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Collaborative Governance Between Local Government and Farmers in Irrigation Management Programs in Pallangga District, Gowa Regency, Indonesia

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Abstract

This study aims to analyze collaborative governance between the local government and farmers in the irrigation management program in Pallangga District, Gowa Regency, Indonesia. Irrigation management is a crucial aspect in supporting agricultural productivity and sustainable food security for agrarian communities. However, irrigation management in the study area still faces various challenges, such as infrastructure damage, uneven water distribution, weak institutional coordination, and low community participation. This research used a qualitative approach with a case study approach. Data collection was conducted through in-depth interviews, observation, and documentation involving the local government, farmer groups, the Water Users Farmers Association (P3A), and irrigation community users. Data analysis used the interactive model of Matthew B. Miles and A. Michael Huberman, while the collaborative governance framework refers to the theory of Chris Ansell and Alison Gash. The results indicate that collaborative governance has been implemented through deliberation, coordination of water distribution, and community participation in irrigation maintenance. Key supporting factors include a culture of cooperation, the existence of farmer groups, and communication between actors. Meanwhile, inhibiting factors include budget constraints, infrastructure damage, weak inter-agency coordination, and government dominance in decision-making. Collaborative governance has a positive impact on increasing community participation, effective water distribution, and collective awareness in water resource management. This research emphasizes the importance of strengthening farmer institutions and participatory governance in realizing sustainable irrigation management.

Introduction

Water resource management is a strategic aspect of sustainable agricultural development, particularly in agrarian countries that rely heavily on the agricultural sector as a pillar of their economies (Singh, 2024). Irrigation not only functions as a means of distributing water for agricultural needs but is also a crucial instrument in maintaining stable food production, improving farmer welfare, and supporting national food security (Sumange et al., 2025). In Indonesia, the agricultural sector remains a key sector supporting the livelihoods of rural communities, particularly in regions with agrarian-based economies (Wulandari & Kurniati, 2025). Therefore, effective and sustainable irrigation management is a fundamental requirement for supporting agricultural productivity and rural development.

In the context of modern agricultural development, irrigation management is no longer viewed as the sole responsibility of the government, but rather requires the involvement

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of various actors, including communities and farmer groups. The paradigm shift in public administration from government to governance emphasizes the importance of collaboration between actors in solving public problems (Wulandjani et al., 2025). The concept of governance positions the government, civil society, and other sectors as partners in the decision-making process and implementation of public policy (Collaborative Governance). This approach developed because the complexity of public problems can no longer be resolved through a centralized, top-down, bureaucratic approach alone (Kushendar et al., 2026).

In contemporary public administration, collaborative governance is a widely used approach to improve the effectiveness of public policy. According to Das (2023), collaborative governance is a collective decision-making process involving government agencies and non-governmental actors in a formal, consensual, and deliberative forum. This approach emphasizes the importance of face-to-face dialogue, building trust, commitment to the process, and shared understanding among actors in achieving common goals. Collaborative governance is considered capable of increasing policy legitimacy because it directly involves the community in the public governance process (Wijaya et al., 2023).

The application of collaborative governance in irrigation management is increasingly relevant because irrigation systems are characterized by common pool resources that require coordination and cooperation among water users (Ziem Bonye et al., 2022). Irrigation management that does not involve the community often results in a low sense of ownership, poor infrastructure maintenance, and conflicts over water distribution between farmers. Conversely, community participation in irrigation management can strengthen the sustainability of irrigation systems through social oversight and collective responsibility. From a participatory development perspective, farmer involvement in water resource management is a key indicator of the success of community-based agricultural governance (Juk et al., 2024).

In Indonesia, efforts have been made to strengthen community participation in irrigation management through the establishment of farmer organizations such as the Water User Farmers Association (P3A) (Stefany, 2025). This organization serves as a forum for farmer coordination in water distribution, irrigation canal maintenance, and water distribution conflict resolution. The presence of P3A demonstrates efforts to decentralize irrigation management, which was previously dominated by the government. However, in practice, participatory irrigation management still faces various challenges, such as low farmer institutional capacity, limited resources, weak inter-agency coordination, and government dominance in decision-making (Iswandi et al., 2026).

Various studies have shown that the success of collaborative governance is significantly influenced by the level of trust between actors, institutional capacity, communication, and government policy support. Research by Rijal (2023) explains that effective management of shared resources can be achieved through collective rules, community participation, and strong social oversight mechanisms. In the context of irrigation, community social capital, such as cooperation and local solidarity, is a crucial factor supporting sustainable water resource management (Sukmawati & Hos, 2026). Therefore, collaborative governance in irrigation management is not only related to administrative aspects, but also to social relations, local culture, and the distribution of power within the community (Afandi et al., 2026).

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Gowa Regency is an agrarian region in South Sulawesi Province that is highly dependent on the agricultural sector. Pallangga District, as one of the agricultural centers in Gowa Regency, has significant irrigation needs to support community agricultural activities (Pratiwi & Andi, 2025). Most people in this region depend on rice farming for their livelihoods, which requires sustainable water distribution. Therefore, the existence of an effective irrigation system is crucial for maintaining agricultural productivity and the economic stability of the local community.

Despite this, irrigation management in Pallangga District still faces various issues, such as damaged irrigation channels, uneven water distribution, inter-farmer conflicts, and limited coordination between the local government and farmer groups. In some cases, farmers have complained about the government's slow response to damaged irrigation infrastructure, particularly during the planting season. Furthermore, farmer participation in the decision-making process related to irrigation management is considered limited, resulting in some policies not fully reflecting the needs of the local community (Nurzal et al., 2026).

This situation indicates that irrigation management in Pallangga District requires a more inclusive and participatory collaborative governance approach. Collaboration between the local government, farmer groups, and community organizations is crucial for creating effective and sustainable irrigation governance (Sakinah et al., 2025). The government cannot work alone to address the complexities of water resource management, especially given budget constraints and the vast irrigation service area. Conversely, active farmer involvement in the planning, implementation, and evaluation of irrigation programs can improve management effectiveness and strengthen the community's sense of collective responsibility for irrigation infrastructure (Nitha & Sukmana, 2025).

