



Global Warming And Its Impact On Tourism In Himachal Pradesh

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ABSTRACT:

Recently, research on global warming, climate change and tourism has shifted to the forefront. Aside from the widely read books and scholarly papers on the subject, there is a heated discussion going on. "Warming of the climate system is unequivocal as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice since the mid-20th century," said the Intergovernmental Panel on Climate Change. This text takes a conceptual and self-directed approach to provide readers with an all-inclusive state of the art. This study aims to define and comprehend the scope of research conducted to evaluate the effects of climate change and global warming on tourism. The process involves the steps: first, searching the literature using the Google search engine; second, consulting reputable research journals on tourism, climate change, and global warming; and third, looking through published reports from government agencies and scientific and international organisations. Given the nature of the business, the size and effects of climate change and global warming clearly affect the tourist industry's fortunes.

Keywords: Global warming, Climate change, Tourism, Carbon Emission and Temperature rise.

Introduction

Apart from being a vital economic sector, tourism plays an important role in providing leisure, entertainment and relaxation. Climate is undoubtedly one of the key factors influencing tourism. The tourism industry has little influence on global climate change, which can have a significant impact on many popular tourist destinations as well as those that are considering becoming tourist attractions. In order to assess the impacts of climate change on tourism, we need to understand how weather and climate affect travel. Published research does not show consistent attention to consensus on the degree of interdependence, despite the clear strong link

between vacation choice (type, destination and duration) and climatic and meteorological conditions (Fagence, Kevan, 1997). There is some uniformity in the way certain tourism and leisure activities are assessed in terms of their sensitivity to the weather and in the emphasis on comfort criteria, but there are also peculiarities in the destination, approach and area of study. We should discuss at least three methods:

- Climate-derived tourism activity zones and tourism climate indicators
- Efforts to identify the best days for a certain activity or form of recreation
- Weather sensitivity assessment for tourism assumed that climate change will affect People's need and desire to travel to places with variable temperatures; Mobility, which includes access to transportation options, transit safety, and an encyclopedia of life support systems
- Safety: increased frequency and intensity of weather extremes are predicted (natural disasters are likely to put tourists at greater risk than local residents, and vector-borne diseases may proliferate);
- Attractiveness of tourist destinations: some places, such as islands in the Pacific Ocean, may become less popular or even disappear, while other places may grow in popularity;
- Offers in tourist destinations - Needs and desires to travel can be divided from the perspective of climate change into:
- Impacts on the home climate: people will like to spend some time in more pleasant climates or they will want to avoid oppressive weather conditions (for example, heat waves);
- Travel with the purpose of enhancing health in places known to have a healthy climate;
- Searching for climate features that allow selected recreation forms and sports. The impact of climate change on mobility and transport can be roughly divided into:
- Impacts on infrastructure (roads, airports, etc.);
- Speed, convenience and safety.

There is no doubt that climate change is going to affect the economy and the environment, but also human health. Our scope in this article is to describe some of the most important relationships between tourism and climate change, and to point out the potential changes in the patterns of mass tourism due to climate change. Due attention will be paid to expected increased risks for the tourism industry, individual travelers, and the environment at the tourist destinations. Projected climate change resulting from greenhouse gas global warming is likely to provide new opportunities for the tourism industry in some areas, but will restrict both the supply and demand for outdoor recreational facilities in others.

1. Tourist destinations will be forced to respond and adapt to the impacts of climate change on infrastructure and programs. It could be that some of the present destinations will lose appeal, and some others will increase their potential to attract masses of tourist. Some of the presently popular places could become dangerous or associated with a high health risk. Climate change could possibly affect also the availability of vital resources, for example drinking water, and will have some impact on propagation of diseases like malaria, dengue fever, etc. But already now fashions are forcing the tourist industry to develop and adapt constantly.

2. Tourism in the Future Every year more than half a billion people cross international frontiers. In Europe, the number of international travelers grew tremendously in the last few years of the twentieth century, and the growth is expected to continue. This enormous mobility of people brings an increase in health risks for travelers and host populations, together with greater risks for the environment and for the cultural identity of the world's population

Objectives of the Study

1. To study the concept of global warming.
2. To study the impact of global warming on tourism in Himachal Pradesh.

Effects of Global Warming on Tourism - Tanja Cegnar (Pasini,1999). What are the motivations of travelers and temporary migrants to go away? They are different, very numerous, and often combined. Traditionally it could have been—and it is the same today—the search for more resources, more food, more security, and more pleasant and comfortable climates. It could have been the search for commercial profit, or the conquest of more attractive places, but also a flight from war or other frightening situations. And what about the curiosity, the pleasure of discovering new landscapes, new people, and new cultures? People travel so that they can narrate, write, or film, urged on by the thrill of adventure. People can also travel for reasons of work, looking for different markets offering different treasures. Others travel to escape, looking for freedom in unreachable exotic climates. Some people travel for motives of faith, on pilgrimages, or on visits to see sanctuaries or oracles. Another reason for travel can be study and research; it is also possible to travel out of sheer curiosity. What about the spirit of adventure? We can assume that the motivation for traveling remains the same, but the possibilities and opportunities will increase in the near future. The World Tourism Organization (WTO) predicts that twenty-first century tourism will be the antidote to high-tech living. The year 2020 will see the penetration of technology into all aspects of life (Pasini, 1999). People in the high-tech future will crave the human touch and tourism will be the principal means to achieve this. Upscale, luxury services that pamper and spoil their customers have a bright future in the twenty-first century. At the same time there are good prospects for low-budget destinations and packages like self-catering holiday facilities that offer plenty of opportunities for socializing among families and friends. WTO predicts that 1.5 billion tourists will be visiting foreign countries annually by the year 2023, spending more than US\$5 billion every day. Tourist arrivals are expected

