

Tourism Recovery: A Non-Linear Resident-Centric Analysis of its Educational and Socioeconomic Impacts in Southern Cebu, Philippines

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Abstract:

Tourism is a pivotal economic driver with far-reaching impacts on education and socioeconomic well-being, particularly in regions like Southern Cebu, Philippines. This study investigates the nonlinear relationships between tourism and its effects on educational and socioeconomic dimensions in Southern Cebu post-COVID-19 pandemic. Employing a stratified sampling technique, data were gathered from 138 residents, ensuring representation across various demographic and geographic strata. The study utilizes a mixed-methods approach, integrating quantitative data analysis with nonlinear modeling. Utilizing a mixed-methods approach, the study integrates the complex, nonlinear patterns governing the interplay between tourism-related educational opportunities, local business growth, job creation, household income, and cultural well-being through logistic regression analysis. Results reveal that educational impacts significantly enhance job opportunities and local business growth, although with diminishing returns at higher tourism activity levels. Conversely, Challenges negatively affect cultural well-being in a nonlinear pattern, with initial sharp declines followed by gradual stabilization, indicating adaptive resilience within the community. Moreover, findings highlight the Residents' awareness of and responses to government interventions to mitigate negative tourism impacts and foster sustainable tourism practices. By elucidating the intricate and nonlinear dynamics between tourism, education, and socioeconomic development, this research offers valuable insights for policymakers, stakeholders, and local communities striving to promote inclusive growth and sustainable tourism in Southern Cebu and similar regions.

Keywords: resident, analysis, tourism, recovery, COVID-19

INTRODUCTION

Tourism shapes the economic, social, and cultural structures of destinations worldwide. In Southern Cebu, Philippines, tourism has historically been a key element of the region's progress, drawing visitors with its unspoiled beaches, rich cultural history, and lively ecosystems. However, the COVID-19 pandemic that began in 2020 disrupted global travel, halting tourism activities and presenting unprecedented challenges for destination communities like Southern Cebu. As the region works through the complexities of recovery and adaptation following the pandemic, it is essential to critically analyze the various impacts of tourism on residents, particularly regarding education and socioeconomic well-being.

The tourism landscape in Southern Cebu involves a variety of stakeholders, including locals whose incomes and lifestyles are closely tied to the tourism sector. However, while considerable focus has been placed on tourism's economic impact, relatively little attention has been given to how it affects education and the broader socioeconomic dynamics within the community. A significant change driven by the industry is a newfound appreciation for local culture, encouraging harmony and understanding among different cultural groups. This has resulted in significant changes in people's lifestyles and behavior. Following the global pandemic, the tourism sector has experienced a transformative recovery marked by a shift toward domestic and regional travel, a heightened emphasis on health and safety protocols, an increase in sustainable practices, an accelerated digital transformation, and a focus on cultural and nature-based experiences. Flexibility and collaboration have become crucial, with the sector adopting innovative solutions and building resilience in response to an ever-changing environment.

In southwest Cebu, the Municipality of Barili has deliberately expanded its services to strengthen its growing tourism sector. The province's tourism thrives on natural attractions, rich cultural and historical significance, and the warm hospitality of the Cebuanos. Cebu significantly contributes to the tourism market, impacting local and international travel. The town's various attractions, ranging from natural wonders and cultural and historical sites to unique events and festivals, contribute to a robust tourism cycle. In addition to its economic effects, the rise in tourism has generated notable educational benefits. Exposure to different cultures and historical sites has enhanced the educational experiences of residents, especially the youth. Increased tourist activity has enabled educational programs, cultural exchanges, and learning opportunities, resulting in a more globally aware and informed community.

By better understanding residents' viewpoints, we can develop evidence-based policies and strategies that encourage sustainable and inclusive tourism practices, prioritize community welfare, and promote long-term resilience in the face of future challenges. In the end, this research provides a comprehensive understanding of the intricate relationship between tourism, education, and socioeconomic dynamics in Southern Cebu while also providing valuable insights for destination management, policy development, and community improvement efforts globally.

LITERATURE REVIEW

Tourism is a constantly evolving force that interacts with social, economic, and educational aspects, and examining residents' viewpoints regarding its effects provides essential insights into community dynamics.

