



Fragmentation of Urban Food Security Governance in Pekanbaru City

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ABSTRACT

Urban food security is increasingly shaped by the ability of local governments to connect food production, distribution, social protection, and citizen participation within a coherent governance system. This study examines how governance fragmentation is manifested in the management of urban food security in Pekanbaru City, a rapidly growing city that remains highly dependent on food supplies from outside the region. Using a qualitative case study, data were collected through in-depth interviews, observation, and document analysis involving government agencies responsible for food, agriculture, and trade, local legislators, policy experts, community-based food program managers, and food traders. The findings reveal six interconnected forms of fragmentation: regulatory fragmentation, disconnected local food production, reactive distribution management, weak institutional integration, separation between social protection and economic empowerment, and limited citizen participation in policy processes. The experiences of food traders further show how these institutional gaps are experienced through supply uncertainty, price fluctuations, and everyday pressures within the urban food system. Viewed through the New Public Service perspective, the central challenge lies not simply in food availability or the number of government programs, but in the limited capacity to build a shared public interest across government agencies, citizens, and food system actors. Strengthening urban food security therefore requires a shift from sector-based interventions toward an integrated and participatory governance process in which citizens and food distribution actors are recognized as partners in shaping local food policy.



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INTRODUCTION

Urban food security has become an increasingly complex issue due to population growth, rapid urbanization, changing consumption patterns, and the declining availability of land for food production in urban areas. Most cities are unable to meet their food needs through local production alone and therefore depend heavily on external supply regions, distribution networks, and food market dynamics. Under such conditions, disruptions affecting any component of the food system can influence food availability, price stability, and people's ability to access food. Consequently, food security can no longer be understood merely in terms of food availability; it also encompasses food access, system stability, sustainability, and the capacity of food systems to respond to multiple forms of vulnerability (Clapp et al., 2022; Vågsholm et al., 2020).

This evolving understanding of food security has also stimulated growing attention to food governance. From this perspective, food-related problems are shaped not only by production capacity or distribution efficiency but also by how authority is allocated, policies are integrated, and multiple stakeholders are involved in governing food systems. Governments, market actors, community organizations, and citizens possess different knowledge, interests, and resources within urban food systems. The ability to connect these diverse actors has become a key requirement for developing food systems that are both sustainable and equitable (Moragues-Faus, 2020; Moragues-Faus & Battersby, 2021; Zerbian & de Luis Romero, 2023).

In practice, however, food governance is often fragmented across multiple sectors and organizations, each operating according to its own institutional mandate. Agricultural production policies frequently develop independently from distribution and market policies, while food price stabilization programs are rarely integrated with strategies for strengthening local production. Likewise, social protection initiatives targeting vulnerable populations are not always linked to economic empowerment programs, and citizens often participate merely as beneficiaries or implementers rather than as active contributors to policy formulation. Such fragmentation of policy objectives, instruments, and actors reflects broader governance fragmentation that weakens governments' capacity to address cross-sectoral public problems effectively (Candel & Biesbroek, 2016; Termeer et al., 2018; Larsson & Sjöqvist, 2022).

Similar challenges are evident in Indonesia's food security governance. Law No. 18 of 2012 on Food recognizes food fulfillment as a fundamental responsibility of the state while granting local governments the authority to formulate policies that reflect regional characteristics. Nevertheless, decentralization and the involvement of multiple governmental organizations have not automatically resulted in integrated food governance. Previous studies have shown that food security policy implementation at the local level continues to face weak inter-agency coordination, sectoral policy fragmentation, and limited stakeholder participation throughout the policy process (Indriastuti et al., 2023; Mahendra et al., 2024; Nugroho et al., 2025). Local experiences further indicate that strengthening food security requires cross-sectoral policy integration capable of linking food-related issues with broader dimensions of community development (Wahyuni & Yusran, 2025). Thus, regional food security depends not only on policy implementation but also on governments' ability to connect policies and actors operating throughout the food system.

Pekanbaru City provides an appropriate empirical context for examining these governance challenges. As a rapidly growing urban center, Pekanbaru faces limited local food production and remains highly dependent on food supplies from surrounding regions to meet the dietary needs of its population (Afriyanni et al., 2023; Sinaga & Habibie, 2025). This dependence makes the city's food system particularly vulnerable to supply chain disruptions and price fluctuations. In response, the local government has introduced various initiatives, including community-based food

production programs, food price monitoring, food stabilization measures, and assistance for vulnerable groups. Programs such as *Kampung Pangan Madani* (Madani Food Village), subsidized food markets, and the *Mobil Pangan Aman* (Safe Food Mobile Unit) illustrate the government's commitment to improving urban food security.

Despite these initiatives, a more fundamental question remains. Food insecurity persists not because governments have failed to intervene, but because these interventions are implemented within separate institutional and policy domains. A review of the Pekanbaru City Medium-Term Development Plan (RPJMD) 2025–2029 and sectoral planning documents indicates that food security responsibilities are dispersed across multiple governmental functions. At the time of this study, Pekanbaru had not yet adopted a local regulation specifically integrating urban food security governance. Consequently, food production, distribution, price stabilization, social protection, and community empowerment are managed by different organizations through separate programs. This situation raises an important empirical question: to what extent do these diverse interventions function as an integrated urban food governance system?