to grow by an average 4.3% per year over the first two decades of the twenty-first century, while receipts from international tourism will climb by 6.7% per year. In domestic tourism, WTO estimates multiply arrivals by 10 and quadruple receipts, which brings us to the grand total of 16 billion tourists spending US\$8 trillion in 2023. Tourism in the twenty-first century will not only be the world's biggest industry, it will be the largest by far that the world has ever seen. Along with its phenomenal growth and size, the tourism industry will also have to take on more responsibility for its extensive impacts—and not only its economic impact, but also its impact on the environment, on societies, and on cultural sites. Environmental values, economic well-being, and tourist health are interdependent. Many actual and potential tourist destinations are concerned or associated with safety and security problems derived from social unrest, delinquency, terrorism, natural disasters, and health hazards. Natural disasters and health hazards, at least, are closely related to climate variability and climate change. Global climate and regional geographic environments are evolving. These changes can create situations and conditions that favor or support new or different disease presentation. A classic example is the change in the habitat or location of vectors of human disease as a consequence of climatic or geographic change. If changes to the distribution of vectors or disease hosts take place in regions affected by or subject to population movements, we can witness the introduction or reemergence of Tanja Cegnar traditional diseases. Examples include the spread of malaria into areas previously malaria free. Given the enormous increase in international travel, doctors today find themselves being increasingly asked to advise their patients on vaccinations and chemoprophylaxis and having to diagnose exotic diseases. With climate change we expect some diseases to spread even more, so it is reasonable to expect an increase in the need for information on preventive measures and to learn what personal behavior should be adopted in order to avoid diseases transmitted by arthropods, food or sexual contacts, and what health documentation or medicines to carry. There are several risks from travel:

- Accidents occur on roads, in public places, during travel
- Disturbances of biorhythms are caused by shifts of time zone, sleep deprivation during the journey
- Natural disasters and severe weather can represent a threat to the health, property, and lives of tourists
- Disturbances with change of pressure
- Exposure to different kind of diseases
- With change of environmental temperatures we have to consider problems of thermoregulatory mechanisms and hydrogen balance, and adaptation of those balances and acclimatization to be kept in mind many of the abovementioned risks are closely related to climate and weather.

Climate and Its Components

Solar Radiation Solar radiation is the main source of energy in the atmosphere; the amount of solar energy reaching ground level depends among other things on the amount of cloud cover. It is not clear yet what changes in cloudiness and consequently in the amount of solar radiation reaching ground level we could expect in the future, if any at all. Solar radiation is an important natural factor because it forms the earth's climate and has a significant influence on the environment. Visible solar radiation has a significant impact on the human mood, which is why for people "nice weather" is synonymous with "sunny weather." Sunny weather is still a very important factor determining how attractive a place seems to an average tourist. But in recent years the public has been paying more attention to ultraviolet (U.V.) radiation. The U.V. part of the solar spectrum plays an important role in many processes in the biosphere. It has several beneficial effects but may also be very harmful if U.V. exceeds safe limits. If the amount of U.V. radiation is sufficiently high, the self-protective ability of some biological species is exhausted and the subject may be severely damaged. This also happens with the human organism, in particular the skin and the eyes. To avoid damage from high U.V. exposures, both acute and chronic, people should limit their exposure to solar radiation by using protective measures. Most of the UV-B radiation is absorbed in the stratosphere by ozone molecules and only a small proportion reaches the surface of the earth. Therefore, at the surface of the earth solar radiation is composed of a large amount of UV-A radiation and only a very small amount of UV-B radiation. UV-B radiation is known to be biologically damaging, whereas UV-A radiation is much less damaging but is known for its ability to tan the human skin. As ozone is the main absorber of UV-B radiation, the amount of UV-B radiation at the earth's surface very much depends on the total amount of ozone in the atmosphere, thus on the thickness of the ozone layer. U.V. solar radiation is a highly variable environmental parameter that differs widely in time and space. The need to reach the public with simple-to-understand information about U.V. and its possible determinant effects has led scientists to define a parameter that can be used as an indicator of U.V. exposures. This parameter is called the U.V. Index. It is related to the well-known erythema (abnormal redness of the skin) effects of U.V. radiation on human skin and it has been defined and standardized under the umbrella of several international institutions, including the World Meteorological Organization (WMO), the World Health Organization (WHO), the United Nations Environment Programme (UNEP), and the International Commission on Non-Ionizing Radiation Protection (ICNIRP) (Vanicek et al., 2000). Under cloudless conditions, each 1% reduction in ozone results in an increase of about 1.3% in the UV-B that affects skin tissue reaching the surface of the earth. It is very difficult to predict with any certainty when the ozone layer may recover. It is estimated that the peak global ozone losses have already been achieved, but the recovery of the ozone layer will be slow. The international measures to safeguard the ozone layer seem to be efficient, but because chlorofluorocarbons (CFCs) are quite stable and long-lived, throughout the first decades of the twenty-first century we still expect the ozone hole to appear, more extensively in some years than in others, mainly depending on climatic conditions. Thus the need will remain for understandable and standardized information about U.V. solar

