

# The Contribution of Special and Alternative Forms of Tourism to the Sustainable Development of Tourist Destinations: Case Studies

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This paper aims to investigate the impact of special and alternative forms of tourism on the sustainable development of tourism destinations, revising the traditional position of tourism development and establishing sustainable development as the only solution to tourism progress of travel destinations. The study includes conceptual approaches to the term tourism, sustainable development and specific and alternative forms of tourism and delves into theoretical approaches that are the bridging of these three central research questions. This is followed by in-depth research through policy analysis of central institutions and regional development stakeholders, as well as further analysis of sustainable development through special and alternative forms of tourism. Key tourism models and theories offer a further understanding of the natural “enemies” and “allies” of sustainable development and how they contribute to its necessity or development. Through a survey and a case study of travel destinations, we conclude the need to couple the term tourism development with sustainable development which is rooted in the healthy coexistence of residents and visitors with respect to the environment, local culture and productive-controlled economic growth.

*Keywords:* tourism development, special and alternative forms of tourism, sustainable development, sustainability, mass tourism, overtourism, travel destinations

## Introduction

Tourism is an industry whose growth has immense potential, and the possibilities offered include vast gains in terms of economic, cultural, expansion and even geopolitical gains. Sustainable development comes as a necessity in the effort to advance tourism in destinations, while preserving the socio-political and environmental heritage that makes destinations worth visiting in the first place. In reaching this conclusion, a state must take careful steps towards managing this huge industry, without giving in to giant visitor numbers and superficial profits. Greece, as an easily accessible destination for visitors from a multitude of countries, and with unique locations painted in the thoughts of many when the thought of summer holidays and beyond comes to mind, has a responsibility to protect itself from tourism models that damage its socio-political and environmental character. But, also to share the wealth that defines it as a travel destination, having as its main concern the hospitality that is deeply rooted in Greek culture, while investing in special and alternative forms of tourism.

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### **The Conceptual Framework of Tourism**

Since ancient times, people have had an innate desire to explore new areas, meet different cultures and gain invaluable experiences. This phenomenon, known as tourism, dates back to the beginning of civilization and continues to this day in various forms. Throughout its development, tourism has been closely intertwined with developments in transport and has been made possible by peaceful conditions, efficient communication systems and organized societies. From ancient times to the Middle Ages, the Renaissance and beyond, tourism has been a timeless human need and desire.

The evolution of transport has been shaped by several key milestones. From the invention of the cart by the Sumerians to the use of papyrus straws as monopods by the Egyptians, innovations have shaped the way we move. The domestication of the horse and its use as a yoke in 2300 BC brought about major changes, while the arrival of the railway in 1840 and the inaugural flight of the Wright brothers in 1903 marked the achievements of later generations. Advances in technology, information and communication have revolutionized global activity and transport. Consequently, tourism has experienced significant growth due to the expansion of human activity worldwide.

Tourism is a complex and multifaceted phenomenon that has been defined in a variety of ways. No single definition is universally accepted, as the motivations of tourists can vary.

#### Definitions of tourism:

- Traditional definition: Tourism is the set of relationships that develop between tourists and the local population.
- Modern definition: Tourism is the set of activities that are undertaken by people who travel and stay in areas outside their usual environment for a period of less than one year, for leisure, business, or other reasons.

#### Characteristics of Tourism:

- Tourism is a global phenomenon that is growing in importance.
- Tourism is becoming increasingly affordable and accessible.
- Tourism has a significant impact on society, the economy, and the environment.

Tourism is a complex and multifaceted phenomenon that has a significant impact on the world. It is important to understand the different definitions and characteristics of tourism in order to study and manage this important sector. The traditional definition of tourism, as proposed by Hunziger and Krapf (1942), focuses on the relationships that develop between tourists and the local population. This definition is based on the idea that tourism is a social phenomenon that involves interaction between two or more groups of people. The modern definition of tourism, as proposed by the UNWTO (1996), broadens the scope to include activities that are undertaken for leisure, business, or other reasons. This definition is based on the idea that tourism is a more general phenomenon that can include a wide range of activities and motivations.

- Tourism is a global phenomenon that is growing in importance. In 2022, the UN World Tourism Organization (UNWTO) estimated that there were over 1.5 billion international tourist arrivals worldwide.
- Tourism is becoming increasingly affordable and accessible. This is due to a number of factors, including the growth of low-cost airlines, the development of online travel agencies, and the increasing number of tourists from developing countries.

- Tourism has a significant impact on society, the economy, and the environment. In the social sphere, tourism can promote cultural exchange and understanding between people from different cultures. In the economic sphere, tourism can create jobs, generate income, and boost economic development. In the environmental sphere, tourism can have both positive and negative impacts on the environment.



Figure 1. Classification of tourism (Baidya, 2023).

### Sustainable Development in Tourism

The concept of sustainable development has evolved over time, from its roots in the field of environmental science to its current prominence in international policy. The idea of sustainable development first emerged in the 1970s, as concerns about the environment grew. The United Nations Conference on the Human Environment in Stockholm in 1972 was a major turning point, as it highlighted the importance of environmental protection for sustainable development.

In 1987, the Brundtland Commission published the report “Our Common Future”, which defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. This definition has been widely adopted by governments, businesses, and civil society organizations.

The United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 was a landmark event in the development of sustainable development. The conference produced a number of important documents, including the Rio Declaration on Environment and Development, Agenda 21, and the Convention on Biological Diversity.

The Johannesburg Summit on Sustainable Development in 2002 built on the momentum of UNCED. The summit adopted the Johannesburg Declaration on Sustainable Development and the Plan of Implementation, which set out a number of priorities for sustainable development in the 21st century.

The 2015 Paris Agreement on climate change is another important milestone in the development of

sustainable development. The agreement commits countries to taking action to reduce greenhouse gas emissions and mitigate the effects of climate change.

Sustainable development is a complex and challenging concept. It requires a balance between economic growth, environmental protection, and social equity. There are a number of principles that can guide the implementation of sustainable development, including:

- Intergenerational equity: Sustainable development should ensure that the needs of future generations are met.
- Sustainable use of natural resources: Natural resources should be used in a way that does not deplete them for future generations.
- Economic growth: Sustainable development should promote economic growth that is equitable and sustainable.
- Social equity: Sustainable development should promote social equity and reduce poverty.
- Participation: Sustainable development should be based on the participation of all stakeholders, including governments, businesses, and civil society.
- The concept of sustainable development is still evolving, and there is no single definition or approach that is universally accepted. However, it is clear that sustainable development is a critical issue for the future of our planet.

Hunter (1997) Identifies four Different Methods for Achieving Sustainable Tourism Development:

***Economic-centered Approach***

This approach prioritizes economic growth over environmental protection. It argues that tourism can create jobs, generate income, and boost economic development. However, this approach has been criticized for its narrow interpretation of sustainable tourism development.

***Product-based Approach***

This approach emphasizes the need to preserve existing tourism products in established destinations. It argues that the use of these products, along with continued tourism growth, can lead to economic prosperity for residents. However, this approach has been criticized for its potential to lead to environmental degradation.

***Environmentally-centered Approach***

This approach emphasizes the need to protect the environment and minimize the negative environmental impacts of tourism. It argues that tourism can damage the environment and that it is important to limit tourism development in order to protect the environment.

***Limited-growth approach***

This approach recognizes the inevitability of the environmental impacts of tourism and prioritizes the preservation of natural ecosystems. It discourages tourism expansion in ecologically sensitive areas or locations that have national or international importance.

Saarinen (2006) identifies three different approaches to sustainable tourism development:

***Resource-based approach***

This approach focuses on the finite nature of tourism resources, such as natural, cultural, human, and infrastructure resources. It argues that these resources need to be protected from potential damage caused by tourism activities. However, this approach has been criticized for its potential to prioritize economic sustainability over environmental sustainability.

***Activity-based approach***

This approach focuses on the need to transform tourism resources to meet the developmental requirements of the tourism industry. It takes into account different levels and limits of tourism activity, diverse tourism profiles, and their environmental impacts. The gradual transformation of resource utilization capabilities serves as a basis for assessing the limits of tourism development. This approach emphasizes the protection of the environment and sustainability in tourism development.

