



# DISASTERS AND ITS IMPACT ON THE TOURISM SECTOR

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## ABSTRACT

Tourism plays an important role in earning foreign exchanges but not only improving the economy this sector helps the individual visitors. This paper explains the importance and the tourism sector's struggles this study reviews More than 20 papers, for a better understanding of how the methods of tourism demand forecasting have evolved. The paper tells about the different natural disaster occurred around India and the impact made by it on tourism during a different period and this paper explained about the Indian tourism and its impact it speaks about how some beautiful tourist dentation destroyed because of natural disaster. This study explained about five natural disasters (Cyclones and floods, earthquake, Tsunami, Landslide, and Disease) and two manmade disasters (Terrorism and War) when comparing the impact manmade impact is greater than a natural disaster

**Keywords:** Natural disasters; Time series; Tourism; Terrorism

## INTRODUCTION

The tourism sectors affected mostly due to the crisis are any other impact on a country. Tourism helps us to understand the different cultures of the world. Over the past years, most of the countries have considered tourism as a contributor to economic growth and is widely accepted that year after year throughout the world a massive investment continues to pour into its development but whenever there has been any major impact on the economy of any country tourism has always been the first one to get affected as people start to cut down on their travel budget. This paper mainly related the tourism sector's struggles

and how certain situation arises in past years and how the sectors overcome the situation. The sector faces huge problems not only in business but also in individual persons, in the tourist places individual business peoples mainly depending upon the visitor's arrivals but it mainly affects through some reasons like a natural disaster, social disaster, economical problems, etc.

The hotel industry, the transport industry (Airline, Water, railway) Accommodation, Food and Beverage, Restaurants, Shopping places, Travel agents, Online Travel agencies are the tourist industries. There are more than 55 Places to visit in Tamil Nadu like In Chennai (Marina Beach, Government Museum, and National Park, etc.) In Pondicherry (Rock Beach, Promenade Beach, Chunnambar Boathouse, etc.) In Kodaikanal (Siver cascade falls, Thalaiyar falls, Kumbakkarai falls etc.) In Madurai (Meenakshi amman temple, Thirumalai Nayakkar Mahal, Alagar koyil etc.) In Nilgiris (There are more than 30 places to visit) these places and industries are always dependent on tourists. Any economic changes, crises, new social changes, natural disasters mainly affected the tourist destination and tourism industries.

## IMPORTANCE OF TOURISM

Tourism brings different people around the world together where people get a break from their routine life the tourism helps the people to relax and spend some time with their friends and families, the traveling help people to understand the different culture of the peoples around the world also travel gives new ideas, different environment, new knowledge's to the travelers. The people also travel from one country to another country this traveling build a friendly relationship between different countries. India is the place where we have a rich culture such as Carnatic music, dance, drama, dress, art, and craft, lifestyles traditional economic activates are the main reason for the foreign traveler to visit our country. Tourism is an important source for earning foreign exchange its help in the economic development of the country

Every country's in the world are developing very fast, people to keep up with the fast-growing economy are aim to earn more so they spend more time in office rather than a home in every families husband and wife both are going for a job they not even have time to spend with their children's, are relax from the business and work the tour could be the best option, by traveling with family make an inner understanding among them, father and mother can spend more time with their children's, leadership quality can be improved among the families

## REVIEW OF LITERATURE

Although, in general, tourists are reluctant to travel to countries with different infectious diseases trips to less developed countries with a prevalence of these diseases are still growing (**Leder K, Torresi J, Brownstein JS et al. . 2013**) Tourism is a sector with the open environment for the public network. The numerous interactions with the various dimensions of the outside world not only influence the tourism

system itself but also influence the environment (**Haedrich G., Kaspar C., Klemm K., Kreilkamp E., 2010**) the local issue of the basic needs such as water facilities accommodation, etc. are not had that much effective significant The regional impact is already devastating. The particular region that affected by floods, earthquakes are some of the examples. The war within the country is also an example of a national crisis this one affects the hole country. The terrisom attack reduse the tourism in 2008 had the country impact on the global tourism in 2008 had a **(Dreyer A., Dreyer D., Obieglo D. Oldenbourg Verlag; 2010.)**

