Item No. 25 Court No. 1

BEFORE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 720/2023

News Item titled "Need to declare the Higher Himalaya an eco-sensitive zone" appearing in Current Science dated 25.10.2023.

Date of hearing: 01.09.2025

CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER
HON'BLE MR. ISHWAR SINGH, EXPERT MEMBER

Respondents: Mr. Avneesh Arputham & Mr. Ankit Sharma, Advs. for MoEF&CC
Mr. Adarsh Chamoli, Adv. for R - 2
Mr. Anil Jaryal, Adv. for R - 3 (Through VC)

ORDER

1. In this original application, the issue under consideration relates to the declaration of higher Himalayas as eco-sensitive zone and its protection.

2. The Tribunal by order dated 18.12.2023 had appointed a joint Committee. The joint Committee had initially submitted the interim report on 01.04.2025. Thereafter, the final report has been submitted by the joint Committee alongwith the affidavit of MoEF&CC dated 11.07.2024. The recommendations made by the joint Committee in its final report are as under:

> *"1. Early warning system should be developed for any abnormal weather condition, river flow, snow melting, etc. and properly communicated to the downstream for better management. There is a need of proper monitoring mechanism for glacier, weather, glacial lakes, river flow (including sediment), forest fire and mountain biodiversity to ensuring the continuous flow of ecosystem services.*
>
> *2. Although the previous studies in similar region have projected the increase in intensity and frequency of large floods, which*

may cause increased sediment transport. However, the sediment transport is a complex phenomenon which depends on interactions between flow, grain size distribution, sediment supply, sediment availability and various other factors. Currently, we don't have sufficient quantitative evidences from the region to draw scientific inferences on sediment transport. The previous studies on sediment yield in the Himalayas in the similar elevations have reported large variations (nearly one order of magnitude) and are subject to several methodological assumptions and limitations such as absence of bedload measurements, variations in measurement methods, reliance on short-term records, and uncertainties in erosion rates derived from cosmogenic nuclides.

3. *The major construction activities, i.e., hydro-electric projects, road, tunnels can be permitted only after detailed engineering geological and geotechnical investigations. The causes/impact of the construction activities can be analysed thoroughly before the execution. In prominent tourist area, proper examination of existing building and it may be necessary to strengthen the retrofitting of structures to prevent them from sliding or collapsing. This could involve underpinning or adding reinforcement to the foundations. Technical auditing of multi-story buildings (~23) by experts on annual or biennial basis can be conducted at State level authorities to ensure the safety of the building. Hotels and residential constructions can be permitted only after detailed information on geology, geomorphology, slope stability and proper planned drainage and waste disposal system.*

4. *The anthropogenic interventions might have impacted the stability of the slopes in Uttarakhand. It can be minimized or mitigated by the proper scientific study of different factors of soil/overburden parameters like their physical shear strength parameters, slope degree, bearing capacity assessment to name a few which can be used to put in place the proper regulations for town planning and to improve the existing construction practices. Increased pressure on infrastructure resulting from tourism activities places additional load on scarce water supply, sanitation, and waste management arrangements in many places of higher Himalayas.*

5. *To check the slope instability and support the sustainable tourism practices the lighter eco-friendly accommodations along with responsible waste management need to be promoted.*

6. *The awareness drives need to promoted and adequate policy changes in the town and country planning act must be put in place. There is dire need to promote eco-tourism, local governance, and stricter environmental regulations.*

7. *The rock structure and stability not be damaged by digging or blasting the hillsides. In landslide prone areas, stones and boulders should not be removed from the bottom of the hill because this would remove toe support, increasing the likelihood of landslides. It is necessary to fill in any cracks that have appeared on the slopes.*

8. *Provision of effective drainage system should be ensured among the proposed area of concern. Due to the lack of proper surface draining system, the rainwater of most of the buildings is being infiltrated into the ground which generates sub-surface flow and accelerates the process of land creeping resulting in damage to buildings and other properties causing economic and environmental disruptions. For safeguarding the buildings and environmental conservation, it is necessary to ensure that the rainwater of each building roof is being drained out properly into the nearest natural drainage line.*

9. *Afforestation of degraded slopes can be initiated, that can help to anchor the soil and prevent erosion. Broad-leaved native trees (i.e., Oaks) can be promoted for stabilizing slopes, especially in the landslide prone areas.*

10. *The regulations related to waste management should be strictly followed. Dumping sites around water bodies should be strictly restricted to prevent pollution threats on the important sources of drinking water of the city. QR code based Digital Direct Refund System should be implemented for management of plastic waste. IEC activities to be promoted amongst visiting tourist towards solid waste and plastic waste management.*

11. *Strict measures should be made to promote the usage of biodegradable materials and ban on use of Single Use Plastics (SUPs) items should be strictly enforced.*

12. *Local people should be involved in the Environmental Conservation programs and awareness/training on landslides, mountain risks, etc. to be initiated.*

13. *In higher Himalaya, the carrying capacity of tourist places, alpine pastures /meadows, etc. should be conducted. Entry of tourists, grazers, etc. can be only permitted according to the carrying capacity."*

3. The Respondent No. 2, State of Uttarakhand has responded to the above recommendations in the reply affidavit dated 26.08.2025 in the following tabulated form:

