

## From deficiency to sufficiency : ensuring food security policy in Ciamis Regency, Indonesia

Erlan Suwarlan<sup>1)\*</sup>, Arie Budiawan<sup>2</sup>, Agus Nurulsyam Suparman<sup>3</sup>, Otong Husni Taufik<sup>4</sup>, Maya Puspita Dewi<sup>5</sup>

<sup>1,2,3,4</sup>Department of Government Studies, Universitas Galuh, Indonesia

<sup>5</sup>Department of Public of Administration, Universitas Muhammadiyah Jakarta, Indonesia

### Abstract

*Several issues contribute to food deficiency, such as failure to maintain local government food reserves, low food diversification, declining fertility of agricultural land, and damaged agricultural infrastructure. The purpose of this study is to find out how local governments collaborate to ensure food sufficiency in Ciamis Regency. Using an explanatory research method, where data collection is done through interviews and observations, and data is processed through the stages of reduction, data presentation, and conclusion/verification. The research findings found that the initial conditions; the activities of the Ciamis District Food Security Council show the involvement of various actors. The Food Security Agency, as the lead sector, is responsible for coordinating food security efforts at the local level, as evidenced by coordination meetings. The institutional design executed by the Food Security Council provides coordination for all stakeholders involved in food security efforts. Collaborative processes are implemented through dialog forum involving representatives from different levels of government, including district, provincial and national levels. The Collaborative Governance approach to achieving food security in Ciamis Regency highlights the important role of institutions and leadership in enabling this process, as well as the importance of coordination and cooperation among multiple stakeholders.*

**Keywords:** collaboration, local government, food security, policy

\*)Corresponding author

E-mail : [erlan.suwarlan@unigal.ac.id](mailto:erlan.suwarlan@unigal.ac.id)

### Introduction

Food security remains a persistent and complex global issue that has been extensively studied through various theoretical and empirical approaches (Abay et al., 2023; Aziz et al., 2022; Bala, 2023; Brimbetova et al., 2023; Hornick, 2023). Global attention to food security has intensified amidst the emergence of cross-sectoral challenges, including climate change, geopolitical conflicts, fluctuations in commodity prices, and export restrictions by major producing countries (Abay et al., 2023; Barlow et al., 2020; Li & Song, 2022). The combination of these challenges threatens the stability of global food supplies and has the potential to trigger multidimensional crises, including energy crises, if not effectively anticipated (Abay et al., 2023; Turenko, 2022). International forums such as the G20 have made food security a priority agenda, emphasizing that ensuring food security is crucial and unavoidable in an increasingly interconnected global society (Clarke, 2023; Hornick, 2023). Despite intensive global discussions, there remains a significant gap between international commitments and actual field implementation. This condition necessitates the development of more

comprehensive strategies to strengthen food systems, including technological innovations and cross-sectoral collaborations (Bala, 2023; Kumar et al., 2024).

Aligned with global concern, Indonesia has demonstrated serious commitment through national policies, notably Law No. 18 of 2012 on Food, which aims to enhance production, value addition, accessibility, and diversification of food commodities. However, food security challenges persist at various regional levels; inadequate food availability and diversity, as well as excessive dependence on rice as a staple food, continue to pose chronic issues in many areas (Rozaki, 2021). Ciamis Regency in West Java Province exemplifies a case where local food security faces multidimensional problems: limited availability and diversification of local food products, unachieved targets for local food reserves, and community consumption patterns that still heavily rely on rice and wheat-based foods. Additionally, agronomic and infrastructural factors exacerbate food security vulnerabilities in Ciamis, including declining soil fertility, deteriorating agricultural infrastructure, significant post-harvest losses, and shrinking productive land areas. These phenomena indicate that achieving national or provincial food security does not automatically guarantee food security at the regency level, as each region possesses unique vulnerability characteristics (Brimbetova et al., 2023; Rozaki, 2021). Consequently, a contextual and location-specific approach is required to effectively implement national food security policies at the local level.

Academic studies focusing on collaborative strategies of local governments to ensure food security at the regency level remain very limited. Yet, local multi-stakeholder collaboration is key to overcoming the complex challenges of food security as previously described. Most research on collaborative governance in Indonesia tends to focus on sectors other than food security, such as heritage tourism (Prahara & Dewi, 2022), national park management (Sururi, 2018), regional agricultural development (Iyoeaga et al., 2020), and sustainable irrigation management (Zwickle et al., 2021). As a result, there is a notable gap in the literature regarding how stakeholder collaboration can effectively support local food security. Addressing this gap is crucial, as without clear empirical and theoretical guidance, local food security efforts risk becoming fragmented and poorly coordinated. If left unaddressed, weaknesses in local coordination and collaboration may result in sporadic food security interventions, thereby perpetuating community food vulnerabilities and hindering the achievement of sustainable food development goals (Brimbetova et al., 2023; Zwickle et al., 2021). Therefore, this study was initiated to critically examine how local governments collaborate with various actors to ensure food security in Ciamis Regency. The insights generated are expected to contribute both academically and practically to strengthening local food security through a collaborative approach.

Both theoretical and practical, the Collaborative Governance framework by Ansell and Gash (2008) was selected as the analytical foundation for this study. This framework offers a structured conceptual model highlighting four critical components determining the effectiveness of collaboration: starting conditions, facilitative leadership, institutional design, and the collaborative process (Ansell & Gash, 2008). The application of the Ansell and Gash framework has dual rationales. Theoretically, it provides a structured and comprehensive analytical tool for evaluating stakeholder collaboration dynamics in Ciamis's food security policies, allowing systematic identification of each critical element in the collaborative process. Practically, it assists in identifying critical factors that can be strengthened or improved within local collaborative governance frameworks (Zhang & Wang, 2023; Zwickle et al., 2021). Collaborative governance is also aligned with the need for innovative public

governance in the face of limited government resources; the involvement of non-governmental sectors is deemed essential to addressing complex and cross-sectoral public problems (Ansell & Gash, 2008; Emerson et al., 2012). Through this framework, the study is expected not only to fill theoretical gaps in the literature but also to provide empirical recommendations for improving coordination and effectiveness of local food security programs. Ultimately, through planned and inclusive collaboration, sustainable food security can be more readily achieved, involving shared responsibility among all stakeholders (Kwarta et al., 2024; Septiyanto et al., 2024).

Previous studies have examined food security from different perspectives, yet significant gaps remain in understanding collaborative governance at the regional level. Abay et al. (2023) focused on the global impact of the Russia-Ukraine war on food security, highlighting disruptions in food supply chains and policy responses. However, this study lacks an in-depth analysis of local governance mechanisms necessary to address food security at the regional level. Similarly, Abu Hatab et al. (2019) examined the effects of urbanization on food security in developing countries, particularly emphasizing livestock systems. Although their findings provide insights into food security challenges, they do not explore how regional collaborative governance mechanisms can mitigate these issues in rural settings such as Ciamis Regency.

Based on Aziz et al. (2022) conducted a systematic review of women's empowerment and food security, emphasizing gender disparities in access to food resources. While their study provides a valuable perspective on the social aspects of food security, it does not examine the role of multi-stakeholder governance in ensuring food availability and sustainability. Bala (2023) explored strategies for sustainable food security, identifying policy gaps and challenges in maintaining long-term food availability. However, the study does not provide a comprehensive governance framework that integrates local government, private sector, and community stakeholders.

