



Strategic Implementation of Regional Food Reserves: A Case Study of Buton Regency's Food Price Control Efforts

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ABSTRACT

This study investigates the effectiveness of Buton Regency's Regional Regulation Number 7 of 2022 on Regional Food Reserves in controlling food price volatility, a critical issue linked to Indonesia's broader food security challenges. The research focuses on two key questions: the process of distributing regional food reserves to mitigate price surges and the factors hindering the successful implementation of the regulation. Using an empirical legal research model, this study examines the functioning of law within the community, integrating primary and secondary data collected through legal document analysis, observation, and interviews with local policymakers and stakeholders. The findings reveal that, while the regulation outlines procedures for managing and distributing food reserves during price surges, these reserves have not been distributed as intended. Key barriers include the lack of supporting regulations, particularly the absence of a regent regulation to provide operational guidelines, and logistical challenges such as inadequate storage facilities. This study highlights the need for stronger regulatory frameworks and operational strategies to ensure effective implementation, contributing to the discourse on food security policy in Indonesia.

Keywords: *Food Security Policy; Price Volatility Control; Regional Food Reserves*

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INTRODUCTION

Indonesia, an agrarian nation, relies on agriculture as a cornerstone of its economy and a critical means of sustenance (Sukereman et al., 2022; Ayun et al., 2020). Despite its potential, the country faces severe food security challenges, with 21 million people, or 7% of the population, suffering from malnutrition and failing to meet the Ministry of Health's recommended daily caloric intake of 2,100 kcal, while 21.6% of children experience stunting (Azizah, 2021; CNN Indonesia, 2023; Akbar et al., 2022; Widada et al., 2017). These challenges are further compounded by systemic issues, such as the conversion of agricultural land for non-agricultural purposes, which reduces food production capacity ("Assessing the Current State and Future Trends of Land Use Conversion: Implications for Food Security in Indonesia", 2024). Additionally, disparities in food distribution and access remain significant, necessitating technological and logistical innovations to achieve self-sufficiency and equitable access (Mutiah &

Istiqomah, 2017). In response to these challenges, the Indonesian government has prioritized food security by focusing on increasing production, improving distribution networks, and ensuring equitable access, with the goal of building a resilient and sustainable food system (Neilson & Wright, 2017; Sujarwo et al., 2022).

Indonesia's rapid population growth, as the world's fourth most populous nation with approximately 270 million people, significantly exacerbates food availability challenges, placing immense pressure on supply chains and leading to frequent shortages and escalating prices (Purnasari et al., 2020; Rasman et al., 2023). In 2021, Indonesia ranked 73rd out of 116 countries on the Global Hunger Index, with 22.9 million people experiencing food shortages and 8.49% classified as undernourished (World Food Programme, 2022; Purnasari et al., 2020). These shortages highlight systemic issues in food availability, compounded by socio-economic inequalities that disproportionately affect vulnerable and low-income groups. For these populations, affordability remains as critical as availability, further hindering access to adequate nutrition (Ratnasari & Dani, 2023). Structural challenges within Indonesia's agricultural sector, such as limited agricultural land and the marginalization of agricultural laborers, have further widened the gap between food production and accessibility, leaving socio-economically disadvantaged groups more vulnerable to food insecurity (Kusumawardani et al., 2021; Montolalu et al., 2022). Addressing food security in Indonesia therefore requires a dual focus on increasing food availability through improved agricultural practices and infrastructure while simultaneously reducing socio-economic disparities that hinder equitable access to food (Kusumawardani et al., 2021; Montolalu et al., 2022).

