

IMPLEMENTATION OF ENVIRONMENTAL MANAGEMENT POLICY IN JAGAPATI VILLAGE, ABIANSEMAL DISTRICT, BADUNG REGENCY

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Abstract

Environmental management is a crucial component of achieving sustainable development, particularly in rural areas with the potential for environmental pollution due to livestock activities and household waste. One of the Provinsi Bali Government's efforts is through the implementation of Peraturan Daerah Provinsi Bali Nomor 1 Tahun 2017 concerning Environmental Protection and Management. However, in practice, various problems remain in Desa Jagapati, such as the direct discharge of livestock waste into rivers, the lack of waste treatment facilities, and low public awareness of environmental cleanliness. This study aims to determine why the implementation of environmental management policies in Desa Jagapati has not been effective and to identify strategies to improve them. The method used was descriptive qualitative, with data collection through observation, interviews, and documentation. The results indicate that the implementation of environmental management policies in Desa Jagapati has not been effective due to low public awareness, weak coordination, and minimal waste management. The main obstacles are a lack of outreach, limited resources, low commitment from implementers, and unclear standard operating procedures (SOP). Improvement strategies include education, the formation of environmental awareness groups, training, the provision of facilities, and a gradual and participatory work structure.

Keywords: *Implementation, Environmental Policy, Perda Bali No.1 Tahun 2017, Desa Jagapati.*

A. INTRODUCTION

Sustainable development emphasizes a balance between economic growth, social sustainability, and environmental preservation. In this regard, environmental management policies are a crucial aspect that cannot be overlooked. The Indonesian government has demonstrated its commitment through Law No. 32 of 2009 concerning Environmental Protection and Management, which regulates efforts to prevent environmental damage and ensures the involvement of the government, community, and private sector in every development process.

This policy requires development planning to consider the carrying capacity and environmental capacity. Therefore, development must not exceed the limits of nature's capabilities. This principle demonstrates the government's commitment to balancing economic growth and environmental preservation. Furthermore, sound environmental management is viewed as a long-term strategic investment that can increase efficiency, create added economic value, and strengthen national competitiveness (Wahanisa & Adiyatma, 2021).

At the regional level, the Bali Provincial Government implemented this commitment through Regional Regulation No. 1 of 2017 concerning Environmental Protection and Management. This regulation was formulated based on Bali's local ecological and cultural characteristics with the aim of preventing, mitigating, and remediating environmental pollution and damage. This regulation also prioritizes the principles of caution, justice, public participation, and emphasizes the active role of the community and the business world in environmental conservation.

Regional Regulation No. 1 of 2017 in Bali not only emphasizes the technical aspects of environmental protection but also integrates local cultural values, particularly the Tri Hita Karana concept, as the basis for harmony between humans, the environment, and spiritual values. This policy demonstrates the region's efforts to balance development with local wisdom.

However, major challenges arise in implementation at the village level, where gaps remain between ideal regulations and field practices. One real problem is environmental pollution from livestock waste, particularly pig waste, which is often discharged directly into waterways or rivers. This waste contains hazardous substances such as ammonia, hydrogen sulfide, nitrate, and TSS, which can pollute water, soil, and air, while reducing the community's quality of life (Humau et al., 2025).

From a health perspective, exposure to these toxic gases can cause irritation and even chronic respiratory diseases, while groundwater contamination by nitrate carries the risk of methemoglobinemia (blue baby syndrome) and potential cancer. This emphasizes the need for a better waste management system at the village level so that regional regulations can run effectively and truly support sustainable development (Sofia et al., 2025).

Livestock waste, particularly pig manure, essentially has dual potential: on the one hand, it can cause environmental pollution if not managed properly, but on the other hand, it can be utilized as a renewable energy source through biogas technology. This utilization can reduce pollution while providing added economic value for livestock farmers (Pertiwiningrum et al., 2023).

If not managed properly, livestock wastewater remains a serious threat because it contains hazardous compounds such as ammonia, nitrate, and TSS, which can pollute water, soil, and air. Ammonia and methane gases not only have negative health impacts but also exacerbate global warming as greenhouse gases. With the increasing livestock population in rural areas, the issue of waste management is increasingly pressing to address systematically (Achyani, 2023).

As a follow-up, Bali Provincial Regulation No. 1 of 2017 requires the implementation of policies that go beyond normative measures to address technical, social, and educational aspects at the village level. This includes the development of waste management infrastructure, community capacity building, and strengthening local institutions. The success of regional regulations is largely determined by active community participation and a paradigm shift from reactive to preventive management, so that regional regulations align with environmentally friendly livestock practices at the grassroots level.

Jagapati Village in Badung Regency is one of the areas with a fairly dense pig farming activity, with a total population of 3,812 pigs spread across four hamlets (banjar), with Jabejero being the largest contributor. This large livestock population provides economic benefits to the community, but also poses serious environmental problems if livestock waste is not properly managed.

