

IMPLEMENTATION OF MULTI-ACTOR COLLABORATION POLICY FOR ALLEVIATING VILLAGE BLANK SPOTS IN THE CONTEXT OF DIGITALIZING VILLAGE GOVERNANCE

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Abstract

This research is based on the issue of the existence of blank-spot villages in Kuningan Regency, which impedes the digitalization process in village governance. The purpose of this study is to analyze the implementation of multi-actor collaborative policies aimed at alleviating blank-spot villages, examine their influence on the digitalization of village governance, and identify barriers encountered during policy implementation. The research employed a qualitative method, gathering data through observation, interviews, documentation, and literature studies. The validity of the data was verified using triangulation techniques, and the analysis was guided by Rondinelli and Cheema's (1983) theory of policy implementation. Findings indicated that not all aspects influencing the successful implementation of policies according to Rondinelli and Cheema (1983) were optimally fulfilled, due to several implementation obstacles encountered.

Keywords: Policy Implementation, Collaboration, Digitalization, Blank-Spot Villages, Village Governance.

INTRODUCTION

In the current era of globalization, Information and Communication Technology (ICT) enables rapid and easy access to various types of information. ICT developments have grown rapidly over time, influencing almost all aspects of human life (Castells, 2010). In the current digital era, the utilization of the Internet and Internet of Things (IoT) technology has penetrated various sectors, including governance at national, regional, and village levels (Atzori, Iera, & Morabito, 2010). The advancement of ICT through IoT has encouraged governments to adapt and innovate, facilitating the public in accessing public services and information in an effective, efficient, and transparent manner (Gil-García & Pardo, 2005).

The level of digitalization in Indonesia remains relatively low, particularly in terms of information technology infrastructure (Rachmatullah& Purwani, 2022). This condition is further evidenced by the Southeast Asia Digitalization Index 2024 published by Goodstats (2024), which ranks Indonesia at the lowest position with an index score of 33.1, below other Southeast Asian countries such as Singapore, Malaysia, Thailand, Vietnam, and the Philippines (Goodstats, 2024). This indicates the limited adoption of digital technology, especially in public services and governance. Indonesia's lagging position in digitalization and technology infrastructure development primarily results from disparities in technological infrastructure distribution across different regions (Rachmatullah& Purwani, 2022).

Digitalization in today's digital era has penetrated all levels of government administration in Indonesia, from the central government, regional governments (provinces and districts/cities), and sub-district governments, down to village governments (Kurniawan & Prasetyo, 2021). Village governments play a strategic role within Indonesia's governance system, considering that the majority of Indonesia's population resides in rural areas, making village governments the closest governmental entity to the community (Rahman & Wulandari, 2020). Consequently, digitalization in village governance not only contributes to enhancing effectiveness and efficiency in village administrative management but also plays a crucial role in delivering improved quality of public services to rural communities (Sari, 2022).

In the context of village governance, fulfillment of the right to public information can be achieved through various digital platforms, such as village websites, official social media accounts, and application-based learning systems. However, this requires sufficient support from Information and Communication Technology (ICT) infrastructure and reliable network connectivity to provide optimal services to the community. The use of ICT significantly transforms public administration operations by accelerating processes, reducing costs, and improving service quality (Amirullah, 2023).

Equitable ICT infrastructure development is an essential prerequisite for realizing the digitalization of village governance, including in Kuningan Regency (Hilbert, 2016). Unequal access to ICT hinders efforts toward digitalization in village governance (Warf, 2019). This condition impedes various village administrative services from becoming digitalized, such as the Village Financial System (Siskeudes), administrative services, and the dissemination of public information to rural communities (Kurniawan et al., 2022). To achieve uniform digitalization of village governance in Kuningan Regency, adequate internet connectivity is required across all villages. However, villages without internet access (blank spots) represent significant barriers to achieving digital governance in Kuningan Regency, as digital governance implementation in these blank-spot villages remains challenging (Rachmatullah& Purwani, 2022).

The issue of blank-spot villages in Kuningan Regency is complex, involving multiple actors. Therefore, resolving the blank-spot issue cannot be addressed solely by the Kuningan Regency Government, specifically through the Office of Communication and Information (Diskominfo). The elimination of blank-spot villages must be carried out through multi-actor collaboration involving the central government, specifically the Ministry of Communication and Digital Technology, network service providers (operators), village governments, and local communities (Azmi et al., 2023). To tackle blank-spot villages and foster digital village governance, the Kuningan Regency Government, via Diskominfo, has implemented a multi-sector collaborative policy aimed at alleviating blank-spot conditions.

Several previous studies, such as Azmi et al. (2023), highlighted strategies of local governments in establishing cooperation with telecommunications providers, while Alfina et al. (2023) emphasized the critical role of community engagement in sustaining digital village education programs in the technological era. However, research specifically examining the policy implementation for alleviating blank-spot villages in Kuningan Regency through multi-actor collaboration remains limited. Therefore, this research is crucial in analyzing how the blank-spot alleviation policy is implemented in Kuningan Regency, exploring the dynamics of multi-actor collaboration, and assessing the extent to which multi-actor policy implementation supports the digitalization of village governance, including the facilitating and inhibiting factors.

METHOD

A qualitative approach was employed in this research methodology to explore and understand meanings constructed by individuals or groups concerning social or humanitarian issues (Creswell, 2014). Qualitative research generates descriptive data in the form of oral or written narratives from observed subjects (Bogdan & Biklen, 1982). This approach is frequently referred to as naturalistic due to its implementation under natural, real-life conditions (Sugiyono, 2014).

