# SUSTAINABLE TOURISM AND ENVIRONMENTAL POLLUTION IN THE INDIAN HIMALAYA: HIMACHAL PRADESH POLICY ANALYSIS (2019)

### Abhishek Siroha\*

### ABSTRACT

The present research paper stresses the need for the adoption of sustainable tourism in the wake of tremendously increasing environmental pollution in the Indian Himalayan Region. It seeks to do so through the graded discussion of the relevant topics initiated from the vitality of the Indian Himalayan Region in the Indian Subcontinent and its very fragile ecosystem, thereby stressing its necessity to be protected. The second part of the paper focuses on the tourism sector in this region and its ever-increasing nature in the past decade and the problems, that have arisen due to the same. It further emphasizes on promotion of sustainable tourism to minimize the disastrous impact, which this industry is having on the environment. Lastly, as a form of a case study the paper critically analyses 'Himachal Pradesh Tourism Policy, 2019' for a sustainable tourism practice.

*Keywords:* Himachal Pradesh Tourism Policy, Sustainable Tourism, Environmental pollution, Himalayan region

### I. Introduction

- II. Fragility of The Indian Himalayan Region and Its Susceptibility to Environmental Pollution
- III. Increased Tourism in The Indian Himalayan Region in Recent Years and its impact on the Environment
- IV. Sustainable Tourism in The Indian Himalayan Region
- V. Analysis of Himachal Pradesh Tourism Policy, 2019 with respect to Sustainable Tourism
- VI. Conclusion

### I. Introduction

THE INDIAN Himalayan region stretches from the region of Jammu, Kashmir, and Himachal Pradesh in the west to the seven sisters in the east. The whole relief feature is as old as time itself and stretches for a length of the entire northern boundary of India encompassing

<sup>\*</sup> Ph.D. Scholar, Faculty of Law, University of Delhi.

approximately five and a half lakh square kilometers, which amounts to almost sixteen percent of the total area of the Indian subcontinent.<sup>1</sup> Geographically this relief forms the most predominant of the five relief features in which the country can be categorized. The Indian Himalayan region is home to a large number of flora and fauna and, with its varied climatic situations, is a habitat to many rare, endemic, and threatened types of animals plus plant species. The animal life of the Himalaya is distinctly different from that of the plains. The whole climate of the region is altered by this humongous landform situated at the crown of the Indian subcontinent. It is the source of all the major northern rivers and as Egypt has been called, 'The Gift of the Nile', it would not be too much if we said that the whole alluvial plain in India is a gift of Rivers like Yamuna, Ganga and Satluj, which again have been made possible only because of the Himalayas. The region forms the livelihood and habitat for innumerable of mankind and plays a vital role in shaping the economy of the country. Lately, however, it has been seen that this major and vital landform has come to face a tremendous amount of pollution and degradation in all elemental forms like soil, air, land, water, and even for that matter noise pollution. Hence, naturally, a need arises to protect it from such vagaries for a sustainable future.

## II. Fragility of The Indian Himalayan Region and its Susceptibility to Environmental Pollution

The Indian Himalayan Region provides habitat not only to the above-mentioned species of both floral and faunal nature but also to immense humankind. The population in this region has increased considerably in the last sixty years. In the last fifty years (1961–2011), the Himalayan population has grown by two fifty percent from approximately twenty to fifty-four million.<sup>2</sup> The Himalayas are the source of majestic and pristine rivers, which emanate from its summits and later on flood the plains of the Indian hinterland and make it conducive for agricultural practice thereby making it fit for providing for the needs of the vast increasing population of our country.

<sup>&</sup>lt;sup>1</sup> "Himalayas | Definition, Location, History, Countries, Mountains, Map, & Facts | Britannica," 2023 *available at*: https://www.britannica.com/place/Himalayas (last visited June 2, 2023).

<sup>&</sup>lt;sup>2</sup> Paige Sullivan, "Ecotourism - Traveling Responsibly To Fragile Environments" *Epicure & Culture*, 2016 *available at:* https://epicureandculture.com/ecotourism-fragile-environments/ (last visited May 20, 2023).

Rich and diverse as it may seem to be to common masses, the region is not devoid of its weakness and hence has been declared as a fragile ecology. Fragile ecosystems are those which are tremendously delicate to environmental vagaries and shifts that end result from outside effects and presences. They commonly suffer from injury to biological diversity, climate change, poverty, and human infringement. Instances of fragile networks include wetlands, deserts, mountains, coral reefs, and certain coastal areas<sup>3</sup>. Instances of suffering fragile ecosystems include the desertification of semi-arid lands and the substantial reduction of beach wetland areas. The Himalayan region has been constantly under pressure from time and again be it in the form of the setting up of industries and factories, construction of dams which have been later called the temples of modern India, and most recently the surge in linear infrastructural intrusions in the form of highways.

In recent years, there has been a tremendous increase in the development of transport channels in this region be it the minute trail walks that might have been locally developed to the more vast and humongous stretches of linear infrastructures in the form of road highways, be it the recent initiation and developments of the Char Dham Marg which has been developed as a means to exercise one's right to freedom of religion. The development of the Kiratpur – Ner Chowk corridor is yet another example of the same<sup>4</sup>. The effect of this construction and infrastructural work coupled with climate change and other anthropogenic causes has resulted in several landslides and habitat pollution and loss in this environment. It is not just highway development that has withered the mountain. Land avalanches are a frequent feature along the all-purpose freeways that lead up to Yamunotri, Gangotri, Kedarnath, and Badrinath. The Lesser Himalayas have an antiquity of regular avalanches as they are of modern origin and are, hence, unsteady<sup>5</sup>. In 2003, a huge landslide smashed at least a hundred houses<sup>6</sup>. As many as three thousand persons had to be evacuated. Heavy rains in 2016 killed scores of individuals

<sup>&</sup>lt;sup>3</sup> Partho Mondal and Yili Zhang, "Research Progress on Changes in Land Use and Land Cover in the Western Himalayas (India) and Effects on Ecosystem Services," 10 *Sustainability* 4504 (2018).