Recommendation of Joint Committee	***Relevant Department -Wise Information***
a. *Early Warning System should be developed for any abnormal weather condition, river flow, snow melting, etc. and properly communicated to the downstream for better management. There is a need of proper monitoring mechanism for glaciers, weather, glacial lakes, river*	1. *<u>Office of the Chief Conservator of Forests, Forest Fire and Disaster Management, Uttarakhand, Dehradun</u>:* - *For strengthening forest fire management through customized weather forecasting, an MoU has been executed between*

flow (including sediment), forests fire and mountain biodiversity to ensuring the continuous flow of ecosystem services.	*the Forest Department, Uttarakhand, and the India Meteorological Department, with Government approval (Letter No. 03/X-2-2025-21(20)/2024 (E-78584) dated 01.01.2025). The process of establishing Automatic Weather Stations (AWS) in sensitive forest areas is underway.* 2. *<u>Disaster Management Department</u>:* - *Disaster Risk Data base (DRDB) is required to be upgraded.* - *State Disaster Management Plan (SDMP) and District Disaster Management Plan (DDMP) is being upgraded.* - *The Uttarakhand State government has developed an earthquake warning systems, a total of 177 sensors and 112 sirens have been installed.* - *For effective control and reduction of landslides within the state of Uttarakhand a separate Uttarakhand landslide Mitigation and Management centre (ULMMC) have been established.* - *For advance warning of lightning strikes Climate Resilient Observing System Promotion Council. MoU has been signed with (CROPS).* - *Incident Response System (IRS) has been activated at State, District and Tehsil level.*

	- *Flawless coordination with central agencies and home ministry control room for aircraft and helipad services.* - *Emergency Response and Assistance system (ERSS) and Common Alert Protocol (CAP) have been practically implanted.* - *Development of THDC Alarm System is required under the leadership of SEOC .* - *To get accurate information about weather forecast in the state, Doppler Radars have been installed in three places namely Mukteshwar, Lansdowne and Surkanda which will make the weather forecast in the state more accurate.*
b. *Although the previous studies in similar region have projected the increase in intensity and frequency of large floods, which may cause increased sediment transport. However, the sediment transport is a complex phenomenon which depends on interactions between flow, grain size distribution, sediment supply, sediment availability and various other factors. Currently, we don't have sufficient quantitative evidence from the region to draw scientific inferences on sediment transport. The previous studies on sediment yield in the Himalayas in the similar elevations have reported large variations (nearly one order of magnitude) and are subject to several methodological*	*<u>Irrigation Department</u>:* - *The Ganga and Yamuna are inter-state rivers originating in Uttarakhand and flowing through several other states. As per Entry 56 of the Union List in the Seventh Schedule of the Constitution of India, the power to make laws or regulations regarding such rivers rests solely with the Central Government. The higher Himalayas, from which these snow-fed perennial rivers originate, extend across Jammu & Kashmir, Himachal Pradesh, Uttarakhand, and the North-Eastern states. Therefore, policies and scientific studies must be undertaken at the national*

assumptions and limitations such as absence of bedload measurements, variations in measurement methods, reliance on short-term records, and uncertainties in erosion rates derived from cosmogenic nuclides.	*level through central institutions such as WIHG (Dehradun), NIH (Roorkee), NEERI (Nagpur), GSI, IITs, Survey of India, and CWC. Given their inter-state character, any related policy must be framed and finalized by the Central Government.*
c. The major construction activities, i.e., hydro-electric projects, roads, tunnels can be permitted only after detailed engineering geological and geotechnical investigations. The causes/impact of the construction activities can be analyzed thoroughly before the execution. In prominent tourist areas, proper examination of existing building and it may be necessary to strengthen the retrofitting of structures to prevent them from sliding or collapsing. This could involve underpinning or adding reinforcement to the foundations. Technical auditing of Multi-Storey buildings by experts on annual or biennial basis can be conducted at State level authorities to ensure the safety of the building. Hotels and residential constructions can be permitted only after detailed information on geology, geomorphology, slope stability and properly planned drainage and waste disposal system.	*<u>Uttarakhand Pollution Control Board</u>:* - *Major construction activities i.e. hydroelectric projects, road, tunnels, building marking 20000 m2 covered under EIA notification, they need prior environment clearance before obtaining CTE from UKPCB under air water acts. During the process of environment clearance they needs to submit details of EMP before the MOEFCC/SEIAA after evolution their EMP, EC is granted by concern authorities if any such conditions imposed in EC, PCB shall impose and monitor in their CTE & CTO compliances.*
d. The anthropogenic interventions might have impacted the stability of the slopes in Uttarakhand. It can be minimized or mitigated by the proper scientific study of different factors of soil/overburden parameters	*<u>Urban Development Directorate</u>:* - *In higher Himalayan areas of Uttarakhand, Solid Waste Management is being carried out by all ULBs. Under SBM 1.0, 62 MSW treatment facility DPRs*