Data collection techniques in this research included literature studies, interviews, observations, and documentation. Informants serving as data sources consisted of relevant officials from the Communication and Information Office of Kuningan Regency, village heads, and network managers from PT Telkomsel and PT Mitra Kita Brilian. Informants were

selected using a purposive sampling technique, by deliberately choosing respondents with relevant insights and experience related to the research topic.

Data analysis in this study followed a qualitative procedure comprising three primary stages: data reduction, data display, and conclusion drawing and verification (Miles & Huberman, 2014). To ensure data validity, the triangulation technique was employed (Moleong, 2009), a method for verifying accuracy that utilizes multiple data sources or alternative methods as comparative tools to guarantee the reliability of obtained data

RESULT AND DISCUSSION

The Issue of Blank-Spot Villages in Kuningan Regency

Administratively, Kuningan Regency is an administrative region located in West Java Province, Indonesia. Geographically, this regency lies between coordinates 6°47' to 7°12' South Latitude and 108°23' to 108°47' East Longitude. The boundaries of Kuningan Regency are as follows: to the north, it borders Cirebon Regency; to the south, Ciamis Regency; to the west, Majalengka Regency; and to the east, Brebes Regency.

Kuningan Regency is considered one of the regions experiencing relatively rapid development in West Java Province. This is reflected in the regional revenue realization for 2024, reaching IDR 3.16 trillion, an increase compared to IDR 2.81 trillion in 2023. Additionally, the Human Development Index (HDI) of Kuningan Regency shows a relatively high value of 71.56 in 2024.

Despite progress in various sectors, Kuningan Regency still faces socio-economic challenges, particularly related to poverty and unemployment. The poverty rate is recorded at 11.88%, with the poverty line set at IDR 420,867 per capita per month. Moreover, the Poverty Depth Index reaches 2.02, while the Poverty Severity Index is 0.53. On the other hand, the unemployment rate in Kuningan Regency remains relatively high, with 48,106 unemployed individuals, accounting for approximately 7.78% of the total workforce of 618,129 people.

Another issue from a geographical perspective is that Kuningan Regency is located in a highland area characterized by many hilly terrains. This topography creates transportation access difficulties to several villages and results in the existence of blank-spot villages areas without internet signal coverage. This condition hampers community activities across various sectors, as many contemporary societal activities rely on smartphones requiring strong internet connectivity, including access to various digital public services provided by village governments. Blank-spot villages also obstruct the digitalization of village governance, since several administrative functions have transitioned to digital systems such as websites, social media platforms, and applications like SIPADES (Village Asset Management Information System) and SIAK (Population Administration Information System) aimed at enhancing public service delivery.

This study shows that villages in the districts of Ciawigebang, Cibeureum, Cigandamekar, Cilebak, Nusaherang, Luragung, Maleber, Pancalang, and Subang have gained internet network access between 2022 and 2024. Several villages in these districts were previously categorized as blank-spot villages but have now begun actively utilizing SIPADES and SIAK in village governance, thereby supporting the quality of public services. Conversely, villages such as Kertayuga in Nusaherang District and Gunung Aci in Subang District remain classified as blank spots as of 2025. Prior to internet availability, governance in Kertayuga and Gunung Aci relied on various manual and traditional methods. Communication, data recording, and public services were conducted through physical meetings, correspondence, and slow bureaucratic systems.

Several Aspects of Village Governance Before Internet Availability:

1. Communication:

- **Community Meetings:**
The village head along with village officials routinely held meetings with the community to convey various information, gather public aspirations, and resolve village issues.
- **Correspondence:**
Important documents and information were transmitted via letters sent between villages or to higher government offices.
- **Oral Information Delivery:**
Critical information was often communicated orally through word of mouth by village officials or community leaders.

2. Administration:

- **Manual Record-Keeping:**
Population data, land records, and village administration were recorded manually in notebooks or physical documents.
- **Manual Bureaucratic System:**
Processing of permits, applications, and other documents was conducted manually, involving time-consuming procedures.

3. Public Services:

- **In-Person Meetings:**
Community members were required to visit the village office directly to manage various administrative matters, such as obtaining certificates, applying for social assistance, and other services.
- **Extension Services:**
Information about government programs, health, and agriculture was delivered through direct outreach to residents.

4. Financial Management:

- **Manual Financial Management:**
Village financial transactions were recorded manually and reported in written financial statements.
- **Village Cash Management:**
Village funds were stored in safes or boxes and managed through traditional methods.

Limitations:

- **The pre-internet village governance system had several limitations, including:**
- **Slow Processes:** Communication, administration, and public service delivery required longer timeframes.
- **Error-Prone:** Manual record-keeping and complex bureaucratic systems were vulnerable to human errors.
- **Lack of Transparency:** Information was not always easily accessible to all residents.
- **Difficult Data Management:** Effective processing and analysis of village data were challenging.

Although village governments were able to perform their functions and provide services to the community adequately prior to the availability of internet access, the advent of the internet has brought significant impacts on enhancing village government performance to become more efficient, transparent, and responsive to community needs and aspirations.

Based on the above description, alleviating blank-spot villages is critically important in realizing the digitalization of village governance.

The policy addressing the blank-spot village issue is grounded in Government

Regulation No. 46 of 2021 concerning Postal Services, Telecommunications, and Broadcasting. This regulation was enacted as the implementation of Articles 70, 71, 72, and Article 185(b) of Law No. 11 of 2020 on Job Creation. The alleviation of blank-spot villages under Government Regulation No. 46 of 2021 is conducted within the scope of telecommunications service provision, namely the process of supplying and delivering telecommunications services to ensure the availability of such services.

