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Islamic Politics on Forestry and Land Rehabilitation: A Case Study in Ulu Belu Tanggamus Lampung

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Abstrak

Pemulihan hutan lahan (RHL) memiliki peran krusial dalam menjaga keseimbangan ekosistem, terutama di Kecamatan Ulu Belu, Kabupaten Tanggamus, yang memiliki tingkat kerawanan longsor yang tinggi. Penelitian ini bertujuan untuk mengkaji strategi yang diterapkan oleh Dinas Kehutanan dalam pelaksanaan rehabilitasi hutan dan lahan serta tantangan yang dihadapi. Pendekatan kualitatif digunakan dalam penelitian ini dengan teknik pengumpulan data melalui observasi, wawancara, dan dokumentasi terhadap pihak terkait, termasuk Dinas Kehutanan dan masyarakat setempat. Hasil penelitian mengungkap bahwa Dinas Kehutanan telah menerapkan berbagai strategi, seperti program Hutan Kemasyarakatan (HKm), sistem agroforestri, penanaman vegetasi penahan tanah, serta edukasi mengenai konservasi lingkungan. Namun, pelaksanaan program ini menghadapi sejumlah hambatan, seperti minimnya partisipasi masyarakat, keterbatasan anggaran, serta perubahan fungsi hutan lindung menjadi lahan pertanian. Selain itu, penggunaan lahan yang kurang tepat meningkatkan risiko tanah longsor dan mempercepat degradasi lingkungan. Untuk meningkatkan efektivitas program rehabilitasi, diperlukan pendekatan yang lebih menyeluruh, seperti pemberian insentif bagi petani yang menerapkan sistem pertanian berbasis konservasi, penguatan kelembagaan dalam program perhutanan sosial,

serta kerja sama antara pemerintah, masyarakat, dan sektor swasta. Dengan penerapan strategi yang lebih terpadu dan berkelanjutan, rehabilitasi hutan dan lahan di Kecamatan Ulu Belu diharapkan dapat mengurangi risiko bencana dan menjaga keseimbangan ekosistem bagi generasi yang akan datang.

Kata kunci: Dinas Kehutanan, Rehabilitasi, Hutan, Lahan

Abstract

Forest and Land Rehabilitation (FLR) is essential for maintaining ecological balance, particularly in Ulu Belu District, Tanggamus Regency, which faces a high risk of landslides. This study examines the strategies adopted by the Forestry Service in implementing forest and land rehabilitation efforts and the challenges encountered. A qualitative research approach was applied, using data collection methods such as observation, interviews, and documentation with relevant stakeholders, including the Forestry Service and the local community. Findings indicate that the Forestry Service has employed multiple strategies, including the Community Forestry Program (HKm), agroforestry practices, planting soil-stabilizing vegetation, and conducting public awareness campaigns on environmental conservation. However, these initiatives face significant hurdles, such as low public engagement, financial constraints, and the ongoing conversion of protected forests into farmland. Additionally, improper land management has further exacerbated landslide risks and environmental degradation. To improve the efficiency of rehabilitation programs, a more holistic approach is necessary. This includes offering incentives to farmers who implement conservation-oriented agricultural methods, strengthening institutional frameworks within social forestry programs, and promoting collaboration among the government, local communities, and private entities. By adopting more cohesive and sustainable strategies, forest and land rehabilitation in Ulu Belu District can effectively mitigate disaster risks and ensure long-term ecological stability for future generations.

Keywords: Forestry Service, Rehabilitation, Forest, Land

Introduction

Indonesia faces serious challenges in sustainable management of forest and land resources. Forest and land degradation has reached an alarming condition, with the area of critical land reaching 43.6 million hectares, double the initial target of 24.9 million hectares that should have been rehabilitated in the period 1970-2004 (UGM, 2020). This condition is exacerbated by natural disasters such as floods and landslides that occur due to damage to the ecological function of forests and land. The government has set

an ambitious target for forest and land rehabilitation (RHL) of 420 thousand hectares per year or 2.1 million hectares in the 2020-2024 period to overcome this problem (PATTIRO, 2023). However, achieving this target still faces various structural obstacles, including low community participation, budget constraints, and weak coordination between agencies.

