



## Clean Water and Sanitation Policy Optimization Strategy: Study in Panguragan Wetan Village, Cirebon Regency

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### Abstract:

**Background:** The problem of access to clean water and proper sanitation remains a major challenge in Panguragan Wetan Village, Cirebon Regency, characterized by inadequate water quality, environmental pollution, and low public awareness of clean and healthy living behaviors. This condition shows that the implementation of clean water and sanitation policies at the village level has not been optimal.

**Aim:** This research aims to analyze the implementation of clean water and sanitation policies, identify factors that support and hinder their implementation, and formulate strategies to improve policies in Panguragan Wetan Village.

**The** research method used is a qualitative approach, with data gathered through interviews, observations, and document studies.

**Results:** Data analysis was carried out using policy implementation theory by George C. Edwards III (1980), which includes the dimensions of communication, resources, disposition, and bureaucratic structure. The results of the study show that policy implementation has not been running optimally due to weak policy communication, limited resources, low community participation, and bureaucratic structures that have not supported cross-sector coordination. Overall, the optimization of clean water and sanitation policies requires an increase in the implementation of four dimensions in an integrated manner so that the goal of improving environmental quality and community welfare can be achieved in a sustainable manner

**Conclusions:** The implementation of clean water and sanitation policies in Panguragan Wetan Village has not run optimally due to weak communication, limited resources, low community participation, and ineffective bureaucratic coordination.

**Implication:** The results of this study imply the need to strengthen village policies in an integrated manner through increased socialization, resource allocation, community participation, and cross-sector coordination to support sustainable sanitation.

**Keywords:** policy implementation; clean water; sanitation; optimization; Village



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## INTRODUCTION

*Sustainable Development Goals* (SDG) 6 states that access to clean water and proper sanitation is a key pillar of sustainable development. These SDGs include ensuring the

availability and management of clean water and sanitation for all. In many developing countries, including Indonesia, this issue is related to the technical aspects of infrastructure provision and how well public policies guarantee people's human rights to these services (*World Health Organization*, 2021).

Although many government policies and programs, including the healthy village policy and *the National Medium-Term Development Plan* (RPJMN), have been created, there are still many challenges to implementing them at the local level. This is especially true in rural areas where resources are limited, institutions are lacking, and community participation is low. The conditions in Panguragan Wetan Village in Cirebon Regency show how complex the situation is. The need for clean water and sanitation systems has not been fully met, and public policy governance in the region has been ineffective in supporting sustainable development plans at the village level.

One of the main obstacles to implementing public policies on clean water and sanitation at the village level is the mismatch between formal policies and their on-the-ground implementation. For example, in Panguragan Wetan Village, there are still differences between the planning and implementation of sustainable clean water and sanitation programs, particularly in funding, inter-agency coordination, and community participation. The effectiveness of existing policies is undermined by bureaucratic problems, technological limitations, and a lack of public awareness of the importance of sanitation. This condition indicates that national-level public policies have not been fully translated into effective contextual actions at the village level (Edwards III, 1980). Therefore, thorough research is needed to understand how clean water and public sanitation policies are implemented in villages and to develop optimization strategies to improve performance and sustainability.

The purpose of this study is to see how public policies on clean water and sanitation management are implemented in Panguragan Wetan Village, Cirebon Regency. This research focuses on the best ways to optimize policy strategies to align with the principles of sustainable development. In addition, this research aims to develop a strategic plan to increase the efficiency, effectiveness, and community participation in the management of clean water and sanitation. As a result, this research is expected to enrich the scientific literature on the implementation of community-based policies in rural Indonesia. In addition, they can also help improve public policy governance in the basic services sector.

Previous research on clean water and sanitation in Indonesia has mostly focused on technical aspects such as infrastructure availability, water source quality, and community hygiene practices. However, less attention is paid to the public policy aspects, particularly implementation and optimization at the relevant local level (Rahman & Suryani, 2019; Susanto, 2022). Few studies have examined how clean water policies, village governance, and sustainable development interact, although all three are critical to ensuring the sustainability of public services in rural areas. In addition, few studies provide empirically based policy models or strategies from village contexts such as Panguragan Wetan, which have unique social, economic, and environmental characteristics. As a result, this study seeks to fill this gap by combining public policy and sustainable development approaches. The purpose of this integration is to provide relevant, actionable strategic recommendations to improve the efficiency of clean water and sanitation governance at the village level.

