

# Community-Based Financial Management Models in Supporting Regenerative Tourism in Samosir Regency

Vina Gabriella Saragih<sup>1</sup>, Prima Yudhistira<sup>2</sup>, Aditiya Pratama Daryana<sup>3</sup>  
<sup>1,2,3</sup> Universitas Negeri Medan

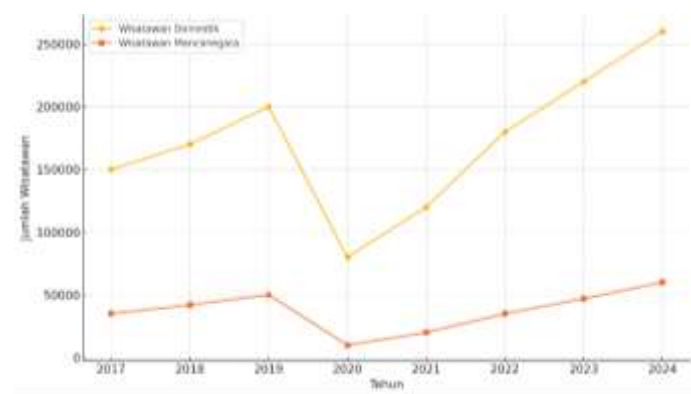
\*E-Mail Correspondence : [vinageby@unimed.ac.id](mailto:vinageby@unimed.ac.id), [primayudhist@unimed.ac.id](mailto:primayudhist@unimed.ac.id), [aditiya@unimed.ac.id](mailto:aditiya@unimed.ac.id)

**Abstract**– This study aims to examine the relationship between a community-based financial management model and the success of regenerative tourism in Samosir Regency, Indonesia. Using a mixed-method approach with a sequential explanatory design, data were collected from 150 respondents and 15 key informants in six tourism villages through surveys, interviews, and document analysis. Quantitative findings indicate that budget participation, financial transparency, and local financial literacy significantly influence the effectiveness of regenerative tourism. Thematic analysis also highlights the role of customary institutions and social trust in strengthening village financial governance. This research produces a contextual logic model that integrates community-based financing with environmental, cultural, and institutional regeneration. These findings contribute to the development of participatory governance theory and provide practical implications for building an inclusive tourism finance system.

**Keywords:** village economy, rural development, institutional governance.

## I. INTRODUCTION

Samosir Regency is a national strategic tourism destination located in the Lake Toba area, North Sumatra. This area not only has extraordinary natural beauty, but is also a center of Batak culture that is still preserved. Along with the designation of Lake Toba as one of the National Strategic Tourism Areas (KSPN) by the Indonesian government, Samosir experiences a surge in visitors every year.



**Figure 1. Development of Tourist Visits to Samosir Regency (2017–2024)**

Source: Samosir Tourism Office Report (processed, 2025)

Based on the graph of tourist visits to Samosir Regency (Lake Toba) from 2017 to 2024, a significant surge in domestic tourists following the COVID-19 pandemic is clearly visible. Despite a decline in 2020, domestic visitor numbers began to recover in 2021, reaching over 250,000 visitors in 2023 and 2024. This increase is in line with the Tourism Recovery Theory, which states that domestic tourism recovers more quickly after a crisis, due to international travel restrictions and tourists' preference for visiting safe and open local destinations.

Furthermore, the Tourism Regeneration Theory supports this phenomenon, suggesting that natural tourism destinations like Lake Toba are recovering through government-driven development policies, such as designating Lake Toba as a National Tourism and Tourism Management Center (KSPN). These policies improve tourism infrastructure and management capacity, attracting more domestic tourists. This trend is also influenced by changing tourist preferences post-pandemic, with many preferring natural destinations that support health protocols and offer open spaces. These data and



theories show that domestic tourism to Lake Toba has experienced a significant surge, making it a leading destination in Indonesia. However, behind this growth, there are fundamental problems that need to be examined more deeply, namely the suboptimal capacity of local institutions, especially in community-based financial management.

This condition creates a dilemma. On the one hand, the growth of tourism has a positive impact on local income and job creation, but on the other hand, without participatory and transparent financial management, economic benefits are often concentrated in the hands of a few parties, thus giving rise to social inequality and ecological damage [1]. In the context of sustainability, the tourism approach is no longer sufficient to be solely conservation-oriented, but must transform towards regenerative tourism, namely an approach that not only maintains but also improves social and environmental conditions through transformative tourism practices [2].