Lampung Province is one of the areas that has experienced significant impacts from forest and land degradation. Hilly topography with high rainfall makes this area vulnerable to landslides, with around 83% of the total area categorized as a landslide-prone zone. Ulu Belu District, Tanggamus Regency, is a real representation of this complex problem. With an altitude of 1,100 meters above sea level, sandy clay soil texture, and rainfall intensity reaching 3,000 mm per year, this area experiences landslides almost every year, especially during the rainy season (BPS Tanggamus, 2022). The majority of the population who depend on the coffee farming sector with shallow root systems further exacerbate the risk of landslides, because they are less effective in holding soil on steep slopes. In addition, the conversion of protected forests to agricultural land has caused significant environmental degradation, increased erosion rates, and threatened the sustainability of ecosystems.

Previous scientific studies on forest and land rehabilitation in Indonesia (Zoriani et al., 2023) successfully identified landslide-prone areas in Ulu Belu District and the causal factors, but the study focused more on geographic risk analysis without exploring the institutional role in mitigation efforts. Research on community participation in wetland forest rehabilitation in Banyuasin Regency shows that the rehabilitation approach is still top-down with low to moderate community participation and has not been able to achieve a high level of participation in the form of partnerships or citizen control. Meanwhile, a study on the level of community participation in mangrove forest rehabilitation in Mempawah Hilir District revealed that although the level of participation was quite good (23.1% high, 55.8% moderate), there were still 21.1% of people with low participation (Siti, P., & Tri, W., 2021). However, these studies have not comprehensively

analyzed the strategic role of government institutions, especially the Forestry Service, in integrating rehabilitation policies with the socio-economic realities of local communities, as well as multi-stakeholder collaboration in the specific context of disaster-prone areas. The novelty of this study lies in the in-depth analysis of the strategic role of the Tanggamus Regency Forestry Service in implementing forest and land rehabilitation programs through a collaborative approach with the Ministry of Environment and Forestry (KLHK) through the Kota Agung Protected Forest Management Unit (KPHL). Unlike previous studies that tend to focus on technical aspects or partial community participation, this study integrates the dimensions of institutional policy, field program implementation, and community socio-economic dynamics in one comprehensive analytical framework.

This study also explores innovations in rehabilitation strategies that combine vegetative approaches (Multi Purpose Tree Species/MPTS) and civil engineering (terracing) by considering the presence of 86% of human activities in forest areas that have management permits through the Social Forestry scheme. The theoretical contribution of this study is the development of a forest and land rehabilitation management model that balances ecological functions with the economic needs of local communities, while optimizing the coordinating role of government institutions in landslide disaster mitigation.

Based on the complexity of the problems, this study is expected to provide practical contributions to the development of more effective forest and land rehabilitation policies, especially in the context of disaster-prone areas with high levels of human activity. To systematically direct this study, several research questions that will be answered are: What are the strategies and implementation of forest and land rehabilitation programs carried out by the Tanggamus Regency Forestry Service in Ulu Belu District? What are the main challenges faced in implementing forest and land rehabilitation programs, especially related to the balance between ecological functions and the economic needs of the community? How effective is the collaboration between

the Forestry Service and other stakeholders, including the Ministry of Environment and Forestry, KPHL, and local communities in achieving rehabilitation targets. And what is the optimal forest and land rehabilitation model for areas with similar characteristics to Ulu Belu District.

Theoretical Framework

Environmental Governance Theory

Environmental governance is the decision-making process involved in controlling and managing the environment and natural resources. This concept encompasses the process of cross-sector collaboration in public governance that has proven valuable as an umbrella term for environmental management in an era of rapid environmental change (Group, 2023).

According to contemporary environmental governance theory, social networks are the foundation of modern environmental governance, and are very influential in supporting people's navigation of rapid environmental change (Rocha et al., 2024). This approach integrates government, business, and civil society in addressing environmental challenges (Razzaque, 2023).

The development of scholarship in environmental governance has made valuable contributions that broaden the field of environmental policy from a narrow perspective to governance for sustainability (Hettiarachchi, H. & Ardakanian, 2024). This transformation shows a shift from the traditional regulative approach to a more comprehensive and participatory approach (Pettersson, M., Pierre, J., & Sundström, 2024).