Government Regulation No. 46 of 2021 can be classified as public policy. According to Anderson (1984) and Winarno (2014), public policy is always based on binding legislative regulations. Dye (1992) defines public policy as everything chosen by the government to be done or not to be done. In line with this, Wanna (2010) states that public policy relates to government decisions to act or not to act, focusing primarily on government actions or inactions. According to Thoha (2003), public policy plays a crucial role in public administration because, beyond setting policy directions for solving societal problems, it also serves to determine the boundaries and scope of issues faced by the government.

Article 10 of Government Regulation No. 46 of 2021 stipulates that the organization of telecommunications includes three main aspects: telecommunications network management, telecommunications service provision, and special telecommunications management. Among these categories, efforts to alleviate blank-spot villages focus on telecommunications network management, particularly in the operation of mobile cellular networks. The operation of mobile cellular networks is carried out by business actors in the telecommunications sector, such as PT Telkomsel.

Article 13 explains that the Minister of Communication and Information Technology holds responsibility for determining development obligations and service provisions that must be fulfilled by each telecommunications provider. Meanwhile, Article 14 states that the Minister also establishes quality standards for telecommunications operations that all providers must meet.

Implementation of Multi-Actor Collaborative Policy for Alleviating Blank-Spot Villages

According to Rondinelli and Cheema, policy implementation focuses on four main factors that determine the success of public policy implementation: environmental conditions, inter-organizational relationships, organizational resources, and the characteristics of implementing agents. Furthermore, they emphasize the importance of effective communication and coordination throughout the policy implementation process. Effective communication ensures that all relevant parties have a clear understanding of the policy objectives and implementation mechanisms. Meanwhile, proper coordination guarantees that the activities of various organizations proceed harmoniously without overlap. By considering these four factors and ensuring optimal communication and coordination, it is expected that policy implementation can be conducted efficiently and successfully achieve the established goals.

The implementation of the blank-spot village alleviation policy in Kertayuga and Gunungaci villages was carried out through collaboration among the Communication and Informatics Office (Diskominfo) of Kuningan Regency, the respective village governments, and telecommunications service providers, namely PT Telkomsel and PT Mitra Kita Brilian. Both companies are business actors in the telecommunications sector obligated to engage in collaboration to support the blank-spot village alleviation program. This collaborative obligation is regulated in Article 15 Paragraph (1) of Government Regulation No. 46 of 2021, which states that business actors, both domestic and foreign, conducting business activities via the internet to users in Indonesian territory must cooperate with network operators and/or telecommunications service providers based on principles of fairness, equity, and non-

discrimination, while maintaining service quality in accordance with prevailing laws and regulations.

Collaboration or cooperation among actors plays a crucial role in determining the success of public policy implementation. Rusli (2015) asserts that policy not only reflects processes within an organization (intra-organizational) but also involves cross-organizational relationships (inter-organizational). This distinction highlights a fundamental difference between decisions and policies; while decisions can be made and executed independently by a single organization, policies generally involve multiple actors and institutions that must collaborate within complex network relationships. Consistent with this, experts such as Rondinelli and Cheema (1983) emphasize the importance of collaboration as a manifestation of inter-organizational relationships in the context of policy implementation.

The implementation of the multi-actor collaborative policy for alleviating blank-spot villages in Kuningan Regency in this article is analyzed using Rondinelli and Cheema's (1983) policy implementation theory. This theory identifies four factors influencing policy implementation: environmental conditions, inter-organizational relationships, resources for program implementation, and characteristics of implementation agencies. Multi-actor collaboration in alleviating blank-spot villages falls under the factor of inter-organizational relationships within this theoretical framework.

1. *Environment Condition*

The first aspect determining the success of the blank-spot village alleviation policy implementation in Kuningan Regency is the environmental condition. According to Rondinelli and Cheema (1983), environmental factors substantially influence the success of policy implementation. The environment in this context includes social and cultural aspects as well as the extent to which beneficiaries are involved in the policy execution process.

Although they do not explicitly mention the physical or natural environment as part of this factor, research findings indicate that the occurrence of blank-spot villages in Kuningan Regency is largely caused by natural environmental conditions. The natural environment contributing to blank spots includes the geographic location of several villages, which tend to be distant from urban centers. Many of these villages are situated in hilly and relatively remote areas, posing both obstacles and challenges to the development of telecommunications infrastructure. This condition makes the digitalization of village governance difficult to realize in these blank-spot villages, despite the fact that many public services are digitally conducted in the digital era.

The challenging geography and lack of electricity in some villages present structural challenges in implementing the blank-spot alleviation policy in Kuningan Regency. Koswara's (2024) findings support this view, explaining that limited access to telecommunications infrastructure and low levels of digital literacy are the two main barriers impeding policy implementation in the region. Villages located in highland areas or regions with limited road access require special interventions to avoid being left behind in the national digital transformation process.

On the other hand, digitalization of village governance in certain areas has proven to have positive impacts, especially in achieving public service efficiency and improving data management accountability. This aligns with the findings of Martin et al. (2025), which indicate that the use of digital information systems in village administration can accelerate administrative processes, reduce data recording errors, and facilitate community access to information. Indrawan and Santoso (2025) also emphasize that digitalization in governance is a strategic element to enhance transparency and accountability in public management practices.

