

Overview Strategic Masterplan to Mitigation Climate Change on Tourism Industry: A Systematic Literature Review

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Abstract - Currently, climate change is a major focus in various industrial sectors, including tourism. Significant climate change has caused changes in tourist behavior, from changes in visiting times to choosing tourist destinations. If the tourism industry does not consider the impacts of climate change, this can affect marketing strategies and regional development, especially when climate change occurs. The Integrated Tourism Master Plan (ITMP), prepared by the World Bank in 2018, provides recommendations on various aspects of tourism development, including mitigating the impacts of climate change. This study uses a qualitative method with a Systematic Literature Review approach. The sample used is a masterplan document from the local government. The results of the study show that although the ITMP issued by the World Bank contains guidelines for climate change mitigation in the tourism sector, the guidelines have not been fully implemented or adapted in the regional master plan. However, the regional masterplan document has shown attention to climate change. Improvement and implementation of the master plan for climate change mitigation are needed. The recommendations given are to adopt aspects of tourism development related to climate change prevention and to prepare relevant implementing regulations.

Keywords: mitigation, climate changes, tourism, SLR

I. INTRODUCTION

Climate change has become one of the biggest global challenges in recent decades, affecting various industrial sectors, including tourism. The tourism industry, which is highly dependent on natural conditions, infrastructure, and climate, is vulnerable to unexpected climate change impacts, such as rising temperatures, extreme weather, and increased frequency of natural disasters (Nurhidayat, 2024). This not only threatens the attractiveness of tourist destinations but also causes significant economic losses for countries that depend on the tourism sector as one of their main sources of income.

The impact of climate change on tourism can be seen in various forms, including shifts in tourist travel patterns, selection of safer destinations, and physical damage to tourism infrastructure due to natural disasters such as floods, heat waves, and storms. In addition, climate change also has an impact on the natural environment which is the main attraction for tourists, such as coral reefs, mountains, beaches, and other natural ecosystems. In some cases, tourist destinations affected by climate change experience a decrease in the number of visitors, which ultimately affects the local economy and the sustainability of the tourism sector (Rafly, 2023).

Therefore, mitigating the impacts of climate change is a very important issue in tourism management. Many countries and international organizations have begun to design strategic plans that focus on tourism industry sustainability and climate change adaptation. One of the most common approaches is the development of a Strategic Masterplan, which serves as a long-term guide to ensure that the tourism industry can adapt to climate challenges while maintaining its attractiveness to tourists.

However, climate change mitigation strategies in the tourism sector require further research and a deeper understanding of effective approaches. The Integrated Tourism Master Plan (ITMP) introduced by various international organizations, including the World Bank, provides comprehensive guidance on how countries and destinations can adapt to the challenges of climate change. This document suggests measures to increase resilience to climate change, such as strengthening infrastructure, implementing environmentally friendly technologies, and involving local communities in sustainability initiatives (WorldBank, 2018).

Previous studies have examined various aspects related to climate change mitigation strategies in the tourism sector, but a more systematic understanding is needed to identify trends and gaps in the literature. Therefore, the Systematic Literature Review (SLR) approach is an ideal method to collect, evaluate, and synthesize existing research on climate change mitigation strategies in the tourism industry. This approach allows researchers to gain a more holistic understanding of the various initiatives that have been implemented in different countries and how these strategies can be adapted in the future (Taali, 2024).

Against this background, this study aims to present an overview of the Strategic Masterplan used for climate change mitigation in the tourism industry through a systematic literature review. This study will identify key trends, strategic approaches that have proven effective, and research gaps that still need to be filled to support the sustainability of the tourism industry amidst the ever-growing challenges of climate change.

This study is expected to provide valuable insights for governments, policymakers, and tourism industry players in designing more effective and sustainable strategies for dealing with climate change.