According to Brimbetova et al. (2023) analyzed food security in the context of social and economic development in various regions. Although the study highlights key economic variables, it does not investigate how collaborative governance structures influence food security at the local level. Hornick (2023) examined economic shifts and their impact on global food security. The study provides valuable macroeconomic insights but lacks a governance-focused approach to addressing food security issues within specific regions. Lastly, Kumar et al. (2024) explored food security technologies and conservation methods, emphasizing technological interventions to improve food production. However, their study does not incorporate policy recommendations or governance frameworks essential for effective implementation at the regional level.

This study provides a novel perspective by focusing on collaborative governance in food security at the regional level, specifically in Ciamis Regency. Unlike previous studies that predominantly discuss food security from macroeconomic, gender, or technological viewpoints, this research highlights the role of multiple stakeholders, including government institutions, farmer associations, cooperatives, and logistics agencies, in ensuring food security. It fills the gap by identifying institutional mechanisms that facilitate or hinder collaboration in food security governance, an area that has been largely overlooked in previous research.

Furthermore, this study contributes to both practical and theoretical discourse by integrating community participation as a key factor in strengthening food security. Many existing studies have neglected the grassroots perspective in governance, focusing instead on policy directives at the national or international level. By

emphasizing participatory governance, this research provides a more holistic understanding of food security strategies, offering an evidence-based framework that supports sustainable regional food policies through collaborative governance mechanisms.

Collaborative Governance is a concept that experts define differently, although they generally agree that it involves the involvement of non-governmental actors. Collaborative Governance, as defined by (Emerson et al., 2012) refers to the systematic and organized approach of formulating and implementing public policies, as well as managing them, via the active participation of persons from many sectors, including public agencies, government levels, and the public, private, and civic spheres. The purpose of this is to attain a public objective that would be challenging to achieve through other means.

According to (McGuire, 2006) defines collaborative governance as a structured and guided approach that involves the participation of various institutions, including government, civil society, and non-governmental organizations (NGOs). The objective of this initiative is to tackle common challenges that are beyond the capacity of any individual government institution to resolve. In their study, (O'Flynn & Wanna, 2008) provide a definition of collaboration as the act of people, groups, or organizations engaging in cooperative and collective efforts with others.

(Ansell & Gash, 2008) offer another point of view, defining collaborative governance as a type of governance where government institutions actively involve non-governmental actors (such as the community, NGOs, and the private sector) in formal decision-making processes that prioritize the collective welfare. The goal is to work together to execute policies and oversee the administration of programs and resources. From this perspective, it is feasible to highlight multiple crucial ideas: (1) Government institutions initiate cooperation; (2) Non-governmental actors participate; (3) All actors are involved in the policy-making process; (4) The collaborative forum is jointly organized and designed; (5) The objective of the collaborative forum is to reach collective decisions; and (6) The collaboration is specifically focused on policy-making and governance.

A new paradigm in public administration is represented by collaborative governance, as can be inferred from these facts. The active participation of the community, the corporate sector, NGOs, and other stakeholders in the process of decision-making, policy implementation, and governance as a whole is a component of this strategy. The collective responsibility and cooperative actions taken to address public issues are the primary focus of collaborative governance, which guarantees that a diverse array of viewpoints and resources are utilized to achieve more efficient and inclusive policy outcomes. This model advocates for a governance style that is more democratic and participatory, in which the success and effective operation of public administration are contingent upon the involvement and contributions of non-governmental actors..

Collaborative governance has been the subject of numerous research investigations (Prahara & Dewi, 2022; Sururi, 2018) examined the collaborative process in the revitalization of the Banten Lama cultural heritage tourism area and the management of Kerinci Seblat National Park; (Iyoega et al., 2020) investigated collaborative efforts in the development of the agricultural sector in Bandung Regency; while (Zwickle et al., 2021) explored collaboration in sustainable irrigation development. Additionally, (Prabowo et al., 2021) analyzed collaborative processes in village development during the COVID-19 pandemic.

On the other hand, the author concentrates on the collaborative process in the pursuit of food security, with a particular emphasis on four critical components as identified by (Ansell & Gash, 2008): Starting Conditions, Facilitative Leadership, Institutional Design, and Collaborative Process. The objective of this comprehensive approach is to considerably contribute to the advancement of knowledge in the field by providing a more advanced and detailed comprehension.

The problem of food security has expanded and reached regional and village levels, which are the smallest administrative units in Indonesia. This encompasses Ciamis Regency. The Ciamis Regency Government's dedication to tackling food security concerns is evident in the creation of the Food Security Council, as mandated by Regional Regulation Number 10 of 2017 about the Food Security Council of Ciamis Regency. The Food Security Council has several primary responsibilities, including creating policies, promoting collaboration across different sectors, and establishing connections between local governments, the commercial sector, and the community in order to improve food security. These endeavors guarantee a cooperative strategy to tackle food security issues, utilizing the capabilities and assets of different stakeholders to construct a robust and enduring food system. The council's objective is to establish a comprehensive framework for attaining food security at all levels of governance by incorporating policy formation, sectoral coordination, and network development.

According to the Regional Medium-Term Development Plan Document of Ciamis Regency for the period of 2019-2024, the food-related challenges in Ciamis Regency are as follows: The local food currently lacks appropriate availability and diversity, The community's food consumption patterns, particularly the use of tubers, animal-based meals, and legumes, require enhancement, The goal for the accessibility of Regional Government Food Reserves has not been achieved, and the community still relies heavily on the consumption of rice and wheat.

Moreover, these problems are highlighted in the Strategic Plan of the Department of Agriculture and Food Security 2019-2024, which delineates the food-related concerns in Ciamis Regency as follows: Decreasing soil fertility in agricultural land, Agricultural infrastructure destruction, There are significant amounts of post-harvest losses, Insufficient regional food stockpiles and the decline of communal food storage infrastructure, and The diminishing expanse of arable land.

Food security in Ciamis Regency is confronted with a multitude of obstacles, as evidenced by the phenomena. The study of food security at the regional level is therefore essential to guarantee the satisfaction of fundamental human requirements. The vulnerability to food insecurity at the national, provincial, and regency levels is characterized by distinct characteristics. Consequently, not all national or provincial indicators can be employed to map vulnerability to food insecurity at the regency level. The significance and intrigue of the specific conditions in Ciamis Regency are the focus of this study, which endeavors to investigate the significance of local government collaboration in the provision of food security in the region.

This research will explore the distinctive opportunities and challenges that Ciamis Regency encounters in its endeavors to guarantee food security. The study endeavors to identify effective strategies and practices that can be employed to overcome the identified obstacles by investigating the role of local government collaboration. An understanding of the intricacies of food security at the regency level, notably in Ciamis, will offer valuable insights into the ways in which customized strategies can address regional deficiency and contribute to a more resiliency food system.

## Research Methods

This study employed an explanatory-qualitative approach with a case study design. The research aimed to gain an in-depth understanding of the dynamics of cross-sectoral collaboration in ensuring food security in Ciamis Regency, West Java. A case study design was chosen as it allows for contextual exploration of phenomena within real-life settings, where the boundaries between the phenomenon and its context are not clearly delineated (Yin, 2018). Informants were selected using purposive sampling, considering their strategic involvement in food security policymaking. A total of 10 informants were chosen, comprising the Head of Service, Secretary of Service, Head of the Food Security Division, Head of Food Distribution and Price Division, food security analysts, and food price supervisors. The selection was based on their experience, position, and the relevance of their duties to food security issues, ensuring the richness and relevance of the data collected.