Observations show that the majority of farmers still discharge liquid and solid waste directly into rivers without processing. This practice results in water pollution, unpleasant odors, and decreased environmental sanitation, which impacts public health, even in neighboring

villages. This situation is exacerbated by residents' habit of indiscriminately dumping household waste into rivers, adding to the burden of cross-regional pollution.

These findings confirm that the implementation of Bali Provincial Regulation No. 1 of 2017 concerning Environmental Protection and Management at the village level has not been optimal. The lack of waste treatment facilities such as wastewater treatment plants (WWTPs) and septic tanks, along with low public ecological awareness, are key inhibiting factors. This indicates a gap between the substance of comprehensive regional policies and actual practices on the ground.

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Based on the problems found in the field related to environmental management in Jagapati Village, Abiansemal District, Badung Regency, it is not yet effective, so it is necessary to evaluate the implementation of environmental management in Jagapati Village, Abiansemal District, Badung Regency. From this background, the researcher is interested in taking the research title "Implementation of environmental management policies in Jagapati Village, Abiansemal District, Badung Regency".

B. LITERATURE REVIEW

In this study, the researcher examines "The Implementation of Environmental Management Policy in Jagapati Village, Abiansemal District, Badung Regency." The theoretical basis used in this study is policy implementation theory.

According to Mulyasa in Harteti Jasin (2021), implementation is the process of applying ideas, concepts, policies, or innovations in practical actions, resulting in positive impacts in the form of changes in knowledge, skills, values, and attitudes. Meanwhile, Jones in Sutojo (2015:3) defines implementation as the process of obtaining additional resources and calculating what can be done.

According to Mulyadi (2015:37), public policy is essentially a decision intended to address specific errors in carrying out certain activities or to achieve specific goals carried out by authorized agencies in the context of carrying out state government and development tasks, taking place within a specific policy. Meanwhile, according to Hamdi (2014:33), public policy is the output or result of state governance, in addition to the results in the form of legislation, public goods, and public services.

According to Mulyadi (2015:26), policy implementation is essentially a multi-organizational change or transformation, where the changes implemented through policy implementation strategies connect various levels of society. Furthermore, according to

Nugroho (2014:657), policy implementation is essentially a means for a policy to achieve its objectives.

According to Purba et al. (2023), environmental management is a systematic and integrated effort undertaken to preserve environmental functions and prevent environmental pollution and/or damage. Meanwhile, according to Masrudi Muchtar (2020), environmental management is a systematic and integrated effort undertaken to preserve environmental functions and prevent environmental pollution or damage, encompassing planning, utilization, control, maintenance, supervision, and law enforcement.

The implementation theory used in this study is the theory of Edward III (1980:149), which defines policy implementation as a dynamic process, with many interacting factors influencing policy implementation, including:

Communication

Effective implementation occurs when decision-makers know what they are going to do. Knowledge of what they will do can only occur if communication is effective, so every policy decision and implementation regulation must be transmitted (or communicated) to the appropriate personnel. Communication (or the transmission of information) is necessary to ensure greater consistency between decision-makers and implementers in implementing each policy established within the community.

Resource

Putting forward resource indicators consisting of several elements including adequate human resources with good abilities and expertise to carry out their duties, clear and adequate funding sources and the facilities needed to implement established policies.