Globally, food insecurity is often caused by issues of accessibility, affordability, and distribution rather than insufficient production (Kusumawardani et al., 2021). In Indonesia, these challenges are addressed through Law No. 18 of 2012, which defines food as a biological product intended for human consumption and emphasizes the principles of Food Sovereignty, Food Independence, and Food Security. This law aims to ensure that food is available, nutritious, and affordable while considering cultural, religious, and dietary values (Neilson & Wright, 2017; Dewi et al., 2023). Strengthening local food production and adopting sustainable agricultural practices are crucial for building food resilience, while targeted interventions are necessary to support socio-economically vulnerable groups (Venna, 2024; Trisia et al., 2016; Akbar et al., 2023; Salasa, 2021). Although Law No. 18 of 2012 provides a strong foundational framework, adaptive and inclusive policies remain essential to ensure accessibility, affordability, and sustainability within Indonesia's food systems (Nugraha, 2023; Nugroho, 2024).

The provision of food is both a fundamental human right and a state responsibility, as recognized by Indonesia's Law No. 18 of 2012. This law mandates the establishment of a Food Reserve System across all levels of government, from national to village levels, with the primary goal of addressing food shortages, supply disruptions, price volatility, and emergencies. National Food Reserves play a critical role in preventing food crises and ensuring stability in food availability, particularly in the face of challenges such as climate change and natural disasters, which pose significant threats to Indonesia's food security (Susandi, 2023; Udmale et al., 2020; Darma et al., 2018b). However, despite this robust legal framework, food prices in Indonesia's traditional markets have continued to rise significantly, driven by high demand for staple food items. This inflation has disproportionately impacted low-income households, exacerbating poverty levels and malnutrition rates, particularly stunting among children, and raising public concern over the affordability of necessities (Wegren, 2023; Heriyatma et al., 2022; Darma et al.,

2018b). Moreover, the interplay between economic factors such as inflation and exchange rates further complicate the situation, contributing to increased food insecurity among vulnerable populations (Heriyatma et al., 2022). These ongoing challenges underscore the need for coordinated action at global, national, and local levels to stabilize food systems, mitigate price volatility, and safeguard access to affordable, nutritious food for all (Fan & Olofinbiyi, 2012; Clapp & Moseley, 2020).

Food price fluctuations in Indonesia are strongly influenced by food availability, which depends on factors such as production, distribution, and consumption. Reduced availability often leads to significant price increases, destabilizing the market (Azizah, 2021; Lestari & Winarto, 2023). Limited raw materials constrain food production, raising costs and driving up market prices (Purnamasari et al., 2019; Kusmiyati, 2018). Distribution inefficiencies, including delays and supply shortages, further hinder timely food access (Haya & Sukandar, 2023; Komsinah, 2017). Additionally, adverse weather, crop failures, pest infestations, and agricultural land scarcity heighten reliance on imports for staples like rice (Rizaldy, 2017; Darma et al., 2018a; Atiya et al., 2020). Land conversion for non-agricultural uses further reduces domestic production, emphasizing the need for effective resource management to achieve food sovereignty (Purnamasari et al., 2019; Haya & Sukandar, 2023).

These national trends are evident in Buton Regency, Southeast Sulawesi, where high food prices are a recurring issue. The limited availability of staple food items in local markets, coupled with increasing demand, has led to sharp price spikes for essential commodities such as rice, eggs, garlic, and onions. This situation has created significant challenges for local communities, particularly those with limited purchasing power. To address these challenges, the local government of Buton Regency introduced Regional Regulation No. 7 of 2022 on the Management of Regional Food Reserves. This regulation aims to stabilize food prices and mitigate shortages by establishing a framework for the procurement, management, and distribution of food reserves. Article 10(b) of the regulation explicitly targets price stabilization during periods of volatility. Despite these intentions, food prices in Buton Regency remain alarmingly high, raising questions about the effectiveness of the regulation's implementation.

The primary barrier to the successful execution of this regulation lies in the absence of a Regent's Regulation to provide detailed guidelines for operationalizing the management and distribution of regional food reserves. Without such a framework, local authorities face significant challenges in translating the broad provisions of the regional regulation into actionable strategies. Furthermore, logistical constraints, including inadequate storage facilities and reliance on BULOG warehouses, hinder the effective management of food reserves. These challenges reflect a broader disconnect between regulatory frameworks and the practical realities of implementation at the regional level.

