



Scienxt Journal of Law
Volume-2 || Issue-1 || Jan-June || Year-2024 || pp. 1-27

Environment protection & tourism: a socio-legal study

Rajat Saxena¹

Assistant Professor, Institute of Legal Studies, Shri Ramswaroop Memorial University
Lucknow. Uttar Pradesh, India

¹ Rajat Saxena, Assistant Professor, Institute of Legal Studies, Shri Ramswaroop Memorial University, Lucknow

Abstract:

The relationship between environmental protection and tourism has long been a topic of debate and contention. While tourism can bring economic benefits and cultural exchange, it also poses significant threats to natural ecosystems and indigenous communities. This abstract explores the complex interplay between environmental conservation efforts and the tourism industry, highlighting both challenges and opportunities for sustainable development. However, amidst these challenges, there exists a growing recognition of the need for sustainable tourism practices that prioritize environmental conservation and community empowerment. Governments, NGOs, and industry stakeholders are increasingly adopting measures to mitigate the negative impacts of tourism while maximizing its potential for positive change. This includes implementing regulations on visitor numbers, promoting eco-friendly transportation options, and supporting community-based tourism initiatives that benefit local economies while preserving cultural heritage and natural landscapes. Ultimately, achieving a harmonious balance between environmental protection and tourism requires collaborative efforts from all stakeholders, including governments, businesses, local communities, and travelers themselves. By prioritizing the preservation of natural ecosystems and cultural diversity, while promoting responsible tourism practices, we can ensure that future generations will continue to benefit from the beauty and richness of our planet's landscapes.

Keywords:

Environment protection, Tourism, Socio-Legal, governments, businesses, local communities

1. Introduction:

The activities of persons who travel or stay in another place than their usual surroundings, by purpose of special interests, business, or holiday² refers to as “tourism” which is today the world’s biggest growth industry. The intensive and stressful working life created the need, while growing incomes, paid holidays, more leisure time, and improved means of transportation created the basis.

At the time of globalization, the protection, conservation, interpretation, and presentation of different natural and cultural environments of any particular region or country is a significant challenge for people in all parts of world. Environment in its widest amplitude includes different aspects such as cultural, economic, political, social, and physical or natural type. Physical environment is often referred as the key element of tourism³.

Since holiday tourism is the largest and also requires the most resources, it is here that the conflicts between tourism and the environment are most visible. The main attraction to a tour is usually and mostly the environment and nature of a particular place, for example- Himachal Pradesh becomes a touring spot in the peak summers. The concept not clearly defined, but the definition of tourism used here takes its starting point in the demand side. The main conflict is about handling the situation of excess demand against the supply as resources are limited on the Earth. It is time and again proven that the places which are still untouched by human are the most serene. On the contrary, the place where human beings visit often exploit at a very rapid rate. It is the balance of this situation and its necessity thereto which this assignment aims to deal with.

The scope of the research will further be limited to the prevailing situations, problems as well as solutions for protecting the environment from the pressure of tourism industry, so that the tourism industry grows at a rapid rate along with the maintenance and preservation of environment and natural resources for the future generation.

Ecosystems consist of a society of individuals from different populations, living in a given area together with their non-living surroundings. It is important that the waste we produce can be either

² Anne Marie G. Christensen & Suzanne C. Beckmann, *Consumers’ Perspective on Tourism and the Environment*, 1998

https://www.researchgate.net/publication/228719926_Consumers%27_Perspectives_on_Tourism_and_the_Environment.

³ Dr. Abdoreza Faraji rad & Somayyeh Aghajani, *The Relationship between Tourism and Environment*, 2010 <https://pdfs.semanticscholar.org/4ed8/a846fb432e8308e3cc4439a95b6a855eb1c6.pdf>.

recycled or assimilated in the ecological system, in order to maintain balance within and between the economic and ecological systems⁴. Careful attention to the limited natural resources and having a sense of social responsibility towards the host society and culture that are influenced by the industry is one of the important factors in terms of boosting the tourism industry. The famous proverb that says: "Tourism is like fireworks, in this way, it is able to obtain food for home or to burn it". So in this context, the researcher is going to examine the effects of tourism on the environment⁵.

Historically, the true thrust for putting in force a well-developed framework came only after the UN Conference on the Human Environment (Stockholm, 1972). After the Stockholm Conference, the National Council for Environmental Policy and Planning was set up in 1972 within the Department of Science and Technology to establish a regulatory body to look after the environment-related issues. This Council later evolved into a full-fledged Ministry of Environment and Forests (MoEF).

MoEF was established in 1985, which today is the apex administrative body in the country for regulating and ensuring environmental protection and lays down the legal and regulatory framework for the same. Since the 1970s, a number of environment legislations have been put in place. The MoEF and the pollution control boards ("CPCB", i.e., Central Pollution Control Board and "SPCBs", i.e., State Pollution Control Boards) together form the regulatory and administrative core of the sector⁶.

2. Legal developments:

The necessity for preservation and protection of environment and usage of the natural resources sustainably is implicated in the constitutional framework of India and also in the International Commitments undertaken by India.

2.1. International scenario:

⁴ Supra note 1.

⁵ Ali Asadzadeh & Mir Sajjad Seyyed Mousavi, *The Role of Tourism on the Environment and Its Governing Law*, May 04, 2017, <http://ejbio.imedpub.com/the-role-of-tourism-on-the-environment-and-its-governinglaw.php?aid=19002>

⁶ Vinay Vaish, Hitender Mehta, *India: Environment Laws in India*, Aug. 31, 2017, <http://www.mondaq.com/india/x/624836/Waste+Management/Environment+Laws+In+India>

United Nations Environment Programme (UNEP) aims to mainstream sustainability into tourism development by demonstrating the economic, environmental and socio-cultural benefits of sustainable tourism. It supports the governments and other institutional stakeholders at local, regional and international levels. It further promotes sustainable consumption and production patterns in the tourism value chain and encourages the development of public and private partnerships⁷.