Regenerative tourism emphasizes the active role of communities in creating new values based on local wisdom and endogenous resources [3]. This is where community-based financial management (CBFM) is important, namely a financial management model that is initiated, controlled, and supervised by local communities collectively. CBFM is an important mechanism that enables the equitable redistribution of tourism economic benefits, promotes social inclusion, and increases community resilience to economic shocks [4].

The potential for implementing Community-Based Financial Management (CBFM) in Samosir Regency is enormous, but its implementation still faces challenges related to suboptimal financial governance. Community financial management practices in the Lake Toba tourist area are still limited to informal bookkeeping without a clear transparency system, adequate accountability, or effective social audit mechanisms. Many tourist villages lack regular, publicly accessible financial reports, hampering fair and sustainable management. This inequality in the distribution of economic benefits often benefits only a

few parties, which has the potential to exacerbate social inequality and ecological damage.

The Regenerative Tourism Theory [2] emphasizes the importance of the role of communities in managing tourism sustainably, which is not only oriented towards conservation, but also towards improving social and environmental conditions through more inclusive and participatory management. In this case, CBFM acts as a solution by ensuring that financial management is carried out collectively by local communities, which allows for a fair and sustainable redistribution of economic benefits. CBFM theory [5] emphasizes that this model increases transparency, accountability, and oversight, as well as encouraging social inclusion and strengthening economic resilience to shocks. Effective implementation of CBFM can be the foundation for better governance, which not only supports economic growth but also preserves the social and ecological values that exist in Lake Toba and Samosir.

Furthermore, the literature shows that community financial management can strengthen social structures, increase the sense of ownership of tourism projects, and encourage locally based economic innovation [6]. Samosir's strong geographic and cultural values of mutual cooperation and community participation provide social capital that can be mobilized to strengthen CBFM within a regenerative tourism framework. These values can strengthen CBFM implementation by providing support from local communities who feel directly involved in the management of their tourism resources, while ensuring that the economic benefits of tourism are shared equally by all stakeholders.

However, to date, there has been little research specifically addressing the integration of community financial management models with regenerative tourism concepts in the local Indonesian context, particularly in Samosir. Therefore, this research is relevant and urgently needed to develop a community financial management model that not only manages funds effectively but also aligns with the principles of environmental restoration, cultural preservation, and local community empowerment.



This research also makes an important contribution to the literature on equitable and ecological tourism development, and provides policy input for local governments and tourism actors in building adaptive and accountable community financial governance systems. By prioritizing the principles of inclusivity and collaboration, it is hoped that the developed model can serve as a reference not only for Samosir, but also for similar destinations in Indonesia that are developing tourism for regeneration.

## II. LITERATURE REVIEW

### 2.1 Community-Based Financial Management (CBFM)

Community-Based Financial Management (CBFM) is a financial management approach based on the active participation of local communities. This approach emphasizes the principles of transparency, accountability, and equitable distribution of economic benefits in the context of community-based tourism management [7]. CBFM has the potential to strengthen the social and economic capacity of rural tourism communities, leading to increased independence and sustainability of the local economy [8]. Highlights the importance of community-based social accounting and audit systems in improving financial management accountability in Samosir, which serves as an example of effective CBFM implementation in improving the sustainability of the tourism sector.

### 2.2 Regenerative Tourism

Regenerative tourism is a tourism approach that goes beyond the principles of sustainability by focusing on ecosystem restoration and strengthening the capacity of local communities. This concept positions the community as the main agent of transformation, with the aim of preserving culture, restoring environmental quality, and encouraging sustainable local economic growth [2]. This approach has a broader dimension than sustainable tourism because it not only maintains existing conditions, but also seeks to improve and restore better social and ecological conditions.

Research by [9] emphasizes that the success of regenerative tourism is highly dependent on the existence of a community financial system that supports the five main development capitals: social, financial, natural, human, and cultural.

### 2.3 Integration of CBFM and Regenerative Tourism in Sustainable Tourism Development

The integration between CBFM and regenerative tourism provides an overview of a tourism development model that is not only economically profitable, but also strengthens social structures and ecological resilience. Several studies, such as that conducted by [10], show that tourism villages with established community financial systems are more adaptive to change and better prepared to implement locally based conservation programs. This shows the importance of both concepts in realizing sustainable and community-oriented tourism management.