Research on collaborative governance in irrigation management is crucial because most previous studies have focused on the technical aspects of irrigation rather than the dynamics of collaborative governance between actors. However, the success of irrigation management is not solely determined by the quality of infrastructure but also influenced by patterns of social relations, institutional communication, and community participation in decision-making (Alfala & Nuraini, 2024). Therefore, this study seeks to analyze how collaborative governance works between local governments and farmers in irrigation management programs in Pallangga District, Gowa Regency, Indonesia.

This research is also crucial for contributing to the development of public administration studies, particularly in the context of collaborative governance in community-based water resource management. Furthermore, the research findings are expected to provide recommendations for local governments in strengthening participatory irrigation governance to be more effective, transparent, and sustainable. Thus, collaborative governance will not only become a normative concept in public policy but also become a practical practice in promoting inclusive agricultural development that focuses on the welfare of local communities.

Method

Research Approach and Type

This research uses a qualitative approach with a case study to analyze collaborative governance between local governments and farmers in the irrigation management program in Pallangga District, Gowa Regency, Indonesia. A qualitative approach was

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chosen because this research aims to deeply understand the collaboration process between actors, institutional interaction patterns, forms of community participation, and the dynamics of decision-making in irrigation management. This approach allows researchers to gain a comprehensive understanding of social phenomena occurring in the field, particularly regarding the relationship between local governments and farmer groups in managing agricultural water resources.

The case study research method was used because the research focuses on a particular phenomenon within a specific local context, namely collaborative governance in the irrigation management program in Pallangga District. Case studies allow researchers to explore social realities in greater depth and context, thus understanding the characteristics of relationships between actors, supporting factors, and obstacles in collaborative irrigation governance.

Research Location

This research was conducted in Pallangga District, Gowa Regency, South Sulawesi Province. The location was selected purposively, considering that Pallangga District is an agricultural area with a high dependence on irrigation systems to support community agricultural activities. Furthermore, this area has dynamic irrigation management involving various actors, such as the local government, farmer groups, and the Water Users Farmers Association (P3A), making it relevant to the research focus on collaborative governance.

Data Sources

The data sources in this study consisted of primary and secondary data. Primary data were obtained directly through in-depth interviews with informants involved in the irrigation management program. Research informants were selected using a purposive sampling technique based on the belief that they understand the collaborative governance process in irrigation management. These informants included local government officials, the Department of Agriculture, the Department of Public Works and Spatial Planning's water resources division, village heads, farmer group administrators, P3A members, community leaders, and irrigation farmers.

Meanwhile, secondary data was obtained through various supporting documents such as government regulations, irrigation management program reports, farmer group archives, scientific journals, books, and other documents relevant to the research. Secondary data was used to strengthen the analysis of collaborative governance and the condition of irrigation management in Pallangga District.

Data Collection Techniques

Data collection techniques in this study included in-depth interviews, observation, and documentation. In-depth interviews were conducted in a semi-structured manner to obtain information related to the collaborative governance process, coordination patterns between actors, forms of farmer participation, and supporting and inhibiting factors in irrigation management. This interview technique was chosen to allow researchers to flexibly gather information according to field conditions.

Observations were conducted by directly observing the condition of irrigation channels, farmer activities, water distribution processes, and interactions between local government and community members in irrigation management. Through observation,

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researchers were able to understand the social realities and dynamics of collaboration in the field more objectively.

In addition, documentation was conducted by collecting various documents such as activity reports, meeting minutes, farmer group administrative data, local government policies, field photographs, and other documents related to the irrigation management program. Documentation was used to support the results of the interviews and observations, thereby providing a more complete research data set.

Research Focus

This research focuses on collaborative governance between local governments and farmers in the irrigation management program in Pallangga District. This research uses the collaborative governance framework developed by Chris Ansell and Alison Gash. The focus of the research includes face-to-face dialogue, trust-building, commitment to the process, shared understanding, and the outcomes of collaboration in irrigation management. Furthermore, the research focuses on the forms of farmer participation, patterns of coordination between actors, and factors supporting and inhibiting collaborative governance in agricultural water resource management.

Data Analysis Technique

This research used the interactive analysis model developed by Matthew B. Miles and A. Michael Huberman. Data analysis was conducted in three stages: data reduction, data presentation, and conclusion drawing.

Data reduction was carried out by selecting, simplifying, and focusing data from interviews, observations, and documentation according to the research focus. This stage aims to make the data obtained more systematic and relevant to the research problem.

The data is presented in narrative form to facilitate researchers in understanding the patterns of relationships between actors in collaborative governance. Data presentation also helps researchers identify the relationship between community participation, institutional coordination, and irrigation management effectiveness.

Furthermore, conclusions are drawn based on the interpretation of the data that has been thoroughly analyzed. The conclusions in this study are tentative during the data collection process and will be strengthened once all data is collected.

Data Validity

To ensure data validity, this study employed source and method triangulation techniques. Source triangulation was conducted by comparing information obtained from various informants, such as local governments, farmer groups, and irrigation user communities. Meanwhile, method triangulation was conducted by comparing the results of interviews, observations, and documentation to ensure the data obtained had a stronger level of validity.

Furthermore, the researcher conducted member checking with several informants to ensure that the data interpretations aligned with actual conditions in the field. This technique ensured the research results were credible and scientifically accountable.

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Results

Collaborative Governance Process in Irrigation Management

The results of the study indicate that the collaborative governance process in irrigation management in Pallangga District, Gowa Regency, involves interactions between the local government, farmer groups, and the Water User Farmers Association (P3A) in maintaining the sustainability of agricultural water distribution. This collaboration is carried out through deliberation forums, field technical coordination, and cooperation activities in irrigation channel maintenance. The local government, through relevant agencies, acts as a facilitator in providing policies, technical assistance, and rehabilitation of irrigation networks, while farmers act as users and direct managers of the water distribution system at the local level (Syahdinrah, 2025).

The collaborative governance process is evident in regular communication between village governments, irrigation officers, and farmer groups to determine water distribution schedules, particularly during the planting and dry seasons. Face-to-face dialogue is the primary mechanism for resolving water distribution issues to minimize conflict between farmers. In this process, farmers are not only recipients of policies but also involved in conveying their aspirations regarding irrigation needs on their farms. This demonstrates efforts to build participatory governance in water resource management.