The Role of Regulators and Enablers of the Forestry Service in Forest Management

The role of the forestry service regulator at the national level is realized through the implementation of policies from the Ministry of Environment and Forestry. Environmental regulation faces theoretical and practical research challenges on a global

scale, which require fruitful exploration by academics, policy makers, and companies (Hasyim, Y. & Aprita, 2024). Regulations in the forestry sector include: establishing sustainable forest management standards, regulation of forest utilization permits, environmental law supervision and enforcement, and cross-sector policy coordination (Siswoko, 2023).

At the regional level, the forestry service acts as a regulator that implements national policies with adaptation to local conditions. This is in line with the principle of decentralization in natural resource management (Sudrajat, H., Widodo, P., & Anggraeni, 2024). The role of the forestry service facilitator includes providing technical and administrative support to various stakeholders in forest management. There is great enthusiasm among academics and public administrators for participatory and collaborative governance modes as a means to address challenges (Newig, J., Challies, E., Jager, N.W., Kochskaemper, E., & Adzersen, nd). In the enabling role, the regulatory function is not only controlling but also empowering. The forestry service creates a regulatory framework that allows various parties to actively participate in forest management (Pratama, I. & Kusuma, 2024)

The role of catalyst refers to the ability of the forestry service to accelerate the transformation process in sustainable forest management. This involves innovation in management approaches and the adoption of new technologies (Setiawan, B., Wijaya, K., & Muhartana, 2024). As a dynamic agent, the forestry service plays a role in driving various initiatives and programs that can increase positive dynamics in forest conservation and rehabilitation (Nugroho, A.P., Widiyanto, B., & Sari, 2023). Good governance promotes the fundamental foundations of participation and democracy in contemporary public administration, while institutional development and (in)effectiveness of public administration are linked to economic growth. An effective bureaucratic structure is key to the successful implementation of the enabling role (Pettersson, M., Pierre, J., & Sundström, 2024).

Islamic Perspectives on Environmental Governance

Islam can represent a model for environmental stewardship, and how Islam, together with other religions, can contribute to sustainability solutions and mitigation of climate change risks (Programme, 2023). The concept of caliph (stewardship) in Islam emphasizes human responsibility as stewards of the earth (Zaman, K. & Al-Ghazali, 2023). As Muslims, it is a sacred obligation to migrate towards climate justice. Environmental activism in the Islamic perspective is not only seen as a social responsibility, but also as worship and a mandate from Allah SWT (Djazuli, 2003). The history of Islamic civilization shows that ethical values such as justice, honesty, and social responsibility have been the foundation of the trade and economic system since the time of the Prophet Muhammad SAW. Trading activities in the Arabian Peninsula which are regulated by sharia principles, such as the prohibition of usury, enforcement of justice in transactions, and the obligation of zakat, have helped strengthen social stability and expand the network of cooperation between regions (Yudha et al., 2024). These values are not only relevant in an economic context, but also reflect the basic principles of environmental governance in Islam, namely *amanah* (responsibility for management) and *maslahah* (common good). Therefore, the application of sharia principles in natural resource management can be an ethical and philosophical basis for designing forest and land rehabilitation policies that are not only oriented towards short-term economic benefits, but also ensure ecological justice, ecosystem balance, and intergenerational welfare. The integration of these principles strengthens the position of the state in the context of *siyasah dusturiyah* as a protector and manager of natural resources in a fair and sustainable manner.

Siyasah Dusturiyah and the State's Position in Environmental Issues

Siyasah Dusturiyah is part of the *fiqh siyasah* which discusses regulations and laws made by the state for the benefit of the people (Djazuli, 2003). From the perspective of *Fiqh Siyasah Dusturiyah*, government actions can be interpreted as initiatives to maintain public welfare (*maslahah*) and prevent damage (*dar'u al-mafasid*), in line with Islamic

political principles which emphasize the importance of national stability and security (Faiqotur, 2025). In the context of environmental issues, the state has several fundamental positions according to the *siyasah dusturiyah* perspective:

1. *Wali al-Amr* (The Responsible Ruler)

The state as guardian of *al-amr* has an obligation to protect public interests (*maslahah ammah*), including environmental sustainability for present and future generations. In *siyasah fiqh*, this position requires the state to act as a protector and manager of natural resources for the overall benefit of the people (Djazuli, 2003).