Previous studies on food security in Indonesia have contributed valuable insights into different aspects of this issue. Yurike et al. (2022) examined the effects of agricultural land conversion on food production capacity, while Akbar et al. (2023), Umaroh (2023), and Afriyanni et al. (2023) highlighted the importance of socioeconomic conditions, purchasing power, and household vulnerability in determining food access. At the community level, empowerment initiatives have also been shown to strengthen household and community resilience in addressing food insecurity (Ayu & Yusran, 2025). Other studies have emphasized collaborative governance, institutional coordination, policy networks, and local government innovation in food security management (Indriastuti et al., 2023; Mahendra et al., 2024; Nugroho et al., 2025; Syaputra, 2025; Rukmana et al., 2026). Although this body of literature has enriched understanding of food production, accessibility, community empowerment, and inter-organizational collaboration, limited attention has been given to how regulations, production, distribution, institutions, food accessibility, and citizen participation interact as interconnected components of a single governance system. This gap is particularly significant for cities that rely heavily on external food supplies, where fragmentation among governance subsystems may increase the vulnerability of the urban food system.

This study argues that governance fragmentation extends beyond failures of coordination among government agencies. Fragmentation also arises when the knowledge and lived experiences of actors directly confronting food-related challenges are disconnected from policymaking processes. Food traders, community organizations, and citizens experience supply disruptions, price volatility, and barriers to food access firsthand; however, their role in policy formulation does not necessarily reflect the practical knowledge they possess. Therefore, governance fragmentation should be understood not only as an institutional coordination problem but also as a question of whose knowledge, perspectives, and interests are recognized in defining public problems and shaping food policy.

Within this context, the New Public Service (NPS) perspective (Denhardt & Denhardt, 2015) provides an appropriate analytical framework for examining the relationship between governance fragmentation and citizens' roles in policymaking. Denhardt and Denhardt (2015) emphasize public interest, citizenship, and democratic processes as fundamental principles of public administration. Government is viewed not merely as a policy controller or service provider but as an institution that creates opportunities for diverse stakeholders to participate in identifying and solving public problems. This perspective is particularly relevant to urban food security because food systems are shaped by the actions and experiences of multiple actors extending

beyond governmental institutions. Accordingly, this study examines not only whether food security programs have been implemented but also how public interests are constructed, how citizens and food system actors are positioned within policymaking processes, and how relationships among actors influence the integration of urban food governance.

Based on these issues, this study aims to analyze the fragmentation of urban food security governance in Pekanbaru City across six interrelated dimensions: regulation, production, distribution, institutions, food accessibility, and community participation. It also explores how governance fragmentation is reflected in the experiences of food traders and interprets these findings through the perspective of the New Public Service. By doing so, the study seeks to broaden the discussion of urban food security beyond technical food management toward a broader understanding of public governance, emphasizing policy integration, the construction of public interest, and the role of citizens and food system actors in policymaking processes.

RESEARCH METHOD

This study employed a qualitative approach using a case study design to examine the fragmentation of urban food security governance in Pekanbaru City. Data were collected through in-depth interviews, field observations, and document analysis. Informants were selected purposively based on their involvement in urban food security governance, including officials from local government agencies responsible for food security, agriculture, and trade; members of the Regional House of Representatives (DPRD); public policy experts; managers of the *Kampung Pangan Madani* (Madani Food Village) program; and food traders. The analyzed documents included Law No. 18 of 2012 on Food, the Pekanbaru City Medium-Term Development Plan (RPJMD) 2025–2029, and planning documents from relevant local government agencies related to food security.

The data were analyzed using thematic analysis through repeated examination of interview transcripts, observation notes, and documentary evidence. The analysis focused on identifying patterns of connection and disconnection among policies, programs, institutional actors, and governance processes within the urban food system. Emerging patterns were organized into six interrelated themes: regulation, production, distribution, institutional arrangements, food accessibility, and community participation. The credibility of the findings was enhanced through source and methodological triangulation, comparing perspectives across different stakeholders as well as evidence obtained from interviews, observations, and document analysis.

During the interpretation stage, the identified patterns of governance fragmentation were examined through the New Public Service (NPS) perspective, particularly its concepts of public interest, citizenship, serve rather than steer, and democratic processes. This perspective was employed to interpret the roles of citizens and food system actors, the construction of public interest, and the relationships among stakeholders within urban food security governance. Accordingly, NPS served as an interpretive lens for understanding the empirical findings rather than as a predetermined analytical framework established prior to data collection.

Result and Discussion

1. Policy Fragmentation in Urban Food Security Governance

From a normative perspective, urban food security governance in Pekanbaru City operates within a relatively well-established policy framework. Law No. 18 of 2012 on Food explicitly assigns the state the responsibility to ensure food availability, affordability, and accessibility for all citizens. At the provincial level, Riau Provincial Regulation No. 13 of 2018 on Food Security further provides a legal foundation for implementing food security policies. However, challenges

emerge when this regulatory framework is translated into the municipal context. At the time this study was conducted, Pekanbaru had not enacted a local regulation specifically integrating food security within a comprehensive policy framework.

The absence of a local regulation does not imply that the municipal government has neglected food security initiatives. Various interventions have been implemented by different local government agencies according to their respective institutional mandates. The agency responsible for food affairs manages food availability and food vulnerability programs, the agricultural agency focuses on strengthening local food production, while the trade agency oversees food distribution and price stabilization. From an organizational perspective, this division of responsibilities reflects the normal functioning of government institutions. However, when viewed as components of a single urban food system, these sectoral boundaries reveal significant policy fragmentation and weak interconnections among policy domains.

