





Actors' Perspectives and Actions Toward Food Policy in Riau Province

Agus Susanto¹, Yonariza^{2*}, Denas Symond³, Dahlan Tampubolon⁴

¹ Doctoral Program in Policy Studies, Faculty of Social and Political Sciences, Universitas Andalas, Padang 25163, Indonesia

² Department of Agricultural Socio Economic, Faculty of Agriculture, Universitas Andalas, Padang 25175, Indonesia

³ Department of Nutrition, Faculty of Public Health, Universitas Andalas, Padang 25163, Indonesia

⁴ Department of Developmental Economy, Faculty of Economics and Business, Universitas Riau, Pekanbaru 28293, Indonesia

Corresponding Author Email: yonariza@agr.unand.ac.id

Copyright: ©2026 The authors. This article is published by IETA and is licensed under the CC BY 4.0 license (<http://creativecommons.org/licenses/by/4.0/>).

<https://doi.org/10.18280/ijstdp.210512>

ABSTRACT

Received: 20 November 2025

Revised: 8 March 2026

Accepted: 26 May 2026

Available online: 31 May 2026

Keywords:

food policy, actors, Multiple Streams Framework, Neo-Institutionalism, Riau

Food security in Riau Province faces structural challenges, characterized by a 77% dependence on external rice supplies and ecological pressures on peatlands. This study analyzes the dynamics of regional food policy through a synthesis of the Multiple Streams Framework (MSF) and Neo-Institutionalism to explain the interactions of actors, institutional structures, and ecological contexts in the policy process. Using a qualitative case study approach, data were obtained from 36 in-depth interviews, 2 focus group discussions (FGDs), and 20 policy documents (2019–2024). Informants were purposively selected based on their strategic positions and direct involvement in food policy. Thematic analysis and triangulation were used to ensure the validity of the findings. The results indicate fragmented problem framing in the problem stream; the dominance of top-down regulations in the policy stream; and the concentration of executive-legislative power in the politics stream, which limits the substantive participation of non-state actors. This configuration results in disharmonious multi-level policies and widens the gap between formal design and implementation, thus weakening food independence and inclusiveness. This study confirms that the implementation of MSF at the subnational level needs to be enriched with institutional and ecological dimensions to build integrative, participatory, and sustainable food governance.

1. INTRODUCTION

Food security has long been a fundamental issue in development discourse, but its complexity is increasing with global challenges such as climate change, market fluctuations, and geopolitical instability [1]. This phenomenon has shifted the perspective on food security, from a mere technical issue of production and distribution to a multidimensional issue involving social, economic, political, and ecological dynamics [2, 3]. A deeper understanding of the interactions between state and non-state actors in the policy formulation process is needed, as decisions are heavily influenced by the perspectives, interests, and power relations that shape the food governance landscape [2, 4-6].

Strengthening food security is a political agenda that determines the sustainability of a nation [2], which is increasingly under pressure from climate change, conflict, economic inequality, and weak governance [3, 7]. Weak institutional interactions, the role of local actors, and cross-sectoral coordination also hamper the effectiveness of food policies [6, 8] and increase food insecurity and limited regional adaptive capacity [9]. This condition is strongly reflected in Indonesia. Indonesia's food security index declined slightly from 61.4 (2020) to 59.2 (2021), placing Indonesia in 69th place out of 113 countries. Inequality in food

access, nutritional insecurity, and the vulnerability of production systems are indicators that Indonesia's food policy still faces significant structural and political challenges [10, 11]. This situation not only fuels regional economic inequality but also hinders the achievement of SDG 2 (Zero Hunger) and SDG 10 (Reduced Inequality).

Riau, as a province with significant land resources and food production potential, faces various fundamental problems. Paradoxically, Riau remains highly dependent on food supplies from outside the region, with approximately 77% supplied from West Sumatra, North Sumatra, and Java. This situation is exacerbated by the dominance of plantation monocultures and the vulnerability of peat ecosystems, which have forced Riau's peatlands into a dry, fragile state, and are vulnerable to ecological disasters [12, 13]. This problem cannot be understood only from a technical-economic perspective, but must be traced through the political and institutional processes that shape it [10, 14].

The food diversification program, increased production, and the Planting Movement in Riau have been running, but various indicators show: 1) household food security is still low: food distribution is uneven, and food reserves are unstable; 2) local food diversification is not optimal: consumption culture is still highly dependent on grains; 3) agricultural human resources are weak: the number of extension workers is limited, and

farmer capacity is low; and 4) dependence on food imports is high: local productivity is unable to meet demand. In addition, the latest data shows that the area of raw rice fields in Riau Province in 2024 is around 59,181 hectares, with around 58,891.30 hectares designated as Protected Rice Fields (LSD) to prevent conversion of agricultural land. Meanwhile, data from the Central Statistics Agency (2024) recorded a rice harvest area of around 56.42 thousand hectares with a production of 222.06 thousand tons of dry milled grain (GKG). This condition shows that limited rice fields and pressure for land conversion are challenges in maintaining food security in Riau Province.

Data from the Riau Provincial Food Service in 2024 showed the highest prevalence of undernutrition (PoU) in Indragiri Hilir (17.06%) and the Meranti Islands (15.95%). Meanwhile, the provincial food security index was only 68.68, still below the ideal national standard. Riau's food availability is high (3,254 kcal/capita/day), but the quality of community food consumption is low and lacks diversity. This means that Riau's problem is not of availability, but rather of governance, access, policy, and coordination between actors. This research is crucial for, among other things: supporting the priorities of the National Medium-Term Development Plan (RPJMN) and the Regional Medium-Term Development Plan (RPJMD), addressing institutional gaps, strengthening food security in vulnerable areas, and producing adaptive and collaborative policy designs that impact socio-economic stability.

The literature on public policy tends to analyze the policy formulation process in a linear or isolated manner [15], often ignoring the complex interactions between factors that drive policy change. Existing research rarely reveals how fragmented understanding of problems among actors, rooted in differing interests and norms, directly influences policy. To address this gap, our research adopts an analytical approach that combines the Multiple Streams Framework (MSF) and Neo-Institutionalism. The MSF provides a powerful lens for examining the interactions between problem streams, policy streams, and political streams. The MSF will help analyze political actors (executives and the Regional People's Representative Council), the private sector, farmer groups, NGOs, indigenous communities, and academics in formulating food problems and promoting solutions through policy recommendations and leveraging political momentum. Neo-Institutionalism theory provides a strong conceptual framework for understanding how norms, values, and institutional structures influence how actors think (logic of appropriateness) and act in a policy context. However, we argue that the MSF alone is insufficient. By integrating Neo-Institutionalism, this research goes beyond structural analysis to reveal how norms, values, and the "logic of appropriateness" among actors shape their actions, which often creates a gap between formulated policies and their implementation on the ground.

This research aims to analyze the dynamics of food policy in Riau Province by exploring the interactions between state and non-state actors through the combined lens of MSF and Neo-Institutionalism. We argue that this research is highly strategic because it places food issues within the institutional and policy domains, rather than solely the technical aspects of production. This study is expected to provide empirical and conceptual contributions to the formulation of inclusive, participatory, ecosystem-based food policies and strengthen coordination between actors in ecologically vulnerable areas such as Riau Province, as well as enrich academic discourse

on public policy in developing countries.

2. LITERATURE REVIEW

2.1 Agricultural technical approaches towards a food policy governance perspective

Food studies in Riau Province have been dominated by a technical-agrarian approach focused on increasing production and optimizing cultivation. Low rice productivity, for example, is attributed to suboptimal land use, limited infrastructure and technological support, and the need for improved planting systems [16]. Other studies highlight the adaptation of new superior varieties, the exploration of local rice germplasm in Kuantan Singingi [17], the implementation of Integrated Crop Management, the potential of swampland, and the Low External Input Sustainable Agriculture (LEISA) approach in Siak Regency [18].

While these studies have contributed significantly to the development of the agricultural sector, their approaches tend to position food policy as a technical issue of increasing production. Food security is assumed to be achieved through agronomic optimization, without examining how food issues are framed as policy issues, who determines program priorities, how resource allocation is decided, and which actors benefit from the process.

In the international literature, food policy is increasingly understood as a matter of governance, not simply production [19]. In Southeast Asia, food governance occurs within a multi-level governance context, where decentralization, central-regional relations, and state-market dynamics significantly influence policy outcomes.