#### ***Community-based approach***

This approach emphasizes the importance of local participation and the involvement of the host community in tourism development. It argues that this approach ensures that tourism development is a collective effort with residents and other community groups actively contributing at every stage. The focus remains on the well-being of the host community, with social well-being as the main driver of sustainable tourism development. However, this approach must be balanced against the different interests and perceptions of the various stakeholders, who may have different notions of acceptable limits for tourism development and environmental change.

Both Hunter (1997) and Saarinen (2006) identify a variety of approaches to sustainable tourism development. These approaches differ in their focus, but they all share the common goal of balancing economic, environmental, and social sustainability.

Tourism indicators are a vital tool for evaluating and managing the impacts of tourism, setting goals, and developing plans. Both international and national organizations are actively seeking indicators for sustainable tourism development beyond traditional measures such as tourist arrivals and overnight stays, beds in tourist accommodations, and tourism expenditures, as well as tourist-origin countries.

In the process of evaluating sustainable tourism development, indicators are widely accepted measurements that appropriately inform decision-making, identify impacts, and measure performance for planning applications. They highlight the relationship between tourism and the ability of the environment to support tourism development. These indicators can be used to assess changes in the structure of tourism, changes in external factors that affect tourism, and the impact of tourism.

Indicators can be divided into quantitative and qualitative. Quantitative indicators can be in the form of raw data (such as the number of tourists per region/year/month), ratios (such as the ratio of foreign tourists to domestic tourists), or expressed as a percentage (such as the rate of change in the number of tourists per year). Qualitative indicators can be categorical (such as pollution levels in coastal areas according to international standards), imperative, or opinion-based expressions (such as tourist satisfaction).

The World Tourism Organization (UNWTO) initially proposed a methodological framework for the use of indicators through Chapter 40 of Agenda 21, and later (UNWTO, 1996) proposed a core of 11 basic Earth Sustainability Indicators. These indicators are:

1. Area protection
2. Environmental pressure
3. Intensity of use
4. Social impact
5. Development control
6. Waste management
7. Planning process
8. Basic ecosystems
9. Consumer satisfaction

10. Local satisfaction

11. Contribution of tourism to the local economy

In addition to the above indicators, the UNWTO also proposed a number of specific indicators for coastal areas, mountain areas, park management, urban environment, cultural areas, and small islands. Specifically, the Local Agenda 21 includes a range of actions that ensure sustainability and sustainability where they are implemented. With regard to travel and tourism, the Local Agenda 21 is an important tool for protecting the natural and built environment, as well as the basic tourism resources (Tsartas, & Stavrinoudis, 2006). In addition, since 1979, the Organization for Economic Co-operation and Development (OECD), in its various environmental texts, has recommended indicators as tools for evaluation and impact assessment (Linster, 2003; OECD, 2004). Finally, Farsari and Prastacos (2001) also proposed a methodological framework using 50 indicators to address the problem of tourism destinations along the Mediterranean coast, which was also accepted by the UNWTO.

In the process of evaluating the sustainable development of tourism destinations, an indicator framework is used that takes into account their unique characteristics and issues, as well as indicators that assess specific issues (e.g., number of indicators per thematic category) and aspects of indicators. The overall assessment is that the indicators that have emerged recently are beneficial tools for the pursuit of sustainable tourism development. These tools are used to shape tourism policy and exchange information between countries on issues such as the environment, the economy, and society.

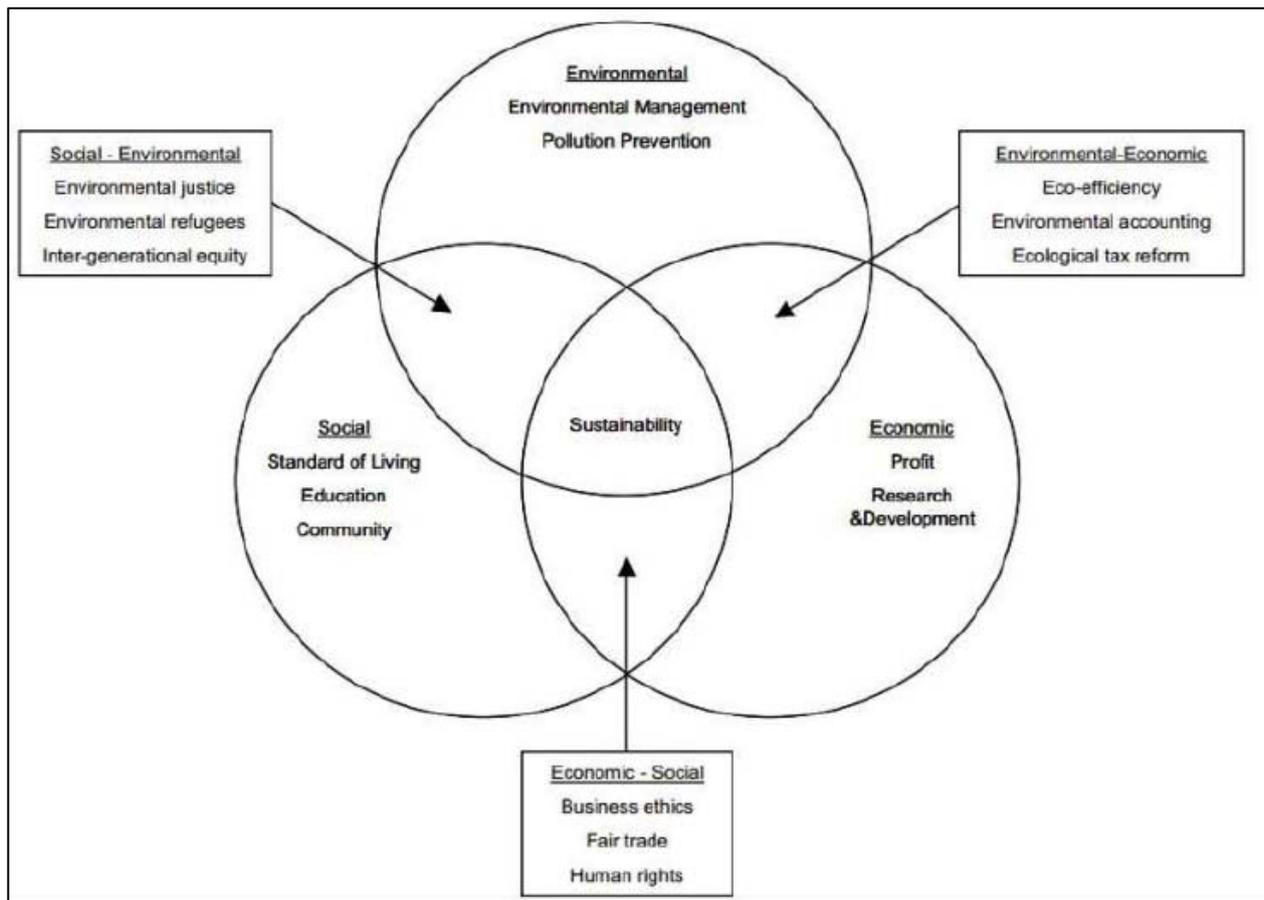


Figure 2. The 3 spheres of sustainability (Rodriguez et al., 2002, p. 8).

The United Nations World Tourism Organization, has proposed six basic goals for sustainable tourism:

1. Maximize the satisfaction of tourists. This goal is focused on ensuring that tourists have a positive experience and that the tourism industry is economically viable.
2. Ensure the optimal use of environmental resources. This goal is focused on protecting the environment and minimizing the environmental impacts of tourism.
3. Respect the socio-cultural heritage of host communities. This goal is focused on preserving the cultural identity of host communities and ensuring that tourism benefits them.
4. Ensure that all stakeholders have access to the socio-economic benefits of tourism. This goal is focused on ensuring that the benefits of tourism are distributed fairly and that everyone in the community benefits from it.
5. Monitor the impacts of tourism. This goal is focused on tracking the environmental and social impacts of tourism so that they can be managed effectively.
6. Ensure that all relevant stakeholders are informed about and involved in the process of sustainable tourism development. This goal is focused on ensuring that everyone who is affected by tourism has a say in its development.

These goals are important because they provide a framework for sustainable tourism development. They help to ensure that tourism is developed in a way that is both beneficial to the environment and to society.