like their physical shear strength parameters, slope degree, bearing capacity assessment to name a few which can be used to put in place the proper regulations for town planning and to improve the existing construction practices. Increased pressure on infrastructure resulting from tourism activities places an additional load on scarce water supply, sanitation, and waste management arrangements in many places of the higher Himalayas.	*costing Rs. 323.59 Cr were approved. Under SBM 2.0, 15 legacy waste remediation proposals were submitted, 14 approved, and funds allocated for 8. MoUs have been signed for two 500 TPD torrefied charcoal plants at Haldwani (NN–NTPC) and Haridwar (NN–THDCIL/UJVNL). Three MSW processing & SLF facilities (Dehradun–200 TPD, Haridwar–150 TPD, Kirtinagar–5 TPD) and 14 MSW facilities with 85 MRFs (450 TPD) are functional. Work on 49 MSW/MRF/compost plants is in progress. Two CBG plants (58 TPD) and 82 plastic compactors (400 TPD capacity, Rs. 5.19 Cr revenue till Dec 2024) are operational. Additionally, 663 NADEP/compost pits are used for wet waste processing, and a 5 TPD Plastic-to-Plank system has been installed at NPP Muni-ki-Reti.*
e. To check the slope instability and support the sustainable tourism practices the lighter eco-friendly accommodations along with responsible waste management need to be promoted.	*<u>Uttarakhand Pollution Control Board</u>:* *- PCB has categorised hotels/restaurant/ashram in Red, Orange and Green category. It is mandatory to provide STPs in projects covered under Red/Orange categories to manage sewer waste.*
f. The awareness drives needs to promoted and adequate policy changes in the town and country planning act must be put in place. There is dire need to promote eco-tourism, local governance, and stricter environmental regulations.	*1. <u>Uttarakhand Pollution Control Board</u>:* *- PCB conducts IEC activities to promote biodegradable alternatives and enforce the ban on single-use plastic. Three Plastic Raths on the Char Dham route covered 6,186 km*

	in 28 days, spreading awareness through community sessions. About 11,300 posters/stickers and 8,000 cloth bags were distributed. The PWM Rath campaign in all 13 districts used street plays, videos, door-to-door campaigns, and audio jingles to highlight the harms of single-use plastic and encourage alternatives.
g. The rock structure and stability not be damaged by digging or blasting the hillsides. In landslide prone areas, stones and boulders should not be removed from the bottom of the hill because this would remove toe support, increasing the likelihood of landslides. It is necessary to fill in any cracks that have appeared on the slopes.	*<u>Disaster Management Department</u>:* - *For effective control and reduction of landslides within the state of Uttarakhand a separate Uttarakhand landslide Mitigation and Management centre (ULMMC) have been established.*
h. Provision of an effective drainage system should be ensured among the proposed area of concern. Due to the lack of proper surface draining system, the rainwater of most of the buildings is being infiltrated into the ground which generates sub-surface flow and accelerates the process of land creeping resulting in damage to buildings and other properties causing economic and environmental disruption. For safeguarding the buildings and environmental conservation, it is necessary to ensure that the rainwater of each building roof is being drained out properly into the nearest natural drainage line.	*1. <u>Irrigation Department</u>:* - *The Irrigation Department, Uttarakhand, is responsible for channelizing storm water from catchment areas to the nearest natural drains. A master drainage plan has been executed at Bhagwanpur (Haridwar) and is under execution at Muni Ki Reti (Tehri Garhwal). DPRs for 17 towns are under preparation, to be implemented in phases as per state resources and budget. DPRs for remaining townships will also be prepared and executed in a phased manner.*

	2. *Uttarakhand Peyjal Nigam:* - *Drainage work is not the mandate of Uttarakhand Peyjal Nigam.*
i. *Afforestation of degraded slopes can be initiated, this can help to anchor the soil and prevent erosion. Broad-leaved native trees (i.e. Oaks) can be promoted for stabilizing slopes, especially in the landslide prone areas.*	*Forest Department:* *(Information has been sought from the above departments. However, no information has been furnished)*
j. *The regulations related to waste management should be strictly followed. Dumping sites around water bodies should be strictly restricted to prevent pollution threats on the important sources of drinking water of the city. QR code based Digital Direct Refund System should be implemented for management of plastic waste. IEC activities to be promoted amongst visiting tourist towards solid waste and plastic waste management.*	1. *Uttarakhand Pollution Control Board:* - *The PCB activity followed the registration related to waste management. NO CTE shall be issued beyond the criteria mentioned in the MSW Rules. Time to time complained covered filed against the local bodies in Hon'ble designate court for non-compliance of MSW rules presently case under trial. The Digital Refund System (DRS) was introduced in the eco-sensitive Char Dham region to manage plastic waste, especially PET bottles. Consumers pay a deposit at purchase and receive a refund upon returning empty containers, incentivizing collection and recycling. Over 20 lakh bottles have been recovered, saving 66 MT of CO_2 emissions, with collected waste sent to registered processors. The initiative, which has reduced littering and promoted responsible disposal, is now being developed into Rules for state-wide implementation.*

k. Strict measures should be made to promote the usage of biodegradable materials and ban on use of Single Use Plastics (SUPS) items should be strictly enforced.	*1. <u>Uttarakhand Pollution Control Board</u>* *- Single-use plastic (SUP) is banned in Uttarakhand, with regular IEC drives promoting biodegradable alternatives. UKPCB has distributed 8,000 cloth bags and 11,300 leaflets for awareness. The state generates 55,991 MTPA plastic waste, with 62 registered recycling units having a combined capacity of 1.77 lakh TPA. Restrictions on supply, storage, transport, manufacture, sale, purchase, and import of identified SUP items have been enforced vide notification dated 16.02.2021.*
l. Local people should be involved in the Environmental Conservation programs and awareness/training on landslides, mountain risks, etc. to be initiated.	*1. <u>Office of the Chief Conservator of Forests, Forest Fire and Disaster Management, Uttarakhand, Dehradun</u>:* *- Uttarakhand holds a special place due to its rich biodiversity, more than two-thirds of the state's land area is covered with forests. Here a large population not only resides near forest areas but also depends on forests for its various daily needs. The Forest Department ensures continuous public participation in the conservation and development works of forests. Along with this, public awareness programs are organized from time to time (especially through forest fire safety week, wildlife safety week, Harela etc.)*