The informants were selected based on their expertise and direct involvement in food security policies. The table below provides an overview of the informants and the data collected:

**Table 1.** Informant

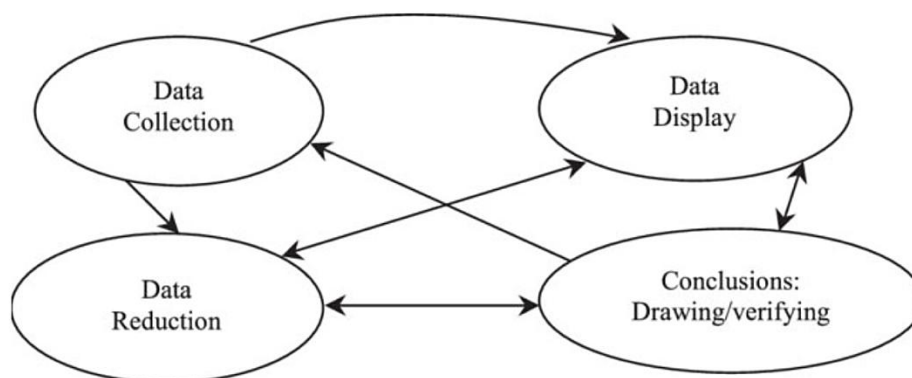
No	Informant Category		Number of Informants	Data Collected
1	Government (Agriculture and Food Security Service)	Officials and Food	3	Policy implementation, food security strategies, regulatory framework
2	Regional Planning Agency (Bappeda)	Development	2	Budget allocation, policy planning, interagency coordination
3	Representatives from Farmer Associations	Farmer	2	Challenges in agricultural production, food supply chain issues
4	Representatives from Cooperatives/BumDes	from	2	Role of cooperatives in food distribution, local economic development
5	Representatives from Logistics Agencies	from	1	Distribution challenges, market accessibility, infrastructure needs

*Source: Research Results, 2024.*

Data were gathered through three primary techniques: semi-structured interviews, non-participant observation, and document analysis. Semi-structured interviews utilized an open-ended interview guide to explore the experiences, perceptions, and practices of stakeholders, allowing flexibility to develop questions according to the flow of conversation. Non-participant observation was conducted to observe interactions, coordination meetings, and the direct implementation of food security programs in the field. Document analysis involved reviewing relevant government regulations, regional and regent decrees, strategic plans, Food Security Council reports, and policy-related literature. Triangulation across data sources was employed to enhance the credibility of the research findings.

The study adhered to ethical principles for qualitative research. Prior to the interviews, all informants were briefed about the research objectives and their rights as participants. Informed consent was obtained in writing. The researcher ensured the confidentiality of informants' identities and guaranteed that the information collected would be used solely for academic purposes.

Data analysis followed the interactive model proposed by Miles, Huberman, and Saldaña (2014), consisting of three main stages: data reduction, data display, and conclusion drawing and verification. During the data reduction stage, the researcher filtered and simplified raw data into meaningful units. The data display stage involved organizing information into narratives, tables, or diagrams to identify emerging patterns and relationships among categories. In the conclusion drawing and verification stage, preliminary interpretations were formulated and subsequently verified through triangulation and member checking with informants. The analysis was conducted iteratively and continuously throughout the research process.



**Figure 1.** Interactive model of qualitative data  
*Source: Miles, Huberman, and Saldaña, 2014*

## Results and Discussion

This study examines the collaborative governance process for ensuring food security in Ciamis Regency by analyzing four key elements: starting conditions, facilitative leadership, institutional design, and collaborative process, in line with Ansell and Gash (2008).

The starting conditions in Ciamis Regency reflect a strong foundation for collaborative efforts, supported by the serious commitment of local government actors. The establishment of the Food Security Council, under Regent Regulation Number 10 of 2017, formalizes the multi-stakeholder coordination framework. This council includes various stakeholders, such as the Agriculture and Food Security Service, the Health Office, the Education Office, and representatives from community organizations like the Indonesian Farmers Harmony Association. Informant 1 noted, "Every coordination meeting ensures that each agency presents their current food security programs, allowing issues to be tackled jointly." The strong participation of these actors during strategic meetings has built early trust and mutual understanding, crucial in setting the trajectory for effective collaboration.

According to the Population and Civil Registration Office (2024), the Ciamis Regency has a total population of 1,436,702 people and is divided into 27 sub-districts, 258 villages, and 7 sub-districts that make up the region. Ciamis Regency is situated in the southern region of the equator, stretching from north to south from 108°19' to 108°43' East Longitude and 7°03'39" to 7°39'36" South Latitude. Its geographic location is an indication of its geographical location. To the north, Ciamis Regency is bordered by Majalengka Regency and Kuningan Regency to the south. To the east, it is bordered by Banjar City and Central Java Province. To the west, it is bordered by Tasikmalaya Regency and Tasikmalaya City, which has a land area of 1,595.94 Km<sup>2</sup> or 159,594 Ha

(BPS, 2023) and does not have a water area (sea) after the expansion of Pangandaran Regency because it does not have a sea.

Ciamis Regency has a monsoon-type rainfall pattern, which means that wet parts receive more than 2,000 millimeters of rainfall annually, while dry areas receive less than 2,000 millimeters of rainfall annually. This is according to the classification of the region's climate.

On the basis of the prices that are currently in effect, the agricultural sector continues to play a significant role in the Gross Regional Domestic Product (GDP), which is the primary economic driver of the Ciamis Regency. Nevertheless, this sector experienced a decline in 2024 as compared to the previous year, when its role in 2023 had reduced from 23.60% to 23.28% throughout the course of 2024. Each and every sub-sector within the Agriculture, Forestry, and Fisheries sector has experienced a reduction in their respective roles, which has led to this fall.

Law No. 18 of 2012 concerning Food Article 114 and Government Regulation No. 17 of 2015 concerning Food Security and Nutrition Article 75 mandates the Government and Regional Governments in accordance with their authority to be obliged to build, compile, and develop an integrated Food and Nutrition Information System, which can be used for planning, monitoring and evaluation, stabilization of food supply and prices as well as an early warning system against food problems and insecurity food and nutrition.

Accurate data on food security and vulnerability is crucial for informing decision-makers in program and policy development. This information is essential at both the central and local levels to effectively prioritize interventions and programs. By understanding the needs and potential consequences of high food insecurity, decision-makers may make more informed decisions. This material can serve as a tool to address the food crisis in the context of efforts to prevent and mitigate food and nutrition emergencies in the short, medium, and long term.

Food plays a crucial role in fulfilling basic physical needs and preventing hunger. Additionally, food with nutritional content is essential for enhancing the intelligence of a nation and improving the quality of human life. This is in line with the definition of food security, which aims to produce healthy, intelligent, active, and productive individuals. The sufficiency of food provision, both in terms of quantity and quality, is directly linked to work productivity and the development of the brain and intelligence. Ultimately, it contributes to enhancing people's well-being.

According to Law No. 18 of 2012 on Food, food security is defined as the state of having enough food that is safe, diverse, nutritious, and affordable. It also emphasizes that the availability of food should be in line with the religious, cultural, and personal beliefs of the community. The ultimate goal is to enable individuals to lead healthy, active, and sustainable lives. In light of the significance of food security in the progress of a nation, Chapter III of the Food Law Number 18 of 2012 stipulates that the Government is obligated to undertake the planning and execution of food implementation. Article 6 directs the food administration to achieve sovereignty, independence, and food security..