Decentralization in Indonesia opens up opportunities for policy innovation at the regional level, but its effectiveness is largely determined by fiscal capacity, the quality of governance, and consistency between planning and budgeting. Various studies show that regional autonomy still faces institutional coordination issues, dependence on central transfers, and budgeting practices that are not fully based on real needs and performance data, resulting in development disparities between regions and suboptimal improvements in public welfare [20-22]. Accountability in regional financial management and the integration of planning documents are key factors in determining the quality of public policy implementation in the era of decentralization [23, 24].

In the food sector, particularly rice, the problem is no longer solely about increasing production, but also about farmer institutions, supply chain efficiency, access to financing, and unintegrated agribusiness governance. Policy approaches oriented toward short-term outputs tend to neglect strengthening local capacity and adapting to regional diversity, thus reducing food security to production targets, rather than developing sustainable food systems [25, 26]. This situation emphasizes the importance of adaptive and contextual institutional design so that decentralization can substantively address food vulnerability.

Therefore, there is a gap between the technical literature on agriculture in Riau and the literature on food policy governance. This research seeks to bridge this gap by positioning food policy as a result of socio-political construction between actors within a specific institutional context, rather than simply a technical issue of production.

2.2 Policy actors, power, and institutional context

The public policy process does not proceed in a linear and rational manner, but is shaped through dynamic interactions between actors, interests, ideas, and power [27, 28]. Policy is the result of negotiation, issue framing, and political strategy within specific institutional spaces. Government actors (executive, legislative, and bureaucratic) have formal authority to determine policy direction [29]. However, non-governmental actors such as interest groups, academics, the media, and civil society play a role in shaping public opinion, providing policy alternatives, and conducting advocacy [30]. The interactions between these actors form policy networks as arenas for the exchange of resources and ideas [31].

In Indonesia's decentralized context, relationships between actors are increasingly complex. Regional autonomy allows for policy innovation, but also opens up space for local elite dominance and sectoral policy fragmentation. Regional food policies are often influenced by the logic of budget politics, electoral cycles, and the interests of regional bureaucracies.

The Neo-Institutionalist approach provides a theoretical foundation for understanding these dynamics. Institutions are understood as structures of formal and informal norms and rules that shape and constrain actor behavior [32]. Actors do not always act based on instrumental rationality, but rather follow the logic of appropriateness, that is, acting in accordance with what is deemed appropriate and legitimate within a particular institutional context. This framework is relevant for explaining why food policies often experience a gap between formal design and implementation practices. Bureaucratic norms, administrative culture, and legitimacy pressures can encourage symbolic policy adoption without substantive change.

2.3 Multiple Streams Framework in food policy analysis

The MSF explains that policy change occurs when three streams, the problem stream, the policy stream, and the political stream converge, opening a policy window. This momentum is often exploited by policy entrepreneurs to push certain issues onto the policy agenda. The MSF is effective in policy contexts fraught with ambiguity and time pressure [33]. In food policy, crises such as pandemics, rising food prices, or distribution disruptions often trigger the opening of a policy window. The COVID-19 crisis in New York City illustrates how external shocks can facilitate the coupling of the problem, policy, and political streams, thereby opening a policy window for agenda change. Similar studies underline the significance of crisis momentum in driving agenda-setting processes [34, 35]. Furthermore, the MSF has proven adaptive outside the context of Western democracies. Recent studies show that in non-democratic systems, informal elites and key political actors can act as policy entrepreneurs. This flexibility makes the MSF relevant for analyzing food policy at the provincial level in Indonesia, where formal and informal structures frequently interact.

However, MSF has limitations in explaining why actors act in certain ways within specific institutional contexts [29]. Therefore, this study integrates MSF with Neo-Institutionalism to provide a more comprehensive analysis.

2.4 Synthesis of Multiple Streams Framework and Neo-Institutionalism

The integration of MSF and Neo-Institutionalism allows for

a more in-depth analysis of food policy. MSF explains the temporal dynamics and momentum of agenda setting, while Neo-Institutionalism explains how norms, rules, and institutional culture mediate actor behavior when the policy window is open. Through this synthesis, this study puts forward three analytical propositions: 1) The entry of food issues into the policy agenda in Riau Province is determined by the convergence of problem framing, the availability of policy alternatives, and political incentives, 2) This convergence is mediated by bureaucratic norms, institutional culture, and the interests of local elites, 3) The gap between formal policies and field practices arises due to entrenched institutional patterns, including the tendency for symbolic public participation, and 4) Compared with the Advocacy Coalition Framework (ACF) which emphasizes the stability of belief-based coalitions in the long term, the MSF-Neo-Institutionalism synthesis is more suitable for analyzing the context of fragmented regional governance, where the dynamics of agendas and institutional norms interact simultaneously.

2.5 Contribution to regional food governance literature

The literature on MSF and Neo-Institutionalism has largely developed in a Western context. Its application to the Southeast Asian context provides an important contribution to the contextual enrichment of public policy theory. In Indonesia's political system, characterized by decentralization, fragmentation of authority, and elite negotiations, food policy cannot be understood solely through technical or economic approaches. It is an arena for contested interests influenced by local institutional structures, budget dynamics, and the logic of political legitimacy. By integrating MSF and Neo-Institutionalism in the context of Riau Province, this study makes three main contributions:

- a. Shifting the focus of Riau food studies from an agronomic approach to a policy governance perspective.
- b. Demonstrating the relevance of agenda-setting theory in the context of decentralization in Southeast Asia.
- c. Explaining the gap between formal policy and implementation through institutional analysis.

Thus, this study offers a more comprehensive analytical approach to understanding the dynamics of inclusive and sustainable food policy at the regional level, focusing more on the dynamics of agenda-setting and political momentum in the fluid and fragmented context of decentralization. Therefore, a framework is needed that can explain how food issues enter the policy agenda under conditions of uncertainty and competing interests.

3. METHODS

This study uses a qualitative approach with a descriptive-exploratory design to analyze the dynamics of actors and institutional interactions in the food security policy process in Riau Province. A qualitative approach was chosen because it allows for in-depth exploration of actors' meanings, interests, and strategies within a complex institutional context, which cannot be adequately captured through quantitative approaches [36]. Theoretically, this study utilizes the MSF to analyze the interactions between problem streams, policy streams, and politics streams, as well as a Neo-Institutionalism

approach to explain how norms, formal rules, and informal practices shape actor behavior in the policy arena.

Table 1. Research informants

No.	Actor/Position	Institution	Role Level	n	Method	Venue	Time (min)
1	Head, Food Security & Horticulture Service	Provincial government	Policy	1	In-depth (F2F)	Office	60–90
2	Secretary, Food Security & Horticulture Service	Provincial government	Managerial	1	In-depth	Office	60–90
3	Head of Food Division	Provincial government	Technical	1	In-depth	Office	60–90
4	Head, Industry Trade Coop SMEs Service	Provincial government	Policy	1	In-depth	Office	60–90
5	Secretary, Industry Trade Coop SMEs Service	Provincial government	Managerial	1	In-depth	Office	60–90
6	Head of Trade Division	Provincial government	Technical	1	In-depth	Office	60–90
7	Head, Regional Development Planning Agency	Provincial government	Planning	1	In-depth	Office	60–90
8	Head, Regional Research Agency	Provincial government	Knowledge broker	1	In-depth	Office	60–90
9	Chair, Commission II	Provincial parliament	Policy	1	In-depth	Office	60–90
10	Chair, Commission III	Provincial parliament	Oversight/budgeting	1	In-depth	Office	60–90
11	Members, Commission III	Provincial parliament	Oversight/budgeting	3	In-depth	Office	60–90
12	Academics, Faculty of Agriculture-University of Riau	Academia	Expert	2	In-depth	Campus	60–90
13	Academics, Faculty of Agriculture-Islamic University of Riau	Academia	Expert	2	In-depth	Campus	60–90
14	Chair, HKTI Riau	Farmers' organization	Interest representation	1	In-depth	Secretariat	60–90
15	Secretary, HKTI Riau	Farmers' organization	Advocacy	1	In-depth	Secretariat	60–90
16	Representative, FITRA Riau	NGO	Budget advocacy	1	In-depth	Office	60–90
17	Representative, INSPIRATIF	NGO	Empowerment	1	In-depth	Office	60–90
18	Director, PT Sarana Pembangunan Riau TRADA	ROE	Distribution	1	In-depth	Office	60–90
19	Director, PT Riau Pangan Bertuah	ROE	Food enterprise	1	In-depth	Office	60–90
20	Chair, Provincial GAPOKTAN	Farmer group	Producer rep.	1	In-depth	Farm site	60–90
21	Farmers	Individual	Grassroots	9	Semi-structured	Production villages	45–60
22	Customary leaders	Customary institution	Socio-cultural	2	In-depth	Customary area	60–90

Data Source: Author's Processing, 2025. Note: n = number of informants.

