

# **Tourism Policy and Governance as Mediator of Community-Based Ecotourism and Sustainable Development in Davao del Norte**

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**Abstract:** This study was conducted to determine the mediating effect of tourism policy and governance on the relationship between community-based ecotourism and sustainable development in Davao del Norte. This study employed a quantitative method and used stratified random sampling in selecting the 214 respondents of the study. Using a hybrid data collection, the survey was distributed face-to-face and online to various tourism-related stakeholders in Davao del Norte relevant to the study. The data was analyzed to determine whether the variables had a statistical relationship. Furthermore, community-based ecotourism (CBET) is strongly linked to and substantially impacts sustainable development, as CBET is the best alternative source of sustainable development. In addition, the study also revealed that CBET is significantly related to tourism policy and governance, emphasizing the system of procedures in place to assist tourism stakeholders. Moreover, tourism policy and governance are also significantly associated with sustainable development, as its frameworks will guide the tourism sector to achieve sustainable development. Finally, using the Sobel test, the mediation analysis yielded a z-value of -0.643197 with a p-value of 0.520096, which is not significant at the 0.05 level, indicating no significant mediation. Therefore, the study reveals that community-based ecotourism does not depend on the province's tourism policy and governance to achieve sustainable development.

**Keywords:** community-based ecotourism, mediation, Philippines, sustainable development, tourism policy and governance, tourism stakeholders

## **I. INTRODUCTION**

One of tourism's highlights and features contributes to the overall development of any locality. The Province of Davao del Norte believes that real success can only come from sustainable tourism development. The cultivation of such an environment takes years to progress (Provincial Government of Davao del Norte, 2017). Hence, Davao del Norte's mission and vision support tourism by making sure that it can shape the best possible environment for its industry to thrive. However, Sarker et al. (2017) stated that sustainable development is a multifaceted term that involves environmental, socio-economic, and political-cultural sustainability. As a result, fulfilling basic needs for the betterment of life necessitates both individual and collective efforts and efforts at all levels of government. The government is the most essential and largest stakeholder in this process. Davao del Norte's sustainable development took longer than anticipated because of political challenges since one administration could choose not to support the previous administration's programs, projects, and activities. Few tourism projects do not thrive because the community's support and views on economic growth and other development are associated with their selected leader.

Schulz (2017) stated that inclusive knowledge for the local communities is the way forward as they build on the entirety of human ingenuity, technical innovation, and the power of information and knowledge. They can accomplish lifelong, positive economic wealth, social incorporation, environmental protection, and progress toward sustainable development. Studying sustainable development helps each of us to take part in maintaining and strengthening our resource base by gradually modifying our ways of creating and using technologies. Various studies have also led to many countries' sustainable development as they implement effective methods that have been studied, tracked, understood, and shared by many researchers. Siegmund (2017) added that sustainable development is context-specific.

So, change is needed in concrete frameworks to draw nearer to the normative idea of sustainability, specifically to move away from non-sustainable development. One of the possible alternatives for the sustainable development and economic growth of indigent rural communities rich in natural resources is community-based ecotourism (CBET). Ecotourism encompasses responsible travel to natural areas, and be familiar with the call to improve community's comfort and enjoyment of life, as well as the environmental conservation (Scheyvens, 1999; The International Ecotourism Society, 2019); as such, CBET is being eyed as an enabler to support the economic development of these peripheral communities (Scheyvens, 1999; Fennell, 2003; Magakgala, 2003; Magome, 2003; The International Ecotourism Society, 2019). Mensah (2017) also expressed that CBET provides a more feasible way of handling these natural resources, offering economic incentives to the communities.

Tourism generates benefits and value across various international, national, and local economies. Hence, it requires tourism initiatives to be visible in a comprehensive policy framework and an overall economic strategy which will only be possible through good governance in tourism (OECD, 2012). Gall and Rodwell (2016) have pointed out that community-based ecotourism is awake for sustainable development. They emphasized that sustainable development aims to efficiently use all available resources to be economically and socially capable of fulfilling cultural diversity while maintaining the region's cultural integrity, essential natural advances, and the existence of a framework. To be regarded effective, Dredge and Jamal (2015) suggested that the government stakeholder must create principles of community-based ecotourism to tourism policy and governance within a series of procedures with the support of tourism stakeholders with authority to handle specific community-related tourism situations. Javier and Elazigue (2020) also added that tourism policy and governance play a significant role in the success of its local tourism industry, specifically sustainable development, just as it has a substantial impact in conserving its resources. The government has the mandate to make their tourism plan which sets out the needs over the medium to longer-term and how they intent to contribute to community well-being.