The urgency of this research lies in its scientific contribution to understanding the implementation of clean water and sanitation policies from a public policy perspective, as well as in providing practical, evidence-based, contextual, and relevant optimization strategies for sustainable village development.

## **LITERATURE REVIEW**

### **Public Policy in Implementation Perspective**

According to Dye (2017), public policy is a collection of decisions made by the government to achieve certain goals that have an impact on society. According to Edwards III (1980), the policy implementation process is an important step in the public policy cycle because it determines the success of achieving the goals that have been set. The policy implementation model emphasizes four important factors: communication, resources, disposition, and bureaucratic structure. In determining how effective policy implementation is on the ground, these four components are interconnected. The interaction between these variables in clean water and sanitation policies at the village level is often influenced by village institutional capacity, community support, and cross-sector coordination (Grindle, 2017).

A Sutopo study (2021) in Sleman Regency found that the success of implementing clean water policies is highly dependent on inter-agency cooperation and community participation. Meanwhile, research conducted by Rahmadani and Santoso (2020) in East Lombok found that the two main factors causing poor implementation of clean water policies

in villages are budget limitations and low-quality human resources. This shows that implementing public policies in the basic services sector requires technical planning and social and institutional strategies relevant to the local context.

### **Clean Water, Sanitation, and Sustainable Development**

Sanitation and clean water are basic human rights essential to economic well-being and public health. *Sustainable Development Goals* (SDG) 6 emphasizes the importance of ensuring that sanitation and sustainable water availability are available to all (UNDP, 2020). However, there are quite a few challenges to getting this service in Indonesia. According to data from the Central Statistics Agency (BPS, 2023), around 18% of households in rural areas still lack access to adequate clean water sources, and 25% still lack adequate sanitation facilities. According to Susanto (2022), environmental and social sustainability must be the top priority of clean water management policies at the village level rather than economic efficiency. On the contrary, Suryani and Kurniawan (2021) found that *community-led total sanitation* programs (CLTS) can accelerate progress toward sustainable development by increasing public awareness of the importance of clean and healthy living behaviors. This participatory method demonstrates a strong relationship between inclusive public policy governance and sustainable development outcomes in the areas of water and sanitation.

Previous research examined how clean water and sanitation policies are implemented in different regions. However, most of those studies concentrate on technical or evaluative aspects. For example, a 2019 study by Wibowo in Banyumas Regency showed that water management policies based on Village-Owned Enterprises (BUMDes) are highly effective. In addition, Putri and Syafrudin (2021) investigated how community-based environmental sanitation programs have improved the quality of residential environments in Central Java Province. However, the research has not included many aspects of public policy and optimization strategies specifically aimed at supporting sustainable village development. This study explores the implementation and optimization strategy for public policy in Panguragan Wetan Village, Cirebon Regency, regarding clean water and sanitation management for sustainable development. The aim of this study is to address the research gap regarding how public policy strategies at the local level, particularly in villages, can be optimized through participatory, innovative, and sustainable approaches. The table below summarizes research related to clean water, sanitation, and public policy.

**Table 1 Research Related to Clean Water, Sanitation, and Public Policy**

| Yes | Researcher & Year          | Location     | Research Focus                               | Method        | Key Findings                                                                                                                                                       | Shortcomings/Gaps                                                              |
|-----|----------------------------|--------------|----------------------------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 1   | Snoop Dogg (2019)          | São Paulo    | Effectiveness of BUMDes in water management  | Mixed Methods | BUMDes are effective in improving water access                                                                                                                     | Focus on economic aspects, minimal discussion of governance and sustainability |
| 2   | Rahman & Suryani (2019)    | Jakarta      | Access to clean water & hygienic behaviour   | Surveys       | Infrastructure affects the quality of health                                                                                                                       | Not focusing on village policy                                                 |
| 3   | Rahmadani & Santoso (2020) | East Lombok  | Implementation of village clean water policy | Case Studies  | Main obstacle: budget and low human resources<br>Cross-sectoral coordination and institutional capacity are very decisive for success                              | It does not discuss the interaction of village policies and national policies  |
| 4   | Sutopo (2021)              | Sleman       | Implementation of clean water policy         | Qualitative   | Environmental Quality Improvement Program Community participation improves sanitation quality<br>Integration of environmental conservation increases effectiveness | Not examining sustainable development-based optimization strategies            |
| 5   | Putri & Syafrudin (2021)   | Central Java | Community-based sanitation                   | Qualitative   |                                                                                                                                                                    | Not reviewing the framework for the implementation of public policies          |
| 6   | Suryani & Kurniawan (2021) | NTB          | CLTS and public awareness                    | Qualitative   |                                                                                                                                                                    | Not researching aspects of bureaucratic and resource coordination              |
| 7   | Holiday (2022)             | LakeMalaya   | Sustainability-based water management        | Qualitative   |                                                                                                                                                                    | Not mapping implementation factors according to Edwards III                    |