A purposive sampling technique was used to select informants with capacity, experience, and strategic positions in the food policy process. Selection criteria were explicitly established based on: (1) direct involvement in the formulation, implementation, or oversight of food policy; (2) formal positions within government institutions, the legislature, farmer organizations, the private sector, or civil society; (3) ability to provide reflective information on the dynamics of policy coordination and conflict; and (4) a minimum of three years of experience in the related sector. Based on these criteria, informants included officials from the

Riau Province Food, Food Crops, and Horticulture Service; the Riau Province Industry, Trade, Cooperatives, and SMEs Service; the Riau Province Regional Development Planning Agency (BAPPEDA); the Riau Province Regional Research Agency (BRIDA); members of Commissions II and III of the Riau Provincial DPRD; academics from the University of Riau; academics from the Islamic University of Riau; representatives of the HKTI Regional Representative Council (DPD Riau); food NGOs; private sector representatives (PT. Sarana Pembangunan Riau TRADA and PT. Riau Pangan Bertuah); traditional institutions; and the Farmers' Group

Association (GAPOKTAN).

These actors were selected based on their roles as policymakers, policy influencers, policy entrepreneurs, and target groups within the regional food policy ecosystem. Therefore, the sampling was not aimed at achieving statistical representation, but rather at achieving analytical depth, richness of information, and diversity of perspectives through purposive sampling oriented toward relevance to the phenomenon being studied. This approach aligns with the tradition of qualitative research, which emphasizes information richness and analytical depth over population generalizations, as well as the importance of case variation in capturing the complexity of policy contexts [37, 38]. This strategy allows researchers to select key informants with knowledge, experience, and strategic positions within the policy process, enabling them to more comprehensively explain institutional dynamics and actor relationships.

In Table 1, a total of 36 farmer members and several institutional actors were interviewed in-depth using a semi-structured interview guide. The interview guides were structured based on three streams within the MSF and the institutional dimension of Neo-Institutionalism. Thematic areas of the interviews included: 1) Problem Stream: actors' perceptions of the food security crisis or challenge, problem indicators, and the construction of public issues; 2) Policy Stream: the process of formulating policy alternatives, the role of technocrats and epistemic communities, and technical and fiscal feasibility; 3) Politics Stream: the dynamics of budget politics, party coalitions, electoral interests, and central-regional influence; 4) Institutional Dimension: formal (regulations) and informal norms (patronage practices, political networks) that influence policy decisions.

The semi-structured interview guide allowed researchers to maintain consistency across participants while providing space for exploration of issues that emerged contextually during the interaction process, resulting in in-depth and reflective data [39, 40]. The 36 farmer informants in Siak Regency, Riau Province, selected using the principle of theoretical saturation, indicating the point at which additional interviews no longer produced new themes, categories, or analytical insights. Saturation was assessed through an iterative coding process; after the 32nd interview, no significant new themes related to problem perceptions, program access, and implementation barriers were identified. Four additional interviews were conducted to ensure confirmatory redundancy. Therefore, this number was deemed sufficient to achieve analytical depth and thematic consistency.

Focus group discussions (FGDs) were conducted in four separate sessions according to the MSF analysis phases: (1) problem identification, (2) policy formulation and regulation, (3) political dynamics and coordination, and (4) impact evaluation and implementation challenges. Each FGD involved 8–12 participants representing the local government, the Regional People's Representative Council (DPRD), BULOG (Logistics Agency), the private sector, farmers/HKTI (Indonesian Food and Agriculture Organization), indigenous communities, and academics. Each session lasted 60–90 minutes and was facilitated by an independent moderator and an assistant recorder. All discussions were recorded using digital audio equipment and transcribed verbatim for further analysis. This approach follows standard FGD practice in public policy research. Secondary data was obtained through analysis of national and regional regulations, planning documents (RPJMD, RENSTRA, RENJA), gubernatorial

instructions, and relevant scientific publications. Document analysis was conducted to examine consistency between formal policy design and implementation practices.

To ensure credibility and reproducibility, this study employed triangulation of sources and methods by comparing the results of interviews, FGDs, participant observation, and policy documents. Triangulation is understood as a strategy to increase the validity of findings through the convergence of multiple data sources and analytical perspectives in contemporary qualitative research [41]. Data analysis was conducted through qualitative content analysis, with systematic and transparent data reduction, thematic categorization, and narrative synthesis to support the research audit trail [42]. The coding process was conducted iteratively, linking empirical findings to the MSF and Neo-Institutionalism constructs, while simultaneously mapping the relationships between actors within the policy network using cutting-edge stakeholder analysis and policy network analysis approaches.

The final stage, drawing conclusions, was conducted through a pattern-matching process between empirical data and theoretical propositions to construct a coherent argument regarding food security policy governance in Riau, a technique recommended in theory-based policy research design. With this design, this research meets the principles of credibility, transferability, dependability, and confirmability, strengthened through the practices of reflexivity, thick description, and transparency of analytical procedures in qualitative research.

4. RESULTS AND DISCUSSION

4.1 Food policy in Riau Province

Food policy in Riau Province indicates a complex dynamic between abundant resource potential and structural dependence on external food supplies. Although Riau is known as a region rich in natural resources, particularly in the plantation and forestry sectors, its food production capacity tends to be insufficient to fully meet domestic consumption needs. Based on data from the Riau Province Food, Crops, and Horticulture Service (2023), the public's rice demand reaches approximately 600,000 tons per year, while local production is only around 400,000 tons. This finding was confirmed by an interview with an official from the Riau Province Food Service: "We are still very dependent on external supplies. If distribution is disrupted even slightly, prices immediately rise in the market." (Interview, Official from the Riau Province Food, Crops, and Horticulture Service, 2024).

The deficit of around 200,000 tons is generally met by other provinces, such as West Sumatra and North Sumatra. This situation indicates that Riau's food security is consumer-oriented and dependent on inter-regional distribution mechanisms, rather than on self-sufficiency in production. Food policy in this region still functions as an instrument of stabilization, not transformation of the local food system.

Regulatory-wise, food policy in Riau is structured within a multi-level governance structure involving interactions between national regulations and regional adaptations. National regulations, such as Minister of Agriculture Regulation No. 12 of 2017 concerning Market Operations, emphasize price stabilization and management of Government Rice Reserves, while regional regulations, such as Riau

Governor Regulation No. 32 of 2023 concerning the Regional Action Plan for Food and Nutrition (RAD-PG), focus on local food diversification and improving community nutrition.

The differentiation of policies between the central and regional governments indicates a tendency toward dualistic policy logic: on the one hand, central policies are oriented toward macro-stabilization and national resilience; on the other, regional policies attempt to address local ecological contexts such as peatlands and swamps. However, the relationship between these two levels of policy often leads to a pattern of policy layering, based on the interpretations of informants, where overlapping regulations potentially hinder synchronized implementation. The results of a cross-regional FGD revealed overlapping policies: “Central government programs often don’t align with our field conditions, especially in peatlands. Agricultural machinery assistance is sometimes unusable.” (FGD from the Agriculture Department, 2024). This indicates a failure to adapt national policies to the local ecological context, particularly on peatlands, resulting in low implementation effectiveness in the field.

In terms of orientation, national food policy is more normative and structural, with an emphasis on providing rice reserves and price stability, while regional policies indicate a more pragmatic and responsive orientation, particularly to issues of nutrition and stunting. Data from the Indonesian Nutritional Status Survey (SSGI, 2023) recorded a stunting prevalence in Riau that still reached 17%, which can be interpreted as an indication that food policies have not fully reached vulnerable groups. Fiscal limitations have been identified as a major obstacle to the implementation of responsive policies at the regional level, as reliance on the Special Allocation Fund (DAK) and Revenue Sharing Fund (DBH) often results in program priorities following the national agenda rather than local needs. In this context, local farmers, such as sago farmers in the Meranti Islands and corn farmers in Indragiri Hulu, face barriers to accessing capital and markets due to policy bias toward rice. The rice-centric orientation of food policy has resulted in the marginalization of local foods such as sago and corn. Interview with a Farmer: “We in Meranti have an abundance of sago, but it’s never a priority. All programs focus on rice.” (Sago Farmer, Meranti Islands, 2024). Farmer Group FGD: “If you plant corn or sago, the market is unclear. Unlike rice, which is guaranteed.” (Farmer Group FGD, Indragiri Hulu, 2024).

This data indicate a structural policy bias that weakens food diversification and local food security. The rice-centric orientation of national food policy has shifted public consumption patterns from being based on local food to being dependent on imported products from other regions, weakening food diversification and local self-sufficiency.