As such, in response to the 2030 Sustainable Development Goals (SDGs) Agenda of the United Nations World Tourism Organization's (UNWTO), this study exemplifies the initiative of the Province of Davao del Norte on community-based ecotourism towards achieving SDGs 8 and 14 on inclusive and sustainable economic growth and, accordingly, the sustainable use of oceans and marine resources (UNWTO, 2021). In addition, the present data portrays the implementation of sustainable development practices of the Province in contribution not only to the SDGs but also to the overall objective of the Philippine Development Plan (PDP) 2017-2022, to empower Filipinos to have a "*matatag, maginhawa at panatagnabuhay*" (NEDA, 2017).

However, despite the Province's efforts to develop and enhance tourism initiatives, there is still no specific strategy that should form the basis of the implementation of the tourism projects in the years to come due to the absence of data collected from the previous years. Therefore, this present study will fill the research gap concerning integrating community-based ecotourism and sustainable development in Davao del Norte's cities and municipalities. This study will examine the level of outcomes of the tourism policy and governance through assessing the tourism stakeholders' perception of community-based ecotourism and their sentiments on sustainable tourism development in Davao del Norte. Furthermore, this study is urgently needed because the key findings of this quantitative research will help Local Government Units (LGUs) and tourism stakeholders better incorporate future tourism programs, projects, and activities that will boost the tourism sector and economically equip the whole Province and its community.

## **II. METHODOLOGY**

This study employed a quantitative descriptive-correlational research design and causal design. Descriptive research describes and understands individuals and situations in the area (Mertler, 2014). The descriptive study involves identifying on an empirical basis of the characteristics of a particular phenomenon or exploring the relationship between two or more phenomena. The researcher does not start with a hypothesis but usually develops after collecting the data (Nassabi, 2015). Furthermore, correlational research is frequently cross-sectional. It is used to see if changes in one or more variables are connected to changes in another variable (Allen, 2017). As a result, the descriptive-correlational technique describes the variables and the natural correlations between and among them (Harkiolakis, 2017).

On the other hand, causal research is frequently referred to as explanatory research. This design aims to gather statistical proof of a link between the two events. After that, the data will be evaluated to see why the association formed in the first place (Erickson, 2017). As a result, causal design is used to see a cause-and-effect relationship between

community-based ecotourism and sustainable development in Davao del Norte. On the other hand, the third variable illustrates the mediation in this study because there are three variables. When a third variable is included in studying a two-variable system, mediation is one of the numerous possible relationships (Wilson, 2018). Imai, Keele, and Tingley (2014) examined a hypothetical causal chain in which one variable impacts a second variable and affects a third variable. As a result, the causal relationship between community-based ecotourism and sustainable development can be explained by using tourism policy and governance as a mediator. The researcher engaged the participants based on the groups in the natural setting and did not alter variables in this study.

### III. RESULTS

Presented in Table 1 is the descriptive statistics in measuring the level of community-based ecotourism as perceived by the respondents with an overall mean of 4.44 (SD=0.381), with the descriptive equivalent of *very high*. The result of the study revealed that the very high level of community-based ecotourism is gathered from the very high ratings of its ten indicators, to include *involvement and empowerment of the community* ( $\bar{x}=4.46$ , SD=0.474), *establishment of partnerships* ( $\bar{x}=4.31$ , SD=0.550), *gaining standing* ( $\bar{x}=4.37$ , SD=0.586), *improvement of social well-being* ( $\bar{x}=4.57$ , SD=0.427), *fair and transparent benefit-sharing* ( $\bar{x}=4.38$ , SD=0.523), *linkages to local and regional economies* ( $\bar{x}=4.41$ , SD=0.518), *respect for local culture* ( $\bar{x}=4.44$ , SD=0.474), *contribution to heritage conservation* ( $\bar{x}=4.53$ , SD=0.487), *quality of visitor experience* ( $\bar{x}=4.50$ , SD=0.454), and *working towards financial self-sufficiency* ( $\bar{x}=4.38$ , SD=0.535).