The implementation of sustainable tourism at regional level is demonstrated through the general framework for sustainable tourism in Europe and is presented in the following Table (Karas, & Ferencova, 2012), cited in Janusz and Bajdor (2013). This general framework includes all three pillars of sustainable tourism, emphasizing in the environmental area that biodiversity and the efficient use of non-renewable resources are crucial for the sustainability of the tourism industry.

Table 1

*A General Framework for Sustainable Tourism (Karas, & Ferencova, 2012, Cited in Janusz, & Bajdor, 2013)*

1. Economical capacity—the tourism and economic efficiency of enterprises in the region must be competitive enough to be able to continue their activities, further development, and the achievement of long-term benefits.
2. Local affluence which is the result of maximizing the profits from tourism in accordance with the number of tourists visiting a particular destination.
3. The level of quality of human resource to increase the number of jobs to support the tourism industry. This considers salary, quality of service and the ability to work without discrimination on the basis race, age, and physical condition.
4. Social equity to ensure fair distribution of profits from tourism, which can be used to increase job opportunities and better provision of services for poor citizens.
5. Satisfying tourists regardless of their age, race, or disability.
6. Local control, which is used to increase the involvement of local community in the planning and decision making, management and development of the tourism industry.
7. Level of satisfaction of the local community—to improve the quality of life of local community, including social structure, access to resources and amenities, while avoiding all forms of degradation or exclusion.
8. Cultural wealth—considering the historical, traditional and distinctive local culture.
9. Physical integration to enhance the physical attractiveness of the region, both urban and rural, and avoidance of physical or visual degradation of the environment.
10. Biodiversity—to preserve natural resources and the landscape while minimizing detrimental action.
11. Resource efficiency—optimizing and minimizing the use of non-renewable resources.
12. Clean environment—reduce emissions of pollutants to nature: air, water, soil and reduce the waste generated by tourists.

A comprehensive approach to overcome the challenges of sustainable tourism is needed that includes the

following elements:

- Government policies and regulations that support sustainable tourism: Governments can play a key role in promoting sustainable tourism through policies and regulations that encourage environmental protection, social equity, and economic development.
- Public-private partnerships: Public-private partnerships can be effective in mobilizing resources and implementing sustainable tourism projects.
- Education and awareness-raising: Education and awareness-raising are essential to ensure that all stakeholders understand the importance of sustainable tourism.

### **Alternative Forms of Tourism and Sustainable Development**

Alternative tourism is a term used to describe any form of tourism that is different from the mainstream, mass tourism industry. It is a broad term that encompasses a wide range of activities and travel experiences. There is no single, universally accepted definition of alternative tourism. However, it is generally characterized by the following features:

- It is focused on smaller, more intimate experiences.
- It is more sustainable and environmentally friendly.
- It is more culturally sensitive and respectful of local communities.
- It often involves activities that are less common or well-known.

Some examples of alternative tourism include:

- Volunteer tourism: Travelers volunteer their time to help local communities in need.
- Cultural tourism: Travelers seek out opportunities to learn about and experience local cultures.
- Adventure tourism: Travelers participate in challenging or exciting activities, such as hiking, biking, or whitewater rafting.
- Nature-based tourism: Travelers focus on spending time in nature, such as hiking, camping, or bird watching.

Alternative tourism is growing in popularity as travelers seek out more authentic and sustainable experiences.

The Greek government's tourism policy from the early start of the 1950s to late 2000s focused primarily on the country's natural and cultural resources, rather than on the tourism industry as a whole. This led to a number of problems, including:

- a. A focus on mass tourism, which led to environmental degradation and a lack of diversity in the tourism product.
- b. A reliance on foreign tourists, which made the industry vulnerable to economic fluctuations.
- c. An imbalance in the distribution of tourism development, with most activity concentrated in coastal areas.
- d. A lack of investment in education and research in the tourism sector.

In the 1980s, the Greek government began to focus more on sustainable tourism development. This included efforts to promote alternative tourism products, such as cultural tourism and ecotourism. There are a number of factors that have contributed to the growth of alternative tourism in Greece. One factor is the increasing demand for authentic experiences from tourists. Another factor is the growing awareness of environmental issues, which has led to a demand for more sustainable forms of tourism.

Alternative tourism is helping to diversify the Greek tourism industry and spread economic benefits to a wider range of regions. It is also helping to protect the environment and preserve local cultures. Alternative

tourism as a form of tourism is often less mass-oriented and more focused on experiencing local culture and nature. It is considered to be a key factor in sustainable tourism development, especially at the local and regional level.

There are three main ways in which alternative tourism is linked to sustainability:

1. Environmental protection: Alternative tourism activities often involve low-impact, sustainable practices that help to protect the environment. For example, ecotourism activities focus on protecting natural resources, while agritourism activities can help to preserve agricultural landscapes.

2. Cultural preservation: Alternative tourism can help to preserve local culture and traditions. For example, cultural tourism activities can help to promote traditional arts and crafts, while community-based tourism can help to support local businesses and organizations.

3. Local economic development: Alternative tourism can help to create jobs and stimulate economic activity in local communities. For example, local businesses can benefit from providing goods and services to tourists, while local residents can find employment in the tourism industry.

Proving that alternative tourism is a valuable tool for promoting sustainable tourism development. By focusing on local culture and nature, alternative tourism can help to protect the environment, preserve local culture, and create jobs and economic opportunities in local communities.

## **Forms and Theories of Tourism Affecting Sustainable Tourism Development**

### **Mass Tourism and Overtourism**

Mass tourism is a type of tourism that is characterized by large numbers of tourists visiting a particular destination. It is often associated with negative impacts, such as overcrowding, environmental degradation, and cultural homogenization. Mass tourism has been a major force in the global economy for decades. It has helped to generate billions of dollars in revenue and create millions of jobs. Though, mass tourism can have a number of negative impacts, including:

- Overcrowding: This can lead to congestion, noise, and pollution.
- Environmental degradation: Mass tourism can put a strain on natural resources, such as water and air quality.
- Cultural homogenization: Mass tourism can lead to the loss of local culture and traditions.

Overtourism is a term used to describe a situation in which a destination is experiencing too many tourists at a point that exceeds mass tourism, leading to additional negative impacts. Overtourism can be caused by a number of factors, such as the popularity of a destination, the availability of affordable travel, and the promotion of mass tourism by tourism authorities. Overtourism is a growing problem in many parts of the world. It is causing a number of problems for destinations, such as:

- Damage to infrastructure: Overcrowding can lead to damage to roads, bridges, and other infrastructure.
- Increased crime: Overtourism can lead to an increase in crime, such as theft and assault.
- Social tension: Overtourism can lead to social tension between tourists and locals.

### **Slow Tourism**

Slow tourism is a type of tourism that focuses on quality experiences over quantity. It is characterized by a slower pace, a greater emphasis on local culture and tradition, and a commitment to sustainability. Slow tourists

are typically educated and interested in different cultures and traditions. They prefer to travel alone and experience more authentic experiences.

The positive impacts of slow tourism include:

- Reduced environmental impact, such as pollution and overexploitation of natural resources.
- Promotion of local culture and tradition.
- Job creation and economic development in local communities.

The negative impacts of slow tourism are limited and include:

- The need for specialized accommodations and activities, which can be expensive.
- The potential for gentrification, which is the displacement of local residents due to rising prices.

Overall, slow tourism is a sustainable and viable form of tourism that can offer multiple benefits to destinations, tourists, and local communities.

### **Imperialism in Tourism**

The concept of tourism imperialism is based on the ability of a country to develop economically and send tourists, which can also extend and impose their economic and political influence on less developed countries that are also able to receive tourists. In this context, the host community should have cultural and natural characteristics that are in line with the desires of the dominant visitors. As a result, larger metropolitan areas have the power to control the tourism development of less developed countries, in collaboration with the networks and elites of the destination, negatively affecting local culture and distorting the natural and built environment.

From this perspective, tourism is considered a product of capitalism. The commodification of tourism is the ultimate logic of capitalist development. According to Britton (1980), the geographical concepts of “core” and “periphery” are used to differentiate tourism demand between developed and developing countries.

The study’s findings show that international tourist travel originates from central urban areas in the sending areas and is directed to central areas in the tourism-receiving countries. Tourists visiting less developed countries/areas typically reside in urban areas that offer many amenities. They are often transported to a closed resort (club), designed by international tour operators. This also demonstrates the control that major tourism companies and organizations from the tourists’ home countries exert over different destinations. All of this is achieved through contractual agreements that are part of tour packages, which include accommodation, food, air travel, and recreation.