South Asia Co-operation Environment Programme (SACEP), an inter-governmental organization of association of eight member countries is to promote and support conservation and management of the environment, both natural and human, in the member states of the South Asian region in a cooperative manner to achieve sustainable development⁸.

International Centre for Integrated Mountain and Development (ICIMOD) which is to help promote the development of an economically and environmentally sound mountain ecosystem and to improve the living standards of mountain populations, especially in the Hindu Kush-Himalayas (HKH) Region⁹.

International Union for Conservation of Nature and Natural Resources (IUCN), a global environmental organization which is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable" (IUCN 2008)¹⁰.

Similarly, there are various other international agencies, regional bodies, conventions and multilateral institutions which aim at protecting the environment and balancing the impacts of the developmental activities on the environment thereto:- International Convention for the regulation of Whaling; International Plant Protection Convention; The Antarctic Treaty; Convention on Wetlands of international importance; Convention on International trade in Endangered Species of Wild Flora and Fauna; Protocol of 1978 relating to the international convention for the prevention of pollution from ships; Vienna Convention for the protection of the Ozone Layer; Convention on

⁷ United Nations Environment Programme, *Tourism*, <https://www.unenvironment.org/explore-topics/resource-efficiency/what-we-do/responsible-industry/tourism>.

⁸ *South Asia Co-operative Environment Programme*, <http://egyankosh.ac.in/bitstream/123456789/12874/1/Unit-12.pdf>

⁹ International Institute for Environment & Development, *International Centre for integrated Mountain Development*, <https://www.povertyandconservation.info/en/org/o0034>

¹⁰ New World Encyclopedia Contributors & Wikimedia Foundation, *International Union for Conservation of Nature*, March 4, 2018, 10:29 p.m., http://www.newworldencyclopedia.org/entry/International_Union_for_Conservation_of_Nature

Migratory Species; Basel Convention on Trans-boundary movement of hazardous substances to; Framework Convention on Climate Change; Convention on conservation of bio-diversity; Montreal Protocol on the substances that deplete the ozone layer; International Convention for Combating Desertification, etc.

2.2. Municipal scenario:

As per the Part IVA (Art 51A-Fundamental Duties) of the Constitution, it is the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures. Further, Part IV (Art 48A-Directive Principles of State Policies) stipulates that the State shall endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country.

Some of the important legislations for environment protection are as follows:

The Air (Prevention and Control of Pollution) Act, 1981, which is to provide for the prevention, control and abatement of air pollution and for the establishment of Boards at the Central and State levels with a view to carrying out the aforesaid purposes.

The Water (Prevention and Control of Pollution) Act, 1974:- To provide for the prevention and control of water pollution. It prohibits the discharge of pollutants into water bodies beyond a given standard, and lays down penalties for non-compliance.

The Environment Protection Act, 1986:- To provide for the protection and improvement of the environment. It establishes the framework for studying, planning and implementing long-term requirements of environmental safety and laying down a system of speedy and adequate response to situations threatening the environment. The Act empowers the Central Government to take measures necessary to protect and improve the quality of environment. In case of any non-compliance/contravention of this Act/the rules/directions under the said Act, the violator will be penalized and punishable as per the Act.

2.3. Other laws relating to environment:

In addition, there are many other laws relating to environment, namely – the Wildlife Protection Act, 1972, the Forest Conservation Act, 1980, the Indian Forest Act, 1927, the Biological Diversity Act, 2002, coastal Regulation Zone Notification etc.

Almost all ministries of the Government of India are involved in decision making for sustainable development. There are inter-ministerial and inter-departmental committees, Core Groups for

coordination to formulate the optimum policy and legislation on issues concerning international cooperation/development assistance for Sustainable Development¹¹.

India is signatory to the following important international treaties/agreements in the field of environment: International Convention for the regulation of Whaling; International Plant Protection Convention; The Antarctic Treaty; Convention on Wetlands of international importance; Convention on International trade in Endangered Species of Wild Flora and Fauna; Protocol of 1978 relating to the international convention for the prevention of pollution from ships; Vienna Convention for the protection of the Ozone Layer; Convention on Migratory Species; Basel Convention on Trans-boundary movement of hazardous substances; Framework Convention on Climate Change; Convention on conservation of bio-diversity; Montreal Protocol on the substances that deplete the ozone layer and; International Convention for Combating Desertification.

The Ministry of Environment and Forests (hereinafter MoEF) is the nodal agency for environment conventions and treaties adopted by India. The MoEF and its agencies cooperate with various countries and from several UN and other multilateral agencies such as the UNDP, World Bank, Asian Development Bank, OECF (Japan) and ODA (U.K.) for various environmental and forestry projects. Sustainable development is an important consideration in bilateral trade agreements that India has signed. The role can be described as active. India has been the spokesman of the G-77 and China on Climate Change and has played a major role in UNEP¹².

3. Critical evaluation:

3.1. Environment and tourism: Relationship

Tourism is one of the world's fastest growing industries as well as the major source of foreign exchange earnings and employment for many developing countries, which has been majorly focusing on natural environments. However, it is a double-edged activity which has the potential to contribute in a positive manner to socio-economic achievements but, at the same time, its fast and uncontrolled growth can be the major cause of degradation of the environment and loss of local identity and traditional cultures. Biological and physical resources are in fact the assets that

¹¹ United Nations Commission of Sustainable Development, *Economic Aspects of Sustainable Development in India*, 2015, <http://www.un.org/esa/agenda21/natinfo/countr/india/eco.htm>.