Table 1

*Level of community-based ecotourism*

Indicator	Mean	SD	Descriptive Level
involvement and empowerment of the community	4.46	.474	very high
establishment of partnerships	4.31	.550	very high
gaining standing	4.37	.586	very high
improvement of social well-being	4.57	.427	very high
fair and transparent benefit-sharing	4.38	.523	very high
linkages to local and regional economies	4.41	.518	very high
respect for local culture	4.44	.474	very high
contribution to heritage conservation	4.53	.487	very high
quality of visitor experience	4.50	.454	very high
working towards financial self-sufficiency	4.38	.535	very high
Overall	4.44	.381	very high

Overall, the tourism stakeholders appear to believe that Davao del Norte prioritizes and values community-based ecotourism (CBET) projects and activities. A critical step toward achieving a thriving economy, particularly for host communities, as evidenced by the very high level of improvement of social well-being. The respondents also recognized CBET's facet as the most sustainable way to safeguard and value local natural heritages, with a very high contribution to heritage conservation.

The descriptive statistics results on measuring the level of sustainable development perceived by the respondents are presented in Table 2. The overall mean of sustainable development is 4.43 (SD=0.434), described as *very high*. The very high level might be attributable to the respondents' assessments of its four indicators, which all achieved

a very high descriptive equivalent. These are *economic sustainability* ( $\bar{x}=4.44$ ,  $SD=0.469$ ), *socio-cultural sustainability* ( $\bar{x}=4.31$ ,  $SD=0.597$ ), *environmental sustainability* ( $\bar{x}=4.50$ ,  $SD=0.541$ ), and *quality of life satisfaction* ( $\bar{x}=4.46$ ,  $SD=0.493$ ).

Table 2  
*Level of sustainable development*

Indicator	Mean	SD	Descriptive Level
economic sustainability	4.44	.469	very high
socio-cultural sustainability	4.31	.597	very high
environmental sustainability	4.50	.541	very high
quality of life satisfaction	4.46	.493	very high
Overall	4.43	.434	very high

Overall, tourism stakeholders appreciated the Province's and community's collaboration on environmental initiatives to achieve environmental sustainability, which is more visible than the other three indicators. Both the government and the community would wish to preserve the current environment for future generations while also contributing to economic sustainability and quality of life satisfaction through the government sector's programs, projects, and activities.

Table 3 presents the descriptive statistics in measuring the level of tourism policy and governance as perceived by the respondents. Results of the study showed that tourism policy and governance garnered an overall mean score of 4.42 ( $SD=0.631$ ), defined as *very high*. The very high descriptive equivalent reflects the very high levels of its three indicators, including *the position of tourism in development* ( $\bar{x}=4.37$ ,  $SD=0.628$ ), *tourism policy and regulatory framework* ( $\bar{x}=4.42$ ,  $SD=0.494$ ), and *tourism governance and institutional setup* ( $\bar{x}=4.42$ ,  $SD=0.494$ ). The outcome revealed that tourism stakeholders recognized a responsible government for providing much of the infrastructure and resources that the tourism industry relies on and the necessary plans and regulations to support various critical tourism functions to the Province's sustainable development.

Table 3  
*Level of tourism policy and governance*

Indicator	Mean	SD	Descriptive Level
the position of tourism in development policies and programs	4.37	.628	very high
tourism policy and regulatory framework	4.42	.494	very high
tourism governance and institutional setup	4.46	.564	very high
Overall	4.42	.631	very high

Table 4 presents the significance of the relationship between the independent variable (community-based ecotourism), dependent variable (sustainable development), and mediating variable (tourism policy and governance). The association between the variables was determined using bivariate correlation analysis.

The correlation analysis between community-based ecotourism and sustainable development has revealed a positive relationship between variables, as shown in its  $r$ -value of 0.731. Its probability value of 0.000 and significant at 0.05 level rejected the null hypothesis, indicating no significant relationship between community-based ecotourism and sustainable development in Davao del Norte.