Table 1. Thematic Summary of Qualitative Findings

Main Theme	Key Indicators	Qualitative Findings	Interpretation
Collaborative dialogue	Meetings, deliberation, communication, problem reporting	Local government, farmer groups, P3A, and farmers communicate regularly to discuss irrigation conditions, water distribution schedules, and infrastructure problems.	Dialogue provides a mechanism for coordinating interests and resolving irrigation problems collectively.
Farmer participation	Canal maintenance, water distribution, meetings, aspiration delivery	Farmers participate in cleaning and repairing canals, discussing water schedules, attending group meetings, and communicating irrigation needs to the government.	Farmers function not only as beneficiaries but also as active actors in irrigation management.
Social and institutional support	Gotong royong, farmer groups, P3A, social solidarity	A strong culture of mutual cooperation and the existence of farmer groups and P3A strengthen communication and collective action.	Social capital and local institutions provide an important foundation for sustainable collaboration.

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Inhibiting factors	Limited budget, damaged infrastructure, weak coordination, uneven participation	Budget limitations delay major infrastructure repairs. Participation among farmers remains uneven, while inter-agency coordination is sometimes weak.	Structural and institutional constraints reduce the effectiveness of collaborative governance.
Water distribution challenges	Dry-season shortages, upstream-downstream conflict	Water distribution becomes more difficult during the dry season, particularly when upstream farmers receive more water than downstream farmers.	Equitable resource distribution remains an important challenge for collaborative governance.
Collaborative outcomes	Participation, communication, water distribution, collective awareness	Collaboration has increased farmer participation, improved communication, made water distribution more organized, and strengthened awareness of shared responsibility.	Collaborative governance contributes positively to irrigation management despite continuing limitations.

The findings identify six key themes: collaborative dialogue, farmer participation, supporting factors, constraints, water distribution conflicts, and collaborative outcomes. Regular communication among village governments, irrigation officers, farmer groups, and P3A facilitates discussion and problem-solving, while farmers participate through canal maintenance, water distribution discussions, and communication of infrastructure needs. Collaboration is supported by *gotong royong*, farmer groups, P3A, and regular meetings, but constrained by limited budgets, damaged infrastructure, uneven participation, and weak inter-agency coordination. Dry-season water shortages may also create competition between upstream and downstream farmers. Overall, collaborative governance has improved farmer participation, communication, water distribution, and shared responsibility for irrigation management.

One informant from a farmer group explained that coordination with the local government is conducted regularly to discuss irrigation conditions and farmer needs. The informant stated:

> *"If there's a water problem or a damaged channel, we usually hold a meeting first with the farmer group and the village government. After that, we report it to the agency for prompt action."*

The interview results indicate that the collaborative process is built through direct communication and deliberation mechanisms between the community and the government. Regular dialogue helps strengthen relationships between stakeholders in irrigation management and creates space for farmer participation in the decision-making process.

Furthermore, collaborative governance is also evident through farmer involvement in irrigation channel maintenance activities through mutual cooperation. These activities

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involve clearing sediment, repairing damaged small channels, and ensuring smooth water distribution to agricultural land. Community participation in irrigation maintenance demonstrates a sense of collective responsibility for the sustainability of the irrigation system.

A member of the P3A explained that farmer involvement in irrigation management is a local custom. The informant stated:

> *"If the water channel is blocked, farmers usually immediately join in community service. We realize that if the irrigation is damaged, the rice fields will also have difficulty getting water."*

This statement demonstrates that collaborative governance in irrigation management is not only formed through formal government policies but is also influenced by community social capital, such as cooperation and solidarity among farmers. Strong social ties are a crucial factor in maintaining sustainable cooperation between the government and the community. However, research results indicate that the collaborative governance process has not been running optimally. In some situations, farmer involvement in strategic decision-making remains limited because program planning is largely dominated by local governments. Farmers are generally involved at the implementation stage, while the planning and prioritization processes remain top-down. This has led some farmers to feel that their aspirations have not been fully accommodated in irrigation management policies.

One farmer using irrigation stated:

> *"Sometimes we're only asked to participate in work or meetings, but the government still makes the ultimate decisions. So, not all farmer suggestions are adopted."*

This situation indicates that collaborative governance in Pallangga District still faces challenges in creating equal relationships between actors. From the perspective of Chris Ansell and Alison Gash's collaborative governance theory, successful collaboration is heavily influenced by inclusive dialogue, trust-building, and a balanced distribution of authority. Therefore, strengthening farmer participation in the decision-making process is necessary so that collaborative governance is not merely administrative but truly becomes a participatory and sustainable governance mechanism.

In addition to participation issues, budget constraints and infrastructure damage also hinder the collaborative governance process. Local governments often face limited resources to comprehensively rehabilitate irrigation channels, necessitating stronger collaboration with the community to maintain the sustainability of irrigation infrastructure. In these circumstances, collaborative governance is crucial because it can strengthen coordination between the government and the community in jointly addressing water resource management issues.

Forms of Farmer Participation in the Irrigation Management Program

Research results indicate that farmer participation in the irrigation management program in Pallangga District, Gowa Regency, is manifested in various activities related to water distribution, irrigation canal maintenance, group decision-making, and social cooperation among farmers. This participation is crucial in supporting the sustainability of the irrigation system, as farmers directly utilize water resources for their agricultural

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activities. Farmer involvement is not only technical but also reflects the community's collective responsibility for maintaining the sustainability of irrigation infrastructure.

One form of farmer participation is evident in their involvement in mutual cooperation activities to clean and repair irrigation canals. This activity is usually carried out periodically before the planting season begins or when the canals become blocked or damaged. Through these activities, farmers collectively maintain smooth water distribution so that all agricultural land receives an adequate water supply. Participation in community service demonstrates that the community still possesses social capital in the form of solidarity and a strong culture of cooperation in managing agricultural resources.