¹² Ibid.

attract the tourists. However, the stress imposed by tourism activities on fragile ecosystems accelerates and aggravates their depletion. Paradoxically, the very success of tourism may lead to the degradation of the natural environment: by depleting natural resources tourism reduces the site attractiveness to tourists, the very commodity that tourism has to offer¹³.

UN Environment research has indicated that the tourism sector consumption of key resources – energy, water, land and materials (such as fossil fuels, minerals, metals and biomass) – is growing commensurately with its generation of solid waste, sewage, loss of biodiversity and greenhouse gas emissions. In a ‘business-as-usual’ scenario, tourism would generate through 2050 an increase of 154% in energy consumption, 131% in greenhouse gas emissions, 152% in water consumption and 251% in solid waste disposal. This is why sustainability must now define tourism development in the 21st century¹⁴.

The need to preserve the world’s inherent assets for future generation is becoming an essential goal not only for travel and tourism but also for all other industries that used the earth’s natural resources.

Tourism is an environmentally dependent activity. At the broadest level, the natural environments and heritages belong to people of each country and even some of them belong to all people of world. So, they all have right to understand, appreciate and conserve its national and international values.

The relationship between these two, however, might be complex; but it is very sensitive and close. In many destinations, both nature and manmade systems are today ruined after just few decades of exploitation. To stop tourism's serious over-exploitation of our common nature and hereby prevent its destruction of exactly what it is based on, the relationship between tourism and ecology must be balanced by the spreading of tourism development with a sustainable objective. Meeting the needs and wants of the present generation without compromising, neither nature nor future generation's needs and wants (The World Commission, 1987)¹⁵.

3.2. Impacts of tourism on environment:

¹³ Drishti IAS, *Impact of Tourism on Environment and Eco Tourism*, Nov. 30, 2015, <http://www.drishtiiias.com/upsc-exam-gs-resources-Impact-of-Tourism-on-Environment-and-Eco-Tourism>.

¹⁴ See Supra 6.

¹⁵ See Supra 2.

Tourism certainly contributes many positive things, both for individuals and whole societies. Inherent in the many positive effects of tourism, is a dark side which includes impacting both the natural and cultural environments at destination regions. By virtue of its enormous extension in size and spreading, especially the environmental consequences of the growing tourism industry are experienced all over the world. Tourists are deserting impoverished destinations to seek new unspoiled places to travel to, and the tourism industry seems to lose its image as a "pollution-free" service industry. International tourism has been considered as contributor to the enhancement of inter-cultural understanding. Many countries know this dynamic industry as the main source of income, employment, and private sector growth¹⁶.

3.3. Positive impacts:

Tourism industry can help environment through several ways. It is one of the industries that can help countries to achieve the economic, environmental and social aims¹⁷. Some of them are referred to as following:

- 1) Tourism can significantly contribute to environmental protection, conservation and restoration of biological diversity and sustainable use of natural resources. Because of their attractions, pristine sites and natural areas are identified as valuable and the need to keep the attraction alive can lead to creation of wild life or national parks.
- 2) It has the potential to increase public appreciation of the environment and to spread awareness of environmental problems when it brings people into closer contact with nature and the environment. This confrontation may heighten awareness of value of nature and lead to environmentally conscious behavior and activities to preserve the environment.
- 3) Direct financial contribution, can be considered as a way of tourism to help conservation of sensitive areas and habitat. Revenue from park-entrance fees and similar sources can be allocated specifically to pay for the protection and management of environmentally sensitive areas. Government can collect money in different indirect ways such as income taxes, user fees, taxes on sales or rent of equipments, and license fees for activities like hunting and

¹⁶ See supra 1.

¹⁷ Ibid.

fishing. Such funds can be used for overall conservation programs and managing natural resources.¹⁸.

- 4) Promoting the environmental culture in the tourist and cultural approach.
- 5) The acquisition of foreign currency and an increase in gross national income.¹⁹ Tourism contributes around 1.5 per cent of world Gross National Product²⁰.
- 6) A great help to justify and pay for the preservation of important natural areas and wildlife as tourist attractions.
- 7) Helping to improve the environmental quality of the area. Because tourists are interested in visiting nice, clean and pollution-free areas²¹.
- 8) Tourism can provide an alternative to development scenarios that may have greater environmental impacts²².

3.4. Negative impacts:

Beside the positive consequences, no doubt the negative environmental effects of tourism are also realized. The following table precisely reflects the positive as well as negative impacts of tourism on the environment:

Table adapted from UNEP, United Nations Environment Programme, 2015

<i>Impacts</i>	<i>Economic</i>	<i>Socio-cultural</i>	<i>Environmental</i>
Positive	<ul style="list-style-type: none"> • Employment Generation • Growth in income • Increase fee • Infrastructure Development • Multiplier Effect 	<ul style="list-style-type: none"> • Cultural Conservation • Better standard of living • Conservation of tradition and customs • Encourages global linkages 	<ul style="list-style-type: none"> • Conservation of natural heritage • Increase in volunteer work
Negative	<ul style="list-style-type: none"> • Leakages • Seasonal Employment • Shortage of Facilities 	<ul style="list-style-type: none"> • Dilution of Heritage and Culture • Increased crime 	<ul style="list-style-type: none"> • Vandalism • Littering • Pollution • Increase in carbon footprint • Destruction of natural habitat Increased Congestion

¹⁸ See supra 2.

¹⁹ See supra 4.

²⁰ See supra 12.

²¹ See supra 4.

²² See supra 1.

