

The Role of the West Provincial Environment and Forestry Agency in Sustainable Environmental Management and Community Empowerment

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ABSTRACT

This study aims to examine the role of the West Nusa Tenggara Provincial Environment and Forestry Agency (DLHK) in implementing sustainable environmental management and community empowerment efforts. The research employed a qualitative approach to gain an in-depth understanding of the institutional role, program implementation, and various challenges faced by the DLHK in maintaining a balance between environmental conservation and socio-economic development. Data collection was carried out through in-depth interviews with DLHK NTB officials and direct observation of the organizational structure, infrastructure, and implementation of environmental programs. In addition, local government support through policies, regulations, and cross-sector coordination strengthens program sustainability, while the use of ecological service technology promotes transparency and public participation. This study confirms that sustainable environmental management in NTB Province requires a holistic approach that integrates ecological, social, and economic aspects with active community involvement

1. INTRODUCTION

The environment is a crucial element that plays a vital role in supporting the sustainability of human life and other living organisms. A high-quality environment plays a vital role in maintaining ecosystem balance, enhancing public health, and fostering social and economic development. Law No. 32 of 2009 on Environmental Protection and Management states that environmental management and protection are systematic and integrated efforts aimed at preserving environmental functions and preventing pollution and ecological damage. These efforts include planning, utilization, control, maintenance, supervision, and law enforcement (Herlina, 2015). However, development pressures and population growth have the potential to increase the risk of pollution, ecosystem damage, and a decline in environmental carrying capacity. To overcome this, implementing sustainable development is crucial, where economic prosperity, social equality, and ecological preservation must be pursued in tandem. Therefore, environmental sustainability has become a critical issue for both societal and governmental affairs.

As time progresses, pressure on the environment tends to increase due to population growth and intensified development activities. Uncontrolled exploitation of natural resources has the potential to cause pollution, damage to ecosystems, and a decline in the environmental carrying capacity. This aligns with Sriyanti's (2023) opinion, which explains that ecological protection and management cannot be separated from the dynamics of development. With a systematic and integrated approach to environmental management, the long-term sustainability of ecological functions can be maintained. Therefore, environmental conservation efforts must simultaneously integrate ecological, social, and economic aspects so that development remains sustainable and meets the needs of the current generation without sacrificing the welfare of future generations. Therefore, environmental conservation efforts must simultaneously integrate ecological, social, and economic aspects so that development remains sustainable and meets the needs of the current generation without compromising the welfare of future generations.

One appropriate approach to address these issues is the implementation of the concept of sustainable development. Nasution et al. (2024) emphasize that sustainable development refers to a

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development process designed to meet the needs of the present while ensuring that the needs of future generations are also met. The main principles in implementing sustainable development include achieving economic prosperity, social equity, and environmental conservation. In addition, Hasporo & Bangun (2020) also believe that sustainable development is a human effort to improve the quality of life while maintaining the limits of the ecosystems that support that life. The implementation of sustainable development cannot be separated from its three main pillars: the economy, society, and the environment. The implementation of this concept requires active participation and synergistic coordination from all stakeholders.

Among various stakeholders, the government plays a strategic role in directing and controlling the implementation of development. The government is responsible for formulating policies, establishing regulations, and supervising environmental management. This role becomes even more strategic at the regional level, given that regional governments have greater contextual authority and a deeper understanding of their respective regions. The regional agency responsible for these functions is the Environment and Forestry Agency. This agency is responsible for implementing regional government affairs in the fields of environmental protection and management, as well as forestry. Through various programs and activities, the Environment and Forestry Agency strives to prevent pollution, control ecological damage, and preserve natural resources (Lubis & Siregar, 2019). The existence of DLHK is crucial in achieving sustainable environmental management in the region.

The province of West Nusa Tenggara, as a region rich in natural resources, has forests, coastal areas, and terrestrial ecosystems of high ecological value. However, development pressures and population growth have the potential to increase the risk of pollution, ecosystem damage, and a decline in environmental carrying capacity. To address these issues, the implementation of sustainable development is crucial, where economic prosperity, social equity, and environmental conservation must be pursued in tandem. On the other hand, the province faces various ecological problems, including deforestation, land degradation, pollution, and the impacts of climate change. These conditions underscore the importance of implementing planned and sustainable environmental management policies and measures by the local government, with the Environment and Forestry Agency playing a strategic role in addressing these challenges.