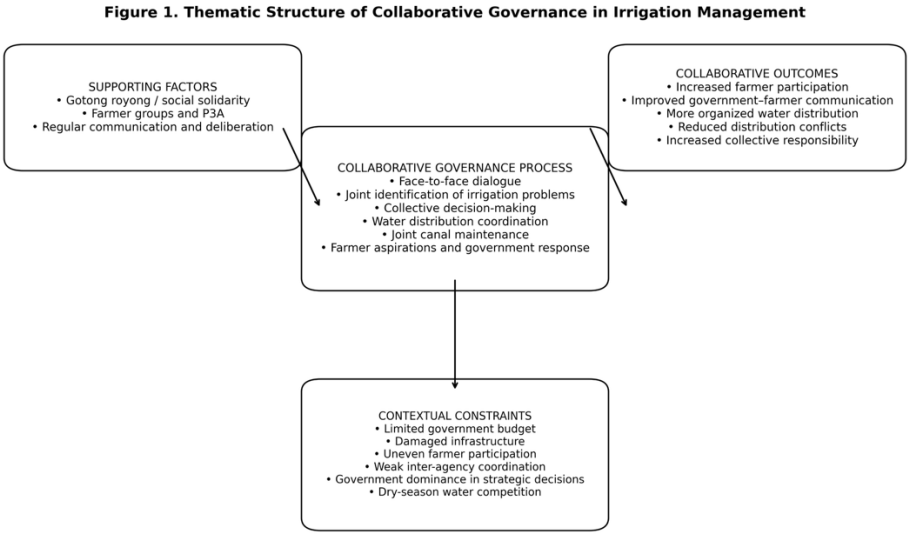


Figure 1. Thematic Structure of Collaborative Governance

Figure 1. Collaborative governance is supported by social capital, community institutions, and communication. These factors facilitate dialogue, joint problem identification, water distribution coordination, and collective maintenance. The process produces positive outcomes in participation, communication, water distribution, and collective awareness. However, these outcomes are influenced by contextual constraints, particularly budget limitations, infrastructure damage, uneven participation, weak coordination, and the continued dominance of government actors in strategic decision-making.

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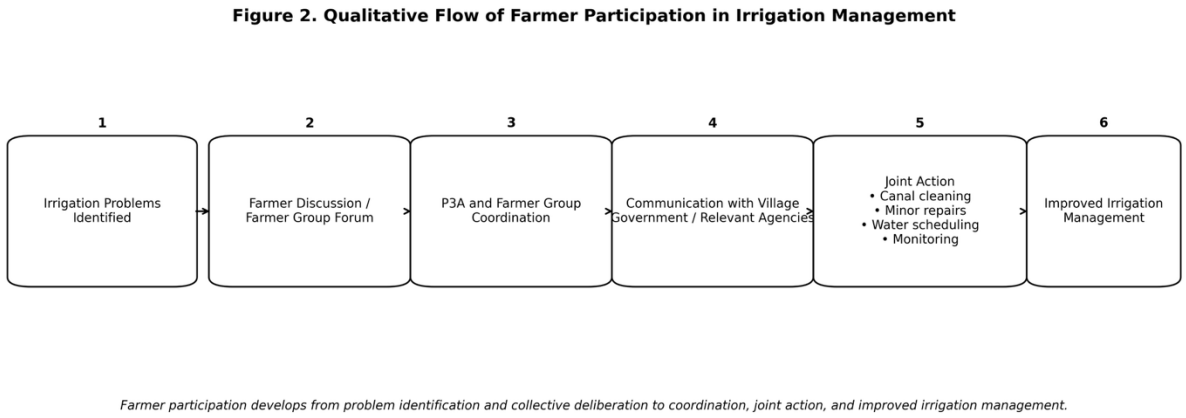


Figure 2. Qualitative Flow of Farmer Participation

Figure 2. This structure demonstrates that farmer participation occurs through several interconnected activities rather than through a single form of participation. Farmers contribute physically through canal maintenance, socially through mutual cooperation, and institutionally through farmer groups and P3A.

A member of a farmer group explained:

> *"If the water channels start to become dirty or clogged, we usually work together to clean them. We don't wait for the government, because if the water isn't flowing smoothly, all farmers will suffer."*

This statement demonstrates that farmer participation stems from a collective awareness of the importance of irrigation for sustainable agricultural production. This awareness is a factor that strengthens collaborative governance in water resource management at the local level.

In addition to involvement in irrigation canal maintenance, farmers also participate in setting water distribution schedules through farmer group forums and the Water Users Farmers Association (P3A). In these forums, farmers, along with group administrators and village officials, discuss water distribution based on agricultural land needs and planting season conditions. These discussions are held to prevent water distribution conflicts between regions and ensure equitable water access for all farmers.

A P3A administrator explained:

> *"Water distribution is usually discussed collectively so that no farmer feels disadvantaged. During the dry season, water management must be stricter so that all rice fields still get their share."*

The interviews revealed that farmer participation in irrigation management is not only physical but also involves involvement in the decision-making process. Deliberation forums are an important tool for building communication and mutual agreement between farmers and village governments regarding irrigation water management.

Farmer participation is also evident in their involvement in conveying their aspirations regarding the need for irrigation infrastructure improvements to the local government. Farmer groups and P3A often act as intermediaries between the community and the

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government in conveying complaints about damaged canals, water shortages, and the need for irrigation network rehabilitation. In some cases, farmers actively propose irrigation improvements through village deliberation forums and meetings with relevant agencies.

One farmer using irrigation explained:

> *"We usually submit suggestions if there are damaged canals or water problems. Usually, it goes through the farmer group leader and then is forwarded to the government."*

This statement demonstrates the important function of farmer groups as a communication channel between the community and the local government in irrigation management programs. Farmer involvement in conveying aspirations is part of the collaborative governance process that positions the community as an actor in public governance.

However, research results indicate that the level of farmer participation remains uneven. Some farmers are actively involved in group activities and irrigation management, while others remain passive and only get involved when water distribution issues arise. The low participation of some farmers is influenced by busy work schedules, a lack of understanding of the importance of farmer group organizations, and the perception that irrigation management is the government's responsibility. A village official explained:

> *"There are still farmers who are less active in participating in meetings or group activities. Usually, they only come when there are water problems or government assistance."*

This situation indicates that community participation in collaborative governance still faces challenges in building consistent and sustainable engagement. From the collaborative governance perspective of Chris Ansell and Alison Gash, the success of collaboration is greatly influenced by the commitment of actors, building trust, and active community involvement in the joint management process.