Elaborately, the negative effects may include:

- 1) The destruction of the natural environment of the woodlands and meadow through hiking.
- 2) Forest fires and destruction of plants.
- 3) Scattering of waste in coastal waters, lakes, rivers, fountains, parks and open spaces.
- 4) The occurrence of excessive construction in the vicinity of tourist centers.
- 5) An increase in noise pollution and air pollution caused by vehicle traffic and bustle of people.
- 6) The destruction of wildlife and plant species²³.
- 7) Uncontrolled conventional tourism poses potential threats to many natural areas around the world. It can put enormous pressure on an area and lead to impacts such as soil erosion, increased pollution, discharges into the sea, natural habitat loss, increased pressure on endangered species and heightened vulnerability to forest fires. It often puts a strain on water resources, and it can force local populations to compete for the use of critical resources (Holden, 2000).
- 8) In all above situations, tourism is environment's enemy but they can be two close friends, if they are planned correctly and also with cooperation of all other organizations or industries which are related to tourism directly and indirectly.²⁴

There are many environmental challenges in relation to tourism. Few of them are referred as follows: Firstly, there is a need to implement practical steps to achieve a practical balance between tourism and environment.

- The need for sustainable growth in different type of tourism such as ecotourism, natural, adventure, and cultural tourism through adherence to international standards and principles.
- To make closer cooperation among stakeholders who are involved in tourism and environment and their common interest lies in the encouragement of natural and cultural tourism.
- To educate tourists and familiar local people with the value of natural recourses and cultural heritages deeply.

²³ See supra 4.

²⁴ See supra 2.

- To control transport related impacts of increased tourism on the physical and historic environment like air travel, city congestion and the associated pollution and effects on climate changing.
- To not only integrate tourism and environment into networks or geographic grouping, but also to establish quality standards or systems of good practice to increase their effectiveness and efficiency, as well as to safeguard natural and man-made environment and heritages.
- To find a right balance between encouraging the expansion of tourism and safeguarding the environment²⁵.

Due to the pressure exerted on the environment by tourism some destination areas may ultimately become unsustainable, and decline in popularity over the long term. The following gives a review of the often deleterious effects of tourism-related behaviors on the natural environment, distinguishing between effects on the biotic and a-biotic elements:

3.5. Tourism's impacts on the biotic elements:

Since the biotic elements are important resources of tourism, they are particularly vulnerable to tourism industries and tourist behavior's impact.

Examples: The tendency of many tourists to bring home souvenirs as memories or status symbols for example, may result in the selective removal, collection or killing of often rare animals and plants, and thus adding to the loss of biological diversity; physical infringements where animals are hurt or killed, either by accident as in traffic or deliberately by fishing or hunting, are more extreme impacts, for say, beaches, are in certain areas also the place where turtles once a year lay their eggs. Studies in Turkey have shown that castles made of sand, excavations, and sunshades stuck in the sand cause the destruction of whole egg colonies; noise from restaurants and discotheques at night prevent the females from reaching the shore in time for laying their eggs; light from roads and buildings prevent female turtles from nesting and disorientate the newly hatched turtles who normally find their way to the sea with the help of the moon's reflections.

Habitat/ Ecosystem Alteration and Fragmentation Ecosystems and natural habitat can be damaged by tourist infrastructure, tourist activities, recreational bonding and the cruise industry. Recreational boats and cruise vessels can damage aquatic vegetation by cutting it with their propellers or otherwise damaging it when running aground.

²⁵ Ibid.

Coral reefs are especially fragile marine ecosystems and are suffering worldwide from reef-based tourism developments. Evidence suggests a variety of impacts to coral result from shoreline development, increased sediments in the water, trampling by tourists and divers, ship groundings, pollution from sewage, overfishing and fishing with poisons and explosives that destroy coral habitat.

Tourism can diminish the aesthetic appeal of a destination through the construction of buildings that clash with the surrounding environment, creating “architectural” or “visual” pollution.

Tourism not only contributes to climate change, but is affected by it as well. Climate change is likely to increase the severity and frequency of storms and severe weather events, which can have disastrous effects on tourism in the affected regions. Some of the other impacts that the world risks as a result of global warming are drought, diseases and heat waves²⁶

Changes in the living conditions of animals, either by impacting a-biotic conditions or by influencing feeding chains, have serious implications. Trekkers cutting forest vegetation for heating and cooking have caused wood scarcity in, e.g., Nepal (Mäder, 1988; UNEP, 1995). In the recent years’ clear cuttings in tropical forests have led to considerable environmental decline. Many tropical forests have after clear cutting turned into bushes or deserts, due to the washing or blowing away of the top soil.

Winter sport is the major reason why the Alps today are called the most threatened mountain system in the world. Where forest areas are cut clear to provide skiing facilities, the occurrence of avalanches and landslides have greatly increased.

3.6. Tourism's impacts on the a-biotic elements:

The a-biotic elements serve important purposes to tourism, since they not only offer resources, but also serve as setting for touristic activities and experiences on the land, in the water, and in the air. Attrition, pollution, and uncontrolled use of resources are the kind of problems that cause conflicts between tourism and environmental protection related to these elements. Example- Tutankhamun tomb in Egypt, due to overcrowding, the increase of moisture and bacteria from all these people (daily about 5 thousands) has been under a serious threat. Most of the harms and losses that physically enter the environment is not intentional and only the presence of some people in one place causes such damage or

²⁶ See supra 12.

- In general, if we want to have a summary of the effects of tourism on the environment we can see them in the three areas of environmental pollution, depletion of natural resources and physical results.
- So we must admit that the environment is not the product but it is actually a capital and any successful businessman thinks of the continuation of capital gains and income stability. The main problem of tourism is the lack of culture and awareness²⁷.

What are Tourism's Biggest Threats to the Environment?