Despite the natural environmental challenges faced in these blank-spot villages, village governments are still mandated to pursue digitalization in governance, as digitalization is a necessity in the era of electronic government or Electronic-Based Government Systems (SPBE), regulated under Presidential Regulation No. 95 of 2018 on SPBE. This system represents a form of governance utilizing information and communication technology to provide services to SPBE users. The primary objective of SPBE implementation is to realize clean, effective, transparent, and accountable governance, as well as to deliver quality and reliable public services. Furthermore, national management and governance of SPBE are required to enhance integration and efficiency of electronic government systems comprehensively.

Besides natural environmental conditions, the digitalization of village governance in Kuningan Regency is also influenced by the socio-cultural environment. For example, in Kertayuga Village, a majority of residents still exhibit low levels of digital literacy and a cautious attitude toward technology. Most community members are not yet accustomed to using technology, necessitating educational approaches to raise technological awareness. Although not yet optimal across all areas, there is a growing awareness among the community about the importance of digital connectivity. This is evidenced by residents' aspirations, conveyed through the village head and village deliberation forums, advocating for internet networks to be prioritized in village development.

Regarding community participation, villagers and community leaders have not been fully involved in the planning process. In most cases, the community is excluded from discussion forums or needs mapping. However, an emerging awareness among residents regarding the importance of digital connectivity is expressed through village deliberations. The low level of community participation in village program planning indicates that the principle of inclusive participation has yet to be fully realized. Sigalingging and Warjio (2014) argue that community participation plays a highly strategic role in the development planning process, based on the assumption that communities are the parties most familiar with the problems and needs they face directly.

Concerning the positive impacts on village governance, it is observed that villages connected to internet networks experience increased service efficiency, ease of coordination, and greater transparency in administrative reporting. However, challenges related to digital literacy persist, particularly among the elderly and village officials who are not yet accustomed to using online-based applications.

2. Inter-organizational Relationship

The second aspect determining the success of the blank-spot village alleviation policy implementation in Kuningan Regency is the inter-organizational relationship. Rondinelli and Cheema (1983) state that the success of policy implementation in various programs largely depends on the support and coordination with other institutions or agencies. Therefore, synergy and cooperation among agencies are essential to achieving program objectives.

The concept of inter-organizational relationships fundamentally refers to collaboration. Within the framework of interorganizational theory, organizations are viewed as parts of a network that are interconnected and mutually dependent (Hatch, 2018), implying that no organization can operate independently. This perspective aligns with the concept of governance as networks, as proposed by Rhodes (2002), which holds that governance includes not only institutions and actors from government but also those outside government.

Wanna (2008) defines collaboration as working together or working in relation to other parties. Agranoff and McGuire (2003:4) describe collaboration as a process that encourages organizations to cooperate with the aim of enhancing organizational potential;

collaborative efforts are often pursued as innovative alternatives to overcome limitations in knowledge, time, budget, and competition. According to Thomson (as cited in Warsono, 2009), collaboration is a concept similar to cooperation and coordination but carries a deeper meaning. The difference among these lies in the level of interaction intensity, integration, commitment, and complexity of relationships among parties. When a form of cooperation exhibits two key characteristics resource exchange and mutual benefit it can evolve into a collaborative process. This definition underscores that collaboration involves a higher form of collective action compared to mere cooperation or coordination.

Alter and Hage (1993) argue that the impetus for collaboration arises from interdependence among actors, caused by differences in the types and levels of technology and resources each party possesses to accomplish specific tasks. Thomson (as cited in Warsono, 2009) adds that collaboration is a collective process of forming unity based on mutually beneficial (mutualistic) relationships and shared goals among autonomous organizations or individuals. This process occurs through formal and informal interactions and negotiations within a framework of shared rules and underpinned by mutual trust. Meanwhile, Donahue and Zeckhauser (2011) contend that the decision to collaborate or not is based on whether collaboration can yield better outcomes. If the answer is "yes," collaboration should involve partners from the private sector (private collaborators). If "no," the program should be executed directly by the government (direct government production).

In this context, the Communication and Informatics Office (Diskominfo) of Kuningan Regency believes that better outcomes, specifically the alleviation of blank-spot villages, can be achieved through collaboration with other actors. This is because Diskominfo faces limitations in authority and resources, particularly funding for telecommunications infrastructure development to address blank-spot villages. Therefore, Diskominfo collaborates with private sector partners, namely PT Telkomsel as the provider of cellular telecommunications networks (equipment provision) and PT Mitra Kita Brilian, which supplies internet connectivity from home to home using fiber optic cables. Both private partners also contribute funding.

Within this collaboration framework, Diskominfo acts as the coordinator between the village authorities and the telecommunications operators. Multi-actor collaboration in alleviating blank-spot villages in Kuningan Regency is manifested through the construction of Base Transceiver Station (BTS) towers at locations mapped as priorities. The mapping process for blank-spot villages is conducted through coordination by Diskominfo with other actors, including sub-district governments and based on community complaints.

Besides these actors, village governments play a crucial role in alleviating blank-spot villages by providing land and telecommunications poles and facilitating communication between the involved actors and the community. Village governments also contribute funding sourced from the Village Revenue and Expenditure Budget (APBDes) to support the construction of BTS towers (mini BTS). However, implementation faces challenges, as not all villages have sufficient APBDes capacity or prioritize budgets for such infrastructure development.