The diseases that could spread quickly through humans this pandemic spreading affected the public this pandemic spreading can event pass from one country to another through travel and tourism. Travel and tourism is a wide and open sector for all the peoples around the world. In 2008 the SARS was a pandemic spreading diseases this starts from China to Hong Kong and from there it passed on to Singapore Taiwan and affected 30 countries' in the world and 8,000 peoples were infected by SARS around the world **(Ritchie B.W. 2009.)**

Tourism is one of the most extensive and complex phenomena of the contemporary world, which deeply marked the current society, at all levels and has been linked to the change of philosophy and perception of the concept of leisure, and to the imposition of a motivations set that become true conditioned - acquired reflexes in its development. Its evolution has led to major effects: appearance of large tourist facilities stretched on complex and extensive areas, causing huge investments implying the need for development, management, promotion and exploitation strategies; massive temporary displacements of population, with different motivations and demands and causing significant changes in the environment. The effects are often of contradictory nature, positive and negative, and whose knowledge and research can contribute to a better understanding of the phenomenology, aiming a sustainable development with potential multiple benefits for the environment and the human community. **(N. Ciangă, V. Sorocovsch.2017)**

World Economic Uncertainty Index is developed by counting the frequencies of "uncertainty" (and its variants) in EIU country reports, however "Discussion about Pandemics Index" represents the percent of pandemic related words in those reports multiplied by 1000. We find that pandemics decrease tourist arrivals. Moreover, this effect exists only for low-income economies. World Economic Uncertainty Index is developed by counting the frequencies of "uncertainty" (and its variants) in EIU country reports, however "Discussion about Pandemics Index" represents the percent of pandemic related words in those reports multiplied by 1000. The following keywords are searched in the Economist Intelligence Unit reports: "Severe Acute Respiratory Syndrome, SARS, Avian flu, H5N1, Swine flu, H1N1, Middle East respiratory syndrome, MERS (Middle East respiratory syndrome), Bird flu, Ebola, Coronavirus, Covid-19, Influenza, HIV1, World Health Organization, and WHO". We find that pandemics decrease tourist arrivals. Moreover, this effect exists only for low-income economies. **(Ahir H., Bloom N., Furceri D.,2020.)**

It should also be noted that the effect of COVID-19 is hard to predict, as the world has not experienced such a global pandemic before. The governments are implementing travel bans and border closures. Therefore, our findings based on the previous pandemics will have limited power to predict to possible effects of COVID-19 on tourism. Future studies can examine the short-run and long-run effects of pandemics on tourist arrivals by using quarterly/yearly data in a single country or a group of countries by using the autoregressive distributed lag model approach (Song H., Qiu R.T., Park J 2019)

In addition, visitors are highly mobile and may change their choice of destination if they perceive an increase in risk at a destination. Tourism studies have consistently found five critical tourism risk factors:

- (1) War and political instability (Gartner & Shen, 1992; Ioannides & Apostolopoulos, 1999; Mansfeld, 1996; Seddighi et al., 2000);
- (2) Health concerns (Miller & Ritchie, 2003; Mc Kercher & Chon, 2004; Cooper, 2005);
- (3) Crime (Brunt, Mawby & Hambly, 2000; Dimanche & Leptic, 1999; Pizam, 1999);
- (4) Terrorism (Sönmez, 1998; Aziz, 1995; Sönmez & Graefe, 1998a, 1998b; Sönmez, Apostolopoulos & Tarlow, 1999); and
- (5) Natural disaster (Faulkner, 2001; Armstrong & Ritchie, 2007; Faulkner & Vikolov, 2001; Mazzocchi & Montini, 2001; Chandler, 2004; Higgins, 2005).