	through mass publicity, seminars / workshops to get maximum public cooperation in the conservation of forests and wildlife, forest fire control / management, human-wildlife coexistence etc. - *Awareness/training on other aspects of environmental conservation with respect to wildlife (flora and fauna) is conducted on regular basis on the field. Funds are obtained through various centrally as well as state sponsored schemes.* 2. *<u>Uttarakhand Pollution Control Board</u>:* *During IEC activities a Char Dham route plastic Raths with screen display used to create awareness.*
m. *In higher Himalayas, the carrying capacity of tourist places, alpine pastures/meadows, etc. should be conducted. Entry of tourists, grazers, etc. can be only permitted according to the carrying capacity.*	*<u>Uttarakhand Pollution Control Board</u>:* - *Carrying capacity study of Char Dham has been awarded to Wildlife Institute of India.*

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4. The response of Respondent No. 3, State of Himachal Pradesh to the recommendations of the joint Committee in its affidavit dated 24.05.2025 is as follows:

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S. No	***Recommendations of the Joint Committee***	***Response***
a.	*Early Warning System should be developed for any abnormal weather condition, river flow, snow melting, etc. and properly communicated to the downstream for better management. There is a need of proper monitoring*	*1. It is submitted that Government of Himachal Pradesh (GoHP) in collaboration with the Government of India, through Himachal Pradesh State Disaster Management Authority (HPSDMA) has installed three Doppler Radars in Shimla (Kufri), Chamba (Jot) and Mandi (Murari Devi) in the year 2021 and 2023 respectively. The installation of two additional*

	mechanism for glaciers, weather, glacial lakes, river flow (including sediment), forests fire and mountain biodiversity to ensuring the continuous flow of ecosystem services.	*Doppler Radars i.e one in Kinnaur and one in Lahaul & Spiti to strengthen the weather monitoring network in Himachal Pradesh are under progress. These Doppler Radars are highly effective and will minimize risks due to adverse weather events.* *2. The GoHP through HPSDMA will install 48 Automatic Weather Stations (AWS), Automatic Rain Gauges (ARG), and Automatic Snow Gauges (ASG) in Community Development Blocks that currently lack such facilities.* *3. To enhance weather forecasting and the Early Warning System, HPSDMA signed a Memorandum of Understanding (MoU) with Indian Meteorological Department (IMD) on 06.09.2024. This collaboration aims to establish a weather network station and a real-time weather information system to improve preparedness and mitigate hydro-meteorological hazards in Himachal Pradesh.* *4. In addition, HPSDMA has sent proposals to the National Disaster Management Authority (NDMA) for planning mitigation measures related to the four pro-glacial lakes. For detailed studies, the Disaster Management Cell is collaborating with the Centre for Development of Advanced Computing (C-DAC), Pune, and National Remote Sensing Centre (NRSC), Hyderabad. As part of this work, C-DAC has completed the geological and bathymetric survey of the Parvati (upstream of Khir Ganga) and Baspa (upstream of Sangla) lakes and submitted its findings. NRSC Hyderabad has completed the modelling for the Gepang Gath lake. Onsite survey of the Satluj lake (northwest of Kalka, along the Kashang Gad) will be conducted during the summer season after the snow is cleared. Mitigation work for these lakes will commence upon receipt of funds from NDMA.* *5. Every year, during the onset of the forest fire season, HPSDMA is issuing alerts based on information received from the Forest Survey of India via the SACHET App, National Disaster Alert Portal regarding forest fire prone areas on annual basis. This information is shared with concerned District Disaster Management Authorities (DDMAs) and departments to help safeguard valuable forest resources.* *6. These initiatives are expected to significantly enhance weather observation and monitoring networks as well as the issuance of early warning in the State. As a result, the damage and losses from disasters are minimized by the strengthening the early warning system.* *7. The HPSDMA has initiated the Himachal Pradesh Disaster Risk Reduction Program (HPDRRP) funded by Agence Francaise de*

		Development / French Development Agency (AFD). The primary objective of this program is to enhance the Disaster Risk Management (DRM) and Climate Change Adaptation (CCA) capacity in the State of Himachal Pradesh. An integrated, multi-sectorial approach focusing on capacity building, education, and training in Disaster Risk Reduction (DRR) and CCA. The program was officially launched following the signing of the Program Operation Manual (POM) between the Government of Himachal Pradesh and AFD on 10th January 2025. The program will be implemented over a period of five years, and out of the 20 identified projects, two are specifically dedicated to the establishment of Early Warning Systems (EWS) which are as under: a. *Under the HPDRRP,* ***Project 2.1*** *has been allocated funds specifically aimed to setup a comprehensive multi-hazard Early Warning System (EWS) across the State to mitigate the impacts of various disasters. The installation of the EWS will address the following hazards:* a) *Landslides,* b) *Flash floods,* c) *Cloudbursts,* d) *Glacial Lake Outburst Floods (GLOF)* *Major Equipment/technologies to be used to mitigate impacts of hazards are as under:-* i) *Automatic Weather Stations (AWS)* ii) *Automatic Rain Gauges (ARGs)* iii) *Real-time River Level Monitoring through Sensors* iv) *Remote Sensing and GIS-Based Landslide Susceptibility Mapping.* v) *Internet of Things (IoT) based Sensors deployed in vulnerable slopes for movement detection.* vi) *Glacial Lake Monitoring with Remote Sensing – through ISRO, NRSC.* vii) *Early Warning Sirens/Alerts in downstream villages.* b. ***Project 2.2*** *Developing climate/ weather related forecast for agriculture and horticulture. The project aims to expand the network of weather stations and real-time observatories across the State as under:* a) *Digitization of administrative boundaries and implement a polygon-based warning system for farmers.* b) *Automatic weather stations, including rain gauges, will be established up to the block level.* c) *To enhance Agromet Advisory Services (AAS) to make them more crop- and location-specific.* d) *Improved weather-based advisories will support farmers in better planning and decision-making.* e) *The information needs of diverse end-user groups within the farming*