## METHOD

The purpose of this research is to gain a deeper understanding of social phenomena by investigating the meanings of people's behaviors, policies, and practices (Creswell, 2018). This method was chosen because it can explain the process of implementing public policies for clean water and sanitation by drawing on the experiences of policy actors at the village level. This study uses a descriptive qualitative method.

The key informants of this study are village officials, environmental health workers, community leaders, and the community who received benefits. Important informants who understand the implementation of public policies in the village are identified using purposive sampling. Key data were collected through thorough interviews with environmental health officers, community groups, and village officials. Using the Miles and Huberman (2014) analysis model, the data were analyzed interactively and inductively. This model includes measures such as data reduction, data presentation, and conclusions drawn. By comparing the results of interviews, observations, and policy documents, the triangulation technique of sources and methods increases the credibility of the data. The interpretation of the analysis results is based on the theory of public policy implementation and the principles of sustainable development.

## DISCUSSION

The research location is in Panguragan Wetan Village, Cirebon Regency, the results of the research were obtained through in-depth interviews and focus group discussions (FGD) with important informants and supporters. The Head of Panguragan Wetan Village, the Village Secretary, and environmental health officers are the main informants. Meanwhile, community leaders, health workers, and individuals who benefit from clean water and sanitation services are supporting informants. Village policy documents, sanitation activity reports, and relevant prior research findings are secondary data sources that support the primary data.

The results of the interview with the Head of Panguragan Wetan Village indicated that most residents' well water sources have been polluted, and the condition of clean water and sanitation in Panguragan Wetan Village remains substandard.

"Almost all residents' well water has been polluted, estimated to be around 98 percent. This pollution comes from septic tank seepage that is too close to the water source, plus there are still residents who do not have proper latrines," (Interview of the Head of Panguragan Wetan Village, 2026).

Findings in the field from interviews with village environmental health officers, the deterioration of well water quality has led to an increased likelihood of environmental diseases.

"From the results of environmental health monitoring, the quality of well water has not met health standards. This condition is very risky for diarrheal diseases, skin

diseases, and gastrointestinal tract infections," (Environmental Health Officer Interview, 2026).

In addition, the practice of open defecation (BABS) still exists in several village areas, especially in Block 3, Block 4, and some parts of Block 1. Supporting information from community leaders indicates that this behavior has been ongoing for a long time and is difficult to change without special efforts.

"In some blocks, there are still residents who defecate in gardens or waterways. This habit is old and difficult to change if only through appeals" (Community Leader Interview, 2026).

The results of the study show that access to clean water varies with the community's socio-economic conditions. People with upper-middle-income income generally rely on PDAM services, while people with low incomes still use well water that is not fit for consumption.

A supporting informant conveyed

"If you can afford it, you usually use PDAM water. But those of us who can't afford it still use well water, even though the water is cloudy and smells bad," (Citizen Interview, 2026).

This condition indicates that village-level clean water policies have not fully upheld the principles of justice and equal access mandated by SDG 6.

Panguragan Wetan Village has implemented several programs related to clean water and sanitation, such as normalizing water channels, collecting data on households without septic tanks, and building septic tanks in collaboration with related agencies. However, the program's implementation has not been optimal.

The Secretary of Panguragan Wetan Village explained that one of the main obstacles is the low public acceptance of the physical sanitation program.

"Some people reject the construction of septic tanks because they prefer assistance in the form of cash. This certainly makes it difficult for the village to carry out programs according to policy objectives," (Village Secretary Interview, 2026).

In addition, community participation in mutual cooperation activities has decreased. Waterway normalization activities that were previously carried out independently must now involve paid labor.

From a resource perspective, the study's results highlight the limitations of human resources and village budgets. Villages do not have a special budget allocation for the clean

water and sanitation sector, so they are highly dependent on programs from the local and central governments.

The village environmental health officer said:

"We do not have a special budget in the village for clean water and sanitation. If there is a program, it usually comes from the local government or office," (Interview of Environmental Health Officer, 2026).