#### **TOURISM DESTINATION AFFECTED BY CYCLONES AND FLOODS**

Mostly South India got affected because of the continued changes in the climate when there is a natural disaster the surrounding places are also affected. Tamil Nadu is a state affected by a minimum of five to six cyclones every year more than thousands of people are affected many businesses and workers are stopped by this cyclone this also has a huge impact on the tourist destination and reduces the travellers. In 2015 there was a flood in Chennai due to heavy rainfall more than 1,000 business are affected and lives are being lost, the tourist places around Chennai (Mahabalipuram 52 km from Chennai, Pulicat 55 km from Chennai, Kanchipuram 72 km from Chennai, Tirupati 135 km from Chennai, Nellore 177 km from Chennai, Puducherry 161 km from Chennai) are also have a great impact due to the cyclones.

Cyclone Gaja on 16th November 2018 has the destruction of towns and rural areas of South India according to government records 45 people are lost their lives more than 2,50,000 people were displaced from their homes this cyclone-affected all the tourist destination in Kerala, Karnataka, and Tamil Nadu. The Kodaikanal faced a huge fall in tourism they took more than 6 months to recover from the distraction. In Kerala more than 14 districts were affected, Kerala is a place of beauty, there are 418 hotels and 12,672 rooms and 30% of income for the state is from tourism mostly foreigners travel to Kerala it is one of the attractive places in India after the flood the economy of the state was fallen many bookings were cancelled the tourism-related industries was closed for months Ernakulam district, Idukki district (Munnar, Thekkady) are been affected mostly.

Even flood-affected north India during 2013 2018 and 2021 the Uttarakhand was affected very badly thousands of people lost their houses and hundreds have been killed 50% of the booking was canceled for July, August, and September this flood affected the hill stations like Mussoorie, Nainted, Jim Corbett, Dehradun, Lansdown, and Kasauli. In Uttarakhand the Mussoorie is a famous tourist place where mountains filled with trees make us to counties with nature, the forest with many different types of trees give peace of mind for nature lovers this is a pleasant place to observe the beauty of nature in Mussoorie (Kempty falls, Gun Hill, George Everest house, Mussoorie Lake, Bhatta Falls, Clouds End, Beneog Wildlife Sanctuary) are the most popular destination.

## **IMPACT ON TOURISM DUE TO EARTHQUAKE**

Earthquake is called has a sudden change in the surface of the earth the reason behind the change is a clash between tectonic plates inside the earth the tectonic plates are the huge rocks inside the earth, the earthquake can be measured using Richer scale the maximum reading of earthquake in the world is 9.5 it is measured on May 22, 1960, near Valdivia in chile. We can fell the earthquake that is more than 6 in the richer scale in a year 9,00,000 earthquake are happing that is below 2.5 Richter scale 30,000 Earthquake happened between 2.5 to 5.4 in the richer scale we can fell only 20% of the earthquakes.

In 1934 an earthquake struck Nepal and India this killed more than a thousand peoples on both the sides of Himalayas, Recorded reading of the Richter scale is 8.5 magnitude in India Bihar, West Bengal, Moghyer(Now Munger), Darbhanga, Muzaffarpur was affected very badly this earthquake destroyed much historical building like Naulakha Palace, Laxmi Vilas Palace, UNESCO World Heritage site, Dharhara tower. The Bihar is a place where Buddhism and Jainism were started it is a historical place, Gaya is the place where Buddha attained enlightenment, Nalanda is the oldest university in India, Munger is the school of yoga, Patna is the birthplace of the Last Sikh Guru Guru Gobind Sing.