The district's food vulnerability and security indicators are determined by: (i) a previous review of the mapping of areas that are susceptible to food insecurity; (ii) the degree of accuracy in measuring the food security and nutrition situation; (iii) the inclusion of all aspects of food security and nutrition; and (iv) the presence of data in all villages. The district's vulnerability and food security are measured using six indicators, which encompass three dimensions of food security as outlined in table 2.



**Table 2.** Indicators of Vulnerability and Food Security of the District  
In Ciamis Regency

Indicator	Definition	Data Source
<b>Aspects of Food Availability</b>		
Agricultural land area per capita	Ratio of agricultural land area to population	1. Agriculture and Food Security Service 2021 2. Population and Civil Registration Office 2021
The ratio of economic facilities and infrastructure to households.	The ratio of economic facilities and infrastructure (including markets, minimarkets, shops, stalls, restaurants, etc.) to the number of households in the community.	1. Village Potential 2021, BPS 2. Population and Civil Registration Office 2021
<b>Aspects of Access to Food</b>		
The proportion of individuals having the very minimal degree of welfare compared to the total number of villagers	The number of people with the lowest welfare status (people with the level of welfare in Decile 1) compared to the number of villagers	1. Social Service 2021, 2. Population and Civil Registration Office 2021
Villages without appropriate access to land, water, or air	Villages without sufficient transportation infrastructure according to the following criteria: (1) Villages that have land transportation facilities are not accessible throughout the entire year; (2) Villages that have sea or air transportation facilities but lack public transit.	1. Village Potential 2021, 2. BPS
<b>Aspects of Food Utilization</b>		
Ratio of the number of households without access to clean water to the number of village households	The number of households in the first to fourth deciles that lack access to protected clean water sources, as opposed to the total number of households in the village.	1. Health Office 2021 2. Population and Civil Registration Office 2021
The ratio of the number of health workers to the number of villagers	The number of health workers is comprised of the following: 1) general practitioners / specialists; 2) dentists; 3) midwives; and 4) other health workers (nurses, public health workers, nutrition workers, pharmacists / pharmacist assistants). This is in contrast to the number of villagers.	1. Health Office 2021 2. Population and Civil Registration Office 2021

*Source: Ciamis Regency Agriculture and Food Security Office, 2023.*

The table and graph below illustrate the categories determined by the analysis of Ciamis Regency's 258 villages and 7 sub-districts in 2020, 2021, and 2022 with respect to food security conditions.

**Table 3.** Food Security Category

Priority	Category	Number of Villages and Villages		
		2020	2021	2022
Priority 1	Highly Vulnerable	0	1 Village	0
Priority 2	Vulnerable	11 Villages	0	3 Villages
Priority 3	Quite Vulnerable	20 Villages	8 Villages	14 Villages
Priority 4	Quite Resistant	74 Villages	25 Villages	39 Villages
Priority 5	Resistant	90 Villages	176 Villages	152 Villages
Priority 6	Highly Resistant	70 Villages	55 Villages	57 Village

*Source: Ciamis Regency Agriculture and Food Security Office, 2023.*

The table above presents a comprehensive assessment of the susceptibility to long-term food insecurity. This assessment is based on six variables that measure factors such as the availability of food, access to food and livelihoods, and the utilization of food and nutrition. The composite food insecurity vulnerability map was created using Weighting Analysis.

Composite maps illustrate the state of susceptibility to food insecurity in a certain area (sub-district) resulting from a combination of different aspects of food insecurity. The villages are categorized into 6 priorities based on the outcome of the weighting process. Priority 1 represents the utmost amount of vulnerability, whilst priority 6 indicates a somewhat higher level of food security. To clarify, priority 1 locations, or villages, are at a higher risk of being vulnerable to food insecurity compared to other areas, or villages. As a result, these priority 1 areas demand rapid assistance. Nevertheless, the designation of an area (village) as priority 1 does not imply that all of its residents are experiencing food insecurity, and conversely, the classification of an area (village) as priority 6 does not indicate that all of its residents are food insecure.

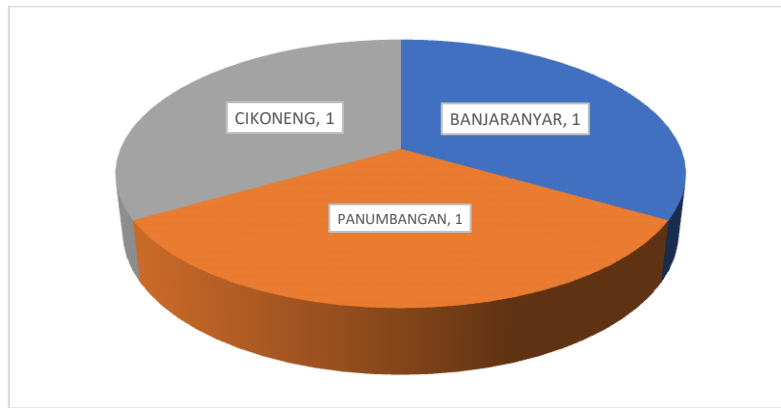
According to the analysis, out of the 265 villages/sub-districts in Ciamis Regency till 2022, none of them are considered a priority. There are a total of 1 village, 3 villages with Priority 2, 14 villages with Priority 3, 39 villages with Priority 4, 152 villages/sub-districts with Priority 5, and 57 villages/sub-districts with Priority 6. Moreover, the information is included in the table labeled as Table 4.

**Table 4.** Distribution of the Number of Villages and Urban Villages by Priority

Priority	Number of Villages	Percentage
1	0	0,00
2	3	1,13
3	14	5,28
4	39	14,72
5	152	57,36
6	57	21,51

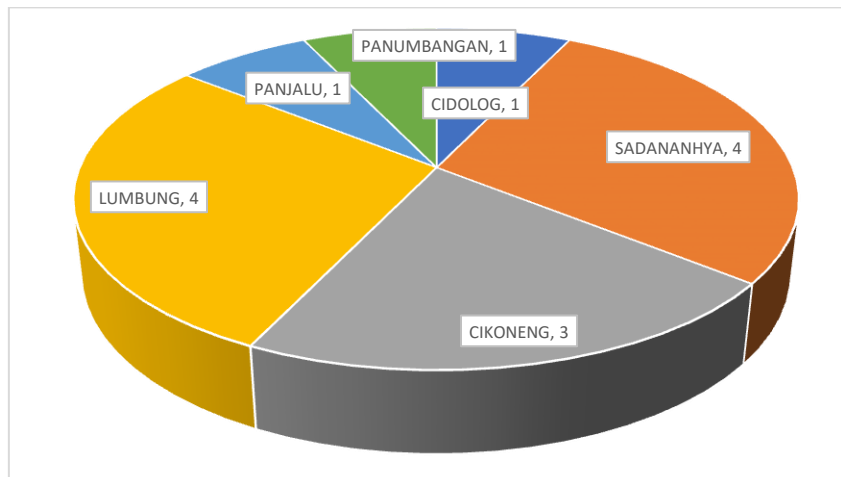
*Source: Ciamis Regency Agriculture and Food Security Office, 2023.*

The villages at highest risk of experiencing food insecurity, categorized as priority 2, are located in the Banjaranyar District (1 village), Cikoneng District (1 village), and Panumbangan District (1 village). Moreover, figure 2 below illustrates this point:



**Figure 2.** Distribution of the number of priority 2 villages per sub-district  
*Source: Ciamis Regency Agriculture and Food Security Office, 2023.*

The villages classified as priority 3 for food insecurity are located in Panjalu District (1 village), Panumbangan District (1 village), Cidolog District (1 village), Sadananya District (4 villages), Cikoneng District (3 villages), and Lumbung District (4 villages). Moreover, graph 2 below illustrates this observation.



