



Research Paper

## Travel Restrictions in Siargao: An Intervention for the Island's Long-Term Sustainability

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### Abstract

An overwhelming influx of tourists to a destination can create massive pressure. Siargao, a tourism-first island known as "Asia's Best Island" and the "Surfing Capital of the Philippines", is one of the favorite spots and has captivated the hearts of tourists around the world. This study investigated the efficacy of travel restrictions in ensuring the island's long-term sustainability. This descriptive research, using a quantitative approach, used snowball sampling. Data were gathered from 400 respondents from the National Capital Region. The findings revealed that Siargao is popularly known as one of the top attractions in the Philippines, and respondents are aware that excessive tourism may lead to site deterioration. Restrictions could be an effective intervention for achieving island conservation. Stakeholders can make a substantial contribution to conservation efforts by closely observing tourist demand and behavior to incorporate current travel restrictions into strategies and, thereby, prevent traffic and destruction of natural sites when visitation levels return to normal. These restrictions could be an effective environmental conservation intervention; therefore, implementing these travel limitations is an effective way to ensure long-term gains that contribute to Siargao's conservation goals. Considering this additional intervention, a thorough intervention and its impact will greatly help determine the significance of the improvement. Thus, this pioneering study provides supporting statements to help Siargao become the top Philippine destination and ensure the long-term sustainability of tourism.

**Keywords:** *Travel Restrictions; Siargao Island; Natural Destination; Conservation; Intervention; Sustainability*

### INTRODUCTION

Tourism is the priority. With that, the island of Siargao is a priority, as revealed by tourism secretary, Frasco (2023) in a message to the Marcos Administration. Tourism has a variety of impacts, including those related to infrastructure (e.g., changing views and landscape), movement of people and vehicles (e.g., noise, air, and water pollution), and overuse of natural resources. Tourism is usually highly dependent on environmental quality.

In the Philippines, Tourism showed an important role in environmental and socioeconomic development. Despite the benefits and aid the economy gained from the continuous flow of tourists, natural sites bear the consequences of welcoming excessive guests. While laws are implemented to protect natural sites, tourists often leave the area in disarray, with waste and pollution. Conventional, unregulated tourism threatens many natural regions worldwide, like land and water pollution and loss of animals' natural habitats (Stainton, 2021).

Tourism has a variety of impacts, including those related to infrastructure (e.g., changing views and landscape), movement of people and vehicles (e.g., noise, air, and water pollution), and overuse of natural resources. Tourism is usually highly dependent on environmental quality. Rajčević et al. (2023) proved that there is a need to focus on tourism geography, highlighting the different aspects of tourism activity.

Nature is typically a substantial contributor to the pleasure gained from tourism (Tisdell & Wilson, 2012). Tourists are often drawn to visit natural and physiological resources, which strain fragile ecosystems, hastening and exacerbating their deterioration. Balsalobre-Lorente et al. (2019) presented that tourism is intimately linked to environmental impact because it is created

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and consumed concurrently at the destination.

Humans are considered destructive beings, overconsuming and exploiting natural resources, resulting in several negative effects on our environment. Galvani et al. (2016) asserted that environmental impact is increasing in sync with the global human population. The inventiveness with which our species has harnessed natural resources to satisfy our needs is mesmerizing. As we strengthen our control of the environment, the increasing scale of human activity upsets long-established ecological balances.

The overuse of natural resources and cultural commodities such as physical attractions and local customs has resulted in the rapid expansion of tourism demand in recent decades. In many cases, increased tourism demands negatively influenced the quality of life of local inhabitants as well as the tourist experience (Smeral, 2019). When the global health crisis occurred in January 2020, people embraced the new normal. Thus, "travel restrictions" were introduced to the public for the first time to control the spread of the virus. Governments worldwide have started closing borders, especially for countries with a fast-growing number of cases.

It is critical to restore and conserve the islands to maintain their beauty (Allen et al., 2018). In the province of Surigao del Norte, Philippines, Siargao Island was "Asia's Greatest Island" by Condé Nast (CN) Traveler (Tek-Ing 2022). It is a teardrop-shaped island containing a massive mangrove forest and vibrant aquatic life on its borders. Its environmental beauty has led it to attract many tourists all over the world, particularly for its ever-famous water activity, surfing. However, one cannot put its main asset at risk.