Institutionally, the food management system in Riau indicates strong administrative coordination, but has not yet fully achieved policy integration. Interview Quote from Regional Apparatus Organization (OPD): “Each agency operates independently. There is no single platform that truly integrates food programs.” (Interview with Regional Development Planning Agency (Bappeda), 2024). FGD Findings: “Coordination exists, but it is merely a formality. It does not reach the level of program integration.” (Cross-OPD FGD, 2024).

Policy documents such as Regional Regulation Number 13 of 2018 concerning Food Security, the 2019-2024 Regional Development Planning Agency (DPTPH) Strategic Plan (Renstra), and the 2022 Regional Work Plan (Renja-PD)

appear formally comprehensive, but their implementation tends to be fragmented, based on findings from FGDs and documents between regional government agencies (OPD). This situation can be interpreted as the dominance of a bureaucratic-hierarchical logic that emphasizes administrative compliance over cross-actor collaboration. Meanwhile, the potential for collaboration with non-governmental actors, such as universities and local communities, has not been optimally utilized, despite their significant capacity for locally-based knowledge and innovation. For example, research on sago food diversification by the University of Riau has not been fully integrated into regional policies.

The political aspect of the budget reinforces the conclusion that food policy in Riau is not yet a strategic priority. Based on the 2024 Riau Provincial Budget of IDR 11.02 trillion, the allocation for the agriculture and food sector is only around 2–3%, far below the education sector (26.68%), health (11.86%), and infrastructure (40.25%). Interview with the Regional Government Budget Team (TAPD): “Programs with quick visible results, such as rice aid, are more easily approved politically than long-term investments.” (TAPD Interview, 2024). Academic FGD: “Food policy in Riau is still trapped in short-term logic, not food system transformation.” (Academic FGD, 2024).

This composition leads to the interpretation of a relatively lower political priority for the food sector. The budgeting process is considered influenced by short-term electoral logic, where populist programs such as market operations and rice aid receive more support due to their high political visibility. This condition aligns with previous view on the politics of public policy, which states that public policy is often the result of political compromise and electoral interests, rather than technocratic rationalization. As a result, long-term investments such as strengthening farmer institutions, researching local varieties, or developing alternative food technologies receive less attention.

Overall, food policy in Riau Province can be understood as a paradox: on the one hand, a comprehensive regulatory framework and abundant natural resource potential are present, but on the other, policy implementation remains hampered by institutional fragmentation, short-term political orientation, and structural bias toward certain commodities. This paradox illustrates the inconsistency between the national food security vision and the regional ecological and social realities. Riau remains trapped in an administrative logic that positions food policy as a complementary development instrument, rather than a driving force for local economic transformation. To address this, a reorientation of budget policy is needed, prioritizing the food sector with a minimum allocation of five percent of the total regional budget (APBD), strengthening food diversification based on sago, corn, and inland fisheries, establishing a cross-sectoral Riau Food Council for strategic coordination, and integrating university and local community research into policy formulation. Furthermore, data transparency and public participation need to be expanded to strengthen the accountability and sustainability of future food policies.

Thus, this analysis confirms that the primary challenge to food policy in Riau Province lies not in a lack of regulations or resources, but rather in limited institutional coordination and low political incentives for local food innovation. The success of building sovereign and sustainable food security depends on the ability of local governments to balance political, economic and ecological logic within an inclusive,

collaborative and knowledge-based policy framework.

4.2 Multiple Streams Framework

The MSF is considered useful in this context for analyzing the dynamics of actors (local governments, regional legislative councils) and non-political actors (private sector, farmer groups, NGOs, indigenous communities, academics) in formulating problems and promoting food policy solutions through leveraging political momentum, thanks to its superiority in explaining the dynamic agenda-setting process. However, this framework has several limitations identified in the literature: it tends to generalize actors as opportunistic while ignoring power relations and resource inequality; it is considered too flexible and ambiguous due to its descriptive nature and weak ability to predict policy; it lacks in explaining causal relationships between streams; it faces challenges in operationalizing concepts such as policy windows and policy entrepreneurs, which are often subjective; it has limited consideration of local institutional and cultural contexts due to

its development in the US presidential system; and it lacks attention to the dimensions of power and conflicts of interest, thus tending to portray the policy process as a neutral mechanism.

In Table 2, an analysis of policy streams in Riau Province shows that existing policy options tend to be partial and focused on the production dimension. Important aspects such as food accessibility and affordability are relatively neglected, resulting in policies that fail to fully provide viable, inclusive, and sustainable alternatives. This situation indicates a narrowing of policy options resulting from the dominance of formal regulations and the exclusivity of actors. This dominance results in a failure to produce inclusive solutions, as the "policy primeval soup," which should be rich with diverse ideas, becomes limited. To address this, better institutional design and strengthened substantive participation from non-state actors are needed. This participation can enrich the basis for selecting solutions within the MSF, making food policy in Riau more responsive and effective in addressing existing challenges.

Table 2. Food policy analysis matrix in Riau Province

Dimension	Key Findings	Gap	Policy Implications	Data Sources
Regulation	Dominance of provincial regulations (<i>Perda</i> and <i>Pergub</i>) referring to national policies	Not adaptive to local characteristics, particularly peatland ecosystems	Formulation of regulations based on local wisdom and ecosystem adaptation is required	Document analysis of <i>Perda</i> , <i>Pergub</i> , RPJMD, and interviews with Bappeda and the Food Agency
Actors	Provincial government and DPRD are dominant; non-state actors are merely consultative	Participation of academics, NGOs, and farmers is symbolic (tokenistic participation)	Strengthening public deliberation mechanisms and substantive participation	In-depth multi-actor interviews, minutes of public consultation forums, and observation of food-sector <i>musrenbang</i>
Solutions	Alternatives identified: farmer institutions, local incentives, environmentally friendly technology	Weak cross-agency coordination and limited budget	Establishing an inter-OPD policy integration mechanism with adequate fiscal support	Cross-OPD FGDs, analysis of planning and budgeting documents, and interviews with the regional budget team (TAPD)
Contestation	Oil palm-based food estate generates ecological resistance	Not aligned with sustainable food security principles	Critical evaluation of the food estate model and development of ecology-adaptive options	Interviews with government actors, environmental NGOs, farmer groups; media and strategic program document analysis
Innovation	Emergence of digitally based food cooperatives	Not yet systematically implemented	Scaling up local institution based innovations with regulatory support and incentives	Local institutional case studies, interviews with cooperative managers, and analysis of regional innovation programs
Policy Focus	Emphasis on food production	Accessibility and affordability dimensions are neglected	Policy shift toward a holistic food security paradigm (production, distribution, access)	Analysis of food policy documents, BPS data on food access and consumption, and interviews with the Food Security Agency

Data Source Processed by Author, 2025. Note: OPD = Regional Apparatus Organization.

a. The perspectives and actions of actors influence food policy in Riau Province

- Problem stream analysis and actor roles

Riau Province's limited food production, which could only meet 23% of local demand in 2023, has been identified as a key issue placing Riau among the most food-insecure provinces in Indonesia. Regional People's Representative Council (DPRD) interview: "We see this as a serious problem, but the solution between agencies is not one-way." (DPRD interview, 2024). Multi-Actor FGD: "The food problem is not just about production, but also about unequal access and distribution." (Multi-Actor Focus Group Discussion, 2024).

Interview data indicates significant deficits in key commodities such as rice (240,167 tons out of a requirement of 633,465 tons), corn, soybeans, meat, and vegetables. This situation is exacerbated by Riau's ranking 29th out of 34

provinces in the food security index (BPN, 2022). A 77% dependence on supplies from outside the region indicates a high level of vulnerability to external disruptions, such as natural disasters in distribution channels, which directly trigger price increases for basic necessities.

Riau has experienced a significant and persistent rice deficit in recent years, with local production falling far short of consumption needs. In 2019, of the total annual demand of 571,266 tons, Riau was only able to produce 153,781 tons, meaning only about 26.9% of the demand was met, leaving a deficit of approximately 73%. This situation worsened in 2022, when local rice production declined to approximately 122,560 tons (out of 100 tons of demand), resulting in a consumption-to-availability ratio of cereals reaching 4.98, meaning demand was four times greater than production capacity. Although production began to increase in 2024 to

127,440 tons (out of 436,000 tons of annual consumption), meeting demand, Riau remains in a high deficit.

A problem stream analysis of food policy in Riau Province indicates complex dynamics (Figure 1). Riau's dependence on outside food supplies and low local rice productivity have become recurring "focusing events," drawing the attention of stakeholders. Furthermore, the ecological vulnerability of peatlands due to land conversion reinforces the perception that this issue is not only economic but also closely linked to environmental sustainability.