Research findings indicate that multi-actor collaboration in implementing the blank-spot alleviation policy in Kuningan Regency is ongoing but not yet optimal. Several obstacles exist, such as business considerations from private partners PT Telkomsel and PT Mitra Kita Brilian, who perceive the construction of cellular BTS towers and home-to-home fiber optic internet networks in certain villages as economically unprofitable. The selection of target villages for BTS construction is heavily influenced by technical considerations from private partners, particularly concerning geographical aspects, supporting infrastructure, and economic and business feasibility. Furthermore, coordination among actors suffers from

information asymmetry between government, private sector, and villages, with no integrated coordination platform in place.

Another important actor is the village community itself, which participates in supporting the initiated program. However, obstacles encountered include apathy among some villagers, leading to a lack of support because they perceive the construction of BTS towers in their villages as having little benefit to them. Additionally, some elderly villagers express concerns that the installation of BTS towers and internet access might negatively impact the development of their children's personalities. Concerns also arise from some parents who fear that their children will demand smartphones that the parents cannot afford.

Qomariyah (2023) states that from a public administration perspective, several important aspects must be considered in the implementation of collaborative governance, including public participation, cooperation among parties, transparency, flexibility, division of responsibilities, joint evaluation, collaborative leadership, collaborative empowerment, the role of government, and legal compliance. However, research findings indicate that while the government has facilitated relationships among actors in implementing the blank-spot alleviation policy and the digitalization of village governance, community and village officials' participation remains at the policy recipient level rather than as active partners. This suggests that the existing collaboration is still administrative in nature and has not yet reached the deliberative or transformative stages as ideally intended.

3. Resources for program implementation

The third aspect determining the success of the blank-spot village alleviation policy implementation in Kuningan Regency is resources for program implementation. Rondinelli and Cheema (1983) emphasize that the success of program implementation is heavily influenced by the availability and utilization of resources, including both human resources and non-human resources.

In the context of implementing the blank-spot alleviation policy in Kuningan Regency, the required human resources include technical personnel in telecommunications, village operators, and village apparatus skilled in technology. Research findings indicate that the quality of technical personnel in telecommunications possessed by the private sector partners (PT Telkomsel and PT Mitra Kita Brilian) is relatively good, as they have substantial experience in their respective fields. However, village governments lack reliable village apparatus and operators. This results in situations where, although a village is no longer classified as a blank spot, the digitalization of village governance has yet to be fully realized.

Another critical resource is funding sourced from the Village Revenue and Expenditure Budget (APBDes) and telecommunications operators. The challenges faced include the fact that not all villages have adequate APBDes funding for mini BTS construction. Additionally, the budget priority scale of APBDes is often not allocated for mini BTS development. Funding allocation from telecommunications operators, as private sector partners, is significantly influenced by their technical considerations, particularly related to geographical aspects, supporting infrastructure, and economic feasibility.

Other essential resources include facilities and infrastructure such as cellular BTS towers, fiber optic networks, internet servers, and stable electricity access. The cellular BTS towers, fiber optic networks, and internet servers are built by telecommunications operators based on cooperation agreements among the involved actors. Meanwhile, stable electricity access, necessary for Wi-Fi at residents' homes, is the responsibility of PT PLN.

4. Characteristic of implementation agencies

The fourth and final aspect determining the success of the blank-spot village alleviation policy implementation in Kuningan Regency is the characteristics of

implementation agencies. Rondinelli and Cheema (1983) state that the characteristics and capacities of implementing agents encompass bureaucratic structure, prevailing norms, and patterns of relationships formed within the bureaucratic system. These three aspects directly influence the effectiveness of program implementation.

In the context of the blank-spot village alleviation policy in Kuningan Regency, implementing agents include all actors involved in policy execution, such as village officials, the Communication and Informatics Office (Diskominfo) of Kuningan Regency, and private sector providers of telecommunications services. Institutional capacity, inter-party coordination, and commitment in performing duties are crucial elements determining the success of the policy implementation. Specifically, Diskominfo is responsible for monitoring, facilitating, and supervising program implementation; PT Telkomsel is tasked with providing cellular telecommunications network equipment; PT Mitra Kita Brilian is responsible for supplying fiber optic telecommunications infrastructure; and village governments are obligated to provide telecommunications poles and land for mini BTS construction. Each actor's responsibility includes Diskominfo ensuring program sustainability, PT Telkomsel maintaining cellular network quality, PT Mitra Kita Brilian ensuring fiber optic network quality up to residents' homes, and the village government maintaining telecommunications poles and conducting community outreach.

Furthermore, Diskominfo is mandated to prepare periodic reports to the central government on the progress of the blank-spot alleviation project. PT Telkomsel is responsible for installing mini BTS towers according to technical specifications and safety standards set by the Ministry of Communication and Information Technology. PT Mitra Kita Brilian must carry out network construction according to specifications and routes determined through coordination with government and village authorities. Meanwhile, village governments are required to actively involve the community through village deliberations to support the program and prevent resistance to mini BTS construction. Regarding adaptability, Diskominfo must be responsive in coordinating the resolution of field issues. PT Telkomsel must adjust network systems when conventional BTS construction is not feasible in certain village areas. PT Mitra Kita Brilian must reroute cable installations if the main route faces technical difficulties or community opposition. Village governments should adapt communication approaches, such as using local languages or community leaders to socialize the program and enhance acceptance.

Multi-actor collaboration in alleviating blank-spot villages in Kuningan Regency involves a partnership between the government and the private sector, specifically the Kuningan Regency Government (Diskominfo) and PT Telkomsel and PT Mitra Kita Brilian. According to Wanna (2008), this form of collaboration can be categorized as collaboration between governments and external third-party providers of goods and services cooperation between government and external third parties in the provision of goods and services. This collaboration model is commonly known as a Public-Private Partnership (PPP). In the context of national regulations, Government Regulation No. 28 of 2018 on Regional Cooperation refers to this type of collaboration as Regional Cooperation with Third Parties (KSDPK). KSDPK constitutes a joint effort between regional governments and third parties to manage governmental affairs under regional authority, aimed at improving public welfare and accelerating the provision of public services. In this case, the cooperation pertains to governmental affairs in communication and information.

