

Forest Fires

Why in news?

\n\n

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

\n\n

What is a forest fire?

\n\n

\n

- A wildfire is a fire in an area of combustible vegetation that occurs in the countryside or rural area.

\n

- Four major natural causes of wildfire ignitions are lightning, **sparks from rockfalls**, spontaneous combustion and volcanic eruption.

\n

- The most common direct human causes of wildfire ignition include arson, discarded cigarettes, power-line arcs and sparks from equipment.

\n

- Ignition of wildfires via contact with hot rifle-bullet fragments is also possible. It can also be started in communities experiencing **shifting cultivation**.

\n

\n\n

Where it happens in India?

\n\n

\n

- The bulk of forest fires in India occurs in the tropical dry forests of our country.

\n

- Almost 70% of forests in India are composed of scrub, savanna grassland, dry and moist-deciduous forests.

\n

- 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.

\n

\n\n

What is the cause of our fire crisis?

\n\n

\n

- The roots of our crisis lie in the blanket implementation of a **no-fire forest policy**.

\n

- This approach of fire protection is incompatible with the ecology of India's tropical dry forests.

\n

- For instance, the fires in Bandipur Reserve were difficult to control because of ample fuel supplied by the invasive species **Lantana camara**.

\n

- Thus, this **no-fire policy was likely responsible for the spread of Lantana** in the first place.

\n

- Frequent, but low-intensity forest fires would have possibly prevented the proliferation of Lantana in the past.

\n

- But, as of now, the future forest fires will be difficult to control unless Lantana biomass is physically reduced first.

\n

\n\n

Who has the power to wield fire?

\n\n

\n

- For the forest dweller, fires have cultural and livelihood significance.

\n

- 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.

\n

- And, Agriculturists set fire to hill forests so that the fertilising ash from fire washes down to their fields with the monsoon rains.

\n

- 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.

\n

- More recently however, fire has been used as a management tool to increase the density of herbivores also.

\n

- 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.

\n

\n\n

What is the way forward?

\n\n

\n

- 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.

\n

- The ecology and bio-geographical origin of these forests indicates that fire occurrence and light availability are important factors that maintain the ecosystem.

\n

- 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.

\n

\n\n

\n\n

Category: Prelims & Mains | GS - III | Environment

\n\n

Source: The Hindu

\n