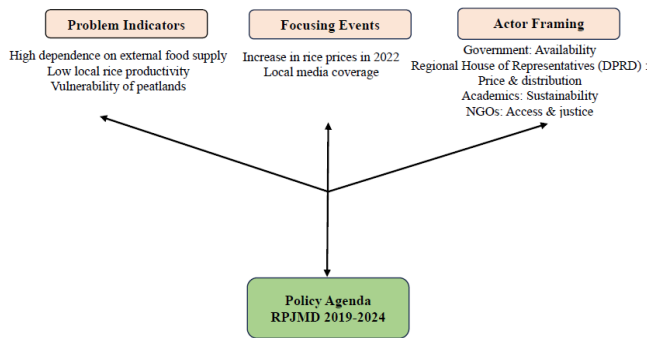


Figure 1. Food security stream problems in Riau Province
Source: Edited by the Author

In Figure 1, each actor interprets this problem from their own perspective. The regional government, through the Riau Province Food, Crops, and Horticulture Agency, views this deficit as a supply issue and tends to focus on strategies to increase external supply. However, the Trade and Industry Agency, along with the Regional People's Representative Council (DPRD), rejects this dependency and urges reduced imports from other provinces, such as West Sumatra and Java. This conflict of interest creates ambiguity in the problem definition. Meanwhile, academics and non-governmental organizations (NGOs) highlight deeper issues, namely the ecological vulnerability of peatlands and the lack of equitable access for vulnerable groups. The fragmentation of actors tends to hinder the development of a cohesive problem definition.

Food security issues in Riau are reflected in complex problem stream dynamics. The recurring issue of production deficits serves as a focal point, attracting attention, amplified by the rice price crisis in 2022. In the June 2022 edition of the FAO index, rice prices rose to their highest level in a year in May 2022. The index reached 109.2 points, a 3.5% increase compared to April 2022. A sharp increase occurred for all types of rice. This accelerated the formalization of food issues into the government's formal agenda, as outlined in the Riau Province Medium-Term Development Plan (RPJMD). However, limited micro-data indicates weak evidence-based policy and indicates information barriers within the problem stream. This condition hinders actors from making decisions based on comprehensive data. The Central Statistics Agency (BPS) is responsible for basic statistical data, while ministries/agencies are responsible for sectoral data. Bappenas plays a role in coordination and integration, and regional governments are responsible for data at the local level. Data limitations often arise from a lack of coordination, accessibility issues, or differing quality standards among relevant parties.

Fundamentally, the differing orientations among actors highlight gaps in framing. The Provincial Government

(Pemrov) consistently focuses on Availability, realized through intensification programs such as "Riau Bertani" and a target of increasing rice production by 50%, even though the current ratio of consumption to availability of Riau cereals indicates a high deficit (for example, 4.98 times the need). In contrast, the Riau Regional People's Representative Council (DPRD) focuses more on Price and Affordability, as evidenced by working visits to Bulog to monitor stocks and price stability to protect public purchasing power. Meanwhile, academics emphasize the importance of Accessibility and Sustainability, considering that food availability at the provincial level does not necessarily guarantee access at the household level by conducting studies to address the physical, social, and economic factors that influence food access across all districts/cities. This difference in orientation emphasizes the urgent need to synchronize policies so that Riau, whose food security index still needs improvement, can achieve comprehensive food security, not only focusing on production. This fragmentation makes the problem stream in Riau not fully coordinated, which directly affects the opportunity for food issues to transform into a consistent policy agenda. Only by unifying the framework of understanding the problem among actors can an inclusive and sustainable food policy be realized.

- Policy stream analysis

Food policy formulation in Riau Province indicates a dominance of formal regulations that generally refer to the national framework. While normatively providing legal legitimacy, this approach has the potential to create a disconnect with the unique local context, particularly the complexity of peat ecosystems. The foundations of food policy in this region include Law Number 18 of 2012 concerning Food, which establishes the principles of food sovereignty, independence, and security, and Presidential Regulation Number 66 of 2021, which regulates cross-sectoral coordination. The Riau Province Medium-Term Development Plan (RPJMD) for 2019-2024 also emphasizes strengthening local superior commodities, while the Regional Action Plan for Food and Nutrition (RAD-PG) focuses on integrating cross-sectoral efforts to improve nutrition. This situation indicates a top-down regulatory bias, significantly limiting the scope for policy innovation based on local needs.

Control of policy configuration by the Riau Provincial Government and the Riau Regional People's Representative Council (DPRD), while non-state actors such as academics, NGOs, and farming communities are only placed in consultative forums with low bargaining power, often occurs in the process of formulating and evaluating regional regulations (Perda), such as through Public Hearings (RDPU), policy-making committees or technical teams, or development planning deliberations (Musrenbang) at the provincial level, where their input is accepted but the final decisions and policy substance remain dominated by the executive and legislative bodies. Public participation indicates a tendency towards symbolic participation, where public presence has no substantive influence on policy formulation. The deliberation process, which should be democratic, becomes merely a reproduction of the formal interests of the state (Figure 2). As a result, most solutions emerging from the policy stream, such as strengthening farmer institutions or incentives for local food, do not fully meet three criteria: technical feasibility, accepted values, and resource availability. Weak coordination across regional government agencies (OPD) and budget constraints hamper the implementation of these solutions.

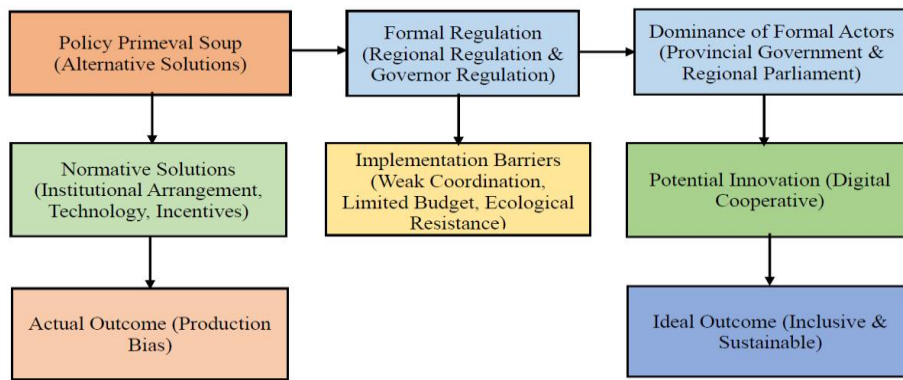


Figure 2. Framework gap chart-policy stream of food policy in Riau Province
Source: Edited by the Author

As shown in Figure 2, the flowchart illustrates the gap analysis between policy design and implementation outcomes in food governance. The policy, which conceptually already has a policy primeval soup in the form of alternative solutions, is then formalized through regulations (Regional Regulations and Gubernatorial Regulations), but in practice is dominated by formal actors (the Provincial Government and the Regional People's Representative Council). This dominance is not accompanied by strong implementation governance, resulting in major obstacles such as weak coordination, budget constraints, and ecological resistance. Consequently, the resulting solutions are normative, limited to institutional aspects, technology, and incentives, and lead to actual outcomes that are biased towards production. On the other hand, the figure also emphasizes the existence of a transformational pathway toward ideal, inclusive and sustainable outcomes through opening up innovation spaces, particularly through strengthening cooperatives and digitalization, which reduce the dominance of formal actors and expand participation. Thus, the core message of the figure is that the primary problem is not the absence of policy, but rather the structure of actors, implementation capacity, and the lack of collaborative innovation.

Although various alternative solutions exist in the policy stream, such as strengthening farmer institutions or developing environmentally friendly technologies, most of these solutions fail to meet three criteria: technical feasibility, value acceptability, and resource adequacy. Weak coordination between regional government agencies (OPD) and budget constraints hamper technical feasibility and resource availability. Furthermore, the concept of a palm oil-based food estate, which is the development of integrated food areas around oil palm plantations to produce strategic food in an integrated manner without clearing new forests, aims to strengthen food security and economic diversification. This concept integrates food agriculture with oil palm plantations, utilizing intercropping and palm oil waste, and involving local communities. However, several challenges faced include land suitability, potential agrarian conflicts, and the gap in roles between companies and communities. This has met with resistance due to its potential to exacerbate ecological vulnerability, resulting in low value acceptability. This has given rise to a more contextual alternative innovation, namely the development of food cooperatives based on local institutions supported by digital technology. This model is considered more adaptive because it can shorten the distribution chain, increase market efficiency, and strengthen farmers' position in the food value chain. However, this

innovation has not been systematically implemented due to a lack of consistent policy support.