Tourism poses a threat to the environment when local communities scramble to meet the inflated expectations of uninformed vacationers. In places like Vietnam, environmental consideration takes a back seat to economic growth. The tourism sector is a perfect example of that. Following are the biggest threats posed by tourism upon the environment:

- 1) The construction of new mega resorts along undisturbed coastal areas. It's a hard thing to stop, especially in some developing countries like Vietnam, where consideration for the environment takes a distant second place to growth as a priority. A good example is the once-untouched China Beach near Hoi An in central Vietnam, which is a developer's paradise and now a construction site of luxury resorts. Unfortunately, tourism will continue to drive this sort of development at even more secluded locations around the world;
- 2) The pressure that tourism puts on already unstable local resources in many developing nations combined with the pressure on lacking infrastructure systems like sewage and transport. Many destinations are in short supply of energy, water and food (which tourists generally take the best of);
- 3) Tourism can be a powerful destructive force, particularly in the hands of those looking for short term gain. When ecologically sensitive areas are not well managed, the results can be dire;
- 4) Although tourists are becoming more aware of their negative impact, few will actively try to reduce it unless prompted to do so;
- 5) Profit-driven overdevelopment for tourism can harm delicate ecosystems like beaches, wetlands, and rain forests. Corporate greed is the most immediate threat to the environment,
- 6) For countries where poverty is rampant and environmental policies aren't implemented, tourism's biggest threat to the environment is tourism itself. Oftentimes the local government

²⁷ See supra 4.

gets so excited about the new influx of tourists (i.e. money) that the environment is ignored. It's always difficult to find that balance between opportunity and environment.

4. Consequences of ecosystem's damage:

4.1. The consequences of ecosystem's damage:

The loss of biodiversity is one of such consequence. It has several consequences thereto:

- 1) The intangible and aesthetic values of the natural environment are reduced, and beautiful creatures will disappear forever.
- 2) The loss of species and subspecies, of which many have not been studied by natural science, results in the loss of potential resources.
- 3) Areas become more vulnerable to climatic problems, vermins, and diseases.

Hence, by altering or destroying for example forests' ecosystem, tourism adds to the reduction of biodiversity. Not only is the quantity of resources such as fossil fuels and timbers reduced, but also aesthetic values are lost²⁸.

4.2. Sustainable tourism developments:

The National Tourism Policy envisages a very big role for all the stakeholders in the decision making process. They are involved in the development of tourism and have contributed substantially in sustainable tourism in the country. The major programmes to promote sustainable tourism include:- Preparation of Master Plans for tourism development; Tourism Awareness; Integrated Development of Destinations and the Implementation of Eco tourism policies and programmes.

Examples of the ways in which eco-tourism and nature-based tourism are being promoted include: Eco-tourism projects in Kerala-Coconut Grove and Spice Village Resorts, the Bangaram Island Resorts, Bekal Resorts, Kerala, Jungle Lodges and Resorts, Karnataka, the sustainable development project of Andaman.

The Ministry of Tourism is making vigorous effort for the sustained growth of tourism through synergy programme and establishing effective co-ordination with state governments and other

²⁸ See supra 1.

agencies to develop infrastructure for sustainable tourism. There are no serious constraints on pursuing sustainable tourism.

4.3. Capacity-building, education, training and awareness-raising:

The Indian Institute of Tourism and Travel Management organize periodical training programmes on various aspects of Sustainable tourism. They also organize separate programmes for policy makers and administration.

4.4. Financing:

Activities in this area are through the national budget and private sector partnership, for example- a study for the development of a strategy for environmentally sustainable tourism in Andaman has been completed with the assistance of World Tourism Organization (WTO) and United Nations Development Programme (UNDP)²⁹.

4.5. Concepts of sustainable development and sustainable tourism:

Sustainable development was used as a means to bring together the seemingly contrasting concepts of economic development and environmental conservation.

Brundtland commission defines it as follows:

Development that meets the needs of present without compromising the ability of future generation to meet their own needs (WTTC, 1995).

Furthermore, if environment and tourism are managed based on the considerations such as weather and climatology, geomorphology, anthropology history, culture, etc., then it will be more practical and sustainable. The environment has an intrinsic value, which outweighs its value as a tourism asset. The harmony between the tourism and environment must be sought³⁰.

Is it possible that organizations can benefit, i.e. create economic gains, from being focused on environmental sustainability? Evidence of the commercial value attached to environmental sustainability suggests the answer to be yes, as can be gauged by looking at the empirical practice of corporate social responsibility (CSR) reporting.

Organizations require a new training regime that can offer a modern generation of entrepreneurs and leaders the right set of tools to balance both economic and environmental sustainability.

²⁹ See supra 10.

³⁰ See supra 2.

Accountants also need to be burnished with new skills in valuing – to an auditable standard and quality – environmental impacts/costs consistently, such that firms could benefit from the potential efficiency gains from environmental accounting. Crowd funding, venture capital, private equity, green bonds and internet finance are among a range of modern financial instruments that could play a defining role in supporting environmentally sustainable investments and supporting economic sustainability within organizations³¹.

For a development to be sustainable it must fulfill three basic principles. They are (The World Commission, 1987):

- a. Optimizing human well-being;
- b. Respecting the earth's capacity to regenerate resources and absorb waste; and
- c. Fair allocation of costs, benefits, and resource-use options.

To reach a balance between the environment and economic development, The World Commission (1987) recommends preserving, strengthening and extending the so-called carrying ability:

- i) preserving all plant and animal species because of both their economic and non-economic value for human beings;
- ii) reducing the negative impacts of human activities on the quality of the biotic and a-biotic elements in nature as much as possible in order to protect the general integrity of ecosystems;
- iii) Using new human knowledge and technology, e.g., for developing sustainable alternatives.

An unsustainable tourism development can therefore be described as a development, where tourism's exploitation is too large compared to nature's carrying ability.

With regard to tourism, the protection of the so-called free and intangible values of the resources in the natural environment needs particularly to be acknowledged. Such values include:

- **The existence value**, which is human being's satisfaction of knowing that a resource is being preserved, and thereby exists also to please future generations.
- **The option value**, which is the option of alternative future uses of an area if it is preserved.