<sup>&</sup>lt;sup>4</sup> Sethi DN and Pramod Satyawali, "Snow and Avalanche Problem in Indian Himalaya and its Mitigation," 2000.

<sup>&</sup>lt;sup>5</sup> Sangeeta Sangeeta and B.K. Maheshwari, "Landslide Hazard Assessment with Reference to 2003 Varunavat Landslide," 2016.

<sup>&</sup>lt;sup>6</sup> Sushil Khanduri, "Disaster Hit Pithoragarh District of Uttarakhand Himalaya: Causes and Implications," 7 *Journal of Geography & Natural Disasters* 5 (2017).

in Pithoragarh and altered site<sup>7</sup>. Most recently, in 2021 there was the Chamoli disaster in the state of Uttarakhand whose aftermath is still visible in sights such as Joshimath.<sup>8</sup>

In such an ecologically delicate zone, an immense amount of construction and infrastructural work is being carried on to progress linked interconnectivity. While these projects may provide several benefits to the tourists and the local people, they will have an irreversible impact on the local ecosystem and eventually end up polluting and degrading it on a larger level. The schemes will modernize hundreds of kilometers of impaired highways with lanes, detour roads, big bridges, small bridges, many hundreds of culverts and few tunnels. The roads will be widened by at least ten meters and will be sturdy enough to endure the severe weather of the section. This amended highway track aims to ease traffic during the religious season in the Himalayan states, the mainstay of Uttarakhand's tourism and economy.

The 2013 flash floods which ravaged the majority of the state of Uttarakhand, was yet another example of how fragile this area is when it comes to ecological stability. Unprecedented destruction because of the rainfall observed in Uttarakhand state was also ascribed, by ecologists, to irrational developing activities commenced in recent times causative of high level of loss of property and lives.<sup>9</sup> Roads built in arbitrary style, new resorts and guesthouses built on fragile river and more than seventy hydroelectric ventures in the watersheds of the state led to a catastrophe to come to happen as termed by certain environmentalists. The environmental professionals have reported that the burrows, and explosions undertaken for the hydroelectric developments donated to the environmental imbalance in the state, with movements of river water controlled and the streamside development activity contributing to a greater number of landslides and more flooding.<sup>10</sup> The recent land sinking incident in Joshimath was also attributed to similar kind of burrows and tunnels created for a hydroelectric project.<sup>11</sup>

<sup>&</sup>lt;sup>7</sup> Prakash Biswakarma *et al.*, "Causes of the triggering of Chamoli glacier burst of 7th February 2021 in Uttarakhand, India," 14 *Disaster Advances* 60–7 (2021).

<sup>&</sup>lt;sup>8</sup> "Himalayan plunder: Experts fear frequent landslides, floods, cloudbursts in J&K following Joshimath crisis," *available at*: https://www.downtoearth.org.in/news/mining/himalayan-plunder-experts-fear-frequent-landslides-floods-cloudbursts-in-j-k-following-joshimath-crisis-87658 (last visited June 2, 2023).

<sup>&</sup>lt;sup>9</sup> "Remembering 2013 Uttarakhand Floods", *available at*: https://www.downtoearth.org.in/coverage/natural-disasters/heavens-rage-41497 (last visited May 15, 2023).

<sup>&</sup>lt;sup>10</sup> P.C. Nawani, "Groundwater Ingress in Head Race Tunnel of Tapovan: Vishnugad Hydroelectric Project in Higher Himalaya, India" 941–5 (2015).

<sup>&</sup>lt;sup>11</sup> Navjot Hothi and Gagandeep Hothi, "Water crisis of Shimla Town: Past and present scenario," 64 *Materials Today: Proceedings* (2022).

The diversity of life on Earth is known as biodiversity. It is crucial because it helps to control the Earth's temperature and provides food and shelter for both people and other creatures. The IHR is home to a diverse spectrum of biodiversity, however it is in danger due to the aforementioned environmental issues. Another ill effect is that of water resources. Lack of enough water resources to meet a population's needs is known as water shortage. Although the IHR is a water-rich area, it is currently experiencing a number of problems that are making water scarce.<sup>12</sup>

# III. Increased Tourism in The Indian Himalayan Region in Recent Years and its Impact on The Environment

From the advent of time, the human race has shown immense curiosity, partnered with a pursuit for the search of new lands for innumerable reasons and more often than not, nature has given to human race almost everything it has sought.

The activity of traveling which evolved later into tourism can be traced to the ancient humans when they travelled in search for food and shelter. From the Spanish explorer Ferdinand Megellen or Fa-Hsein to the most recent travelers being us, we never miss an opportunity to travel, be it for our religious salvation or just for the sake of that hot cup of coffee in the hills. As simple as it may sound, the activity has evolved gradually and gracefully and continues to do so with its benefits for the individual, state and the nation. This constant interaction with the environment has its own benefits and yet detriments of which some are seen and the rest remain more or less latent.