Environmental quality has a significant impact on tourism. Tourism has traditionally relied heavily on the preservation of natural resources and the environment. Tourists look for natural wonders and tourist attractions, and they like to draw them in. Tourism and the environment have progressed through four stages since their inception. The Philippine economy is unquestionably benefiting from the steady flow of tourists. However, natural landscapes bear the brunt of overcrowding.

According to Stainton (2021), traditional, unregulated tourism is a threat to many natural locations around the world, resulting in land and water pollution and the loss of wildlife habitats. As Smeral (2019) stated, in many cases, growing tourism demands have had a negative impact on both the quality of life for local residents and the tourist experience. In January 2020, the world was struck by a global health crisis. Accordingly, the public was informed for the first time about "travel restrictions" to help limit the spread of the virus. Countries with a rapidly increasing number of cases have begun to close their borders.

Tourism was considered as one of the important components of innovation and offers opportunities for employment but was hurt badly by the health crisis (Dellova, 2022). Hence, travel restrictions may have had some benefits, including a reduction in visitor traffic, which in turn reduced damage and stress on natural places and the environment. Using the break as an opportunity for destinations to recuperate from exposure to various types of operations, disturbances, and human discomfort can help fully maximize this benefit. Our finite resources are replenished by the pandemic, contrary to common opinion. Decreased human activity has a substantial impact on air and water quality. In this regard, the crisis presents an opportunity to re-evaluate tourism's interactions with society, economics, and nature.

Overall, travel restrictions may lead to a shift in adaptation and innovation not only in the attraction industry but also in the tourism industry. This study explores whether these travel restrictions may be permanently implemented as an additional aid to restore a healthy environment in Siargao. Thus, tourists' perceptions of conservation efforts, appropriate restrictions, and strategies will be necessary to implement for long-term sustainability in tourism.

## LITERATURE REVIEW

Located in the province of Surigao del Norte, Siargao is an island with nine municipalities. Sargo, popularly known as the "Surfing Capital of the Philippines," is credited with popularizing the sport in the Philippines. It also offers cave excursions, rock climbing, and surfing. In addition, it is one of Mindanao's most extraordinary mangrove forests. Long wetlands suggest that commercial seaweed propagation is possible. The Mindanao Current, which flows westward via the Siargao Strait, strongly influences the island. However, due to tourists' increasing interest, the natural sites in Siargao are suffering environmental losses (Island Philippines), which makes them a priority in the Philippines project development in tourism (Frasco, 2023). Frasco also added that the Marcos administration will prioritize Siargao island and that it will thrive with the support of his government.

### Conservation of Siargao Island

The tourism industry on Siargao Island has grown at an extraordinary rate since surfing was introduced in the 1980s. Surfing competitions attracted many spectators, earning the island's international prominence as Asia's surfing center. Furthermore, the International Game Fishing Tournament added to the island's popularity because of the abundance of marine resources within the island. Aside from the annual water sports adventure events, the Siargao Islands' numerous natural attractions, such as extensive lengths of white sand beaches, waterfalls, islands, lagoons, and caverns, have attracted more visitors (Serrona & Camarin, 2022).

Due to the overwhelming influx of tourists, Siargao Island is slowly becoming a victim of overtourism and its adverse effects. According to Mihalic (2020), overnourish is, amongst many other things, the speed and development of tourism supply and demand, the exploitation of tourist destinations' natural resources, the degradation of cultural assets and attractions, and severe social and economic consequences. To combat the impact of overtourism, conversion to sustainable tourism is highly recommended. As stated by the UNWTO (2021), sustainable tourism is defined as tourism that entirely considers its overall economic, social, and environmental impact while addressing the needs of tourists, sectors, the environment, and host communities. As a tourist site starts to gain growth and popularity, managing visitors, assisting its development, and maintaining the well-being of its environment, the local community should go hand in hand to obtain sustainability.

### Travel Restrictions

Siargao is undergoing urban and tourism development; however, there is a lack of long-term plans and a vision for long-term sustainability. With a desire not to become another "cesspool" like Boracay, Siargao has been looking into conservation techniques to help safeguard the Island from massive deterioration. In relation, this study focuses on the possibility of travel restrictions as an additional intervention to conserve this natural resource-dependent destination, Siargao.