		community will be assessed. *f) The project will contribute to developing weather-based strategies for crop and livestock management.* *g) To increase agricultural productivity and ensuring food security.* *h) Local communities will be actively involved in disseminating weather forecasts at the household level.* *The Early warning system is essentially required to be developed and installed for monitoring the river flow, glacial lakes, etc. As per the mandate of the Dam Safety Act, 2021, it is mandatory for all the specified dam owners to install inflow forecasting system and emergency flood warning system for the probable flood affected areas in the downstream of the dam. However, we need to develop inflow and flood warning system basin wise for all the Major Rivers which is capable of forecasting real time inflow, river flow and alerting all the stakeholders automatically during the time of any eventuality of Cloudburst, GLOF etc.*
b.	*Although the previous studies in similar region have projected the increase in intensity and frequency of large floods, which may cause increased sediment transport. However, the sediment transport is a complex phenomenon which depends on interactions between flow, grain size distribution, sediment supply, sediment availability and various other factors. Currently, we don't have sufficient quantitative evidences from the region to draw scientific inferences on sediment transport. The previous studies on sediment yield in the Himalayas in the similar elevations have reported large variations (nearly one order of magnitude) and are subject to several methodological assumptions and limitations such as absence of bed load measurements, variations in measurement methods, reliance on short-term records, and uncertainties in erosion rates derived from cosmogenic nuclides.*	*It is agreed that the sediment yield at the time of high frequency flood increases manifold causing vide spread damage, destruction and further deposition along the river banks in the downstream areas. Considering the large catchment areas of the high Himalayan region, it would not be feasible to carry out the detailed investigation in terms of the different weathering processes and the sediment yield thereof. It would be more practical to identify the most vulnerable catchments based on the historical data for carrying out sediment yield analysis for those basins.*
c.	*The major construction activities, i.e., hydro-electric projects, road, tunnels can be permitted only after detailed engineering geological and geotechnical investigations. The causes/impact of the*	*1. The Government of Himachal Pradesh has formulated Swarna Jayanti Policy in the year 2022 and the allotment and construction of hydro-electric projects in the state is done as per the provisions laid in this policy. The construction of hydro -electric projects only starts after the technical concurrence of the*

	construction activities can be analysed thoroughly before the execution. In prominent tourist area, proper examination of existing building and it may be necessary to strengthen the retrofitting of structures to prevent them from sliding or collapsing. This could involve underpinning or adding reinforcement to the foundations. Technical auditing of multi-storey buildings (—≥3) by experts on annual or biennial basis can be conducted at State level authorities to ensure the safety of the building. Hotels and residential constructions can be permitted only after detailed information on geology, geomorphology, slope stability and proper planned drainage and waste disposal system.	*Detailed Project Report (DPR) by the competent authority and it covers all aspects pertaining to geological and geotechnical investigations. The Environment Impact Assessment (EIA) is also carried by the project developers to take the necessary steps for mitigating any adverse impact on the environment. This is executed in line with EIA approval granted by the MoEF & CC, GoI, for large projects and as per State approval granted for small hydro-electric projects (HEP). The Environment Master Plan (EMP) is implemented in letter and spirit as per approval. All the relevant IS codes and other international codes are followed during the construction of hydro-electric projects.* 2. *The Department of Town & Country Planning of GoHP, considering the recent unprecedented rainfalls and the subsequent disaster across the urban as well as rural areas of the State made amendment in Himachal Pradesh Town and Country Planning Rules dated 08.08.2024. The amendment of Rule 21 (3) and 21(4) read as under:-* *"Rule 21 (3): For all High Risk Buildings as per Risk Based Classification notified by the Government, Geological Investigation Report along with Structural Design Report and Structural Stability Certificate shall be mandatory."* *"Rule 21 (4) : The Director may suspend or cancel the registration of any registered Structural Engineer in case structure infirmity is found in the structural design submitted and approved by the concerned Structural Engineer or in case the structural stability certificate is issued by a Structural Engineer upon completion of the building and the building is not found structurally stable."* *(Copy of amended Himachal Pradesh Town and Country Planning Rules is annexed as Annexure-1)* *Further the distance where construction shall be allowed from nallah and khud were increased to 5 mtrs. and 7 mtrs. respectively.* *Also, the directions have been given vide letter dated 22.08.2024 (Copy annexed as Annexure -2) to all the Urban Local Bodies (ULBs) / Special Area Development Authorities (SADAs) and Town and Country Planning Offices to check the drainage systems of all plots having area more than 500 m² in case of Hotels, Public and Semi-Public Buildings, Commercial Establishments and Real Estate Projects in a campaign mode over the next two months.*