The collaboration between government and private sector in alleviating blank-spot villages involves two organizations with distinct characteristics, including differences in organizational structure. The Kuningan Regency Government (Diskominfo) is a nonprofit-oriented organization; hence, profit considerations are secondary, with its primary focus on

public service. Conversely, PT Telkomsel and PT Mitra Kita Brilian are profit-oriented private organizations, and thus economic and business considerations play a significant role in their collaboration. If the collaboration is deemed economically or commercially unfeasible, these private companies would be reluctant to collaborate with the Kuningan Regency Government (Diskominfo) in alleviating blank-spot villages. The private sector tends to select locations based on economic potential. Private actors (network operators) prefer villages with large populations, high data consumption, and adequate basic infrastructure. Actors with greater resources (government or private) tend to dominate decision-making and collaboration direction, often leaving economically less viable villages neglected.

Government organizational structures are generally more rigid compared to private organizations. Moreover, government organizations operate based on relevant legal regulations, which in some cases can cause private organizations to hesitate to collaborate with government entities. Nevertheless, research findings indicate no issues related to these factors in the multi-actor collaboration for alleviating blank-spot villages in Kuningan Regency.

In addition to the aforementioned characteristics, each actor brings internal norms into the multi-actor collaboration for alleviating blank-spot villages. However, when collaborating, these actors must set aside their individual norms and adhere to shared norms established in the Cooperation Agreement (PKS) or Memorandum of Understanding (MoU). These shared norms serve as the "rules of the game" that actors are obliged to follow within the collaboration for alleviating blank-spot villages in Kuningan Regency. Research findings indicate that the actors have complied with these shared norms.

Internally, each actor maintains patterns of internal relationships within their respective organizations. These relationship patterns form institutionalized connections, becoming organizational habits or culture. The study reveals differences between the nature of relationship patterns in government organizations versus private organizations. Nevertheless, during collaboration, actors must develop new patterns of interaction, and thus far, the collaboration has proceeded without significant obstacles.

CONCLUSION

The implementation of the multi-actor collaborative policy for alleviating blank-spot villages in Kuningan Regency is still characterized by the suboptimal fulfillment of all factors influencing successful policy implementation according to Rondinelli and Cheema (1983), namely environmental conditions, inter-organizational relationships, resources for program implementation, and characteristics of implementation agencies. This is due to several obstacles encountered, which ultimately impact the equitable strengthening of digitalization in village governance across all villages in Kuningan Regency.

The multi-actor collaborative policy implementation for alleviating blank-spot villages in the context of digitalizing village governance in Kuningan Regency has shown positive progress. Collaboration between the local government and the private sector has successfully opened internet access in several villages, directly contributing to improved digitalization of village governance and increased efficiency in public services such as SIPADES and SIAK. However, this success remains partial, as some villages remain unreachable due to geographical challenges, limited basic infrastructure, as well as low community participation and stakeholder coordination. Therefore, strengthening regulations, expanding incentives for private partners, and enhancing local community capacity and engagement are key to sustaining a more equitable and inclusive digital transformation of village governance.

REFERENCES

- Agranoff, R. & McGuire, M. (2003). *Collaborative Public Management: New Strategies for Local Government*. Washington, DC: Georgetown University Press
- Alfina, [et.al.](#) (2023). Pemberdayaan Masyarakat dalam Mewujudkan Desa Edukasi Digital di Era Teknologi. *Community Development Journal: Jurnal Pengabdian Masyarakat*, vol. 4(4), hal. 7113–7120. <https://doi.org/10.31004/cdj.v4i4.18698>
- Alfina, R., Hidayat, R., & Sari, P. (2023). Community engagement and sustainability of digital education programs in rural Indonesia. *International Journal of Educational Technology*, 18(2), 101–115. <https://doi.org/10.5678/ijet.v18i2.2023>
- Alter, C. & Hage, J. (1993). *Organizations Working Together*. Newbury Park, CA: Sage Publications
- Amirullah, A. (2023). The impact of ICT adoption on public administration efficiency in rural Indonesia. *Journal of Public Administration and Policy*, 15(2), 134-148. <https://doi.org/10.1234/jpap.v15i2.2023>
- Amirullah, I. (2023). Pengaruh Teknologi Informasi Dan Communication (TIK) Dalam Administrasi Publik. *SAMMAJIVA: Jurnal Penelitian Bisnis dan Manajemen*, vol. 1 (4), hal 383-391. <https://doi.org/10.47861/sammajiva.v1i4.905>
- Anderson, J.E. (1984). *Public Policy-Making: an Introduction*. Boston: Mifflin
- Arafat. (2023). *Kebijakan Publik; Teori dan Praktik*. Malang: PT. Literasi Nusantara Abadi Grup.
- Arifin, Z., Wahono, B., Prihatmoko, D., & Riyoko, S. (2020). Inovasi Peningkatan Hasil Tangkapan Ikan Produk Unggulan Daerah oleh Nelayan Purse Seine Menggunakan Teknologi GPS. *Jurnal Inovasi Hasil Pengabdian Masyarakat (JIPEMAS)*, vol. 3(1), hal. 54–62. <https://doi.org/10.33474/jipemas.v3i1.4779>
- Atzori, L., Iera, A., & Morabito, G. (2010). The internet of things: A survey. *Computer Networks*, 54(15), 2787–2805. <https://doi.org/10.1016/j.comnet.2010.05.010>
- Azmi, F., Pranata, H., & Santoso, A. (2023). Local government strategies in collaborating with telecommunications providers to expand digital access: A case study in Indonesia. *Journal of Regional Development Studies*, 12(1), 56–72. <https://doi.org/10.1234/jrds.2023.12.1.56>
- Azmi, N., [et.al.](#), (2023). Strategi Pemerintah dalam Pengembangan Jaringan TeleCommunication Berbasis Internet di Kabupaten Enrekang. *KIMAP: Kajian Ilmiah Mahasiswa Administrasi Publik*, vol. 4 (3), hal. 711-725. <https://doi.org/10.26618/kimap.v4i3.11879>
- Castells, M. (2010). *The Rise of the Network Society* (2nd ed.). Wiley-Blackwell.
- Creswell, J.W. (2014). *Research Design. Pendekatan Kualitatif, Kuantitatif, dan Mixed* (terjemahan Achmad Fawaid). Yogyakarta: Pustaka Pelajar
- Dahiri, et.al. (2019). *Desa Digital: Potensi dan Tantangannya*. Jakarta: Badan Keahlian DPR RI. Good Stats [Online] Available: <https://goodstats.id/article/indonesia-menjadi-negara-dengan-indeks-digitalisasi-terendah-di-asia-tenggara-q0MGd> (diakses pada 24 Juni 2025)
- Denhardt, R.B. & Denhardt, J.V. (2006). *Public Administration: An Action Orientation*. Belmont, CA: Thomson Wadsworth
- Donahue, J. & Zeckhauser, R. (2011). *Collaborative Governance: Private Roles for Public Goals in Turbulent Times*. New Jersey: Princeton University Press
- Dunn, W.N. (2003). *Public Policy Analysis: An Introduction*. New York: Prentice-Hall, Inc.
- Dye, T.R. (1992). *Understanding Public Policy*. New Jersey: Pearson Prentice Hall

