



Mains Practice Question

Q. Investigate the factors contributing to the escalation of plastic pollution in the IHR (Indian Himalayan Region). What steps need to be taken to mitigate the crisis in the region? (250 words)

06 Mar, 2024 GS Paper 3 Bio-diversity & Environment

Approach

- Start the answer with a discussion that sets a context for the question.
- Analyze the factors contributing to the escalation of plastic pollution in the IHR (Indian Himalayan Region).
- Suggest steps need to be taken to mitigate the crisis in the region
- Conclude suitably.

Introduction

The Indian Himalayan Region (IHR) is a critical source of water in the subcontinent, feeding a number of major rivers of India including the Indus, Ganges, and Brahmaputra river systems. Unscientific plastic disposal is causing soil and water pollution in the IHR and impacting its biodiversity, which is having an adverse impact on the freshwater sources that communities downstream depend on.

Body

Reasons Behind Rising Plastic Pollution in IHR :

- **Poor Waste Collection Infrastructure:** Reports from **NITI Aayog** and the World Bank estimate that the IHR now generates more than five to eight million metric tons of waste annually. Uttarakhand and Himachal Pradesh have witnessed more than 400 million tourists since 2010 and are among the worst-performing states when it comes to solid waste management.
 - Poor waste collection and infrastructure leads to more than 60% of waste being dumped, burned, or swept downstream into key rivers like the Ganga, Yamuna, and Sutlej.
- **Heavy Influx of Tourists and Single-Use Products:** With more travel options via road, train, and air, tourists are increasingly flocking to Himalayan states. Additionally, they visit more remote rural destinations and trekking routes.
 - Their urban consumption patterns influence local residents to procure and sell packaged FMCGs, Polyethylene Terephthalate (PET) bottles, and single-use plastics to meet the large demand generated by the tourism, food, and hospitality sectors. This leads to widespread littering, dumping, and burning of waste in and around tourist areas.
- **Lack of Reach of Extended Producer Responsibility (EPR):** Even though the Ministry of Environment, Forest and Climate Change has mandated FMCG brands to set up and support reverse logistics for their plastic waste as a part of their EPR mandate under the Plastic Waste Management Rules 2016, most brands do not invest in reverse logistics in hilly areas due to the high cost of collection.
 - Moreover, many of the products available in these villages are produced by local brands, which do not have the capacity to invest in reverse logistics. Tourists carry products by the more popular brands with them, and the waste they leave behind does not get collected or recycled.

- **Lack of Policy Enforcement and Convergence:** Waste collection in the IHR is sporadic, and waste is immediately dumped either at designated sites that lack environmental clearance or directly downhill and in rivers. Informal waste pickers and scrap dealers play a major role in material recovery, but only for high-value materials such as PET plastic, metals, cardboard, and glass.
 - Additionally, such waste picking remains limited to urban and tourist areas. It doesn't help that most gram panchayats and village or block development officers are ill-equipped to handle the exponentially increasing waste generation by local and floating populations.
- **Inadequate Funding Capacity:** Another important factor to be noted is that the per capita amount provided by the central government to gram panchayats under the Swachh Bharat Mission-Gramin guidelines is insufficient to meet the expenses in hilly areas due to the widely spread-out population and difficult terrain as compared to villages in the plains, which have a much higher population density.
- **Social Stigma and Informal Livelihoods:** There is a social stigma attached to working with waste as a means of livelihood. In most urban areas, informal migrant workers are involved in waste collection and segregation. However, rural areas do not attract these migrant workers, further exacerbating the crisis which calls for urgent redressal on a war footing.

Steps Required to Mitigate the Plastic Crisis in IHR :

- **Plugging Data Gaps:** Data gaps in terms of the quantum and quality of waste being generated in the Indian Himalayan Region States should be plugged in.
 - Convergence in existing schemes such as SBM, the Mahatma Gandhi National Rural Employment Guarantee Act, 2005 and the Finance Commission's grants could be used to create the infrastructure, maintain and run operations.
- **Ensuring Sufficient Investments:** The systemic nature of the problem implies that no singular institution or stakeholder can be held responsible for it. There is certainly an urgent need to solve the waste management problem in the IHR, but the current efforts in this direction are not commensurate with the scale of the issue.
 - The Swachh Bharat Kosh Trust set up to facilitate the channelization of philanthropic contributions and corporate social responsibility funds towards this cause could also be used to augment resources.
- **Adopting State-Specific Initiatives:** States across the IHR have also been taking various initiatives including enacting laws to curb this menace which need to be adopted by other States also. For Instance,
 - Himachal Pradesh has a buy-back policy for non-recyclable and single-use plastic waste since 2019.
 - Sikkim banned packaged mineral water use in January 2022 and has a fairly robust regulatory system.
- **Devolving Powers to Local Bodies:** Though local bodies are the pivot of the waste management system in the country, a commensurate devolution of power to them is still a work in progress.
 - The value of the EPR (Extended Producer Responsibility) certificate which is earned by a PIBO (Producers, Importers, and Brand owners) in the IHR could be higher than one earned in the rest of the country for every ton of plastic waste processed.

Conclusion

The vision for the Indian Himalayan Region should extend beyond mere waste management to embrace a paradigm shift towards a circular economy that values conservation, sustainability, and resilience. By embracing innovation, inclusivity, and a shared commitment to environmental stewardship, India can safeguard the precious freshwater sources and biodiversity of the Himalayas for generations to come.