- Political stream analysis

Within the MSF, politics is one of the main streams that determines whether an issue can rise to the policy agenda. Here, politics is understood as an arena for competing interests between actors, with an asymmetric distribution of resources. In the context of food policy in Riau Province, the political stream tends to be dominated by formal actors, as interview findings show: "Coordination meetings between regional government agencies (OPDs) are held regularly, but often only to fulfill administrative requirements." (OPD Interview, 2024). FGD Findings: "Farmers' aspirations are often drowned out by bureaucracy." (Farmers and NGOs FGD, 2024). The Riau Provincial Government and the Riau Provincial Legislative Council (DPRD) are indicated as holding structural authority in the formulation and budgeting of food policy in Riau. Although formal coalitions are formed through budgetary mechanisms, coordination between regional government agencies (OPDs) is often administrative and ceremonial, failing to generate substantive synergy in implementation.

The private sector also plays a significant role through its control over the food distribution chain, reinforcing the interpretation of pragmatic logic and economic orientation in the power relations demonstrated by the government's pragmatic logic due to the severe production deficit. Private Interview: "Distribution is about efficiency. If it's not profitable, we can't operate." (Food Distribution Actor, 2024), Riau is only able to meet around 22% to 50% of its total rice needs, which reach approximately 662,000 to 670,000 tons per year. On the other hand, academics and NGOs function as epistemic actors with normative power in shaping public discourse. However, their capacity to influence policy is limited because they are not part of the formal architecture of power. Informal networks formed between academics, NGOs, and farming communities are more effective in articulating local interests, but their access to decision-making remains limited due to limited public participation mechanisms in formal forums such as the Musrenbang (Deliberation for Development Planning).

Political support from regional heads tends to be symbolic, emphasizing flagship programs, while the Regional People's Representative Council (DPRD) indicates a short-term orientation influenced by electoral interests. This condition reflects the argument that political streams are often influenced by power dynamics, ideology, and constituent pressure. As a result, the coalition patterns formed in Riau tend

to be exclusive and elitist, dominated by formal actors who neglect inclusivity. This pattern indicates that the political stream reflects the logic of power and resource distribution rather than the aspirations of grassroots communities, thus weakening the chances of developing food policies that are truly responsive to local needs.

A key quote from the interview underscores this failure of synergy: "Coordination meetings between regional government agencies (OPDs) are held regularly, but frankly, they are often just for administrative purposes, not for seeking substantive synergy on the ground. It all comes back to individual sectoral egos." Meanwhile, the main findings of the FGDs reinforce this analysis by indicating that policy coalitions are elitist. The FGDs concluded that politics reflects more of a distribution of power and resources than an arena for inclusive dialogue. FGD participants emphatically stated: "Farmers' aspirations are often drowned out by bureaucracy. Existing participation mechanisms are largely dominated by the interests of urban elites." The strongest evidence explaining the pragmatic logic of the private sector is their complete control over distribution channels, which makes food availability in the market determined based on economic profit, rather than solely on national food security.

In Figure 3, the structure of power relations and actor roles in the policy process is both hierarchical and collaborative. Formal actors (provincial government, Regional People's Representative Council, regional heads, and Regional Apparatus Organizations) occupy a dominant position due to their legal authority and control over the decision-making process. These formal actors form a formal coalition with pragmatically oriented economic actors (the private sector), particularly in program implementation and resource support. Conversely, informal relations exist with epistemic and advocacy actors (academics, NGOs, and farming communities) who act as counterweights by providing knowledge, policy criticism, and representing community interests. This configuration indicates that while the state remains a key actor, policy effectiveness is greatly influenced by cross-actor interactions, both formal and informal, in shaping the direction and quality of policy.

The configuration of actors in Riau's food policy indicates the dominance of formal institutions such as the Provincial Government and the Provincial People's Representative Council, which hold legislative and budgetary authority (Figure 3). Meanwhile, the private sector plays a strategic role in logistics distribution, reflecting a pragmatic orientation within the policy network. Conversely, epistemic actors such as NGOs and academics function as critical counterweights through knowledge production, despite their position outside the formal architecture of power. Formal coalitions formed between local governments and the Provincial Legislative Council (DPRD) tend to be procedural, focused on budget allocation, but fail to create substantive synergy due to coordination still being mired in administrative patterns. Conversely, informal networks connecting academics, NGOs, and farming communities have proven more adaptive in articulating local interests. However, limited political access makes it difficult for their advocacy capacity to be translated into formal policy agendas.

The asymmetrical distribution of power is evident through three main dynamics: Regional Heads tend to display symbolic political support through flagship programs such as "Riau Bertani" (Farming Riau), which are summarized in planning documents (Renstra). However, these efforts are often overridden by dominant private economic control, as evidenced by the massive conversion of productive food land into plantations, an issue raised in the analysis of food policy changes. Meanwhile, academics and NGOs play a role with their epistemic capital, namely through the preparation of various evaluations and policy critiques that highlight the suboptimal implementation of programs, uneven distribution, and low achievement of production targets, thus providing an independent knowledge base to challenge the narrative of political success alone, while civil society, especially farmers, remains marginalized because their participation is limited to formal forums such as musrenbang. The coalition pattern is perceived as tending to be exclusive by informants, which closes the opportunity for the birth of food policies that are inclusive and responsive to the needs of grassroots communities.

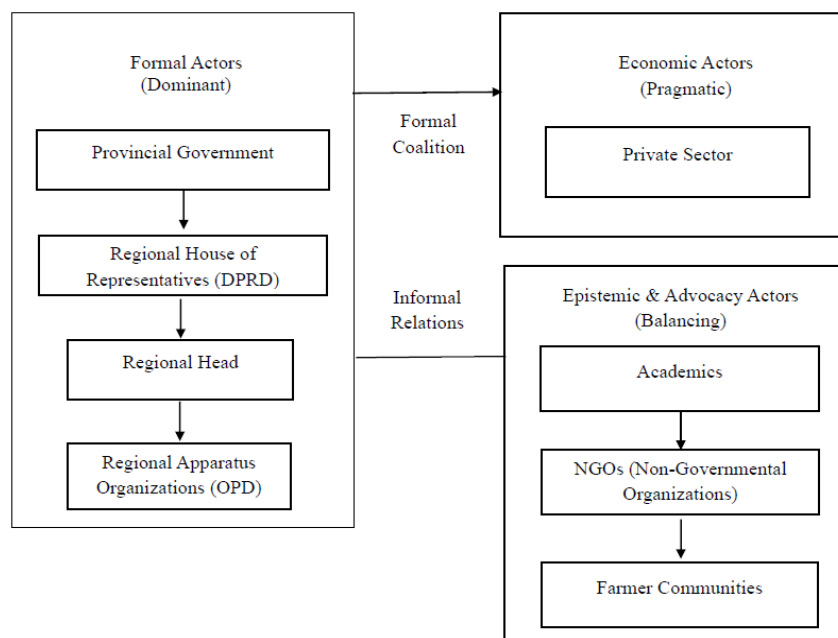


Figure 3. Political stream of food policy in Riau Province

Source: Edited by the Author

Empirically, the separation of food policy and peat governance is reflected in the fragmentation of actor roles. Regional governments (the Executive and the Regional People's Representative Council) tend to interpret food security as increasing production and short-term supply stability, while the Riau Provincial Environmental Agency (DLH) positions peatland within a conservation framework disconnected from the food agenda. Private actors, on the other hand, operate within a logic of commodity efficiency that reinforces large-scale land use, while farmers and local communities face limited capacity, access to adaptive technology, and institutional support for developing peat-friendly cultivation models. From the perspective of MSF, this condition indicates a lack of convergence between the problem stream, the policy stream, and the political stream, resulting in peatland issues never becoming a policy window in the formulation of regional food policies. Neo-institutionally, the dominance of growth-based development norms reinforces sectoral practices and hinders the integration of landscape-based policies. Consequently, food security and peatland protection operate within two separate policy regimes, and transformation is only possible through the reconstruction of cross-sectoral coordination, the strengthening of local actors, and the institutionalization of food production models adaptive to peat ecosystems.

b. Impact of actors' perspectives and actions influencing food policy in Riau Province

- The real impact of food policies on society

Food policies in Riau Province correlate with various impacts reported by informants on the community. In terms of availability, Riau Province indicated an average availability of 2,254 kcal/capita/day (2013–2017), exceeding the national Recommended Dietary Allowance (RDA) of 2,150 kcal/capita/day. However, this figure does not always directly reflect equitable food access. The low level of public food access is evident in the still high percentage of the population experiencing food insecurity across all regions, both in high-income areas and food-producing areas with high poverty rates. Overall, this policy has been relatively successful in maintaining price stability for key commodities such as rice, chilies, and horticultural crops, but dependence on supplies from other provinces makes them vulnerable to price fluctuations.