Furthermore, the correlation analysis between community-based ecotourism and tourism policy and governance also showed a positive and strong connection with an r-value of 0.688 and significant at 0.05 level with the probability value of 0.000. Hence, the null hypothesis of no significant relationship between the two variables is rejected.

Lastly, the correlation analysis between tourism policy and governance and sustainable development gleaned an r-value of 0.481, significant at 0.05 level with the probability value of 0.000. Thus, this rejects the null hypothesis stating that there is no significant relationship between the two variables.

Table 4  
*Correlation analysis between variables*

Pair	Variables	Correlation Coefficient	p-value	Decision on Ho
IV and DV	community-based ecotourism and sustainable development	0.731	0.000	Reject
IV and MV	community-based ecotourism and tourism policy and governance	0.688	0.000	Reject
MV and DV	tourism policy and governance and sustainable development	0.481	0.000	Reject

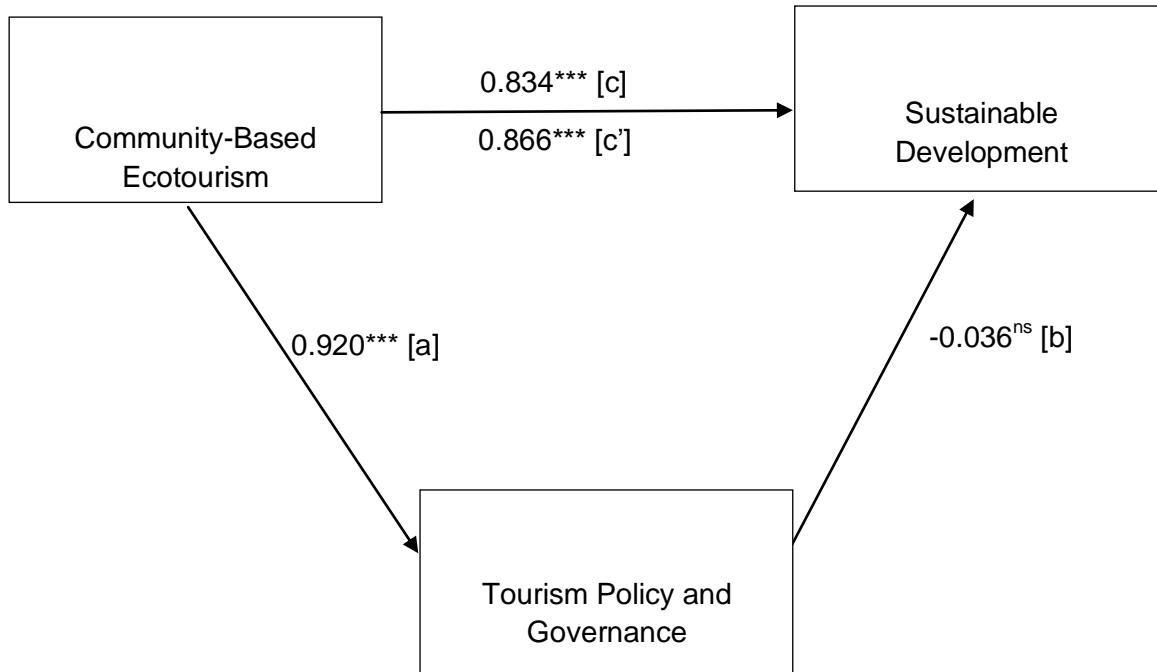
Table 5 presents the regression analysis of the three paths as an input to the MedGraph. As shown in Table 5, four steps were performed to analyze whether the mediator significantly mediates the independent and dependent variables. In Step 1 (path c), the independent variable (IV), community-based ecotourism, is significantly associated with the dependent variable (DV), sustainable development. Step 2 (path a), community-based ecotourism, is significantly associated with the mediating variable (MV), tourism policy and governance. In Step 3 (path b), tourism policy and governance is significantly related to sustainable development.