		3. The earthquake resilient construction techniques are propagated to Rural Local Bodies (RLBs) through training to local masons under MGNREGA and Pradhan Mantri Awas Yojna (PMAY). The Social Impact and Environment Impact assessments of large construction projects are conducted by state government/ project executing agencies and local people are made aware through concerned gram panchayats of such project analysis before beginning of projects. *3. The Public Works Department is constructing roads and Buildings by preparing Detailed Project Reports (DPRs) of each project wherein detailed study of Soil Investigation, Geological Investigation is carried out along with mitigation measures required at a location of particular project. The construction of roads and highways is carried out as per provisions of applicable Indian Road Construction (IRC) Codes and relevant specifications. During road construction work various mitigation measures are taken to mitigate various risks, by incorporating scientific and engineered slope stabilization measures, such as cutting of hill slope at a self-sustaining slope, protection of hill slope by erection of gabion walls, retaining/ breast walls and bio-engineering techniques. In addition to this, protection of hill slopes by latest techniques such as self-drilling anchors (SDA), flexible earth percussion anchors, and turf reinforcement mats is being proposed to provide long-term resilience against landslides and ensure the safety of road users and nearby communities.*
d.	*The anthropogenic interventions might have impacted the stability of the slopes in Uttarakhand. It can be minimized or mitigated by the proper scientific study of different factors of soil/overburden parameters like their physical shear strength parameters, slope degree, bearing capacity assessment to name a few which can be used to put in place the proper regulations for town planning and to improve the existing construction practices. Increased pressure on infrastructure resulting from tourism activities places additional load on scarce water supply, sanitation, and waste management arrangements in many places of higher Himalayas.*	*1. The committee has made specific recommendations related to Uttrakhand State. However, the State of Himachal Pradesh has already undertaken measures through the Town and Country Planning Department (TCP) to improve the construction practices.* *2. To decongest the tourism hot spots in the State, the Department of Tourism and Civil Aviation is promoting the Home Stays in the rural areas. This endeavour not only reduce the pressure on basic infrastructure like water, sanitation, waste management in urban areas but also boost the tourism experience of tourists visiting the various unexplored destinations in the State.* *3. In order to manage waste, the Rural Development Department (RDD) is opening Plastic Waste Management Units PWMU in all Development Blocks to manage plastic waste. Segregation sheds have been provided and are being established in 3615 Panchayati Raj Institutions (PRIs) in rural areas of State where recyclable and non-recyclable plastic waste is to be segregated. Recyclable plastic is sold to*

		local vendors. Non-recyclable plastic waste is given to cement companies for which MoU have already been signed with M/s ACC Ltd., M/s Ambuja Cements Ltd. and M/s Ultra Tech Ltd. 4. *For biodegradable waste, it is being handled through cattle feeding, compost pit making at village level. Nearly 80% of biodegradable waste at Gram Panchayat level is being treated and disposed off through this method safely. For liquid waste community soak pits are being constructed in rural areas of Himachal Pradesh.* 5. *For sanitation, the Himachal Pradesh has obtained an Open Defecation Free (ODF) State status in the year 2016. For floating population of migrants and tourists, CSCs are being constructed as per need basis in rural areas of Himachal Pradesh. Regular clean-up programmes are organised in the State especially in higher and inaccessible areas to remove, collect and safely dispose off the Non-biodegradable plastics.*
e.	*To check the slope instability and support the sustainable tourism practices the lighter eco-friendly accommodations along with responsible waste management need to be promoted.*	1. *The State of Himachal Pradesh has passed regulations through the Town and Country Planning (TCP) Department and construction is not permitted on land having slope more than 45°. Further, as mentioned in para-supra structural design report and Structural Stability Certificates are mandatory for all High Risk Buildings. Further, maximum hill cutting in one step has been restricted to 3.5 mts.* 2. *All Mitigation Measures are based on detailed Geotechnical Investigations, Geophysical Investigations, Topographic Survey, Advanced Slope stabilization techniques, and infrastructure rehabilitation as part of DPRs to ensure the long-term stability of the roads/ Highways. For Proper drainage of surface and subsurface water along any road project drainage network is designed as part of project which finally disposes off the rain water to the nearest natural streams. In case of construction of Buildings also, Geotechnical Investigations, Soil Investigations and Topographic Survey are carried out in the Building Projects including measures for draining of area from rain water runoff.* 3. *For responsible waste management Rural Development Department (RDD) and Urban Development Departments (UDD) are also carrying out IEC activities to increase awareness besides taking waste management measures.* 4. *The Tourism Department is sensitizing all tourism stake-holders to discourage the use of polythene/ plastic in the units/ activities. Tourism Units are registered only after obtaining consent to operate for*

		the Pollution Control Board. For eco-friendly accommodations, the home stays are being promoted in the rural areas to decongest the tourist hotspots. The Forest Department is also making efforts to promote eco-tourism in the forest areas through building camping facilities etc. having least environmental impact.
f.	*The awareness drives needs to promote and adequate policy changes in the town and country planning act must be put in place. There is dire need to promote eco-tourism, local governance, and stricter environmental regulations.*	1. *The Department of Town and Country Planning (TCP) has taken many steps to promote safe building construction in the State. The Department is carrying out awareness activities about the the Town & Country Planning Act, Rules and its regulations in the field and awareness programs are being organized from time to time to enlighten the general public regarding the crucial role that planning plays in protection of environment, creation of hygienic living spaces and safety from disasters. The amendments made are already highlighted in the paras supra.* 2. *The Department of Tourism and Civil Aviation, register the camping sites on production of No Objection Certificate (NOC) by the operator from Forest Department, as per the provisions of Himachal Pradesh Tourism Development and Registration Act, 2002. The camping sites for the eco-tourism activities are further regulated by the Forest Department. The Department of Tourism and Civil Aviation also consider the proposals for funding in respect of eco-tourism related activities subject to approval from the competent authority.* 3. *The Department of Environment Science Technology, Climate Change (DEST&CC), Department of Forest and Pollution Control Board are constantly taking measures to promote and conserve environment of the State. The Environmental regulations are being enforced by these Departments to safeguard the environment in the State.*
g.	*The rock structure and stability not be damaged by digging or blasting the hillsides. In landslide prone areas, stones and boulders should not be removed from the bottom of the hill because this would remove toe support, increasing the likelihood of landslides. It is necessary to fill in any cracks that have appeared on the slopes.*	1. *The construction of hydro-electric power projects involves tunneling and blasting work and it is undertaken after prior permission accorded in accordance to detailed investigation based on geological, geographical and environment & social considerations and concerns. The latest available techniques of controlled blasting and Tunnel Boring Machine (TBM) etc. are used for tunnel excavation in hydro-power projects. Proper dumping of muck is ensured as per approved muck dumping plan and same is being monitored by authorized state departments and the HP State Pollution Control Board.* 2. *The Public Work Department (PWD) undertakes in road/highway projects and undertakes various slope stability measures so as to ensure the following:*