Furthermore, limited institutional capacity of farmer groups also affects the effectiveness of farmer participation. Some farmer groups still face obstacles in internal coordination, organizational administration, and disseminating information to members. As a result, not all farmers have equal access to information regarding irrigation management programs and local government policies.

Supporting and Inhibiting Factors in Collaborative Governance

The research results show that collaborative governance in the irrigation management program in Pallangga District, Gowa Regency, is influenced by various supporting and inhibiting factors stemming from social, institutional, communication, and resource availability aspects. These factors determine the effectiveness of collaborative relationships between local governments, farmer groups, and the community in maintaining sustainable irrigation management. Collaborative governance can function well if there is support from trust, intensive communication, and active community participation. Conversely, weak coordination and limited resources are major obstacles to the collaborative process.

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One factor supporting collaborative governance is the strong culture of cooperation (gotong royong) among farming communities. This culture encourages farmers to voluntarily participate in irrigation canal maintenance, community service, and collectively resolve water distribution issues. The growing sense of social solidarity within the community serves as crucial social capital in building cooperation between the government and farmers.

Table 2. Qualitative Evidence Based on the Collaborative Governance Framework

Collaborative Governance Dimension	**Evidence from the Findings**	**Resulting Condition**
Face-to-face dialogue	Regular meetings and deliberations among government officials, farmer groups, P3A, and farmers	Improved communication and opportunities to express irrigation needs
Trust-building	Joint canal maintenance and continuous communication	Stronger relationships and collective responsibility
Commitment to the process	Farmer participation in community service, water scheduling, and group activities	Greater willingness to participate in irrigation management
Shared understanding	Collective recognition that irrigation is important for all farmers	Increased awareness of shared responsibility
Collaborative action	Joint maintenance, water distribution coordination, and problem reporting	More coordinated irrigation management
Collaborative outcomes	Increased participation, improved communication, and more organized water distribution	More participatory and responsive irrigation governance

The qualitative findings can therefore be interpreted through the dimensions of collaborative governance proposed by Ansell and Gash. Dialogue provides the foundation for interaction, while trust, commitment, and shared understanding develop through repeated communication and collective activities. Nevertheless, the findings also reveal that collaboration has not yet achieved a fully balanced relationship because strategic planning and prioritization remain largely dominated by local government.

A member of a farming group explained:

> *"If there's a problem with the water canal, the community usually comes together. It's commonplace here to work together because all farmers need water for their rice fields."*

This statement demonstrates that community social capital is a crucial factor in strengthening collaborative governance. The existence of a culture of mutual cooperation helps foster a sense of collective responsibility for irrigation management, eliminating complete dependence on the local government.

In addition to social capital, other supporting factors include the existence of farmer groups and Water Users Associations (P3A) as community coordination forums. These

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organizations facilitate communication between farmers and the local government, conveying needs, aspirations, and issues related to irrigation management. Farmer groups also play a role in regulating water distribution and coordinating irrigation canal maintenance activities at the local level. A P3A administrator stated:

> *"Farmer groups help convey farmers' needs to the government. If there is damage to canals or water distribution, it is usually discussed first within the group before being forwarded."*

The existence of these local institutions demonstrates that collaborative governance requires a community organizational structure capable of bridging the relationship between the government and the community. Farmer institutions serve as an important medium for building communication and strengthening coordination in water resource management.

Another supporting factor is regular communication and deliberation between the village government, farmers, and relevant agencies. Deliberation forums provide a dialogue space for discussing water distribution issues, the condition of irrigation infrastructure, and the need for canal rehabilitation. Through open communication, water distribution conflicts can be minimized, and joint decisions can be more easily reached.

However, research results indicate that collaborative governance in irrigation management in Pallangga District still faces various obstacles. One major obstacle is the limited local government budget for comprehensive rehabilitation and maintenance of the irrigation network. Extensive damage to irrigation canals often cannot be repaired immediately due to limited funds and regional development priorities.

A village government official explained:

> *"Many irrigation canals need repair, but the government budget is limited, so repairs are carried out in stages."*

These conditions have caused several agricultural areas to experience disruptions in water distribution, particularly during the dry season. Limited infrastructure poses a serious obstacle to maintaining the effectiveness of collaborative governance, as communities often expect a swift response from the government to address irrigation damage.

In addition to budget constraints, another obstacle is the low participation of some farmers in group activities and irrigation management. Not all farmers actively participate in meetings, community service activities, or deliberations related to water resource management. Some farmers still believe that irrigation management is primarily the government's responsibility.

A farmer group leader stated:

> *"There are still farmers who are less active in participating in group activities. Usually, they only participate when there is a major problem or government assistance is needed."*

This low participation indicates that collaborative governance is not yet fully supported by the collective awareness of the entire community. From the collaborative governance perspective of Chris Ansell and Alison Gash, the active involvement of all actors is a crucial element in building effective and sustainable collaboration.

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Another obstacle identified in the research is weak coordination between government agencies in irrigation management. In some cases, there are delays in communication between village governments, the agriculture office, and the water resources office regarding handling irrigation damage and distributing aid. This condition causes the decision-making process to be slow and less responsive to the needs of farmers in the field.

Furthermore, conflicts over water distribution between farmers are still common, particularly during the dry season when water levels decrease. Competition for water access causes some farmers to feel disadvantaged, particularly those located downstream of irrigation channels. These conflicts demonstrate that collaborative governance still faces challenges in ensuring fair and equitable resource distribution.

One farmer using irrigation explained:

> *"During the dry season, there are often problems with water distribution. Sometimes farmers upstream take more water, so the rice fields downstream lack water."*

This statement demonstrates that water distribution issues are not only technical but also involve social relations and fair access to resources at the community level.

Impact of Collaborative Governance on Irrigation Management

Research results show that collaborative governance has had a significant impact on irrigation management in Pallangga District, Gowa Regency. Collaboration between the local government, farmer groups, and the community has fostered a more participatory, responsive, and local-needs-based irrigation management model. The involvement of various actors in water resource management helps improve the effectiveness of water distribution, strengthens coordination between farmers, and supports the sustainability of community agricultural activities.