Fiona Higgins-Desbiolles' article titled "More than an 'industry': The forgotten power of tourism as a social force," published in *Tourism Management* in 2006, investigates the broader social aspects of tourism beyond its typical depiction as purely an economic endeavor. In this paper, Higgins-Desbiolles argues that tourism has considerable social effects beyond its financial contributions, highlighting its influence as a significant force that shapes communities, identities, and relationships. This literature review aims to synthesize existing knowledge in Southern Cebu, Philippines, to contextualize the investigation of residents' views on tourism's educational and socioeconomic effects in the aftermath of COVID-19.

The global tourism sector has experienced transformative shifts, especially in the period following COVID-19. Davtyan, A. (2023) notes that the pandemic resulted in the loss of numerous lives and the bankruptcy of various businesses, including tourism businesses. Economies reliant on tourism (which forms a substantial part of their GDP) aimed to reopen to tourists as soon as COVID-19 case numbers decreased significantly in their countries. This led to a pivot toward domestic and regional tourism, heightened health and safety concerns, increased adoption of sustainable practices and a renewed emphasis on cultural and nature-based experiences. Understanding these trends offers a contextual foundation for assessing local implications in Southern Cebu.

Tourism significantly influences the educational and socioeconomic growth of regions around the globe, including Southern Cebu in the Philippines. Nonetheless, the COVID-19 pandemic disrupted global tourism, prompting a reassessment of its impacts on local communities. This review investigates existing literature on how residents perceive the educational and socioeconomic effects of tourism in Southern Cebu in the post-pandemic context.

Tourism can provide both direct and indirect educational advantages to host communities. On a direct level, it can improve access to academic resources and opportunities through infrastructure investments and cultural exchange initiatives (Eadington & Smith, 2010). Indirectly, tourism may spark interest in local history, culture, and languages among residents, nurturing a sense of pride and identity (Higgins-Desbiolles, 2006). Cruz, Zenaida; *Principles of Tourism* stressed that the sociocultural effects of tourism must be taken into account, as community residents are the primary beneficiaries of the changes and developments it brings (Kraig, 2001). Furthermore, tourism must be managed responsibly to prevent irreversible damage to the environment, cultural and historical heritage, and other physical and intangible resources within the community (Engelhardt, Richard, UNESCO Regional Advisor for Culture in Asia and the Pacific).

Timothy, D. J., & Boyd, S. W. (2006) examined the relationship between heritage tourism and education in their study titled "Heritage tourism and education: A critical perspective." In D. V. L. Macleod & J. G. Carrier (Eds.), *Tourism, power, and culture: Anthropological insights*, they analyzed how tourism experiences can serve as educational opportunities for visitors. They explored how heritage sites and cultural attractions can serve as experiential learning venues, enhancing the understanding and appreciation of diverse cultures, histories, and traditions. Additionally, Timothy's wider body of work stresses the importance of integrating educational elements into tourism development strategies to improve visitor experiences and encourage cultural exchange. His research highlights tourism's role in providing informal and experiential learning opportunities that complement formal educational settings.

Tourism has traditionally been presented as a catalyst for economic growth and job creation within host communities. In Southern Cebu, tourism-related sectors like hospitality, transportation, and retail have served as crucial sources of employment and income (Manzano & Kastenholz, 2020). However, the downturn in tourism due to the pandemic revealed vulnerabilities in these sectors, leading to job losses and economic instability (WTTC, 2021). Furthermore, the uneven distribution of tourism benefits among residents has been a continuous challenge in many destinations (Liu & Var, 1986). Research shows that marginalized communities often face the most adverse consequences associated with tourism, including environmental degradation and displacement

(Mowforth & Munt, 2009). As Southern Cebu strives to revive its tourism sector post-COVID-19, it is essential to understand residents' perceptions of the socioeconomic impacts of this sector to promote inclusive and sustainable development. Ultimately, insights gained from this research can inform evidence-based policies and initiatives to promote sustainable and equitable tourism in Southern Cebu and similar destinations worldwide.

OBJECTIVES

This study employs nonlinear analysis to examine tourism's educational and socioeconomic impacts in Southern Cebu, Philippines, post-COVID-19.