This article aims to analyze the role of the NTB Provincial Environment and Forestry Agency in preserving the environment and forests, balancing the economic needs of the community, and implementing sustainable policies and programs that involve community participation.

2. METHOD

To comprehensively understand the role of DLHK NTB, this study employs a qualitative approach, which emphasizes a deep understanding of social and institutional phenomena through the collection of contextual, descriptive data (Waruwu, 2024). The qualitative approach allows researchers to comprehensively explore the role of the NTB Provincial Environment and Forestry Agency (DLHK), including its strategies, programs, and challenges in preserving the environment while balancing the economic interests of the community.

Data were obtained through in-depth interviews with the Head of the Environmental Planning and Supervision Division of DLHK NTB to gather information on the organizational structure, main tasks and functions, flagship programs, and the implementation of sustainable environmental management policies. Additionally, field observations were conducted at the DLHK NTB office, encompassing the condition of the building, workspaces, supporting facilities, and employee interactions during the implementation of environmental and forestry programs. All data were analyzed descriptively and interpretively, focusing on the strategic role of DLHK NTB in sustainable environmental management, the implementation of policies involving community participation, and efforts to maintain a balance between economic development and natural resource conservation. Using this method, the study was able to provide a comprehensive picture of the environmental management practices carried out by DLHK NTB in accordance with the challenges and potential of the West Nusa Tenggara Province.

3. RESULT AND DISCUSSION

Result

The results of the study reveal that the NTB Provincial Environment and Forestry Agency (DLHK) has a well-structured organizational structure, consisting of six main divisions that are integrated to implement environmental and forestry management. The Head of the Environmental Planning and Supervision Division, Didik Mahmud Gunawan Hadi, stated that the main tasks of DLHK NTB include managing state forest areas, supervising environmental protection, providing guidance on climate change and waste management, and rehabilitating watersheds. The organizational structure consists of

a Secretariat that handles administrative and general affairs, Forest Planning that manages permits for forest area utilization, the Watershed Management, Rehabilitation, and Community Empowerment (PDAS RPM) division, PHKAKA, which focuses on law enforcement and natural resource conservation, Environmental Planning and Supervision, which is tasked with supervising environmental documents and guidance activities, and PSPPL, which is responsible for waste management and environmental pollution control.

Discussion

Program Integration and Community Participation

The existence of a well-structured organizational structure enables the NTB Provincial Environment and Forestry Agency (DLHK) to carry out environmental management in a more focused, effective, and coordinated manner. Each division has specific responsibilities, allowing for the optimal planning, monitoring, and implementation of programs. For example, the Watershed Management, Rehabilitation, and Community Empowerment (WMRCE) division not only focuses on the rehabilitation of critical land and the conservation of watersheds, but also carries out various community empowerment activities (Markum et al., 2024). This activity includes training, mentoring, and the provision of facilities that enable the community to participate actively in environmental conservation efforts. This approach fosters synergy between ecological sustainability and improved socio-economic welfare for the community, helping the simultaneous achievement of environmental and social benefits. This aligns with the principles of sustainable development, which emphasize a balance between ecological, social, and economic aspects and encourage program integration to ensure continuous positive impacts.

In its implementation, DLHK NTB faces various complex ecological challenges, such as forest encroachment, watershed degradation, a decline in the number of springs, and an increase in the frequency of flooding in several areas, particularly in the city of Bima. This high ecological pressure requires the DLHK to rely not only on a sound organizational structure, but also to implement comprehensive rehabilitation strategies, including reforestation, strengthening water catchment areas, erosion control, and strict supervision of community and industrial activities surrounding forests. In addition, community education and empowerment remain a primary focus, enabling them to develop awareness and actively participate in forest conservation. These integrated management efforts require support from all stakeholders, particularly local governments, to ensure that DLHK programs can operate effectively and have a broad impact.

