Forest Fires

Why in news?

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Last month, a forest guard who served in Bandipur Tiger Reserve in Karnataka was killed in a forest fire.

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What is a forest fire?

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- A wildfire is a fire in an area of combustible vegetation that occurs in the countryside or rural area.
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- Four major natural causes of wildfire ignitions are lightning, **sparks from rockfalls,** spontaneous combustion and volcanic eruption.
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- The most common direct human causes of wildfire ignition include arson, discarded cigarettes, power-line arcs and sparks from equipment.
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- Ignition of wildfires via contact with hot rifle-bullet fragments is also possible. It can also be started in communities experiencing **shifting cultivation**.
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Where it happens in India?

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- The bulk of forest fires in India occurs in the tropical dry forests of our country.
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- Almost 70% of forests in India are composed of scrub, savanna grassland, dry and moist-deciduous forests.
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- Every year, in March, forest fires happen in the **dry deciduous forests** in

India, particularly in A.P, M.P, Chhattisgarh, Jharkhand, Karnataka, Maharashtra, Odisha and Assam.
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What is the cause of our fire crisis?

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- The roots of our crisis lie in the blanket implementation of a **no-fire forest policy.**
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- This approach of fire protection is incompatible with the ecology of India's tropical dry forests.
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- For instance, the fires in Bandipur Reserve were difficult to control because of ample fuel supplied by the invasive species **Lantana camara.**
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- Thus, this **no-fire policy was likely responsible for the spread of Lantana** in the first place.
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- Frequent, but low-intensity forest fires would have possibly prevented the proliferation of Lantana in the past.
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- But, as of now, the future forest fires will be difficult to control unless Lantana biomass is physically reduced first.
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Who has the power to wield fire?

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- For the forest dweller, fires have cultural and livelihood significance.
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- They set fire to forests to clear walking paths, to collect non-timber forest products and to encourage the fresh growth of grass for their livestock.
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- And, Agriculturists set fire to hill forests so that the fertilising ash from fire washes down to their fields with the monsoon rains.
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- The forest department, on the other hand, has **historically prevented fire in order to protect timber stocks,** and initiated a system of fire-lines around valuable timbers.

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- More recently however, fire has been used as a management tool to increase the density of herbivores also.
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- The logic for this kind of burning is also related to the creation of fresh grass, but this time for consumption by wild herbivores rather than by cattle.
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What is the way forward?

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- Research say that many tree species distinct to **dry forests have co-evolved with fires** and have developed fire-resistance features like thick, spongy bark, and can re-sprout from rootstock.
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- The ecology and bio-geographical origin of these forests indicates that fire occurrence and light availability are important factors that maintain the ecosystem.
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- So, instead of viewing forest fires as being purely destructive in nature, forest managers should perhaps expand their opinion and view fires as being both rejuvenating and revitalising.
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Source: The Hindu

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