In addition, there is no dedicated Standard Operating Procedure (SOP) for clean water and sanitation management at the village level. Structural obstacles also arise from the River Region Center's authority over the AW7 tertiary waterway, so problem-handling is often hampered by lengthy bureaucratic processes.

## **DISCUSSION**

The discussion of the results of this study was carried out by associating empirical findings with the policy implementation theory of Edwards III (1980), which emphasized four main variables, namely communication, resources, disposition, and bureaucratic structure, as well as the principle of sustainable development.

### **Implementation of the clean water and sanitation policy in Panguragan Wetan Village, Cirebon Regency**

#### **Communication Dimension**

According to Edwards III (1980), communication is an important element in policy implementation because it determines the extent to which the policy is understood by implementers and target groups. Policy communication must be carried out clearly, consistently, and continuously so that policy objectives can be implemented appropriately in practice.

Based on the results of the study, communication of clean water and sanitation policies in Panguragan Wetan Village has not been running effectively. The policy socialization carried out by the village government remains informational and administrative and has not been able to build the community's collective awareness of the importance of proper sanitation and sustainable clean water management. This problem arises from indiscriminate defecation in several villages and low public acceptance of the septic tank construction program.

The inconsistency in communication is also seen from the difference in understanding between the village government and the community regarding policy objectives. The village



government considers sanitation policy as an effort to protect health and the environment in the long term, while some people interpret it as a temporary assistance program. In the perspective of Edwards III (1980), this condition shows a distortion in policy communication that has an impact on declining the level of compliance and public support for policy implementation.

### **Resource Dimensions**

The dimension of resources in Edwards III's theory (1980) includes the availability of human resources, funds, information, and supporting facilities needed to implement policies effectively. Without adequate resource support, public policies may fail to achieve their stated goals. The results of the study show that limited resources are among the main factors hindering the implementation of clean water and sanitation policies in Panguragan Wetan Village.

In terms of budget, the village does not have a dedicated, sustainably allocated fund for the clean water and sanitation sector. The program's implementation remains highly dependent on assistance from local governments and related technical agencies, so policy implementation is sporadic and unsustainable. Budget and human resource capacity at the village level remain limited. Apparatus and environmental health officers have not been supported by specialized technical personnel with competence in water management and sanitation. These limitations affect water quality monitoring, less than optimal maintenance of sanitation infrastructure, and limited community education efforts.

Within the framework of Edward III (1980), limited resources directly reduce the effectiveness of policy implementation. The clean water and sanitation policy in Panguragan Wetan Village has not provided equitable and sustainable services, so the Sustainable Development Goals, as stated in SDG 6, have not been fully achieved.

### **Dimensions of Disposition**

The disposition in Edwards III's theory (1980) includes the attitude, commitment, and level of acceptance of policy objectives by policy implementers. The ability and positive attitude of implementers and target groups are important requirements for the successful implementation of public policies. Based on the research findings, the disposition of village government officials towards clean water and sanitation policies is generally positive. The village government demonstrates a commitment to implementing available programs and

seeks to establish cooperation with relevant agencies. However, the positive disposition of the village apparatus has not been fully followed by the disposition of the community as a policy target group. Some people still show resistance to sanitation programs, especially to the construction of septic tanks.

This resistance is influenced by low awareness of health and environmental impacts, as well as the assumption that sanitation policies do not provide direct economic benefits. As a result, community participation in sanitation activities, including cleaning waterways, has decreased. From the perspective of Edwards III (1980), the community's low disposition is a serious obstacle to the implementation of policies. Without the support of people's attitudes and commitments, public policies tend to lose social momentum and find it difficult to achieve long-term sustainability.

### **Dimensions of Bureaucratic Structure**

The bureaucratic structure, according to Edwards III (1980), includes organizational mechanisms, the division of authority, work procedures, and coordination among policy-implementing units. Complex and unresponsive bureaucratic structures can hinder policy implementation, even when communication, resources, and dispositions are in place. The results of the study show that the bureaucratic structure in the management of clean water and sanitation in Panguragan Wetan Village still faces various obstacles. One of the main problems is the limited management of the AW7 tertiary waterway, which is under the authority of the River Region Center.