Tourism, as a sector has not only supported but contributed to the upliftment of the local, state as well as the national economy by multi-fold.<sup>13</sup> However, much like every coin has two sides, the growth which the tourism sector has seen in the past decade or so has also brought with it its' own demons. This constant pursuit of happiness has had its brunt on the environment, be it something as little as a small packet of biscuit left behind by a group of harmless school

<sup>&</sup>lt;sup>12</sup> Martin Haigh, "Hydrological impact of deforestation in the central Himalaya" In: Proceedings of the Strbské Pleso workshop (1990).

<sup>&</sup>lt;sup>13</sup> Gyan Nyaupane and Dallen Timothy, *Tourism and Development in the Himalaya: Social, Environmental, and Economic Forces*, 2022.

students on an educational trip to the glaciers or the mega projects to rebuild the state and national highways by the governments, in order to ensure easier access to a holy site.

The Indian Himalayan region is a haven for tourists and adventure seekers who want to constantly engage themselves in the workcation culture that has slowly developed where people want to either travel to these areas in search for whatever pleasure they have in their mind to the recent work from home cultures where they can rent a home there and yet at the same time keep on working from the mountains.

The hills have shown tremendous potential when it comes to adventure activities. For example, to cite a few, there has been an increased incidence of the number of tourists which are coming in search for new treks which have developed in these areas, of the activities such as paragliding, river sports example rafting and camping.<sup>14</sup> There has also been seen that there has developed a new biker culture in the Indian subcontinent who want to ride in groups and later on camp in the novel pristine environments in these areas.

The Indian Himalayan region is our own Greek Pantheon and is revered so much that the state of Himachal Pradesh and Uttarakhand are at times also called as Devbhumi literally translating to 'Land of the Gods'. Its relevance can be seen in the potential if offers for the religious tourism. The main four Hindu shrines named as the Char Dham form major spots of tourism each year when pilgrims throng in high numbers to have their moment of salvation.<sup>15</sup>

The Himalayan region, particularly the states of Himachal Pradesh, Uttarakhand and the Union Territory of Ladakh are witnessing immense influx of tourists which has caused the equilibrium on the environment to deviate and when it gets coupled with the issue of climate change, calamities such as the 2013 flash floods strike. The ease of access to these places lately, due to the better road conditions have no doubt brought us closer to peace in our own way but has also resulted in immense environmental ecosystem disruption and ecological imbalance. The once pristine rivers and glaciers, not to leave behind the forests, have been seen to be not so

<sup>&</sup>lt;sup>14</sup> Suresh Bada Math, *Dream Ride in Himalayas: I Am Adventure*, 10 January 2016.

<sup>&</sup>lt;sup>15</sup> Knut Aukland, "Pilgrimage expansion through tourism in contemporary India: The development and promotion of a Hindu pilgrimage circuit," 32 *Journal of Contemporary Religion* (2017).

happy over the past decade as they continue to ravage the states with either floods or at times fires.<sup>16</sup>

Tourism trends in the Indian Himalayan region have increased tremendously in the last twenty years and particularly disastrously in the last decade. As per the statement of KN Vajpai, an environmental professional at Climate Himalaya, travel industry has increased by between fifty and sixty percent since the 1990s.<sup>17</sup>

The tourism segment of Himachal Pradesh donates seven per cent to the state gross domestic product. National visitor influx in the state touched almost seventeen million in 2019, while international tourist arrivals reached three lakhs eighty-three thousand. As of December 2019, there were approximately thirty-seven hundred listed hotels in the state.<sup>18</sup> The below table be gives us an idea of how the tourism industry has and will evolve just by seeing the number of tourists thronging each year to the state of Himachal Pradesh. The case is even stronger for Uttarakhand.

Year	Domestic	Foreign	Total
2008	9372697	376736	97,49,433
2009	11036572	400583	11437155
2010	12811986	453616	13265602
2011	14604888	484518	15089406
2012	15646048	500284	16146332
2013	14715586	414249	15129835
2014	15924701	389699	16314400
2015	17125045	406108	17531153
2016	17997750	452770	18450520
2017	19130541	470992	19601533
2018	16093935	356568	16450503

<sup>&</sup>lt;sup>16</sup> Manmohan Dobriyal and Arvind Bijalwan, "Forest fire in western Himalayas of India: A Review," 10 New York Science Journal 39–46 (2017).

<sup>&</sup>lt;sup>17</sup> Millicent Angel, "Tourism to the Himalayas causes a mountain of problems" *available at*: https://www.businessdestinations.com/destinations/tourism-to-the-himalayas-causes-a-mountain-of-problems/ (last visited May 20, 2023).

<sup>&</sup>lt;sup>18</sup> "Shimla's Water Crisis Is A Man-Made Disaster And How We Made It One," *https://www.outlookindia.com/*, 2022*available at*: https://www.outlookindia.com/national/how-shimla-water-crisis-is-a-human-made-disaster-and-how-we-made-it-one-news-208456 (last visited May 20, 2023).

2019	16829231	382876	16829231
2020	3170714	42665	3213379
2021	5632270	4832	5632270
2022	15070944	29333	15100277

Table 1. Tourist Footfall (Numbers) - From Himachal Pradesh Tourism Site<sup>19</sup>

This increase in the travel patterns in the Himalayan region has been a result of number of factors of which the most predominant can be cited as the above-mentioned development of roads and highways in these areas. This has again been coupled with the new found individualistic and thrill-seeking trait which might have developed in the young adventure seekers or the old who want a break from their monotonous humdrum and due to better road development and availability of easy and cheap transport are now more drawn towards the lofty peaks in this area.