One of the main impacts of collaborative governance is seen in increased community participation in irrigation network maintenance. Prior to intensive coordination between the government and farmer groups, irrigation canal maintenance tended to depend on the local government. However, through a collaborative approach, the community has begun to actively participate in community service activities such as cleaning water channels, repairing minor damage, and monitoring water distribution at the local level. This involvement has accelerated the resolution of irrigation problems and helped maintain the smooth flow of water to agricultural land.

A farmer group member explained:

> *"Now farmers are more active in maintaining the water channels because they are often invited to meetings and work together. If there is minor damage, they usually immediately repair it together before it gets worse."*

This statement demonstrates that collaborative governance can increase the community's sense of collective responsibility for the sustainability of irrigation infrastructure. The active involvement of farmers demonstrates a shift in the relationship pattern from one that was previously dependent on the government to one that is more participatory and independent.

In addition to increasing community participation, collaborative governance also improves communication between the local government and farmers. Regular

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deliberation and coordination forums in irrigation management create a dialogue space for communities to express their needs and issues. This helps the government obtain more accurate information about field conditions, so that irrigation policies and programs can better align with farmers' needs.

A village official stated:

> *"With regular meetings, the government is more quickly aware of problems on the ground. Farmers can also more easily voice complaints about water and canal conditions."*

The interview results indicate that collaborative governance strengthens communication between the government and the community. Open dialogue helps create transparency in irrigation management and increases community trust in the local government.

Another impact is seen in the increased effectiveness of irrigation water distribution. Through collaboration between farmer groups and the village government, water distribution schedules have become more organized, reducing conflicts over water resources. Water distribution is based on collective deliberations to ensure equitable access to water for all agricultural areas, especially during the dry season when water levels decrease.

A P3A administrator explained:

> *"Now, water distribution is more organized because there is a collective agreement. Previously, there were frequent fights over water, but now it's easier to manage through group discussions."*

This statement demonstrates that collaborative governance helps create a more orderly and coordinated water distribution system. The existence of collaborative forums is an important mechanism for resolving resource distribution issues peacefully and participatoryly.

Despite its positive impact, the research also shows that collaborative governance still faces several limitations in irrigation management. Although community communication and participation have increased, the effectiveness of collaboration has not been fully optimized due to limited local government budgets for comprehensive irrigation infrastructure repairs. Some severely damaged irrigation channels require extensive rehabilitation that cannot be addressed through community cooperation alone.

A farmer using irrigation explained:

> *"Collaboration has improved, but if the damage is major, we still have to wait for government assistance because the community doesn't have enough funds for repairs."*

This situation demonstrates that collaborative governance requires adequate resource support for effective collaboration. Community participation is important, but successful irrigation management still requires the support of local government policies and funding.

Furthermore, the impact of collaborative governance is also evident in increased public awareness of the importance of maintaining the sustainability of water resources. Farmers are beginning to understand that irrigation management is not solely the government's responsibility, but a shared responsibility of all water users. This

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awareness has encouraged the community to become more actively involved in monitoring water use and maintaining the proper functioning of irrigation channels.

From the perspective of Chris Ansell and Alison Gash's collaborative governance theory, the positive impact of collaborative governance can be seen in increased dialogue between stakeholders, trust-building, shared commitment, and the creation of collaborative outcomes in public resource management. Collaborative governance in Pallangga District demonstrates that community involvement in irrigation governance can strengthen the effectiveness of public policies and support more sustainable agricultural development.

Collaborative Governance Process in Irrigation Management

This study aims to analyze the collaborative governance process between local governments and farmers in an irrigation management program in Pallangga District, Gowa Regency, Indonesia. The results indicate that collaborative governance has developed as a participatory governance mechanism involving local governments, farmer groups, and communities in agricultural water resource management. However, the quality of the collaboration remains transitional because relationships between actors are not yet fully equal. These findings demonstrate that collaborative governance at the local level is influenced not only by formal institutional design but also by community social capacity, the distribution of power, and the government's ability to foster inclusive participation (Shunglu et al., 2022).

From the perspective of Chris Ansell and Alison Gash's collaborative governance theory, successful collaboration is largely determined by face-to-face dialogue, trust-building, shared commitment, and shared understanding between actors (Wahyuni, 2023). The results of this study indicate that elements of face-to-face dialogue have developed through farmer group deliberation forums, water distribution meetings, and regular coordination between village governments, farmer groups, and WUAs. The forum serves as a deliberative arena that allows communities to convey their aspirations and needs directly to the government. Thus, collaborative governance in Pallangga has created a relatively open communication space in irrigation management.

However, this study found that this open communication has not yet fully resulted in an equal distribution of authority. The local government still dominates the planning and strategic decision-making process, while farmers are more involved in program implementation. This situation indicates that collaborative governance in Pallangga remains consultative rather than fully deliberative (Elken, 2024). In the context of public administration, this phenomenon illustrates that the decentralization of community participation has not automatically eliminated the bureaucratic power structures that have long been embedded in development governance in Indonesia (Susanti, 2025).

These findings reinforce Sherry Arnstein's argument regarding the "ladder of citizen participation," which explains that community participation often stops at the level of tokenism, where communities are involved in consultative forums but do not have substantive influence on final decisions (Jamaluddin et al., 2025). In this study, farmers were indeed involved in deliberation forums, but their capacity to determine irrigation program priorities was still limited by the dominance of the local government and limited access to information. Therefore, collaborative governance in irrigation management in

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Pallangga has not fully achieved the shared governance model that positions communities as equal partners with the government.

Nevertheless, this study shows that the existence of community social capital is a crucial factor in maintaining the sustainability of collaborative governance. A culture of cooperation, solidarity among farmers, and community-based social relationships are the main foundations for maintaining irrigation canals and resolving water distribution conflicts (Muhlis et al., 2025). This finding aligns with Ssekajja's thinking, which asserts that the successful management of common pool resources is greatly influenced by the existence of collective rules, social trust, and the community's ability to develop internal oversight mechanisms (SSekajja, 2022). In the context of Pallangga, social capital is a crucial instrument that addresses the limited capacity of the state to manage irrigation infrastructure.

