

Uttarakhand Forest Fires

Why In News

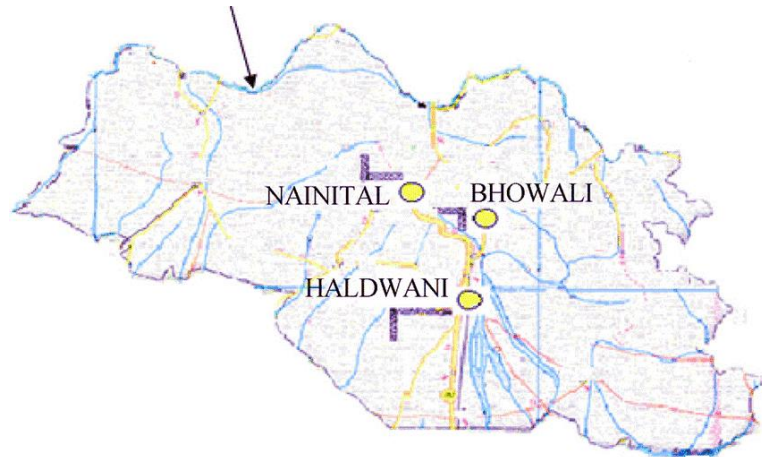
- **Amid forest fires in Uttarakhand's Nainital district**, the Indian Air Force was engaged in firefighting operations on Sunday (April 28), the second day the fires continued raging.



- **Nainital, Haldwani and Ramnagar** forest divisions were worst affected. In some regions, the fires were doused with the help of a Bambi bucket, used to pour large amounts of water on the flames in relatively quick intervals.
- While the **exact cause of these fires is unknown** so far, here is a quick recall of the potential causes of forest fires in general, and the factors that impact their frequency and intensity.

Current Situation

- The state reported eight fresh **forest fires in the last 24 hours**, gutting 11.75 hectares, compared to the 23 such incidents **damaging 34.175 hectares** from Friday evening to Saturday evening.
- Since November 1, 2023, Uttarakhand has recorded **606 forest fires** in which 735.815 hectares of forest land were gutted, the information said. The fire in the **forests of Ladiyakata and Pines area on Nainital-Bhowali road** have been extinguished with the **help of the IAF helicopter** that was deployed on Saturday (April 27), he said.



- After the forest fire in Nainital reached dangerously close to the High Court Colony and the Air Force base containing sensitive equipment on Friday, an IAF helicopter was brought in to help quell the flames.

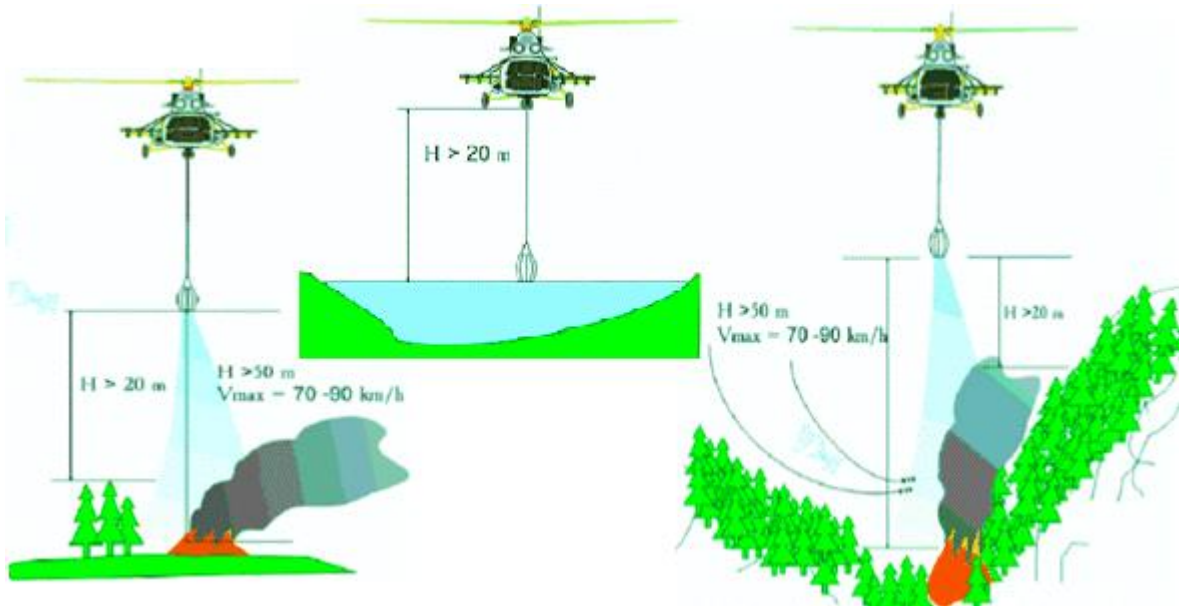
What Is A Bambi Bucket

- Bambi Bucket is a **specialised aerial firefighting tool** which has been in use since the 1980s. It is essentially a lightweight collapsible container that releases water from underneath a helicopter to targeted areas. The water is released by using a pilot-controlled valve.



- One of its key features is that it can be quickly and easily filled. The bucket can be **filled from various sources**, including lakes and swimming pools, which allows firefighters to swiftly refill it and return to the target area. Bambi Bucket

is available in a variety of sizes and models, with capacities ranging from 270 litres to more than 9,840 litres.