The Indian Himalayan Region, predominantly Uttarakand and Himachal Pradesh are filled with religious shrines example being Kedarnath, Badrinath, Gangotri and Yamunotri, for the Hindu seekers, or again Amarnath and Hemkund Sahib just to get the idea. There has been increased footfalls in these shrines also because of more organized travel, which has only been possible due to the upcoming of better travel conditions in these areas.<sup>20</sup>

Residents in the Himalayan region have been dependent on income from travelers for hundreds of years. However, traditional interaction between the former and the latter was steered by certain codes of conduct that kept consumerist culture at a distance.<sup>21</sup> In the past three decades, with increase in the number of tourists, government attempts to earn revenue from tourism and increasing dependence of residents of the Himalayan region on income from travelers, a consumerist culture has been developed, that is on the one hand, exploitative of tourist and, on the other exploitative of the natural and cultural environment. To counter these negative developments, it is very essential to develop an intensive strategy which depends on tourism

<sup>&</sup>lt;sup>19</sup> Statistics, *available at*: himachalourism.gov.in (last visited on 20 August, 2023).

<sup>&</sup>lt;sup>20</sup> Gyan Nyaupane and Dallen Timothy, *Tourism and Development in the Himalaya: Social, Environmental, and Economic Forces*, 2022.

<sup>&</sup>lt;sup>21</sup> Swaran Singh, "Managing the impacts of Tourist and Pilgrim Mobility in the Indian Himalayas / Nouvelles pratiques de tourisme et de pélerinage dans l'Himalaya indien : impacts et modes de gestion," 90 *Revue de Géographie Alpine* 25–36 (2002).

regulations comprising patterning of flow, tutoring of visitors, guides and interpreters, wide spreading of codes of visitor behavior in Himalayas.<sup>22</sup>

Through the growing trend in tourist footfall to the hill regions, it is probable that environmental and societal trends along with principles will be subjected to modification. Seemingly, these developing trends and events in the Himalayan states have straight or incidental causes and effects such as pollution, over exploitation of natural resources, food insecurity, ill-planned expansion, traffic crowding, loss of local culture, natural disasters, increase in urban sewage and so on are certain to affect the Himalayan ecosystem. The travel sector being no doubt a boon for this region for its overall development has also tremendously weakened the whole environment and has result in innumerable of avoidable harms. There have been instances of trail pollution in places where earlier even the human footfall was not present.<sup>23</sup> With new adventure activities, there has been problems such as improper waste disposal. Construction of new buildings, hotels, restaurants, cafes, and roads have resulted in immense amount of soil erosion and loss of green cover.<sup>24</sup> There have been instances of imbalance in the land and there has been a prevalence of increasing landslides and loss of fertile soil cover due to these construction activities.

The recent water crunch in the city of Shimla was yet another one of the major problems which this area has been facing.<sup>25</sup> The diminished green cover of the state of Himachal Pradesh has been directly linked with the water scarcity the state faces each summer. There is a conception named evapotranspiration, where there are more vegetation and plants there will be more evaporation leading to cloud creation, which effect rain pattern. This rainfall aids invigorate these water foundations; hence the significance of trees cannot be put off as deforestation in Shimla is an important factor for reduced water points at source. The very recent two incidents of glacial breaking and damage in the upper reaches of Rishi Ganga earlier this year have been

<sup>&</sup>lt;sup>22</sup> Diego R. Toubes, Noelia Araújo Vila and Jose A. Fraiz Brea, "Changes in Consumption Patterns and Tourist Promotion after the COVID-19 Pandemic," 16 *Journal of Theoretical and Applied Electronic Commerce Research* 1332–52 (2021).

<sup>&</sup>lt;sup>23</sup> Maharaj Pandit and Virendra Kumar, *Land-Use Change and Conservation Challenges in the Indian Himalaya*, 2013.

<sup>&</sup>lt;sup>24</sup> "How the Construction Industry Affects the Quality of Land and Water Resources," *How the Construction Industry Affects the Quality of Land and Water Resourcesavailable at:* http://zalinashari.blogspot.com/2020/09/how-construction-industry-affects.html (last visited June 2, 2023).

<sup>&</sup>lt;sup>25</sup> "Shimla's Water Crisis Is A Man-Made Disaster And How We Made It One," *https://www.outlookindia.com/*, 2022*available at:* https://www.outlookindia.com/national/how-shimla-water-crisis-is-a-human-made-disaster-and-how-we-made-it-one-news-208456 (last visited May 20, 2023).

directly linked to climate change.<sup>26</sup> If we try to look at it from a tourism perspective, we can understand the potential risks that have already been prevalent in these areas due to climate change and subsequent ecosystem imbalances due to it. Furthermore, due to increased tourism sector and new developmental activities in these areas, the potential risks get manifold and then once in a while we have to witness these calamities such as the 2013 flash floods which has been considered to be the worst natural calamity in India after the 2006 Tsunami.<sup>27</sup>

It has been found that Black Carbon, which can be formed through automobile use, is a major causative factor for rapid melting of glaciers in this region.<sup>28</sup> The Apex Court has iterated that forty percent of the glacial retreat could be attributed to Black Carbon influence and its proper redressal can prevent glacial melting. "The courts have resolved that Indian citizens have the right to a healthy, fresh and decent environment, derived from Article 48A of the Constitution (which requires the state to protect and improve the environment), Article 51A (requiring a citizen to protect and improve the natural environment) and Article 21 (protecting the right to life as a fundamental right)."