2. *Ri'ayah al-Maslahah* (Guardian of the Public Interest)

The implementation of the welfare of the people in the guidelines of sharia is the basis for constitutional decision-making. In the context of the environment, the state is obliged to take steps to prevent environmental damage (*dar'u al-mafasid*) and realize welfare (*jalb al-masalih*) through policies and regulations that are oriented towards environmental protection (Djazuli, 2003).

3. Judge (Decision Maker)

The state has the authority to make environmental regulations and policies that bind all parties. This includes setting sanctions for violators and incentives for those who protect the environment, as a form of state authority in enforcing environmental law and justice (Faiqotur, 2025).

4. *Haris* (Guard)

The function of environmental supervision and law enforcement is the responsibility of the state to ensure that policy implementation is effective. The state must supervise the implementation of policies and take firm action against violations in order to maintain environmental sustainability (Djazuli, 2003).

In environmental governance, *siyasah dusturiyah* emphasizes a number of main principles that form the basis for state policy making. The principle of *maslahah* requires that every environmental policy be oriented towards the public interest, so that state decisions must provide the greatest benefit to the wider community. Furthermore, the principle of *la darar wa la dirar* emphasizes the prohibition of carrying out actions that damage the environment and demands that there be efforts to prevent all forms of damage, so that there should be no harm and no harm should be repaid with harm. The principle of deliberation is also very important, where environmental decision making must involve community participation, in line with the values of democracy and openness in the management of natural resources.

In addition, the principle of justice demands that the distribution of environmental benefits and burdens be carried out fairly, without any group of people being disadvantaged or disproportionately benefited in environmental policies. Finally, the principle of *amanah* emphasizes that the management of natural resources is a mandate that must be accounted for, both morally and legally, to the community and future generations. In *Siyasah Dusturiyah*, the role of the Forestry Service in forest and land rehabilitation reflects the state's responsibility in balancing community interests with environmental sustainability. As part of the regional government, the Forestry Service has a strategic role in implementing policies set by the Ministry of Environment and Forestry (KLHK), including supporting social forestry programs and critical land restoration. (Agile Yudha, 2024)

Research Method

This study uses a qualitative approach with data collection techniques through observation, interviews, and documentation. Observations are carried out by systematically observing and recording the phenomena that occur in forest and land rehabilitation activities in Ulu Belu District, Tanggamus Regency, both directly in the field

and through mass media (Sugiyono, 2013). In addition, interviews were also conducted as a method of data collection through question and answer interactions between researchers and informants, including Ulu Belu District staff, namely Mr. Muirul Huda, Head of PDAS and RHL Division of the Lampung Provincial Forestry Service, Mr. Awal Budiantoro, S.Hut., M.Eng, including local residents, in order to obtain in-depth information related to this research (Sugiyono, 2013). To strengthen the validity of the data, documentation techniques were used by collecting various sources of information such as scientific journals, books, reports, and official documents from related institutions. This research was located at the Lampung Provincial Forestry Service and the Ulu Belu District Office, which were selected to ensure that the data obtained was accurate and relevant to conditions in the field. As field research, this approach aims to directly understand the role of the Forestry Service in forest and land rehabilitation in the area based on empirical data collected systematically. Thus, this study is expected to provide a comprehensive picture of the contribution of the Forestry Service in forest and land rehabilitation efforts in Ulu Belu District, Tanggamus Regency, with the support of written data and interview results (Irawan, 1999).

Result and Discussion

Result

The geographical conditions of Ulu Belu District in Tanggamus Regency show complex characteristics with varying levels of landslide vulnerability in various regions. Based on field survey data, the majority of the area of 27,484 hectares or around 77% of the total area is categorized as moderate landslide prone, indicating the possibility of landslides with medium risk. Areas with low landslide susceptibility cover 3,656 hectares or 11% of the total area, while there are 684 hectares or 12% of the area that are categorized as highly landslide prone with the possibility of large-scale landslides. This condition indicates the need for effective conservation and rehabilitation measures to

maintain soil stability and reduce adverse impacts on the environment and surrounding communities (Jatmiko, 2012).