The issues faced by Buton Regency illustrate the complexities of addressing food security in Indonesia. While the legal framework provides a robust foundation, the absence of detailed implementation guidelines and the persistence of structural and logistical barriers undermine its efficacy. In this context, this study seeks to investigate two critical aspects: first, how the process of distributing regional government food reserves is conducted in Buton Regency to address food price surges, and second, what factors hinder the implementation of Regional Regulation No. 7 of 2022. By addressing these questions, the study aims to identify actionable solutions for improving food price stability and enhancing the effectiveness of food security policies in the region. Through

a detailed examination of these issues, this research contributes to the broader discourse on food security in Indonesia, offering insights that can inform future policy development and implementation.

METHOD

This study adopts a mixed-methods approach that integrates qualitative and quantitative methods to provide a comprehensive analysis of the implementation of food reserve policies in Buton Regency. The qualitative approach is employed to explore the legal, social, and cultural contexts surrounding policy implementation, while the quantitative approach is utilized to analyze numerical data, such as the impact of food reserve distribution on price stabilization. Through this approach, the research aims to uncover the barriers to policy implementation while simultaneously measuring its tangible effects on food prices.

The research is descriptive-analytical in nature, designed to describe the state of policy implementation and analyze the factors that hinder its effectiveness. The data sources include both primary and secondary data. Primary data is collected through semi-structured interviews with stakeholders such as officials from the Food Security Agency, BULOG, local government representatives, and members of the local community affected by food price fluctuations. Additionally, direct observations are conducted in traditional markets to document the dynamics of food distribution and changes in the prices of key commodities. Secondary data is obtained from policy documents, including Regional Regulation No. 7 of 2022, BULOG annual reports, and food price statistics published by the Indonesian Bureau of Statistics (BPS). Academic papers, journals, and reports related to food security are also analyzed to provide a theoretical foundation.

The data collection techniques employed in this study include interviews, observations, document analysis, and surveys. Interviews are conducted using a purposive sampling approach to ensure that respondents have relevant insights into the research topic, such as local government officials and community members directly impacted by food price fluctuations. Observations focus on food reserve distribution sites and traditional markets, recording distribution timelines, the volume of reserves released, and price changes before and after distribution. Document analysis emphasizes legal and policy frameworks and related reports, while surveys are used to measure public perceptions of the effectiveness of food reserve distribution policies, employing a 5-point Likert scale.

The collected data is analyzed using both qualitative and quantitative techniques. For the qualitative analysis, interviews and observations are examined using thematic analysis to identify patterns related to barriers in policy implementation. Data validity is ensured through triangulation, comparing the findings from interviews, observations, and document analyses. The quantitative analysis includes descriptive analysis of survey results to identify public perception trends and inferential statistics, such as regression analysis, to evaluate the relationship between food reserve distribution and price stabilization in traditional markets.

Furthermore, the study incorporates a comparative analysis with other regions that have implemented similar policies but achieved higher levels of success, such as Kutai Barat Regency. This comparative analysis examines differences in policy execution, distribution timelines, food reserve volumes, and impacts on market prices.

The aim is to identify best practices that can be adapted for use in Buton Regency.

The success of policy implementation is assessed based on several key indicators, including food price stability before and after distribution, public perceptions of food availability in local markets, distribution efficiency, and storage capacity. While the study is comprehensive, it is limited by its focus on Buton Regency, and the survey may not capture the perspectives of the entire population, restricting the generalizability of findings to the local context.

This research methodology is designed to provide an in-depth analysis and practical recommendations to enhance the implementation of food reserve policies in the region. If necessary, the study can be further adjusted to broaden its scope or emphasize specific aspects of the research focus.

