

The implementation of Ecotourism Programs and Ecotourism Development of Hinatuan, Surigao del Sur

IRISH G. ASIS-DAHAB, MBA

asisirish@gmail.com

Father Saturnino Urios University, Butuan City 8100, Philippines
Hinatuan Southern College, Hinatuan, Surigao del Sur 8310, Philippines

Abstract

This study examined the extent of implementation of ecotourism programs in the Municipality of Hinatuan, Surigao del Sur, Philippines, and their relationship to ecotourism development in terms of economic, socio-cultural, and environmental aspects. A descriptive–correlational research design was employed, involving local residents and visiting tourists as respondents. Data were collected using a validated researcher-made questionnaire and analyzed using mean and Pearson product–moment correlation.

Results revealed that the overall extent of ecotourism program implementation was rated very good ($M = 4.08$). Among the program components, transportation obtained the highest mean ($M = 4.19$), followed by human resources ($M = 4.21$), infrastructure and utilities ($M = 4.06$), promotion ($M = 4.03$), and accommodation ($M = 3.92$). Ecotourism development was likewise rated high, with mean scores of 3.97 for economic development, 4.03 for socio-cultural development, and 3.98 for environmental development.

Pearson correlation analysis revealed a statistically significant relationship between ecotourism program implementation and ecotourism development ($p < 0.05$). Transportation exhibited the strongest correlation with ecotourism development ($r = 0.751$), followed by

infrastructure and utilities ($r = 0.653$), accommodation ($r = 0.652$), promotion ($r = 0.622$), and human resources ($r = 0.495$). These results indicate that improved implementation of ecotourism programs significantly contributes to enhanced local development outcomes.

The findings underscore the importance of sustained investment in ecotourism planning, community capacity-building, and environmental management. Strengthening infrastructure, transportation systems, and human resource development is essential to sustaining ecotourism initiatives; thus, an intervention program is proposed to enhance implementation and promote sustainable local development.

Keywords: ecotourism; program implementation; sustainable tourism; local development; Philippines

Introduction

Tourism is a significant contributor to the Philippine economy, generating employment and supporting local development. In recent years, ecotourism has gained prominence as a sustainable approach that promotes environmental conservation, cultural awareness, and community participation. The Municipality of Hinatuan, Surigao del Sur, is known for its ecotourism attractions, particularly the Hinatuan Enchanted River, which has drawn increasing numbers of local and foreign tourists.

Despite the implementation of various ecotourism programs by the local government, limited empirical studies have examined how these initiatives affect the municipality's economic,

environmental, and socio-cultural development. Anchored on Externality Theory, this study assessed the extent of ecotourism program implementation and determined its relationship with ecotourism development in Hinatuan.

The study sought to answer the following questions: (1) What is the extent of implementation of ecotourism programs in terms of promotion, infrastructure and utilities, accommodation, transportation, and human resources? (2) What is the extent of ecotourism development in terms of economic, environmental, and socio-cultural aspects? (3) Is there a significant relationship between ecotourism program implementation and ecotourism development?

Review of Related Literature and Framework

Ecotourism and Sustainable Development

Ecotourism is widely recognized as a form of sustainable tourism that emphasizes environmental conservation, cultural preservation, and community participation while providing meaningful experiences to visitors. In the Philippine context, ecotourism plays a crucial role in local economic development by generating employment, supporting small enterprises, and diversifying sources of income, particularly in rural and coastal communities.

Previous studies have shown that ecotourism contributes significantly to gross domestic product and employment generation while fostering environmental awareness among host

communities. The Philippine government, through the Tourism Act of 2009, promotes ecotourism as a strategy for inclusive growth, environmental protection, and cultural integrity.

Economic, Socio-Cultural, and Environmental Impacts of Ecotourism

Empirical studies consistently report that ecotourism produces positive economic impacts such as livelihood creation, entrepreneurship, and increased household income. Jalani (2012) found that communities adjacent to ecotourism sites in Palawan experienced improved income levels and employment opportunities due to tourism-related activities.

Socio-culturally, ecotourism enhances community pride, intercultural interaction, and preservation of local traditions. Haas (2003) emphasized that interaction between tourists and host communities can strengthen cultural awareness and promote social cohesion when managed properly.

From an environmental perspective, ecotourism encourages conservation efforts and sustainable resource management. Tisdell (2003) noted that ecotourism can increase funding and public support for environmental protection initiatives, provided that visitor activities are properly regulated.

Theoretical Framework: Externality Theory

This study is anchored on Externality Theory, which explains the indirect effects of economic activities on third parties. In tourism, externalities may be positive or negative depending on how tourism activities are managed. Positive externalities include employment generation, improved infrastructure, cultural preservation, and environmental protection, while negative externalities may include environmental degradation and social disruption.

In this study, ecotourism program implementation represents the independent variable, while ecotourism development—measured in economic, socio-cultural, and environmental dimensions—serves as the dependent variable. The framework assumes that effective implementation of ecotourism programs leads to positive externalities that promote sustainable local development and improved quality of life.