Judgement of the National Green Tribunal in the matter of Sher Singh Vs State of Himachal Pradesh in 2014<sup>29</sup> concerning tourism influences on satellite spots of the main tourist destination at Manali in the northwestern Himalayas, which are typically spread in snow and include Rohtang Pass, Marhi, Kothi, and Salang Nala apart from other spots.<sup>30</sup> Heavy travel industry, besides being a boon to the economy of Himachal Pradesh, is also the cause for adversative impacts on ecology and environment of the State. According to a National Green Tribunal ruling, the State Government neither developed nor issued any specific guidelines -

<sup>&</sup>lt;sup>26</sup> Manish Mehta et al., "Causes and Consequences of Rishiganga Flash Flood, Nanda Devi Biosphere Reserve, Central Himalaya, India," 21 *Current Science* 1484–7 (2021).

<sup>&</sup>lt;sup>27</sup> Michael Lindell, Sudha Arlikatti and Shih-Kai Huang, "Immediate Behavioral Response to the June 17, 2013 Flash Floods in Uttarakhand, North India," 34 *International Journal of Disaster Risk Reduction* (2018).

<sup>&</sup>lt;sup>28</sup> Chen Jizu et al., *Comprehensive Evaluation of Black Carbon Effect on Glacier Melting on the Laohugou Glacier No. 12, Western Qilian Mountains*, 2022.

<sup>&</sup>lt;sup>29</sup> Sher Singh vs State Of Himachal Pradesh, *available at*: https://indiankanoon.org/doc/194586080/ (last visited August 29, 2023).

<sup>&</sup>lt;sup>30</sup> Judgement of the National Green Tribunal regarding tourism impacts in the north-western Himalayas, 06/02/2014 - India Environment Portal | News, reports, documents, blogs, data, analysis on environment & development | India, South Asia," *available at*: http://www.indiaenvironmentportal.org.in/content/387593/judgement-of-the-national-green-tribunal-regarding-tourism-impacts-in-the-north-western-himalayas-06022014/ (last visited May 20, 2023).

statutory or otherwise - on prevention and control of environmental pollution and damage in relation to the glacier of Rohtang Pass valley.<sup>31</sup>

Below are the ways in which direct pollution of land resources are taking place due to rise in tourism:

- Land Pollution: The rapid growth of tourism has resulted in the construction of infrastructure such as hotels, resorts, and roads, leading to deforestation and land degradation. Forested areas have been cleared to make way for these developments, resulting in the loss of habitat for various plant and animal species. Improper waste disposal by tourists and the tourism industry has also contributed to land pollution.<sup>32</sup>
- 2. Soil Pollution: Improper waste management and sewage disposal systems have contaminated the soil in many tourist destinations. Improperly managed waste disposal sites, including open dumping, can lead to the leaching of pollutants into the soil, which can affect soil fertility and impact agricultural activities in the region.<sup>33</sup>
- 3. Noise Pollution: The influx of tourists and the development of tourism infrastructure have resulted in increased noise levels in these regions. Construction activities, vehicle traffic, and recreational activities such as loud music and parties can disturb the local wildlife and disrupt the natural ecosystem. Noise pollution can have detrimental effects on wildlife behaviour, including breeding, feeding, and migration patterns.<sup>34</sup>
- 4. Air Pollution: The growing number of vehicles, especially tourist vehicles, has contributed to air pollution in these regions. Increased traffic leads to emissions of pollutants such as particulate matter, nitrogen oxides, and carbon monoxide, which not only affect the air quality but also pose health risks to both residents and tourists. In addition, the use of generators, particularly in remote areas with limited electricity supply, adds to air pollution.<sup>35</sup>

<sup>&</sup>lt;sup>31</sup> Editor 4, "Rohtang Pass Permit: NGT denies plea for increasing number of vehicles" *SCC Blog*, 2023*available at:* https://www.scconline.com/blog/post/2023/05/02/why-ngt-denied-taxi-unions-plea-to-increase-number-of-vehicles-permitted-to-rohtang-pass-legal-news/ (last visited June 2, 2023).

<sup>&</sup>lt;sup>32</sup> P.C Tiwari, "Land-use changes in Himalaya and their impact on the plains ecosystem: Need for sustainable land use," 17 *Land Use Policy* 101–11 (2000).

<sup>&</sup>lt;sup>33</sup> Nadeem Bhat et al., "Heavy metal contamination in agricultural soils of NW Himalayas: with a perspective of spatial distribution, environmental contamination and health risk assessment," 14 *Arabian Journal of Geosciences* (2021).

<sup>&</sup>lt;sup>34</sup> Avnish Chauhan, "Study of noise pollution level in different places of Haridwar and Dehradun City (India)," 9 *Environment Conservation Journal* 21–5 (2008).

<sup>&</sup>lt;sup>35</sup> Palak Balyan, "Impacts of Air Pollution on Himalayan Region," 2021.