This condition hampers the handling of pollution and floods due to long, tiered bureaucratic procedures. In addition, the absence of a dedicated Standard Operating Procedure (SOP) at the village level for clean water and sanitation management reflects a weak institutional policy framework. The decision to strengthen program management is driven by the absence of SOPs, which leads to policy implementation being situational and dependent on the personal initiative of village officials, making it difficult to maintain the program's consistency and sustainability. Within the framework of Edward III's (1980) theory, an unadaptive and poorly coordinated bureaucratic structure is an inhibiting factor in the implementation of clean water and sanitation policies in Panguragan Wetan Village. This condition emphasizes the importance of simplifying procedures, strengthening village authority, and improving cross-sector coordination to support the success of public policies at the local level.

## **Factors That Play a Role in Supporting and Hindering the Implementation of Clean Water and Sanitation Policy in Panguragan Wetan Village, Cirebon Regency Communication Dimension**

**Supporting Factors:** In terms of communication, the key factor supporting the implementation of clean water and sanitation policies in Panguragan Wetan Village is the village government's efforts to convey policy information to the community through formal forums, such as village deliberations, RT/RW meetings, and coordination with environmental health officers. Formal communication channels demonstrate the village government's efforts to carry out the function of delivering policies as expected during implementation. The presence of village officials and environmental health workers who understand the policy's substance is also a supporting factor, as they act as liaisons between government policies and village communities.

**Inhibiting Factors:** Policy communication still faces various obstacles. Intensive and persuasive socialization related to clean water and sanitation policies has not been carried out, so it has not been able to build collective community awareness. Administrative socialization can lead some people to misunderstand the policy's long-term goals, particularly regarding the impact of sanitation on health and the environment. According to Edwards III (1980), unclear and inconsistent communication can lead to misinterpretation of policies. This is reflected in the perception of some people, who view sanitation programs only as material assistance, rather than as basic needs that must be met sustainably. This condition is the main obstacle to encouraging behavior change.

## **Resource Dimensions**

The supporting factor of the resource dimension can be seen in the program support and assistance from the local government and related technical agencies, such as the construction of septic tanks and support for the sanitation program. External assistance enables villages to continue running clean water and sanitation programs despite internal limitations. In addition, environmental health officers and village health cadres support the implementation of policies by monitoring sanitation conditions and providing public health education.

**Inhibiting Factors:** On the other hand, resource limitations are the dominant inhibiting factor. Panguragan Wetan Village does not have a dedicated budget for clean water and

sanitation management, so policy implementation is highly dependent on external assistance. This dependence prevents the program from running continuously. Limited human resources are also an obstacle, particularly the lack of technical personnel with competence in water management and sanitation. Edwards III (1980) emphasized that the lack of financial and human resources will reduce the ability to implement policies and contribute an low-quality implementation in the field.

### **Dimensions of Disposition (Attitude and Commitment of Implementers and Society)**

**Supporting Factors:** From a dispositional perspective, village government officials exhibit a fairly positive attitude and commitment to implementing clean water and sanitation policies. The village government is aware of the importance of the health sector to the community and has sought to manage the program within its authority and capacity. The readiness of village officials to collaborate with relevant agencies and open a space for dialogue with the community is a supporting factor in the implementation of policies.

**Inhibiting Factors:** However, the impact of policies on the community as a target group remains relatively low. Some people show resistance to sanitation programs, especially to the construction of infiltration wells. This resistance is influenced by low awareness of the importance of proper sanitation and by people's tendency to focus on direct economic benefits. The decline in community participation in mutual cooperation activities aimed at normalizing waterways reflects a weakening of social commitment to supporting such policies. From Edwards III's (1980) perspective, the low disposition of the target group is a serious obstacle because implementing the policy requires support and compliance from all actors involved.

### **Dimensions of Bureaucratic Structure**

**Supporting Factors:** In terms of bureaucratic structure, the existence of a formal division of tasks between the village government and related technical agencies is an initial support factor for implementing the policy. Coordination with relevant agencies allows the village to receive the necessary technical assistance and sanitation programs.

**Inhibiting Factors:** The bureaucratic structure is a significant obstacle. The limitations of village authorities in managing tertiary waterways under the supervision of the River Region Center hamper the handling of sanitation and flood problems due to time-consuming bureaucratic procedures. In addition, the lack of a dedicated Standard

Operating Procedure (SOP) for managing clean water and sanitation at the village level results in the implementation of policies not being systematic and consistent. Edwards III (1980) emphasizes that complex and inflexible bureaucratic structures can hinder policy implementation, even though other variables are available.