³¹ David Broadstock, *Finding a balance between economic and environmental sustainability*, Friday 27, 2016, 3:43 PM, <https://www.scmp.com/business/global-economy/article/1956350/finding-balance-between-economic-and-environmental>

- **The bequest value**, which is the pleasure of knowing that a resource is not being used or exploited to its theoretical maximum capacity in the interests of future generations³².

4.6. Eco-tourism:

There seems to be universal acceptance of the fact that ecotourism was viable long before the 1980s in practice, if not in name (Soleimanpour, 2006, p. 2).

There is little consensus about the meaning of ecotourism, due to the many forms in which its activities are offered by a large and wide variety of operators, and practiced by an even larger array of tourists.

A clear distinction should be made between the concepts of ecotourism and sustainable tourism. The term ecotourism itself refers to a segment within the tourism sector, while the sustainability principles should apply to all types of tourism activities, operations, establishments and projects, including conventional and alternative forms. In the field, well-planned and managed eco-tourism has proven to be one of the most effective tools for long-term conservation of biodiversity when the right circumstances are present. While still relatively small, ecotourism is one of the fastest growing segments of the tourism industry.

4.6.1. General characteristics of Eco-tourism:

- 1) It contains all nature-based forms of tourism in which the main motivation of the tourists is the observation and appreciation of nature as well as the traditional cultures prevailing in natural areas.
- 2) It contains educational and interpretative features and increases the awareness and understanding natural and cultural systems of an area and the subsequent involvement of visitors in many issues that are affecting those systems.
- 3) It is generally, but not exclusively organized for small groups by specialized and small, locally owned businesses. Foreign operators of varying sizes also organize, operate and/or market ecotourism tours, generally for small groups.
- 4) It minimizes negative impacts upon the natural and socio-cultural environment.

³² See supra 1.

- 5) It supports the protection of natural areas and contributes to the conservation and management of legally protected and other natural areas.
- 6) It provides especial opportunities for local people and nature tourism employees to utilize and visit natural areas and maximize the early and long-term participation of local people in decision- making process about tourism.

In other words, although ecotourism management remains the focus of a number of books, less attention has been paid to the application of management theory and practice to this field³³.

4.6.2. Focus of ecotourism:

- 1) On local cultures, wilderness adventures and volunteering;
- 2) Personal growth and learning new ways to live on our vulnerable planet;
- 3) On cultural artifacts from the locality;
- 4) Travel to destinations where the flora, fauna and cultural heritage are the primary attractions;
- 5) Minimizing the adverse effects of traditional tourism on the natural environment and enhance the cultural integrity of local people;
- 6) Evaluating environmental and cultural factors, initiatives by hospitality providers to promote recycling, energy efficiency, water reuse and the creation of economic opportunities for local communities.

4.6.3. Principles to be followed in ecotourism activities:

- 1) Minimize impact;
- 2) Build environmental and cultural awareness and respect;
- 3) Provide positive experiences for both visitors and hosts;
- 4) Provide direct financial benefits for conservation;
- 5) Ecotourism include local communities in the activities of planning, development and operation and it contributes to their welfare;
- 6) Environmentally educative;
- 7) Raise sensitivity to host countries' political. Environmental and social climate;
- 8) Ecotourism is intended mainly for individual visitors and small organized groups;
- 9) Generates tourism satisfaction;

³³ See supra 2.

10) Ecotourism actively contribute to the conservation of natural and cultural heritage;

For developing countries, ecotourism serves as an ideal industry for fostering economic growth and conservation. The developing countries, often endowed with natural resources are now experiencing a dramatic increase in the number of visitors. Ecotourism can reduce the negativities associated with mass tourism and thus brilliantly help in conservation. On the other hand, it will also stimulate growth through its positive impact on employment opportunities, income generation and education of the host communities.

4.6.4. Eco-tourism potential in india:

- 1) India, uniquely blessed with wildlife diversity, offers great scope for ecotourism;
- 2) Some focal locations for eco-tourism development: the Himalayas, North Eastern States, Western Ghats, Jharkhand, Andaman & Nicobar Islands, Lakshadweep;
- 3) Major Potential areas: Protected areas, forests outside protected areas, village based tourism; ex situ conservation areas (ecological gardens, zoological parks, botanical gardens and biodiversity parks)³⁴.

4.7. Eco-tourism as sustainable development:

The Rio+20 Outcome Document “The Future We Want” highlights the role of sustainable tourism so as to come out of the adverse effects of tourism.

The UN defines sustainable tourism as “Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.”

According to Hector Ceballos-Lascurain “ecotourism is environmentally responsible travel and visitation to relatively undisturbed natural areas in order to enjoy and appreciate nature that promotes conservation, has low negative visitor impact and provides for beneficially active socio-economic involvement of the local populations”³⁵.

As an idealized alternative to mass tourism, ecotourism seeks balance between economic benefits for resident hosts and protection of the natural resource base against environmental costs. Yet these

³⁴ See supra 12.

³⁵ Ibid.

ambiguous descriptors fail to consider what is to be sustained, at what levels, and for whom. Nor is the fundamental contradiction resolved between the demand for economic growth to ameliorate poverty-induced ecological destruction and environmental conservation that inhibits economic growth. If ecotourism is to induce sustainable development, it must be ecologically sound, culturally sensitive, and economically viable. In order for such businesses to maintain profitability, it is essential to incorporate a balance between economic benefits, environmental costs, and social and cultural appropriateness.