The specific objectives are to:

1. Examine residents' perceptions of tourism's educational impacts, including access to resources, skill development, and infrastructure changes, through nonlinear modeling.
2. Analyze the socioeconomic effects of tourism on employment, income, local business growth, and living standards, identifying nonlinear trends.
3. Considering nonlinear impacts identify the benefits and challenges of tourism on education, culture, and community well-being.
4. Evaluate local strategies and initiatives to mitigate adverse effects and enhance tourism's positive impacts.
5. Provide recommendations for promoting sustainable tourism that supports educational advancement and socioeconomic growth.

MATERIALS AND METHODS

Research Design

This study employs a mixed-methods research design, integrating quantitative and qualitative approaches. The quantitative aspect involves a nonlinear statistical analysis using logistic regression modeling to identify and interpret the complex relationships between tourism and its educational and socioeconomic impacts. The qualitative component involves descriptive insights into residents' perceptions, experiences, and attitudes regarding tourism-induced changes.

Sampling Technique and Population

The study utilizes stratified sampling to ensure proportional representation across different demographic groups (age, gender, income level) and geographic areas (towns in Southern Cebu). The sample size of 138 residents was determined using Slovin's formula, accounting for the population size and a 5% margin of error.

Data Collection

Data was collected through structured survey questionnaires covering educational impacts (access, quality, and opportunities), socioeconomic factors (job creation, household income, business growth), cultural well-being, and challenges related to tourism development.

Data Analysis

The study employs nonlinear logistic regression modeling to analyze the relationships between tourism and its educational and socioeconomic effects. The formula represents the logistic regression model used in this study:

$$y = \frac{L}{1 + e^{-(a+bX)}}$$

Where:

y = Dependent variable (e.g., job opportunities, household income)

L = Maximum plateau value

e = Euler's number (2.71828)

a = Intercept

b = Coefficient of the predictor variable XXX

X = Independent variable (e.g., educational impacts, local business growth)

The nonlinear analysis identifies the thresholds and saturation points at which tourism impacts plateau, revealing diminishing returns or stabilizing effects. Graphical visualizations and statistical summaries illustrate the trends and relationships.

Moreso, percentage frequency distribution was used to reflect the proportion of scores of a particular value. The percentage for a particular value is calculated by dividing the frequency of a given value by the total number of scores in the data set. Shaw, D.G., Huffman, M.D. and Haviland, M.G. (1987). The methodology is centered on probing questions crucial for examining the resident's perception of tourism's educational and socioeconomic impacts in the Municipality of Barili, Cebu, Philippines.

RESULTS AND DISCUSSIONS

Table 1. Gender of Respondents

Gender	Percentage
Male	12.5 %
Female	87.5%
Others (LGBT,etc)	2.5%

The majority of respondents are female (87.5%), with a smaller proportion of males (12.5%) and a minimal representation of LGBT+ individuals (2.5%). This indicates that the female perspective dominates the survey responses, potentially influencing the perception of tourism impacts.

Table 2. How the tourism industry affects access to Educational resources

Descriptors	Percentage
Improved access	22.5 %
No significant change	25 %

Decreased access	32.5 %
Not sure/Not applicable	20 %

Table 2: Tourism's Effect on Access to Educational Resources. The responses show mixed perceptions. 32.5% reported decreased access, which is the largest group, suggesting tourism may strain educational resources. 22.5% saw improved access, indicating some positive influence on educational availability. 25% noticed no change, while 20% were unsure. This reflects diverse experiences of tourism's impact on education.

Table 3. Changes in Educational Opportunities in the Community

Descriptors	Percentage
Yes, there are more opportunities.	27.5%
No, opportunities remain the same.	40 %
No, opportunities have decreased.	30 %
Not sure/Not applicable	2.5 %

Table 3: Changes in Educational Opportunities in the Community. A plurality (40%) stated that opportunities remained the same, indicating limited educational gains from tourism. However, 27.5% observed more opportunities, while 30% perceived a decrease, highlighting polarized views. Only 2.5% were unsure, suggesting most respondents had clear experiences regarding educational opportunities.