How Frequent Are Forest Fires In India

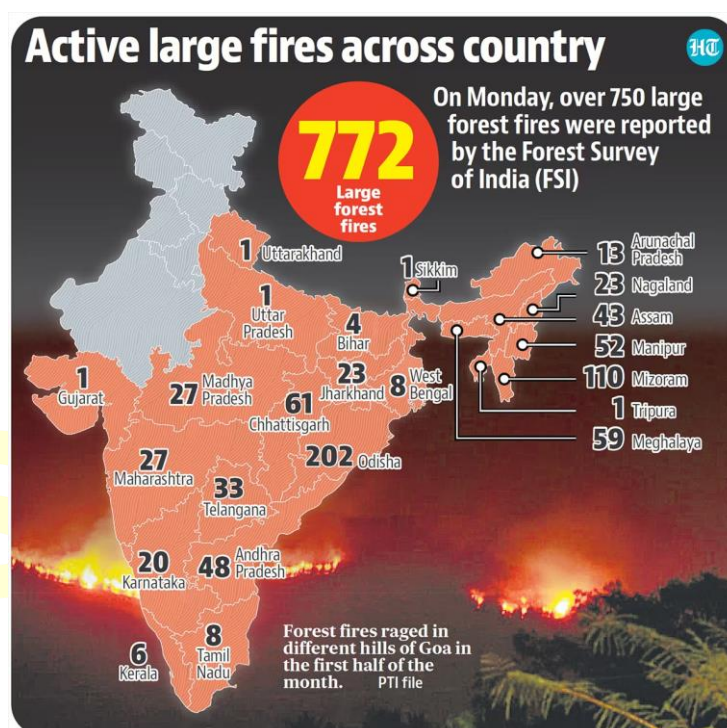
- The forest fire season in India lasts between November to June. Factors like temperatures, precipitation, vegetation, and moisture contribute to the scale and frequency of these fires.

9000 TREES GUTTED IN LAST 5 MONTHS

District	Forest area (Ha)	Total incidents (October 2020- March 9, 2021)
Pauri Garhwal	211.6	167
Almora	111.5	67
Bageshwar	71.36	47
Pithoragarh	71.3	49
Rudraprayag	53.15	46
Chamoli	43.9	48
Dehradun	27.6	17
Tehri	17.1	22
Nainital	6.7	14
Champawat	6.5	7
Haridwar	2.2	4
Udham Singh Nagar	1.8	1
TOTAL	669.3	551



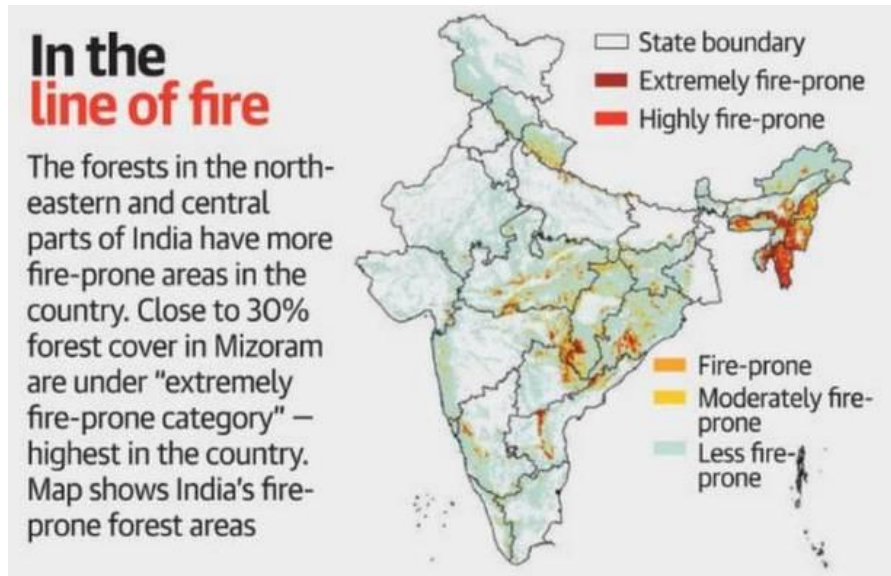
- According to experts, **three factors cause the spread of forest fires** — fuel load, oxygen and temperature. **Dry leaves** are fuel for forest fires. The Forest Survey of India (FSI) website states that nearly 36 per cent of India’s forests are prone to frequent fires.
- **Higher fire incidents** are reported in March, April and May due to ample availability of dry biomass following the end of winter and amid the prevailing summer season.



- **The FSI website adds:** “Severe fires occur in many forest types particularly dry deciduous forest, while evergreen, semi-evergreen and montane temperate forests are comparatively less prone (India State of Forest Report 2015).”
- **Nearly 4% of the country’s forest cover** is extremely prone to fire, whereas 6% of forest cover is found to be very highly fire prone (ISFR 2019).”
- **An FSI analysis in ISFR 2021** also found that states in northeastern India showed the highest tendency for forest fires. Parts of western Maharashtra, southern Chhattisgarh, central Odisha and regions in Andhra Pradesh, Telangana and Karnataka also showed patches of extremely and very highly fire-prone zones.

Causes Behind Forest Fires

- Most fires are **believed to be man-made**, due to changes in agriculture and unchecked land-use patterns.



- The forest department has previously cited **four causes of wildfires in Uttarakhand** – deliberate fires by locals, carelessness, farming-related activities and natural reasons. According to a government report, locals set forests on fire for the growth of good quality grass, to cover up illegal cutting of trees, for poaching, etc. Friction of electricity cables with dry leaves also triggers wildfires, as does lightning, according to the report.
- Notably, **setting a forest on fire is a punishable offence** under the Indian Penal Code. A forest official said several cases have been lodged but the accused remain unidentified in most such cases.