There are *two major approaches in measuring environmental protection through tourism*: protecting the environment for the tourism industry and protecting the environment from the tourism industry. Eco-tourism challenges the mass tourism industry by potentially supporting conservation of the natural environment with funding for management of the area, education of the protected area for tourists and local communities, limiting number of visitors, and construction of facilities that minimize impact. Despite its motives, eco-tourism persists in raising environmental challenges, including: contamination in terms of waste, traffic, and noise; loss of “ecological integrity” of highly visited areas; and increased unsustainable pressure on resources. These challenges exist because oftentimes ecotourism destinations are unusually sensitive places that have limited ability to withstand excessive use; travel is likely to occur at critical times (e.g., during mating or breeding season); unknown and unexplored relationships between volumes of use and multi-layered environmental impacts; and "en route impact" from traveling to the site (e.g., consuming resources for planes) contributes to global climate change.

Obtaining the seasonal reduction techniques particularly the reduction of the use of tourism especially in busy seasons, is another useful way. In addition to these general approaches, specific measures must be applied in order *to control the effects of tourism on the environment*.

These *measures* include:

- Insertion of well-designed welfare systems of water supply, electricity, sewage and waste disposal and drainage for tourist facilities should be applied, such as water purification and recycling of waste and the use of solar generating heat.
- Development of roads and other transportation systems enough emphasis on the development of public and non-polluting means of transport for the movement of tourists. For example, the electric buses used in tourist resorts.
- Creating open space, parks and landscaping fit in the area of tourism.

- Environmentally appropriate land use practices and principles of regional planning, zoning regulations, standards development and architectural design in the area of tourism.
- Careful handling during the visit of tourists from absorbing features.
- Prohibiting the felling of trees in the area of the encampment and the march, collecting samples of rare plants and animals and disturbing the natural behavioral patterns of wild animals by tourists. Hunting and fishing should be allowed only under carefully controlled conditions.
- In the marine area, several types of control are necessary. Operations to clean up sewage and disposal counterweights, ships, using motor boats in environmentally sensitive areas, collecting live shells and sea, endangered coral and sea life, fishing with spears, disorder turtle nests, using boats anchored in the bay in which there are the coral beds and mining of sand and coral for building purposes.

In general, the development of sustainable tourism is: Developing tourism and attracting tourists to the country using available resources in such a way while responding to the economic needs of society, cultural and legal norms and expectations of tourists would also maintain unity, cultural identity, environmental health, economic balance and welfare of the people and their guests.

The definition highlights three important things:

1. Quality of sustainable tourism also allowing the host society to improve the quality of life.
2. Maintenance and duration: Sustainable tourism guarantees sustainable natural resource which has been the basis for its existence and culture of the host society that is a valuable source of experience.
3. It establishes a balance between the needs of the tourism industry, protection of the environment and the local community.

The rapid growth of the tourism industry in the last half century has caused increasing pressure on the environment. Research has shown that although the tourism industry relies on ecology but it has not succeeded in protecting environment due to reckless and uncontrolled tourism development. These facts have caused the thinkers, social reformers and scholars to emphasize on the need to alert communities about environmental protection and insist on adopting efficient policies and measures for environmental protection, tourism development and halt of destruction. In the meantime, paying attention to the effects of development on the environment is one of the

main tasks of planners and managers of the tourism industry. For example- There is no need for extraction or exploration of mining, pouring waste into the water and air pollution (such as factories and refineries)³⁶.

The sustainable development at the same time recognizes the importance of Environment Impact Assessment (“EIA”). EIA should include all types of effects: environmental, economic, social, and cultural impacts³⁷, accordingly, the projects with gross negative effects must not be approved³⁸.

4.8. Illustration:

The advent of tourism activity and its unregulated growth has resulted in a dramatic increase in the number of hotels, and unmindful of the number of tourists. There was an increased need for hotel accommodation during 1990s when the majority of the tourists from Jammu and Kashmir State turned towards Kullu-Manali. This inflow exerted such great pressure that over-construction of hotels took place in a big way.

The surrounding forests were also exploited largely for timber but also for fuel. Along with continuing deforestation, air pollution has been observed. The forest cover has decreased but the number of tourist vehicles particularly during the peak summer season has increased. This resulted in high emissions of pollutants in the ambient air causing health risks to natives and tourists alike. Total SPM and other gases were the major forms of pollutants. The aesthetic beauty of the tourist spot diminished due to high solid waste generation compounded by inadequate infrastructure facilities to tackle it. Indiscriminate throwing of solid waste into river has caused water contamination. Continuous drying up of springs in the hill spots has also posed a serious threat to water supply of the region. As a result, tourists, hosts and many other living organisms in the region have begun to feel the impact of water crisis. Rivers being the major source of drinking water and the only option for future water this cannot be allowed to surpass the level of pollutions³⁹.

³⁶ See supra 4.

³⁷ Id.

³⁸ See supra 12.

³⁹ Jagdish Chandra Kuniyal, Ardhendu Sekhar Shannigrahi, *Environmental Impacts of Tourism in Kullu-Manali complex in North Western Himalaya, India. Part 1: The Adverse Impacts*, Jan., 2003, https://www.researchgate.net/publication/237448071_Environmental_Impacts_of_Tourism_in_Kullu-Manali_complex_in_North_Western_Himalaya_India_Part_1_The_Adverse_Impacts.

Table: Adverse impacts on natural environment due to unplanned tourism in the Himalaya (after Kuniyal et al., 1999) ⁴⁰

<i>Forms of Activity</i>	<i>Pressures on</i>	<i>Adverse Impacts</i>
Over construction Over construction Over construction Over construction	Land	Increase in disasters (deforestation, floods, cloud bursts and landslides etc.)
Increase in roads Fuelwood Timber extraction Forest fires	Forests	Soil erosion, landslides, floods Air pollution and shrinkage in forests Air pollution and loss of forests cover Drying up of springs
Trekking, Hunting & poaching Increase in road traffic	Fauna Air	Disturb wildlife habitat Reduction in wildlife Increase in air and/ noise pollution and respiratory problems begin.
Waste dumping sewage disposal	Water	Water borne disease/contamination of water sources, fading scenic beauty.

