ABSTRACT

In the present era of 21st century, forest fires have taken a lead role in the destruction of the ecosystem. Every year thousands of wildfires happen across the world and destroy forest. resources and biodiversity. One forest fire may overrule all the efforts of conserving the forest. wealth and all the wildlife that inhabit a forest. Wildfire has become a common hazard in the forested area of India. India is a South-Asian country and the seventh-largest country in the world. It is a second highest populated country. The climate of India is mainly tropical monsoon. type. The average annual temperature in India varies between 25°C in winter to 44°C in summer seasons. The IMD has identified four climatological seasons in India: winter, summer or pre-monsoon, monsoon or rainy and post-monsoon.

In our country, almost all forest fires are caused by human activity and the forest-dependent communities use fires in the forest for various purposes. To save our forest wealth, it is needed to reduce the occurrence of wildfires and for this purpose we need a proper monitoring of forest fires for a better management. This project would bring a better understanding of the spatiotemporal pattern in forest fire occurrence in India in the last two decades. GIS techniques like mapping, monitoring and modelling have been done. This research work attempts to find out the annual forest fire occurrence in India from the year 2001 to 2019. The seasonal trend of forest fires has been described using different graph charts. A forest fire hazard map has been prepared by using maximum entropy model.

Keywords: *GIS, wildfires, maximum entropy model.*