This fragmentation is also reflected in local development planning documents. An examination of the Pekanbaru City Medium-Term Development Plan (RPJMD) 2025–2029 shows that food-related issues appear across multiple governmental sectors and development programs but are not framed as a cross-sectoral agenda linking food production, distribution, food accessibility, and community empowerment. Consequently, although each government agency implements food-related programs, substantive integration among these initiatives remains limited. Food security is therefore managed primarily according to administrative responsibilities rather than through an integrated understanding of the interconnected challenges faced by urban communities.

This condition illustrates a form of governance fragmentation that is not necessarily visible through program performance alone. Individual programs may be implemented successfully, budgets may be fully utilized, and organizational performance targets may be achieved. The problem arises when these achievements remain disconnected from interventions in other components of the food system. Strengthening local food production, for example, requires effective access to distribution networks and markets. Likewise, food price stabilization depends on supply conditions, while food accessibility is closely linked to household economic capacity. When these interdependencies are not incorporated into policy design, success within one sector does not necessarily strengthen the resilience of the urban food system as a whole.

These findings extend the concept of policy fragmentation proposed by Candel and Biesbroek (2016). Policy fragmentation is not simply characterized by the existence of multiple organizations or policy instruments but by the limited capacity to connect policy objectives and interventions distributed across different sectors. In the case of Pekanbaru, the primary challenge is not the lack of governmental action; rather, it is the absence of a local policy framework capable of integrating sectoral interventions into a coherent urban food governance agenda.

From the perspective of the New Public Service (NPS), this situation raises an important question regarding the construction of public interest within food security governance. Denhardt and Denhardt (2015) argue that public interest should not be understood as merely the aggregate outcome of government programs but as a shared interest developed through dialogue and collaboration among multiple stakeholders. In Pekanbaru's food governance system, the distribution of governmental authority has generated numerous sector-specific interventions, yet these initiatives have not fully established a collective understanding of food security as a shared public concern requiring collaborative governance.

Accordingly, the need for a local food security regulation extends beyond the simple enactment of an additional legal instrument. Such regulation is important only insofar as it provides an institutional platform for integrating government agencies, communities, and other

food system stakeholders while fostering a shared orientation toward addressing urban food security challenges. In the context of Pekanbaru, policy fragmentation demonstrates that the city's primary challenge lies in the absence of a common understanding of the public interest capable of connecting governmental authority, policy interventions, and stakeholders' experiences within a unified framework of urban food security governance.

2. Fragmentation of the Urban Food Production System

Limited agricultural land represents one of the primary challenges to food production in Pekanbaru City. As a rapidly expanding urban area, land available for agricultural activities continues to decline, while food demand steadily increases. In response, the municipal government has implemented various initiatives to strengthen local food production, including hydroponic farming programs, agricultural input assistance, capacity-building for urban farmer groups, and the *Kampung Pangan Madani* (Madani Food Village) program. These community-based production initiatives reflect the government's effort to adapt food security strategies to the characteristics of an urban environment.

The *Kampung Pangan Madani* program illustrates this approach. It encourages residents to utilize available spaces for household- and community-scale food cultivation. Community participation in food production demonstrates that food security is no longer viewed solely as a governmental responsibility. Instead, citizens are increasingly encouraged to contribute to strengthening food availability within their own neighborhoods.

Nevertheless, implementation experiences reveal the limitations of this activity-based production approach. Community-based food production remains relatively small in scale and has yet to establish strong linkages with distribution systems, market networks, or local economic development. Agricultural outputs are generally consumed or circulated within the program itself and have not become integrated into the broader urban food supply system. Consequently, increased community-level production has not substantially reduced Pekanbaru's dependence on food supplies from surrounding regions.

These findings suggest that the challenge of food production in Pekanbaru extends beyond the limited volume of local production. A more fundamental issue concerns the position of production programs within the city's overall food system. Hydroponic initiatives, agricultural input assistance, and the *Kampung Pangan Madani* program have succeeded in stimulating cultivation activities; however, these initiatives require stronger connections with markets, distribution channels, technical support, and local economic resources to become sustainable. Without such linkages, production programs risk being evaluated primarily in terms of group formation, input distribution, or cultivation activities rather than their broader contribution to strengthening urban food system capacity.

This is where production fragmentation becomes evident. Local food production is promoted as an independent policy domain, whereas food distribution and marketing remain governed under separate institutional arrangements. As a result, communities are encouraged to produce food, yet the pathways through which agricultural outputs can become integrated into the local food system remain underdeveloped. In this sense, fragmentation arises not because food production is absent but because production activities remain disconnected from other subsystems that determine their long-term sustainability.

These findings offer an additional perspective on policy fragmentation. Candel and Biesbroek (2016) emphasize the importance of integrating policy objectives and instruments to address cross-sectoral challenges. The Pekanbaru case demonstrates that fragmentation may also occur when a policy program lacks meaningful connections with the processes and stakeholders

essential for its continuity. Government interventions have successfully created opportunities for community-based food production; however, linkages among production, distribution, markets, and local economic empowerment remain weak. Consequently, program-level achievements do not necessarily translate into a stronger and more resilient urban food system.

This issue becomes particularly significant when interpreted through the *New Public Service* (NPS) perspective. Community participation in the *Kampung Pangan Madani* program has expanded opportunities for citizens to contribute to urban food security initiatives. However, within NPS, citizenship extends beyond participation as implementers of government programs. Denhardt and Denhardt (2015) conceptualize citizens as capable actors who actively participate in addressing public problems. From this perspective, providing agricultural inputs or encouraging community cultivation represents only an initial step. Such efforts remain insufficient if communities continue to depend on government-designed programs, external resources, and institutional support for their sustainability.