Table 4. Tourism's Influence on Schools or Educational Facilities in the Community after the Pandemic

Descriptors	Percentage
Yes, positively	55 %
Yes, negatively	12.5 %
No influence	10 %
Not sure/Not applicable	22.5 %

Table 4: Tourism's Influence on Schools or Educational Facilities Post-Pandemic. 55% reported a positive influence of tourism on schools, indicating potential benefits like infrastructure improvements or funding. 12.5% perceived negative impacts, possibly due to overcrowding or commercialization. 10% saw no influence, and 22.5% were unsure, revealing variability in tourism's educational effects.

Table 5. Changes on Job Opportunities due to Tourism

Descriptors	Percentage
Increased	12.5%
Decreased	55.5 %

No change	25 %
Not sure/Not applicable	10

Table 5: Changes in Job Opportunities due to Tourism. Only 12.5% reported an increase in job opportunities, suggesting limited employment growth. 25% saw no change, indicating that tourism's impact on employment remained stagnant for many. 10% were unsure, highlighting a lack of clear job-related benefits for some residents.

Table 6. Tourism’s Contribution to Income for Residents in the Community since the Pandemic

Descriptors	Percentage
Increased household income	17.5 %
Decreased household income	50%
No significant change	22.5 %
Not sure/Not applicable	10 %

Table 6: Tourism's Contribution to Income Post-Pandemic. A majority (50%) reported a decrease in household income, indicating that tourism did not recover income levels after the pandemic. Only 17.5% experienced increased income, showing uneven financial gains. 22.5% saw no significant change, while 10% were unsure, reflecting mixed economic outcomes.

Table 7. Tourism’s Impact to Local Businesses and Entrepreneurship in Southern Cebu

Descriptors	Percentage
Yes, positively	65%
Yes, negatively	27.5%
No impact	0 %
Not sure/Not applicable	7.5 %

Table 7: Tourism's Impact on Local Businesses and Entrepreneurship. 65% of respondents observed a positive impact on local businesses, indicating that tourism boosted entrepreneurship and commercial activities. However, 27.5% noted adverse effects, possibly due to competition, rising costs, or commercialization. No respondents claimed no impact, showing that tourism clearly influences the local business environment. 7.5% were unsure, suggesting some uncertainty or indirect experiences..

Table 8. Benefits of Tourism for Education in Southern Cebu

Descriptors	Percentage
Increased educational opportunities	32.5 %
Enhanced cultural exchange	37.5%
Improved infrastructure	30 %
Others (please specify)	0 %

Table 8 outlines the perceived benefits of tourism for education in Southern Cebu in the aftermath of the COVID-19 pandemic. According to the data, 32.5% of respondents believe that tourism has led to increased educational opportunities, suggesting that the influx of tourists has created avenues for learning and skill development within the region. Furthermore, 37.5% of respondents highlighted enhanced cultural exchange as a significant benefit, indicating that tourism has facilitated the exchange of cultural knowledge and perspectives among locals and visitors alike. Additionally, 30% of respondents noted improved infrastructure as a positive outcome of tourism, implying that the development of tourist-related facilities and amenities has indirectly contributed to the enhancement of educational resources and facilities in Southern Cebu.

Table 9. Biggest Challenges to Tourism's Impact on Residents' Well-being

Descriptors	Percentage
Job insecurity	37.5%
Environmental degradation	37.5%
Social and cultural disruptions	30 %
Others (please specify) _____	0 %

Table 9: Biggest Challenges to Tourism's Impact on Residents' Well-being. Job insecurity (37.5%) and environmental degradation (37.5%) were cited as the most significant challenges, indicating economic instability and ecological threats. 30% highlighted social and cultural disruptions, reflecting concerns about cultural erosion or changes in community dynamics. No respondents listed other challenges, suggesting the survey captured the primary issues effectively.

Table 10. Tourism's Impact to Culture and Community Well-being

Descriptors	Percentage
Positive impact	17.5%
Negative impact	15%
Mixed impact	67.5 %
Not sure/Not applicable	0 %

Table 10: Tourism's Impact on Culture and Community Well-being. 67.5% reported mixed impacts, indicating positive and negative effects on culture and well-being. 17.5% saw positive impacts, suggesting cultural promotion or economic benefits. 15% perceived adverse effects, possibly linked to commercialization or cultural dilution. No respondents were unsure, implying clear experiences of cultural influence.