This study also shows that collaborative governance has significant implications for the effectiveness of irrigation management. Farmer involvement in irrigation canal maintenance helps expedite the resolution of minor damage and improves the efficiency of water distribution. Furthermore, deliberation forums established through farmer groups and P3A (Regional Water Resources Management Units) have been able to reduce water distribution conflicts, particularly during the dry season. This demonstrates that collaborative governance not only generates social legitimacy for government policies but also strengthens communities' adaptive capacity in managing shared resources (Anwar et al., 2025).

This study found that the effectiveness of collaborative governance is still limited by structural issues, particularly limited local government budgets and weak inter-agency coordination. The extensive damage to irrigation infrastructure cannot be resolved solely through community participation without adequate state resource support. In this context, collaborative governance cannot be understood as a form of transfer of state responsibility to the community but must be positioned as a synergistic mechanism between government capacity and local community capacity (Mahulette, 2025). If the state relies too heavily on community participation without strengthening institutional support and funding, collaborative governance has the potential to create unequal public resource management burdens at the community level.

The theoretical implications of this study indicate that collaborative governance in irrigation management in agrarian areas cannot be understood solely through a procedural approach that emphasizes the existence of collaborative forums. This research demonstrates that the quality of collaborative governance is strongly influenced by the local social context, power relations, and community institutional capacity. Therefore, the development of collaborative governance theory in developing countries needs to consider the dimensions of structural inequality, local culture, and community organizational capacity in explaining the success of collaboration between actors (Fonataba, 2025).

This research contributes to the development of studies on public administration and community-based water resource governance. While most previous studies have focused on the technical aspects of irrigation management, this study positions collaborative governance as a key variable in understanding the effectiveness of irrigation governance. This research demonstrates that irrigation management issues are not solely technical

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issues of water distribution, but also relate to political, social, and institutional dimensions in the relationship between the state and society.

From a policy perspective, this research has important implications for local governments in strengthening participatory irrigation governance. First, local governments need to strengthen the position of farmer groups and P3A (Women's Associations) as local institutions with greater authority in irrigation management decisions. Second, community institutional capacity must be strengthened through training in organizational management, conflict management, and community-based water resource governance. Third, the government needs to build a more integrated cross-sectoral communication system between the agriculture office, water resources office, village government, and farmer groups to make the decision-making process more responsive to community needs.

This research demonstrates that successful collaborative governance requires a paradigm shift from a top-down approach to a more democratic and deliberative co-governance approach. Local governments no longer act as dominant actors controlling the entire policy process, but rather as facilitators that create space for participation and strengthen community capacity in public governance. In the context of irrigation management, this transformation is crucial for creating a more adaptive, inclusive, and sustainable water resource management system amidst the increasing challenges of climate change and pressures on the agricultural sector.

Conclusion

This study concludes that collaborative governance between local governments and farmers in the irrigation management program in Pallangga District, Gowa Regency, has developed into a form of participatory governance involving the government, farmer groups, and the community in managing agricultural water resources. The collaborative process is realized through communication, deliberation, coordination of water distribution, and community participation in irrigation network maintenance. The success of collaborative governance is supported by a culture of cooperation, the existence of farmer groups and P3A (Women's Associations), and strong community social relations. However, the implementation of collaborative governance has not been optimal due to various obstacles such as limited government budgets, damaged irrigation infrastructure, weak inter-agency coordination, low participation by some farmers, and government dominance in strategic decision-making. Nevertheless, collaborative governance has a positive impact on the effectiveness of irrigation management by increasing community participation, strengthening communication between actors, improving water distribution, and fostering collective awareness of maintaining water resource sustainability.

Therefore, strengthening farmer institutions, increasing community participatory capacity, and developing a more inclusive coordination system are crucial steps in realizing more effective, democratic, and sustainable irrigation management.

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References

Afandi, M. N., Sudartini, S., Anomsari, E. T., & Novira, A. (2026). *Collaborative governance: Suatu tinjauan konseptual model collaborative governance dan implementasi pencapaian SDGS pada studi intervensi stunting di pemerintah daerah*. Deepublish.

Alfala, S., & Nuraini, C. (2024, December). Partisipasi Masyarakat dalam Pengelolaan Sumber Daya Air Berkelanjutan di Karo. In *PROSEMNASPROIT: Prosiding Seminar Nasional Ilmu Teknik* (Vol. 1, No. 2, pp. 1-13). https://doi.org/10.61132/prosemnasproit.v1i1.34

Anwar, M., Nurkidam, A., Mahyuddin, M., & Bakri, M. (2025). Collaborative Governance in Village-Owned Enterprises: A Case Study of Traditional Rice Field-Based BUMDes in Tubo Selatan. *KOMUNIDA: Media Komunikasi dan Dakwah*, *15*(2), 81-97. https://doi.org/10.35905/komunida.v16i2.13416

Das, A. K. (2023). Collaborative governance. In *Global Encyclopedia of Public Administration, Public Policy, and Governance* (pp. 1772-1775). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-66252-3_1828

Elken, M. (2024). Collaborative design of governance instruments in higher education. *Studies in Higher Education*, *49*(6), 1095-1106. https://doi.org/10.1080/03075079.2023.2258905

Fonataba, J. (2025). Kolaborasi Pemerintah, Swasta, dan Masyarakat dalam Peningkatan Kualitas Pelayanan Dasar di Merauke. *Jejak Digital: Jurnal Ilmiah Multidisiplin*, *1*(4), 1376-1395. https://doi.org/10.63822/vmthgf73

Iswandi, R. M., Sudarmo, H., & Hasan, A. (2026). *Strategi Pembangunan Berbasis Sumber Daya dan Kelembagaan: Integrasi Pengelolaan Wilayah, Komoditas Unggulan, dan Keberlanjutan di Kawasan Timur Indonesia*. Deepublish.

Jamaluddin, Y., Nizhamul, N., & Pasha, S. (2025). *Birokrasi dan Governansi Publik*. CV Eureka Media Aksara.

Juk, B., Shaw, F. R., Alaydrus, A., & Hastira, M. F. (2024). Peran Partisipasi Masyarakat Dalam Pengambilan Keputusan Tentang Pemanfaatan Dan Pengelolaan Sumber Daya Alam. *International Journal of Demos (IJD)*.