Britton argues that these development patterns result in the control of less developed countries, but provide them with false benefits. In this context, imperialism can also be seen as a form of tourism, which is a point of reference and interpretation of the development of the entire system as well as the interaction between metropolitan, urban areas, and islands.

### **Life Cycle of Tourism Destinations**

The tourism life cycle is a theoretical model that describes the stages of development that a tourist destination goes through over time. It is based on the idea that all tourist destinations follow a similar path, from initial discovery to eventual decline. The Butler model, which is the most widely accepted tourism life cycle model, identifies six stages:

1. **Exploration:** In this early stage, the destination is only known to a small number of people. Tourism is often low-key and focused on exploring the natural and cultural attractions of the area.

2. **Involvement:** The number of tourists begins to increase, and the destination starts to develop basic tourism

infrastructure.

3. **Development:** Tourism grows rapidly, and the destination becomes increasingly commercialized. The local culture and environment may begin to suffer as a result.

4. **Consolidation:** Tourism reaches its peak, and the destination may become overcrowded and overdeveloped.

5. **Stagnation:** Tourism starts to decline, and the destination may need to be revitalized in order to stay competitive.

6. **Decline:** Tourism disappears altogether, and the destination returns to its pre-tourism state.

The tourism life cycle model is useful for understanding the challenges and opportunities facing tourist destinations. By understanding the different stages of the cycle, destinations can take steps to manage tourism in a sustainable way and avoid negative impacts. For that reason, tourist destination life cycle is another useful theoretical and empirical approach that facilitates the investigation of product and market changes. It helps to identify potential problems at each stage and to select solutions. The product life cycle depends on many internal and external factors, such as technology, environment (social, economic, demographic), intensity of competition, etc. In order to avoid the decline of a destination and to maintain its durability and competitiveness, the aim is to pursue planning and integrated management of tourism development. This will enable the destination to adapt to changes in the market and the environment. This planning is essential for assessing the destination's development capacity.

Sustainable tourism is driven by multiple factors, which are at times in its favor and at times against it. Mass tourism, imperialism by stronger states and alternative forms of tourism such as slow tourism is just some of the factors that contribute to the success or failure of sustainability. However, the life cycle theory of tourism destinations defines a rule of natural evolution, having the use of sustainable designs as a one-way street to achieve revitalization, stabilization or limited development of the destination when it reaches the sixth stage of *Decline*.

### **Survey: Sustainable Tourism Development in Greece**

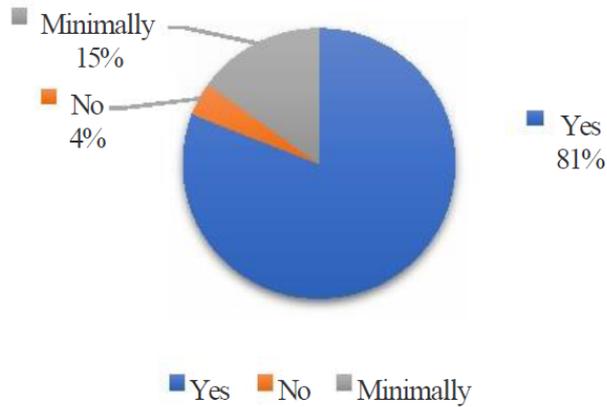
To better understand the attitudes of Greek citizens towards sustainable tourism development, I conducted a survey of 150 random Greek citizens, the survey was administered online through web-based groups where the members are over 18 years old, without any requirements for academic knowledge, gender or social class, following the Simple random sampling method which is a type of probability sampling in which the selection is random and a total of 150 responses were collected.

The questionnaire consists of 10 simplified questions which aim to bring out a generalized view of the population in relation to sustainable tourism development, special and alternative forms of tourism as well as mass tourism. Although the questions are presented in a simplified way, they aim to elicit opinions and are intended to be easily read by a broader population where tourism functions as an inherent sector in their culture.

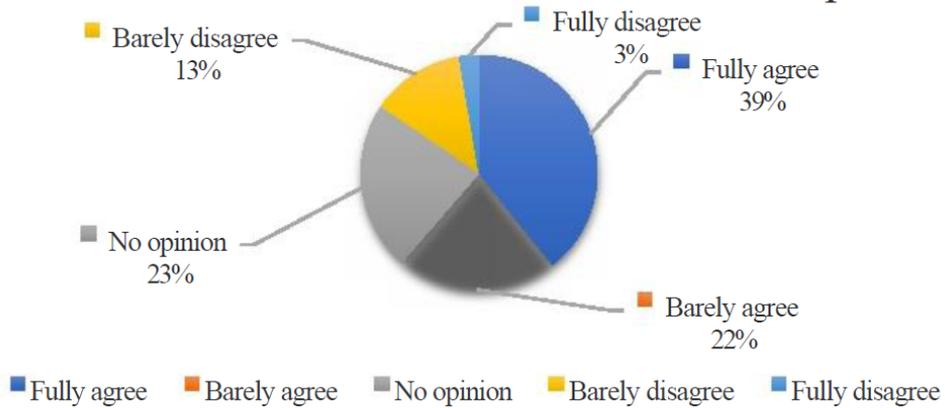
For the 9 questions except the first of the survey, the 5-point Likert scale was used. 1 meant strongly agree and 5 meant strongly disagree. The questionnaire was designed using Google Docs, Google's service, which is an online service offered by the company to all its registered users. The results were stored directly on Google's server. To complete the survey, it was necessary to fill in the questionnaire in full. Once individuals completed the survey by clicking the "Submit" button, the results were stored on the server. Through the administrator's panel, the respondents' answers could be accessed at any time.

Survey Results

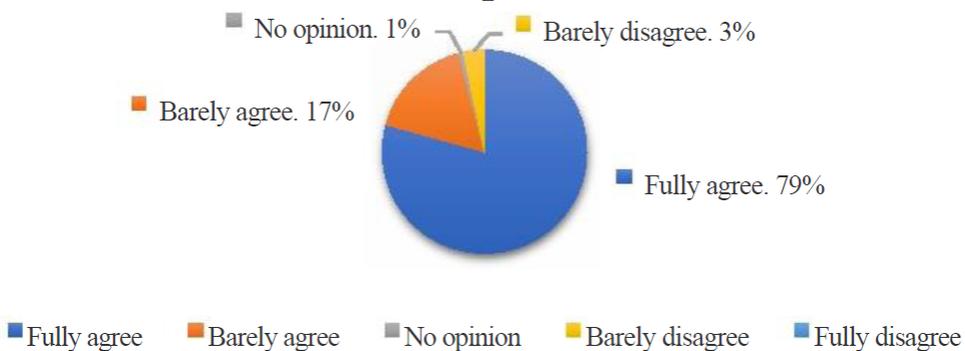
1. Do you think you understand the concept of sustainable tourism?



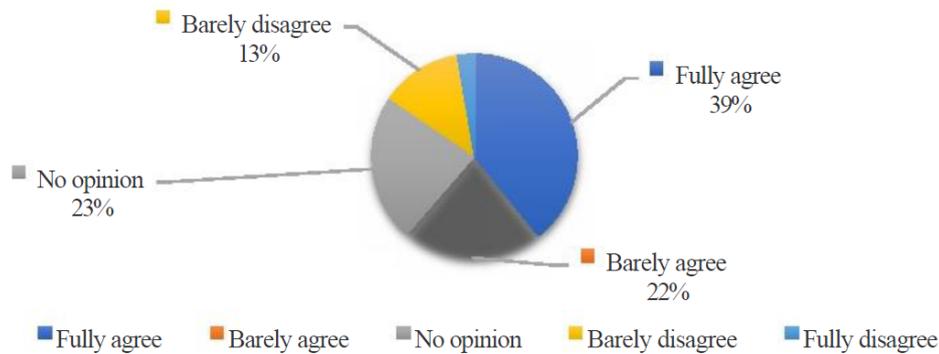
2. Do you think that the protection of natural resources and tourism can coexist as concepts?