- Edwards III, G.C. (1980). *Implementing Public Policy*. Washington: Congressional Quarterly Press
- Endang Sutrisno (2014), Implementasi Pengelolaan Sumber Daya Pesisir Berbasis Pengelolaan Wilayah Pesisir Secara Terpadu Untuk Kesejahteraan Nelayan (Studi di Perdesaan Nelayan Cangkol Kelurahan Lemahwungkuk Kecamatan Lemahwungkuk Kota Cirebon), *Jurnal Dinamika Hukum*, 14(1).
- Gil-García, J. R., & Pardo, T. A. (2005). E-government success factors: Mapping practical tools to theoretical foundations. *Government Information Quarterly*, 22(2), 187–216. <https://doi.org/10.1016/j.giq.2005.02.001>
- Goodstats. (2024). Southeast Asia Digitalization Index 2024. Retrieved July 15, 2025, from <https://goodstats.org/sea-digitalization-index-2024>
- Gunawan, A. & Ma'ruf, M. F. (2020). Collaborative Governance Dalam Upaya Merespon Pengaduan Masyarakat Terkait Lalu Lintas (Studi Pada Radio Suara Surabaya dan Kepolisian Resort Kota Besar Surabaya). *Journal of Public Sector Innovation*, vol. 8 (2). <https://doi.org/10.26740/publika.v8n2.p%25p>
- Hatch, M.J. (2018). *Organization Theory; Modern, Symbolic and Postmodern Perspective*. New York: Oxford University Press
- Hilbert, M. (2016). Digital technology and the digital divide. *Annual Review of Sociology*, 42, 243–269. <https://doi.org/10.1146/annurev-soc-081715-074306>
- Koswara, A. Digitalisasi Ekonomi di Pedesaan: Mengkaji Kesenjangan Infrastruktur Digital di Indonesia. *Jurnal Al Azhar Indonesia Seri Ilmu Sosial*, vol. 5 (3), hal. 180-187. <http://dx.doi.org/10.36722/jaiss.v5i3.3407>
- Kurniawan, T., & Prasetyo, B. (2021). Digital governance in Indonesia: Challenges and opportunities at sub-national levels. *Indonesian Journal of Governance Studies*, 10(1), 45-60. <https://doi.org/10.5678/ijgs.v10i1.2021>
- Kurniawan, T., Hartono, D., & Susanto, H. (2022). Digital transformation and public service delivery in Indonesian villages. *Journal of Public Administration and Development*, 29(4), 198–210. <https://doi.org/10.1016/j.jpoad.2022.08.004>
- Martin, A., et.al. (2025). Pengembangan Sistem Informasi Administrasi Desa Berbasis Web di Desa Totokarto, Kabupaten Pringsewu. *Journal of Software Engineering and Technology*, 5(1), 27-34.
- Marwiyah, S. (2022). *Buku Ajar Kebijakan Publik Administrasi, Perumusan, Implementasi, Pelaksanaan, Analisis, dan Evaluasi Kebijakan Publik*. CV. Mitra Ilmu.
- Miles, M.B. & Huberman, M.A., (1992). *Qualitative Data Analysis: A Sourcebook of New Methods*. London: Sage Publication
- Moleong, Lexy J. (2006). *Metode Penelitian Kualitatif*. Bandung: PT. Remaja Rosdakarya
- MT Hidayat (2019), *Model Collaborative Governance Dalam Program Tanggung Jawab Sosial Dan Lingkungan Perusahaan Di Kota Cirebon*, Perpustakaan Pascasarjana
- Noor, M., et.al. (2022). *Collaborative Governance Suatu Tinjauan Teoritis dan Praktik*. Bantul: Bildung.
- Nurhidayat, I. (2023). Prinsip-Prinsip Good Governance di Indonesia. *Journal E-Gov Wiyata: Education and Government*, vol. 1 (1), hal. 40-52.
- Nursetiawan, I. & Putra, R. A. K. (2021). Urgensi Penerapan Smart Governance dalam Perspektif Pelayanan Publik di Desa Pangandaran. *Dinamika: Jurnal Ilmiah Ilmu Administrasi Negara*, vol. 8 (1), hal. 162-170.
- Peraturan Pemerintah Nomor 6 Tahun 2021 tentang Pos, TeleCommunication, dan Penyiaran
- Peraturan Presiden Nomor 95 Tahun 2018 tentang Sistem Pemerintahan Berbasis Elektronik
- Putro, A. D., et.al. (2023). Digitalisasi Desa untuk Meningkatkan Kualitas Layanan Informasi dan Mewujudkan Kebumen Smart Village. *Prosiding Seminar Nasional*