		a) *To ensure the long-term stability of the hill slopes and prevent future slope failures, duly taking into account various factors such as soil properties and geological characteristics.* b) *Long-term stability of the hill slopes by taking into account the properties of the soil, including its shear strength, cohesion, and angle of internal friction. Implementing effective engineering measures not only mitigates the risk of slope failures but also ensures the overall safety and sustainability of the existing road and its surrounding infrastructure. Proper slope stabilization techniques promote the long-term stability of the hillside and minimize the potential for future slope failures.* c) *By considering the specific site conditions, employing appropriate slope stabilization methods, and adhering to sound engineering practices, the risks associated with steep slopes is mitigated, ensuring the safety and longevity of the slope.* d) *The design of slope stabilization technique is determined so as to achieve Factor of Safety in Static and Seismic cases as per IRC: 75-2015 and IRC: SP-48, 2023 (Hill Road Manual).* *The above mitigation measures result in significant improvements in road safety, infrastructure resilience, and community well-being. The key outcomes include:* a) *Safe passage for commuters* b) *Improved road connectivity and economic stability* c) *Long-term slope stability and reduced maintenance costs* d) *Enhanced Disaster Preparedness and Resilience.* e) *Preservation of Environment.* 3. *The PWD is taking up various technical and scientific measures while carrying out development of roads/highways and buildings in the State for well being of the community as a whole with minimum disturbance and least impact on the environment.*
h.	*Provision of effective drainage system should be ensured among the proposed area of concern. Due to the lack of proper surface draining system, the rainwater of most of the buildings is being infiltrated into the ground which generates sub-surface flow and accelerates the process of land creeping resulting in damage to buildings and other properties causing*	1. *The Department of Town and Country Planning has issued regulations to improve building activities away from rivers / drainage system as already explained in the para-supra. Government is ensuring that the drains are cleaned before the monsoon season and that the encroachments are removed. Rain Water Harvesting is promoted in urban and rural areas.* 2. *The Jal Shakti Vibhag also ensures that the rain water harvesting activities are conducted and necessary steps are taken to prevent flooding of the rivers. The cleanliness drives are conducted to preserve the drinking*

	economic and environmental disruption. For safeguarding the buildings and environmental conservation, it is necessary to ensure that the rainwater of each building roof is being drained out properly into the nearest natural drainage line.	*water and natural sources of the water are conserved effectively.*
i	*Afforestation of degraded slopes can be initiated, this can help to anchor the soil and prevent erosion. Broad-leaved native trees (i.e Oaks) can be promoted for stabilizing slopes, especially in the landslide prone areas.*	*Afforestation on degraded forest areas is a regular activity of the Forest Department. Currently the forest cover of the State is about 28% of the total geographical area as per the State of Forest Survey Report, 2023. State has set a target to enhance the forest cover to 30% by the year 2030 through regular afforestation and plantation drives by involving the local communities, NGOs, youth etc. Soil binder species are preferred in the landslide prone areas and on slopes. Oak species are also raised in the forest nurseries and are planted as per site specific needs in their natural zone of occurrence. Plantation activities are also undertaken under NGREGA by the Rural Development Department to augment the afforestation activities.*
j	*The regulations related to waste management should be strictly followed. Dumping sites around water bodies should be strictly restricted to prevent pollution threats on the important sources of drinking water of the city. QR code based Digital Direct Refund System should be implemented for management of plastic waste. IEC activities to be promoted amongst visiting tourist towards solid waste and plastic waste management.*	*The State of Himachal Pradesh has made a pioneer effort by bringing a special legislation titled as H.P. Non-Biodegradable Garbage (Control) Act, 1995 to effectively manage the plastic waste. Various notifications have been issued from time to time to ban various single use plastics and penalties have also been imposed. The Plastic Waste Management Rules (PWMR) formulated by the GoI under the Environment (Protection) Act, 2005 are strictly followed in the State. The Deposit Refund Scheme as envisaged under the Extended Producer Responsibility Guidelines has been drafted and is under active consideration of the State Government. The concerned Departments conduct regular IEC activities for proper collection of plastic waste and its safe disposal.*
k	*Strict measures should be made to promote the usage of biodegradable materials and ban on use of Single Use Plastics (SUPs) items should be strictly enforced.*	*1. Single Use Plastic (SUP) ban is strictly enforced in Himachal Pradesh under HP Non-Biodegradable Garbage (Control) Act, 1995.* *2. Officers/officials of 14 different departments have been given powers of entry, inspection and compounding of offences under the HP Non-Biodegradable Garbage (Control) Act, 1995 through various notifications issued by the Government from time to time.* *3. The State has been regulating use of plastic items since 1995 and following regulations have been issued till date:* *a) Single Use Plastic has been banned by the State Government vide notification no. STE-F(4)-1/2020 dated 20.07.2022 under HP Non Biodegradable Garbage (Control) Act, 1995 along with authorization of officers for entry and inspection under Section 7 (A) and to compound any offence*