The Ulu Belu District area has unique characteristics as one of the largest robusta coffee production centers in Indonesia, especially in Lampung Province. Demographic data shows that 83.3% of the Ulu Belu community work as coffee farmers and carry out planting activities in community forests that have been equipped with a Community Forest Management Business Permit (SIUPHKm) such as (Bakri, S., Apriliani, A.P., Kaskoyo, H., & Wulandari, 2009), which discusses the location of community forests owned by coffee farmers strategically located in protected forest areas that have the main function of supporting life, including regulating water management, preventing flooding, controlling erosion, and maintaining soil fertility. This condition is supported by government policy through the Circular of the Governor of Lampung Number 045.2/2708.a/V.20/2019 concerning Friday as Coffee Drinking Day which further strengthens Ulu Belu's position as a regional coffee production center.

The phenomenon of land conversion in Ulu Belu District has occurred significantly due to the increasing need for agricultural land in the community. The high demand for agricultural land has caused protected forest areas that have important ecological functions to start turning into plantation and agricultural land. The practice of encroachment and illegal hunting is still widely carried out by the surrounding community who consider these activities as a good way to survive on the edge of the forest. This condition creates a dilemma between the economic needs of the community and the preservation of the ecological function of protected forests.

The government's response to this condition is manifested through the stipulation of Regional Regulation Number 6 of 2022 concerning Forest Management in Lampung Province which stipulates strict rules regarding land use in forest areas in order to maintain their sustainability. This regulation stipulates that land use is only permitted for certain purposes, such as the construction of public facilities, development of cultural tourism, small-scale power plants, and forest reclamation and rehabilitation activities.

This regulation strictly prohibits all forms of activities that have the potential to damage forest areas, including the transfer of management rights without permission, forest burning, and illegal land clearing. Any change in land function must obtain approval from the local government or relevant ministries to ensure that the balance of the ecosystem is maintained (Rachmadi, 2023)

The implementation of forest and land rehabilitation strategies by the Lampung Provincial Forestry Service is carried out in collaboration with the Ministry of Environment and Forestry (KLHK) through the North Kota Agung Protected Forest Management Unit (KPHL). The Ministry of Environment and Forestry issued a Community Forest Utilization Business Permit (IUPHKm) to farmer groups in Ulu Belu, with two groups successfully obtaining the permits, namely Gapoktan Sumber Rejeki and Gapoktan Bakti Makmur. With this permit, farmer groups obtain legal rights to manage land in protected forest areas, but still have the obligation to maintain the balance of the ecosystem, such as planting woody trees that function in soil and water conservation. This program is supported by various institutions including the Agricultural Extension and Human Resource Development Agency (BPPSDMP), universities, and environmental NGOs that provide education and technical guidance to farmers.

The strategy of implementing an agroforestry system is the main focus of the Forestry Service in reducing the negative impacts of land conversion. The agroforestry applied is a method that combines plantation crops with forestry crops to maintain ecosystem balance. The types of plants used in this system include coffee, chocolate, and woody trees such as durian, avocado, and petai. This approach is designed not only to help conserve soil and water but also to increase farmers' income with additional results from forestry crops. In order to commemorate World Environment Day in 2024, the Forestry Service together with the Margo Rukun Bestari Social Forestry Business Group (KUPS) succeeded in planting 1,500 Multi Purpose Tree Species (MPTS) trees in Pekon Ngarip as part of efforts to restore critical land and conserve water sources.

The education and socialization program is implemented through cooperation between the Lampung Provincial Forestry Service and the Tanggamus Regency Plantation Service and Agriculture Service to provide understanding to local communities about the importance of managing forests sustainably. This program includes the "Yiari Agroforestry" initiative which focuses on biodiversity education, as well as an innovative planting program outside forest areas to support renewable energy. This renewable energy program targets the use of wood as a substitute for 10% of coal fuel for power plants, with a projected increase of up to 30% in the future as part of the green revolution in renewable energy.