As noted, paths c, a, and b turned out to be significantly correlated regardless of the positive and negative direction of the association. However, the pattern alone does not show whether tourism policy and governance mediated the relationship between community-based ecotourism and sustainable development. Hence, a mediation analysis through MedGraph with the aid of the Sobel z test was performed to determine if tourism policy and governance significantly mediate community-based ecotourism and sustainable development. If the indirect effect of the independent variable to the dependent variable is less than its direct effect at the end of the mediation analysis or with the mediator included in the regression equation, partial mediation is achieved. On the other hand, full mediation is achieved when the indirect effect of the independent variable to the dependent variable is zero. However, there is no mediation if the indirect effect of the independent variable to the dependent variable is greater than its direct effect. In this study, the indirect effect of community-based ecotourism and sustainable development turned out to be greater than its direct effect, as shown in Step 4 (path c'). Hence, the result revealed no significant mediation.

Table 5  
*Regression analysis of the three paths as input to the medgraph*

Step	Path	B	S.E.	$\beta$
Step 1	c	0.834	0.038	0.745
Step 2	a	0.920	0.067	0.688
Step 3	b	-0.036	0.055	-0.042
Step 4	c'	0.866	0.054	0.731

Furthermore, the result of the mediating analysis is shown in Figure 3. The Sobel test yielded a z-value of -0.643197 with a p-value of 0.520096, which is not significant at 0.05 level. Therefore, the mediation result failed to reject the null hypothesis stating that tourism policy and governance have no mediating effect on the relationship between community-based ecotourism and sustainable development in Davao del Norte. Further, the findings of the effect size computation of the mediation test between the three variables are also shown in the figure.



#### Mediation Analysis

Sobel z -0.643197,  $p=0.520096$

Percentage of the effect that is mediated -3.926859%

Ratio of the indirect to the direct effect -0.037785

**Figure 3. Medigraph Showing the Mediating Effect of Tourism Policy and Governance to the Relationship Between Community-Based Ecotourism and Sustainable Development**

#### IV. DISCUSSION

This chapter presents the comprehensive and accurate representation of the study's findings through discussions of community-based ecotourism, sustainable development, and tourism policy and governance indicators. The connection between the three variables is also discussed, followed by the conclusions and recommendations. The primary purpose is to provide answers and reactions to the study's objectives.

#### Level of Community-Based Ecotourism in Davao del Norte

Tourism growth is critical for the community's economic growth and improving the local government unit (LGU). As a result, community-based ecotourism is being bolstered to make it the most alternative and successful way of valuing Davaonons in rural areas and the Province's natural and cultural assets.

The study shows that the level of Community-Based Ecotourism in Davao del Norte is very high as the tourism stakeholders perceive, which means that they are observed at all times. The results showed that the improvement of social well-being is very high. Community-based ecotourism (CBET) in Davao del Norte excellently encourages and provides improved social well-being, exhibiting better community attachment and satisfying lifestyle requirements. Even though Asuk and Nchor (2018) explained that inadequate local road networks, along with lack of lodging facilities and basic amenities such as electricity and water, could obstruct ecotourism development in the area, Baniya, Shrestha,

and Karn (2018) are affirmative that community-based ecotourism influences various factors which ultimately enhances community's quality of life with the type of employment generation, cultural and social quality, and the provision of health services they acquire from this activity.

CBET is the enhancement of environmentally sensitive activities that preserve natural heritage. The Province was influential in implementing natural resource protection and presentation initiatives. Mensah (2017) supports this conclusion, stating that community-based ecotourism addresses two issues with one initiative: conserving natural heritage and boosting community livelihoods. Although some may view developments as infrastructure rather than natural assets (Cruz, 2014), Mensah argues that CBET can sustainably manage resources through boosting local community engagement simply because natural resources are the primary source of community livelihood.

Quality of visitor experience has the third-highest mean score equivalent to very high. It demonstrated that host communities could present their natural and cultural assets safely and appealingly and provide a memorable guest experience. Ven (2015) stated that most of the engagement of the locals is in tour guiding services. However, this does not imply that they are exceptionally skilled in this area. Nevertheless, Lestari et al. (2019) considered that only the host community could supply other important information about the area that visitors would be interested in. Further, Carter (2014) added that the local community should develop a significant relationship between hosts and guests by ensuring tourists of a genuine community experience through their natural offers to produce outstanding visitor experiences.