One of the most severe distraction in India happened on 2001 January 26 A massive earthquake strikes Gujarat that taken away the life of 20,000 People in an hour according to the reading more than 1,66,000 peoples have injured this natural disaster affected the economics of the state and nation 40% of buildings and temples where damaged this strikes mainly in Kutch, Ahmedabad, Jamnagar, Surat, and Surendranagar Kutch is most popular tourist places in India it has the shape of a tortoise, Kutch is the place where the largest district in Indian with the white salt district is there, Somnath is a place of temples and that place also had beach museums and nearby Girnar Hill, Gir National Park, Sakkabaug zoo and wildlife museum but a most popular destination for the travelers is the temples of Somnath this earthquake killed more than 17,030 in Kutch and more than 14,00,000 Peoples were injured. This was recorded has 7.7 magnitudes on the Richter scale.

On 30th September 1993, North Indian faced an earthquake in Maharashtra which killed more than 10,000 people and injured 30,000 people and lakes of people were displaced from their homes this massive earthquake is measured 6.6 magnitudes in Richter scale more than 30 villages were affected by the killer village is affected mostly. The nearby killer village there are chalk farm, City point Nilanya, Tuijapur, Nilanya, Solapur, Gulbarga, Bidar, Dand Harpur are the tourist places when earthquake stacked all the transportation where damages it takes a year to fix the damages the Maharashtra government contributes the funds to rebuild the villages and tourist arrivals have been reduced due to the massive earthquake in Maharashtra there are 15 best places for the tourist to fell the natural beauty of the state

## **IMPACT ON TOURISM DUE TO TSUNAMI**

The important reason for the series of seawater waves happened because of the Earthquake, volcanic eruptions, underwater explosions, landslides, glacier calving, meteorite impacts above are below the seawater is the cause of Tsunami. The first tsunami has occurred four thousand years ago on the coast of Syria, Tsunami is a Japanese word it was given in 1896 “Tsu” means “Harben” and “Nami” means “Waves” the largest Tsunami waves were recorded in Lituya Bay in 1958 the height of the waves is 1,720 feet above the sea level .

A beach is a place where a lot of natural peace can be found it is the very best place to be got relax and the silence of nature can be felt on beaches, the sea bathing, sun-basking, soft warm sand, blue water attracted the travelers to vest the beaches. In India, there are top 25 beaches that attracted the tourist (Radhanagar beach, Agonda beach, Cavelossim Beach, Mandrem Beach, Puri Beach, Elephanta Beach, Yarada Beach, Dhanushkodi Beach, Ganpatipule Beach, etc.)

The Tsunami that killed more than 2, 80,000 people around the world this natural disaster happened on 26th December 2004 this is called the world’s third-largest Tsunami, For India, it is the worst natural disaster we haven’t faced before this was measured as 9.3 magnitude earthquake in the Indian ocean this Tsunami Streaks TamilNadu, Andhra Pradesh, Kerala, and Andaman & Nicobar Island. In Tamil Nadu, Nagapattinam, Kanyakumari, Kanchipuram, and Cuddalore Chennai are affected badly this place is one of the important tourist places in TamilNadu. In Andhra Pradesh Prakasam Krishna, East Godavari, Nellore, Vishakhapatnam, West Godavari are the places that were destroyed and these are the famous tourist places.

90% of income for Andaman & Nicobar Island are from the Tourism according to the records 1,36,426 peoples visit Andaman & Nicobar in 2008 there are more than 52 tourist dentation, Have lack Island is one of the famous tourist destinations this is the place where we can see forest and beaches together with luxurious hotels and resorts, Neil Island is another popular destination with crystal clear water and from the Neil Island we can fell the sunrise and sunset than nature relax the heart of the peoples, minimum it will take five days to see the Island.