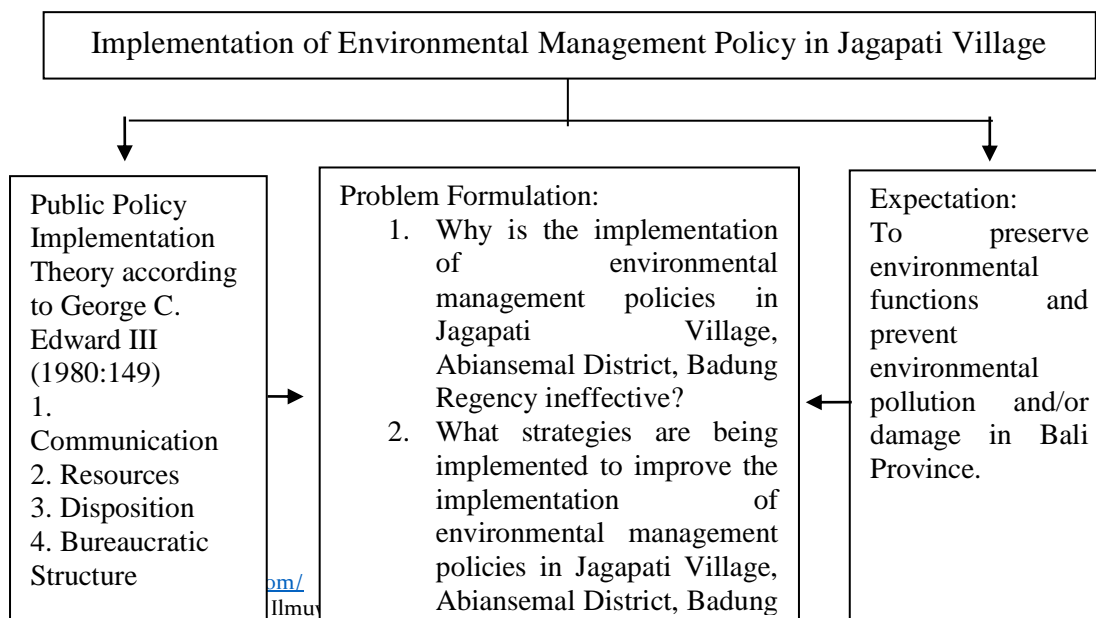
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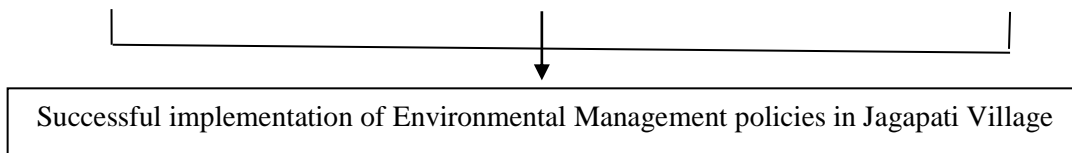
The disposition or attitude of policy implementers is the third important factor in the approach to public policy. Important factors to consider in the disposition variable/factor include employee responsibility in carrying out their primary duties and functions in implementing the policy.

Bureaucratic Structure

Bureaucratic structure relates to the suitability of the bureaucratic organization responsible for implementing public policy. Two key characteristics of bureaucracy are: Standard Operating Procedures (SOPs) and fragmentation.

Based on the theoretical foundation above, the implementation of Environmental Management Policy in Jagapati Village, Abiansemal District, Badung Regency can be described. The research model flow is as follows:





C. RESEARCH METHODOLOGI

This study employed a descriptive qualitative approach. The primary research location was Jagapati Village, Abiansemal District, Badung Regency. The informant selection technique used was purposive sampling, a type of non-probability sampling. In this study, the author selected eight informants. These informants included: one Jagapati Village Head, Abiansemal District, Badung Regency; two employees at the Jagapati Village Office, Abiansemal District, Badung Regency; and five community members in Jagapati Village, Abiansemal District, Badung Regency.

Data collection techniques used in this study included observation, interviews, documentation, and online interviews. The data analysis technique employed was qualitative analysis. Data analysis was presented based on a specific concept. Data obtained from the research object was found, processed, and confirmed with the opinions of competent respondents being observed. Based on this presentation, conclusions and recommendations were drawn.

D. RESULT AND DISCUSSION

The Implementation of Environmental Management Policies in Jagapati Village, Abiansemal District, Badung Regency is Not Yet Effective

To measure the ineffectiveness of the implementation of environmental management policies in Jagapati Village, Abiansemal District, Badung Regency, four indicators can be used, including communication, resources, disposition and bureaucratic structure indicators.

Communication

The implementation of environmental management policies in Jagapati Village, Abiansemal District, Badung Regency, has not been effective, as seen from communication indicators, due to the low intensity and reach of outreach carried out by the village government. Communication is still formal, has not reached all levels of society, and the messages conveyed are inconsistent and not easily understood. Limited field officers and communication facilities are also obstacles, so that many residents do not understand the correct waste management procedures and still dispose of livestock waste into the river. This is in line with the policy implementation theory put forward by George C. Edward III, which states that communication is a key factor in the success of policy implementation. It is further supported by the opinion put forward by Mazmanian and Sabatier who emphasize the importance of clarity of objectives and firmness of policy structures in supporting effective communication.

Resource

The implementation of environmental management policies in Jagapati Village, Abiansemal District, Badung Regency, has not been effective, as seen from resource indicators, due to budget constraints, a lack of competent technical personnel, and a lack of supporting facilities such as wastewater treatment plants (WWTP), transportation equipment, and waste processing machines. Environmental management has not been a primary focus of village officials, and at the TPS (Poll-Out) level, facilities and personnel are still lacking. The

community's low technical knowledge and limited education also exacerbate the situation. As a result, policies cannot be implemented optimally due to weak human resource, facility, and financial support. This is in line with the policy implementation theory proposed by George C. Edward III, which states that resources are one of the key factors in successful policy implementation. A similar theory was also put forward by Grindle (1980), who stated that policy implementation will be greatly influenced by the organization's resource capacity and the characteristics of its implementers.