Over two years ago, more than half a million arrivals were recorded on Siargao Island, and the majority were local tourists. According to Bacasnot (2018), the island faced multiple challenges from the rapid flow of tourists and vehicles, causing pollution and land deterioration from commercially built infrastructures. Overtourism also caused deterioration of the natural sites of the destination due to the influx of tourist visits.

Rasekhi et al. (2016) asserted that tourism is associated with environmental degradation because of human overuse, resource overuse, and pollution; thus, they found tourism to be liable for its negative influence on nature. Even GhulamRabbany (2013) showed the notion that tourism is heavily reliant on the condition of both natural and man-made environments. The connection between the tourism industry and the environment is complicated. It refers to a broad variety of

actions that can be potentially destructive to the environment. Excessive consumption of environmental assets, as well as cultural commodities such as physical attractions and local customs, arose from the explosive growth of tourism demand in recent decades.

As stated by [Gazta \(2018\)](#), tourism can contribute positively to socioeconomic development; however, it can also be a major source of environmental deterioration. It may also lead to the loss of cultural identity and indigenous beliefs due to its rapid and often unregulated growth. In many situations, the rise of tourism demand has had a negative impact on both the quality of life of the residents and the quality of experience of the visiting tourists ([Smeral, 2019](#)).

[Ignacio \(2019\)](#) noted that as a country continues to gain economic benefits from tourism, tourism-related activities continue to represent a threat to local tourism sites and host communities, particularly in terms of ecological and biophysical challenges.

[Rume and Islam \(2020\)](#) stated that the global disruption caused by COVID-19 has resulted in many environmental and climate effects. Air and water quality have improved in multiple places worldwide because of mobility limitations and a significant slowdown in social and economic activities. Despite the damaging effects of the lockdown on the economy; this may help enhance the condition of the environment. As reported by [Murali \(2021\)](#), while the pandemic hampered economic activities, nature and the environment flourished in the absence of human interference.

[Sarr et al., \(2004\)](#) claimed that environmental systems possess inherent regenerative mechanisms and can develop even in the absence of human intervention. The majority of ecologists say that natural systems have great potential for restoration only if the movements that contribute to their degradation are halted. Excessive consumption of environmental assets, as well as cultural commodities such as physical attractions and local customs, arose from the explosive growth of tourism demand in recent decades. In many situations, the rise of tourism demand has had a negative impact on both the quality of life of the residents and the quality of experience of the visiting tourists ([Smeral, 2019](#)). The increase in tourism strains natural surroundings and resources, such as land, water, and biological diversity. It is impossible to facilitate the travel of hundreds of millions of people to different places without developing facilities to meet their needs. As much as it is about the quality and characteristics of the surroundings to which people travel, the rising growth of tourism is a representation of the changing economic and social conditions in the locations where people live. Tourism markets are not only economically and geographically dynamic but also fluctuate according to consumer preference and fashion, reflecting differences in individual goals, motives, and lifestyles ([Holden, 2016](#)).

Despite the difficulties associated with the lockdown, reports and studies have shown some positive effects of travel restrictions on the environment. As stated by [Arora et al. \(2020\)](#), as all forms of social, economic, industrial, and urbanized activity abruptly ceased, nature reaped the benefits. According to [Eligio-García et al. \(2020\)](#), the pandemic could be viewed as an opportunity to redefine the country's tourism condition and develop sustainable methods to be implemented in highly pressured destinations in the future.