Local governments play a crucial role in supporting the implementation of DLHK programs through a strong political commitment and effective cross-sector coordination. The governor of NTB, for example, actively monitors the implementation of waste management, watershed rehabilitation, and forest conservation projects, as well as involving the private sector in the development of technology-based waste management facilities. Regional policies are also strengthened by local regulations related to RPPLH, waste management, and forestry, which serve as the legal basis and operational guidelines for implementing sustainable environmental programs. This support includes the provision of adequate budgets, capacity building of human resources, and encouraging community participation through education, program socialization, and incentives for community-based initiatives. The synergy between the DLHK and local governments ensures that environmental management programs not only address ecological issues but also improve the socio-economic welfare of the community, while fostering collective awareness of environmental preservation.

Implementation of Circular Economy and Good Governance

As one tangible implementation of this support, the application of circular economy principles (Bonaraja et al., 2024) in waste management demonstrates how the DLHK NTB program can reduce pollution while providing economic value to the community. For example, processing waste into compost and using it as fertilizer offers an additional source of income for women scavengers, while instilling awareness of the importance of sustainable waste management and the integration of economic interests with environmental preservation. Additionally, the implementation of good governance through technology-based service systems, such as AMDAL Net and the Lestari application, enhances transparency and community participation. The community can monitor the environmental licensing process, submit complaints, and participate in environmental decision-making, thereby creating an effective public oversight mechanism. This approach emphasizes that successful ecological management depends not only on the government but also on the active involvement of the community, which is the foundation for implementing DLHK's innovative programs.

In line with the principles of openness and participation, observations at the DLHK NTB office show that facilities and a work environment that support employee professionalism and productivity also strengthen program implementation. Neatly arranged workspaces for each division, a hall for meetings and socialization, and an emergency waste response post demonstrate the institution's readiness to implement environmental programs systematically and responsively. A conducive work environment enables employees to be more focused and efficient in carrying out their duties, allowing each division to perform its functions and responsibilities optimally. This, in turn, improves the quality of program implementation in the field and encourages active community involvement in various environmental activities (Rahayu et al., 2024).

These supportive internal conditions are then reinforced through community empowerment programs, such as Desa Berdaya and Desa Semparu, which integrate economic development and environmental conservation. Desa Semparu, for example, implements the circular economy concept by processing waste into compost for fertilizer and using it as fish feed, ensuring that no waste is sent to landfills. This approach not only improves environmental quality but also provides socio-economic benefits for the community. The integration between DLHK's internal facilities and these empowerment programs strengthens community participation in conservation and fosters collective awareness of the importance of environmental management.

Response to Ecological Conditions in NTB

The urgency of empowerment and conservation programs has become more apparent, given the ecological conditions in NTB, such as the reduction in the number of springs from around 600 to only 100, which requires watershed rehabilitation and reforestation. The NTB DLHK has responded to this by providing seedlings through the KPH, allowing the community to participate directly in nature conservation while also raising awareness of the importance of protecting water resources and forest areas. This strategy demonstrates the continuity between community empowerment and ecological conservation efforts, creating an integration between environmental protection and the strengthening of residents' socio-economic welfare.

Strategic support for these programs is also reinforced through formal policies and guidelines. The KLHS and RPJMD developed by the NTB DLHK serve as references for planning activities in accordance with environmental carrying capacity, identifying potential ecological risks, and preparing mitigation measures for the impacts of development. This document then became the basis for implementing the community forestry and WPR schemes, which grant communities the legal right to manage their land responsibly, while suppressing illegal mining practices and minimizing the potential for social conflict.

Transparency and public participation are essential elements in the management of this program. Online services and AMDAL Net integration enable the public to monitor DLHK activities, submit complaints, and provide input on environmental management. This participatory approach increases government accountability while fostering a culture of collective oversight that supports program sustainability. The waste emergency response program, based at a special command post, demonstrates the DLHK's readiness to address environmental issues promptly and in a coordinated manner. The synergy between ecological management and community welfare strengthens collective awareness of the importance of maintaining environmental quality.