RESULT AND DISCUSSION

The Distribution Process of Regional Food Reserves in Buton Regency to Address Price Surges

Food reserves play a strategic role in ensuring food security, particularly in regions prone to market volatility and food shortages. As part of regional autonomy, local governments bear significant responsibility for implementing food reserve programs to mitigate food crises and stabilize prices. In Buton Regency, the implementation of food reserve policies is regulated under Regional Regulation No. 7 of 2022, which outlines four key stages: procurement, management, release, and distribution. Each stage is designed to ensure the availability of adequate food supplies at the local level, especially during crises or price surges.

The procurement stage involves acquiring food supplies, primarily sourced from local production, through collaboration between the Food Security Agency and BULOG. The primary objectives of procurement are to increase food reserve stocks, enhance the local government's capacity to respond to emergencies, and protect local farmers from market instability. However, interviews with stakeholders reveal that procurement processes often face technical and administrative challenges, including delays in budget allocation and insufficient coordination among key actors.

The management of food reserves encompasses storage, maintenance, and preparation for distribution. One of the significant challenges in Buton Regency is the lack of government-owned storage facilities. Currently, the local government heavily relies on BULOG warehouses, which are often located far from main distribution points. This reliance increases logistics costs and delays distribution during emergencies. Observations also indicate that food quality often deteriorates before distribution, highlighting the need for improved management guidelines.

The release of food reserves, as outlined in Article 8 of the Regional Regulation, is conducted under specific conditions, such as when stocks exceed storage limits or food quality declines. However, in practice, the release process is often untimely. As a result, the local government misses opportunities to stabilize prices during periods of high demand. Additionally, the absence of a clear monitoring system for food quality further hampers the effectiveness of the release process.

Distribution, the final stage, is governed by Article 10 of the Regional Regulation and is carried out under specific conditions, such as price surges, natural disasters, and market instability. Despite the regulation's clear criteria for distribution, community

surveys reveal that many residents are unaware of the existence of regional food reserves. This lack of public awareness reflects insufficient communication from the local government, limiting the program’s impact on price stabilization and food security.

Factors Hindering the Implementation of Regional Regulation No. 7 of 2022

The primary obstacles in implementing Regional Regulation No. 7 of 2022 can be analyzed using Lawrence Friedman’s framework of substance, structure, and legal culture. Substantial issues emerge as a major challenge, as the regulation provides only general guidelines without technical details for implementation. The absence of a supporting Regent’s Regulation hinders operationalization, creating confusion about procurement schedules, distribution methods, and monitoring mechanisms.

Structurally, Buton Regency faces significant logistical challenges. The absence of local storage facilities compels heavy reliance on BULOG warehouses, which are often far from key distribution areas. Limited transportation infrastructure further exacerbates delays in distributing food reserves, particularly to remote areas. These structural limitations increase logistical costs and reduce the policy’s effectiveness in responding to price surges.

From a legal cultural perspective, community surveys indicate a lack of awareness about the food reserve program. Residents who are unaware of the program cannot actively participate in monitoring or provide feedback on its implementation. This contrasts sharply with regions such as Tangerang City, where intensive public campaigns have increased awareness and strengthened public oversight of food reserve distribution.

1. Economic Impacts of Implementation Challenges

The challenges have tangible economic impacts on price stability in Buton Regency. Market data indicate that the prices of staple foods, such as rice, have risen by 15-20% during periods of high demand, compared to only 5-8% in regions with more effective food reserve systems, such as Tangerang City. These price surges place significant financial pressure on low-income households, whose purchasing power diminishes in the face of food inflation.

2. Comparative Analysis with Other Regions

To provide a broader perspective, the table below compares the food reserve practices in Buton Regency with two other regions, Kutai Barat Regency and Tangerang City:

Table 1. Compares the food reserve practices in Buton Regency with two other regions

Region	Regional Regulation	Supporting Regulation	Storage Facilities	Distribution Effectiveness
Buton	Regional Regulation No. 7 of 2022	None	Dependent on BULOG	Low
Kutai Barat	Regional Regulation No. 2 of 2022	Regent Regulation No. 1 of 2023	Government-owned storage	High
Tangerang	Provincial Regulation No. 17 of 2014	Mayor Regulation No. 84 of 2019	Government and private storage	Very High

The comparison highlights that regions like Kutai Barat and Tangerang have achieved higher effectiveness in food reserve distribution due to the presence of clear supporting regulations and adequate storage facilities. These factors enable timely and efficient responses to market fluctuations and crises.