**Figure 3.** Distribution of the Number of Priority Villages 3 per District  
*Source: Ciamis Regency Agriculture and Food Security Office, 2023.*

Food insecurity poses a threat to villages. Priority 2 and 3 are typically the result of the following factors: (1) the ratio of the number of unprosperous residents to the number of villagers, (2) the ratio of the number of households without access to clean water to the number of households, and (3) the ratio of the number of health workers to the number of villagers.

In the context of food security, collaborative governance encompasses a variety of factors, including policies, innovation, land availability, limited food diversification, and climate change. Consequently, the ongoing depletion of food sources underscores the necessity of collaborative governance in the context of food security.

Cross-actor involvement and the commitment of actors are the initial factors that will influence the trajectory of collaboration, including the establishment of collaborative processes and the development of asymmetrical relationship dynamics between stakeholders, during the Starting Conditions stage (Ansell & Gash, 2008)

The participation of various stakeholders in achieving food security in Ciamis Regency is demonstrated through the inclusion of multiple parties in the Ciamis Regency Food Security Council. These parties include the Agriculture Service, Animal

Husbandry Service, Small and Medium Business Cooperative Service, Logistics Affairs Agency, Health Office, Public Works Public Housing and Binamarga Office, Education Office, Regional Planning and Development Agency, Central Statistics Agency, Indonesian Farmers Harmony Association, and Mainstay Farmers and Fishermen Contact. In general, actors play a crucial role in addressing and resolving issues related to local food development. They engage in effective communication, coordination, and concerted efforts to tackle the problems identified and explore alternative solutions.

The informants' information revealed that each coordination meeting included a presentation of material from relevant agencies, particularly those that were relevant to the issues of the year. For instance, the agriculture office, livestock service, and cooperative office discussed activities related to food security during the pandemic.

Each agency, such as the Agriculture Office, is active in many aspects connected to food security, agricultural commodity availability, and irrigation systems that enhance agricultural production and productivity. The livestock service encompasses the assessment of current conditions regarding commodities that contribute to food security, as well as the preservation of the supply of animal commodities. Logistics companies involved in: monitoring food prices, analyzing statistical data on food security or agriculture, ensuring the supply and stock of food commodities, particularly rice or grain. The Small and Medium Business Cooperative Office is associated with ensuring stability in food prices. The Regional Planning and Development Agency is involved in providing assistance for planning activities that contribute to the food security council. The education office is specifically focused on providing food security instruction in schools. The Health Office is involved in monitoring and assessing the nutritional intake of children. Public works offices are associated with the development and maintenance of essential infrastructure, particularly in relation to ensuring food security, such as the construction and upkeep of roadways.

Moreover, the Mainstay Farmers and Fishermen Harmony Association, along with the Indonesian Farmers Harmony Association, plays a crucial role in supporting key players in the agricultural industry. For instance, they actively participate in events like World Food Day to promote agricultural products and encourage the development of locally sourced agricultural goods, thereby guiding business actors in the sector. They also engaged in discussions with farmers regarding the ongoing food security issues, as well as strategies to enhance productivity in order to ensure a steady supply of food and promote increased consumption using local resources. In order for them to assume the role of the Food Security Council's media. The informant's statement provides a thorough understanding of how the actors engage, communicate, coordinate, and exert various attempts to address the identified concerns, such as the development of alternative local food.

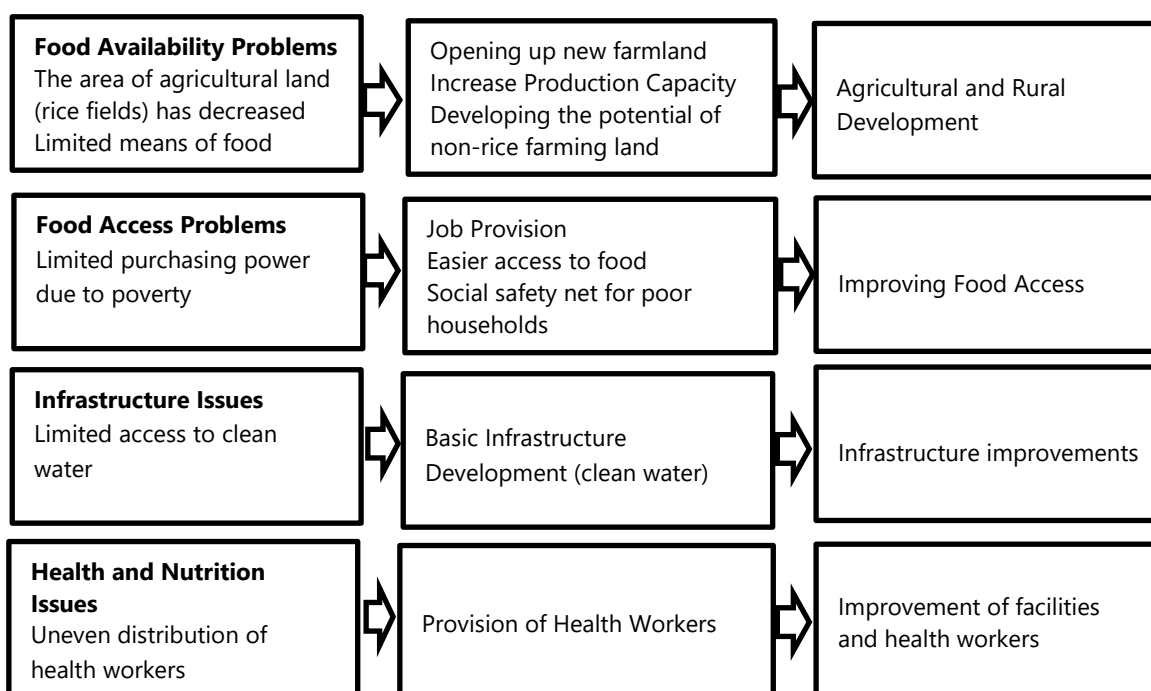
The Facilitative Leadership stage involves facilitating the collaborative process, mediating conflicts, establishing trust, and resolving any problems that may develop (Ansell & Gash, 2008; McGuire, 2006; H. Zhang & Wang, 2023). Facilitative leadership is evident through the proactive role of the Food Security Service as the leading sector, providing consistent coordination and evaluation mechanisms. Informant 4 emphasized, "The Agriculture and Food Security Service has become a central hub, facilitating all agencies to align their interventions." Key government agencies, such as the Livestock Service, the Cooperative Office, and the Trade Office, demonstrated leadership by actively supporting initiatives to stabilize food commodity supplies, monitor price fluctuations, and strengthen local food systems.

Having access to precise, thorough, and well-structured data on food security is crucial for aiding the prevention and management of food and nutrition insecurity. This information can offer guidance and suggestions to policymakers in designing programs, policies, and interventions at both the national and local levels. Law No. 18/2012 and Government Regulation No. 17/2015 require the Government and Regional Governments to establish an integrated Food and Nutrition Information System, in accordance with their respective authorities, as mandated by the law.

The factors contributing to susceptibility to food insecurity vary among locations, thus necessitating distinct approaches for their resolution. Gaining insight into the circumstances inside different regions (specifically villages) is crucial for policymakers to effectively identify appropriate measures to address food security concerns in their respective areas.