Based on this analysis, it can be concluded that the supporting and inhibiting factors in the implementation of clean water and sanitation policies in Panguragan Wetan Village are interrelated and inseparable. The four dimensions put forward by Edward III (1980) show that the success of policy implementation depends not only on the availability of programs but also on the quality of communication, the adequacy of resources, the disposition of policy actors, and the supporting bureaucratic structure. Without simultaneous improvements in these four dimensions, it will be difficult to achieve the goals of sustainable development at the village level.

### **Strategies for Optimizing Clean Water and Sanitation Policies in Panguragan Wetan Village, Cirebon Regency**

Optimization of clean water and sanitation policies in Panguragan Wetan Village is needed to overcome various implementation obstacles identified in the research, especially limitations in policy communication, resources, community availability, and bureaucratic structures that are not yet effective. The optimization strategy must be comprehensively designed based on Edwards III's (1980) policy implementation theory by strengthening the four dimensions of policy implementation, enabling clean water and sanitation policies to operate effectively and sustainably at the village level.

### **Communication Dimension**

The main strategy in the communication dimension is to improve the socialization pattern of clean water and sanitation policies so that they are not only administrative, but also educational and persuasive. The village government needs to develop a communication strategy that emphasizes changes in community behavior, especially to stop open defecation and promote the use of proper sanitation facilities. The community-based communication approach needs to be improved by involving community leaders, religious leaders, health cadres, and RT/RW heads as policy communication agents. The use of informal forums such as recitations, community meetings, and social activities is considered more effective for forming collective awareness than formal socialization alone. In addition, using

environmental health data and examples of local water pollution cases can strengthen public understanding of the urgency of sanitation policies. From the perspective of Edwards III (1980), this strategy aims to ensure clarity, consistency, and sustainability of policy communication so that policy objectives can be widely understood and accepted by rural communities.

### **Resource Dimensions**

Optimizing clean water and sanitation policies requires strengthening resources, namely financial, human, and technical. Village governments need to integrate clean water and sanitation programs into village planning and budgeting in a more systematic manner, for example, by allocating Village Funds for sanitation activities based on local needs.

Increasing human resource capacity is an important strategy. Village officials, health cadres, and managers of clean water facilities need technical training in sanitation, water infrastructure maintenance, and environmental quality monitoring. This training can be carried out in collaboration with the health office, public works office, and non-governmental institutions engaged in sanitation and environment. From a technical perspective, strengthening resources can also be done by encouraging the use of simple, affordable, and socio-economically appropriate methods for the village community. Edwards III (1980) emphasized that the availability of adequate resources is the main requirement for policies to be implemented effectively and sustainably.

### **Dimensions of Disposition**

Strengthening the disposition or attitude of implementers and the community is a key strategy in optimizing clean water and sanitation policies. The village government must build a sense of community ownership of the sanitation program so that the policy is not seen only as a government project but as a shared need. This strategy can be carried out through a participatory approach, such as involving the community in the planning, implementation, and evaluation stages of sanitation programs.

Active community participation in decision-making will increase commitment to and compliance with policies. In addition, the provision of non-financial incentives, such as awards for environmental or RT/RW initiatives that achieve decent sanitation conditions, can encourage changes in people's attitudes and behaviors. Within the framework of Edwards III's (1980) theory, policy implementation will be stronger if there is a positive disposition

among implementers and target groups, because policies are supported by the internal commitment and motivation of policy actors.

### **Dimensions of Bureaucratic Structure**

Optimizing clean water and sanitation policies requires improving the bureaucratic structure to be more adaptive and responsive to local needs. The village government needs to prepare a special Standard Operating Procedure (SOP) for the management of clean water and sanitation, tailored to the conditions of Panguragan Wetan Village. This SOP is important to ensure that policies are implemented consistently, that tasks are clearly divided, and that effective coordination mechanisms are in place.

It is necessary to optimize cross-sector coordination between village governments, local governments, and technical agencies such as the River Region Center. The village government can serve as a facilitator to encourage program synchronization and accelerate decision-making related to tertiary waterway and pollution management. According to Edwards III (1980), a simple, clear, and well-coordinated bureaucratic structure will increase the efficiency of policy implementation and reduce administrative obstacles that have hindered clean water and sanitation policy implementation at the village level. Overall, the strategy for optimizing clean water and sanitation policies in Panguragan Wetan Village must be implemented in an integrated manner through strengthening policy communication, resource availability, implementation, and community discipline, and improving bureaucratic structures. This approach is in line with Edwards III's theory (1980), which emphasizes that the success of public policy implementation is determined by the interaction of these four dimensions. With a contextual optimization strategy based on community participation, clean water and sanitation policies in Panguragan Wetan Village are expected to support the achievement of sustainable development and improve the quality of life of the village community.