		as per provisions of Section-11 of the Act ibid . *b) Ban on non-woven carry bags vide Notification No. STE-F-(4)-1/2019-L dated 30th July, 2022.* *c) The State Government vide notification no. STE-F(4)-1/2019-L dated 21.01.2025 has banned the biodegradable/compostable carry bags in addition to the identified SUPs already banned.* *d) Over time, the Government has observed that the widespread use of polyethylene terephthalate (PET) water bottles, particularly those up to 500 milliliters, has raised significant environmental concerns due to their high potential for littering. Keeping in view the environmental concerns, the State Government, in exercise of powers under sub-section (1) of Section 3-A of the HP Non-Biodegradable Garbage (Control) Act, 1995, has issued a notification No. STE-F(4)-1/2017-L dated 29.03.2025, prohibiting the use of PET bottles (up to 500 ml) in all indoor official meetings, conferences, and events organized by Government Departments, Boards, Corporations, and other State Government organizations. This prohibition also applies to HPTDC hotels and private hotels in the State. These entities shall adopt sustainable alternatives such as glass bottles, water dispensers/kiosks of steel containers.* *e) The incidences of littering of bio-degradable and non-biodegradable waste are being observed in the State by tourist vehicles, public & private transport and taxis in Himachal Pradesh which is causing pollution and damage to environment in addition to clogging of drains. Keeping in view the environmental concerns, the State Government, has issued a notification No. STE-F(9)-1/2018-loose dated 28.03.2025, where directions have been passed to all taxi operators, public transport and owners/drivers of private transport vehicles shall install/fix "Garbage Bins" in their vehicles for collection of waste and the same shall be disposed at designated places and thus shall not allow to litter /throw Bio-degradable/Non-biodegradable material as specified in the H.P. Non-Biodegradable Garbage (Control) Act, 1995.* *4. The violators are being penalized and 13,926 no. of challans have been issued till March, 2025 and penalty amount of Rs. 1,19,11,230/- has been collected.* *5. The MoEF&CC GoI has issued notification dated August 12, 2021, which mandated banning of identified SUP items with effect from July 01, 2022 and has provided the following mechanism to eliminate the SUPs.*

		a) *A State level Special Task Force & District Level Task Force notified by the Government for taking measures to eliminate Single Use Plastics (SUPs) in the State of Himachal Pradesh.* b) *A State level Comprehensive Action Plan (CAP) and District level Action Plans have been prepared to implement Plastic Waste Management (Amendment) Rules, 2021 to eliminate Single Use Plastic (SUPs) in the State of Himachal Pradesh.* c) *In order to have effective implementation of action plans, the meetings of the State Level Task Force are being convened. As on date total five meetings have been convened under the Chairmanship of the Chief Secretary on dated 06.04.2022, 29.06.2022, 16.01.2023, 24.05.2024 & 28.04.2025.* d) *The District Level Action Plans in respect of all Districts have been approved and being implemented in respective Districts and are reviewed during the meetings of "District Environment Plan" under the Chairmanship of concerned Deputy Commissioners.*
l	*Local people should be involved in the Environmental Conservation programs and awareness/ training on landslides, mountain risks, etc. to be initiated.*	*Community education, awareness and capacity building programmes are undertaken on regular basis for environmental conservation and mountain risks. The HP State Disaster Management Authority has trained more than 25,000 volunteers for mountain search and rescue.*
m	*In higher Himalayas, the carrying capacity of tourist places, alpine pastures/ meadows, etc. should be conducted. Entry of tourists, grazers, etc. can be only permitted according to the carrying capacity."*	*For protecting higher Himalayas, the GoHP is taking all necessary means to conserve and sustain the valuable ecosystem. For this purpose the entry of tourists to the protected areas and eco-sensitive areas is properly regulated. The Department of Tourism and Civil Aviation, register the camping sites on production of NOC by the operator from the Forest Department, as per the provisions of Himachal Pradesh Tourism Development and Registration Act, 2002.* *In addition, the Department of Environment, Science, Technology and Climate Change has also recently undertaken carrying capacity studies of the following areas:-* 1. *Renukaji Wildlife Sanctuary, Sirmaur.* 2. *Manali Wildlife Sanctuary, Kullu.* 3. *Col. Sherjung National Park, Simbalbara, Sirmaur..* *Grazing activities in the forest areas is regulated by the Forest Department through issuance of permits. The number of the animals grazing in the meadows/pastures is ensured through the permit system. This system ensures that grazing activities are properly regulated. Grazing activities in the higher alpine pastures is mainly carried out from May to October only.*

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5. Learned Counsel appearing for the MoEF&CC submits that the response affidavits of the States of Uttarakhand and Himachal Pradesh have been received recently and seeks four weeks' time to examine the stands of the States and file the response. The prayer is allowed.

6. List on 28.11.2025.

Prakash Shrivastava, CP

Dr. A. Senthil Vel, EM

Ishwar Singh, EM

September 01, 2025
Original Application No. 720/2023
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