5. Suggestive measures:

There are some practical solutions as follows:-

- The tourism should be planned and managed within environmental limits and with due regard to sustainable use of natural and human resources.
- Tourism planning, development and operation should be integrated into national and local sustainable development strategies, particularly to different types of tourism development and the ways in which they link with existing land and resource uses and socio-cultural factors.
- Tourism should support a wide range of local economic activities, taking environmental costs and benefits to account, but it should not be permitted to become an activity which dominates the economic base of an area.

⁴⁰ See supra 39.

- To ensure the equitable distribution of the benefits of tourism, the local communities, especially the indigenous people, women and minority groups in the planning, development and control of tourism with the support of government and the industry must be involved.
- All organization and individuals should respect the environment, the culture, the economy, the way of life, and the political structures of the destination area⁴¹.
- Example can be taken from various countries as to the kinds of techniques and agendas they adopt to promote sustainable growth and sustainable tourism. For Example: In Bhutan, the numbers of tourists are limited, tourism development is tightly controlled and an enormous effort is placed on win-win-win outcomes- for tourists, for local communities and for the environment. The core is the belief that growth in Gross Domestic Product is a poor measure for development and instead the country has focused on Gross Domestic Happiness. The Prime Minister of Bhutan is leading the way in defining a new economic paradigm.
- All stakeholders within tourism should be educated about the need to develop more sustainable forms of tourism. This includes staff training and raising awareness, through education and marketing tourism responsibility, of sustainability issues among host communities and tourists themselves. All agencies, organization, businesses, and individuals should cooperate and work together to avoid potential conflict and to optimize the benefits to all involved in the development and management of tourism (Pender, 2005)⁴². Entrepreneurial finance could play a key role in funding environmentally sustainable investments that help generate economic value for organizations⁴³.
- For the individual tourist who wants to combine the consumption of goods and services with the sustainability paradigm, the following guidelines are important:
 - 1) During the planning phase, tourists should prefer countries, regions, destinations or attractions where there are used scientific measures for the acceptable number of visitors.
 - 2) Tourists should be aware of the specific problems of given areas and behave as responsible as possible, e.g., by keeping water consumption at a minimum in countries with water scarcity.
 - 3) Means of transportation with low energy-use should be chosen.

⁴¹ See supra 2.

⁴² See supra 2.

⁴³ See supra 31.

- 4) The choice of agents, tour and transportation agencies, hotels, and other tourism business should fall on those who claim a sustainable attitude and act accordingly.
- 5) Pollution or waste problems should be reported to the local tourism authorities, and personal experiences related to the implementation of sustainable tourism consumption should be informed to others.
- 6) The biological elements should be respected, and impacts such as attrition and pollution of the a-biotic elements should be kept at an absolute minimum.
- 7) The degree of exploitation of renewable resources should lie within the limits of regeneration and natural growth. The exploitation of non-renewable resources should exclude as few of the future alternatives as possible.
- 8) When camping, try to reduce the space for your tent as this damages the soil.
- 9) Avoid activities with high environmental impacts, such as motorized tours, trophy hunting, and hiking in protected zones not open for the public.
- 10) Souvenirs: Do not take objects, animals or plants out of nature.
- 11) Do not support illegal trade. You do not know where the articles come from or what they are made of. Buy legally from local people⁴⁴.
- 12) Connected industries should fulfill the same demands of sustainability as the tourism industry itself, and cooperation should take place across traditional institutional sectors⁴⁵.

India believes that environmentally harmful processes should be stopped and that over-exploitation of non-renewable resources should be controlled. However, the specific production process to be used would depend upon the absorptive capacities and development priorities of the country concerned and hence, no global harmonized standard for production processes can be developed. The solution lies not in unilaterally banning trade, but rather in transferring technology and offering prices to developing countries for commodities, which would not then necessitate their overexploitation or jeopardize their development priorities⁴⁶.

⁴⁴ Sabrina, *Can Tourism help the Environment?*, 2016, <http://www.iynf.org/2016/03/can-tourism-help-the-environment/>

⁴⁵ See supra 1.

⁴⁶ See supra 10.

6. Conclusion:

The critical analysis of the literature makes it very clear that in practice, negative impacts of tourism are in access to its positive ones. But these negative impacts can be eliminated with the constant efforts, right strategies, right intention, co-ordination and co-operation of all the agencies, organizations, individuals, authorities and governments collectively. There is a need to find balance between the maintenance and growth of tourism along with the preservation of the nature resorting to sustainable usage of limited resources.

Tourists put a high value on our natural and built environment. In a growing economy such as ours, economic progress and environmental protection are the two components, destined to be in permanent conflict. We can have one or the other, not both, according to this view. It is here where the tourism sector needs to challenge this notion. Tourism also needs to attend to minimizing its own impact on the environment.

Various means can help us deriving this balance between the conflicted two concepts. For example: tourism should bring benefits to host communities and provide an important means and motivation for them to care for and maintain their heritage and cultural practices; the involvement and cooperation of local and/or indigenous community representatives, conservationists, tourism operators, property owners, policy makers, those preparing national development plans and site managers in every place, region, and country is necessary to achieve a sustainable balancing tourism with the environment.

With the exception of the National Parks, our system of identifying and designating areas and routes of scenic value is uncoordinated. A national approach is required to identify scenic areas and scenic routes that are nationally important tourism assets.

If eco-tourism promotes development and conservation, it should accelerate economic growth while simultaneously braking against its environmental costs. The necessary strategies with all the features should be adopted in order that sustainable tourism aims could be taken desirably to a place that deserves the environment.

Eco-tourism needs to be promoted so that tourism in India helps in preserving and sustaining the diversity of the India's natural and cultural environments. In order to understand the effects of tourism on the environment, tourism planning in terms of the environment is important.