### **CONCLUSION**

Based on research and discussion on the implementation of clean water and sanitation policies in Panguragan Wetan Village, Cirebon Regency, it can be concluded that the implementation has not been running optimally in supporting the achievement of sustainable development as mandated by the 6th Sustainable Development Goal (SDG). Empirical conditions in the field show the low quality of access to clean water and proper sanitation,

characterized by high water pollution, limited sanitation facilities, and open defecation in several villages.

From a theoretical perspective on the implementation of the Edwards III (1980) policy, clean water and sanitation policies in Panguragan Wetan Village are influenced by four main dimensions: communication, resources, disposition, and bureaucratic structure. From a communication perspective, policies have not been delivered effectively and persuasively to the public, so the purpose and urgency of the policies have not been fully understood as a common need. This condition has led to a decline in community support and compliance with the village government's sanitation program.

The availability of resources, budget constraints, human resources, and technical capacity are the main limiting factors in policy implementation. Village dependence on assistance from local governments and technical agencies makes policy implementation unsustainable, and this assistance has not been able to cover all community needs. Clean water and sanitation policies have not been supported by adequate resources, leading to shortcomings in the effectiveness and sustainability of their implementation.

On the village side, government officials show a relatively strong commitment to implementing clean water and sanitation policies. However, the level of public awareness, as a policy target, remains low, particularly regarding program acceptance and active participation. Lack of awareness of the importance of sanitation and of the short-term benefits can hinder the development of social support for public policies in the basic services sector.

In terms of bureaucratic structure, limited village authority and the absence of specific Standard Operating Procedures (SOPs) for clean water and sanitation management mean that policy implementation is neither systematic nor consistent. Cross-sectoral coordination, especially with agencies that have authority over tertiary waterways, has an impact on slowing policy responses to sanitation and environmental pollution problems.

Based on these findings, it can be concluded that optimizing clean water and sanitation policies in Panguragan Wetan Village requires strengthening integrated policy implementation by improving policy communication, increasing resource availability, strengthening community participation, and developing bureaucratic structures. Without simultaneous improvements in these four dimensions, clean water and sanitation policies will find it difficult to achieve the goals of improving people's quality of life and the sustainability of village development.



## INVOLVEMENT

The implications of this study show that the implementation of clean water and sanitation policies in Panguragan Wetan Village needs to be strengthened through a more planned, collaborative, and sustainable approach, because the success of the policy is not only determined by the existence of government programs, but also by the ability of the village government to communicate policy objectives, provide adequate resources, build community participation, and create effective coordination. effective between implementing actors. The findings of this study suggest that the village government needs to improve the quality of community socialization so that residents understand the importance of using clean water and managing sanitation, as well as the health and environmental impacts that can result if clean living behaviors are not applied consistently. In addition, limited resources, both in the form of budgets, infrastructure, and human resource capacity, are important factors that must receive serious attention, so budget planning that is more responsive to the basic needs of the community is needed. Another implication is the need to increase community participation in every stage of policy, starting from planning, implementation, supervision, to evaluation, because the community is not only a beneficiary, but also a party that plays a direct role in maintaining the sustainability of the program. Village governments also need to strengthen coordination with local governments, relevant agencies, health institutions, community leaders, and local organizations to implement clean water and sanitation policies in a more integrated and non-partisan manner. With good coordination, various obstacles such as overlapping authority, delays in program implementation, and lack of supervision can be minimized. Practically, the results of this research can be an input for the village government in formulating a more effective sanitation development strategy, for example through the preparation of routine education programs, strengthening village institutions, providing proper sanitation facilities, and establishing community-based monitoring mechanisms. Theoretically, this research also contributes to the study of public policy implementation, especially in the context of basic services at the village level, by emphasizing that communication factors, resources, implementing disposition, and bureaucratic structure have an important role in determining policy success. Therefore, clean water and sanitation policies in Panguragan Wetan Village need to be directed not only at physical development, but also at changing community behavior and strengthening village governance. If these implications are consistently followed, the policy has the potential to

improve public health quality, reduce the risk of environmental pollution, and support the achievement of healthy, inclusive, and sustainable village development.