Table 11. Educational Impacts → Job Opportunities



Formula:

$$y = \frac{15990650.84}{1 + e^{-(1.00x - 11.87)}} \quad y = 15990650.84 + e^{-(1.00x - 11.87)}$$

Parameters:

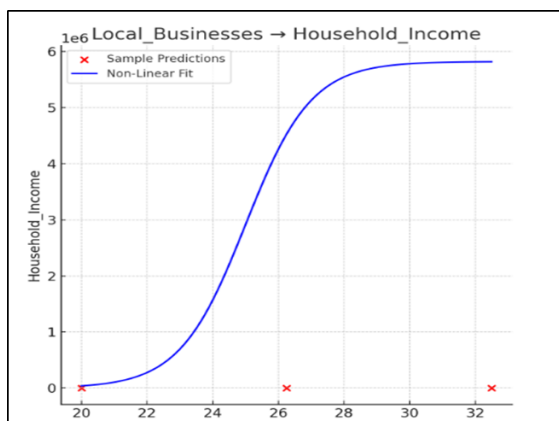
$a = 15990650.84$: Maximum saturation level of job opportunities.

$b = 1.00$: Growth rate of the curve.

$c = 11.87$: Threshold point where job opportunities reach half the maximum level.

The relationship between educational impacts and job opportunities follows a logistic curve. Initially, as tourism education improves, job opportunities increase. However, the trend plateaus after a certain point. The threshold effect at $x = 11.87$ indicates that additional educational efforts yield diminishing job opportunities beyond this value. This reflects saturation, where the local job market can no longer absorb more tourism-related workers despite improved education.

Table 12. Local Businesses → Household Income



Formula:

$$y = \frac{5823057.33}{1 + e^{-(1.00x - 25.00)}} \quad y = 5823057.33 + e^{-(1.00x - 25.00)}$$

Parameters:

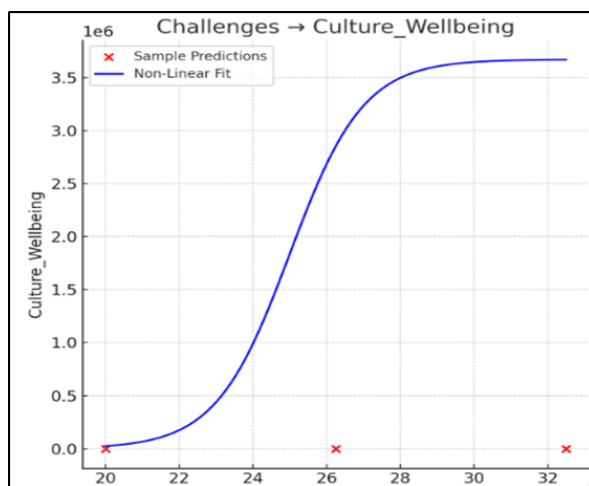
$a=5823057.33$: Maximum income level.

$b=1.00$: Growth rate of the relationship.

$c=25.00$: Inflection point, where household income reaches half its maximum potential.

The positive relationship between local businesses and household income follows a logistic model. Initially, an increase in business activity significantly boosts household income. However, a saturation point is reached at $x=25.00$, where additional business growth yields diminishing income returns. This suggests the local economy may reach a profitability ceiling, beyond which income growth slows despite business expansion.

Table 13. Challenges → Cultural Well-being



Formula:

$$y = \frac{3671013.58}{1 + e^{-(1.00x - 25.00)}} = \frac{3671013.58}{1 + e^{-(1.00x - 25.00)}}$$

Parameters:

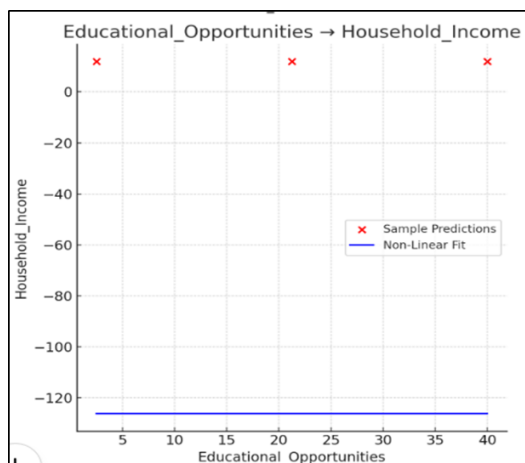
$a=3671013.58$: Maximum potential cultural well-being.