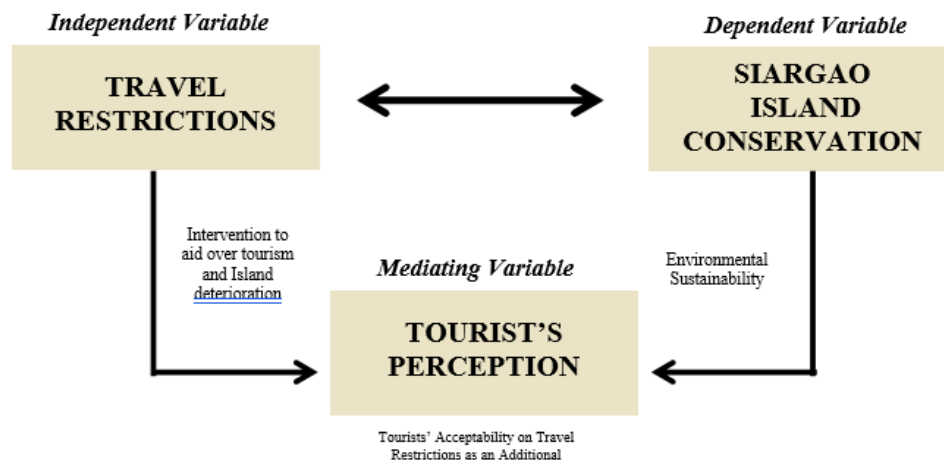
### **Perception of Tourists**

[Rume and Islam \(2020\)](#) affirmed that the observed beneficial impacts of COVID-19 on the ecosystem are only temporary. Thus, it is recommended that tourist attractions consider implementing a periodic closure after a specified period. [Islam et al. \(2020\)](#) stated that governments should evaluate the long-term consequences of travel restrictions and closely monitor tourists' demands and behaviors in a location. For long-term gains, to avoid overcrowding and exploitation of natural resources, a policy restricting the number of tourists allowed in a place should be implemented ([Organization for Economic Co-Operation and Development, 2020](#)).

[Ashford \(2019\)](#) explained that public support for environmental protection can help assure

the effectiveness of government activities and policies targeted at resolving environmental challenges. Local residents who used to endure issues from tourists' negligence may take this opportunity to develop more plans for the conservation of their island. According to [Arora et al. \(2020\)](#), nature benefited as all social, economic, industrial, and urbanized activity unexpectedly came to an end.

Overconsumption, waste problems, and pollution contribute to the depletion of natural resources because of tourism. Tourism places a strain on natural resources, leading to a lack of concern for site preservation. In some instances, tourists have been observed threatening agricultural cultures or scaring animals at agri-tourism farms, as well as causing enormous amounts of rubbish in rural areas, either intentionally or unintentionally. At the same time, it has been claimed that automotive tourism has contributed to the rising contamination of natural areas that were previously inaccessible to this type of tourist ([Frent, 2016](#)).



**Figure 1.** Conceptual Framework

As shown in Figure 1, tourist perception identifies the extent to which the independent variable (IV) affects the dependent variable (DV) and its relationship. Travel restrictions are considered an additional measure to combat overtourism and prevent the depreciation of the island's natural features. Consequently, it determines the possibility of aiding in conservation and environmental sustainability.

The impact of travel restrictions as an additional intervention is the determining factor for the viability of conserving Siargao Island through the perception of tourists. [Lal et al. \(2020\)](#) asserted that shutdowns and restrictions can temporarily aid the recovery of world ecology. If maintained simultaneously at a destination, these constraints may provide a potential conservation approach by reducing tourist traffic and resource consumption through aiding tourism. This was also supported by the study of [Rume and Islam \(2020\)](#), who claimed that the travel restrictions imposed by the pandemic improved air quality in various cities worldwide, reduced GHG emissions, reduced water and noise pollution, and alleviated the strain on tourist attractions. All of which may contribute to the ecological system's conservation.

It is critical to evaluate the amount of tourist traffic as a factor in the deterioration of tourist destinations to prevent them from worsening. If the demand for tourists continues to rise, leading to overtourism, an adequate intervention to ease it should exist. If tourism does not progress more sustainably, it can cause environmental deterioration and may eventually harm ecosystems.

## RESEARCH METHOD

This study used a descriptive research design to better understand and describe the

information from 400 respondents in the National Capital Region, Philippines. [Heath \(2023\)](#) proved that a scenario must initially be explored before addressing a specific problem. The data were collected from tourists aged 18 years and above through snowball sampling. The researchers employed a quantitative method to collect the necessary numerical and statistical data. The instrument used was a survey focused on travel restrictions and their potential as an intervention. The survey questionnaire was validated and tested before being distributed using a Google form on various social media networks.