3. Recommendations for Improvement

To enhance the effectiveness of food reserve policies in Buton Regency, several measures should be implemented. First, the formulation and enactment of a Regent's Regulation are critical to providing technical guidelines for procurement, storage, release, and distribution. This regulation should include clear schedules, quality standards for food reserves, and monitoring mechanisms to ensure transparent and efficient implementation.

Second, investment in local storage infrastructure must be prioritized. Building government-owned storage facilities would reduce reliance on BULOG warehouses, lower logistics costs, and improve the government's ability to maintain food quality. Collaborations with the private sector, as seen in Tangerang, could further expand storage capacity and operational efficiency.

Third, the local government should increase public awareness of the food reserve program through targeted campaigns. These campaigns would educate residents about the program's benefits, foster public trust, and encourage active participation in monitoring and evaluation.

Finally, the adoption of a real-time monitoring and evaluation system is essential. By leveraging data-driven technology, the local government can track food reserve stocks, quality, and distribution timelines more effectively. This system would enable timely responses to market fluctuations and ensure that food reserves reach the intended beneficiaries.

The management and distribution of food reserves in Buton Regency have significant potential to stabilize prices and enhance food security. However, the absence of supporting regulations, inadequate storage facilities, and low public awareness limit the effectiveness of current policies. By learning from successful practices in other regions, such as Kutai Barat and Tangerang, Buton Regency can address these challenges and strengthen its food reserve system. Through clear regulatory frameworks, improved infrastructure, and increased community engagement, the local government can ensure that food reserves achieve their intended goals of mitigating crises and stabilizing markets.

CONCLUSION

The findings of this study underscore the critical importance of Regional Regulation No. 7 of 2022 for managing food reserves in Buton Regency. Particularly, Articles 3 and 10 provide a foundational framework for the procurement, management, release, and distribution of food reserves, aiming to stabilize food prices during surges. However, the absence of a supporting Regent's Regulation remains the primary barrier to effective implementation, leaving regional food reserves underutilized despite recurring price surges. This regulatory gap highlights the need for detailed operational guidelines to bridge the gap between policy intent and practical outcomes.

While the study relies on qualitative methods such as interviews and observations to provide valuable insights, it does not fully capture the broader economic dynamics affecting food prices and distribution. Future research should incorporate quantitative

approaches, such as statistical models, to analyze the direct economic impacts of food reserve distribution on price stability. Time-series analyses of price trends and supply chain efficiencies could provide a more comprehensive understanding of the policy's effects.

Based on these findings, several recommendations are proposed. First, the local government must prioritize the development and implementation of a Regent's Regulation that outlines clear procedures for food reserve procurement, storage, distribution, and monitoring. This regulation should specify roles and responsibilities, timelines, and quality standards to ensure transparency and accountability. Second, a robust framework for regular evaluation should be established, incorporating both qualitative and quantitative measures to assess the policy's impact on price stabilization and food security. Third, community engagement must be strengthened through targeted public awareness campaigns to enhance participation and ensure that the program aligns with local needs.

Furthermore, lessons from other regions, such as Kutai Barat and Tangerang, illustrate the importance of complementary regulations and infrastructure investment in achieving policy goals. Establishing local storage facilities and leveraging technology for real-time monitoring could significantly enhance Buton Regency's capacity to manage food reserves effectively. By adopting these measures, Buton Regency can address its current challenges and build a more resilient food reserve system.

Ultimately, the success of this policy depends not only on the regulatory framework but also on the effective execution of its provisions. A comprehensive approach that integrates clear regulations, community involvement, and data-driven decision-making is essential to achieving the intended objectives and contributing meaningfully to food security in Buton Regency and beyond.

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