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HIMALAYAN ENVIRONMENTAL STUDIES

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ABSTRACT

The natural resources that are found on earth play an important part and have the potential to fulfil the requirements of human beings. The Himalayas are a mountain range in Asia that stretches over 2,500 kilometres from east to west across the continent. They are home to millions of people, as well as numerous animals that can be found nowhere else on the planet, and they have a deep cultural and spiritual heritage. It has been estimated that the eastern Himalaya is home to over 10,000 unique varieties of plants, 750 unique species of birds, and approximately 300 unique forms of animals. This region is home to a significant number of endemic species, which are unique to this particular location and cannot be found anyplace else on the planet. The Himalaya is made up of a range of environments that are fragile or quickly harmed, and it has a number of different impediments; this is despite the fact that the Himalaya is known for its hard topography. It is the birthplace of a number of significant rivers, including the Indus and the Ganges, the length of which and the pace at which they run are both influenced by the climatic conditions of their respective regions. The indigenous species of the Himalayan area are in greater danger and are on the brink of extinction as a result of the expansion of human activities in the region. The conservation of these natural resources has lately surfaced as an issue of crucial significance as a consequence of the fact that these are now under pressure as a result of excessive exploitation. This is due to the fact that excessive exploitation has caused these to become underutilised. The sustainable management and development plan is a current way for dealing with this problem since it would both maintain and improve the level of life of the local population. This makes it an appealing option for those looking for a solution to this problem.

KEYWORDS:*Himalayan region, biodiversity, sustainable development.*

INTRODUCTION

The natural resources that are found on earth play an important part and have the potential to fulfil the requirements of human beings. The Himalayas are a mountain range in Asia that stretches over 2,500

kilometres from east to west across the continent. They are home to millions of people, as well as numerous animals that can be found nowhere else on the planet, and they have a deep cultural and spiritual heritage. It has been estimated that the eastern Himalaya is home to over 10,000 unique varieties of plants, 750 unique species of birds, and approximately 300 unique forms of animals. This region is home to a significant number of endemic species, which are unique to this particular location and cannot be found anyplace else on the planet. The Himalaya is made up of a range of environments that are fragile or quickly harmed, and it has a number of different impediments; this is despite the fact that the Himalaya is known for its hard topography. It is the birthplace of a number of significant rivers, including the Indus and the Ganges, the length of which and the pace at which they run are both influenced by the climatic conditions of their respective regions. The indigenous species of the Himalayan area are in greater danger and are on the brink of extinction as a result of the expansion of human activities in the region. The conservation of these natural resources has lately surfaced as an issue of crucial significance as a consequence of the fact that these are now under pressure as a result of excessive exploitation. This is due to the fact that excessive exploitation has caused these to become underutilised. The sustainable management and development plan is a current way for dealing with this problem since it would both maintain and improve the level of life of the local population. This makes it an appealing option for those looking for a solution to this problem.

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Challenges to Himalaya region

Trends that are visible on a global scale sensuamplo reveal that natural resources are being exploited at a price that is far higher than the price at which these assets are able to be replaced. This is because the price at which natural resources are being extracted is far higher than the price at which these assets are able to be replaced.

The flora and fauna of the Himalayas are vulnerable to, and sensitive to, the effects and consequences of:

(a) changes in natural causes,

(b) anthropogenic discharge leading to climate change, and

(c) the way in which current civilization lives.

The fundamental explanation for the growing gap that exists between the amount of resources that are used and the amount that are replaced in affluent nations is the rise in the quantity of resources that are used on a per capita basis. It is commonly acknowledged that the surge in the population is the direct deciding cause of such trends in developing and underdeveloped countries. With the birth of agriculture, people have been cutting down trees for many decades, and they are approaching dangerously close to losing the whole Himalayan region's forest cover. The loss of forest cover in the Himalaya is the most serious issue that the region faces. This opens the door to a wide variety of other problems, including soil erosion, slope failures, depletion of soil fertility, scarcity of fuelwood and fodder, amplified overland flows, reduced ground water recharge, which threatens biological diversity, and accelerated siltation of river beds in lowlands areas.