This study is anchored on the Limits of Acceptable Change (LAC), which is widely regarded as the most effective method for avoiding or managing overtourism ([Goodwin, 2019](#)). According to [McCool et al. \(2007\)](#), the LAC approach is used to establish a limit on the amount of change that an area can tolerate due to a variety of tourist activities and development. This strategy is used to manage areas that have been altered due to human activity. The LAC is concerned with determining how much change is acceptable and developing a strategy to avoid unintended consequences. Given that change is an inevitable consequence of resource use, LAC claims that a framework is necessary to address resource management issues regarding how much change is acceptable. [Ceballos-Lascurain \(1996\)](#) states that a critical component of the LAC process is using a series of distinct but coordinated planning processes to establish quantitative measures, which can be used to support the formulation of an overall management plan. It focuses on establishing measurable limits on human-induced changes to the natural and social environments of protected landscapes and developing appropriate management strategies. Activities require different types of resources (natural, physical, cultural) and social conditions to provide a satisfying experience for the visitor. Constant monitoring of conditions also enables the model to adapt to changing trends, which implies that it is dynamic. Thus, the LAC approach is necessary to manage tourism and conserve Siargao Island.

**FINDINGS AND DISCUSSION**

Despite the negativity that blankets the idea of travel restrictions, especially during the pandemic, travel restrictions have been proven to be an effective tool to open opportunities for the regeneration and conservation of different natural sites. It may also be possible to produce long-term benefits, even when society returns to normal. These findings prompted the researchers to check if the same pattern can be observed on Siargao Island, a well-known tourist destination, and to examine various conservation approaches to prevent site deterioration.

Table 1 reveals that the youngest age group corresponds to the highest number of respondents and is more likely to be interested in traveling. The proportion decreases as the age group increases. As revealed by the Philippine Statistics Authority and Department of Tourism data in 2017, the age group ranging from 15 to 24 years traveled the country the most. Three out of every five Filipinos over 15 took two trips. Only three of ten tourists were visiting relatives or friends, and most of these trips were for pleasure.

**Table 1.** Frequency and Percentage Distribution of Respondents by Age

<b>Year Level</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
18-24 years old	216	54%
25-34 years old	104	26%
35-44 years old	45	11.3%
45-54 years old	35	8.8%
55 years old and above	0	0%
<b>Total</b>	<b>n = 400</b>	<b>100%</b>

Table 2 indicates that females were more dominant and interested in visiting various tourist destinations than males among the study's respondents. According to a survey conducted by the Statista Research Department in 2021, 46.8% of Filipino tourists and travelers are female. [Beyer \(2019\)](#) stated that females are increasingly leading the global travel business. Females earn more, spend more, and have greater influence on tourism. Female purchasing power has never been greater in the travel sector.

**Table 2.** Frequency and Percentage Distribution of Respondents by Gender

<b>Gender</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Male	184	46%
Female	194	48.5%
Others	22	5.5%
<b>Total</b>	<b>n = 400</b>	<b>100%</b>

Table 3 shows that there was also an overwhelming preference for those who lived in the North Metro Manila area (Caloocan, Malabon, Navotas, and Valenzuela). As reported by the Department of Trade and Industry, the country's political, economic, and educational hub is the National Capital Region (NCR), often known as Metropolitan Manila. Although it is the Philippines' smallest region, it is the most densely populated, with over 12 million Filipinos. According to the 2015 national census, the National Capital Region has a population of 12,877,253. It is the Philippines' most populated region, Asia's seventh most populous metropolitan area, and the world's third most populous urban area.

**Table 3.** Frequency and Percentage Distribution of Respondents by Area of Residence

<b>Area of Residence</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
North Metro Manila	183	45.8%
South Metro Manila	73	18.3%
East Metro Manila	92	23%
Central Manila	52	13%
<b>Total</b>	<b>n = 400</b>	<b>100%</b>

Table 4 implies that most of the respondents traveled once every 3 months before the pandemic. As stated by [Mayo et al. \(2021\)](#), before the pandemic, the primary reasons for traveling were leisure, recreation, and work-related. This suggests that during the pre-pandemic, tourists are more likely to travel once every three months, as tourists were free to visit tourist sites at any given time and date without any prior requirements to be permitted mobility inside or outside the country.