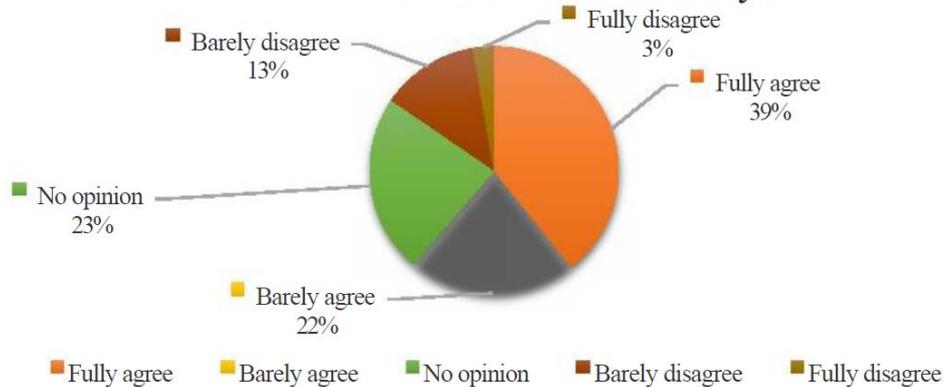
3. Do you believe that the protection of local tradition - culture and tourism can coexist as concepts?



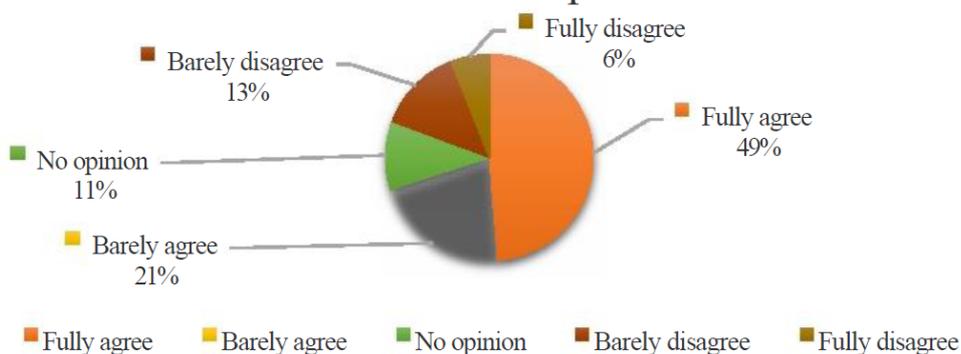
4. Do you believe that our country will benefit from the development of a sustainable tourism framework?



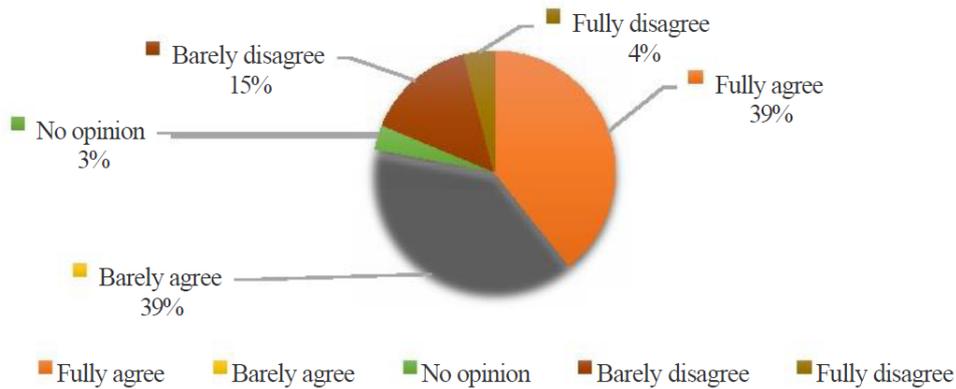
5. Do you think there is a demand for sustainable tourism in our country?



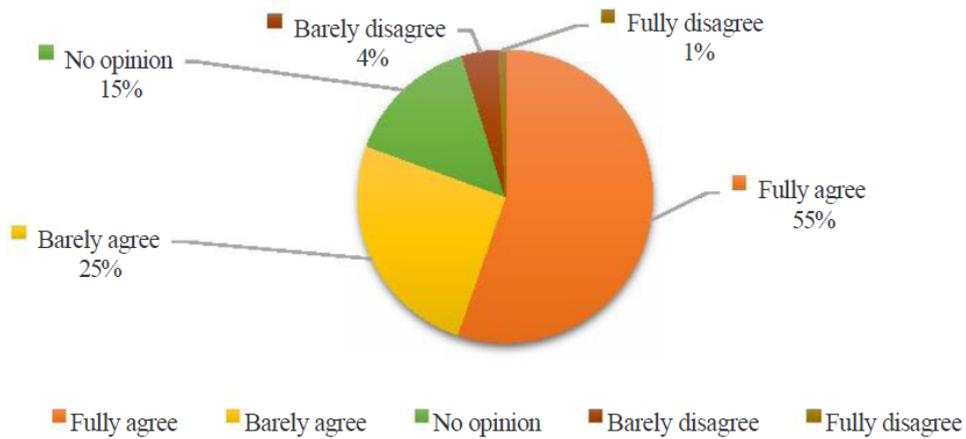
6. Mass tourism has brought more negative than positive benefits to the tourist destinations where it has developed.



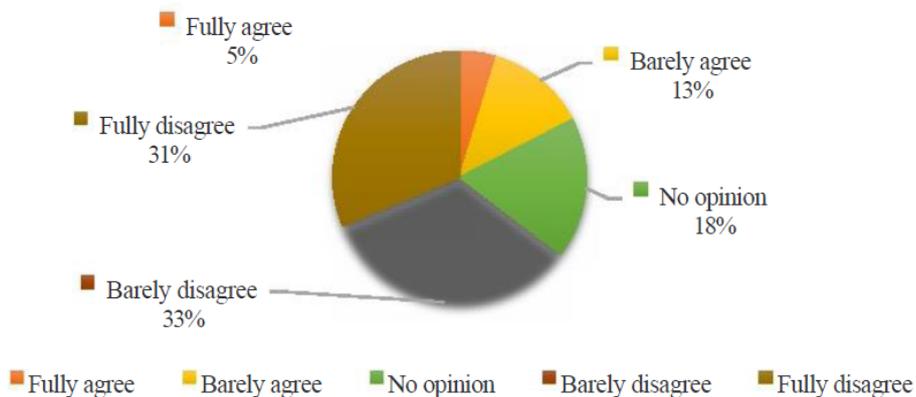
7. Mass tourism is essential for the development of tourism in our country.



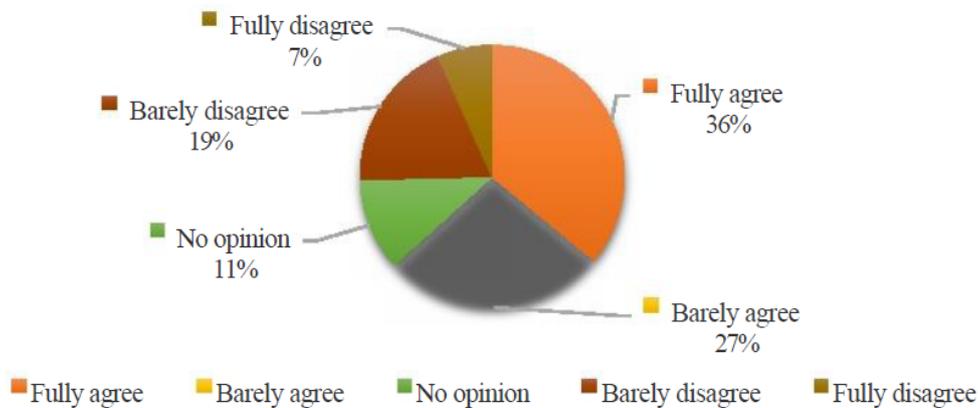
8. Do you believe that sustainable tourism development should be achieved through specific and alternative forms in destinations that have invested mainly in mass tourism?



9. Do you think our country has invested enough in sustainable tourism development?



## 10. Do you believe that mass tourism can evolve into a form of sustainable mass tourism?



### Analysis of Survey Results

Even though the survey did not require academic knowledge of theoretical tourism models, 15.3% of respondents answered “*Little*” to the first question about whether they understand the concept of sustainable tourism. This is something that has been shown in previous chapters of the thesis that, as a concept, sustainable tourism is often a matter of debate even among tourism academics. However, this is not a problem for extracting clear results from the survey, due to the simplified questions and the natural experience of the Greek population with tourism.