The handling of food vulnerability in rural areas focuses on several priority locations. First, Priority 2 villages spread across Cikoneng and Panumbangan Districts are the main targets. Second, Priority 3 villages in Cidolog, Sadananya, Kawali, Panjalu, and Panumbangan Districts are also included in the intervention priorities. Additionally, special attention is given to villages located far from the district capital or in border areas with neighboring districts, considering their often-limited access. Finally, newly established villages (expansion villages) that still face constraints in facilities, infrastructure, and human resource capacity are also a focus of intervention to ensure food security in these areas.

The focus of efforts to enhance food security is on addressing the primary factors contributing to food vulnerability in rural areas, as depicted in the figure 4.



**Figure 4.** The Framework of Interventions to Improve Food Security

*Source: Food Security and Vulnerability Atlas, 2022.*

The collaboration amongst players to achieve food security is demonstrated through coordination meetings, where the Food Security Service, as the leading sector, plays a crucial role. The Food Security Service specializes in conducting evaluations to determine the level of food security, typically focusing on specific groups or villages.

Furthermore, the informants provided information indicating that, apart from the food security service, other local government organizations such as the livestock service, agriculture service, and industry and trade agency also play a significant role in providing direct support. Therefore, the assistance provided by the local government has been relatively successful.

The Institutional Design stage centers on fundamental components, including foundational rules, comprehensive involvement, and openness, which serve as the bedrock for the stakeholder cooperation process. In terms of institutional design, Ciamis has established clear rules, open participation mechanisms, and inclusive governance structures are systematically involved in the Food Security Council to support operationalization at sub-district levels. Informant 7 observed, "Every village now has access to basic food security data, and food barns (*lumbung pangan*) have been revitalized to maintain food availability." Nevertheless, some challenges remain, such as the aging infrastructure of food barns and limited maintenance funding. Despite these limitations, the design ensures that all relevant actors have a formal avenue for contributing to food security efforts.

An endeavor to ensure enduring sustainability in attaining food security in Ciamis Regency entails extending assistance to groups in villages across all sub-districts using diverse means. Although there have been both successful and unsuccessful outcomes, not all of them have been successful. The figure below shows a group that has remarkable managerial skills.

Based on the information provided by the informants, it was discovered that nearly every sub-district possesses a food storage facility, which is either supplied by the government or established via community efforts. Nevertheless, there are barns that have sustained damage due to their prolonged existence, as well as those that have been inactive and are no longer being maintained. There is financial assistance available for the construction of upgraded food barns, which serve as both storage facilities and drying areas. The damage to food barns primarily results from the prolonged operation of the program over the past few decades. The maximum budget allows for the construction of 4 barns, which serve as spacious storage warehouses capable of holding 60 and 100 tons, respectively.

Government aid for barns has been available since 2009/2010 and has been extended to 200 organizations through the representative council's aspiration assistance. Over the past five years, the only source of funding has been the Special Allocation Fund (DAK) from the central government. Previously, the APBD consisted of a maximum of 200 groups. Many of the trees still offer some support, with prices ranging from Rp 20 million to Rp 25 million, and some even contain seed cash. The number of savings and loans has become stagnant, particularly for individuals who now receive only one or two program assistance from the DAK center per year, due to the large budget of up to Rp 500 million. This assistance includes the provision of warehouses, drying floors, machine houses, and machines. The presence of current food storage facilities is sufficient to enhance the accessibility of food in Ciamis Regency, however not at its maximum potential.

The final phase is Collaborative Design, which places greater emphasis on the presence of five processes: face-to-face dialogue, trust-building, commitment to the process, mutual understanding, and the attainment of results. Each of these stages will result in the attainment of shared objectives and beneficial transformations in procedures and policies. The outcomes of this partnership encompass not just the end

result, but also emphasize the process, specifically the establishment of trust and comprehension among stakeholders.

The collaborative process in Ciamis is characterized by structured dialogue, trust-building efforts, and mutual commitment to shared objectives. Stakeholder meetings serve as key forums for face-to-face dialogue, addressing challenges such as climate impacts, limited land availability, and food diversification issues. Informant 10 stated, "Coordination meetings are not just reporting forums; they are platforms for real problem-solving." The regularity of these meetings—particularly during national holidays and annual evaluations—strengthens mutual accountability and enables actors to adapt strategies to evolving challenges.

Empirical evidence from vulnerability mapping underscores the achievements and remaining gaps in food security efforts. Analysis of 265 villages between 2020 and 2022 shows a positive trend: the number of "highly vulnerable" villages (Priority 1) has decreased to zero, while "resistant" and "highly resistant" villages (Priorities 5 and 6) have increased significantly. However, vulnerabilities remain concentrated in certain districts such as Cikoneng, Panumbangan, and Sadananya, primarily due to inadequate clean water access, insufficient health infrastructure, and high poverty rates.

Recognizing these challenges, Ciamis Regency has prioritized interventions in rural and peripheral villages, particularly those classified as Priorities 2 and 3. Policy responses emphasize improving transportation infrastructure, expanding access to clean water, and increasing the availability of health personnel. The Framework of Interventions to Improve Food Security illustrates a structured strategy, focusing on strengthening village capacities, building local food reserves, and enhancing human resources.

The synergy between government bodies, farmer associations, and community groups reflects a maturing collaborative governance model. Informant 8 noted, "Farmer groups now actively participate in food diversification programs and local agricultural fairs," illustrating the empowerment of grassroots actors. The Food Security Council's multi-actor structure has proven effective in sustaining collective momentum, although continued investment in capacity building and infrastructure is needed.

In conclusion, the collaborative governance approach adopted in Ciamis Regency has significantly strengthened local food security structures. While challenges persist, particularly in marginal areas, the institutionalized collaboration mechanisms, supported by active facilitative leadership and inclusive design, provide a robust foundation for ongoing improvements. Moving forward, strengthening community engagement and ensuring sustainable financial support for infrastructure maintenance will be crucial to sustaining the gains achieved so far.

The interaction between actors and different levels of government in Ciamis Regency frequently takes place with the aim of achieving food security. The presence of the conversation forum has a beneficial influence, particularly by providing references and raising awareness for regions to further develop their capabilities in achieving food security.

The process of engaging in dialogue among stakeholders in achieving food security is crucial, particularly when addressing the intricate challenges that may arise unexpectedly, such as during national religious holidays and end-of-year meetings for activity evaluation. The role of the parties in local government collaboration is illustrated in the table 5.

**Table 5. Roles of Actors**

<b>No</b>	<b>Stakeholders</b>	<b>Role</b>
1	Regent/City Mayor	Director: carry out guidance and direction to the team of members of the Food Security Council
2	Regional Secretary	Daily Chairman: ensure that the duties and functions of the Food Security Council run smoothly starting from planning, implementing and evaluating activities
3	Assistant for Economy, Development and People's Welfare of the Regional Secretariat	The daily vice chairman plans and implements the activities of the Food Security Council
4	Head of the Agriculture and Food Security Service	collects and processes data from all members of the relevant agency/agency team to be formulated into policy recommendations.
5	Head of the Regional Development Planning Agency	Member: plays a role in development planning in the field of food security
6	Head of the Central Statistics Agency	Member: carries out a role in the collection and processing of data related to food security (legitimacy of data sources)
7	Head of the Regional Financial Management Agency	Members: play a role in supporting budgeting related to activities in an effort to improve food security
8	Head of Education Office	Member: plays a role in early socialization efforts to students in schools regarding efforts to prevent and overcome food and nutrition problems
9	Head of the Health Office	Member: plays a role in efforts to prevent and overcome food and nutrition problems in the community
10	Head of the Public Housing, Residential Areas and Environment Office	Member: plays a role in efforts to support food security in terms of environmental sanitation
11	Head of Social Service	Members: play a role in efforts to support food security through the provision of data related to the level of family welfare
12	Head of Public Works, Spatial Planning and Land Office	Members: play a role in supporting the facilitation of facilities and infrastructure that support the improvement of food security
13	Head of the Cooperatives, Small and Medium Enterprises and Trade Office	Members: carry out roles in efforts to smooth the distribution and marketing of food products
14	Head of the Population Control, Family Planning, Women's Empowerment and Child Protection Office	Members: play a role in supporting the role of women in efforts to improve food security and nutrition starting from the household level
15	Head of the Livestock and Fisheries Service	Member: plays a role in the supply of animal food products
16	Head of the Community and Village Empowerment Office	Members: play a role in community empowerment efforts to increase food security and independence at the village level
17	Head of Transportation Agency	Members: play a role in efforts to smooth food distribution