**Table 4.** Frequency and Percentage Distribution of Responses at Frequency of Travel in the Pre-Pandemic

<b>Pre-pandemic Travel</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Once a year	113	28.2%
Once every 3 months	129	32.3%
Once every 6 months	99	24.8%
Every month	59	14.7%
<b>Total Responses</b>	<b>n = 400</b>	<b>100%</b>

Table 5 suggests a decrease in travel frequency with the onset of the pandemic. It has a limit of once per year due to travel restrictions. Even after the community quarantine was subsequently loosened, [Hotle et al. \(2020\)](#) asserted that travelers remained reluctant to travel because risk perception greatly influenced the change in travel behavior during the COVID-19 pandemic, which resulted in a significant decline in travel demand.

**Table 5.** Frequency and Percentage Distribution of Responses at Frequency of Travel during the Pandemic

<b>Pandemic Travel</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Once a year	224	56%
Once every 3 months	68	17%
Once every 6 months	94	23.5%
Every month	14	3.5%
<b>Total Responses</b>	<b>n = 400</b>	<b>100%</b>

As presented in Table 6, with a weighted mean of 3.68, the respondents know that "Siargao is one of the top tourist attractions in the Philippines." With a weighted mean of 3.55, the respondents were also aware that excessive tourism may lead to site deterioration. A weighted average of 3.34 indicates that Siargao is active in the conservation and preservation of the island. In conclusion, the grand weighted mean of 3.52 indicates that most respondents are "highly aware," showing their awareness regarding the state of Siargao Island as a tourist attraction. As Governor Matugas said in 2019, the inclusion of Siargao Island in the Department of Tourism's Tourist Program has surely benefited the tourism business in the area, making it a well-known and top tourist destination in the Philippines. [McKee et al. \(2020\)](#) asserted that after witnessing the negative impact of excessive tourists on other popular destinations, Siargao's locals sought to steer the island in a more sustainable direction.

**Table 6.** Frequency, Weighted Means, and Ranks of Responses According to Tourist Awareness

<b>Probing Statements</b>	<b>Frequency (f)</b>				<b>Weighted Mean</b>	<b>Rank</b>
	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>		
Are you aware that the island of Siargao is one of the Philippines' top tourist attractions?	300	79	14	7	3.68	1
Are you aware that being considered a top tourist attraction could lead to overtourism, resulting in site deterioration?	258	111	22	9	3.55	2
Are you aware that Siargao's objective is conservation and protection from harm caused by tourism despite its popularity?	212	130	39	19	3.34	3
<b>TOTAL</b>	<b>n=400</b>	<b>Grand Mean</b>	<b>Weighted</b>	<b>3.52</b>		

Table 7 shows that travel limitations for Siargao Island were viewed as an effective conservation measure by the respondents, with a grand weighted mean of 3.53. However, the large environmental benefits due to travel restrictions had a negative impact. According to [Richter et al.](#)



(2021), several governments that enforced border closures and lockdowns alleviated the negative effects of industrial and human activities on landscapes and ecosystems. Accordingly, Chakraborty and Maity (2020) stated that the pandemic had a positive impact on the ecosystem and may have provided avenues to safeguard natural regions, which supports this idea. The [Organization for Economic Co-Operation and Development \(2020\)](#) argued that the government should assess the long-term effects of travel restrictions and keep a close eye on tourist demand and behavior. The government should enact a policy that limits the number of tourists permitted in a location. It is for long-term profits and to minimize the overpopulation and overexploitation of natural resources.

**Table 7.** Frequency, Weighted Means, and Ranks of Responses According to Tourist Perceptions of Travel

Probing Statements	Frequency (f)				Weighted Mean	Rank
	4	3	2	1		
Do you think travel restrictions could be an effective intervention for achieving island conservation?	233	152	12	3	3.54	1
Do you think that a permanent limited carrying capacity policy is an effective intervention to conserve Siargao?	235	144	18	3	3.53	2
<b>TOTAL</b>	<b>n=400</b>	<b>Grand Mean</b>	<b>Weighted</b>	<b>3.53</b>		

Table 8 concludes that with a weighted mean of 3.58, the respondents highly agreed that "Establishing a daily cap—setting a maximum number of tourists on the island per day." "Tourists are only allowed to travel if pre-booking from the Department of Tourism accredited establishment has been confirmed." was also highly considered by respondents, with a weighted mean of 3.53. It is also recommended that the island would only allow "Tourist-heavy events like beach parties to be strictly limited with a maximum of 50% capacity", with a weighted mean of 3.48, which is defined as "highly agree". The survey found that the respondents viewed travel limits as an intervention that may benefit Siargao Island’s conservation efforts. Because of the belief that tourist traffic has a considerable impact on the condition of natural places, these perceptions may change. [Zambrano-Monserrate et al. \(2020\)](#) claim that limits on tourists have helped natural places to maintain their natural habitat and nature to adapt to human interference.