In terms of distribution and access, despite improvements in distribution infrastructure, price disparities between regions persist, particularly in rural and coastal areas with limited transportation access. Household Interview: "Prices are stable, but if distribution is late, we immediately have difficulties." (Coastal Community Interview, 2024). Data from the Food, Crops, and Horticulture Agency indicates that the number of people experiencing food insecurity in Indonesia has tended to increase from 46.47% in 2011 to 50.10% in 2015. Therefore, although food policy in Riau encompasses a comprehensive legal framework, the effectiveness of its implementation is still largely determined by the harmonization of regulations and consistency in program implementation on the ground.

Food policy in Riau also encourages increased land intensification and extensification programs. The Riau Province Food, Crops, and Horticulture Agency has implemented various programs, such as the Food Diversification Enhancement Program, which aims to expand the use of local food substitutes for rice. In addition, they launched the "Riau Rice Option" program with a target of increasing rice farming land by 50,000 ha and the "Riau

Moves to Plant Rice" (Riau Bertani) program which aims to increase rice production by at least 50% by 2024. Although this initiative can be interpreted as a form of policy commitment, its contribution to regional food independence has not been optimal due to limitations in technology, capital, and farmer institutional capacity.

- Policy implementation and actor responses

Law Number 18 of 2012 concerning Food clearly indicates the government's political commitment to achieving national food security. This law serves as the foundation for regional policies, such as Riau Provincial Regulation Number 13 of 2018. This regional regulation establishes various policy aspects, from planning, availability, and diversification to food security and community participation. The Riau Provincial Government is also striving to achieve the 2019–2024 RPJMD target of meeting 50% of local food needs by promoting programs in 12 districts/cities through various initiatives such as increasing agricultural productivity and land use for strategic commodities.

In general, farmers and business actors acknowledge the benefits of policies, such as assistance with production inputs, seed subsidies, and technical assistance. However, they also find that these benefits are not evenly distributed, and bureaucratic aid distribution often presents obstacles. While this policy improves price stability for consumers, it has not completely reduced price volatility for strategic commodities. Indicators of success used by actors and the community include price stability, increased land productivity, and food affordability at the household level.

However, policy implementation on the ground faces significant challenges. Weak inter-agency coordination, limited irrigation and logistics infrastructure, and low levels of active participation by farmer groups in policy formulation have led to inconsistencies. Farmer Group FGD participants stated: "We are rarely involved in planning. Usually, we are just asked to attend." (Farmer FGD, 2024). This directly impacts program effectiveness and indicates the need for institutional reform to ensure more responsive and inclusive policies.

- Improving food policy reviews at the district level in Riau

Several regencies in Riau Province have demonstrated their commitment to food security through regulatory initiatives. Rokan Hilir Regency (Regional Regulation No. 02 of 2016), Kampar Regency (Regional Regulation No. 06 of 2021), and Indragiri Hilir Regency (Regional Regulation No. 02 of 2021) have issued regulations protecting sustainable agricultural land. This fact aligns with data indicating that Indragiri Hilir, Rokan Hilir, and Siak Regencies are the largest rice production centers in Riau (BPS, 2021). This situation underscores the significant potential of local-level policy initiatives to support food security. Therefore, the implementation of food policies in Riau must focus on strengthening the local production base. This requires support for agricultural technology, increased access to inclusive financing, and institutional improvements for farmer groups. More efficient and transparent distribution mechanisms are also needed, especially in remote and island areas such as the Meranti Islands Regency, to reduce the food access gap.

Regional governments need to improve cross-sector integration with trade, agriculture, and private sector agencies to make the food supply chain more adaptable to market dynamics. Finally, the essence of policy improvement lies in expanding the scope for public participation, including farmers, NGOs, and academics, in the policy formulation and

evaluation process. This way, food policy will not operate solely from a top-down perspective but will also be responsive to actual needs and conditions on the ground.

5. CONCLUSIONS

The dynamics of food policy in Riau Province are not solely the result of multi-level regulatory alignment, but rather the interaction between regional institutional capacity, power configurations between actors, and local ecological characteristics. Although the national policy framework provides a relatively cohesive normative direction, at the regional level, a process of reinterpretation occurs, resulting in coordination gaps, particularly in the integration of the dimensions of food availability, distribution, and quality. Fragmented problem framing and the dominance of formal actors lead to policy processes that tend to be institutionally reproductive and not yet fully inclusive.

Theoretically, this study extends the relevance of the MSF to the subnational context of developing countries by indicating that the coupling process between streams depends not only on the openness of policy windows, but also on asymmetries of authority in multi-level governance, limited local institutional capacity, and region-specific ecological pressures. Thus, this study proposes that institutional and ecological variables are conditional factors determining the effectiveness of MSFs at the local level.

The integration of MSF with a Neo-Institutionalist perspective results in the finding that policy windows in the regional context are both structural and temporal. The coupling process is mediated by path-dependent institutional logic, institutionalized norms, and the distribution of power between actors, so that policy change is determined not only by political momentum but also by actors' ability to negotiate existing institutional constraints. This synthesis extends the MSF framework from an agenda-setting framework to one capable of explaining policy reproduction and transformation within a multi-layered institutional context.

These findings have referential value for studies of food policies in other provinces in Indonesia and developing countries with similar characteristics, particularly those characterized by asymmetric decentralization, dependence on national policies, and ecological vulnerability. Decentralization of food policy does not automatically produce contextual policies without strengthening regional institutional capacity, opening up space for local policy entrepreneurship, and integrating ecological dimensions into policy design.

REFERENCES

- [1] Rachmat, M. (2015). Percepatan pembangunan pangan menuju pencapaian ketahanan pangan yang mandiri dan berdaulat. *Forum Penelitian Agro Ekonomi*, 33(1): 1-17. <https://doi.org/10.21082/fae.v33n1.2015.1-17>
- [2] Leach, M., Nisbett, N., Cabral, L., Harris, J., Hossain, N., Thompson, J. (2020). Food politics and development. *World Development*, 134: 105024. <https://doi.org/10.1016/j.worlddev.2020.105024>
- [3] Alonso, B.E., Cockx, L., Swinnen, J. (2018). Culture and food security. *Global Food Security*, 17: 113-127. <https://doi.org/10.1016/j.gfs.2018.02.002>
- [4] Mockshell, J., Birner, R. (2015). Donors and domestic policy makers: Two worlds in agricultural policy-making? *Food Policy*, 55: 1-14. <https://doi.org/10.1016/j.foodpol.2015.05.004>
- [5] Mehrabi, Z., Delzeit, R., Ignaciuk, A., Levers, C., et al. (2022). Research priorities for global food security under extreme events. *One Earth*, 5(7): 756-766. <https://doi.org/10.1016/j.oneear.2022.06.008>
- [6] Brown, K.A., Venkateshmurthy, N.S., Law, C., Harris, F., Kadiyala, S., Shankar, B., Mohan, S., Prabhakaran, D., Knai, C. (2021). Moving towards sustainable food systems: A review of Indian food policy budgets. *Global Food Security*, 28: 100462. <https://doi.org/10.1016/j.gfs.2020.100462>
- [7] Brinkman, M., Levin-Koopman, J., Wicke, B., Shutes, L., Kuiper, M., Faaij, A., van der Hilst, F. (2020). The distribution of food security impacts of biofuels, a Ghana case study. *Biomass and Bioenergy*, 141: 105695. <https://doi.org/10.1016/j.biombioe.2020.105695>
- [8] Saint Ville, A.S., Hickey, G.M., Phillip, L.E. (2017). How do stakeholder interactions influence national food security policy in the Caribbean? The case of Saint Lucia. *Food Policy*, 68: 53-64. <https://doi.org/10.1016/j.foodpol.2017.01.002>
- [9] Galli, A., Moreno Pires, S., Iha, K., Abrunhosa Alves, A., Lin, D., Mancini, M.S., Teles, F. (2020). Sustainable food transition in Portugal: Assessing the footprint of dietary choices and gaps in national and local food policies. *Science of the Total Environment*, 749: 141307. <https://doi.org/10.1016/j.scitotenv.2020.141307>
- [10] Purwaningsih, Y. (2018). Ketahanan pangan: Situasi, permasalahan, kebijakan, dan pemberdayaan masyarakat. *Jurnal Ekonomi Pembangunan*, 9(1): 1-27. <https://journals.ums.ac.id/JEP/article/view/1028>
- [11] Jamil, A. (2022). Inclusiveness of policies and the role of actors in subsidized fertilizer management to achieve food security. *Analisis Kebijakan Pertanian*, 20(2): 161-172. <https://doi.org/10.21082/akp.v20i2.161-172>
- [12] Gevisioner, G., Febriamansyah, R., Ifdal, I., Tarumun, S. (2015). Kualitas konsumsi pangan di daerah defisit pangan Provinsi Riau. *Jurnal Gizi dan Pangan*, 10(3): 233-240.
- [13] Mariyani, S., Prasmatiwati, F.E., Adawiyah, R. (2017). Food availability and factors affecting the food availability of rice farmer household members of food lumbung in Ambarawa Subdistrict Pringsewu. *Jurnal Ilmu Ilmu Agribisnis: Journal of Agribusiness Science*, 5(3): 304-311. <https://doi.org/10.23960/jiia.v5i3.1643>
- [14] Swinnen, J., Vandeveld, S. (2019). The political economy of food security and sustainability. In *Encyclopedia of Food Security and Sustainability*, pp. 9-16. <https://doi.org/10.1016/B978-0-08-100596-5.22328-7>
- [15] Muadi, S., MH, I., Sofwani, A. (2016). Konsep dan kajian teori perumusan kebijakan publik. *Jurnal Review Politik*, 6(2): 195-224. <https://doi.org/10.15642/jrp.2016.6.2.195-224>
- [16] Masganti, M. (2021). Peningkatan produktivitas padi di Provinsi Riau melalui perbaikan sistem tanam. *AI Ulum: Jurnal Sains dan Teknologi*, 6(2): 84-94. <https://doi.org/10.31602/ajst.v6i2.5219>
- [17] Ezward, C., Suliansyah, I., Rozen, N., Dwipa, I. (2024). Exploration of local rice germplasm diversity in kuantan singingi based on grain and rice morphology. *Jurnal*