### 2.4 The Relevance of CBFM and Regenerative Tourism in Samosir Regency

Samosir Regency, as one of the leading tourism destinations in the Lake Toba region, has great potential to implement CBFM in its tourism management. With the existence of traditional institutions, tourism awareness groups (Pokdarwis), BUMDes, and local cooperatives, the implementation of CBFM can increase local economic independence and improve the distribution of economic benefits from tourism [7]. In addition, the concept of regenerative tourism is relevant for Samosir Regency, given the importance of preserving Batak culture, as well as improving and restoring the Lake Toba ecosystem, which is a major tourist attraction.

## III. RESEARCH METHODS

This research uses a mixed methods approach with a sequential explanatory design, namely an approach that combines quantitative and qualitative methods sequentially to obtain a complete understanding of the phenomenon being studied. In the initial stage, a quantitative survey was conducted to identify patterns of relationships between variables in community financial management and the success of regenerative tourism. These quantitative results are then explained in more depth through qualitative

exploration to understand the narrative, social context, and dynamics of actors in the field.

The types of data used in this study include primary data and secondary data. The research locations were purposively selected in six tourist villages in Samosir Regency that have developed community-based tourism activities, have active local economic institutions (BUMDes, cooperatives, Pokdarwis), and demonstrate diversity in the level of community participation. The sampling technique used purposive sampling with 150 respondents for the survey, consisting of community institution administrators, tourism micro-entrepreneurs, traditional leaders, and village officials involved in financial and tourism management.

Quantitative data collection techniques were conducted by distributing questionnaires compiled based on theoretical indicators of each research variable. The independent variables in this study include community financial transparency, participation in financial decision-making, and community financial literacy, while the dependent variable is the success of regenerative tourism implementation, which is measured from three main dimensions: social, economic, and environmental sustainability. Each indicator is measured using a five-point Likert scale to determine the level of agreement or perception of respondents towards a statement. Indicator development refers to the framework developed by [11] on community-based tourism and [12] in participatory social analysis.

Data from the questionnaire were analyzed using multiple linear regression with the help of the latest version of SPSS software, to determine how much influence each independent variable had on the dependent variable. Meanwhile, qualitative data collection techniques were carried out through in-depth interviews and participatory observation. Interviews were designed to explore understanding, perceptions, real-world practices, and challenges in community financial management that were not captured by quantitative instruments. The qualitative data analysis process used the thematic analysis method as developed by [12], which allows researchers to identify patterns of meaning, build themes, and connect categories based on respondents' narratives.

Methodologically, this research seeks to combine quantitative rigor in measuring important variables with qualitative depth in capturing complex and contextual social realities. Thus, the results are expected to produce not only an academically valid conceptual model but also practically relevant and applicable for developing a community financial management model capable of supporting sustainable regenerative tourism in culture-based areas such as Samosir Regency.

## IV. RESULTS AND DISCUSSION

### Result

The results of this study indicate that there is a significant relationship between several elements of community-based financial management and the success of implementing regenerative tourism in Samosir Regency.

**Table 1. Multiple Linear Regression Results**

Independent Variable	Regression Coefficient	Significance (p-value)
Financial Transparency	0.325	0.002
Community Participation	0.411	0.001
Financial Literacy	0.287	0.019
Social Interaction	0.23	0.045
Local Institutions	0.196	0.053

Source: Processed data (2025)

Based on the results of the multiple linear regression analysis presented in Table 1, the community participation variable has the strongest influence with a regression coefficient of 0.411 and a significance value of 0.001. This indicates that the higher the level of community participation in financial decision-making processes such as tourism budget planning, profit sharing, and public donation management, the greater the success of regenerative tourism achieved. This finding strengthens the theory of participatory governance which states that active community involvement in governance strengthens social legitimacy and public accountability [12].

Furthermore, the financial transparency variable also shows a significant influence with a coefficient value of 0.352 and a p-value of 0.002. These findings indicate that regular disclosure of financial information through village deliberation forums, financial information boards, and simple digital



reporting contributes positively to community trust and the sustainability of local tourism programs. This is in line with the findings [9] showing that clarity of financial flows can encourage horizontal accountability and strengthen community support for environmental restoration and cultural preservation programs.