**Table 8.** Frequency, Weighted Means, and Ranks of Responses According to Tourist Perceptions of Travel Restrictions

Probing Statements	Frequency (f)				Weighted Mean	Rank
	4	3	2	1		
Implementation of a travel ban and closure of tourist destinations.	172	149	64	15	3.20	5
Establishing a daily cap: setting a maximum number of tourists on the island per day.	251	130	17	2	3.58	1
Tourist-heavy events like	216	161	22	1	3.48	3

Probing Statements	Frequency (f)				Weighted Mean	Rank
	4	3	2	1		
beach parties are strictly limited with a maximum of 50% capacity.						
Tourists are only allowed to travel if pre-booking from a DOT-accredited establishment has been confirmed.	240	141	11	8	3.53	2
Destinations will only accept tourists with roundtrip travel arrangements.	194	161	32	13	3.34	4
<b>TOTAL</b>	<b>n=400</b>	<b>Grand Mean</b>	<b>Weighted</b>	<b>3.42</b>		

Table 9 illustrates that most of the respondents rated travel restrictions' impact on "reducing solid waste and enhancing the environmental state of air and water on natural sites" as the most significant, with a weighted mean of 3.60 out of five. With a weighted mean of 3.59, respondents agree that "less travel has contributed to the conservation and preservation of natural places." With a weighted average of 3.58, respondents recommended introducing travel restrictions to help conserve natural places. Because of travel restrictions, the condition of our natural environments has improved, notably in the case of popular tourist attractions. Seventy-five percent of respondents said that travel restrictions would have a substantial impact on a destination's tourism during its implementation. According to Rume and Islam (2020), the environment may flourish naturally through its regenerative mechanisms, with the help of decreased mobility and human involvement. This claim was also supported by different ecologists who presented evidence of quality development in many natural areas around the world.

**Table 9.** Frequency, Weighted Means, and Ranks of Responses According to Tourist Perceptions of Travel's Effects Restrictions on the Conservation of Siargao Island

Probing Statements	Frequency (f)				Weighted Mean	Rank
	4	3	2	1		
Several landscapes and seascapes had a significant change in appearance due to the hiatus of tourism activities.	212	177	9	2	3.50	7
Travel restrictions resulted in less trash on beaches and in parks. Closures in some locations left the ecosystem open to the habitat.	240	151	8	1	3.58	4
Due to travel restrictions, solid waste was lessened, which improved the environmental condition of air and water on natural sites.	250	140	8	2	3.60	1
Travel Restrictions reduced recycling efforts, which worsened problems related to general waste disposal.	191	145	51	13	3.29	9
Face masks, face shields, and added paper requirements have led to an increase in solid waste problems in destinations.	245	130	22	3	3.54	5
Various conservation efforts in natural areas were halted because of travel restrictions.	189	156	41	14	3.30	8
The decrease in tourist traffic during the	240	154	5	1	3.58	3

Probing Statements	Frequency (f)				Weighted Mean	Rank
	4	3	2	1		
implementation of travel restrictions is beneficial for conserving natural sites.						
Travel restrictions aid the recovery of world ecology and open the way for conservation.	227	164	8	1	3.54	5
Reduced traveling caused by travel restrictions was beneficial for conserving resources and preserving natural sites.	248	139	12	1	3.59	2
<b>TOTAL</b>	<b>n=400</b>	<b>Grand</b>	<b>Weighted</b>		<b>3.50</b>	
		<b>Mean</b>				

Table 10 demonstrates that the most effective long-term conservation plan for the island is "increasing ecotourism to support cultural preservation and biodiversity protection," with a weighted mean of 3.71. Similarly, "adopting a pre-booking policy" is followed by "a policy restricting the number of visitors in a place" with a weighted mean of 3.66 and then by "a policy implementing a pre-booking policy" with a weighted mean of 3.58 to prevent an influx of tourists. With a grand weighted mean of 3.57, it has been determined that respondents "strongly agree" that solutions drawn from the idea of travel limitations should be implemented to preserve the long-term protection of Siargao Island.