In questions 2 and 3, we observe the participants to agree by huge percentages, that tourism can coexist with the protection of the environment and natural resources, as well as with culture and local traditions, at percentages of 92.2% and 96%, respectively. This creates a way to introduce the term sustainable tourism development in the following questions.

In question 4, the participants answered affirmatively (96.7%) that Greece would benefit from the development of a sustainable tourism framework. While, in question 5, which requires further observation of the country’s tourism operation, “*Do you believe that there is demand for sustainable tourism in our country?*” There was a split in the affirmative percentages (61.3%) through the answer “*I do not know*” to (23.3%), proving that the main part of the participants believes that there is demand for sustainable tourism in our country.

The greatest interest arises from the contrast that is created between questions 6 and 7. The statement “*Mass tourism has offered more negatives than positives to the tourist destinations where it has developed*” finds 48.7% absolutely in agreement, 21.3% slightly in agreement, 10.7% without knowledge, 13.3% slightly in disagreement, and 6% absolutely in disagreement. Creating a reasonable majority in percentage (70%). In question 7 though, the participants are asked to answer whether they believe that the existence of mass tourism is essential for the tourism development of Greece, where the answers create a huge contrast in relation to what was said in the answers of the previous statement in question 6, and find 78% in agreement and 18.7% in disagreement, baptizing mass tourism as a “*Necessary evil*”.

The purpose of question 8 was to link special and alternative forms of tourism with sustainable development, which was achieved with 25.3% agreeing slightly and 55.3% agreeing absolutely, amounting to a total percentage

of agreements (80.6%).

In question 9, participants will have to answer whether, in their opinion, the country has invested enough in sustainable tourism development, creating a fairly large percentage of disagrees with 33.3% disagreeing slightly and 31.3% disagreeing absolutely, amounting to a total percentage of disagrees (64.6%), while also a percentage of the order of (18%) remaining at *"I do not know"*. Proving that a huge part of the participants either has not observed enough investment mobility in sustainable development, or disagrees with its existence.

Finally, participants are faced with question 10, which brings them into contact with the theory of sustainable mass tourism, a theory that has been lightly approached in a previous chapter of the thesis. The answers showed 36% to agree absolutely, 27.3% to agree slightly, 11.3% to not know, 18.7% to disagree slightly, and 6.7% to disagree absolutely. Concluding a confirmation of the opinion that characterized mass tourism as a necessary evil and the strong desire of the participants at a percentage of (63.3%), to establish sustainability as a term in mass tourism, despite the strong contrast that is created through question 8, where the respondents gave at a percentage of (80.6%) that mass tourism should hand over the reins to special and alternative forms.

### **Conclusion**

Even through these simplistic questions the survey offered views and results that were overflowing with interest. The assumption of mass tourism with its titling as *"Necessary Evil"* for the tourism development of Greece is evident through the analysis of the percentages in several questions. The contrasts that resulted from this titling shows us both a tolerance for mass tourism and a necessity for direct investment in special and alternative forms of tourism for sustainability in tourist destinations, whether they have invested in mass tourism or not. The participants demonstrated from the outset their positivity towards Greece's huge tourism industry when they agreed that tourism can coexist as a concept with the preservation of the environment, natural resources, culture and traditions of tourist destinations. The strong positivity of the participants demonstrates the willingness of Greece to invest further in tourism with steps that are characterized as sustainable, while showing the tolerance that currently exists towards mass tourism.

### **Case Studies: Tilos and Santorini**

Tilos and Santorini are two Greek islands that have taken very different approaches to tourism development. Tilos is a small island in the Dodecanese that has opted for a sustainable tourism model, while Santorini is a major tourist destination that has been criticized for its overtourism. Tilos has a population of just over 500 people and receives only a few thousand tourists each year. The island has a number of environmental protection measures in place, such as a ban on plastic bags and a limit on the number of tourists who can stay on the island at any given time. Tilos also promotes sustainable tourism practices, such as hiking, cycling, and boat tours. Santorini, on the other hand, is a much larger island with a population of over 15,000 people. The island receives millions of tourists each year, making it one of the most popular tourist destinations in Greece. Santorini has been criticized for its environmental impact, such as the pollution of its beaches and the overdevelopment of its coastline.

The case study of Tilos and Santorini shows the different ways that tourism can be managed. Tilos has chosen to pursue a sustainable tourism model, while Santorini has opted for a more mass tourism model. Both models have their own advantages and disadvantages. Sustainable tourism can help to protect the environment and the local culture, but it can also limit the number of tourists who can visit a destination. Mass tourism can

generate more revenue for a destination, but it can also lead to environmental degradation and the loss of local culture, as it has seen in Santorini.

Table 2

*Comparative Analysis of Tilos and Santorini*

<b>Feature</b>	<b>Tilos</b>	<b>Santorini</b>
<i>Population</i>	780	15,000
<i>Number of tourists</i>	Few thousand	Millions
<i>Tourism model</i>	Sustainable	Mass
<i>Environmental impact</i>	Low	High
<i>Impact on local culture</i>	Low	High
<i>Economic benefits</i>	Low	High
<i>Social acceptance</i>	High	Low

### The Sustainability of Tilos

Tilos has become a model for sustainable energy. With the help of a €13.7 million EU grant, Tilos became the first island in the Mediterranean to be powered entirely by renewable energy. The project, called TILOS, was a collaboration between 13 partners from seven European countries. It involved the installation of a new wind turbine and solar farm, as well as a battery storage system to store excess energy. Before the project even began, it had already won two awards for its innovative approach. Tilos was a good fit for the project because it had previously relied on a diesel-powered power plant on the nearby island of Kos. The diesel plant was unreliable and often caused power outages, especially during the summer months when the island is visited by tourists.

Today, Tilos meets 100% of its electricity needs and even produces a surplus that is sold to Kos. The island also has a public electric vehicle charging station, autonomous street lighting, and remote water management systems. In 2020, Tilos was awarded third place in the EU's Responsible Island competition. The prize, worth €100,000, was awarded in recognition of the island's innovative energy solutions and its contribution to a sustainable and climate-friendly Europe. The European Commission said that "*Tilos' innovative energy model with community—scale wind and solar energy, battery energy storage, and advanced energy management will inspire other islands and local communities.*"

Tilos also has officially committed to becoming a zero waste city. The Zero Waste Cities certification is a strong European certification standard developed by Zero Waste Europe (ZWE) and operated by the Mission Zero Academy (MiZA). In recent years, thanks to the initiatives of the municipality, the community, and local businesses, the island has been moving towards a zero waste model, with a focus on prevention, reuse, and resource recovery. The Just Go Zero Tilos initiative, led by Polygreen, a company that focuses on circular economy in waste and resource management, began implementation in June 2021. In just one year, the implementation of door-to-door waste collection and separate collection and management of organic waste has resulted in 100% of residual waste being diverted from landfill, with recovery rates approaching 90% and the landfill facility having closed.

Zero waste means that all waste generated on the island is collected and managed in a fully circular way, in order to eliminate its environmental impact. Public waste bins have been replaced with source separation and door-to-door collection, with the aim of composting, recycling, and reuse. The old landfill site has been completely transformed and now functions as a Circular Innovation Center, where waste is transported for further sorting and processing. Anything that cannot be recycled (biowaste) is converted into compost. The rest is reused

or prepared for waste-to-energy conversion. For example, old furniture, faulty appliances, old fabrics, etc. are collected and transported to the Creative Recycling Center to be repaired and reused or used as raw materials for art and creation. This public-private partnership model not only benefits the environment, but it is also a significant investment that is transforming local waste management infrastructure, strengthening the local community's green transition capacity, and creating more than 10 permanent or seasonal new jobs. Additionally, it creates a new model that can be applied by other communities in Greece and abroad and contributes to promoting Tilos as an international destination for sustainable tourism.

With its official candidacy for inclusion in the network of zero waste cities, the Municipality of Tilos is committed to a continued effort to prevent and further reduce its waste and is beginning its cooperation with MiZA, ZWE, and the Ecological Recycling Company. In the context of its commitment, the Tilos Municipality's zero waste strategy has a long-term vision, which includes:

- The continued pursuit of diverting 90% of municipal waste from final disposal.
- Maintaining the percentage of production of residual municipal waste at a rate of less than 10% annually.
- Reducing waste production with a particular focus on seasonal fluctuations caused by increasing tourist activity.
- Encouraging and promoting activities and initiatives for reuse and recycling.
- Mobilizing for the modification of consumer habits and the active participation of both residents and visitors to achieve the goal of zero waste.
- Preventing the degradation of the ecosystem, upgrading the natural resources of the island, and improving the quality of life of the residents.