## BIBLIOGRAPHY

- Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Dye, T. R. (2017). *Understanding public policy* (15th ed.). Pearson.
- Edwards, G. C. III. (1980). *Implementing public policy*. Congressional Quarterly Press.
- Grindle, M. (2017). *Politics and policy implementation in the Third World*. Princeton University Press.
- United Nations Development Program. (2020). *Sustainable Development Goals Report 2020*. UNDP.
- Budiarto, T. (2020). The effectiveness of implementing community-based clean water policies in Central Java. *Journal of Indonesian Public Administration*, 7(2), 112–124.
- Dewi, R., & Yuliani, M. (2021). Evaluation of environmental sanitation policies in rural areas. *Journal of Social Sciences and Humanities*, 10(1), 56–70.
- Heryanto, Y. (2021). The leadership of the village head in carrying out the administrative functions of the village government. *Syntax Literate: Indonesian Scientific Journal*.
- Hidayat, F. (2022). Clean water governance in supporting sustainable development. *Journal of Regional Development*, 9(3), 201–214.
- Ministry of Public Works and Public Housing. (2022). *Guidelines for the implementation of the community-based PAMSIMAS program*. Directorate of Drinking Water, Ministry of PUPR.
- Kurniawan, E., & Prasetyo, A. (2021). Community participation in sanitation management in the village. *Journal of Public Policy and Development*, 8(2), 145–158.
- Lestari, A. (2020). Analysis of the implementation of clean water policies in disadvantaged areas. *Journal of State Administration*, 5(1), 33–47.
- Mulyani, S. (2019). Community-based water resource management strategy. *Journal of Ecology and Environment*, 6(2), 122–135.
- Nugraha, I. (2022). The performance of village institutions in the implementation of clean water programs. *Journal of Government and Policy Science*, 11(1), 87–101.
- Putri, R., & Syafrudin, M. (2021). The effectiveness of community-based environmental sanitation programs in Central Java. *Journal of Sociohumanities*, 23(2), 190–205.
- Rahmadani, L., & Santoso, D. (2020). Implementation of clean water policies in rural areas. *Journal of Nusantara Public Administration*, 8(3), 250–263.
- Suryani, D., & Kurniawan, B. (2021). A model of community empowerment in village sanitation management. *Journal of Sustainable Development*, 10(4), 305–320.
- Susanto, A. (2022). Sustainable development and village clean water policy. *Journal of Governance*, 12(2), 88–101.
- Sutopo, Y. (2021). The implementation of clean water policy is based on community participation in Sleman Regency. *Journal of Social and Political Sciences*, 14(2), 215–230.
- Wibowo, T. (2019). The effectiveness of BUMDes in clean water management. *Journal of Village Empowerment*, 6(1), 45–60.
- Widodo, B. (2023). The challenges of clean water public policy in the era of decentralization. *Journal of Administration and Public Policy*, 9(1), 77–89.
- Yuliana, Y., Permana, I., & Hidayat, M. T. (2022). Evaluation of the quality family village program in improving the quality of life of the community (Case study on the

- Prosperous Kunir Quality Family Village in Kedungjaya Village, Kedawung District, Cirebon Regency). *Journal of Syntax Literate*, 7(3), 2542.
- Yuliani, R. (2022). Multi-actor collaboration in village sanitation policy. *Journal of Public Management*, 13(3), 158–172.
- Rahman, A., & Suryani, T. (2019). Community involvement in sanitation management in rural areas. *Journal of Social Development*, 7(2), 110–122.
- Setiawan, D. (2021). Evaluation of the implementation of the clean water program based on citizen participation. *Journal of Innovation and Public Service*, 5(3), 201–214.
- Pratama, L., & Nuraini, D. (2022). Synergy of central and regional policies in sanitation programs. *Journal of Public Administration and Local Government*, 8(4), 90–104.
- Basuki, I. (2020). Optimizing clean water policies for the welfare of village communities. *Journal of Administrative Reform*, 12(1), 51–65.
- Permata, C., Larasati, A., Ayuningtyas, M. L., Putri, A. A. K., & Wahyudi, A. V. (2024). Analysis of the potential and progress in the management of clean water and sustainable sanitation (SDGs 6) in Indonesia. *Journal of Environmental Education and Sustainable Development*, 25(1), 16–24. <https://doi.org/10.21009/plpb.v25i01.40440>

### Interview Report

- Alipasya, I. D. (2026). Interview report on the implementation of clean water and sanitation policies in Panguragan Wetan Village from November – December 2025 and January 2026.