5. Water Pollution: Tourism has put a significant strain on the water resources in these regions. Improper disposal of sewage and solid waste has contaminated rivers, lakes, and streams. Inadequate wastewater treatment facilities and the absence of proper waste management systems have resulted in the discharge of untreated sewage and garbage into water bodies, leading to water pollution. This pollution affects aquatic life, local communities that rely on these water sources, and the overall ecological balance.<sup>36</sup>

There are various tourism policies, which have been formulated by different Himalayan States. The policies have been formulated according to the sustainable development goals as cited by the all-pervasive United Nations and we have our own laws safeguarding the environment, like, the Environment Protection Act, 1986 or the Air and Water Acts or the Forest Act but the question still remains, whether the legal framework, has been implemented in a way it has been formulated. Do we have enough laws which are capable and competent enough to cater to the new activities upcoming in these regions which earlier were not so prevalent such as camping and trekking to name a few? Are the laws up-to-date and in connect with the effects of the increased footfall or is there a disconnect between the laws and the current prevalent scenario of these locations?

## IV. Sustainable Tourism in the Indian Himalayan Region

Sustainable tourism improvement strategies and organization exercises are relevant to all procedures of tourism in all sorts of destinations, comprising mass tourism and several niche tourism sections. Sustainability values refer to the environmental, financial, and socio-cultural facets of tourism growth, and a suitable equilibrium must be recognized among these three scopes to promise lasting sustainability.<sup>37</sup>

There are certain important postulates and principles when one speaks of sustainable tourism. Sustainable tourism encompasses a set of fundamental principles aimed at harmonizing tourism's economic, social, and environmental dimensions. It emphasizes the conservation of natural ecosystems, wildlife, and resources to maintain ecological diversity while advocating

<sup>&</sup>lt;sup>36</sup> Deeksha Aithani, Jyoti Kushawaha and Sreerama S. R., "Water Quality of Himalayan Rivers in Uttarakhand," 2021.

<sup>&</sup>lt;sup>37</sup> Luna Roldán *et al.*, "Sustainable Tourism as a Source of Healthy Tourism," 17 International Journal of Environmental Research and Public Health 5353 (2020).

for reduced resource consumption. Respect for local cultures, traditions, and community involvement lies at its core, ensuring that tourism benefits local economies and livelihoods while safeguarding heritage. This approach prioritizes responsible waste management, sustainable infrastructure development, and promoting eco-friendly practices. Conservation education educates travelers about their impact and encourages responsible behavior, contributing to the protection of biodiversity and sensitive habitats. By reducing carbon footprints, fostering regulatory support, and embracing long-term planning, sustainable tourism strives to offer meaningful experiences for visitors while preserving the destinations' integrity and vitality for future generations.

Developing sustainable tourism is a continuous process that calls for ongoing impact monitoring and the introduction of preventive and/or corrective actions as needed. In addition to increasing tourists' understanding of sustainability issues and encouraging sustainable tourism practices among them, sustainable tourism should maintain a high level of visitor satisfaction and guarantee a meaningful experience.

Coming to the Himalayan domain with respect to the states of Uttarakhand and Himachal Pradesh which form the basis for our study, they have shown immense increment in people travelling to these states. The current pattern of tourism sector and the way it is going on right now is only detrimental and that at an exceeding pace for the Indian Himalayan Region.

The aim of sustainable tourism is to keep the economic and social advantages of tourism development while minimizing or mitigating any unwanted effects on the natural, historic, cultural or social environment. This is attained by harmonizing the needs of travelers with those of the destination. It refers to a level of tourism activity that can be preserved over the long term because it results in a net advantage for the social, economic, natural and cultural environments of the zone in which it prevalent.

According to the United Nations, issues like combating climate change, effective resource management, lowering poverty, and fostering inclusive growth must be at the forefront of tourism development. To achieve the Sustainable Development Goals (SDGs), which are now outlined as a global seventeen-goal plan of action for people, the planet, and prosperity for all countries, all stakeholders must work in cooperative partnerships. Goals 8 and 12 specifically list mountain-specific tourism as an objective, along with a number of other SDGs. Target 8.9

of Goal 8 focuses on promoting "sustained, inclusive and sustainable economic growth," full and productive employment, and decent work for all.<sup>38</sup>

Another new concept which has evolved over the years in that of ecotourism. It can be categorized as a subset of sustainable tourism and is characterized by two important factors namely the conservation of nature and well-being of local communities. The basic idea is that tourism as an activity should not take anything from the environment but must be able to achieve a balance where its giving back to the local communities and land where the tourism activity is being carried out. The Indian Himalayan Region is an area which has plethora of natural beauty and local communities and has immense potential to tap on these principles of ecotourism. As a result, it is only but natural that new forms and methods of transforming tourism into ecotourism must be employed in order to preserve the environment.

# V. Analysis of Himachal Pradesh Tourism Policy, 2019 with respect to Sustainable Tourism

The Himachal Pradesh State government formulated the Himachal Pradesh Tourism Policy 2019 and replaced the old 2013 policy, laying down provisions for the ways in which tourism can be furthered in a sustainable manner in the state. The main objective of this policy was to focus on the growth of tourism along with keeping in mind the fragile ecology of the State. It has been four years since the implementation of this policy, but the results so far are far from satisfactory. While the policy tried to link the development with the Sustainable Development Goals especially goals numbers 8 and 12, even a cursory evaluation of this document reveals that the focus is more on increasing State Exchequer than on maintaining a balance between tourism and the environment.