The local government's attention to air quality and forest conservation demonstrates an awareness of long-term ecological risks, which aligns with the DLHK program. Deforestation has a significant impact on air quality, flood potential, and the loss of springs, making preventive measures and public education crucial. This focus also strengthens the role of the younger generation in environmental preservation, as part of a sustainable development strategy that involves multiple generations.

Fostering an Environmentally Conscious Young Generation

The policies and programs implemented by DLHK NTB emphasize the development of a young generation that cares about the environment. The speakers emphasized the importance of future generations in sorting waste, conserving water resources, and addressing environmental issues through social and political channels. This confirms that environmental conservation is a collective responsibility across generations. With adequate internal coordination, local government support, community participation, and the application of principles of sustainable development, circular economy, and good governance, DLHK NTB has successfully implemented a comprehensive approach to environmental management. This approach has made NTB a model for a region that balances economic development and ecological preservation in a sustainable manner.

4. CONCLUSION AND RECOMMENDATION

Based on the study's results, it can be concluded that the NTB Provincial Environment and Forestry Agency (DLHK) plays a crucial role in preserving the environment and forests, while striking a balance between economic development and community welfare. The integrated organizational structure of the DLHK enables the effective, targeted, and sustainable implementation of environmental management programs. Community empowerment programs, such as Desa Berdaya and Desa Semparu, as well as the application of circular economy principles, strengthen community involvement in conservation while providing socio-economic benefits. Local government support through policies, budgets, and cross-sector coordination strengthens program effectiveness, while the use of technology and online services increases transparency and public participation. The success of DLHK NTB confirms that environmental preservation requires a holistic approach that integrates ecological, social, and economic aspects and involves the younger generation as part of a sustainable development strategy.

DLHK NTB needs to increase community involvement in environmental conservation, expand the implementation of the circular economy concept, enhance employee competencies, and strengthen inter-agency synergy to optimize the implementation of sustainable ecological programs and achieve a tangible impact.

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6. REFERENCE

- Bonaraj, P. (2024). Konsep Ekonomi Sirkular Model CircularBisnis Circular dan Ekonomi Karbon Sirkular. *Economic Reviews Journal*, 3, 2029–2034. <https://doi.org/10.56709/mrj.v3i3.305>
- Herlina, N. (2015). PERMASALAHAN LINGKUNGAN HIDUP DAN PENEGAKAN HUKUM LINGKUNGAN DI INDONESIA Oleh. *Jurnal Ilmiah Galuh Justisi*, 3(2), 1–15.
- Lubis, M. S., & Siregar, S. H. (2019). *Strategi peningkatan kinerja Dinas Lingkungan Hidup dan Kehutanan dalam pencegahan kerusakan lingkungan hidup di Kabupaten Padang Lawas*. 3(1), 18–25.
- Markum. (2024). *Pendampingan dan Pemberdayaan Masyarakat Peduli Hutan Kemasyarakatan Wana Lestari Desa Bukit Tinggi, Kecamatan Gunung Sari, Kabupaten Lombok Barat*. 1(1), 1–11. <https://doi.org/10.71024/bhakti.2024.v1i1.1>
- Nasution, A. M., & Ulfa, Nadia, nurhayati, A. (2024). *Strategi Perencanaan Pembangunan Berkelanjutan*. 2(1).
- Nur Arief Hasporo, resensia B. (2020). *PERKEMBANGAN PEMBANGUNAN BERKELANJUTAN DILIHAT DARI ASPEK EKONOMI DI INDONESIA*. 03(02), 88–96.
- Rahayu, S. T., Ismail, I., Madura, U. T., & Inda, P. T. (2024). *Pengaruh kinerja karyawan terhadap suksesnya suatu perusahaan*. 2(12).
- Sriyanti. (2023). *Pengendalian Dan Pengelolaan Lingkungan Hidup*. 1(2).
- Waruwu, M. (2024). *Pendekatan Penelitian Kualitatif: Konsep, Prosedur, Kelebihan dan Peran di Bidang Pendidikan*. 5, 198–211.