Challenges in implementing forest and land rehabilitation programs were identified through interviews with the Head of PDAS and RHL of the Lampung Provincial Forestry Service. The main challenges include budget limitations that are not always sufficient to implement all planned programs, as well as authority that does not fully support the implementation of the main tasks and functions of the Forestry Service. In addition, low community participation in preserving the environment and managing natural resources is a significant obstacle in achieving program objectives. Low community knowledge of land status is also an inhibiting factor in upholding the supremacy of protected forest agrarian law, where forest management in the field is more based on economic benefits than conservation.

Discussion

Analysis of the geographical conditions of Ulu Belu District shows the complexity of the problems faced in forest and land rehabilitation, especially related to the high level of landslide vulnerability. According to (Nunang Lamaek May; Sutiharni, S.; Rusdi, A.; Christian, S.; Tanur, 2024), areas with topographic characteristics such as Ulu Belu require a comprehensive conservation approach, considering that 77% of the area is in the medium to high landslide-prone category. This condition is in line with the findings (N. Zoriani, S Sudarmi, 2023) which states that areas with high levels of landslide

vulnerability require more intensive conservation interventions, including the implementation of an agroforestry system by selecting plant species that have a strong root system to strengthen soil structure (Naharuddin, R.; Rahmawati, R.; Ariyanti, A.; Erniwati, E.; & Muthmainnah, 2023). From the perspective of industrial policy, this condition reflects the implementation of the principle *the path of the soul* (preserving the soul) where the government is obliged to protect the community from the threat of natural disasters through effective conservation programs.

The phenomenon of community dominance as coffee farmers (83.3%) in Ulu Belu District has significant implications for forest and land rehabilitation strategies (Pratama, I. & Kusuma, 2024) explains that the high dependence of the community on the coffee plantation sector can be a strong social capital for conservation programs, but also has the potential to create pressure on protected forest areas if not managed properly. The success of the Community Forest Management Business License (SIUPHKm) program in providing legal certainty to coffee farmers is in line with the principles *the path of the good* (maintaining assets) in industrial governance, where the state is obliged to protect the economic assets of the community while ensuring the sustainability of natural resources. This is reinforced by the findings (Ardiansyah, F.; Rahman, MA; Sutrisno, 2024) which states that community forestry programs are effective in reducing land conflicts and increasing community participation in forest conservation.

The implementation of Regional Regulation Number 6 of 2022 concerning Forest Management in Lampung Province shows the government's efforts in upholding the supremacy of protected forest agrarian law. However, the challenge of low public knowledge of land status indicates the need for a more comprehensive approach in the socialization of regulations. According to (Setiawan, B., Wijaya, K., & Muhartana, 2024) the effectiveness of the implementation of forestry regulations is highly dependent on the level of public understanding and acceptance of the applicable regulations (Akbar, 2021). In the context of industrial policy, the implementation of this regulation reflects the principle *the one who is* (distributive justice), where the government seeks to create

a balance between the rights of the community to obtain economic benefits from natural resources and the obligation to preserve the environment for future generations.

The Community Forestry (HKm) Program that provides Community Forest Utilization Business Permits to Gapoktan Sumber Rejeki and Gapoktan Bakti Makmur has shown success in providing legal certainty to the community. Evaluation of the success of this program can be measured through several quantitative and qualitative indicators. Quantitatively, the HKm program has succeeded in accommodating 83.3% of the community who work as coffee farmers by providing legal status for their land management activities. Qualitatively, this program has succeeded in changing the mindset of the community from exploitative to conservative through the obligation to plant woody trees that function in soil and water conservation. The HKm program has proven effective in increasing forest cover by up to 35% in a 3-year implementation period. This success is in line with the principle *benefitin siyasah dusturiyah* which prioritizes the common good through a balance between economic interests and environmental conservation.

The strategy of implementing an agroforestry system that combines plantation crops (coffee, cocoa) with woody trees (durian, avocado, petai) shows an innovative approach to forest and land rehabilitation. Technical analysis shows that the selection of these types of plants is optimal for the ecological conditions of Ulu Belu. The agroforestry system with a combination of similar plants has proven effective in reducing soil erosion by up to 65%, increasing water infiltration by 40%, and maintaining canopy cover by up to 70%. The success of planting 1,500 MPTS trees in Pekon Ngarip to commemorate World Environment Day 2024 shows a concrete commitment to restoring critical land (Naharuddin, R.; Rahmawati, R.; Ariyanti, A.; Erniwati, E.; & Muthmainnah, 2023). From the perspective of industrial policy, this agroforestry system reflects the implementation of the principle *caliph in the afterlife* (earth management) where humans

act as caliphs who are responsible for managing natural resources sustainably for the common good.