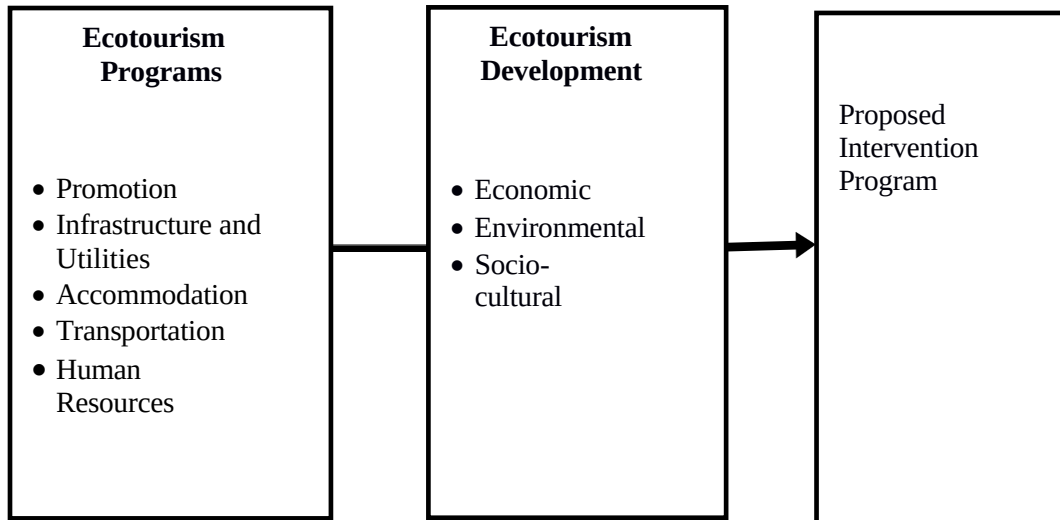


Figure 1. Research Paradigm of the study

Conceptual Framework

The conceptual framework of the study illustrates the relationship between ecotourism program implementation and ecotourism development in Hinatuan, Surigao del Sur. The independent variable consists of ecotourism programs categorized into promotion, infrastructure and utilities, accommodation, transportation, and human resources. The dependent variable is ecotourism development, measured in terms of economic, socio-cultural, and environmental aspects.

It is hypothesized that effective implementation of ecotourism programs leads to higher levels of ecotourism development. The framework assumes that strengthened programs generate positive externalities that contribute to sustainable local development and improved quality of life for host communities.

Methodology

Research Design: A descriptive-correlational research design was utilized to describe the extent of ecotourism program implementation and determine its relationship with ecotourism development.

Research Locale, Population, and Sample: The study was conducted in the Municipality of Hinatuan, Surigao del Sur, particularly in Barangays Talisay, Cambatong, Portlamon, and Harip. Respondents included local residents and visiting tourists selected through purposive-quota sampling.

Research Instrument: A researcher-made questionnaire consisting of two parts was used: (1) ecotourism program implementation and (2) ecotourism development in economic, environmental, and socio-cultural aspects. The instrument underwent reliability testing and yielded a high reliability coefficient.

Data Gathering Procedure: Permission was obtained from the local government and barangay officials prior to data collection. The researcher personally administered the questionnaires and ensured ethical considerations such as informed consent and confidentiality.

Statistical Treatment: Mean was used to determine the extent of program implementation and ecotourism development, while Pearson r was employed to test the relationship between the variables.

Results and Discussion

Extent of Implementation of Ecotourism Programs

The findings revealed that the overall extent of implementation of ecotourism programs in the Municipality of Hinatuan was rated very good ($M = 4.08$), indicating that most of the planned tourism initiatives were effectively executed. Among the program components, human resource development obtained the highest mean score ($M = 4.21$), suggesting that training programs for tourism personnel, tour guides, and frontline service providers were highly effective. This highlights the local government's strong emphasis on capacity building, which is essential in delivering quality tourism services and ensuring visitor satisfaction.

Transportation ($M = 4.19$) and infrastructure and utilities ($M = 4.06$) were also rated very good, reflecting improvements in road access, transportation services, and basic tourism facilities. These improvements contribute significantly to the accessibility and safety of tourist destinations in the municipality. Promotion activities likewise received a very good rating ($M = 4.03$), indicating effective marketing strategies and information dissemination that increased tourism visibility.

Accommodation obtained the lowest mean score ($M = 3.92$), although still within the "very good" range. This suggests that while lodging facilities are generally adequate, there is still room for improvement in terms of quality, capacity, and sustainability standards, particularly during peak tourism seasons.

Overall, the results indicate that Hinatuan has established a strong foundation for ecotourism development through well-coordinated program implementation and stakeholder participation.

Extent of Ecotourism Development

Ecotourism development in Hinatuan was rated high across all dimensions, demonstrating the positive outcomes of the implemented programs.

The economic dimension registered a mean of 3.97, reflecting increased employment opportunities, livelihood generation, and growth of small tourism-related enterprises. This indicates that ecotourism has become an important contributor to the local economy.