There is a close relationship between the rise in the number of people living in an area and the increase in the amount of land that is cultivated for food staples. Additionally, there is a close relationship between the rise in the number of livestock and the rise in the amount of resources that are required from forests. The findings of the study carried out by Rao and Saxena indicate that during the course of the last sixty years, very little of the wooded area in the central Himalaya has been converted into agricultural land. On the other hand, because of degradation and a lack of care for commons, the quality of the land that can be preserved has decreased. According to the results of some other studies, the fundamental reason of a decrease in the forest perimeters or circumferences surrounding habitations or residential places in mountains was an increase in the demand for fuel wood.

Because of the demand and the requirement, these resources are in competition with one another. As a result, the attraction and drive for feed and fuel is leading to tree canopy openings, which in turn is generating an increase in the number of invasive plant species. It is hypothesised that the invasive plants prevent the regeneration of tree seedlings and increase the risk of frequent fires by stacking on loads of debris that is readily combustible. Also, it is believed that the presence of these plants contributes to an increase in the probability of frequent fires. In these situations, it produced further complications, which, in the end, led to a shortage of leaf litter, which is necessary for animal bedding and manure. An earlier research that got to its conclusions based on a case study of the region of the Himalaya known as Kumaon came to the conclusion that the majority of deforestation was driven by an increase in the populations of both humans and animals.

Because of this, the weeds reached a stage where they were unwanted. According to him, circumstances similar to this one took place rather often in the heart of the Himalaya. In spite of the fact that the Himalaya only accounts for 15% of the total geographical vicinity of the nation, it is home to 28.8% of the country's

indigenous and most important dicot flora. It is likely that the area's biological richness (measured in terms of the number of species) was underestimated when one takes into account the relevance of surveys and the qualifiers of the genetic abundance of tough mountainous locations. The biggest danger factor that might lead to irreparable losses in the world's biological variety is deforestation, which is occurring at an alarming rate. It is presently vital to have a pan-Himalayan strategy that would define and produce common policies and would not follow the race to the bottom; hence, it is crucial to think about building a plan for having such a strategy. These strategies should be based on regional natural resources such as jungles, water, biodiversity, organic and quality foods, and natural tourism; however, in order to ensure that development does not come at the expense of the environment, they still require a response to the specific threats that are currently present .

OBJECTIVES OF THE STUDY

1. To study of the natural conditions of Himalaya Region.
2. To study of the Organic farming in Himalaya landscape.

Action plans to Himalayan issues

The National Mission for Sustaining the Himalayan Ecosystem (NMSHE) was enunciated and launched in 2008 by the National Action Plan on Climate Change (NAPCC), which is overseen by the Ministry of Environment and Forest. This was done in order to address the problems that are prevalent in Himalayan regions The goal of this project is to improve people's standard of living by determining the relationships that exist between the Himalayan environment and the various climatic elements. In addition to this, it intended to reevaluate and grasp the factors that go into Himalayan sustainable development with an eye towards the reinforcement or protection of this fragile and often damaged environment. In order to achieve the goals set for the shaping of natural Himalayan resources and climate variables, a collaborative effort from a variety of specialists, including climatologists, glaciologists, and others, will be necessary.

For the purpose of recovering and attracting tourists interested in the Himalayan biodiversity, it will also be necessary to engage in an open dialogue and information-sharing with the southern Asian countries and territories that contribute to or share in the region's resources In addition to this, it is necessary to establish an experimental, pragmatic, and vigilant monitoring set of connections for the Himalayan environment in order to estimate and verify the amount of forest and water resources along with the overall health of ecological units.The mission is attempting to address some issues that are of primary concern, such as the Himalayan glaciers and the associated hydrological consequences; the safety and conservation of biodiversity; the upkeep and management of wild life; the preservation of traditional culture, societies, and their means of subsistence;

and the forecasting and scheduling plan for a sustainable Himalayan ecosystem. The Mission document on the NMSHE was approved by the Union Cabinet in 2014, and it has a budget outlay of INR 550 crore for the period of the 12th five year Plan. The primary objective of this mission is to build up in a time bound approach a sustainable national capacity to constantly gauge the health status of the Himalayan ecosystem, to make it possible for policy bodies in their policy-formulation actions, and to facilitate states in the Indian Himalayan region with the operation of activities chosen for sustainable development.