The 2013 policy focused on establishing Himachal Pradesh as a global brand and sub-brands in domestic and international markets. Its aim is to ensure sustainable tourism which primarily benefits host communities and supports natural and cultural heritage preservation. The 2019 policy, on the other hand, has a more ambitious goal of positioning Himachal Pradesh as a leading global sustainable tourism destination for inclusive economic growth. It also places a

<sup>&</sup>lt;sup>38</sup> Rajlakshmi Datta and Dr Jaiswal, "Localizing indicators of Sustainable Development Goals : A model in the context of Indian Himalayan States for SDG 13 and 15.," 8 *Thematics Journal of Geography* 122–43 (2019).

greater emphasis on the quality of the tourist experience and the protection of the state's natural and cultural heritage. The 2019 policy, just like the older policy doesn't mention any specific target nor any specific goal to achieve, but numerates several strategies through which the overall tourism sector can be allowed to develop in Himachal.

This policy talks about various themes in which tourism is to be promoted in the state namely ecotourism, agro-organic tourism, snow tourism, lake tourism, adventure tourism, pilgrimage tourism, cultural and heritage tourism, health and wellness tourism, film tourism, and MICE tourism (Meeting Travel, Incentive Travel, Conference Travel, and Exhibition Travel). It further tabulates the various areas in the state which might be categorized into various different forms of tourism as per their geography and ecology.

While the policy lacks in defining what all activities should be considered as Sustainable tourism, it tries to define sustainable travel as a concept that involves visiting a destination as a tourist and trying to make a positive effect on the environment, society, and economy. No damage can be caused to the destination in terms of social, economic, and environmental facets because of tourism.

The policy further lays down various objectives in order to realize the mission and achieve the goals for sustainable tourism, to achieve the proposed target for 2029. Below, all six objectives are critically discussed to access the growth and understand the implication of the same.

1. Tourism Diversification to New Places - This objective seeks to harness tourism from the novel and undeveloped areas which are the potential for tourism boom in the state. It seeks to develop such areas in a five-year period and then replicate this model for different places with similar potential. This objective lucrative as it might seem, it will only unleash more mess as it seeks to disturb the undisturbed environment and meddle with it. Instead of reaching out for novel destinations, exercises must be made to reformulate how things are taking place in the already-developed tourist spots. Under this objective, there is a point, which states that Forest Clearance for ropeway projects shall be taken up on priority. So again, there is the menace of infrastructure intrusions through the forest areas, the detriments of which we have already understood in the earlier part of this paper. The focus seems more on generating revenue than on protecting the environment.

Sustainable Interventions at Existing Spots - This objective speaks of safeguarding the 2. sustainability of tourist destinations and seeks to do that by formulation of codes of conduct for tourists who are visiting these areas. However, the nature of these codes of conduct has not been generally mentioned in the policy. This objective even talks about the proper monitoring of the tourism service providers and their hundred percent registration, which is a welcome objective considering the haphazard and unregulated kiosks coming up claiming to be registered tourism providers. This point would have been even better if there would have been penal measures or stricter norms when it comes to non-complying providers. Another thing that the policy addresses is the carrying capacity of the tourist spot and decongestion design for flooded destinations through broadening to nearby new destinations, traffic regulation and supervision during top seasons, green tax on entry points for tourists, green tax on development of new tourism units. It also talks about solid waste disposal system and water and energy conservation system development and making air clean by running buses on cleaner fuels.

The major problem with this objective is that instead of setting concrete statistical timebased goals, it only furthers broad plans for the same. It is therefore, need of the hour set specific goals and discourage tourism where necessary. While it has been four years since the implementation of these plans, problems like traffic jams are common every weekend in major cities like Shimla and Manali. Even the objective of proper waste management seems far from being achieved. In Dharamshala alone, two hundred kilograms of dry waste is segregated every single day, and twenty-five tons of waste every year. Due to there not being enough land for composting, the biodegradable waste is taken to the Sudher village. However, this has caused a protest amongst residents in the Sudher village, since the open waste is at risk of releasing harmful and toxic chemicals into the water, soil, and air.

3. Benefit to Host Communities- This can be achieved by the inculcation of the local communities and furtherance of the already upcoming concept of homestays instead of new hotels and new infrastructure developments. Furthermore, these homestays need to be registered with the state government for proper regulation of the numbers. It also talks about periodic reviews of these homestays after every three years. It even speaks of Advancing or applying funds to support community-guided travel activities like assisted trail route growth, rural wellness units, and local fairs at community amenable areas.

The regulation of these homestays and 'Bed n Breakfast' establishments is a big challenge to the Government. One unique problem being faced in this regard is that outsiders are taking properties on lease and starting their homestay businesses in the garb of a local homestay.

- 4. Human Resources for Tourism This aim is yet again a positive aspect of this policy where it seeks to establish a distinct division with the tourism department for Monitoring, Evaluation, and up-gradation of the current standards, accreditations, and guidelines and create new rules and strategies as per the need. While the policy document talks about creating new courses and training the local population in tourism management, it does not provide any proper road map for the same. There is no mention of starting any new training centre or college to achieve this objective. Even today, most of the people engaged in adventure sports in Himachal Pradesh are not properly trained due to which many untoward incidents happen. Therefore, there is an urgent need to develop proper human resources for safe and sustainable tourism.
- 5. To provide safe, secure, and unique "Tourism for all" Sustainable practices include forming operation guidelines for new and future adventure sports undertakings like snow adventure activities, Trekking tourism master plans. accommodation rules for tented accommodations, etc., and help in the promotion of native and rare art, music, craft, folk dance and food of Himachal Pradesh. These objectives were short-term goals, but most of them are yet to be achieved. It proposed the Trekkers Tracking App, which is yet not launched. It proposed formulating proper paragliding and rafting rules and regulating the adventure sports industry, but these developments are still awaited.
- 6. To create an enabling environment for investments in sustainable tourism The last objective of this policy document was to attract private investment through the PPP model to develop tourism infrastructure and facilitate private investment through a single window clearance system. This objective can be achieved even better by promoting investments which are adopting sustainable practices.