When the Tsunami attacked the Island, all the places in Andaman & Nicobar Island has affected this place had never faced a huge natural disaster the transportations, Building, Hotels, trees, beautiful places are damaged, in Andaman & Nicobar more than 1.4 lack people are living all the peoples are affected some lost their houses many lost their jobs, 1,310 people, were died and 5,600 of them where the missing maximum number of peoples Incomes are from the tourism but after this natural disaster this sector was washed out it took more than two years to recover the damages all the booking were canceled and there were zero visitors for some months Government take initiatives to overcome this natural disaster. This Tsunami not only strikes India but also Maldives, Phuket, Thailand, Sir Lanka, and the United Republic of Tanzania. 1.2 million Tourist canceled their trips to these countries in Sir Lank only 50% of a hotel room are occupied and 18 percent of foreign income for the nation is from travel and tourism this natural disaster had a high impact on the country's economy, the places like Phuket, Phang Naga, and Krabi are the famous tourist places in Thailand affected mostly

### **IMPACT ON TOURISM DUE TO LANDSLIDE**

The landslide is called has the mass movement of rock in the mountains this landslide occurred because of rainfall, Snowmelt, Changes in water level, Stream erosion, Changes in groundwater, Earthquakes, Volcanic activity.

The Mountains were filled with trees and forest with the chill climate that makes tourist vest these places, many hill station in India are called the famous tourist places according to geographical location India is near to the Equity line during summer the maximum temperature of 52.2 degree Celsius was recorded in North India and in south India, the maximum temperature of 43.9 degree Celsius was recorded in the year 2020 and all the climates of west and country are below 20 degree Celsius so most Indian and foreign travellers are planning a trip to the Hill stations in Indian .

When a landslide occurred in a Hill station the roads are damaged and the transportation was blocked it take mounts are days to fix the affected roads during the landslide many have lost their lives even the tourist people died during the landslide, the landslide happened immediately without the warning it not give any time to escape, there are no scientific equipment's to measure are found the disaster before, many tourist places also washed away due to the landslides.

We can forget the landslide that killed many people this is a nightmare of the Darjeeling peoples, Due to the rain fall this massive landslide was occurred the recording tells us that 1,000 millimetres of rainfall in 52 hours (it is five days) in a year TamilNadu receive average of 984.1 millimetres of rainfall, When people are thinking about the landslides they think the landslide will happen in one are two places but 20,000 landslides was occurred in Darjeeling that was one of the severe disaster of the nature it was happened in the year 1968 November 21st during this disaster many places in Darjeeling washed out the Darjeeling is always vulnerable to the landslides in September 1899 and January 1934 a landslide destroyed

the roads and towns of Darjeeling, In 1950 due to heavy rain a massive landslide happened and in September 1980 a landslide killed many peoples and has per the records in 1991, 1993, 2003, 2004, 2005, 2006, September 2007, June and July 2015 the landslides are occurred in Darjeeling, In Darjeeling there are more than 30 places are there to visit such has Tiger Hill, Batasia Loop, Sandakphu Trek etc.

Guwahati landslide Assam in 1948 Killed more than 500 peoples in Guwahati ten beautiful places are there for travelers the places are Namer National park, Umanada Island, Assam state Zoo cum Botanical garden, etc. Amboori landslide Kerala on November 2001, the people in Kerala are telling it is the worst natural disaster in Kerala that killed 40 peoples because of landslide in Amboori Neyyar wildlife sanctuary, Agastya Mala, Panmudi Hill Station, Meenmutty waterfall, etc are the tourist dentation in Amboori. Kedarnath landslide Uttarakhand this one killed 5,700 peoples and 4,700 villages are affected. In TamilNadu the Nilgiris was affected due to landslide in the years 1902, 1978, 1993, 2001, 2006 and 2009 are the year the Nilgiris was affected due to the landslides when we are comparing to the other places landslide in The Nilgiris the lives are lost in a minimum Numbers.

## **IMPACT ON TOURISM DUE TO TERRORISM AND WAR**

Terrorism is the unlawful use of violence there are seven types of terrorism are there this are The New Terrorism, State Terrorism, Religious Terrorism, Theological Terrorism, International Terrorism, Criminal Dissident Terrorism, Gender selective Terrorism. Terrorism threads the economics of a country a Terrorism attack can lead to a war between the countries' The Terrorism Threads the economics of a country. Even Terrorism actives like blasting building, killing peoples, occupying certain places threads the public, the people who are far away from the attack also be threaded by the attack.

