

PUBLIC POLICY AND BUREAUCRATIC REFORM IN STRENGTHENING NATIONAL FOOD SECURITY

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Abstract

This study examines the relationship between public policy and bureaucratic reform in strengthening national food security in Indonesia. The research employs a library-based systematic literature review, analyzing recent scholarly publications on food policy, food governance, decentralization, institutional reform, intergovernmental coordination, and collaborative governance. The findings indicate that national food security is determined not only by food production and availability but also by accessibility, distribution stability, nutritional quality, environmental sustainability, institutional capacity, and public participation. The study identifies several major obstacles, including fragmented authority, sectoral ego, overlapping programs, weak coordination between central and local governments, unequal bureaucratic capacity across regions, limited data integration, and insufficient accountability mechanisms. These problems reduce the effectiveness of policy implementation and weaken the government's ability to respond to food crises, price volatility, supply chain disruption, and climate-related risks. The discussion shows that bureaucratic reform must move beyond structural simplification and administrative efficiency toward results-oriented, data-driven, adaptive, and collaborative governance. Strengthening food security, therefore, requires clearer institutional mandates, integrated information systems, improved civil servants' competence, stronger monitoring and evaluation, transparent budgeting, and meaningful participation from farmers, businesses, universities, civil society, and local communities. The study concludes that integrated public policy and comprehensive bureaucratic reform are essential to transforming Indonesia's food governance from a fragmented, reactive system into one that is coordinated, inclusive, resilient, and sustainable. This transformation is expected to improve policy effectiveness, reduce regional disparities, and support long-term national food security amid increasingly complex domestic and global food challenges.

Keywords: bureaucratic reform; collaborative governance; food governance; food security; public policy; Indonesia

Introduction

Food security is a strategic agenda in national development because it is directly related to the fulfillment of basic needs, social stability, public health, poverty alleviation,

and economic sustainability. The concept of food security is no longer limited to the availability of food. However, it includes accessibility, utilization, stability, sustainability, and the ability of communities to determine food systems that suit their needs. The expansion of this dimension shows that food problems must be addressed through comprehensive, adaptive public policies oriented to the community's interests. Therefore, the success of national food security development is largely determined by the government's capacity to formulate and implement cross-sectoral policies consistently (Clapp et al., 2022).

The phenomenon observed in Indonesia shows that the national food system remains vulnerable to climate change, supply chain disruptions, price volatility, infrastructure limitations, distributional inequality, and regional capacity differences. The COVID-19 pandemic has increasingly exposed weaknesses in institutional coordination, dependence on certain supply chains, and inadequate protection for vulnerable communities. In addition, food policies implemented by the central government have not always been effectively translated by local governments due to differences in resources, bureaucratic capabilities, budget support, and regional socio-economic conditions. This condition confirms that food security is not only a problem of agricultural production, but also an institutional issue and governance of public policies (Akbar et al., 2025)

From the perspective of public administration, strengthening food security requires a bureaucracy capable of integrating agricultural policies, trade, health, social protection, the environment, development planning, and regional development. However, the implementation of food policy is still often hampered by fragmented authority, sectoral egos, overlapping programs, limited data exchange, and weak public participation. Research by Amin et al. (2022) shows that the role of the central government, local governments, governance, and community participation are important factors in the success of food security policies. Meanwhile, Susanty et al. (2022) found that regional food policy coordination is constrained by differences in priorities, budget limitations, unclear division of tasks, weak infrastructure, and low motivation.

Research problems arise from the gap between the number of regulations and food security programs and the effectiveness of their implementation in the field. Various policies have been directed to increase production, maintain price stability, strengthen food reserves, improve distribution, and protect people experiencing poverty. However, the existence of these various programs is not always accompanied by an integrated system of control, evaluation, and accountability. Barinda and Ayuningtyas (2022) show that assessments of the food control system in Indonesia have not been conducted comprehensively, particularly regarding resource connectivity, stakeholder interaction, knowledge base, supervisory functions, and continuous improvement. At the regional level, limited information on the origin, type, and distribution of commodities also hinders evidence-based food supply chain planning (Syahirul Alam, 2024)

Previous studies have discussed food security from various perspectives, including the roles of central and local governments, inter-agency coordination, food safety control,

traditional market management, supply chain resilience, and stakeholder collaboration. Nonetheless, most research still focuses on a single aspect of the institution or examines cases in specific regions and programs. There is still limited research that systematically links public policy with bureaucratic reform as an analytical framework in strengthening national food security. In particular, few studies have explained how simplifying bureaucratic processes, integrating data, dividing authority, strengthening accountability, fostering cross-sectoral collaboration, and increasing the capacity of the apparatus can reduce the gap between policy formulation and the implementation of food programs.

