California forest fires

Why in news?

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California is suffering the aftermath of a most devastating wildfire in its history recently.

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What are the reasons?

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- Forest fires have been getting worse in California in recent years, both in terms of their destructive power and their size.
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- Nine of the 10 biggest fires by area have taken place in the past two decades, according to the California Fire Service.
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- Many experts point out that **climate change** has made things worse, leading to higher temperatures, lower humidity, earlier springs and changes in wind and rainfall patterns.
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- The scale has been huge this year because of the hot, dry summer conditions persisting into the autumn.
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- According to the US Drought Monitor, 18% of the state is currently experiencing severe drought, which is exacerbating the seasonal weather patterns that make it difficult to fight fires in the state.
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- Experts have said that climate change is also making conditions more favourable for wildfires in the American West.
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- This could be true since climate plays a vital role in determining fire patterns and intensity and, in turn, fire influences the climate system through the release of carbon.
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- Researchers project that moist, forested areas are the most likely to face greater threats from wildfires as conditions in those areas become drier and

hotter, becoming more flammable.
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- Add to this is the fact that winter seasons, when it rains or snows, are getting shorter.
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- California has two fire seasons, wherein the first is from June to September, which is driven by warmer, drier weather in Western California.
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- The other is from October to April, which is driven by strong gusts called the Santa Ana winds in Southern California.
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- These winds spread three times faster and burn closer to urban areas.
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- A report by the US Department of Agriculture in 2010 noted that by that year more than 11 million people out of a population of some 37 million in California were living in such areas and flagged the fire risks this posed.
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- This made more and more people to move out of the main urban centres and into rural or semi-rural areas.
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- Also, houses are often built of combustible materials such as wood.
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- California state law does require homeowners to take steps to protect their properties from fire hazards, including clearing or reducing vegetation near properties.
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- However, lack of public awareness, enforcement and the availability of up-to-date information about the areas put those people at most risk.
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Does forest management play a role here?

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- California has always been prone to wildfires every dry season.
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- However, the US President recently attributed the cause as the result of forest mismanagement, though many scientists have linked it to climate change.
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- Nearly 60% of California's forested areas are managed by national agencies such as the US Forest Service, the Bureau of Land Management and the National Park Service.

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- There is a significant amount in private hands as well.
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- The actual amount managed by the California state authorities is small, but the California Department of Fire and Forestry Protection is responsible for putting out fires and prevention measures in privately owned areas.
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- Hence, concerns have been voiced about whether there has been enough emphasis on longer-term fire prevention.
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- There is also a demand on sensible management of the environment and better land use to avoid catastrophic burning.
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- There are also large number of dead trees in parts of the state, due to drought and disease, which poses a serious fire risk that needs to be addressed.
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- A report by an independent state oversight agency already outlined recommendations such as increased prescribed burning and dedicating more money and jobs toward forest management in California.
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- However, it has been pointed out that the recent fires have started in open scrub or grassland rather than in forests.
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- Hence the blame on forest mismanagement was criticised by some experts who say that the bigger picture of climate change and population shifts in the state was getting ignored.
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What are the lessons for India?

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- India’s forests are also facing similar challenges.
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- According to the 2017 State of Environment Report of the Centre for Science and Environment, there were 15,937 forest fires in India in 2015 and the number rose to 35,888, a 125% spike over two years.
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- In 2017, the maximum number of forest fires were reported in Madhya Pradesh (4,781), followed by Odisha (4,416) and Chhattisgarh (4,373).
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- A National Institute of Disaster Management report on forest fires says 50%

of the country’s forests are prone to fire.
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- Such uncontrolled fires not only burn down the vegetation but also the surface organic matter, increasing the frequency of flooding and soil erosion.
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- In addition, wildlife patterns and habitat are also disrupted.
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- India’s firefighting potential is not as good as it should be.
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- **Estimation** - The statistics on forest fire damage are poor, and so it is difficult to arrive at accurate losses from the forest fires.
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- **Allocation** - Nearly 46-65% of the money allocated under the forest management schemes has not been released in the last two years.
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- This is despite the replacement of the Intensification of Forest Management Scheme with the Forest Fire Prevention & Management Scheme in December 2017.
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- **Management** – The country lacks fire protection planning knowledge and incentive.
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- Foresters still fight forest fires using outdated methods, when systematic modern fire management techniques and methods have been adopted in the rest of the world.
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- India also doesn’t have a strong and clear national policy on how to tackle forest fires.
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- In the age of climate variability, such lack of preparedness can put India’s forest wealth at a huge risk.
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- Thus, India does need to take adequate measures addressing these issues to avoid California type catastrophe in the future.
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Source: The Indian Express, Hindustan times

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