In the involvement and empowerment of the community, which is also very high, the respondents reflected that the community had experienced the economic significance of tourism in their lives through the employment opportunities it has provided, according to the study's result. When the local government is supportive, there is a desire to invest in tourism. However, private ownership or management penetration may negatively impact transparency (Strzelecka, Boley, and Strzelecka, 2017). That is why Zuniga (2020) stated that access to funding, unbiased tourist support networks, and community-based group participation could all aid in selecting the most appropriate and large-scale jobs that can be created through CBET.

Another very high indicator is respect for local culture. Despite the modern tourism practices and the emergence of new types of tourism, the tourism stakeholders believed that Davao del Norte achieved to uphold the local culture of Dabaonons. The province continuously conducts cultural mapping per local government unit according to RA 10066 or the National Cultural Heritage Act of 2009, with the aid of the National Commission for Culture and the Arts. Cultural mapping aims to thoroughly understand the province's culture and heritage and safeguard the local communities' ethnicity (Provincial Government of Davao del Norte, 2020).

Linkages to local and regional economies are also important indicators. With its very high descriptive equivalent, the findings showed that tourism programs in the province employ and empower the local community to manufacture goods and services from local and supply regional or even national providers. It demonstrates that local community products are appreciated above imported goods and collaborate with other community-based groups and regional private and public sector organizations to boost regional tourism. The province is proud of its Musa fabric, manufacturing creative tribal fashion made of banana fiber behind jails and native houses. Malbog-Mendoza (2021) highlighted that several dressmakers from the tribal groups and the Muslim community in the province had been offered a livelihood and a chance to be part of the new product development, the creation of fashion items made from banana fabric. Musa fabric is now available not just to regional partners but even internationally. Furthermore, according to Mayer, Habersetzer, and Meili (2016), local and regional linkages can reduce spatial gaps by creating economic opportunities in rural areas. These connections increasingly attract legislative attention since they are considered a way for rural communities to diversify their economies while also ensuring urban areas have access to key resources.

Further, although the province achieved a very high rating regarding fair and transparent benefit-sharing, the government still does not have full authority over private management. That is why 100 percent of equitable benefit sharing is not guaranteed. Cruz (2014) agreed and said that investors are likely to invest in the area due to the influx of tourists. Snyman and Bricker (2019) stated that locals should have an equal opportunity to apply for employment offered by the private management and that this is something the LGU should address and work on.

In addition, working towards financial self-sufficiency resulted in fair and transparent benefit-sharing, which works hand in hand when the community's chance of gaining benefit is employed by private management. Locals are

encouraged to manufacture and sell local products to take advantage of the influx of visitors for financial self-sufficiency, according to Lonn et al. (2018), but with proper management to ensure that resources are not stressed, and supplies are not depleted.

The indicator with the second-lowest mean score of 4.37 is gaining standing. Although very high in descriptive equivalent, the respondents still thought that the initiative must be further recognized at the national level. Through this, the community will be more empowered and be provided with any support needed to sustain the programs and projects of the community. On the study of Garraway (2018), unlike traditional tourism, CBET is typically handled by locals and is more likely to generate direct revenue and benefits to their community. Thus, the need to be recognized and gain widespread attention will provide them with meaningful benefits and valuable opportunities.

Although the ten indicators garnered a very high descriptive equivalent, establishing partnerships is the indicator with the lowest mean value. The last two indicators function in tandem since gaining standing contributes to establishing partnerships with other regional and national players. Stone (2015) stated that due to the extreme involvement of multiple stakeholders in ecotourism programs, projects, and activities, it only brings mixed results in environmental conservation and community livelihoods instead of gaining much stronger partnerships. Hence, a stable relationship will be achieved by emphasizing the role of the stakeholders.

#### **Level of Sustainable Development of Davao del Norte**

Sustainable development is essentially an effort to ensure that subsequent generations will benefit from long-term resources in their pursuit of a higher quality of life. (UNESCO, 2021). According to Acciona (2020), many of humanity's issues can only be handled worldwide and by encouraging sustainable growth in all aspects. These include commitments to economic, socio-cultural, and environmental sustainability and happiness with one's quality of life.