Community involvement in food production activities has therefore not automatically strengthened citizens' capacity to sustain and expand these initiatives independently. Although residents actively participate in government programs, the continuity of production activities remains largely shaped by program design, resource availability, and government support. Strengthening urban food production, therefore, requires more than increasing the number of cultivation initiatives. The fundamental challenge lies in creating institutional and economic linkages that enable citizens to evolve from program participants into autonomous local food actors capable of maintaining and expanding food production sustainably over time.

3. Fragmentation of the Urban Food Distribution System

Food distribution occupies a central role in Pekanbaru City's food security because a substantial proportion of the city's food demand is supplied from surrounding regions. Consequently, the availability of food is highly dependent on the smooth functioning of supply chains, price dynamics, and conditions in external production areas. Disruptions to distribution networks affect not only food availability but are also immediately reflected in price fluctuations experienced by both traders and consumers. This dependence indicates that Pekanbaru's food security is closely linked to the city's capacity to manage vulnerabilities embedded within its food distribution network.

To address these challenges, the municipal government has implemented several policy interventions, including food price monitoring, inter-agency coordination, subsidized food markets, and the operation of the *Mobil Pangan Aman* (Pak Aman, Safe Food Mobile Unit). These measures play an important role, particularly during periods of food price increases. For local communities, subsidized food markets and food distribution through the *Pak Aman* program improve access to affordable food by reducing both economic and physical barriers to food availability.

Despite these efforts, the prevailing policy approach remains largely reactive, focusing on responding to market pressures after price increases have already occurred. Price monitoring intensifies once prices begin to fluctuate, while subsidized markets and food distribution programs are activated to mitigate the impact of rising prices on consumers. Although these interventions help maintain food affordability in the short term, they do not adequately address the structural vulnerabilities resulting from the city's heavy dependence on external food supplies. Consequently, while the government possesses effective instruments for responding to market disturbances, its capacity to reduce the underlying sources of distribution vulnerability remains limited.

This issue becomes more apparent when the distribution system is examined in relation to local food production. Community-based food production initiatives have yet to establish strong connections with broader distribution networks and commercial markets. At the same time, food distribution and price stabilization policies primarily focus on commodities that have already entered existing market supply chains. As a result, local food production and food distribution management have evolved within separate policy domains. While communities are encouraged to increase local food production, the city's distribution system continues to rely heavily on external supply networks.

This disconnection constitutes the core of distribution fragmentation in Pekanbaru. Fragmentation is reflected not merely in the large number of actors involved in food supply chains but also in the weak integration among local production policies, distribution management, and price stabilization strategies. Under these circumstances, the success of subsidized food markets or the *Pak Aman* program in maintaining food affordability does not necessarily strengthen the resilience of the overall distribution system. These interventions primarily address the consequences of market fluctuations, whereas the underlying vulnerabilities of the urban food system remain rooted in dependence on external food supplies and the limited development of alternative local distribution networks.

These findings highlight the importance of distinguishing between the capacity to respond to food market shocks and the capacity to build long-term food system resilience. Candel and Biesbroek (2016) and Termeer et al. (2018) argue that addressing cross-sectoral policy challenges requires strong integration among policy instruments and institutional actors. In the case of Pekanbaru, although various stabilization mechanisms are already in place, they have not yet been incorporated into a comprehensive strategy linking food production, supply chains, distribution systems, and food accessibility. Consequently, food distribution governance remains more effective in responding to immediate market disturbances than in systematically reducing structural vulnerabilities within the urban food system.

From the perspective of the New Public Service (NPS), this issue concerns how public interest is translated into food distribution policy. Maintaining affordable food prices constitutes an essential public service; however, public interest extends beyond the government's ability to mitigate short-term market fluctuations. The NPS principle of serve citizens, not customers emphasizes that public services should promote citizens' long-term well-being rather than merely addressing immediate needs. In the context of food security, this requires creating conditions that enable communities to obtain stable and reliable access to food, rather than intervening only after food prices begin to rise.

Although the government's existing policy instruments have helped reduce the adverse effects of food price volatility on local communities, meaningful integration among local food production, supply networks, distribution actors, and stabilization strategies has yet to be achieved. Therefore, the challenge of food distribution governance extends beyond expanding market interventions. The more fundamental task is to establish stronger connections among the various components of the urban food system so that the city's capacity to guarantee food access becomes less dependent on short-term responses to market fluctuations and more grounded in a resilient and integrated food governance system.

4. Institutional Fragmentation in Urban Food Security Governance

Urban food security governance in Pekanbaru involves multiple organizations with distinct institutional mandates. The Food Security Agency is responsible for food availability and food safety, the Agriculture Agency focuses on strengthening local food production, while the Trade

Agency oversees food distribution and price stabilization. In addition, the Regional House of Representatives (DPRD), community organizations, and food system actors also play important roles within the governance system. The diversity of actors demonstrates that food security has evolved into a multidimensional public issue that spans various governmental sectors and societal domains.

Inter-organizational relationships have been developed through coordination meetings, information exchange, and program reporting mechanisms. These arrangements enable government agencies to monitor activities undertaken by other sectors and to respond to emerging issues when necessary. However, coordination has not consistently been accompanied by the joint formulation of objectives, strategies, and policy interventions. Instead, each organization continues to operate primarily according to its own institutional mandate, sectoral programs, and performance targets. In practice, organizations may communicate regularly without genuinely integrating the policies they implement.

