



BILATERAL RELATIONSHIP BETWEEN TOURISM AND CLIMATE CHANGE: IMPACTS, VULNERABILITY & SOLUTIONS

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ABSTRACT

Human activities are directly or indirectly assigned to "Climate change". Global scenario indicates that changing climate is an influencing phenomenon with wide range of impacts on different levels in societies and industries. In current scenario tourism industry is considered as one of the fastest-growing industries with direct relation to changing climate. Tourism is totally dependent on various climatic conditions over specific destinations. Any effort to separate them will lead to danger. Tourism is one of the fastest-growing industries which is also responsible for excess amount of emissions and also includes large scope to adapt or mitigate changing climate. Tourism has the capability to create beneficial effects on the environment by contributing to environmental protection and conservation. It is a way to raise awareness of environmental values and it can serve as a tool for foreign investments. As tourism is a growing sector it is essential to identify its promising impacts on climate change. With marked increase in tourism industry it is quite easy to understand the flow of tourist by statistical analysis of secondary data, and its relative possible impacts. Lack of research in sustainable tourism and climate change provides us platform to built bilateral approach for solutions using micro observations of destination as well as generation of primary data using socio-economic methods. This approach for sustainable tourism and its advantages play a major role in global context. Tourism, a highly growing industry is also providing various possibilities to achieve sustainable development goals (SDGs) and to stabilize the global threat of 21st century.

Keywords: - Global scenario, Bilateral approach, Sustainable tourism, SDGs.

INTRODUCTION

TOURISM:

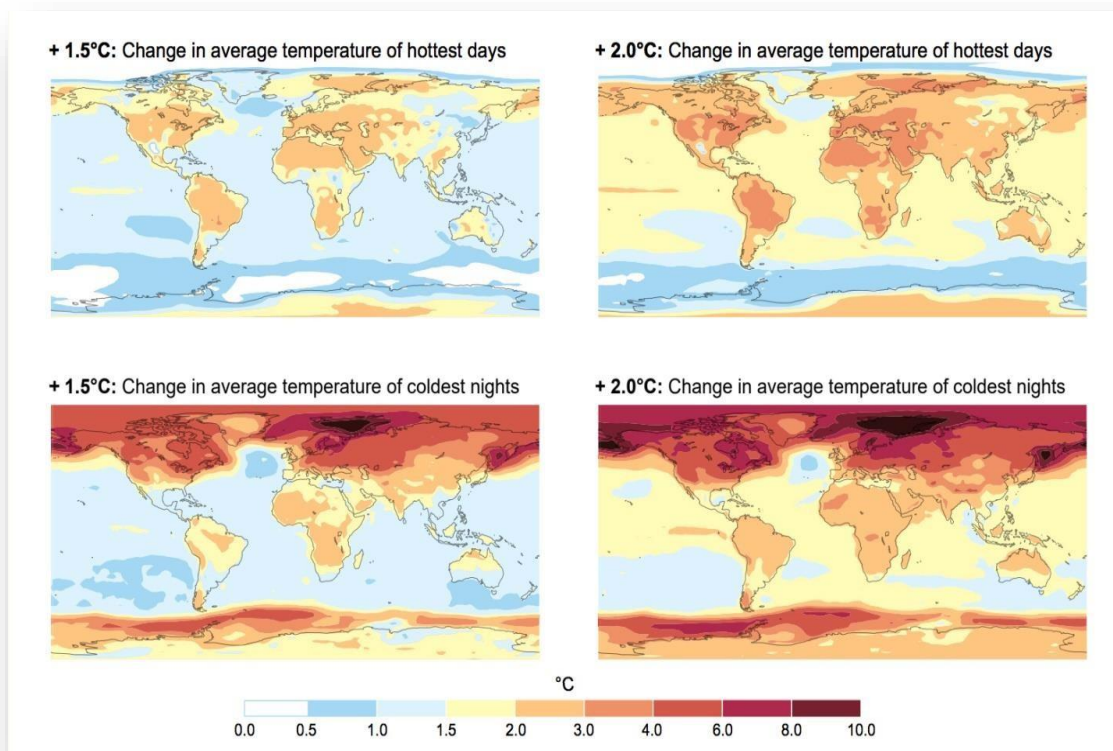
International tourism had become one of the world's most important economic activities by the early 21st century, and the impacts are becoming increasingly apparent from the North to South. The history of tourism is of great interest and importance. At the end of the 18th century history of tourism begins long before the coinage of the word *tourist*.