The novelty of this research lies in its effort to integrate public policy perspectives, bureaucratic reform, and collaborative governance for analyzing national food security. Bureaucratic reform is understood not only as simplifying organizational structures or improving administrative efficiency, but also as an instrument for building food governance that is responsive, coordinated, transparent, data-based, and results-oriented. This research also places the relationship between the central government, local governments, business actors, farmers, communities, academics, and social organizations as an important part of the food policy ecosystem. The approach complements previous research that emphasizes the importance of institutional design, facilitative leadership, integrated data systems, and adaptive coordination in achieving food security (Akbar et al., 2025; Astuti et al., 2026).

This research is urgent because the challenges of food security are increasingly complex and cannot be solved by sectoral approaches and bureaucratic silos. Climate uncertainty, price volatility, changes in consumption patterns, population growth, agricultural land conversion, and potential global crises demand faster, more flexible, and accountable government capacity. Based on these conditions, this study aims to analyze the relationship between public policy and bureaucratic reform in strengthening national food security, identify institutional obstacles in policy implementation, and formulate a direction for collaborative and sustainable food governance reform. The results of the study are expected to provide a conceptual basis for the formation of an adaptive food bureaucracy as well as practical recommendations to strengthen policy coordination at the central and regional levels.

Research Methods

This study employs a library research method and a systematic literature review to analyze the relationship among public policy, bureaucratic reform, and the strengthening of national food security. The research data consists of scientific articles obtained from the databases Scopus, ScienceDirect, Emerald Insight, Taylor & Francis, and Google Scholar. The literature search uses a combination of keywords, such as "public policy", "bureaucratic reform", "food security", "food governance", "collaborative governance", and "Indonesia". The literature is limited to publications from 2021 to 2026, in Indonesian or English, available in full text, and directly relevant to food policy, governance, institutional coordination, decentralization, and bureaucratic reform. The process of

searching, filtering, and selecting articles is carried out by adapting the stages of identification, screening, feasibility assessment, and article determination as recommended in the PRISMA 2020 guidelines (Page et al., 2021).

Data analysis was carried out using thematic content analysis techniques, including reading, classifying, comparing, and synthesizing findings from each selected study. The articles are grouped into several main themes: food policy formulation and implementation, coordination between central and regional governments, institutional reform, bureaucratic capacity, data integration, community participation, and collaborative governance. The study's validity is maintained by selecting sources based on journal reputation, topic suitability, methodological clarity, and consistency of findings. The results of the synthesis were then used to identify relationship patterns, differences in findings, implementation barriers, research gaps, and the direction of bureaucratic reform needed to strengthen national food security. This approach enables research to generate both a comprehensive conceptual understanding and evidence-based policy recommendations.

Results and Discussion

Results

The results of the literature review show that national food security is a multidimensional problem that cannot be measured only through increased production and availability of commodities. Food security also includes people's ability to access safe, nutritious food, maintain stable food supplies, and participate in decision-making that affects food systems. The sustainability dimension is important because production-increase policies that ignore environmental conditions, farmers' welfare, and the needs of future generations can create only temporary food security. Therefore, public policies in the food sector need to integrate the dimensions of availability, access, utilization, stability, sustainability, and community capacity in determining food choices. These findings underscore the need to shift policy orientation from a production approach to a comprehensive food systems approach (Clapp et al., 2022).

The next results show that one of the main obstacles in strengthening national food security is the fragmentation of authority and weak coordination between government agencies. Food policy involves ministries and institutions responsible for agriculture, trade, distribution, health, social protection, the environment, development planning, and local government. The number of actors is not always accompanied by a clear coordination mechanism, division of tasks, and program integration. Research in Central Java Province shows that differences influence food policy coordination in organizational interests, budget limitations, weak infrastructure, unclear division of responsibilities, and low commitment to cooperation. This condition can cause food programs to overlap, operate sectorally, or fail to reach the most needy community groups (Susanty et al., 2022).

The study also found that decentralization presents both opportunities and challenges for implementing food security policies. Local governments have room to

adjust policies to regional characteristics, commodity potential, geographical conditions, consumption culture, and the needs of local communities. However, this authority has not always been supported by bureaucratic capacity, human resources, budget, data, and adequate infrastructure. In aquaculture governance in Indonesia, for example, central government policies still tend to be uniform and top-down. In contrast, local governments have limited capacity to develop programs that suit the needs of farmers and local communities. A limited number of support workers, weak integration of local knowledge, and a mismatch between government targets and community needs can reduce the effectiveness of food policies in regions (Nagel et al., 2024).

The results of the synthesis show that data quality and control systems are important factors in food governance reform. Effective food policy requires accurate data on production, stocks, distribution, prices, consumption, food safety, regional vulnerabilities, and community conditions. However, the assessment of Indonesia's food control system has not been fully integrated. The framework of a food control system needs to include resource availability, stakeholder relationships, the use of science, supervisory functions, and continuous improvement. At the regional level, traditional market mapping in Central Kalimantan has identified market locations. However, information on the type of commodity, the source of supply, and the distribution chain relationships remains limited. These limitations make it difficult for governments to map supply chain vulnerabilities and formulate evidence-based interventions (Barinda & Ayuningtyas, 2022; Syahirul Alam et al., 2024).