18	Head of the Economic Section of the Regional Secretariat	Members: carry out their role in an effort to help coordinate every activity between agencies to be more synergistic
19	Head of Sub Dolog Divre Region VII Ciamis	Members: carry out roles in efforts to provide food products, food reserves and stocks
20	Chairman of HKTl Ciamis Regency	Member: plays a role in efforts to encourage the improvement of the quality of farmers' human resources in an effort to increase food security
21	Chairman of KTNA Ciamis Regency	Member: plays a role in efforts to encourage the improvement of the quality of farmers' human resources in an effort to increase food security
22	Elements of the Agriculture and Food Security Service.	Helping to facilitate the activities of the Food Security Council

*Source: research results, 2024.*

In the process of government collaboration, the commitment of the individuals involved in attaining food security is a critical component. The Food Security Council was established under Ciamis Regent Regulation Number 10 of 2017 during the ex-Regent's tenure in Ciamis Regency. The implementation of this regulation occurred on May 8, 2019. In the process of government collaboration, the commitment of the individuals involved in attaining food security is a critical component. The Food Security Council was established under Ciamis Regent Regulation Number 10 of 2017 during the ex-Regent's tenure in Ciamis Regency. The implementation of this regulation occurred on May 8, 2019.

The Ciamis Regency Food Security Council is responsible for the following responsibilities: assisting the Regent in the formulation of policies to achieve district food security by considering national and provincial policies, promoting community participation and food administration through policy formulation, and conducting the evaluation and control of the Food Development Program at the district level.

Simultaneously, it serves the purpose of coordinating the formulation of policies in the food industry. This includes enhancing sustainable food production, increasing value for food businesses, strengthening distribution and logistics, establishing regional food reserves, diversifying food options, preventing and addressing food and nutrition issues, promoting coordination and collaboration across sectors with all relevant parties, and involving the community in devising practical strategies for food development programs. Additionally, it aims to establish networks and coordination systems between government agencies, the private sector, and community institutions to enhance the efficiency of regional food development programs.

Moreover, in the upcoming tenure of the Regent, the Third Mission in the 2019-2024 Medium-Term Development Plan document specifies the objective of "Establishing an economy centered on community empowerment, people's economy, and exceptional potential." This objective is part of the seventh strategy, which aims to enhance food security and achieve food self-sufficiency. The policy direction for this strategy is to augment the availability, accessibility, quality, diversity, and safety of food for the community."

Similarly, the Agriculture and Food Security Service, being the primary sector in charge, has expressed its commitment in its Strategic Plan. This plan outlines the medium-term goals and targets, which include increasing the production of food crops,

horticulture, and plantations, as well as enhancing food security to achieve community food independence.

The significance of the dedication displayed by these individuals is evident through the establishment of the Food Security Council, with the crucial aspect being that the highest level of leadership is held by the Regent. This commitment is demonstrated through the implementation of activities planned for the upcoming year, which are based on the evaluation conducted at the end of the previous year.

Therefore, it can be inferred that the dedication of those interested in achieving food security in Ciamis Regency has been demonstrated by all stakeholders participating in the diverse initiatives, particularly those affiliated with the Ciamis Regency Food Security Council.

## **Conclusion**

The research findings indicate that the participation of various stakeholders in achieving food security in Ciamis Regency is evident in the composition of the Ciamis Regency Food Security Council. This council includes key organizations such as the Agriculture Office, Livestock Office, Cooperatives and SMEs Office, Bulog, Health Office, PUPR and Binamarga Office, Bappeda Education Office, BPS, HKTI, and KTNA.

Facilitative Leadership in the context of achieving food security is demonstrated through coordination meetings, where the Food Security Service, as the primary sector, plays a crucial role in fostering collaboration among actors.

In the context of Institutional Design, the initiation of collaborative efforts occurred with the establishment of the Food Security Council, as mentioned before. The council is responsible for coordinating all stakeholders engaged.

The Collaborative Process component involves a dialogue platform that begins at the national, provincial, and district/city levels. The discourse forum has a beneficial influence, particularly by incorporating references and vigilance to encourage areas to fully exploit their capacities in achieving food security.

The recommendation of this study is that programs to improve food security and handle food vulnerability in district areas are directed to the following activities: Increasing food supply in non-production center areas by optimizing local food resources; Opening of new agricultural farmland; Poverty management through the provision of jobs, labor-intensive, land redistribution; the development of basic infrastructure (roads, clean water), and the provision of social assistance; as well as the development of productive businesses/MSMEs/labor-intensive to drive the regional economy; Improving access to clean water through the provision of clean water facilities and services; socialization and counseling; and provision of health workers.

In addition, the focus on the location of food vulnerability handling in village areas is prioritized on: Priority 2 villages spread across Cikoneng and Panumbangan Districts; Priority 3 villages spread across Cidolog, Sadananya, Kawali, Panjalu and Panumbangan Districts; Villages that are located far from the district capital or in areas bordering other districts; and expansion villages whose facilities, infrastructure and human resource capacity are still limited.

## **Acknowledgement**

Special gratitude is extended to the Institute for Research and Community Service at Galuh University for providing financial support for this research, as well as to the faculty colleagues who contributed to the entire research process.