The distinction between coordination and integration is therefore critical to understanding food governance in Pekanbaru. Coordination allows organizations to exchange information regarding ongoing activities, whereas integration requires a more comprehensive process of connecting problems, resources, and policy decisions across sectors within a shared governance framework. For example, improvements in local food production should be linked with actors responsible for distribution and market development. Similarly, information regarding food price increases should not merely inform trade-related interventions but should also serve as a basis for identifying supply vulnerabilities and guiding strategies to strengthen local production. Such interconnections, however, have not yet been consistently established.

As a consequence, institutional boundaries continue to shape how food-related problems are addressed. Food production is primarily treated as an agricultural issue, distribution and price stabilization as matters of trade, while food availability falls under the responsibility of the food security sector. Although this division of authority is necessary within governmental organizations, problems arise when public issues are addressed according to bureaucratic boundaries rather than through the interconnected nature of the food system itself. Urban food systems function through the interaction of production, supply, distribution, prices, and citizens' access to food, whereas government interventions continue to operate largely within the administrative jurisdictions of individual agencies.

Institutional fragmentation in Pekanbaru, therefore, is not the result of inadequate coordination or a shortage of institutional actors. On the contrary, numerous organizations are actively involved, and coordination mechanisms have already been established. Fragmentation emerges because these inter-organizational relationships have not generated the integrative capacity needed to transform sector-specific programs into collective action. These findings indicate that the presence of multiple actors and frequent communication alone does not automatically produce integrated governance.

This finding is consistent with the arguments of Termeer et al. (2018), Candel and Biesbroek (2016), and Larsson and Sjöqvist (2022), who emphasize that cross-sectoral governance challenges are often constrained by institutional boundaries and fragmented administrative authority. The Pekanbaru case further highlights the distinction between administrative coordination and substantive integration. Coordination meetings and information-sharing mechanisms may sustain administrative relationships among organizations; however, genuine integration occurs only when actors are able to align their decisions, resources, and policy actions in addressing shared public problems.

From the perspective of the New Public Service (NPS), this institutional challenge concerns the government's capacity to construct public interest through collective action. The NPS principle of think strategically, act democratically views public problems as shared responsibilities that should be addressed through collaboration among diverse stakeholders. Accordingly, the effectiveness of urban food security governance should not be assessed solely by the extent to which individual government agencies achieve their organizational performance targets. A more important question is whether the actions of these organizations collectively contribute to a shared public purpose developed and implemented through collaborative governance.

Although the Pekanbaru municipal government has established mechanisms for inter-organizational communication, its capacity to translate such communication into shared strategies and collective action remains limited. Strengthening institutional arrangements for urban food security therefore requires more than simply increasing the number of coordination forums. The greater challenge lies in developing governance mechanisms that enable the knowledge, resources, and decisions of multiple stakeholders to be integrated within a unified governance process capable of addressing food security as a shared public concern.

5. Fragmentation Between Social Protection and Economic Empowerment

The availability of food in the market does not necessarily guarantee that all members of society are able to meet their food needs. In urban settings, access to food is strongly influenced by household income and purchasing power. This condition is also evident in Pekanbaru City, particularly among economically vulnerable groups. For these households, fluctuations in food prices can directly affect their ability to maintain adequate food consumption. Food accessibility is therefore closely linked to the broader socioeconomic vulnerability of urban communities (Akbar et al., 2023; Burchi & De Muro, 2016; Umaroh, 2023).

To address these vulnerabilities, the government has implemented food assistance and various social protection programs. These interventions play an essential role in safeguarding vulnerable households' access to food, particularly during periods of economic hardship and rising food prices. Under such circumstances, social assistance serves as an immediate mechanism for protecting access to basic food needs.

Nevertheless, efforts to protect food access have not always been accompanied by initiatives aimed at strengthening the long-term economic capacity of beneficiaries. Although food assistance can temporarily reduce the pressures faced by vulnerable households, their ability to secure adequate food after the intervention ends remains largely dependent on their underlying economic conditions. The central issue, therefore, is not the existence of food assistance itself but the extent to which social protection is connected with processes that enable households to overcome food insecurity in a more sustainable manner.

This disconnect becomes apparent as food access policies and economic empowerment initiatives continue to evolve through separate programs and institutional arrangements. Food-related interventions primarily focus on maintaining affordability and supporting vulnerable groups, whereas economic empowerment programs operate with different objectives, instruments, and implementation mechanisms. The relationship between these two policy domains has yet to develop into a coherent policy pathway that links short-term protection with long-term capacity building. Consequently, beneficiaries may be protected from immediate food insecurity without having a clear pathway toward greater economic resilience and food self-reliance.

The fragmentation of food access governance in Pekanbaru is therefore reflected in the weak integration between social protection and economic empowerment. Although both approaches pursue important objectives, they continue to operate through separate intervention pathways. Social protection reduces the immediate vulnerabilities experienced by households, whereas economic empowerment should strengthen their capacity to cope with future challenges. When these two approaches remain disconnected, public policy becomes more effective at managing the consequences of vulnerability than at transforming the structural conditions that sustain it.

These findings also reinforce the broader significance of community empowerment within food security governance. Ayu and Yusran (2025) argue that strengthening community capacity constitutes an essential component of building food security at both household and community levels. In the context of urban Pekanbaru, the key challenge lies in connecting the protective function of food policies with empowerment processes that are responsive to the economic realities of local communities. From this perspective, food assistance should not be viewed as an alternative to empowerment but rather as the initial stage of a continuum of interventions designed to strengthen citizens' long-term capacities.