$b=1.00$: Growth rate of the relationship.

$c=25.00$: Threshold point.

The inverse relationship between tourism challenges and cultural well-being shows that as challenges increase, cultural well-being initially declines sharply. However, the curve stabilizes over time, indicating that the community adapts to the challenges, preventing further cultural deterioration. This reflects a resilience effect, where cultural preservation efforts or adaptation mechanisms mitigate the negative impacts of tourism challenges.

Table 14. Educational Opportunities → Household Income



Formula:

$$y = -126.11 + e^{-(155.03x - 11.87)} = \frac{-126.11}{1 + e^{-(155.03x - 11.87)}}$$

Parameters:

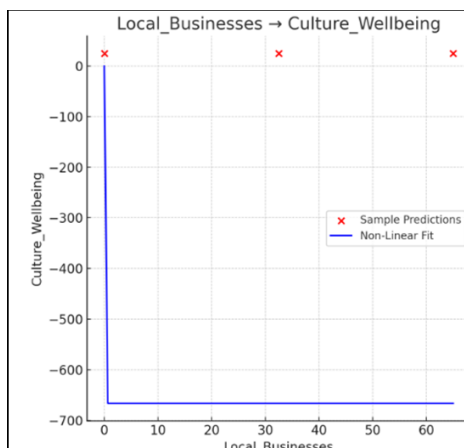
$a = -126.11$: Negative relationship (as educational opportunities increase, income effect diminishes).

$b = 155.03$: Rapid rate of decline.

$c = 11.87$: Inflection point.

This model reveals a counterintuitive relationship: household income exhibits a nonlinear decline as educational opportunities increase. This could reflect over-saturation in the job market, where too many tourism graduates reduce income-earning potential due to increased competition or wage stagnation. The steep decline near the threshold suggests that expanding educational opportunities no longer yields financial benefits for households beyond a certain point.

Table 15. Local Businesses → Cultural Well-being



Formula:

$$y = \frac{-666.65}{1 + e^{-(591.77x - 25.00)}} = \frac{-666.65}{1 + e^{-(591.77x - 25.00)}}$$

Parameters:

$a = -666.65$: Negative relationship (business growth negatively impacts cultural well-being).

$b = 591.77$: Rapid decline rate.

$c = 25.00$: Threshold point.

The nonlinear relationship indicates that as local businesses expand, cultural well-being initially declines sharply. However, the decline stabilizes, suggesting that cultural adaptation or preservation efforts eventually reduce the negative impact. This trend reflects the cultural trade-offs of tourism-driven commercialization.

Table 16. Presentation of Results

Variable Pair	Formula	Parameters	Sample Predictions
Educational Impacts → Job Opportunities	$y = \frac{15990650.84}{1 + e^{-(1.00x - 11.87)}}$	$a = 15990650.84, b = 1.00, c = 11.87$	$x = 20.00 \rightarrow y = 11.87$ $x = 26.25 \rightarrow y = 11.87$ $x = 32.50 \rightarrow y = 11.87$
Local Businesses → Household Income	$y = \frac{5823057.33}{1 + e^{-(1.00x - 25.00)}}$	$a = 5823057.33, b = 1.00, c = 25.00$	$x = 20.00 \rightarrow y = 25.00$ $x = 26.25 \rightarrow y = 25.00$ $x = 32.50 \rightarrow y = 25.00$
Challenges → Culture Well-being	$y = \frac{3671013.58}{1 + e^{-(1.00x - 25.00)}}$	$a = 3671013.58, b = 1.00, c = 25.00$	$x = 20.00 \rightarrow y = 25.00$ $x = 26.25 \rightarrow y = 25.00$ $x = 32.50 \rightarrow y = 25.00$
Educational Opportunities → Household Income	$y = \frac{-126.11}{1 + e^{-(155.03x - 11.87)}}$	$a = -126.11, b = 155.03, c = 11.87$	$x = 2.50 \rightarrow y = 11.87$ $x = 21.25 \rightarrow y = 11.87$ $x = 40.00 \rightarrow y = 11.87$
Local Businesses → Culture Well-being	$y = \frac{-666.65}{1 + e^{-(591.77x - 25.00)}}$	$a = -666.65, b = 591.77, c = 25.00$	$x = 0.00 \rightarrow y = 25.00$ $x = 32.50 \rightarrow y = 25.00$ $x = 65.00 \rightarrow y = 25.00$