radiation. Tourists should be informed about the variability of the U.V. Index in Europe and throughout the world. Such information will also remain among the most important pieces of biometeorological information in the twenty-first century. U.V. radiation increases with altitude because the amount of absorption in the overlaying atmosphere decreases with altitude. Measurements show that U.V. radiation increases by 6%–8% per 1000 m increase in altitude. Thus all tourists visiting destinations at high elevations should be aware of the fact that the exposure to U.V. solar radiation is much higher there than on low-lying land. Tourists should be informed that sometimes, for example in the presence of fresh snow or sandy beaches, reflected U.V. radiation noticeably increases the dose of U.V. radiation. Information about the U.V. Index should be upgraded with descriptions of protective measures and healthy ways of sun bathing.

Climate Change, Tourist behavior and Effect

These articles were more destinations specific and tended to use case studies to highlight how weather can change tourism in an area. France, Ontario's provincial parks, Himachal tourism tourism, and Bernese Overland are some examples provided in this category. The main ideas in this category included assessment of travelers' attitudes toward climate change, business owner attitudes, and willingness to address climate change. Travelers seem to be well aware of climate change issues but most are not willing to change their travel. Behavioral change by business owners tends to occur when it affects their bottom line – either through the demands of their clients or through savings in energy and other resources. In order to be effective, educational campaigns on climate change require different approaches for different people. Other studies showed that when the desired attributes of a destination changed, travelers would prefer to go elsewhere. Articles about changes in season due to climate change refer to both the positive impacts, such as, a longer tourism season in Alaska and the negative changes, like longer and drier seasons in Tunisia. Climates have an impact on tourist demand which will affect destination choice and duration of travel. To some extent, publications that fell into this category generally touched on many topics of climate within the same article. A few articles called for more climate change and tourism research. One article discussed a historical review of climate change, and another gave examples of how climate is an economic engine.

Impact of Climate Change on Tourism

This category discussion of the impacts and consequences of climate change on tourism are provided. Articles presented in this category ranged from discussions of the effects of a carbon tax on international tourism to the environmental consequences of what tourism does and will continue to do if not addressed.

Policy is discussed in two basic approaches:

1) How current climate change policies impact tourism, and; 2) Policies, programs, and actions related to climate impact and tourism. Many of the articles provide a discussion of how the tourism industry could or

should assist in the policy dialog so when policies that may impact their business are being formulated, they will not be caught off guard.

Conclusion

Research and discussions about tourism and climate change began in earnest in the past decade. The literature review shows a dramatic increase in published articles about tourism and climate change after 2005, of course demonstrating an awakening by tourism researchers to the phenomenon. Research also shows that certain areas will be affected more by climate change than other areas including mountains (lack of snow), islands and beaches (higher water levels and erosion), warm climates getting too hot, and cold climates warming up. This, in turn, changes the types of tourism such as snow skiing, beach recreation, and hiking, while possibly eliminating some recreation, such as snowmobiling. The applications of the information gained from this study are numerous. First, visitor numbers will likely increase in the northern part of the northern hemisphere and the southern part of the southern hemisphere. Additionally, destination seasonality will affect length of visitation. Ski areas will shrink in their season, but mountain tourism in the fall and spring will lengthen. Land managers will need to address capacity issues on public lands due to extended seasonal use. Second, ecological shifts caused by climate change can alter not only the type of special issue. For example, fishing opportunities will decrease as rivers and lakes show reduced water levels (lack of snowmelt). This, in turn, causes warmer waters, which is deadly to many fish. As river and lake water levels fall, conflicts for water use will increase (recreation, irrigation, drinking water). Destinations dependent on water recreation will need to diversify soon. Experts predict that droughts will happen more frequently with more severity. Designing alternative recreation opportunities now may keep some businesses open. Third, people in the USA have misconstrued the message and convinced others that climate change does not exist (Anderegg, 2010). This lack of faith in the experts is a fundamental issue in this country. As stated in Farrell and Ward's research, whether you are diagnosed with cancer you go to the experts (oncologists), you may get several opinions, but you still trust the experts since they are most qualified to identify and address the problem. In climate change there is a renewed need to trust the experts. We would argue that climate change mitigation by the tourism industry should become part of a 'normal' conversation worldwide. Relying solely on business knowledge, economics and potential capacity of adaptation of destinations (Farrell and Ward, 2004), and some social sciences is inadequate in a universe where managers must proactively protect.

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