

Forest Fires in Himachal Pradesh

Why in news?

Recently, Himachal Pradesh (H.P.) is witnessing widespread forest fires across the region.

What is the status of forest fires in Himachal Pradesh?

- **Geography** The state's total geographical area is 55,673 sq km, out of which 15,443 sq km is *forest cover, which is 27.72% of the total area*.
- Chir Pine, Deodar, Oak, Kail, Fir and Spruce are some of the common trees found here.
- **Transformation of forests** A crucial watershed moment in Indian forestry began with the construction of railways in the 1850s.
- From 1853 to 1910, the construction of around 80,000 kms of railway track led to an *assault on forests* and the *extinction of the customary rights of the people*.
- Between 1869 and 1885, 6.5 million sleepers were made of Deodar, and the <u>area for Chir pines was expanded</u> for timber and resin.
- Total trees from which resin was tapped between 1910 and 1920 increased from 2,60,000 to 21,35,000.
- **Forest fire** It is an *uncontrolled fire in an area* of combustible vegetation that occurs in the countryside or rural area.
- **Higher incidence of forest fires** According to the Himachal Pradesh Forest department, there have been a **total of 1,684 forest fires since April 2024.**

Uttarakhand and Himachal, two of India's Himalayan states, ranked first and second among states where most fire alerts had been sounded in 2023-2024.

- **Impact** These fires have <u>damaged a total of 17,471 hectares of forest land</u>, resulting in significant loss to wildlife.
- From 2001 to 2023, H.P. has <u>lost 957 hectares of tree cover</u> from fires and 4.37 thousand hectares from all other drivers of loss.

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What are the cause for forest fires in the state?

Natural Causes

- Lightening
- Rubbing of Bamboo with each other
- Depletion of snowmelt water in pre-monsoon summer
- Less moisture content
- Dry leaf litter on the surface

Man-made Causes

- Conversion of Banj oak with Chir pine for timber
- Unattented campfires
- Discarded cigarettes
- Slash and Burn cultivation
- Deforestation for developmental activities
- **Natural causes** It relates to *lightning* or *rubbing of dry bamboos* with each other can sometimes result in fires.
- **Depletion of snow** Fires in the Himalayas occur during the pre-monsoon summer period of *moisture stress*, due to the resultant *depletion of snowmelt water*.
- **Less moisture content** The less moisture there is, the *greater the impact of the fires*.
- **Dry leaf litter** Fallen tree leaves, dry grass, weeds, low brushwood, deadwood on the forest floor, logs and stumps etc *form the surface fuels*.
- **Climate Changes** There is higher incidence of heatwaves and droughts in recent times that are favoring forest fires.
- **Faulty Human practices** The primary causes of these forest fires are faulty forestry practices, and <u>treating forests from a utilitarian perspective</u>, excluding people's participation.
- Irrational human activities Activities like <u>unattended campfires</u>, <u>discarded</u> <u>cigarettes</u> etc., are also some of the common causes for forest fires.
- **Slash and Burn practices** When people burn their fields to clear them of stubble, dry grass or undergrowth, the *fire sometimes spreads to the adjoining forest*.
- **Replacement of the Banj oak with Chir pine** <u>Chir pine</u> forests are very vulnerable to forest fires.
- Ecologically, *Banj forests absorb a high content of rainwater*, leading to better moisture retention and water springs in the mountains.

What are the impacts of forest fires?

- Environment degradation These fires are also a major source of pollutants, including black carbon.
- It can significantly contribute to glacier melt in the Himalayas and negatively influences the regional climate.
- Low Productivity Forests help maintain aquifers and continuous flow of streams and springs, and provide firewood, fodder and non-timber produce to the local communities all these capacities may get adversely affected in case of a fire.
- Invasion by exotic species Moisture-loving trees such as *Oaks and Deodars* may give way to other species and exotic weeds.
- **Erosion** Forest fires may destroy organic matter in the soil and expose the top layer to erosion.
- Danger to wildlife Fires may also impact the wildlife by burning eggs, killing young

animals and driving the adult animals away from their safe haven.

• **Affect human settlements** - Sometimes, a forest fire may get out of control and extend to human settlements, thus posing danger to human life and property.

What lies ahead?

- **Democratise forests** It is essential to ensure that people and communities who have lived in and around forests are made part of the forest management process.
- **Restore community rights** The rights of the local community have been periodically curtailed, and as a result, when forest fires start, first responders are nowhere to be found.
- The traditional forest rights of Himalayan dwellers included the right to extract wood for fuel, timber, fodder, and other activities.
- **Promote peoples participation** There is a need for involving local communities in decision making of development based projects in the state.
- Create environmental services at the village level.

Himachal Pradesh is under **Schedule V of the Indian Constitution**, which requires community assent for development activities in the region. However, for large projects like hydro power generation, road widening, and four-lane highways, forests are being diverted with ease.

- Increase biodiversity Build mixed forestry and remove pine trees.
- Enhance knowledge convergence There is a need to ensure that both scientific and community knowledge converge and forest management is conducted in a participatory manner.
- **Build infrastructural solutions** We need to implement check dams and other methods to revive water springs.
- Seek disaster management funds We need to articulate their case with the ongoing <u>16th Finance Commission</u>, seeking help apart from disaster mitigation funds.



References

- 1. The Hindul Higher incidence of Forest Fires in Himachal Pradesh
- 2. Down To Earth | Himalayas on Fire