II. METHOD

Qualitative research with a case study approach is a research method that is very suitable for investigating questions that are closely related to a particular situation or context. In this approach, researchers can explore problems from various angles to gain an in-depth understanding. The case study approach allows the exploration of research issues from various dimensions such as a particular industrial sector, a specific geographic location, or a unique business field, such as tourism, the creative economy, or other service sectors. Through this approach, researchers can understand the specific dynamics that affect the industry. For example, in the context of tourism, case study research can be used to examine aspects that influence consumer decisions, marketing strategies, or the impact of government policies on this industry (Rahadi, 2020). Case studies allow research on various aspects, such as accounting, operations, marketing, and management functions that affect a business or organization. Thus, this study can produce broader and deeper insights into the problem being studied. In addition, case study research can also touch on other important issues, such as the development of business strategies or the impact of external changes, such as regulations or new technologies. This type of research allows researchers to use a variety of data sources and methods so that a more holistic analysis can be achieved. The data sources used in case studies can include academic literature, government reports, various official documents, and other sources of information. Each of these data is analyzed using a systematic literature review (SLR) approach, where this process involves identifying, assessing, and synthesizing findings from various existing studies.

Systematic literature review itself is one of the highly structured and systematic methods for collecting and analyzing relevant research. By using this method, researchers can gain a more comprehensive understanding of the topic being studied, because previous studies are analyzed with the aim of uncovering patterns, trends, or research gaps. This makes the research methodologically stronger because the findings are based on various studies that have been conducted previously and validate conclusions in a more objective way.

When exploring documents such as the Integrated Tourism Master Plan (ITMP) or regional development plan documents, this approach is very helpful in identifying important aspects of tourism development planning and management. Descriptive analysis is used to describe the existing reality, which is useful for providing an overview of the context or situation being studied. Through this analysis, researchers can capture the phenomena that are happening and identify key elements that influence the development of the industry or region.

The validity of qualitative research findings can be strengthened by using triangulation, a method in which researchers use several different data sources or methods to ensure the accuracy of the results. In this case, respondents who act as research subjects can provide additional data that enrich and verify the research results. The use of triangulation in case study research ensures that the findings obtained are more valid and reliable because the data is analyzed from various perspectives and methods (Corbin, 2012; Creswel, 2010). As an additional research method, the limitations of this research can hopefully be improved in further study.

III. RESULT AND DISCUSSION

Currently, the issue of climate change has become a major concern in various industrial sectors, including the tourism industry. The significant impact of climate change has affected many aspects of this sector, especially in the behavior and habits of tourists. One of the most obvious influences is the shift in the time of tourist visits, where they tend to replan their travel schedules to avoid extreme weather conditions such as heat waves, storms,

high rainfall, or even unpredictable temperatures. The increasingly unpredictable weather due to climate change makes tourists more careful in determining their travel times for safety and comfort.

In addition to affecting the time of visit, climate change also has an impact on the choice of tourist destinations. Tourists are now increasingly considering aspects of safety and environmental sustainability when choosing a holiday destination. Many of them are starting to avoid areas prone to natural disasters, such as floods, landslides, or forest fires, and are switching to choosing more stable and safe locations. In addition, tourists also tend to choose destinations that show a commitment to environmental sustainability, such as destinations that implement sustainable and environmentally friendly tourism practices (Rafly, 2023).

For the tourism industry, this major challenge requires serious attention. Every tourism industry player must be able to respond to changes in tourist preferences well and quickly, so as not to be left behind in the competition. If the tourism sector does not immediately adapt to these changes, various negative impacts will occur, especially related to marketing strategies that can become less effective. Not only will marketing strategies be affected, but also the development of tourist destinations as a whole can stagnate or experience a decline in interest from tourists (Nurhidayat, 2024). For example, destinations that are not ready to face climate change can lose their appeal due to unfavorable weather conditions or significant environmental damage. This will certainly result in a decrease in the number of tourists visiting.