The latest results show that the relationship between central government capacity, local governments, governance, and community participation influences the success of food security policies. The central government plays a role in setting regulations, standards, national targets, and financing, as well as in food stabilization mechanisms. In contrast, local governments are responsible for translating policies into programs that align with local conditions. At the same time, communities, farmers, business actors, universities, and social organizations need to be involved in the planning, implementation, supervision, and evaluation processes. Community participation is not only a means of legitimacy, but also a source of local information and knowledge to improve the accuracy of policies. Thus, food bureaucratic reform needs to be directed at the formation of collaborative governance supported by facilitative leadership, inter-institutional communication, responsibility sharing, and common goals (Amin et al., 2022; Astuti et al., 2026).

Discussion

The findings of the study confirm that bureaucratic reform in the food sector cannot be achieved solely through the simplification of organizational structures or the reduction of administrative procedures. Reform needs to focus on changing how the government formulates, implements, and evaluates food policies. As long as the policy's success remains dominant, as measured by production levels, planted area, budget size,

or the amount of assistance distributed, issues of access, nutritional quality, distributional inequality, environmental sustainability, and community participation risk being overlooked. The six-dimensional framework of food security provides a basis for assessing bureaucratic performance on the ability of policies to produce food that is available, affordable, safe, stable, and sustainable, and to provide space for people to determine their needs. Bureaucratic reform must thus be outcome-oriented and impact-oriented, not just on budget absorption and the achievement of administrative outputs (Clapp et al., 2022; Barinda & Ayuningtyas, 2022).

In the context of decentralization, strengthening food security requires a balance between national policy consistency and regional implementation flexibility. The central government needs to establish service standards, food security indicators, monitoring mechanisms, and a clear financing system. However, local governments must be given space to formulate policies that align with the potential of commodities, supply chain conditions, social structures, and the vulnerability levels of their regions. A policy approach that is overly uniform risks failing to address regional differences in food problems. On the other hand, decentralization without strong standards, coordination, and supervision can lead to inequality in the quality of food services. Therefore, central and regional relations must be built through a clear division of authority, data exchange, strengthening the capacity of the apparatus, technical assistance, and performance evaluation that takes into account local characteristics (Nagel et al., 2024; Syahirul Alam et al., 2024).

Bureaucratic reform also needs to place data integration and information system interoperability as the foundation for decision-making. Production data owned by agricultural agencies must be linked to data on stocks, prices, trade, poverty, health, nutrition, and social assistance. This integration allows the government to detect supply shortages, price increases, distribution disruptions, and vulnerable groups more quickly. Food information systems are not just places for data collection; they must be instruments for coordination, monitoring, early warning, and policy evaluation. In addition, data disclosure can strengthen accountability because the public can monitor the suitability between food conditions, budget allocations, and government programs. Strengthening the supply chain control and mapping system is an important part of reducing reactive policies and replacing them with evidence-based policies (Barinda & Ayuningtyas, 2022; Syahirul Alam et al., 2024).

Conceptually, the study found that national food security is shaped by interactions among the quality of public policies, bureaucratic capacity, central-regional coordination, data integration, and stakeholder participation. Good policies will not have an optimal impact if the bureaucracy lacks the capacity to implement, coordinate, and evaluate them. On the other hand, an efficient bureaucracy is not enough if the policy process does not involve the community and does not account for the complexity of the food system. Therefore, the food bureaucratic reform model needs to combine collaborative leadership, institutional clarity, performance accountability, service digitization, community participation, and adaptability to crises. This synergy is expected to transform

food governance from a fragmentary and reactive system to an integrated, anticipatory, inclusive, and sustainable system (Amin et al., 2022; Susanty et al., 2022; Astuti et al., 2026).

Conclusion

Based on the study's results, it can be concluded that strengthening national food security depends heavily on the government's ability to develop integrated public policies and implement results-oriented, collaborative, and sustainability-oriented bureaucratic reforms. Food security is determined not only by increased production but also by community access, stable distribution, nutritional quality, environmental sustainability, data integration, and effective coordination among the central government, local governments, business actors, farmers, academics, and the community. Fragmentation of authority, weak coordination among agencies, regional capacity disparities, and limited information systems are the main obstacles to implementing food policies. Therefore, bureaucratic reform needs to focus on strengthening institutions, clarifying the division of authority, improving data interoperability, increasing the capacity of the apparatus, strengthening accountability, and implementing collaborative governance. With this step, the national food system can transform from a sectoral and reactive model to a more adaptive, inclusive, evidence-based governance framework that ensures sustainable food security.

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