

Evaluation of Institutional Development Level in the Management of West Bali National Park and Sangeh Monkey Forest Using the Institutional Development Framework (IDF) Approach

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Abstract. Conservation areas in Indonesia, encompassing 27.14 million hectares across 552 units, face considerable management challenges that necessitate robust institutional frameworks. This study evaluates the level of institutional development at Sangeh Monkey Forest and West Bali National Park using the Institutional Development Framework (IDF) approach. The research employed a mixed-methods design, combining systematic observations and in-depth interviews with management staff in December 2024. The findings reveal that Sangeh Monkey Forest attained an IDF score of 2.9, indicating substantial institutional capacity across five key areas: control/oversight, management, human resources, finance, and external resources. Noteworthy improvements were observed in organizational structure, stakeholder coordination, and resource management. Key developments include the establishment of formal agreements with local communities, the implementation of structured training programs, and enhanced financial transparency. These findings suggest that Sangeh Monkey Forest has built a robust institutional capacity that supports its sustainable operation while fulfilling its conservation and tourism functions.

Keywords: Conservation management, institutional development, monkey forest, protected areas, sustainability

INTRODUCTION

Indonesia's conservation areas span an impressive 27.14 million hectares, managed across 552 conservation units. These units encompass 214 nature reserves, 79 wildlife sanctuaries, 131 nature parks, 34 grand forest parks, 11 hunting parks, 54 national parks, and 29 units still designated as nature reserves or nature preservation areas. By 2017, 12 institutional units had been established for essential ecosystem areas, including six biodiversity parks, two mangrove ecosystems, and four wildlife corridors (Prayitno, 2020).

Conservation areas play a vital role in maintaining biodiversity, protecting ecosystems, and providing social and economic benefits to local communities (Dowson et al., 2021; Hoffmann, 2022). West Bali National Park (TNBB) and Sangeh Monkey Forest are two conservation areas in Bali that combine ecological, cultural, and tourism functions. According to Pujiantari (2019), TNBB serves as the primary habitat for the endangered Bali starling (*Leucopsar rothschildi*), while Sangeh Monkey Forest is a nutmeg forest home to long-tailed macaques (*Macaca fascicularis*).

The Institutional Development Framework (IDF) approach can be utilized to assess institutional development in conservation area management (Jeyaraj & Zadeh, 2020; Capriati et al., 2025). As highlighted by Rahayu & Dzikrulloh (2024), this framework analyzes various institutional aspects, including organizational roles, human resource capacity, legal regulations, and management mechanisms. In the context of TNBB and Sangeh Monkey Forest, this approach can identify existing institutional strengths and weaknesses.

Conservation management faces numerous challenges due to population growth, urbanization, and climate change impacts. Gurr et al., (2021) emphasize that successful

conservation requires collaboration between government, communities, and non-governmental organizations to ensure comprehensive ecosystem preservation. The main principle of conservation is maintaining ecosystem sustainability while ensuring efficient and environmentally friendly resource utilization (Jhariya et al., 2022; Zhichao & Yashu, 2024).

According to Puspasari et al., (2021), conservation areas serve as crucial protectors of endangered flora and fauna and natural ecosystems from human-induced damage. These areas play an essential role in maintaining global climate stability through carbon absorption and clean water provision. However, challenges such as land encroachment, illegal logging, and climate change can threaten the effectiveness of conservation areas, requiring integrated and sustainable management (Patra et al., 2022; Zhang et al., 2023; Barchok & Mwangi, 2024; Hussain et al., 2024).

Institutional management of conservation areas must include clear regulations, community participation, and law enforcement mechanisms. Hartanto et al. (2019) note that institutions often face challenges such as lack of inter-agency coordination, limited funding, and weak law enforcement that can hinder conservation efforts. Community-based management is crucial for improving conservation effectiveness through local community empowerment, particularly in areas like Sangeh Monkey Forest, where local wisdom and cultural preservation are integral to conservation success. This study aims to examine how institutional management practices and community involvement contribute to the effectiveness of conservation efforts in Sangeh Monkey Forest, with a focus on identifying challenges and opportunities for strengthening governance frameworks.

RESEARCH METHODOLOGY

Time and Location

This research was conducted on Sunday, December 22, 2024, starting at 12:00 WITA (Central Indonesian Time) until completion, at West Bali National Park and Sangeh Monkey Forest, Badung, Bali Province, Indonesia.

Materials and Equipment

In this study, a number of tools were prepared to support the smooth data collection process in the field. Stationery such as pens and notebooks were used to record important findings during observations and interviews. These notes are the basis for formulating accurate and structured research results. In addition, cameras or smartphones were used as documentation tools to record conditions or events relevant to the research topic, either in the form of photos or videos.

