



FOREST FIRE (FF)

IMPACTS OF FF

- Flora: Forest fires can cause a lot of damage to the regeneration in the forests and their productivity. Moisture-loving trees give way to other species and exotic weeds.
- Water resources: Forests help maintain aquifers and continuous flow of streams and springs, all these capacities may get adversely affected in case of a fire.
- Soil degradation: Forest fires may destroy organic matter in the soil and expose the top layer to erosion. Soil get hardened, devoid of moisture, humus etc.
- Fauna: It impact the wildlife by burning eggs, killing young animals and driving the adult animals away from their safe haven.
- Humans: Sometimes, a forest fire may get out of control and extend to human settlements, thus posing danger to human life and property.
- Pollution and climate change: Forest fires increase carbon dioxide levels in the atmosphere, contributing to the greenhouse effect and climate change.
- Ashes destroy much of the nutrients and erode the soil, causing flooding and landslides.
- The use of chemicals in firefighting adds an additional problem to the already dramatic consequences of forest fires.

WHY IN NEWS?

- Massive forest fire broke out at Bandhavgarh National Park.
- This is the second tiger reserve where a forest fire has raised concern, as earlier this month, similar incident was reported at Odisha's Similipal Reserve.

CAUSES OF FF:

- Natural causes: Lightning, volcanoes eruption or rubbing of dry bamboos or when dry leaves fall on an electric pole.
- Anthropogenic causes
 - Accidental events when someone drop a burning matchstick, torchwood or a bidi/cigarette in dry grass or heap of dry leaves.
 - Deliberate setting of fire for encroachment, clearing the field from stubble and shifting cultivation, dry grass or undergrowth sometimes spreads to the adjoining forest
 - Climate change, human and cattle population pressure on forest .

MITIGATION STRATEGY

- Forecasting fire-prone days using meteorological data
- Clearing camping sites of dried biomass
- Early burning of dry litter on the forest floor
- Growing strips of fire-hardy plant species within the forest and creating fire lines in the forests
- Conducting forest fire drills to check preparedness
- Strict implementation of forest fire rules which restrict or regulate certain activities in and around forest areas

CONCLUSION

- Forests are listed under the concurrent list, so its management is responsibility of both central and state government.
- Ministry of Environment, Forest and Climate Change had launched the National Action Plan on Forest Fires in 2018 to manage forest fire.
- Centrally Sponsored Intensification of Forest Management Scheme (IFMS) scheme was launched in 2017 to provide adequate fund for forest fire management.

PROS OF FF

- Clean the forest floor: Remove the low growing underbrush that exists underneath the canopy. Thus, it works to clean the forest floor of debris.
- Protection from pests and disease: Forest fires help to kill the diseases and insects that like to prey on the trees in the biome.
- Seed germination: Fire plays an important role in several grassland ecosystems in the world. Fire can trigger germination in several species, by breaking the physical dormancy of their seeds.