InOrganic farming in Himalaya landscape

The Indian states that are located in the Himalayan regions, as well as the majority of the foreign countries that share boundaries with the Himalayas, have begun and implemented the innovative practise of organic farming in order to obtain the high quality products of their region, which will help to improve both the health and the economy in order to ensure a more sustainable way of life. This will help to obtain the high quality products of their region, which will help to improve both the health and the economy, which will help to ensure a more sustainable way of life In a similar manner, the state of Meghalaya, which is located in the northeastern part of the country, was the first to proclaim itself an organic state. This was then followed by Sikkim, and after that, Uttarakhand began a significant initiative in the state to support organic green agro-farming. In addition to this, Uttarakhand took advantage of the chance to continue practising organic agro-farming. The various impediments that exist throughout the states and hinder them from using their unique capabilities include constraints in certification and mandated forest restrictions.

As Sikkim has been pushing organic cardamom crop, it has been noted that forest restrictions have not helped them in taking advantage of farming on these lands. This is despite the fact that Sikkim is one of the leading producers of organic cardamom. Despite the fact that organic farming is an efficient practise that does not lead to the loss of forest land, this remains the case. The female farmers who work the slopes of the Himalayas use a tremendous amount of energy in order to gather fodder, feed cattle, and carry dung to locations where manure is made. All of these activities require a great amount of physical labour.

Tourism and Himalayan environment

The towering peaks, thrilling adventures, extensive biodiversity, and breathtaking natural beauty that can be found in the Himalayas are all factors that contribute to the growth and development of the area economy. One of the most important aspects that impacts the number of visitors that go to a certain location is the condition of the ecology there. Although tourism itself may be a contributor to environmental degradation if it is not carefully controlled, the tourism industry will be negatively impacted if the environment is degraded as a result of human activity. This is because tourists will be less likely to visit places where the environment

has been degraded. The flood that hit Uttarakhand the year before showed us that we need to focus more of our attention on building sustainable models for pilgrimage tourism in the vulnerable Himalayan highland regions. This is something that we must do in order to protect these locations.

In tourist areas in the high Himalayas, the most common problems that develop are pollution, garbage, and improper disposal of solid waste. In addition, the unchecked construction of highways, hotels, and lodges adds to the deterioration of Himalayan scenery. The idea of ecotourism has to be promoted in a cautious way so that the best practises may be followed and used. This should not only help the economic system of the local people, but it should also benefit the environment. Placing environmental issues front and centre, the administration in Leh has aggressively promoted tourism in the surrounding regions, giving particular emphasis to the reduction of pollution inside the city and the maintenance of natural balance. So, there is a need for ecologically responsible national building plans to increase mountain tourism for the compensation and wellness of rural communities, without having an influence on the natural treasures of the Himalayas. These plans should aim to develop mountain tourism in the Himalayas.

Wildlife conservation in Himalaya

The Indian Himalayan Region (IHR) is one of the most biodiverse locations in the world since it is home to approximately 10,000 plant species, 300 animal species, 977 bird species, 281 herpetofauna species, 269 fish species, and many kinds of invertebrates and microorganisms. The preservation of many of these species is a priority for conservationists all across the world. The delicate mountain ecosystems in the IHR are in great risk as a consequence of increased human pressures, most notably development. These ecosystems have major ecological, hydrological, and biological value; yet, they are in grave danger due to the fact that they are fragile. The exertion of these forces may be directly attributed to human activities. Poaching for meat, illegal wildlife trafficking, unfavourable human-animal interactions (conflicts), habitat loss, habitat fragmentation and degradation as a result of developmental operations, and the utilisation of natural resources by humans are the top threats to wildlife species in the IHR.

These causes have led to a decline in the number of wild animals, a reduction in the distribution range of the species, and in some cases, the extinction of the species in that specific region. A project titled "Securing livelihood, conservation, sustainable use, and restoration of high range Himalaya" was launched in 2017 as part of the Global Wildlife Program (GWP) by the Indian government's Ministry of Environment, Forests, and Climate Change in collaboration with the United Nations Development Programme (UNDP). The conservation of high-altitude Himalayan ecosystems is the primary objective of this initiative. It is an attempt to address the growing concerns to conserve the animal wealth of the region and a programme that will last

for seven years and will be funded by the Global Environment Fund (GEF), which will be led by the World Bank. It is a response to the growing crisis of illegal trafficking in wildlife and an attempt to address the growing concerns to conserve the animal wealth of the region. The development of a National Biodiversity Strategy and Action Plan is one of the ongoing conservation efforts in India (NBSAP).