The study's findings revealed that sustainable development measures, such as economic sustainability, socio-cultural sustainability, environmental sustainability, and quality of life satisfaction, are incredibly high, implying that the province's sustainable development practices are always observed. Environmental sustainability got the highest mean among the four measures. Hence, Singgalen, Sasongko, and Wiloso's (2019) study proved that many places have grown due to ecotourism operations. Environmental assessment is increasingly prioritized to align with the demands of the area and the desires of the community, according to Diaconu and Popescu (2016). This is due to the increased social awareness of the community to ecological issues. Proved also by Verma (2019) that a harmonious coexistence of all living beings within an area in a healthy manner is a vital issue to consider.

Another very high indicator is quality-of-life satisfaction. This demonstrates that the community embraced the province's tourism-related laws and ordinances towards tourism growth. As highlighted in Woo, Uysal, and Sirgy's (2016) study, the community will more likely understand the changes and the influx of visitors if it showed a beneficial direct effect to them. And it is also expected that their cooperation will help them improve their overall quality of life.

Economic sustainability is likewise very high. Although Gaviglio et al. (2016) stated that the calculation of economic sustainability appears to be less studied due to its multiple indicators that are unrelated to sustainability, the tourism stakeholders who answered the research questionnaires still believed that the province is committed not only to environmentally sustainable management but also to economic sustainability. According to Spangenberg (2015), if a political will exists to improve a region's financial ability, they will more likely develop a complete plan based on its potential future path studies. The improvement will be noticeable based on the actions of the community's residents.

Furthermore, socio-cultural sustainability gained the lowest mean but remained very high. In the study of Diaconu and Popescu (2016), tourism development sometimes fails to achieve its primary goal, the fulfillment of human needs and their benefits. It contributed to the depletion of local culture and weakened cultural activities for some areas. However, socio-cultural sustainability was still evident in the province's approach to "pursue the sustainable development of Davao del Norte as a serene tourist haven" through the means of being socially inclusive, environmentally sound and respecting and protecting the province's rich culture and heritage as well as natural resources (Provincial Government of Davao del Norte, 2018).

### **Level of Tourism Policy and Governance of Davao del Norte**

According to the UNWTO (2013), several studies have demonstrated the importance of competent tourism policy and governance, which necessitates a consistent and standardized tourism policy framework, a competitive tourism sector, goal-oriented governance, collaborative private sector, along with a strategy for the development of tourism that establishes inter-agency linkages. The tourism policy and governance findings have also garnered very high descriptive equivalents for all indicators. Leading to it is the tourism governance and institutional setup. Tourism stakeholders indicated that tourism can be a different sector or division within local government units. It is supported by various regional and national stakeholders to operate effectively and competently and improve the industry's performance. It helps the OECD's (2012) assertion that frameworks should be in place to monitor trends and implement policies according to multi-stakeholder engagement, including private-public partnerships.

Tourism policy and regulatory framework were ranked second, indicating that the province has clear tourism policy frameworks. To note, the province has already crafted their Provincial Tourism and Culture Development Plan for medium-term projects, which has undertaken multi-stakeholders consultation. The Provincial Tourism Code is being amended together with the approval of the Provincial Tourism Council (Provincial Government of Davao del Norte, 2020). These initiatives are in light of the COVID-19 situation and prepare the province for a better normal state.

The indicator with the lowest mean but remained very high is the position of tourism in development policies and programs. During the pandemic, the tourism sector was hard to note that the travel restrictions had not yet been lifted. Hence, policy formulation is necessary to counter covid-19. That is why domestic tourism, according to the Department of Tourism (2020), will be the driving force behind the tourism industry's resurgence. Moreover, the Provincial Government of Davao del Norte (2020) created a tourism circuit included in the Provincial Tourism and Culture Development Plan to establish a travel bubble in collaboration with other provinces in the Davao Region, allowing visitors to travel safely.

### **Significance of the Relationship between Community-Based Ecotourism, Sustainable Development, and Tourism Policy and Governance**

The study results showed that community-based ecotourism and sustainable development correlated significantly with a 0.000 p-value. It is consistent with Ostrom's (1990) Common-Pool Resources hypothesis, based on Garrett Hardin's "Tragedy of Commons." This theory discusses the link between community-based ecotourism and sustainable development, which includes two-way management of the community's jointly held resources, excludability, and consumption rivalry. CBET is awake for sustainable development, as Gall and Rodwell (2016) mentioned. Sustainable development aims to make the best use of all available resources to meet economic, social, and aesthetic requirements while preserving cultural integrity, important ecological innovations, natural diversity, and the framework for long-term survival.