The socio-cultural dimension, with a mean of 4.03, showed that ecotourism enhanced community participation, cultural awareness, and social interaction between residents and visitors. The results suggest that tourism activities have fostered pride in local culture while strengthening social cohesion.

Meanwhile, the environmental dimension obtained a mean of 3.98, indicating improved environmental awareness, waste management practices, and conservation efforts. This finding implies that ecotourism in Hinatuan promotes responsible environmental behavior when properly managed.

Relationship Between Ecotourism Program Implementation and Ecotourism Development

Pearson product–moment correlation analysis revealed a significant positive relationship between the extent of ecotourism program implementation and ecotourism development ($p < .05$). This indicates that higher levels of program implementation are associated with better economic outcomes, stronger socio-cultural development, and improved environmental management.

This result supports Externality Theory, which explains that well-managed economic activities such as ecotourism generate positive spillover effects for host communities. Effective program execution enhances local income, strengthens cultural identity, and promotes environmental protection. The findings also support previous studies emphasizing that strong governance and stakeholder involvement are critical in achieving sustainable tourism development.

Conclusion

The study concludes that ecotourism programs in the Municipality of Hinatuan are effectively implemented and have significantly contributed to local development. The high level of implementation across program components demonstrates the local government's commitment to sustainable tourism development.

Ecotourism has positively influenced the municipality's economic growth, socio-cultural advancement, and environmental conservation. The significant relationship between program implementation and ecotourism development confirms that well-planned and properly managed ecotourism initiatives can serve as a powerful tool for sustainable community development.

Recommendations

Based on the findings of the study, the following recommendations are proposed:

- **Strengthen Human Resource Development:** Continuous training programs should be conducted for tourism workers and stakeholders to further enhance service quality and professionalism.
- **Improve Accommodation Facilities:** The local government should encourage investment in eco-friendly lodging facilities and improve existing accommodations to meet increasing tourist demand.
- **Enhance Environmental Protection Measures:** Stronger enforcement of environmental policies, waste management systems, and conservation programs should be prioritized to ensure long-term sustainability.
- **Intensify Tourism Promotion:** Digital marketing strategies and partnerships with tourism agencies should be strengthened to improve destination visibility.
- **Encourage Community Participation:** Local residents should be actively involved in planning and decision-making processes to ensure inclusive and sustainable ecotourism development.
- **Conduct Future Research:** Future studies may examine long-term impacts of ecotourism, include larger samples, or employ advanced statistical methods to further validate findings.

Acknowledgment

The author sincerely expresses gratitude to the individuals and institutions whose support contributed to the successful completion of this study. Special appreciation is extended to the local government of Hinatuan, Surigao del Sur, the Hinatuan Tourism Council, Hinatuan, Southern College, Commission on Higher Education, her adviser Mrs. Sandy Tiu, barangay officials, and all respondents for their cooperation and support throughout the conduct of this study. The author also acknowledges the guidance and assistance of academic mentors and colleagues who provided insights and encouragement throughout the research process. Above all, heartfelt thanks are given to the author's family for their unwavering support and inspiration.

References

- Alampay, R. B. (2005). Sustainable tourism development in the Philippines: Institutional issues and policy directions. *Journal of Philippine Development*, 32(1), 1–27.
- Alexander, S. E., & Whitehouse, J. L. (2004). Challenges for balancing conservation and development through ecotourism: Insights and implications from two Belizean case studies. In F. D. Pineda & C. A. Brebbia (Eds.), *Sustainable tourism* (pp. 129–142).
- Dulnuan, J. R. (2005). Perceived tourism impacts on indigenous communities: A case study of Sagada in Mountain Province. In R. B. Alampay (Ed.), *Sustainable tourism: Challenges for the Philippines* (pp. 161–203).

- Haas, R. (2003). *Community-based ecotourism and sustainable development*. Routledge.
- Jalani, J. O. (2012). Local people's perception on the impacts and importance of ecotourism in Sabang, Palawan, Philippines. *Journal of Sustainable Tourism*, 20(2), 1–17.
<https://doi.org/10.xxxx/xxxx>
- Lim, C. (2012). Tourism development and economic growth. *Annals of Tourism Research*, 39 (1), 1–23.
- Republic Act No. 9593. (2009). *Tourism Act of 2009*. Official Gazette of the Republic of the Philippines.
- Ross, S., & Wall, G. (1999). Ecotourism: Towards congruence between theory and practice. *Tourism Management*, 20(1), 123–132.
- Tisdell, C. (2003). Economic aspects of ecotourism in wildlife-based tourism and its contribution to nature conservation. *Sri Lankan Journal of Agricultural Economics*, 5(1), 83–95.
- United Nations World Tourism Organization. (2014). *Tourism and local development*. UNWTO.
- Wang, X. (2010). Critical aspects of sustainable development in tourism: Advanced ecotourism education. *Journal of Sustainable Development*, 3(2), 261–263.