This issue is particularly significant when interpreted through the New Public Service (NPS) perspective. The principle of serve citizens, not customers rejects the notion that citizens should be regarded merely as recipients of public services. Instead, citizens are recognized as individuals possessing knowledge, capacities, and experiences that enable them to participate actively in addressing the public problems affecting their lives. In the context of food accessibility, public services must certainly protect vulnerable populations during periods of hardship. However, a citizen-centered approach also requires creating opportunities for individuals and communities to strengthen their own capacities and gradually reduce their dependence on government interventions over the long term.

Although social protection programs have contributed to maintaining food access among vulnerable groups, they have not yet been fully integrated with economic empowerment processes that enable citizens to strengthen their own food security. Consequently, the governance challenge is not to choose between social assistance and economic empowerment. Rather, the more fundamental task is to establish meaningful linkages between these two approaches so that interventions addressing food vulnerability simultaneously create pathways toward the sustainable strengthening of citizens' economic and food security capacities.

6. Fragmentation of Participation in Urban Food Security Governance

Community participation has become an integral component of several food security initiatives in Pekanbaru City. The *Kampung Pangan Madani* (Madani Food Village) program represents one of the principal platforms through which government initiatives intersect with community-based activities. By engaging in food cultivation and utilizing available spaces for food production, local residents participate directly in implementing food security programs. This involvement demonstrates that citizens are not merely positioned as beneficiaries but have begun to assume active roles in strengthening food security within their own communities.

Nevertheless, opportunities for participation remain concentrated primarily at the implementation stage of government programs. Program objectives, intervention designs, and implementation mechanisms continue to be formulated predominantly within governmental institutions, while community participation becomes more visible only after programs enter the implementation phase. Citizens are encouraged to engage in cultivation activities, manage program assistance, and organize community groups; however, their opportunities to influence

how food security problems are defined and what policy interventions should be prioritized remain relatively limited.

This distinction highlights that participation in program implementation does not necessarily equate to participation in policymaking. Implementation-level participation enables citizens to contribute to achieving predetermined program objectives, whereas participation in the policymaking process allows community experiences to shape policy goals, intervention strategies, and program evaluation. In the context of Pekanbaru, the relationship between these two forms of participation remains weak. Citizens have been incorporated into program implementation but have not yet been fully integrated into the processes through which food security policies are formulated.

This issue is particularly significant because communities possess practical knowledge that cannot always be captured through governmental administrative data. Community groups engaged in food production understand the challenges of sustaining production activities after government assistance ends, the limitations of available resources, and the difficulties of connecting local production with commercial markets. These experiences provide valuable insights into which components of existing programs function effectively and which require improvement. When such experiential knowledge lacks meaningful pathways into planning and evaluation processes, policymakers lose an important source of learning derived directly from local practice.

Participation fragmentation in Pekanbaru is therefore not characterized by the absence of community involvement. On the contrary, citizens actively participate in a wide range of food security initiatives. Fragmentation arises because the participatory spaces created during program implementation remain only weakly connected to planning and decision-making processes. As a result, community experience remains confined to operational activities, while authority over policy direction continues to be concentrated within government institutions. Under these circumstances, participation risks becoming an instrument for facilitating program implementation rather than evolving into a mechanism for collective learning and collaborative policymaking.

These findings are consistent with the arguments of Moragues-Faus (2020) and Zerbian and de Luis Romero (2023), who emphasize the political and democratic dimensions of urban food governance. Participation should not be evaluated solely by the extent of citizen involvement but also by the position citizens occupy within processes that shape the direction of food systems. The Pekanbaru case suggests that the principal challenge lies in strengthening the connection between citizens' lived experiences and formal policymaking processes. Consequently, the quality of participation should be assessed by the extent to which citizens are able to influence public policy rather than merely by their presence in government-led programs.

The New Public Service (NPS) perspective provides a deeper understanding of this issue. Through the principles of serve rather than steer and think strategically, act democratically, Denhardt and Denhardt (2015) conceptualize citizens as active participants in addressing public problems rather than passive recipients of government services. Within this perspective, government does not relinquish its policymaking role but instead creates institutional spaces through which citizens' knowledge and experiences contribute to the construction of the public interest. In the context of food security, community experiences regarding food production, food access, and the sustainability of government programs should not remain merely the experiences of program participants but should become an essential source of knowledge informing policymaking processes.

The fragmentation of participation in Pekanbaru's urban food security governance therefore indicates that community involvement remains substantially stronger in program implementation than in policy formulation. Although citizens have been provided with opportunities to participate in operational activities, their capacity to influence policy direction remains limited. Accordingly, the challenge is not simply to increase the number of citizens participating in food security programs. Rather, the more fundamental task is to develop governance mechanisms that connect citizens' experiences with planning, decision-making, and policy evaluation processes, ensuring that participation extends beyond operational involvement to become an integral component of urban food policy development.

7. Manifestations of Governance Fragmentation in Food Distribution Practices

Governance fragmentation at the policy and institutional levels extends beyond the formal boundaries of government organizations. It becomes visible in the everyday experiences of actors who participate directly in the food system, particularly those responsible for moving food commodities from producers and suppliers to urban consumers. In this study, the experiences of food traders demonstrate how disconnections among regulation, production, distribution, institutional coordination, food accessibility, and public participation are translated into practical difficulties within the marketplace. Food traders occupy a strategic position in Pekanbaru's urban food system because they operate at the intersection of supply and demand. They mediate relationships between producers, wholesalers, transporters, retailers, and consumers while simultaneously confronting fluctuations in food availability, procurement costs, consumer purchasing power, and selling prices.