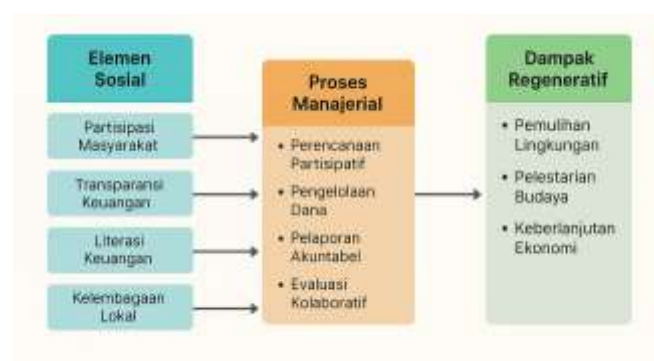
The community financial literacy variable also plays a significant role with a coefficient of 0.287 ( $p = 0.019$ ), indicating that the community's basic understanding of budget management, transaction recording, and activity evaluation has a positive impact on the sustainability of community-based tourism projects. These skills are important to prevent misuse of funds, accelerate the adoption of financial technology, and support results-based management, as recommended by [13].

Meanwhile, the social interaction variable was also significant although relatively smaller ( $B = 0.230$ ;  $p = 0.045$ ). This indicates that social dynamics between community members such as trust, cooperation, and communication between actors support the effectiveness of community finance implementation and strengthen social ties in regenerative development. The concept of social capital proposed by [14] is relevant in this context, where social cohesion is an important foundation in maintaining the continuity of community activities.

The local institutional variable, although considered theoretically important, showed results approaching the significance threshold ( $p = 0.053$ ). While not yet statistically significant, this value indicates a tendency for institutional structures such as Village-Owned Enterprises (BUMDes), customary institutions, and Tourism Awareness Groups (Pokdarwis) to have significant potential to act as facilitators in the community financial system. Limitations in administrative capacity and weak internal regulations may be factors that hinder the optimization of this institutional role. These findings underscore the importance of reformulating institutional governance at the village level to be more responsive to regenerative principles.

## Discussion

In an effort to develop sustainable and inclusive tourism, it is important to adopt a financial management model that can strengthen local capacity and empower local communities. One approach that can support this is CBFM, which prioritizes community participation in financial resource management. In the context of Samosir Regency, which is rich in tourism potential and local culture, implementing this model can help create a system that not only supports economic growth but also maintains social and ecological sustainability.



**Figure 2. Community-Based Financial Management Model for Regenerative Tourism**

This model is designed as a systemic approach to explain how CBFM can directly and indirectly support the success of *regenerative tourism* in the local context of Samosir. The model integrates five main components :

### 4.1 Community Input

Community input is the initial foundation that provides the basic resources for the sustainability of the Community-Based Financial Management system within a regenerative tourism framework. This input includes social, financial, institutional, and local knowledge capital accumulated within the community. Social capital such as trust among residents, mutual cooperation, and customary values create a collaborative climate that enables effective planning and implementation of community-based programs. Furthermore, local financial capital in the form of village funds, community contributions, revenue from tourism businesses, and donor assistance are key resources for financial management.

The existence of local institutions such as Village-Owned Enterprises (BUMDes), Tourism Awareness Groups (Pokdarwis), women's farmer groups, and customary structures provide institutional channels for managing and channeling funds. Finally, community financial literacy plays a crucial role in ensuring that these funds are managed transparently and accountably. If these inputs are strong and mutually supportive, the CBFM system has a solid foundation for sustainable operation.

#### 4.2 Governance Process

The governance process describes the dynamics and mechanisms by which community input is organized and converted into concrete activities and decisions within a community financial management framework. This process encompasses three essential components: participatory planning, transparent implementation, and collaborative evaluation. Participatory planning is conducted through village deliberation forums, intersectoral dialogue, and the involvement of vulnerable groups (women, youth, and the elderly) to prepare budgets and design inclusive regenerative tourism programs.