**Table 10.** Frequency, Weighted Means, and Ranks of Responses According to Tourist Perception Regarding Strategies to Ensure Long-term Conservation of Siargao Island

Probing Statements	Frequency (f)				Weighted Mean	Rank
	4	3	2	1		
The accommodation sector must comply with the pre-booking policy to prevent tourist influx.	272	122	5	1	3.66	2
Tourist spots should be periodically shut down after a certain period.	186	137	66	11	3.25	4
A policy limiting the number of tourists in a destination should be adopted.	247	140	11	2	3.58	3
Ecotourism should be strengthened to promote cultural preservation and biodiversity conservation.	291	104	4	1	3.71	1
<b>TOTAL</b>	<b>n=400</b>	<b>Grand</b>	<b>Weighted</b>		<b>3.55</b>	
		<b>Mean</b>				

According to [Mongeon \(2021\)](#), the long-term environmental impact of travel limitations will be defined by our current activities and dialogs encouraging groups to take advantage of this opportunity. It has been suggested by [Gato et al. \(2022\)](#) that destination management encompasses administration and facilitation through proper policies and actions for the integration of various resources, activities, and stakeholders. It is imperative that the destination be well managed, as it will boost the site's economy and evaluate any damaging elements. [Brooking \(2022\)](#) asserted that ecotourism contributes to preserving and cultivating respect for our natural environment. It encourages travelers to take a more active role in environmental protection and community

development than simply passing through. Islam and Bhuiyan (2018) also stated that ecotourism practices should be strengthened to promote sustainable livelihoods, cultural preservation, and biodiversity conservation to achieve sustainable tourism. Therefore, Travel limitations can help Siargao achieve its conservation goals while simultaneously supporting the growth of more sustainable tourism in the region, as demonstrated by this study.

## CONCLUSIONS

The pandemic hampered commercial operations, yet nature and the environment flourished and made environmental advances without human intervention. This study claims that travel restrictions can be an intervention for island conservation. Based on the results, environmental conditions significantly improved after imposing travel limits because there was less solid waste produced as a result of less tourist traffic. Travel limitations, if strongly imposed, are advantageous for the conservation and preservation of natural regions. This investigation demonstrates that travel limitations have had a favorable impact on the ecosystem, especially in areas that are popular for natural tourism.

Moreover, as tourism has the strong potential to raise public awareness about the need to conserve the environment, travel limits may be a beneficial environmental conservation strategy. It is determined that implementing tactics generated from this notion is an efficient way to achieve long-term results that support the conservation objectives of Siargao Island. To support the conservation and preservation of Siargao Island, ecotourism must be increased. and the pre-booking regulations must be maintained long after the pandemic to stop tourist influx and island damage.

Furthermore, it is shown that stakeholders can make a substantial contribution to conservation efforts by closely observing tourist demand and behavior on the island. Current travel restrictions can be turned into strategies that could prevent traffic and destruction (again) at natural sites when visitation levels return to normal. Buckley (2020) thought that travel restrictions could prompt national and regional tourism agencies to conduct new research on the advantages of travel restrictions. Therefore, the appropriate tourism authorities must take advantage of the opportunity to propose travel limitations as the initial strategy and intervention to counter Siargao Island's long-term sustainability.

## LIMITATION & FURTHER RESEARCH

The key objective of this study is to investigate the effectiveness of travel restrictions as an intervention to conserve the island of Siargao, an area where tourism is highly dependent on natural resources. Furthermore, this study intends to raise awareness of the elements on which mass tourism's negative consequences depend. However, as this study is limited in scope and cannot encompass a broader range of issues, the researchers recommend that aspiring researchers investigate the possibilities of travel limitations toward more sustainable tourism in terms of sustainability's social, economic, and environmental aspects. Future researchers will also be challenged to observe tourist perceptions and those of community residents being studied to better understand the restrictions' implications.

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