Tourism is seen as a global phenomenon with an almost unintelligibly massive infrastructure. Importance of tourism is evident from the fact that its influence thoroughly penetrates society, politics, culture and, above all, the economy. Tourism is a combined form of industries, activities and services that gives experience of travelling. Other components of Tourism industry are Accommodation, i.e. hotels, bed & breakfasts, guest houses, self-catering/serviced apartments, camping, caravanning and home stay, Hospitality, i.e. food and beverage serving services, e.g. pubs, restaurants, cafes, private dining for groups/conference, Transport services, e.g. rail, road, water, air networks and rental, Cultural services, e.g. museums, attractions, Sports and recreational activities and Retail. Tourism is currently the world's largest industry with annual revenues of over \$3 trillion dollars says The World Tourism Organization (WTO). Tourism provides over six million jobs in the United States, making it the country's largest employer and contributes 8,810.96 billion U.S. dollars to worldwide GDP.

According to **Macintosh and Goeldner** - *Tourism is a collection of activities, services and industries which deliver a travel experience comprising transportation, accommodation, eating and drinking establishments, retail shops, entertainment businesses and othe hospitality services provided for individuals or groups traveling away from home"*

"The sum of the phenomena and relationships arising from the interaction of tourists, business suppliers, host governments and host communities in the process of attracting and host in these tourists and other visitors"

Tourism is a phenomenon that has demonstrated continuous growth for at least half a century at the global scale and most of this growth has been in mass tourism. The quickest growth in recent years appears to have been in specialized forms of tourism, such as ecotourism, the actual numbersof tourists involved in these forms are very small compared to those occupied in 'mass' tourism (World Tourism Organization 1995). (Richard W. Butler 1999)

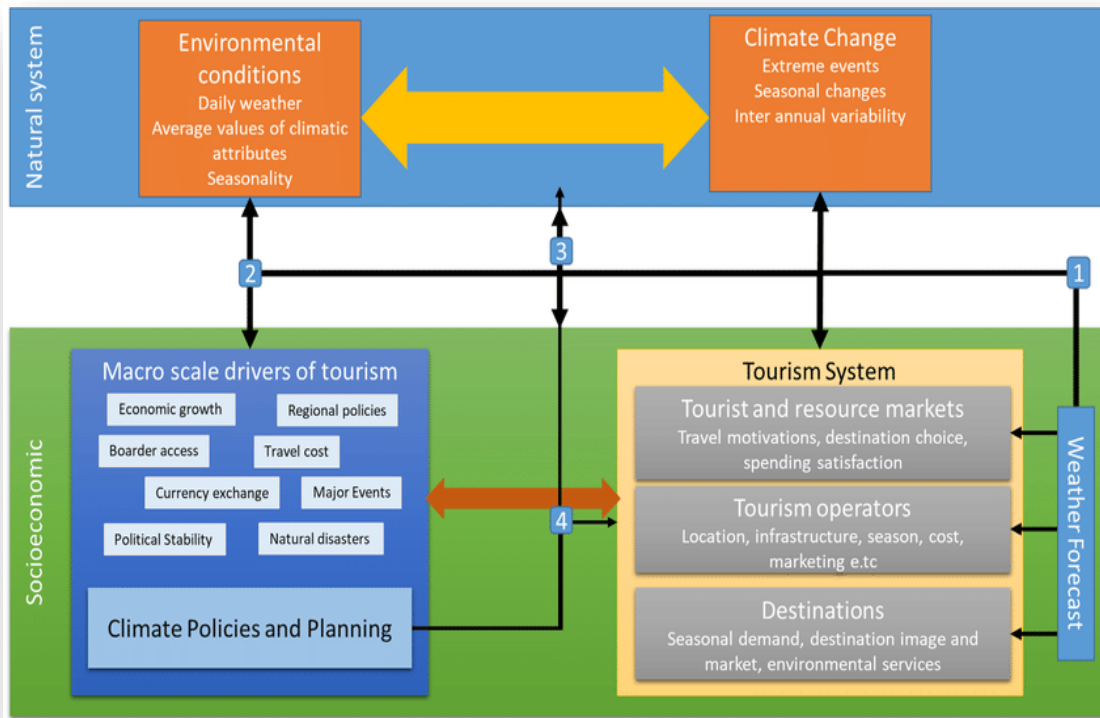


CLIMATE CHANGE:

The Intergovernmental Panel on Climate Change Special Report on warming of 1.5°C concluded that human activities have caused ~1.0°C of global warming since pre-industrial times and that, if it continues to increase at the current rate, warming is likely to reach 1.5°C between 2030 and 2052. The Special Report concluded that climate change is increasing, and will continue to increase, land and ocean temperatures and the frequency, intensity and duration of heat waves in most land regions. It also concluded that climate change will continue to increase the frequency and intensity of heavy precipitation events globally and the risk of drought in the Mediterranean region specifically. Climate change is a long-term process, but the extent to which individual weather events are influenced by climate change can increasingly be estimated.