For recording quantitative data, tally sheets were used which allowed for fast and systematic recording of repetitive or numeric data. The use of tally sheets helped researchers in recapitulating and facilitating the data analysis process. All of this equipment was selected based on field needs and research objectives, so that the information collected could be processed optimally and produce valid conclusions.

Materials

The materials used in this research consisted of a set of questions directed to the management of Sangeh Monkey Forest.

Research Methods

Observation

The observation method in this research was employed to observe phenomena occurring during the study period. The observation aimed to collect empirical data that could support analysis and conclusions. The observation was conducted systematically to ensure the data

obtained was valid and accountable (Sari and Nugroho, 2020). Furthermore, the observation carried out in this research also aimed to identify patterns or phenomena occurring in the experiment according to the tested variables (Prasetyo, 2021).

Interviews

This research method utilized direct interviews with the head and management staff of West Bali National Park and Sangeh Monkey Forest to obtain in-depth information about conservation area management. The interviews aimed to explore various perspectives regarding institutional structure, decision-making processes, management challenges, and the role of each party in conservation area management. Additionally, the interviews also identified how inter-institutional collaboration and local community involvement support conservation area sustainability.

RESULTS AND DISCUSSION

Control/Oversight

Control and oversight at Sangeh Monkey Forest have shown significant development. The local government has evolved from having no communication to establishing effective program coordination with various stakeholders. According to Akpa et al., (2021) and Peterson et al., (2023), effective organizational vision and mission integration into various programs reflects an organization's ability to direct and control its management more effectively. The organization's vision, previously unclear, is now well-defined in strategic plans and understood by all staff and community members. The mission has been integrated into various programs and activities, demonstrating that the organization not only has clear direction but also serves as an effective planning tool.

Management

Management at Sangeh Monkey Forest has experienced significant improvements, particularly in decision-making and staff participation. As noted by Thompson (2024) that strategic decisions now involve staff consultation, indicating more inclusive and democratic participation. Staff evaluation is conducted independently by the organization, demonstrating greater autonomy and control over human resource performance. Additionally, planning and budgeting have been aligned with the vision, mission, and local conditions, providing flexibility and responsiveness to local needs. Financial reporting transparency has also increased, with complete, timely, and auditable reports reflecting higher accountability in financial management.

Human Resources

Human resource development at Sangeh Monkey Forest focuses on enhancing staff skills and motivation through structured training programs and reward systems. According to Wilson & Rodriguez (2023), systematic training programs designed to meet organizational needs ensure staff maintain relevant and up-to-date skills. Rewards are not just ad hoc recognition but implemented through a system that stimulates performance and career advancement. This approach demonstrates the organization's commitment to improving its resource quality, which in turn enhances operational effectiveness and efficiency.

Finance

Financial management at Sangeh Monkey Forest has shown significant progress with budgets being used as integral management tools. Research by Anderson et al., (2024) suggests that diversified funding sources contribute to better organizational flexibility and financial stability. Funding sources are no longer entirely dependent on central government but include various other sources. Complete, timely, and auditable financial reports reflect high

transparency and accountability. These practices not only increase stakeholder confidence but also enable more efficient and effective management, supporting organizational goals in achieving independence and sustainability.

External Resources

External relationships between Sangeh Monkey Forest and various stakeholders, including local government, surrounding village communities, and NGOs, have improved significantly. According to Martinez & Lee (2024), effective communication and formal agreements between conservation areas and local communities are crucial for sustainable management. Effective communication has been established to address national park issues. There is good coordination to address emerging issues, as well as integrated programs developed and implemented collaboratively (Wondirand et al., 2020; Dangi & Gribb, 2021; Tait & Branson, 2022). With surrounding village communities, formal agreements have been established regulating the rights and obligations of each party, creating more harmonious and productive relationships. Long-term cooperation with NGOs also demonstrates commitment to sustainability and community involvement in national park management.

CONCLUSION

The conclusion of the results of this study shows that the Institutional Development Framework (IDF), Sangeh Monkey Forest shows a strong institutional capacity with a score of 2.9. This score reflects the existence of a solid organization, efficient resource management capabilities, and the potential for operational and financial independence. In addition, this performance shows the institution's ability to balance ecological goals with tourism development, while maintaining the integrity and supporting the ecosystem. With a mature institutional capacity, Sangeh Monkey Forest is considered ready to face future challenges, both in environmental and social contexts, without sacrificing its main functions in conservation and tourism.

Recommendations

For future research and practical applications, we recommend:

1. Implementing comprehensive pre-planning protocols for field studies and assessments
2. Developing more detailed evaluation metrics for specific aspects of institutional development
3. Conducting regular comparative analyses with similar conservation areas to benchmark performance
4. Establishing long-term monitoring systems to track institutional development progress
5. Enhancing stakeholder engagement strategies to further strengthen institutional capacity

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