The municipality has already achieved a number of important milestones in its journey to zero waste, including:

- Closing the landfill.
- Diverting 100% of residual waste from landfill.
- Increasing recovery rates to 90%.
- Creating a new Circular Innovation Center.
- Creating a new Creative Recycling Center.

The municipality is committed to continuing to work towards its goal of zero waste, and it is confident that it can achieve this ambitious goal with the continued support of its residents, visitors, and partners.

### **The Tourism Footprint of Tilos**

The island of Tilos is a paradise for tourists who choose alternative destinations, counting about 3,000 visitors in the summer season. Tilos will attract visitors who are looking for nature, peace, quiet beaches and an overall peaceful atmosphere. With municipal buses that cross the island at regular intervals, they offer flexibility to visitors who do not have their own means, while the passenger during his waiting time can be informed about the times of the routes as well as charge his smart device on the usb ports that the bus stop shelter has. Tilos is one of the few places in Greece where free camping is allowed, while the municipality has invested in public toilets and showers. This is also the reason why it is a very popular destination among campers and "slow" tourists. Tilos is a paradise for hikers and nature lovers. There are about 54 kilometers of trails and old paths that lead to beautiful beaches, small churches and peaks with stunning views.

Attractions such as:

- The Harkadio cave which is combined with the Elephants Museum.
- The Small Village, an abandoned village where festivals are organized in a single shop that operates in the area.
- The Knights' Castle at the Acropolis of Megalo Chorio.
- The church of Taxiarchis.
- The Monastery of Saint Panteleimon.
- The chapel of Panagia of Politissa.

The majority of attractions are promoting tourism such as hiking, agrotourism, adventure tourism, maritime, archaeological, cultural, slow, etc. that are served by the tourist services of Tilos, in combination with the green development model that has chosen for its development as a destination and place of residence, it is therefore logical to be recognized as one of the Sustainable travel destinations in Greece.

Finally, taking into account Butler's theory of the stages of development of the life cycle of a tourist area, it is observed that Tilos is in the third stage of *Development*, where in these years there will be a continuous increase in tourists and where the adoption of organizational measures on issues of structures, environment, natural resources, etc. will become necessary. However, the difficult access to the island and the limitation on the number of tourists prevents the development of a mass tourism framework and gives time to local authorities to retain the green development in which they have already invested, carefully controlling the tourist waves that will follow in the coming years.

**Overtourism of Santorini**

The island of Santorini is a popular tourist destination, but it is also experiencing the negative effects of overtourism. The island receives over 2 million visitors each year, which is a significant number for a small island with a population of just 15,000 people. The influx of tourists has put a strain on the island's infrastructure and environment. Water and energy consumption have increased, and the island's waste management system is struggling to keep up. Cruise ships also contribute to the island's environmental problems, as they emit pollutants that can harm human health. In response to these concerns, the municipality has taken some steps to address overtourism in Santorini. These measures include limiting the number of cruise ship passengers allowed to disembark each day and promoting sustainable tourism practices.

The largest changes to the landscape of Santorini took place in the 1970s, when the island took on many new roles to meet the needs of visitors, second-home owners, and of course, the citizens. Today, the landscape of Santorini is characterized by the repetition of its "*new traditional*" architecture (Sarantakis, & Terkenli, 2019). If the development of new construction is not slowed down, or at least continues in more limited ways, the island will eventually lose its unique landscape and character. "*Culture is a fundamental element that development must take seriously, engage with, and respect*" (Skelton, 2007, p. 137).

**Cultural Threats, Environmental Consequences and Waste Management**

One of the cultural heritages of Santorini that is threatened by overtourism is its vineyards. Despite the fact that the vineyards of Santorini are promising and have great potential to further influence development in areas such as the environment and the economy, more and more hotels are being built every year, and as a result, exploited vineyards are tending to disappear. In addition, unique agricultural products of the island, such as white eggplant, fava beans, cherry tomatoes, etc., are becoming increasingly rare for two reasons:

- People are trying to find easier and more profitable jobs.
- The percentage of land that can actually be productive and arable is becoming smaller and smaller.

In addition, stakeholders promote the island mainly as a luxury destination without giving the appropriate importance to the exploitation of vineyards, which could lead to an alternative resource. This is a result of the lack of strategy and planning. Cultural heritage monuments, historical centers, and protected areas are usually an incentive for tourists to travel (Peeters et al, 2018). The caldera of Santorini and many other archaeological sites, such as Akrotiri, attract a large number of tourists. The concentration of so many people in one place could lead to disastrous consequences for the land and the island's historical identity.

Waste related to tourism has been a concern for many years, with analysis being limited by data scarcity (Eckelman et al, 2014). The typical waste management sustainability on all islands for residents and tourists focuses on the 3Rs of Reduce, Reuse, and Recycle, which in turn have their own implementation barriers (Kelman, 2019).

Waste management in Santorini has completely failed. Of course, the lack of infrastructure is one of the main reasons. The island does not have a suitable space to dump all the waste and they dump everything in a reef on the side of the caldera which is the most famous feature of Santorini. Especially during the summer season, when the island's population doubles, the large amount of waste causes a huge problem. The location is along the main road that connects the island's capital, Fira, with Pyrgos. The stench usually causes the displeasure of residents and tourists. In addition, the island has four wastewater treatment plants throughout the island. They are essential considering the number of permanent residents and visitors each year. The downside is that they are located near beaches where people go swimming.

Lastly, Santorini is currently the second most "urbanized" island in the country, with 18.6% of its land built up and its arable and cultivated areas significantly reduced (Spilanis, & Kizos, 2015). For example, water is delivered daily by cargo ships for the basic needs of the island's residents and visitors in certain areas of the island, such as Oia, while noise pollution reaches very high levels in areas with intense tourist activity, especially during the high season in the island' capital, Fira (Sarantakis, & Terkenli, 2019).

### **Santorini's Future**

When government intervention was implemented through new laws on new construction on the island, locals intervened and eventually little was done. Specifically, the former mayor of Santorini referred to the issue that "*Geological formations dating back thousands of years are being destroyed not only by illegal but also by legal constructions*". Difficulties with the legislation emerged in 2012, when the Substitute Minister of the Environment Nikos Sifounakis stated that he would reform a presidential decree with strict regulations for the construction zone, in order to protect the island. The decree proposed a 500-meter no-building zone along the coast of Vlychada, which is one of the most visited beaches on the island thanks to its unique volcanic formations. Due to excessive pressure from locals, the Santorini Municipal Council proposed to reduce the area to 200 meters and eventually the Ministry of the Environment decided to compromise with a 150-meter protected zone (Lialios, 2016).

#### Measures have been taken to address overtourism, such as:

- *Setting limits on visitor arrivals.*

Santorini also introduces a daily limit for cruise ships, in order to address the overpopulation that has been caused, with a limit of 8,000 passengers per day, compared to 12,000 in 2017. Government officials have also implemented a policy to better distribute arrival and departure dates and will require cruise ships to leave one

hour apart as they depart (Staff, 2018).

- *Extending the tourist season.*

Most Greek resorts close in November or December. However, in 2015, the local authorities of Santorini confirmed that many hotels and restaurants will be open year-round and that flights and ferry schedules will increase. In addition, travelers will be able to organize their holidays in advance, as booking services will also be available for an extended period (Stanchev, 2018).

The existence of overtourism in Santorini promotes a great need for alternative, more environmentally and host-friendly practices in development, planning and policies. There is a demand to design more responsible tourism, using it to create better places to live and better destinations to visit, without profit remaining the only goal. The wellbeing of local people, combined with long-term strategic planning for tourism, are the necessary conditions to address the impact of mass tourism, paying more attention to maximizing social and environmental incentives over the monopoly of profit.

