Global Journal of Tourism, Leisure and Hospitality Management

Juniper Publishers key to the Researchers

Mini Review
Volume 1 Issue 3 - March 2024
DOI: 10.19080/GJTLH.2024.01.555564

Glob J Tourism Leisure & hosp manag
Copyright © All rights are reserved by Reimund Schwarze

Climate Change and its Implications for German Mountain Tourism

Reimund Schwarze*

Helmholtz-Centre for Environmental Research - UFZ, Leipzig, and European University Viadrina, Germany

Submission: February 23, 2024; **Published:** March 11, 2024

***Corresponding author:** Reimund Schwarze, Helmholtz-Centre for Environmental Research - UFZ, Leipzig, and European University Viadrina, Germany

Abstract

Germany, a mid-latitude region, must brace for rising temperatures and water extremes. Heatwaves, droughts, fluctuations in river levels, floods, and intense rainfall are expected to intensify, affecting the tourism sector. Mountainous areas will have limited chances to react and adjust to extreme weather events. Ski resorts will struggle to remain viable with an expected temperature increase of over 3 degrees Celsius, prompting a transition to summer tourism. Effective coordination of adaptation strategies across all levels is crucial to bolster climate resilience.

Keywords: Rainy Climate; Agriculture; Forestry; Tourism Industry; Mountaineering

Introduction

The last few years with their increasing extreme weather situations have made it clear to most people in Europe that climate change has long been in full swing. The international climate negotiations demonstrate that limiting global warming to 1.8 degrees Celsius would only be possible under extremely optimistic conditions. It is not realistic! The efforts currently pledged by the global community will lead us to a world well above 2 degrees Celsius. Estimates range between 2.4 and 2.7 degrees Celsius globally up to the mid-century. For Germany, this means that we will have to adjust to a warming of over 3 degrees Celsius. This is due to Germany's predominantly continental-climatic location in the transition zone between the maritime climate in Western Europe and the continental climate in Eastern Europe. The oceans do not have as strong a dampening effect here as in other regions of Europe. Weather statistics therefore already show a temperature increase of plus 2.5 degrees Celsius compared to pre-industrial levels.

Specifically, we must prepare as a mid-latitude region with a temperate, rainy climate for increasing temperatures and water extremes in the future: Periods of several weeks of heat of over 30 degrees Celsius in summer, multi-year droughts in agriculture and forestry, recurring low water levels in rivers, but also increasing flooding and heavy rainfall events. Economically, these extremes will not only become more intense, but will also recur more frequently. What we experienced in Germany in 2002, 2013 and 2021, namely that floods recurred at short intervals, will happen even more frequently in the future. Yet we have seen cases where people were personally impacted recurrently, for example, where the old reconstruction loans after damages in 2002 had not yet been repaid in 2013 when the new ones occurred.

What does this mean for tourism in the mountain regions of Germany? There are special situations in the high mountains that I can't go into in detail. But in the mountains of southern and central Germany, the warning times for extreme precipitation are already much shorter than in lower-lying cities and the regions of the north. This means that the possibilities for adaptation are fundamentally limited in the mountain regions. We can already predict that the technical measures to safeguard traditional winter tourism in Bavaria, Baden-Württemberg and Saxony will no longer be sufficient for 90 percent of ski resorts if regional warming exceeds 3 degrees Celsius [1]. At 4 degrees Celsius, not a single ski resort could be maintained. It would then be too hot even for technically produced snow and water would be too scarce.

However, the tourism industry in Germany does not have to suffer from the end of ski tourism, as recent studies [1, 2] show, if it succeeds in switching from winter to summer tourism in a timely and planned manner. Although only a slight increase in overnight stays can be expected in summer due to the increasing number of hot spells, the potential for additional overnight stays in spring and fall is high. However, the vulnerability of summer tourism activities, such as hiking and mountaineering, to the

increase in extreme weather conditions and new risks, such as the increase in insect pests, has not yet been sufficiently researched.

i. Meaningful climate impact adaptation can only be achieved if the options for action and adaptation strategies are coordinated as planned at all levels: At federal state, at municipal and at company level.

ii. Municipalities must draw up an integrated climate adaptation concept in accordance with the new German Climate Adaptation Act [3]. The new strategy emphasizes a precautionary approach. In addition to adapting to the climate changes that are already taking place, targeted measures are to be taken with a view to more frequent, extreme and long-lasting consequences of climate change in the future, e.g. communal heat management plans.

iii. Companies and private individuals should take appropriate precautionary measures, identify climate risks and take countermeasures at an early stage. The Bavarian Chamber of Industry and Commerce offers companies checklists and assistance 4 to help them prepare for changing climatic conditions. If guests are actively involved in the adaptation processes, experience has shown that this can provide additional support.

The sooner we start, the better we will succeed.

References

1. François H, Samacoits R, Bird David N, Köberl J, Prettenthaler F, et al. (2023) Climate change exacerbates snow-water-energy challenges for European ski tourism. Nature Climate Change 13(9): 935-942.
2. Thomas B, Raimund L, Stephan M (2016) Wintertourismus im Klimawandel - Auswirkungen und Anpassungsstrategien. Germany.
3. German-government-adopts-first-nationwide-climate-adaptation-law, Germany.

This work is licensed under Creative Commons Attribution 4.0 License
DOI: 10.19080/GJTLH.2024.01.555564

Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
  (Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission
https://juniperpublishers.com/online-submission.php

How to cite this article: Reimund S. Climate Change and its Implications for German Mountain Tourism. Glob J Tourism Leisure & hosp manag. 2024; 1(3): 555564. DOI: 10.19080/GJTLH.2024.01.555564