Kushendar, D. H., Fajar, A., Santoso, O. R., Sopandi, E., Dewi, Y. F., Prasetia, A. R., ... & Riwayanti, J. (2026). *MANAJEMEN SEKTOR PUBLIK KONTEMPORER (Teori, Kebijakan, dan Praktik Administrasi Negara di Era Transformasi)*. Penerbit Widina.

Mahulette, S. S. (2025). *Collaborative Governance Dalam Tata Kelola Pariwisata Di Kabupaten Raja Ampat* (Doctoral dissertation, Institut Pemerintahan Dalam Negeri).

Mitha, A., & Sukmana, H. (2025). The Role of the Village Government in Agricultural Development in Wilayut Village. *Hulondalo Jurnal Ilmu Pemerintahan dan Ilmu Komunikasi*, *4*(2), 619665.https://doi.org/10.59713/jipik.v4i2.1357

Muhlis, M., Asfar, A. M. I. T., Asfar, A. M. I. A., Nurannisa, A., Dewi, S. S., & Damayanti, W. (2025). *Integrasi Cultural Mitigation Berbasis Kearifan Lokal dalam Resolusi Konflik Air*. CV Eureka Media Aksara.

Copyright © 2026, International Journal of Social Welfare and Public Policy Under the license CC BY-SA 4.0

Nurzal, E., Yeni, M., & Yanti, I. D. (2026). Pendekatan Perkumpulan Petani Pemakai Air (P3A) dalam Meningkatkan Efisiensi Pengelolaan Air Irigasi pada Musim Kemarau. *Jurnal Kolaborasi Akademika*, *3*(1), 114-125. https://doi.org/10.64826/cgcsst16

Pratiwi, M., & Andi, L. S. A. (2025). Partisipasi Masyarakat terhadap Perencanaan Saluran Irigasi di Kelurahan Kalase'rena Kecamatan Bontonompo Kabupaten Gowa. *JURNAL TEPAT: Teknologi Terapan untuk Pengabdian Masyarakat*, *8*(1), 147-163. https://doi.org/10.25042/jurnal_tepat.v8i1.587

Rijal, S. (2023). The importance of community involvement in public management planning and decision-making processes. *Journal of Contemporary Administration and Management (ADMAN)*, *1*(2), 84-92. https://doi.org/10.61100/adman.v1i2.27

Sakinah, Y. P., Furqani, F., Depi, J. W. S., Putra, M. F. D., Husna, A., & Fachri, A. (2025). Penguatan Kelembagaan Kelompok Tani melalui Integrasi Kemandirian Wirausaha dan Pengelolaan Irigasi Berkelanjutan. *Kolaborasi: Jurnal Hasil Kegiatan Kolaborasi Pengabdian Masyarakat*, *3*(4), 1-12. https://doi.org/10.62383/kolaborasi.v3i4.862

Shunglu, R., Köpke, S., Kanoi, L., Nissanka, T. S., Withanachchi, C. R., Gamage, D. U., ... & Withanachchi, S. S. (2022). Barriers in participative water governance: A critical analysis of community development approaches. *Water*, *14*(5), 762. **https://doi.org/10.3390/w14050762**

Singh, S. (2024). Natural resource management for sustainable agriculture development in India. *Sustainable Agricultural Technologies*, 99.

Ssekajja, G. (2022). *Essays on Migration and Diversity in Community: Analyzing Determinants of Institutions for Collective Action for Common-Pool Resources and Public Goods Management in Rural Communities*. Indiana University.

Stefany, A. A. (2025). Dinamika Organisasi Perkumpulan Petani Pemakai Air (P3a) Dalam Pengelolaan Irigasi Di Kecamatan Abung Surakarta Kabupaten Lampung Utara.

Sukmawati, S., & Hos, J. (2026). Modal Sosial Petani dalam Pengelolaan Irigasi Partisipatif: Studi pada Program GEMAS AIR KONAWE di Kabupaten Konawe. *TheJournalish: Social and Government*, *7*(1). https://doi.org/10.55314/tsg.v7i1.1092

Sumange, L., Nursaman, H., & Ibrahim, H. (2025). Kontribusi Program Irigasi Perpompaan terhadap Ketahanan Pangan Masyarakat di Kabupaten Tana Toraja. *SENTRI: Jurnal Riset Ilmiah*, *4*(12), 4390-4400. https://doi.org/10.55681/sentri.v4i12.5179

Susanti, I., IP, S., & AP, M. (2025). *PEMBANGUNAN KELEMBAGAAN DALAM ADMINISTRASI PUBLIK*. Penerbit Berseri.

Syahdinrah, M. R. (2025). *Peran Pemerintah Daerah Dalam Peningkatan Kesejahteraan Petani Melalui Program Pertanian Terpadu Di Kabupaten PinranG= The Role of Local Government in Improving Farmers' Welfare through the Integrated Agriculture Program in Pinrang Regency* (Doctoral dissertation, Universitas Hasanuddin).

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Wahyuni, K. E. (2023). Collaborative Governance in Handling Limited Face-to-face Learning Cases of Corona Virus in Elementary Schools in Bekasi Regency Case Study: Education Office and Health Office of Bekasi Regency Government. *KnE Social Sciences*, *8*(11), 401-410. https://doi.org/10.18502/kss.v8i11.13562

Wijaya, A. A. M., Sa'ban, L. A., & Nastia, N. (2023). Opportunities and Challenges of Collaborative Governance in Local Government Tourism Public Policy. *Jurnal Administrasi Negara*, *29*(3), 214-234. https://doi.org/10.33509/jan.v29i3.2681

Wulandari, E., & Kurniati, E. (2025). Karakteristik pertanian di Indonesia: Antara tradisi, tantangan struktural, dan peluang transformasi. *Jurnal Ekonomi Pertanian Dan Agribisnis*, *2*(1), 57-72.

Wulandjani, H., Widiyahseno, B., Utomo, E. N., Megaster, T., Sudarmanto, E., Saleha, D., ... & Islam, N. (2025). *Collaborative Governance*. Penerbit Minhaj Pustaka Indonesia.

Ziem Bonye, S., Yenglier Yiridomoh, G., & Der Bebelleh, F. (2022). Common-pool community resource use: Governance and management of community irrigation schemes in rural Ghana. *Community Development*, *53*(1), 39-56. https://doi.org/10.1080/15575330.2021.1937668

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