

**Committee:** Environment

**Issue:** “The problem of waste disposal in the Himalayan mountains”

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## I) Introduction

The Himalayas are a mountain range located in Asia.

Separating the plains of the Indian subcontinent to the south from the Tibetan plateau in the north, they include over fifty mountains (the highest peak being Mount Everest 8,848 metres).

The region is inhabited by over 52.7 million people, and is spread across 5 countries : Nepal, Pakistan, India, Bhutan and the People’s Republic of China.

Three of the world’s major rivers rise from the Himalayas : the Indus (China, India, Pakistan), The Ganges (India, Bangladesh) and the Brahmaputra (China, India, Bangladesh).

Their combined drainage basin is home to roughly 600 million people.

The Himalayas have profoundly shaped the cultures of the Indian subcontinent; many Himalayan peaks are sacred in Hinduism and Buddhism.



## II) The question of waste disposal in the Himalayas

This particular region of the developing world has been subject to rapidly changing consumption patterns, especially in urban centres, due to rapid population growth and urbanization.

Solid waste management systems in the region are progressively proving to be disastrously overburdened and ineffective.

An accumulating amount of solid waste is being disposed within the open urban environment and the high mountain trekking and expedition areas, producing unaesthetic and unsanitary conditions. This is generally due to the limited number of expanded collection facilities, disposal facilities, insufficient funding and logistical problems.

The problem of waste disposal in the Himalayas puts forth numerous challenges that could potentially hinder the economic development of the countries in the region.

- Environmental issues include : atmospheric and water pollution, loss of biodiversity in cities; illicit disposal of toxic waste; fire hazards.
- Sanitary issues include : infectious diseases transmission through polluted water; blockage of open drains; disposal of effluent waste.
- Social issues include : traffic jamming; odor nuisance; aesthetic nuisance.

All these issues combined result in heavy economic losses for the countries in the region. Suffice it to say that in high mountain areas the costs and logistics of implementing an effective waste management system is a challenging goal to achieve.

The largest cities in the region are the most affected by the issue, having higher population densities.

Approximate populations in largest cities :

Kathmandu - Nepal - 2.500.000

Srinagar - India - 1.200.000

Dehradun - India - 700.000

The number of tourists, trekkers and mountaineers has also increased rapidly in the name of mountain ecotourism and adventure tourism in high mountain areas (i.e. base camps).

This has proven detrimental to these ecologically and topographically fragile areas, with rising human-induced pollution and amounts of solid waste being deposited.

'Leaving behind' self-generated waste is becoming the norm in trekking areas, this is further enabled by the absence of infrastructural services and waste management bodies in these locations.

### **Unexploded ordnance**

The massive mined area on the India-Pakistan border is an immediate cause for concern.

The largest known use of anti-personnel mines by any government in recent times was India's (and Pakistan's) deployment of hundreds of thousands of anti-personnel mines along the international border during Operation Parakram in the wake of the attack on the Indian Parliament in December 2001.

Land forces were mobilised on a large scale and mine-laying covered a huge parcel of agricultural land along the border, thereby disrupting the lives of hundreds of thousands of Indian citizens.

According to an April 2005 report of the Lok Sabha Standing Committee on Defence, the Indian Army suffered 1,776 casualties while laying and removing its minefields on the border between December 2001 and April 2005. The total number of civilian casualties remains unknown. However, an Indian NGO survey in 2004 counted at least 1,295 civilian casualties from Operation Parakram-laid mines. Despite many rounds of manual and mechanical mine clearance, by 2004 the Army declared that at least 300,000 mines planted along 400 kilometres of the international border in Punjab and Rajasthan were untraceable, and proposed that the area be permanently cordoned off.

Reliance on anti-personnel mines led to deaths and injuries of hundreds of more Indian nationals and land displacement of thousands with attendant hardship for those villages.

The misery they have produced in the communities along the international border and the LoC (line of control) is real today. With the subsequent construction of the fence along the LoC, India's anti-personnel mines have become all the more dispensable. Left over from a previous phase of the conflict, they no longer serve any purpose.

### **III) Key NGOs**

In the Indian state of Himachal Pradesh the influx of tourists is increasing every year. The mountains of Manali, Shimla, Rishikesh, Mcleodganj are only a few of the destinations which are crowded by tourists every year. The trekking trails of Kheerganga, Triund, Hampta Pass have been destroyed and are now filled with plastic bottles and packets of chips and instant noodles lying everywhere.

Today, there are a number of NGOs in Himachal and Uttarakhand that have sprung up to make sure that these trekking trails remain the way they are supposed to be. One of these NGOs, Waste Warriors, is battling with the rapid tourist commute in Mcleodganj, which is killing the ecology of the place. The intervention of NGOs can certainly help but doesn't permit to eliminate the root of the problem. Appropriate laws should be promulgated by the governments of the Himalayan states, for example by limiting tourism or creating a waste disposal system, a network of more than one country, to help tackle the issue in the long run.

### **IV) Key nations and political history**

Since 1947 the lengthiest and most important conflict in the region has been the Kashmir conflict, which saw direct military confrontation between India and Pakistan.

The last large scale armed conflict in the Kashmir region took place during the Kargil war (May-July 1999), which saw a decisive victory for India (who regained the town of Kargil, without further territorial changes).

Another large scale armed conflict took place in October 1962 during the Sino-Indian War, fought between India and China.

Resulting in a Chinese victory, the conflict ended in roughly a month.

Having reached its claim lines (Aksai Chin) by November the PRC did not advance farther and arranged for a unilateral ceasefire.

Skirmishes along the India-Pakistan border and the China-India border have also been the norm in the 21st century.

The latest conflict Indo-Pakistani dates back to 2018. It ended on May 29, when both parties agreed to fully implement the 2003 ceasefire and stop cross-border firing.

### **V) Current Political Situation**

Land disputes and regional tensions still exist, with India making claim to the territories of Azad Kashmir, Gilgit-Baltistan from Pakistan and the Aksai Chin region from China.

China claims the Indian state of Arunachal Pradesh recognizing it as South Tibet.

Pakistan claims the Indian state of Jammu and Kashmir based on its majority Muslim population.

The Kashmir conflict between India and Pakistan is still ongoing.

### **VI) Focus Questions**

How can Himalayan countries achieve immediate waste minimization?

How can the issue be dealt with at the household, community and manufacturing level?  
What kind of waste management systems can cities adopt?  
How can public and private enterprises (in the waste management sector) expand their service coverage areas in high mountain environments?  
How can we stimulate operational efficiency of waste management service in both citizens and service providers?  
How can we spread the use of recycling techniques?  
How can municipalities manage their landfill disposal areas in order to minimize pollution?  
What measures should be implemented when disposing of hazardous or healthcare waste?  
What other environmentally sustainable solutions could there be to reduce overall solid waste in the region?

## **V) Useful links**

- [https://idosi.org/ajbas/ajbas5\(1\)13/4.pdf](https://idosi.org/ajbas/ajbas5(1)13/4.pdf)
- <https://www.hindustantimes.com/india-news/a-himalayan-mess-growing-garbage-pile-a-threat-to-mountains-ecosystem/story-sSmLxHSc24DHmIe9bSKOiP.html>
- <https://en.wikipedia.org/wiki/Himalayas>
- <https://www.britannica.com/place/Himalayas>
- <https://www.thehindu.com/opinion/op-ed/its-time-for-india-to-join-the-mine-ban-treaty/article7008157.ece>
- <http://wastewarriors.org/>