

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 2303
TO BE ANSWERED ON 12.03.2026

Ecological fragility of Himalayas

2303. SMT. SAGARIKA GHOSE:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) the year-wise tree cover in the Indian Himalayan Region (IHR) since 2020;
- (b) the year-wise carbon sequestration capacity of IHR since then;
- (c) whether Government is aware that an increased greenness in forest areas does not indicate a subsequent increase in health of forests;
- (d) whether there has been a noted decrease in soil moisture in IHR and if so, the details thereof; and
- (e) whether there has been an increased drying up of streams in IHR since 2019 and if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

- (a) & (b) Forest Survey of India (FSI), Dehradun, under the Ministry of Environment, Forest and Climate Change, carries out biennial assessment of forest and tree cover, carbon stock and publishes the findings in the India State of Forest Report (ISFR).

The Indian Himalayan Region is spread across 13 States/Union Territories, namely Jammu and Kashmir, Ladakh, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Assam and West Bengal. As per ISFR 2023, the tree cover in these States/UTs is 15,075.50 square kilometers in 2023 as compared to 15,427.11 square kilometers in 2021.

The total carbon stock in the forests of the Indian Himalayan Region has been assessed at 3273.10 million tonnes in ISFR 2023, as compared to 3272.68 million tonnes in ISFR 2021.

- (c) to (e) Forest health is influenced by multiple ecological and biophysical parameters and not merely by the greenness of forest areas. As part of the National Forest Inventory, the FSI collects information on various parameters such as Forest enabling conditions (soil depth, humus, soil organic carbon, soil erosion and status of ground flora); Characteristics of forest vegetation (origin of forest stand, intensity of regeneration, size class, crop composition, canopy layer and basal area); and threats to forests (forest fire, injuries to crop, grazing incidence, biotic influence, invasive species, illicit felling, girdling and lopping). These characteristics interact with each other and determine the state of forests at a given time and have been published in ISFR 2023. As such above survey does not include soil moisture assessment.