Furthermore, with a p-value of 0.000, the association between community-based ecotourism and tourism policy and governance was found to be significant. However, to be regarded effective, Dredge and Jamal (2015) suggested that the government must create principles of community-based ecotourism to tourism policy and governance with a system of procedures with the support of tourism stakeholders. Stakeholders with authority to handle specific community-related concerns and policies, plans, or programs must represent a suitable foundation for active and meaningful community participation.

Moreover, tourism policy and governance and sustainable development were also significantly correlated at 0.000 p-values. Given the tourism policy and governance's ability to achieve sustainable development, Siakwah, Musavengane, and Leonard (2019) suggested that tourism policy and governance must fully integrate genuine supremacy and justice into established frameworks that will direct the tourism activities in achieving sustainable development.

### **Mediating Effect of Tourism Policy and Governance to The Relationship Between Community-Based Ecotourism and Sustainable Development**

Even though all variables are associated, the Sobel Z test revealed that tourism policy and governance do not significantly mediate community-based ecotourism and sustainable development, with a p-value of 0.520. This result

supported the null hypothesis stating that there is no mediating effect of tourism policy and governance on the relationship between community-based ecotourism and sustainable development in Davao del Norte.

According to Anjos and Kennell (2016), the inherent complexity of tourism necessitates an efficient planning and management strategy for development based on core sustainability principles. Disparities and issues between national government agencies and local government units frequently allow locals and private interests to dominate their area rather than policies that lead to socially equitable development and consider local citizens' demands (Riensche et al., 2019). As a result, tourism policy, governance, and local cooperation are challenging to manage.

Zhou et al. (2019) examined community satisfaction in different parts of China. They evaluated how the local government interacted in each destination. Their study revealed that local government interaction in the destinations could vary because one community's support differs from another. Still, one thing remains constant: the community's contribution to the sustainable development of their hometown. Thus, this teaches that the community can still pursue sustainability with or without tourism policy and governance assistance. It is further reinforced by the approach developed by Yanes et al. (2019) for evaluating the role of community-based ecotourism in developing countries' sustainable development. Their research presents a framework for assessing tourism policy documents in different countries based on criteria that help and hinder CBET. The findings revealed that tourism policy and governance are weak in creating a path for CBET towards sustainable development.

On the other hand, tourism policy and governance entails strengthening public-private partnerships and should bring together tourists, host communities, enterprises, and cultural organizations to promote sustainable development within and across destinations (Hall, 2017), rather than simply creating tourism policies and governing exclusively with formal tourism institutions and national and local government (Castelnovo, Misuraca, Savoldelli, 2016).

## CONCLUSION

Based on the findings of the study. The following conclusions are drawn:

The level of community-based ecotourism (CBET) is very high. So are its ten indicators; the improvement of social well-being and contribution to heritage conservation have the highest mean scores. As a result, the CBET in Davao del Norte effectively exemplified the ASEAN CBT standards. In addition, the level of sustainable development and its four indicators is very high, with the indicators environmental sustainability and the quality of life satisfaction setting the pace. It demonstrated that Davao del Norte had adopted sustainable development approaches. Furthermore, the extent of tourism policy and governance is also very high, along with its three indicators, highlighting that tourism governance and institutional setup and the tourism policy and regulatory framework indicators got the highest mean. It signifies that Davao del Norte is boosting the province's tourism development.

Moreover, the three variables, community-based ecotourism, sustainable development, and tourism policy and governance, are all correlated. However, in Davao del Norte, tourism policy and governance do not significantly mediate community-based ecotourism and sustainable development. Therefore, the study revealed that community-based ecotourism does not depend on the support of the tourism policy and governance of the province to attain sustainable development. Nonetheless, the result of the study still harmonized to the theory where this study is being anchored, the Tourist Area Life Cycle (TALC) established by Buttler (1980). According to Buttler's definition, tourism is a fast-paced sector that evolves through time. It is not a static process, as many other things are. Hence, with the fixed framework of tourism policy and governance of the province and when tourism changes in several ways, it may or may not be beneficial. Only community-based organizations can efficiently manage their own resources.

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