

# **PROBLEM STATEMENT**

**TITLE** : Emerging Methods For Early Detection  
Of Forest Fires

**DOMAIN** : Artificial Intelligence

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## **Problem Statement Description:**

Forest fires are a major environmental issue, creating economic and ecological damage while endangering human lives. There are typically about 100,000 wildfires in the United States every year. Over 9 million acres of land have been destroyed due to treacherous wildfires. It is difficult to predict and detect Forest Fire in a sparsely populated forest area and it is more difficult if the prediction is done using ground-based methods like Camera or Video-Based approach. Satellites can be an important source of data prior to and also during the Fire due to its reliability and efficiency. The various real-time forest fire detection and prediction approaches, with the goal of informing the local fire authorities.

### **What is the issue?**

- Loss of biodiversity.
- Extinction of plants and animals.

### **When does the issue occur?**

- Natural causes like lightning.
- Man- made causes like stubble burning

### **How we detect forest fires now?**

- Satellite images.
- Optical systems.
- Human interactions.

### **Why we need to fix this problem?**

- Prevent future disasters.
- Control fires.