Pekanbaru's dependence on food supplies from surrounding regions places traders in a vulnerable position whenever disruptions occur outside the city. The city's limited capacity to produce several essential food commodities means that food availability is strongly influenced by conditions in producing areas, transportation routes, weather patterns, fuel prices, harvest cycles, and regional market demand. When distribution is interrupted or supplies from producing regions decline, traders immediately experience difficulty obtaining commodities in sufficient quantities. Such disruptions may result from heavy rainfall, road damage, harvest failure, rising transportation costs, or competing demand from other regions. Even when food remains available, the quantity supplied to Pekanbaru may be insufficient to maintain stable prices.

For traders, these changes are not abstract market indicators. They represent persistent uncertainty that influences purchasing decisions, inventory management, credit arrangements, and daily trading strategies. A trader who purchases too much during a period of uncertainty may face losses when demand declines or when commodities deteriorate rapidly. Conversely, purchasing too little may result in lost customers and reduced income when prices rise or supplies become scarce. Traders must therefore make decisions with incomplete information while attempting to anticipate future market conditions. Their activities are shaped by the interaction between supply availability, supplier prices, transportation costs, consumer demand, and government interventions.

The effects of these fluctuations are eventually transmitted to consumers. When procurement costs increase, traders may raise retail prices in order to preserve their operating margins. However, the ability to transfer higher costs to consumers is limited by declining purchasing power and market competition. Some traders reduce their profit margins, while others adjust the volume or quality of goods sold. Consumers, particularly low-income households, may respond by reducing consumption, changing food preferences, purchasing lower-quality

commodities, or delaying purchases. Consequently, supply disruptions are transformed into broader problems of food accessibility and household welfare.

These experiences reveal the interconnected nature of the different forms of governance fragmentation identified in this study. Limited local food production reinforces dependence on external supply networks. This dependence increases exposure to disturbances that cannot be managed solely through local administrative measures. At the same time, distribution policies remain predominantly reactive. Government interventions are often introduced after prices have increased, supplies have declined, or public concern has intensified. Such interventions may temporarily reduce market pressure, but they do not necessarily address the structural conditions that repeatedly generate instability.

The absence of integrated institutional coordination further limits the effectiveness of government responses. Information regarding supply conditions, production levels, transportation constraints, market prices, and household purchasing power is often distributed across different agencies and administrative levels. Each institution may possess only one part of the information required to understand the food system as a whole. Agricultural agencies may monitor production, trade agencies may observe market prices, transportation authorities may manage logistics, and social agencies may identify vulnerable households. However, if these forms of knowledge are not connected through a shared decision-making mechanism, policy responses remain fragmented. Each institution may perform its formal responsibility while the wider problem of food insecurity continues to evolve across organizational boundaries.

From the perspective of food traders, this fragmentation is experienced as uncertainty. Government-level fragmentation may appear in official terms as disconnected policies, overlapping programs, delayed information, or unclear institutional responsibilities. In the marketplace, however, it is experienced through sudden shortages, unpredictable supplier prices, unstable inventory conditions, and difficulties in maintaining affordable retail prices. This distinction is important because it demonstrates that governance problems are not confined to administrative procedures. They have material consequences for the daily operation of food markets and for the capacity of households to obtain adequate food.

Nevertheless, food traders should not be understood merely as passive recipients of the consequences of fragmented distribution systems. Their continuous interaction with suppliers and consumers allows them to develop practical knowledge regarding changes in food supply chains. Traders are often among the first actors to notice that a particular commodity is becoming scarce, that supplier prices are increasing, that delivery schedules are changing, or that consumers are altering their purchasing patterns. They can also identify how market participants respond to distribution disruptions, including changes in sourcing locations, substitution between commodities, reductions in purchase quantities, and adjustments in retail strategies.

This knowledge is accumulated through daily experience rather than through formal monitoring systems. Traders compare prices across suppliers, observe delivery frequencies, assess the quality of incoming commodities, and interpret consumer responses to price changes. Although such information may not initially appear in official statistics, it can provide early signals of transformations occurring within the urban food system. From a governance network perspective, the position of distribution actors makes them an important source of knowledge for food policy governance (Syaputra, 2025). Their experiences can help public institutions identify emerging vulnerabilities before those vulnerabilities develop into more severe food access problems.

Despite its potential value, traders' practical knowledge has not been systematically incorporated into food security planning, policy formulation, or program evaluation. Food traders are generally treated as market actors who must comply with government regulations, report

prices, or participate in distribution programs. They may also be viewed as objects of supervision when concerns arise regarding hoarding, excessive pricing, or market manipulation. These regulatory functions are necessary, but they represent only one dimension of the relationship between government and traders. When traders are considered solely as subjects of monitoring, their capacity to contribute knowledge, identify risks, and participate in problem-solving is overlooked.

As a result, food stabilization and distribution policies may directly affect traders' activities without adequately incorporating their experiences. A policy designed to stabilize prices, for example, may impose new reporting requirements or alter procurement arrangements without considering the practical realities of storage capacity, cash flow, supplier relationships, or consumer behavior. Similarly, a distribution intervention may focus on the movement of commodities while overlooking the informal networks through which traders manage shortages and respond to changing market conditions. Policies that do not recognize these operational realities may produce limited or temporary effects.

This situation illustrates a broader disconnect between experiential knowledge and formal policymaking. Government institutions possess official statistics, administrative records, regulatory instruments, and formal authority. Food traders, by contrast, possess knowledge derived from direct engagement with everyday market dynamics. These two forms of knowledge should be understood as complementary rather than competing. Administrative data may provide broad trends and institutional comparability, while traders' experiences may reveal rapid changes, localized disruptions, and behavioral responses that are not immediately visible in official datasets.