- Agroteknologi, 15(1): 1-10.
<https://doi.org/10.24014/ja.v15i1.23429>
- [18] Hapsah, H., Wawan, W., Salbiah, D., En Yulia, A., Dini, I.R. (2021). Pengembangan produksi pertanian dengan sistem low external input sustainable agriculture (LEISA) di desa langsung permai kecamatan bunga raya kabupaten siak. *Wikrama Parahita: Jurnal Pengabdian Masyarakat*, 5(2): 182-188.
<https://doi.org/10.30656/jpmwp.v5i2.2960>
- [19] Rai, R.K., Kumar, S., Sekher, M., Pritchard, B., Rammohan, A. (2015). A life-cycle approach to food and nutrition security in India. *Public Health Nutrition*, 18(5): 944-949. <https://doi.org/10.1017/S1368980014001037>
- [20] Nasution, F.A., Indainanto, Y.I., Pardede, P.D.K. (2023). Beras sebagai komoditas politik dalam pemilihan umum di Indonesia. *Jurnal Kajian Agraria dan Kedaulatan Pangan*, 2(1): 37-43.
<https://doi.org/10.32734/jkakup.v2i1.13421>
- [21] Prastiya, S.D., Toruan, J.W.L. (2025). Peran kebijakan pemerintah untuk ketahanan pangan berbasis swasembada beras di Indonesia. *Prosiding Seminar Nasional Pembangunan dan Pendidikan Vokasi Pertanian*, 6(1): 142-149.
<https://doi.org/10.47687/snppvp.v6i1.1763>
- [22] Lumbanraja, V., Fahreza, I. (2023). Politik pangan: Upaya membangun kebijakan ketahanan pangan di Sumatera Utara. *Jurnal Kajian Agraria dan Kedaulatan Pangan*, 2(2): 1-7.
<https://doi.org/10.32734/jkakup.v2i2.13354>
- [23] Ali, T.R., Makhasin, L. (2025). Food security dan komoditi strategis: Analisis ekonomi politik kebijakan perberasan di era presiden Joko Widodo. *Politeia Jurnal Ilmu Politik*, 17(1): 15-27.
<https://doi.org/10.32734/politeia.v17i1.15824>
- [24] Kairupan, M.S.R., Azizah, H.N., Rizaqyllah, M.F., Afifah, D.F. (2025). Implementasi diversifikasi pangan pokok (beras dan pangan lokal) sebagai strategi pencapaian SDG 2 di kabupaten bandung barat. *Jurnal Review Pendidikan dan Pengajaran*, 8(11): 8938-8945.
<https://doi.org/10.31004/jrpp.v8i4.53958>
- [25] Budiman, N.D., Santu, L. (2024). Kajian strategi dan kebijakan pemerintah Indonesia dalam mencapai target swasembada beras. *Jurnal Pertanian Cemara (Cendekiawan Madura)*, 21(2): 125-136.
<https://doi.org/10.24929/fp.v21i2.3888>
- [26] Partini, P., Sari, I. (2022). Kebijakan pengembangan ketahanan pangan lokal. *Jurnal Agribisnis*, 11(1): 78-83.
<https://doi.org/10.32520/agribisnis.v11i1.1988>
- [27] Sabatier, P.A. (2006). *Theories of the Policy Process*. California: Westview Press.
- [28] Cairney, P. (2024). Kingdon's multiple streams framework: What happens next? *International Review of Public Policy*, 6(3): 455-462.
<https://doi.org/10.4000/13gg0>
- [29] Béland, D., Howlett, M. (2016). The role and impact of the multiple-streams approach in comparative policy analysis. *Journal of Comparative Policy Analysis: Research and Practice*, 18(3): 221-227.
<https://doi.org/10.1080/13876988.2016.1174410>
- [30] Jenkins-Smith, H.C., Weible, C.M. (2025). *The Advocacy Coalition Framework*. Palgrave Macmillan Cham. <https://doi.org/10.1007/978-3-031-85554-2>
- [31] Abraham, B.G., Wei, W., Chanie, M.A., Addis, A.K., Cai, B.Z., Fang, S. (2024). Applying Kingdon's multiple streams framework to understand health policy processes: A systematic review. *Academic Journal of Politics and Public Administration*, 1(5): 555575.
<https://doi.org/10.19080/ACJPP.2024.01.555575>
- [32] March, J.G., Olsen, J.P. (1983). The new institutionalism: Organizational factors in political life. *American Political Science Review*, 78(3): 734-749.
<https://doi.org/10.2307/1961840>
- [33] Herweg, N., Zahariadis, N., Zohlnhöfer, R. (2018). The multiple streams framework foundations, refinements, and empirical applications. In *Theories of the Policy Process*, pp. 17-53.
<https://doi.org/10.4324/9780429494284-2>
- [34] Cramer, L., Crane, T., Dewulf, A. (2023). Knowledge brokers within the multiple streams framework: The science-policy interface for livestock and climate change discussions in Kenya. *Environmental Science & Policy*, 147: 44-56. <https://doi.org/10.1016/j.envsci.2023.05.018>
- [35] Möck, M., Vogeler, C.S., Bandelow, N.C., Hornung, J. (2022). Relational coupling of multiple streams: The case of COVID-19 infections in German abattoirs. *Policy Studies Journal*, 51(2): 351-374.
<https://doi.org/10.1111/psj.12459>
- [36] Creswell, J.W., Creswell, J.D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
- [37] Hays, D.G., Mckibben, W.B. (2021). Promoting rigorous research: Generalizability and qualitative research. *Journal of Counseling & Development*, 99(2): 178-188.
<https://doi.org/10.1002/jcad.12365>
- [38] Hennink, M., Kaiser, B.N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine*, 292: 114523.
<https://doi.org/10.1016/j.socscimed.2021.114523>
- [39] Fofana, F., Bazeley, P., Regnault, A. (2020). Applying a mixed methods design to test saturation for qualitative data in health outcomes research. *PLoS ONE*, 15(6): e0234898. <https://doi.org/10.1371/journal.pone.0234898>
- [40] Rahimi, S., Khatooni, M. (2024). Saturation in qualitative research: An evolutionary concept analysis. *International Journal of Nursing Studies Advances*, 6: 100174. <https://doi.org/10.1016/j.ijnsa.2024.100174>
- [41] Naem, M., Ozuem, W., Howell, K., Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods*, 22: 1-18.
<https://doi.org/10.1177/16094069231205789>
- [42] Lyhne, C.N., Thisted, J., Bjerrum, M. (2025). Qualitative content analysis—framing the analytical process of inductive content analysis to develop a sound study design. *Quality & Quantity*, 59: 5329-5349.
<https://doi.org/10.1007/s11135-025-02220-9>