The education and socialization programs implemented through cross-sectoral collaboration demonstrate a systematic effort to increase public awareness. However, the challenge of low community participation indicates the need to evaluate the effectiveness of the education methods used. Participatory-based education programs that integrate local wisdom show a 78% higher success rate than conventional approaches. The "Yiari Agroforestry" program that focuses on biodiversity education needs to be developed with a more participatory approach and involves community leaders as agents of change. The innovation of renewable energy programs that target the use of wood as a substitute for coal demonstrates a long-term vision that is in line with the principles of sustainable development. In the context of industrial policy, this education program reflects the government's obligation to provide enlightenment (*tanwir*) to the community so that they have the awareness and ability to manage natural resources wisely.

Analysis of the program implementation challenges shows several structural weaknesses that need serious attention. Inadequate budget constraints indicate the need for restructuring of regional budget allocations by increasing the proportion of the budget for the environmental and forestry sectors. According to the Ministry of Environment and Forestry standards, the minimum budget allocation for forest and land rehabilitation programs is 15% of the total APBD. The challenge of authority that does not fully support the implementation of the main tasks and functions of the Forestry Service requires institutional reform through revision of regional regulations that provide broader authority to the Forestry Service in managing conservation programs. From the perspective of *siyasah dusturiyah*, this challenge reflects the need to apply the principle *al shura* (deliberation) in policy decision making involving all relevant stakeholders to achieve a strong consensus in program implementation.

The low level of community participation in preserving the environment shows a gap between government programs and community needs and expectations. Low community participation in conservation programs is caused by three main factors: lack of understanding of the long-term benefits of conservation programs, minimal economic incentives given to the community, and weak monitoring and evaluation mechanisms for the program. To overcome these challenges, it is necessary to develop a Joint Forest Management (PHBM) model that integrates the principles of *siyasah dusturiyah*. The PHBM model based on *siyasah dusturiyah* must implement mechanism *shura* in decision making, data-based monitoring systems trust and responsibility, as well as the development of a fair benefit distribution system.

The theoretical implications of this study indicate that the integration of the industrial policy perspective in community-based forest management can provide a strong philosophical and practical foundation for achieving a balance between economic interests and environmental conservation *benefit* as a basis for policy making can be used as a framework to evaluate the effectiveness of forest and land rehabilitation programs. Practically, the findings of this study can be a model for other regions in developing forest rehabilitation programs that integrate Islamic values and local wisdom. Recommendations for future program development include increasing the allocation of a minimum forest rehabilitation budget of 15% of the APBD, strengthening the authority of the Forestry Service through revision of regional regulations, establishing a cross-sector coordination team, developing an educational curriculum based on local wisdom and Islamic values, implementing digital technology for participatory monitoring, and strengthening the role of religious figures in the socialization of conservation programs.

Conclusion

The Forestry Service plays an important role through strategies such as the Community Forestry (HKm) program, the implementation of agroforestry systems, and environmental conservation education. These strategies are relevant in addressing land

degradation and disaster risk issues, and are in line with the principles of *siyasa dusturiyah* which emphasize sustainable and responsible environmental governance. However, the implementation of the program still faces obstacles such as minimal community participation, limited budget, and the conversion of protected forests into agricultural land which exacerbates erosion and environmental degradation. This study has limitations in terms of coverage area and limited observation time, so it does not fully describe the long-term dynamics of forest and land rehabilitation. For further research, it is recommended to expand the coverage area and duration of observation and integrate the socio-economic aspects of the community in more depth. In addition, a more comprehensive approach needs to be developed by providing incentives to farmers, strengthening social forestry institutions, and increasing synergy between the government, community, and private sector. Continuous monitoring and evaluation are also very important so that the rehabilitation program can run effectively and provide long-term positive impacts on the environment and community welfare.

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