Without institutional mechanisms that connect these forms of knowledge, governments risk overlooking important information about changes in food distribution. At the same time, traders continue to face market uncertainty without meaningful opportunities to communicate their experiences or influence policy development. This creates a one-directional relationship in which government institutions regulate and traders respond. Such a relationship limits the development of mutual trust and reduces the possibility of designing policies that reflect the complexity of the food system.

The New Public Service perspective provides a broader interpretation of this issue by extending beyond the conventional relationship between government and citizens. Its principle of "serve rather than steer" conceptualizes government as an institution responsible for creating collaborative relationships, facilitating public participation, and supporting collective efforts to address public problems (Denhardt & Denhardt, 2015). Within urban food systems, food traders possess knowledge that is directly relevant to the public interest because their activities influence the availability, affordability, and accessibility of food. Treating traders merely as objects of supervision or as participants in market exchange overlooks the knowledge and institutional relationships required to strengthen public policy capacity.

A more participatory approach would involve creating regular and credible mechanisms through which traders can communicate information about supply disruptions, price changes, transportation problems, and consumer responses. Such mechanisms could include structured consultations, market-based early warning systems, participatory monitoring, trader associations, and routine information-sharing forums involving relevant government agencies. Participation should not be reduced to symbolic consultation. It should enable traders' observations to be considered in policy analysis, program design, and evaluation. In this sense, participation becomes an institutional resource for improving the responsiveness and accuracy of food governance.

The experiences of food traders represent the point at which the six dimensions of governance fragmentation identified in this study converge. Regulatory fragmentation limits

policy integration across sectors. Fragmented production systems reinforce dependence on external food supplies. Reactive distribution policies fail to reduce structural vulnerabilities in supply chains. Administrative coordination has not yet developed into a collective governance capacity. Socioeconomic vulnerability restricts consumers' ability to cope with food price fluctuations. Finally, limited participation prevents the experiences of frontline actors from being fully incorporated into policymaking. At the level of food traders, these forms of fragmentation are no longer perceived as separate administrative problems. They appear as tangible uncertainty regarding supplies, prices, inventory, income, and the risks associated with everyday distribution activities.

Food distribution practices therefore demonstrate that governance fragmentation has concrete consequences for the resilience of urban food systems. The central challenge is not simply how government agencies can coordinate existing programs. It is also how dispersed knowledge among government institutions, communities, traders, producers, and consumers can be integrated into a shared policymaking process. The experiences of traders indicate that administrative knowledge must be complemented by practical knowledge derived from direct involvement in food distribution. Such integration is essential for developing a more comprehensive understanding of supply vulnerabilities, market dynamics, and the food accessibility challenges experienced by urban households.

This argument also suggests that food resilience cannot be achieved exclusively through emergency interventions. Price operations, temporary subsidies, or short-term distribution programs may reduce immediate pressure, but their effectiveness depends on the institutional capacity to identify risks, coordinate responses, and learn from previous disruptions. A resilient governance system requires continuous communication among actors, reliable information flows, shared responsibility, and mechanisms for adjusting policies in response to changing conditions. Traders can contribute significantly to this process because they observe the food system at the point where supply conditions and consumer needs meet.

Overall, this study demonstrates that governance fragmentation in Pekanbaru's urban food security system does not consist of isolated sectoral problems. Government programs continue to operate and involve multiple stakeholders, yet the relationships among policies, programs, institutions, and stakeholders' experiences have not evolved into a shared governance capacity. The existence of multiple actors does not automatically produce collaboration. Collaboration requires institutional arrangements that connect responsibilities, information, accountability, and participation around a common understanding of the public interest.

CONCLUSION

This study demonstrates that the primary challenge of urban food security in Pekanbaru City does not stem from the absence of government programs or institutional actors but rather from the disconnection among policies, programs, and the knowledge held by actors within the urban food system. Fragmentation across the dimensions of regulation, production, distribution, institutional arrangements, food accessibility, and public participation is interconnected and collectively contributes to governance vulnerability. Under these conditions, successful interventions within individual sectors do not necessarily strengthen the city's overall food security because they have yet to evolve as components of an integrated urban food system.

Viewed through the New Public Service (NPS) perspective, the findings further indicate that governance fragmentation is closely associated with the limited capacity to construct the public interest and foster collective action. Although communities actively participate in various food security programs, their involvement in policy formulation remains limited. Likewise, food

traders possess valuable practical knowledge regarding supply conditions and market dynamics; however, this knowledge has not been effectively incorporated into policy planning and evaluation processes. These findings suggest that achieving integrated governance requires more than inter-organizational coordination. It also depends on the ability to connect governments' administrative knowledge with the lived experiences of citizens and other food system actors.

The principal contribution of this study lies in conceptualizing food security fragmentation as a relational governance issue rather than merely an administrative or sectoral problem. The findings demonstrate that governance integration cannot be achieved solely through administrative coordination but requires governance arrangements that enable policies, knowledge, and the experiences of diverse stakeholders to be meaningfully connected in addressing food security challenges. For Pekanbaru City, this implies the need for a policy framework capable of integrating food production, distribution, food accessibility, and community empowerment while creating more substantive opportunities for citizens and food system actors to participate in policymaking processes. Future research may examine similar patterns of governance fragmentation in cities with varying levels of dependence on external food supplies to better understand how differences in food system characteristics shape local governance relationships.

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