Diposition

The implementation of environmental management policies in Jagapati Village, Abiansemal District, Badung Regency has not been effective, as seen from the disposition indicator due to the low commitment and awareness of policy implementers in carrying out environmental-related tasks. Some village officials still consider environmental management as an additional task, not a top priority. On the other hand, TPSR employees also admitted to working routinely without any further initiative due to minimal training and incentives. The community also felt the lack of a direct approach and education from officers, resulting in unequal distribution of information and understanding about waste management. The lack of enthusiasm, responsibility, and active involvement from policy implementers indicates that disposition as a supporting factor for implementation has not been well formed in Jagapati Village, Abiansemal District, Badung Regency. This is in line with the policy implementation theory proposed by George C. Edward III, which states that the disposition or attitude of implementers is one of the important factors in the success of policy implementation. A similar theory was also put forward by Van Meter and Van Horn (1975), who also emphasized that the attitudes and orientations of policy implementers greatly influence implementation outcomes.

Bureaucratic Structure

The implementation of environmental management policies in Jagapati Village, Abiansemal District, Badung Regency has not been effective, seen from the bureaucratic structure indicator, due to the lack of a clear division of tasks, the absence of specialized officers, and the lack of SOPs as work guidelines. Coordination between village officials and community involvement has also not been optimal due to the bureaucratic structure that has not been systematically arranged. This is in line with the policy implementation theory put forward by George C. Edward III, who stated that bureaucratic structure plays an important role in the success of policy implementation. Furthermore, it is also supported by the opinion put forward by Jones (1996), one of the important elements in successful implementation is organization, which includes the formation or restructuring of resources, units, and methods so that policies can produce results.

Strategies Implemented to Improve the Implementation of Environmental Management Policies in Jagapati Village, Abiansemal District, Badung Regency

The strategy implemented to improve the implementation of environmental management policies in Jagapati Village, Abiansemal District, Badung Regency is designed to address various obstacles to the ineffective implementation of environmental management policies in Jagapati Village, Abiansemal District, Badung Regency.

The strategies needed to improve the implementation of environmental management policies in Jagapati Village, Abiansemal District, Badung Regency include increasing public awareness and education about the importance of environmental protection, establishing environmental awareness groups at the hamlet level, and encouraging active community participation through mutual cooperation activities and waste bank programs. In addition, technical training is being provided for village officials and TPSR employees, facilities and infrastructure such as shredders and transport vehicles are being provided, as well as the

development of simple standard operating procedures (SOPs) and a clear division of tasks among village officials. This strategy is being implemented in a phased and participatory manner, involving the community and coordinating with relevant agencies to strengthen the effectiveness of policy implementation in Jagapati Village, Abiansema District, Badung Regency. This is in line with the policy implementation theory put forward by George C. Edward III, which states that the success of policy implementation is influenced by four main factors, namely communication, resources, disposition, and bureaucratic structure.

E. CONCLUSION

The discussion results show the following conclusions: The implementation of environmental management policies in Jagapati Village has not been effective. Communication indicators indicate that policy socialization is still limited, not intensive enough, and has not yet reached all levels of society. Resources indicators indicate that limited budget, technical personnel, and facilities and infrastructure are the main obstacles to implementation. Disposition indicators indicate that the low commitment and responsibility of policy implementers hampers effective implementation in the field. Bureaucratic structure indicators indicate that the absence of standard operating procedures (SOPs) and a clear division of tasks have resulted in weak coordination and implementation of environmental activities.

Strategies implemented to improve the ineffective implementation of environmental management policies in Jagapati Village include increased education and outreach, the formation of environmental awareness groups, technical training, the provision of supporting facilities, and the development of standard operating procedures (SOPs) and work structure restructuring. These strategies are being implemented in a phased and participatory manner, involving the community and establishing collaboration with relevant agencies to strengthen policy implementation in Jagapati Village.

To improve the success of environmental management policy implementation in Jagapati Village, the researcher offers the following recommendations:

From the discussion, the following conclusions can be drawn:

The implementation of environmental management policies in Jagapati Village has not been effective. Communication indicators indicate that policy socialization is still limited, not intensive enough, and has not yet reached all levels of society. Resources indicators indicate that limited budget, technical personnel, and facilities and infrastructure are the main obstacles to implementation. Disposition indicators indicate that the low commitment and responsibility of policy implementers hinders effective implementation in the field. Bureaucratic structure indicators indicate that the lack of standard operating procedures (SOPs) and a clear division of tasks have resulted in weak coordination and implementation of environmental activities.

The community is expected to be more active and concerned with environmental issues, particularly in managing waste and livestock waste independently and responsibly. Active participation in mutual cooperation activities, waste banks, and environmental awareness group programs is essential to foster a clean and healthy culture. Collective awareness and a willingness to change are key to the successful implementation of environmental policies at the village level.

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