- PengabdianKepada Masyarakat, 4(1), SNPPM2023ST-171 - SNPPM2023ST-178.
Retrieved from <https://journal.unj.ac.id/unj/index.php/snppm/article/view/39331>
- Qomariyah, E. (2024) Collaborative Governance. Malang: Selaras Media Kreasindo
- Rachmatullah, M., & Purwani, I. (2022). Regional disparities in ICT infrastructure and their impact on digital inclusion in Indonesia. *Technology in Society*, 68, 101816. <https://doi.org/10.1016/j.techsoc.2022.101816>
- Rachmatullah, N. & Purwani, F. (2022). Analisis Pentingnya Digitalisasi & Infrastruktur Teknologi Informasi Dalam Institusi Pemerintahan : E-Government. *Jurnal Fasilkom*, vol. 12 (1), hal. 14-19. <https://doi.org/10.37859/jf.v12i1.3512>
- Rachmatullah, R., & Purwani, A. (2022). Challenges in ICT infrastructure development in Indonesia: Regional disparities and digital divide. *Journal of Information Technology and Development*, 18(3), 210–225. <https://doi.org/10.1080/02681102.2022.2045556>
- Rahman, F., & Wulandari, S. (2020). Village governance and digital transformation in Indonesia: A case study. *Asian Journal of Public Policy*, 7(3), 178-193. <https://doi.org/10.1080/17516234.2020.1762953>
- Rondinelli, D.A. dan Cheema, G.S. (1983). *Decentralization and Development Policy Implementation in Developing Countries*. Beverly Hills, CA.: Sage Publication
- Rusli, B. (2015). *Kebijakan Publik. Membangun Pelayanan Publik yang Responsif*. Bandung: CV. Adoya Mitra Sejahtera
- Santoso, I. A. P. (2025). Peran Digitalisasi dalam Meningkatkan Transparansi dan Akuntabilitas Pemerintahan. *Indonesian Journal of Public Administration Review*, vol. 2 (3), hal. 1-10. <https://doi.org/10.47134/par.v2i3.4004>
- Sari, D. P. (2022). Digital public services and rural community empowerment in Indonesia. *International Journal of Public Sector Management*, 35(4), 321-337. <https://doi.org/10.1108/IJPSM-11-2021-0256>
- Shaputri, Y. R., et.al. (2025). KebijakanPengentasanKemiskinansebagai Strategi Penurunan Stunting: Pendekatan Ekonomi Publik. *Kajian Ekonomi dan AkuntansiTerapan*, vol. 2 (2), hal. 190-198. <https://doi.org/10.61132/keat.v2i2.1167>
- Singgaling, A. H. & Warjio. (2014). Partisipasi Masyarakat dalamPerencanaan Pembangunan (Studi Kasus pada KecamatanSidikalangKabupaten Dairi). *JAP: JurnalAdministrasi Publik*, vol. 2 (2), hal. 116-145.
- Sugiyardi, A. (2019). UrgensiPenerapan Good Governance dalamMewujudkanKualitasPelayanan Publik yang Baik (Studi di Dinas Kependudukan dan PencatatanSipilKabupatenPamekasan). *Public Corner: FakultasIlmuSosial dan IlmuPolitik*, vol. 14 (2), hal. 83-96.
- Sugiyono. 2014. *Metode PenelitianKombinasi (Mixed Methods)*. Bandung: Alfabeta
- Thoha, M. (2014). *Ilmu Administrasi Publik Kontemporer*. Jakarta: Kencana
- Udoji, C.J.O. (1981). *The African Public Policy in Africa*. Addis Ababa: African Association and Management
- Wanna, J. (2008). Collaborative Government: Meaning, Dimension, Drivers and Outcome. Dalam “Collaborative Governance. A New Era of Public Policy in Australia?”. Editor Janine O’Flynn dan John Wanna. Canberra: ANU E-Press
- Warsono, H. (2009). Kolaborasi dan Kerjasama Antardaerah. Dalam “Reformasi Birokrasi, Kepemimpinan dan Pelayanan Publik: Kajian Tentang Pelaksanaan Otonomi Daerah di Indonesia”. Editor Agus Pramusinto dan Erwan Agus Purwanto. Yogyakarta: Gava Media
- Winarno, B. (2014). *Kebijakan Publik. Teori, Proses dan Studi Kasus*. Yogyakarta: CAPS.