

**Project Design Phase-I**  
**Proposed Solution**

Date	15 October 2022
Team ID	PNT2022TMID30674
Project Name	Emerging Methods for Early Detection of Forest Fires
Maximum Marks	2 Marks

**Proposed Solution Template:**

S .No.	Parameter	Description
1	Problem Statement (Problem to be solved)	For many nations around the world, forest and urban fires are major issues. Forest fires harm the economy, and the ecosystem, and put people in danger. In the United States, there are about 100,000 wildfires per year. Dangerous flames have burned more than 9 million acres of land.
2	Idea / Solution description	It is even more challenging if the prediction is made using ground-based techniques like a camera or video-based approaches. Due to their dependability and effectiveness, satellites can be a valuable source of data both before and during the Fire. the many methods for predicting and detecting forest fires in real time, with the aim of informing the local fire authority.
3	Novelty / Uniqueness	Continuous monitoring, data gathering, and analysis. detect forest fires earlier before they spread to a large area.
4	Social Impact / Customer Satisfaction	Instant detection of forest fires and sending an early warning message to reduce the damage. it helps to save the lives of people, animals, and trees.
5	Business Model (Revenue Model)	Forest plays an important role in the economy. It is used for commercial and medicine.
6	Scalability of the Solution	The development of a forest fire is influenced by a number of factors. It is common knowledge that wind is one of the most important factors in determining how a forest fire spreads. It makes sense that the main direction a forest fire will spread will be determined by the meteorological wind speed. Smoke detection from satellite and ground cameras is made possible by computer vision models.