For Santorini in particular, the most important impacts, such as the high volume of tourists, promote the creation of new jobs, the upgrading of the services offered and the provision of a large income for both locals and all those involved in the sector. However, the negative effects outweigh the positive ones and those involved are starting to become seriously concerned about the future of Santorini, believing that saturation may have set in. Locals and entrepreneurs say that on their own, they can do nothing but offer a better-quality product, so a proper cooperation with the state is essential. The current infrastructure of the island is inadequate to properly serve tourists, locals and seasonal workers (airport, port, houses for workers, roads, etc.).

As a result, none of the above are really happy. Tourists, especially in high season, may be unhappy with the overcrowded attractions and certain areas of the island, locals and a huge percentage of workers cannot live a quality life. Surprisingly, no aggressive reactions appear, as the economic benefits “*justify*” the negative impact on the final balance of thinking of the residents and simply leave a sincere concern for the future of the island. However, according to Toposophy’s (2019) survey of visitor attitudes, an increased number of very satisfied tourists from the US (60%) and UK (54%) on departure from the destination and over (90%) would recommend the destination to others. An indication that tourist satisfaction is still intact from the overcrowded destination, yet it is important to bear in mind that it is easy to serve the needs of a “*mass*” tourist from a place that is described as “*eye candy*”. Finally, the environmental impact of tourism development is extremely serious: (lack of water, waste management, elimination of vineyards) and the traditional culture of the place has been replaced by the “*new traditional*” architecture of the island.

In addition, the following specific recommendations are made for Santorini:

- The government should work with local stakeholders to develop a comprehensive tourism strategy that is based on the principles of sustainability.
- The government should invest in infrastructure improvements, such as expanding the airport and improving public transportation.
- The government should implement policies to protect the environment, such as reducing pollution and conserving water resources.
- Local businesses should be encouraged to adopt sustainable tourism practices.
- Tourism education and awareness programs should be developed for tourists and locals.

By following these recommendations, Santorini can work to create a more sustainable and equitable tourism industry.

### Conclusions-proposals

Tourism is a long-standing and evolving phenomenon. Since the Eleusinian Mysteries, Thomas Cook, and the technological revolution of today, there have been countless proposals to define it. With the arrival of globalization, international organizations were established that provided further control and planning for the tourism industry. In particular, with the advent of environmental awareness, sustainability has become a necessary condition for tourism.

Sustainable development has become widespread in the last three decades, and has become an integral part of the concept of sustainable tourism, which can be seen as a reaction to the negative environmental impacts of tourism. However, while the preservation of nature is a central tenet of the environmental pillar of sustainability, it is contrasted and interconnected with the economic and social dimensions of sustainability. Thus, the preservation of nature is critical, as the environment provides the resources for the long-term future of the tourism economy and the opportunities for livelihoods and social upgrading that must accompany economic development.

Following the mother concept of sustainable development, economic and social empowerment should include policies to address endogenous inequalities. It should also include the empowerment of local communities and the increase of their capacities so that they become participants in the development process. Thus, tourism can be used as a method to support economic development, the conservation of local traditions and culture, the protection of the environment, the improvement of the quality of services that tourists/visitors receive, and the quality of life of the local population. As a result, the development of a balanced model of sustainable tourism will make a significant contribution to the sustainability of the local society in general.

Many initiatives and guidelines for sustainable tourism have been developed that have created a framework for the concept, both theoretically and practically. However, the ambiguities of sustainable development that open it up to wide interpretations have also manifested themselves in tourism, leaving it open to the influences of misinterpretation and hegemony. This makes it more difficult to achieve a balanced model of sustainable tourism that balances the three main pillars: economy, environment, and society, as external control is likely to reduce the voices of local participation. While there are numerous interpretations of sustainable tourism, it is also important to recognize that it is impossible to have a transferable blueprint that can be defined between destinations. This is because destinations, especially in the diverse landscape of Greece, are dynamic entities that are defined by their unique environment, economic, social, and cultural characteristics.

Santorini and Tilos come as excellent examples of two travel destinations that demonstrate the clear differences between investing in sustainability through specialized and alternative forms of tourism and investing in mass tourism. This underscores the case for participatory approaches to the strategic planning of sustainable tourism, which emphasizes locally determined goals, as supported for example in Agenda 21. It is also important to recognize that even if the phenomena of the “*necessary evil*” of mass tourism and overtourism are fully addressed through specialized and alternative forms, any claims for a truly fully sustainable tourism beyond the geographical boundaries of a place are unrealistic in the short and medium term, as a consequence of the dependence on a carbon-centered system for the movement of tourists.

The best approach to tourism likely depends on the specific characteristics of a destination. For example, a smaller destination with a fragile ecosystem may be better suited for a sustainable tourism model, while a larger destination with a more robust infrastructure may be able to accommodate mass tourism. Ultimately, the goal of any tourism model should be to minimize the negative impacts of tourism and to maximize the positive impacts.

This can be achieved through careful planning and management, as well as through the cooperation of tourists, businesses, and local communities.

### References

- Baidya, R. D. (2023, October 31). The holidaysite. Retrieved from: <https://www.theholidaystory.com/different-types-of-tourism/>
- Britton, S. (1980). *The political economy of tourism: The case of Spain*. Basingstoke, Hampshire: Palgrave Macmillan.
- Eckelman, F., Williams, D. R., & Qian, Q. (2014). Waste management and climate change: Challenges and opportunities. *Waste Management and Research*, 32(6), 616-624.
- Farsari, O., & Prastacos, P. (2001). Sustainable tourism development and planning for coastal destinations in the Mediterranean. *Journal of Sustainable Tourism*, 9(4), 359-374.
- Hunter, C. (1997). Sustainable tourism as an adaptive paradigm. *Annals of Tourism Research*, 24(4), 850-867.
- Hunziger, W., & Krapf, F. (1942). *Eine systematische Betrachtung der Beziehungen zwischen Gast und Gastgewerbe*. Polygraphische Verlagsgesellschaft.
- Janusz, J., & Bajdor, A. (2013). Towards a sustainable tourism framework: A systems approach. *International Journal of Sustainable Development and World Ecology*, 20(5), 367-382.
- Karas, E., & Ferencova, K. (2012). Sustainable tourism development in central and eastern Europe: Current status and future challenges. *Tourism and Hospitality Management*, 41(2), 262-269.
- Kelman, J. H. (2019). *Managing plastic waste on small islands: Lessons from the Pacific*. Cambridge, Massachusetts, USA: Academic Press.
- Lialios, N. (2016). Santorini: The island that is being choked by mass tourism. Guardian News and Media.
- Linster, M. (2003). Measuring sustainability: Performance measures for the tourism industry. *Journal of Sustainable Tourism*, 11(6), 561-577.
- OECD. (2004). *Development Assistance Committee: DAC Guidelines on Poverty Reduction*. Paris: OECD Publishing.
- Peeters, P., Gössling, S., Hall, C. M., & Weaver, D. B. (2018). Cultural heritage and tourism in a global context: An introduction, pp. 1-22. Abingdon: Routledge.
- Rodriguez, L. G., Gamboa, G. J., Vilcapoma, O., & Reyes, J. A. (2002). Sustainability metrics for public infrastructure investment: A framework for prioritizing public works projects. *Environment, Development and Sustainability*, 10(2), 47-61.
- Saarinen, J. (2006). Towards a conceptual framework for sustainability indicators for tourism destinations. *Journal of Sustainable Tourism*, 14(4), 459-477.
- Sarantakis, N., & Terkenli, T. (2019). *Santorini Landscape Character Assessment—Final Report*. Santorini: Santorini Municipality Development Agency.
- Skelton, R. (2007). Tourism and development in small islands: Challenges and potential. *Annals of Tourism Research*, 34(3), 130-152.
- Spilanis, I., & Kizos, T. (2015). *The Greek tourism islands: Urbanization and its spatial aspects*. Dordrecht: Springer.
- Staff, T. G. (2018). Santorini to limit cruise ship passengers to 8,000 per day. Guardian News and Media.
- Stanchev, G. (2018). Santorini to stay open year-round. Guardian News and Media.
- Toposophy. (2019). *Santorini Visitors 2019 Survey Report*. Santorini: Toposophy.
- Tsartas, K., & Stavrinoudis, E. (2006). Sustainable tourism and global competitiveness in Greece. In: *The future of global tourism*. Amsterdam: Elsevier.
- UNWTO. (1996). *Indicators of Sustainable Tourism (Chapter 40)*. Agenda 21. New York: United Nations.