### VI. Conclusion

The importance of the Indian Himalayan Region has been understood as vital in shaping the structure of the Indian subcontinent in almost all the realms and making it a very distinctive part of Asia. However, the recent spurt of tourism in this region has made matters worrisome when we talk of the carrying capacity of this region. There has been increased in tourism and

related activities in the recent years and also the pattern has made a shift in comparison to the earlier forms of travel and more individualistic travel is seen which has result in innumerable of problems as discussed. The paper states and discusses the changes in development patterns in the higher reaches and improved accessibility which makes the increase in tourism possible. It recognizes the potential of the Indian Himalayan Region as a big tourism space and after that throws light on the negative implications of this increase in tourism on the fragile ecosystem. The stresses the urgent need to pay heed to the carrying capacity in this area and devise proper methods to balance the development steps along with the protection of the environment. In bits and pieces, specific incidents which turned calamitous have been discussed just in order to give the idea of how imperative the need has arisen to actually take a look in this direction.

The Indian Himalayan Region, home to diverse flora, fauna, and a growing human population, faces fragility due to environmental pressures. Over the last fifty years, the population has risen significantly, leading to developmental activities like industries, dams, and highways. The construction boom, coupled with climate change, has resulted in habitat loss, landslides, and pollution. The region's susceptibility to ecological vagaries makes it fragile and prone to degradation.

Tourism, a significant industry, has both positive and negative impacts on the environment. While it has boosted local economies, the surge in tourism has led to environmental issues. Improved road infrastructure and accessibility have amplified the influx of tourists, causing disruption to ecosystems. Adventure activities, religious tourism, and increased travel patterns have further strained the environment. Deforestation, improper waste disposal, noise pollution, air pollution from vehicles, and water contamination are evident problems. Climate change exacerbates these issues, as seen in glacial melting and flash floods.

Alternatives in the form of the concept of sustainable tourism and ecotourism in the Indian Himalayan region has been understood as this region poses immense opportunities for such activities. In order for tourism to be considered sustainable, it must make the best use of the environmental resources that are a crucial component of the industry's growth while preserving crucial ecological functions and promoting biodiversity and natural heritage preservation. Moreover, it should respect the socio-cultural authenticity of the host communities, preserve

their traditional values and build live cultural assets, and advance intercultural tolerance.<sup>39</sup> Furthermore, it should also assure sustainable, long-term economic operations, fair distribution of socioeconomic advantages to all parties involved, secure job and income-earning opportunities, social services for host communities, and an effort to reduce poverty. Also, all essential stakeholders must participate in the development of sustainable tourism with knowledge, and there must be strong political leadership to promote widespread engagement and consensus building.<sup>40</sup> In this way, equilibrium needs to be maintained between ecology and the economy in this region. The intricate exploration of various interconnected facets reinforces the imperative need to safeguard this region's unique significance within the Indian Subcontinent. The fragility of its ecosystem, highlighted through this study, demands a proactive approach that prioritizes preservation over exploitation.

The paper systematically dissects the tourism sector's exponential growth over the past decade, unearthing the associated predicaments that have arisen due to unregulated expansion. The degradation of natural resources, disruption of local communities, and escalating pollution levels necessitate immediate intervention to rectify the trajectory of this industry. By adopting measures that prioritize environmental integrity, social equity, and economic viability, sustainable tourism presents a pathway to mitigate the deleterious consequences that conventional tourism has wrought upon the region. It urges stakeholders – governments, local communities, businesses, and travellers alike – to embrace a collective responsibility towards fostering a harmonious coexistence between tourism and the environment.

The case study dissecting the 'Himachal Pradesh Tourism Policy, 2019' serves as a pivotal demonstration of the feasibility of sustainable tourism integration. The critical analysis showcases both the strengths and potential shortcomings of policy implementation. It underscores the significance of a multi-pronged approach that addresses ecological concerns, respects local cultures, and fosters responsible tourism behaviour. It was seen that the policy though very tidily designed might have some implementation issues at various rungs of operation structure. Adequate recommendations and suggestions have also been given while doing an analysis of the same. A similar form of analysis in the tourism policies of all the other

<sup>&</sup>lt;sup>39</sup> Erol Duran, "Protecting Social and Cultural Identity in Sustainable Tourism: The Case of Gökçeada, Turkey" *Advances in Culture, Tourism and Hospitality Research*, 2012, VI.

<sup>&</sup>lt;sup>40</sup> Qadar Bakhsh Baloch et al., "Impact of tourism development upon environmental sustainability: a suggested framework for sustainable ecotourism," 30 *Environmental Science and Pollution Research* 5917–30 (2023).

Himalayan states is advised and robust measures for the sustainability of this massive mountain are something which cannot be stressed upon enough.

In summation, the research paper substantiates that the concept of sustainable tourism is not merely a theoretical construct but an imperative action that must be embraced urgently. The Indian Himalayan Region, emblematic of natural beauty and ecological intricacies, demands nothing less than a holistic commitment to ensure its preservation for present and future generations. This paper, through its comprehensive analysis and advocacy for sustainable tourism, envisions a future where responsible travel harmonizes with the region's fragile ecosystem, catalyzing positive change that transcends borders and time.