Urbanization

Some of the challenges that the new government will face as it assumes power at an important policy juncture include rapid urbanisation, rising energy demands, environmental degradation, falling agricultural productivity, inadequate human capital, the generation of productive jobs, new security threats, and repositioning India in an evolving global order. These are just some of the challenges that the new government will face. Some of the most significant sentinels in the area are found in India, namely in the states that are situated in close proximity to the Himalayas. Both the number of people living in the mountainous areas around the Himalayas and the size of the cities there are on the rise. It is imperative that any unplanned or uncontrolled growth of metropolitan settlements in the Himalayan region be severely stopped at all costs.

In addition to taking into account the sensitivity of the region to seismic activity and the need for aesthetics, the building of the structures must be carried out with care for the environment of the surrounding area. This is required in order to meet the specifications. It is going to be required to establish bureaucratic regulatory bodies in the urban regions so that we can keep a careful check on all of these operations. It ought to be against the law for residents of the metropolitan region to engage in any kind of construction within their borders unless they have obtained prior authorization and certification from the appropriate regulatory authorities. This provision ought to be written into the bylaws of the region.

CONCLUSION

The biggest contributors to the problems that are resulting from the degradation of the Himalayan environment are unchecked and wasteful human activities directed against natural resources. Because of this, the moment has come to react more promptly to the reasons that have now begun to be perceived as a danger to the environment as well as the riches of the vulnerable area. This is both an urgent and suitable time to do so. Even though a better standard of living and increased economic growth for the people living in the Himalayan states is unquestionably a necessity in the 21st century, this growth should not come at the expense of the future of the country in terms of its environment, climate, biodiversity, and the natural beauty of its landscape. The goal of the writers is to advocate for an alternative paradigm that would maintain the economic well being of the local population while also protecting the Mountains and ensuring the continuation of future life. As a result, the new models of development should be designed in such a manner that it would be compatible with

the environment of the Himalayan area as well as its traditional knowledge and culture in order to construct an economy with the involvement of the local people.

REFERENCES

1) Acharya PR, Gupta P, Adiga R, Amatya A. The Himalayas: Rethinking the region, reimagining the identities. Himalayan Studies Conf, Georgia State University 2017.
2) Aggarwal M. Five years since Uttarakhand floods: Continued disregard for the environment is an open invitation for more calamities. Mongabay India Newsletter 2018.
3) Akhtar A, Gondhalekar D. Impacts of tourism on water resources in Leh town: Towards an eco-tourism approach. Int. Asso. Ladakh. Studies 2013, P25-37.
4) Ali J, Benjaminsen TA. Fuelwood, timber and deforestation in the Himalayas. Mount Res. Dev 2004;24(4):312-318.
5) Anonymous. Report on Governance for the sustaining the Himalayan ecosystems guidelines and best practices. Ministry of Environment and Forest, New Delhi 2009.
6) Anonymous. National mission for sustaining the Himalayan ecosystem: National action plan on climate change. Department of Science and Technology, New Delhi 2010.
7) Anonymous. Task force 4: Micro flora, fauna, wildlife and animal population. Himalayas Climate Change Portal 2015.
8) Asadzadeh A, Mousavi MSS. The Role of tourism on the environment and its Governing Law. Elect. J Biol 2017;13(2):152-158.
9) Basu S, Singh J, Shrivastava SK, Paliwal A, Chakravartty A. Remembering 2013 Uttarakhand floods 2016, P41497.
10) Bhushan I, Kumar A, Patel JS, Yadav RP, Singh S, Meena R, Meena SK, Meena VS. The Indian Himalayan Ecosystem as Source for Survival. Conserv. Agri. Publ. Springer, Singapore 2016, P367-380.
11) Briassoulis H, Van Der Straaten J. Tourism and the Environment: An Overview. In: Tourism and the environment (Briassoulis H, Van Der Straaten J). Environ. Assess 1992;2:1-9.
12) Chatterjee D. Studies on the endemic flora of India and Burma. J Royal Asiatic Soc. Bengal. Sci 1939;5:66.