Therefore, marketing strategies and management of tourist destinations that do not consider the impacts of climate change can be fatal. Especially for destinations that are vulnerable to extreme weather and natural disasters, efforts to maintain the attractiveness of these destinations are very important. In addition, drastically changing weather conditions can also affect the natural beauty that is the main attraction of natural tourism such as beaches, mountains, and national parks. These natural destinations, which are usually a magnet for tourists, can lose their charm if there are no efforts to maintain sustainability and adapt their management to changing climate conditions.

To overcome these impacts, concrete steps are needed. One guide that can be followed by the tourism industry is the Integrated Tourism Master Plan (ITMP), designed by the World Bank in 2018. The ITMP provides a number of important recommendations on how the tourism sector can develop sustainably amidst the challenges of climate change. These recommendations include various preventive measures aimed at minimizing the risks of climate change on tourism, such as improving infrastructure that is more resilient to extreme weather, as well as increasing awareness of the importance of environmental protection among tourists (WorldBank, 2018). In addition, the ITMP also proposes the development of more environmentally friendly tourist destinations, which are expected to be able to adapt to climate change and remain attractive to tourists.

Furthermore, the ITMP emphasizes the importance of collaboration between the public and private sectors in efforts to address the impacts of climate change on tourism. Collaboration between local governments, industry players, and local communities is key to creating a tourism system that is resilient to climate change. These efforts can include training programs for tourism industry players on how to implement more environmentally friendly business practices, as well as initiatives to strengthen regulations related to the development of sustainable tourist destinations.

With good cooperation and the implementation of appropriate adaptation measures, the tourism sector is expected to survive and even thrive amidst the challenges of climate change. In addition to maintaining tourist attractions and economic well-being, these measures also aim to protect the natural environment which is the main resource in tourism. Ultimately, climate change is not only a challenge but also an opportunity for the tourism sector to innovate and implement more sustainable and future-oriented business models (Amri, 2024).

IV. CONCLUSION

The results of the study show that although the Integrated Tourism Master Plan (ITMP) issued by the World Bank has provided clear guidance on climate change mitigation in the tourism sector, the guidance has not been fully implemented or adapted in strategic planning at the local or regional levels. This indicates a gap between internationally available guidance and actual implementation in the field. Many regions, despite having prepared a tourism development master plan, have not integrated climate change mitigation measures optimally.

However, although the implementation of the ITMP is still limited, master plan documents in several regions have begun to show attention to climate change issues, by recognizing that the tourism sector is very vulnerable to the negative impacts of this phenomenon. Several regions have prepared initial strategies that include involving local communities in protecting the environment, reducing carbon emissions through environmentally friendly transportation, and increasing tourist awareness of environmental sustainability.

However, these steps are still partial and have not been made an integral part of the overall tourism development plan.

To ensure that the tourism sector can adapt and survive the challenges of climate change, more serious efforts are needed to improve and implement master plans at the regional level. This includes the integration of climate change mitigation strategies in every aspect of tourism management, from infrastructure planning, and natural resource management, to more sustainable tourism destination marketing strategies.

The recommendations given from the results of this study are the importance of adopting more specific aspects of tourism development related to climate change prevention and mitigation. Regions need to refer in more detail to the ITMP guidelines and apply them contextually according to existing local characteristics and challenges. In addition, it is necessary to formulate relevant implementing regulations, which not only provide a legal framework for local governments in implementing mitigation strategies but also ensure continuous monitoring of the effectiveness of their implementation.

In addition, the study also emphasizes the importance of increasing institutional capacity and involving various stakeholders, including the private sector, local communities, and non-governmental organizations, in designing and implementing climate change mitigation policies in the tourism sector. Steps such as developing infrastructure that is resilient to natural disasters, implementing environmentally friendly technology in tourist destinations, and intensive education for tourists regarding environmental sustainability are needed to create a tourism system that is more resilient to the impacts of climate change.

Thus, in the future, the integration between the ITMP guidelines and masterplan planning at the local level must be further strengthened. It is important to build a tourism industry that focuses not only on economic growth but also on environmental sustainability and adaptation to increasingly real climate change.

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