The meaning of war is a conflict carried on by force of arms between nations or between parties within a nation. The disaster that affected a long-term economy of a country and reduces the population of the people is done by man-made war. During the war no one is allowed inside the country the Impact of the war will affect many industries and business inside the country.

India was attacked by many terrorists. On 14th February 2019, the Pulwama was attacked in Jammu & Kashmir killed 40 peoples, And 17 Juwan's were killed by four terrorists who attacked Uri in 2016 in Kashmir. The Mumbai attack in 2008 is the worst one that killed 166 people and injured 300 this attack occurred in five major places in Mumbai there was another attack in the same 2008 in Jaipur nine bomb blast happen for 15mints that blast killed 80 public peoples are died and 170 public peoples are injured. This type of terrorism activity threads the travelers to vest some beautiful places like Jammu and Kashmir this place is called has heaven on the earth by many travelers. The Yusmary is a hill station in Kashmir it is a beautiful valley with many numbers of different trees and flowers and mountain that covered with the green grass and Gulmary the mountain that is covered with snow during summer we can see many different types of flowers the son Mary is another tourist dentation has three great lakes such has kishansar, Vishansar and

Gadsar like this there are more than 50 places are there in Jammu and Kashmir but because of continuity Terrorism attack and wars, these beautiful places have minimum numbers of visitors. Indian is called has the third most terrorist attacked country in the world.

After independence in 1947 the first war was started with Pakistan in Jammu & Kashmir till 1948 and after 13 years second Indo-Pak war was started this war took place between April 8th to September 23, 1965 (5month 15days) during this war Lal Bahadur Shastri is the prime minister and Ayub Khan is a President of India Again there was a war with Pakistani in 1971 for 14 days in December and Fourth Indian Pakistani war was started this war is also called has Kargil war it was started from 3 May 1999 to 26 July 1999 during this war Atal Bihari Vajpayee is the Prime minister of India. Like this India face many wars during this times maximum funds are allotted for the army and equipment even a world war one and two decries the development of the world economy during war other industries and business are affected very badly no travelers are allowed to travel inside the country and outside the country that affected the travel and tourism during the war periods when we are comparing with the natural disaster the war the manmade disaster is too High

### **IMPACT ON TOURISM DUE TO DISEASE**

After the outbreak of covid-19, the tourism industry faced big challenges. Tourism plays an important role in many people are depending on the tourist industries as the outbreak of covid-19 lock down all the 29 states in India were locked down and all the transportations where blocked many people are lost their jobs in such a situation many tourist places faced huge problems. During the years tourism play an important source of the country for the growth of the economy and is widely accepted that year after year throughout the world a massive investment continues to pour into its development but during any impact, people start to cut down on their travel budget The Travel & Tourism sector faces a staggering 100 million job losses due to the coronavirus pandemic according to the World Travel & Tourism Council. Coronavirus disease 2019 (COVID-19) is a highly infectious disease with a long incubation period. It is a disease speared all over the world recently.

### **CONCLUSION**

An author told that when we are flying in an airplane for the first time we feel how small we are and we occupied very little space in this world, The world is a vast place the humans are such intelligent beans who can create many different things in this vast world but still, we not have any scientific equipment's to stop the natural disaster every year the world is facing many disasters but still, the world is running a natural disaster taken away more number of lives and destroy the buildings but in a year the place and building are been rebilled such a capacity the human's beans had, governments have to take some imitative measures to make aware the public about the natural disaster that may happen in the future years, The humans are going far away from nature because of non-natural things that we create for our comfort, only during the travel & tourism we are getting close to nature and art by this study it understood the impact of tourism due to the

natural disaster. But after this natural disaster also the tourism industries are running still and earning foreign exchanges for the country, but the fear of war and Terrorism made the travellers not go to some beautiful places. Many factors can affect the tourism industries apart from the natural disaster

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