Transparent implementation includes open fund management, the use of public information boards, and access to budget data through digital or manual channels. Collaborative evaluation is conducted through social audits, reflective discussions, and periodic reporting that invite active community participation. This process reflects the principles of deliberative democracy and good governance, where accountability is established not only vertically (from the government to the people) but also horizontally (between citizens). The success of the governance process is a key determinant of the social legitimacy and efficiency of the community financial system.

#### 4.3 Institutional Output

Institutional output is a direct result of effective governance. In the context of CBFM, these outputs include the formation of a transparent and structured community financial system, the birth of tourism-based regenerative business units, and the formation of a fair economic redistribution mechanism. A healthy community financial system is characterized by clear procedures, neat financial records, and

accessible public reports. Regenerative business units can include ecotourism-themed homestays, educational gardens, cultural studios, and even environmentally friendly local product processing businesses [15]. Economic redistribution mechanisms are reflected in the allocation of funds for scholarships, health programs, conservation, and the preservation of local culture. These outputs serve as indicators that the system is not only functioning administratively but also successfully generating tangible economic and social value. When outputs are equitably felt by the wider community, a sense of ownership in the system is strengthened.

#### 4.4 Regenerative Outcome

Regenerative outcomes describe medium-term changes resulting from the cumulative results of successful governance processes and institutional outputs. These outcomes include increased socio-ecological resilience, community empowerment, and the preservation of local culture. Ecological resilience is demonstrated by reduced environmental degradation, rehabilitation of critical land, and better management of tourism waste. Community empowerment is reflected in the increasing ability of residents to make collective decisions, the increasing role of women and vulnerable groups in the local economy, and the emergence of new community-based leadership [16]. Preservation of local culture occurs when customary values, traditions, and practices are not only maintained, but integrated into the tourism ecosystem in an active and meaningful way. Regenerative outcomes are the main differentiator between regular sustainable tourism and regenerative tourism. It does not just maintain conditions, but rebuilds social and ecological systems that have been damaged, towards conditions that are more resilient and fair.

#### 4.5 Adaptive Feedback Loop

This model is supported by an adaptive feedback loop that ensures that the system remains relevant, responsive, and able to learn from both internal and external dynamics. Feedback occurs in every cycle of planning, implementation, and evaluation. When inefficiencies or inequities are identified, communities and managers can revise policies, adjust



budget allocations, or strengthen the involvement of marginalized groups. This feedback loop also includes a cultural reflection mechanism, where customary values serve as a reference in assessing whether a policy or use of funds is in line with local norms [17]. Feedback comes not only from within the community but also from interactions with external actors such as government, NGOs, academics, and tourists. Thus, this model is a living system that learns, changes, and grows over time. This adaptability is key to addressing long-term challenges such as climate change, labor migration, and digital transformation in the tourism sector.

## V. CONCLUSION AND SUGGESTIONS

This study reveals that the success of regenerative tourism in Samosir Regency is greatly influenced by an effective community-based financial management model. Through active community involvement in financial planning, management, and oversight, economic benefits can be felt evenly, while building a collective commitment to maintaining the sustainability of the local environment and culture. Thus, financial management serves not only as a technical instrument but also as a social connector that strengthens community cohesion and creates a long-term orientation in regenerative development. This study also introduces an impact model that illustrates the relationship between community inputs, managerial processes, institutional outputs, and sustainable socio-environmental outcomes.

Practically, the results of this study provide important guidance for local governments, tourism actors, and community institutions. It is necessary to develop policies that support the institutional capacity of tourist villages, such as the development of accounting systems that are appropriate to the local context and adaptive financial literacy training. This research also emphasizes the importance of designing a more integrative community financial management model that not only regulates the distribution of economic benefits but also ensures resource allocation for environmental restoration, cultural preservation, and strengthening local education. For further research, it is recommended to develop a

community-based digital monitoring system that can evaluate the impact of tourism funds in real time and a more adaptive model that considers factors such as gender, age, and individual capacity within the community.