IMPACTS OF CLIMATE CHANGE ON TOURISM:

Each tourist destination worldwide has its own appeal. This can come from the activities it can provide to visitors, like skiing or golf, or it can come from their natural beauty or what nature has



to offer. It is very important that each tourist destination should maintain its charms and beauty in order to keep the tourist industry booming. Another important factor to keep tourism alive is that of attainability. Areas that become damaged or inaccessible lose their charm, causing tourists to seek other unspoiled or reachable destinations. Due to climate change, the beauty of the local destinations is threatened while reachability also can become a problem especially when airports, roads and bridges are destroyed during extreme weather disturbances.

Up to eight percent of all global carbon emissions is the result of Tourism’s carbon footprint-four times more than previously estimated - according to a group of scientists from the Australian University in Sydney and University of Queensland and National Cheng Kung University from Taiwan.

The different impact of climate changes on the tourism industry will be shown in the succeeding sections.



IMPACTS OF TOURISM ON CLIMATE CHANGE:

Climate change and tourism shows the bilateral relationship between them. Climate change affects tourism and vice versa. Climate change may ask for adaptation measures, like shifting destinations, seasons and activities and investing in new air conditioning systems and Tourism may ask for mitigation measures aimed at reducing greenhouse gas (GHG) emissions. More than many other industries, tourism is totally dependent upon climate. New research finds that from 2009 to 2013 tourism accounted for 8% of global greenhouse gas emissions Worldwide, making the sector a bigger polluter than the construction industry. Tourists are the main contributor to climate change in a number of ways – through travel by air, rail and road, for example, and by consuming goods and services, such as food, accommodation and souvenirs.

SOLUTIONS FOR CLIMATE CHANGE:

SUSTAINABLE TOURISM:

The concept of sustainable tourism development has become the focus of increasing attention amongst tourism theorists and practitioners over the last decade. In tourism, there are a collection of definitions for sustainability and sustainable development (Butler, 1999b; Page & Dowling, 2002). The World Tourism Organization (WTO, 2001) prefers the following definition of sustainable development:

“Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is predicted as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, and biological diversity and life support systems.” (Zhenhua Liu 1994)

Sustainable tourism requires both the sustainable growth of tourism’s contribution to the economy and society and the sustainable use of resources and environment. (Zhenhua Liu 1994) Globally, tourism has been growing rapidly during the last half a century, from 25 million international tourist arrivals in 1950 to 698 million in 2000 (WTO, 2002), and is expected to grow at an average annual rate of 4.3% until 2020 (WTO, 1998).

ECO- TOURISM:

Ecotourism developed ‘within the womb’ of the environmental movement in the 1970s and



1980s(Honey, 1999, p. 19). Eco tourism is defined as a "Responsible tour to natural areas which does not affect environment and conserves the nature and sustains the well-being of local people." However, it is contended here that, regardless of definition, ecotourism is an instigator of change. It is unavoidable that the introduction of tourists to areas which were previously seldom visited by outsiders will place new demands upon the environment associated with new actors, new activities, and new facilities. This will involve the forging of new relationships between people and environment, between peoples with different lifestyles, and between a wide variety of forces for both change and stability. These forces act at a heterogeneity of scales from global to local. Ecotourism is not automatically sustainable. However, if it is to be sustained and if it is a contributor to sustainable development, it must be economically viable, environmentally appropriate and socio-culturally acceptable. If positive tourism experiences are not available, and then tourists will halt to come - there will be no tourism! If ecotourism is not economically feasible, then the facilities and services required by most ecotourists will not be provided and the potential economic benefits of ecotourism for both industry providers and local residents will not be achieved. If the environment and its fortunes are not maintained then the resource base for ecotourism is destroyed - if tourism continues, it is unlikely to be ecotourism unless one can persuade visitors to come to restore a severely degraded environment. If the ecotourism is not culturally and socially acceptable and local people do not benefit from its existence, they will be hostile towards and may work to undermine it. Thus, economy, environment and culture are all involved. Both are crucial - they are all vital to the successful introduction, operation and perpetuation of ecotourism.

CONCLUSION

This review shows the impacts of the tourism industry and appropriate response options. Climate change is to be sure a highly remarkable problem for the global tourism industry: less acute than wars and terrorism, but larger scale and longer lasting. (Buckley, R 2008). Climate change and tourism shows the bilateral relationship between them. Climate change affects tourism and vice versa. Climate change may ask for adaptation measures, like shifting destinations, seasons and activities and investing in new air conditioning systems and Tourism may ask for mitigation measures aimed at reducing greenhouse gas (GHG) emissions. Weaver (2011) contends that "tourism's expanding engagement with climate change, as it is currently unfolding, is not necessarily conducive to the interests of tourism sustainability". I contend that how tourism responds to climate change is absolutely critical to sustainability of tourism and should the sector retreat from engagement in climate change, it would be to its substantial detriment. (Daniel Scott 2010). In order to achieve objectives of sustainability, the tourism industry should focus its action on the application of technologies and the adaptation of tourism businesses and destinations to new environmental conditions.

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