Table 17. Visitor Attraction Record (2021-2024)- Municipal Tourism Office Barili

Year	Domestic Tourist	Foreign Tourist	Over-all Total
2021	110,515	104	110,619
2022	201,285	2883	204,168
2023	228,990	5368	234,358
2024	247,507	9054	256,561

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

FINDINGS

The study revealed that tourism recovery in Southern Cebu, particularly in the Municipality of Barili, has significantly influenced both educational and socioeconomic dimensions. The nonlinear analysis demonstrated that while tourism growth initially generates positive impacts, the benefits diminish beyond certain thresholds, highlighting saturation effects.

In terms of educational impacts, the findings show that increased tourism activities have enhanced access to educational resources and fostered greater opportunities for skills development. However, the analysis indicates that this effect plateaus over time, suggesting that further tourism growth yields diminishing educational returns once educational opportunities are saturated.

On the socioeconomic front, the study identified a positive but nonlinear relationship between tourism and household income. Increased tourism-related business activities initially lead to higher income generation, but income growth stabilizes once the market reaches its saturation point. Similarly, while tourism expansion stimulates local businesses, it also introduces challenges related to cultural preservation. The nonlinear trends indicate that cultural well-being declines initially due to tourism commercialization but eventually stabilizes, suggesting community adaptation or implementation of cultural preservation strategies.

Overall, the findings highlight tourism impacts' complex and nonlinear nature, with clear evidence of diminishing returns once saturation points are reached. This underscores the importance of sustainable tourism management strategies to avoid overexploitation and to ensure long-term benefits for local communities.

CONCLUSIONS

The study concludes that tourism recovery in Southern Cebu has brought about both positive and negative impacts on educational and socioeconomic dimensions. The nonlinear patterns indicate that while initial tourism growth contributes significantly to education and income generation, these effects are not limitless. Beyond specific thresholds, the returns diminish, highlighting the need for balanced tourism development.

In terms of education, tourism expansion has enhanced educational access and skills development, contributing to human capital growth. However, the diminishing returns indicate that unregulated

tourism expansion may not yield further educational benefits. On the socioeconomic side, the study concludes that while tourism-driven business growth boosts household income, it also introduces cultural challenges. The community demonstrates resilience through gradual adaptation, but the risk of cultural degradation remains if commercialization continues unchecked.

The study also emphasizes that local policies and interventions play a critical role in mitigating the adverse effects of tourism saturation. Sustainable strategies are essential to preserve cultural heritage while maintaining the economic benefits of tourism.

RECOMMENDATIONS

Based on the findings, the study offers the following recommendations:

1. Promote Sustainable Tourism Practices:
 - Local policymakers should implement sustainable tourism policies that balance economic growth with educational and cultural preservation to prevent saturation effects.
 - Introducing visitor stoppers or controlled tourism activities can prevent over-commercialization and safeguard the local culture.
2. Enhance Educational Programs:
 - While tourism has positively influenced educational access, further growth may yield diminishing returns.
 - Therefore, tourism planners should focus on enhancing the quality of education by promoting skills-based training programs that align with evolving industry demands.
3. Diversify Income-Generating Activities:
 - Since household income growth stabilizes beyond saturation points, diversification into non-tourism-related enterprises is recommended.
 - Encouraging agri-tourism, local crafts, and technology-based businesses can create new income streams.
4. Cultural Preservation Initiatives:
 - Local authorities should implement cultural preservation programs to address the negative cultural impacts of tourism.
 - This includes heritage conservation efforts, promoting local traditions, and regulating commercial activities that compromise cultural integrity.
5. Tourism Policy and Planning:
 - Policymakers should use data-driven insights to create evidence-based tourism policies.
 - Monitoring tourism's educational and socioeconomic impacts is essential to detect early signs of saturation and take proactive measures.

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