## VI. REFERENCE

- [1] A. Kamassi, N. H. Abdul Manaf, and A. Omar, "The need of international Islamic standards for medical tourism providers: a Malaysian experience," *J. Islam. Mark.*, vol. 12, no. 2, pp. 110–120, 2021, doi: 10.1108/jima-03-2019-0051.
- [2] I. N. Sudiarta, I. Cahyanto, Y. Indrawati, and K. Negara, "Regenerative rural tourism: uncovering community capitals and vulnerabilities through photovoice in Bali, Indonesia," *Tour. Rev.*, vol. 75, no. 1, pp. 25–40, 2025, doi: 10.1108/TR-01-2025-0026.
- [3] R. Kusumastuti, I. R. Maruf, E. Fatmawati, and ..., "Increasing digital-based human resources competencies for profitable and sustainable MSME managers," *International Journal of ... academia.edu*, 2022, [Online]. Available: <https://www.academia.edu/download/93649328/4624.pdf>.
- [4] C. M. Osazuwa, O. A. Peter, and M. Y. Oghogho, "Role of community-based conservation in Ekiti State," *Am. J. Int. Relations*, vol. 8, no. 1, pp. 45–58, 2024, doi: 10.5281/zenodo.6620390.
- [5] T. Jacob and D. Brockington, "Learning from the other: Benefit sharing lessons for REDD+ implementation based on CBFM experience in Northern Tanzania," *Land use policy*, vol. 99, pp. 1–10, 2020, doi: 10.1016/j.landusepol.2020.104872.
- [6] Y. A. W. Sutomo, C. P. M. Sianipar, S. Hoshino, and ..., "Self-Reliance in Community-Based Rural Tourism: Observing Tourism Villages (Desa Wisata) in Sleman Regency, Indonesia," *Tourism and ... mdpi.com*, 2024, [Online]. Available: <https://www.mdpi.com/2673-5768/5/2/28>.
- [7] T. K. Yuda and H. Suyatna, "Institutionalised social entrepreneurship in the context of Indonesia's decentralized social welfare



- provision,” *J. Soc. Entrep.*, vol. 19, no. 4, pp. 231–245, 2024, doi: 10.1080/19420676.2023.2300657.
- [8] I. Santoso, Y. N. Afifa, R. Astuti, and ..., “Development model on upstream-downstream integration of coffee agroindustry using dynamics modelling approach,” *IOP Conf. Ser. ...*, 2021, doi: 10.1088/1755-1315/733/1/012054.
- [9] R. Kusumastuti, M. Silalahi, and M. T. Sambodo, “Understanding rural context in the social innovation knowledge structure and its sector implementations,” *Manag. Rev. Q.*, vol. 33, no. 2, pp. 151–167, 2023, doi: 10.1007/s11301-022-00288-3.
- [10] D. Hermawan, “Bandung as a creative city in Indonesia: The role of community in developing a creative tourism urban village initiative,” *Int. J. Entrep. Innov.*, vol. 22, no. 3, pp. 112–125, 2024, doi: 10.1108/ijei-02-2024-0005.
- [11] M. T. Sambodo, S. Hidayat, and A. Z. Rahmayanti, “Towards a new approach to community-based rural development: Lessons learned from Indonesia,” *Cogent Soc. Sci.*, vol. 9, no. 1, pp. 1–13, 2023, doi: 10.1080/23311886.2023.2267741.
- [12] L. Liebenberg, A. Jamal, and J. Ikeda, “Extending youth voices in a participatory thematic analysis approach,” *Int. J. Qual. Methods*, vol. 19, pp. 1–15, 2020, doi: 10.1177/1609406920934614.
- [13] R. N. Bhattarai, “Basic concepts and approaches of results-based management,” *J. Popul. Dev.*, vol. 5, no. 1, pp. 15–28, 2020.
- [14] R. D. Putnam, *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ, USA: Princeton University Press, 1993.
- [15] N. A. Hamdani and R. N. Khalifah, “The Influence of Risk Perception on Business Model Innovation,” *Int. J. ...*, 2023, [Online]. Available: <https://journal.rescollacomm.com/index.php/ijbesd/article/view/469>.
- [16] G. A. F. Maulani, A. A. Zahra, N. A. Hamdani, and I. Permana, “The Effect of Business Communication on Employee Performance,” *Proceeding Int. Conf. Business, Econ. Soc. Sci. Humanit.*, vol. 6, pp. 1165–1170, 2023, doi: 10.34010/icobest.v4i.492.
- [17] N. A. Hamdani, R. Muladi, G. Abdul, and F. Maulani, “Digital Marketing Impact on Consumer Decision-Making Process,” vol. 220, no. Gcbme 2021, pp. 153–158, 2022.