## References

- Abay, K. A., Breisinger, C., Glauber, J., Kurdi, S., Laborde, D., & Siddig, K. (2023). The Russia-Ukraine war: Implications for global and regional food security and potential policy responses. *Global Food Security*, 36, 100675. <https://doi.org/10.1016/j.gfs.2023.100675>
- Abu Hatab, A., Cavinato, M. E. R., & Lagerkvist, C. J. (2019). Urbanization, livestock systems and food security in developing countries: A systematic review of the literature. *Food Security*, 11(2), 279–299. <https://doi.org/10.1007/s12571-019-00906-1>
- Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18(4), 543–571. <https://doi.org/10.1093/jopart/mum032>
- Aziz, N., He, J., Raza, A., & Sui, H. (2022). A systematic review of review studies on women's empowerment and food security literature. *Global Food Security*, 34, 100647. <https://doi.org/10.1016/j.gfs.2022.100647>
- Bala, R. (2023). Food Security for Sustainable Future: Challenges, Strategies and Solutions. *International Journal For Multidisciplinary Research*, 5(6). <https://doi.org/10.36948/ijfmr.2023.v05i06.8868>
- Barlow, P., Loopstra, R., Tarasuk, V., & Reeves, A. (2020). Liberal trade policy and food insecurity across the income distribution: an observational analysis in 132 countries, 2014–17. *The Lancet Global Health*, 8(8), e1090–e1097. [https://doi.org/10.1016/S2214-109X\(20\)30263-1](https://doi.org/10.1016/S2214-109X(20)30263-1)
- Bazerghi, C., McKay, F. H., & Dunn, M. (2016). The Role of Food Banks in Addressing Food Insecurity: A Systematic Review. *Journal of Community Health*, 41(4), 732–740. <https://doi.org/10.1007/s10900-015-0147-5>
- Brimbetova, N. Zh., Temirova, G. K., & Sultanaev, A. A. (2023). Food Security and Social Development of Regions: International Experience. *Economics: The Strategy and Practice*, 18(1), 36–54. <https://doi.org/10.51176/1997-9967-2023-1-36-54>
- Clapp, J., & Murphy, S. (2013). The G20 and Food Security: A Mismatch in Global Governance? *Global Policy*, 4(2), 129–138. <https://doi.org/10.1111/1758-5899.12039>
- Clarke, J. (2023). An India-Europe Agenda for Food Security. *FOCUS: Journal of International Business*, 10(1), 1–9. <https://doi.org/10.17492/jpi.focus.v10i1.1012301>
- de Souza Ferreira Filho, J. B., & Horridge, M. (2017). Land Use Change, Ethanol Production Expansion and Food Security in Brazil. In *Natural Resource Management and Policy* (Vol. 40, pp. 303–320). Springer. [https://doi.org/10.1007/978-1-4939-6906-7\\_12](https://doi.org/10.1007/978-1-4939-6906-7_12)
- Emerson, K., Nabatchi, T., & Balogh, S. (2012). An integrative framework for collaborative governance. *Journal of Public Administration Research and Theory*, 22(1), 1–29. <https://doi.org/10.1093/jopart/mur011>
- Fujimori, S., Hasegawa, T., Krey, V., Riahi, K., Bertram, C., Bodirsky, B. L., Bosetti, V., Callen, J., Després, J., Doelman, J., Drouet, L., Emmerling, J., Frank, S., Fricko, O., Havlik, P., Humpenöder, F., Koopman, J. F. L., van Meijl, H., Ochi, Y., ... van Vuuren, D. (2019). A multi-model assessment of food security implications of climate

- change mitigation. *Nature Sustainability*, 2(5), 386–396. <https://doi.org/10.1038/s41893-019-0286-2>
- Hornick, J. L. (2023). Big Changes in Global Food Security and the Issue of Development: Challenges and Hopes. *Volume 8: Agri-Innovations and Development Challenges: Engineering, Value Chains and Socio-Economic Models*, 1–11. <https://doi.org/10.1002/9781394236503.CH1>
- Iyoega, R. R., Trilestari, E. W., & Kirana, C. A. D. (2020). Collaborative Governance dalam Pembangunan Sektor Pertanian di Kabupaten Bandung. *Perspektif*, 9(1), 55–65. <https://doi.org/10.31289/perspektif.v9i1.2864>
- Kumar, A., Simran, S., Kumar, A., & Mubashshir, M. (2024). Food Security and its Conservation Technology. *International Journal of Research Publication and Reviews*, 5(5), 8124–8128. <https://doi.org/10.55248/gengpi.5.0524.1331>
- Kwarta, H., Warsonoc, H., & Hayu Dwimawanti, I. (2024). Collaborative Governance in Government Administration in the Field of State Security Along the Republic of Indonesia (RI)-Malaysia Border Area. *The International Journal of Management Science and Business Administration*, 10(3), 65–79. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.103.1004>
- Li, J., & Song, W. (2022). Food Security Review Based on Bibliometrics from 1991 to 2021. *Foods*, 11(23), 3915. <https://doi.org/10.3390/foods11233915>
- Margulis, M. (2012). Global food security governance: The Committee on world food security, comprehensive framework for action and the G8/G20. In *The Challenge of Food Security: International Policy and Regulatory Frameworks* (pp. 231–254). Edward Elgar Publishing. <https://doi.org/10.4337/9780857939388.00025>
- McGuire, M. (2006). Collaborative Public Management: Assessing What We Know and How We Know It. *Public Administration Review*, 66(s1), 33–43. <https://doi.org/10.1111/j.1540-6210.2006.00664.x>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). Fundamental fo Qualitative Data Analysis. In A. S. University (Ed.), *Qualitative Data Analysis: A Methods Sourcebook* (3rd editio, Vol. 4, Issue 1). SAGE Publications, Inc.
- O'Flynn, J., & Wanna, J. (2008). Collaborative Governance: A new era of public policy in Australia? In *Collaborative Governance: A new era of public policy in Australia?* ANU Press. [https://doi.org/10.26530/OAPEN\\_458884](https://doi.org/10.26530/OAPEN_458884)
- Prabowo, A., Khairul Muluk, M. R., Hayat, A., Administrasi, F. I., Brawijaya, U., & Korespondensi, ). (2021). Model collaborative governance dalam pembangunan desa pada masa covid-19: studi di Kabupaten Lampung Selatan. *Publisia: Jurnal Ilmu Administrasi Publik*, 6(1), 15–31. <https://doi.org/10.26905/PJIAP.V6I1.5393>
- Prahara, G. C., & Dewi, M. P. (2022). Collaborative Governance Dalam Pengelolaan Ekowisata Taman Nasional Kerinci Seblat. *Res Publica: Journal of Social Policy Issues*, 1(1), 11–21. <https://doi.org/10.59689/RP.V1I1.39>
- Rayfuse, R., & Weisfelt, N. (2012). The Challenge of Food Security. In R. Rayfuse & N. Weisfelt (Eds.), *The Challenge of Food Security: International Policy and Regulatory Frameworks*. Edward Elgar Publishing. <https://doi.org/10.4337/9780857939388>
- Septiyanto, AKBP. N. I. D., Riyadi, B. S., Saleh, C., MM, Ir. A. H., & DPA, W. S. Sos. M. S. (2024). Developing Policy and Regulation Using Collaborative Governance to

- Enhance Democratic Policing. *International Journal of Religion*, 5(11), 742–760. <https://doi.org/10.61707/G76RTZ26>
- Sururi, A. (2018). Collaborative Governance Sebagai Inovasi Kebijakan Strategis (Studi Revitalisasi Kawasan Wisata Cagar Budaya Banten Lama). *Humanika*, 25(1), 24–37. <https://doi.org/10.14710/HUMANIKA.V25I1.18482>
- Tando, C. E., Sudarmo, & Haryanti, R. H. (2020). Collaborative Governance In Public Service In Indonesia: A Systematic Mapping Study. *Jurnal Ilmu Sosial*, 18(2), 144–163. <https://doi.org/10.14710/jis.18.2.2019.144>
- Turenko, A. (2022). Ensuring food sovereignty in modern conditions of challenges and threats. *Problems of Legality*, 157, 20–33. <https://doi.org/10.21564/2414-990x.157.255555>
- Zhang, H., & Wang, W. (2023). A Collaborative Governance Model in Public Management. *Frontiers in Sustainable Development*, 3(4), 40–49. <https://doi.org/10.54691/fsd.v3i4.4746>
- Zhang, J., He, C., Chen, L., & Cao, S. (2018). Improving food security in China by taking advantage of marginal and degraded lands. *Journal of Cleaner Production*, 171, 1020–1030. <https://doi.org/10.1016/j.jclepro.2017.10.110>
- Zwickle, A., Feltman, B. C., Brady, A. J., Kendall, A. D., & Hyndman, D. W. (2021). Sustainable irrigation through local collaborative governance: Evidence for a structural fix in Kansas. *Environmental Science and Policy*, 124(August), 517–526. <https://doi.org/10.1016/j.envsci.2021.07.021>