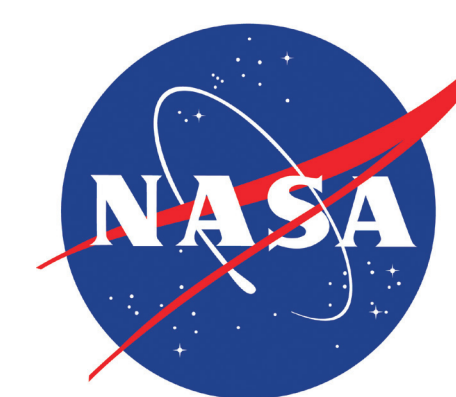


Monitoring Forest Fires



USAID
FROM THE AMERICAN PEOPLE



SERVIR **HIMALAYA**

ICIMOD

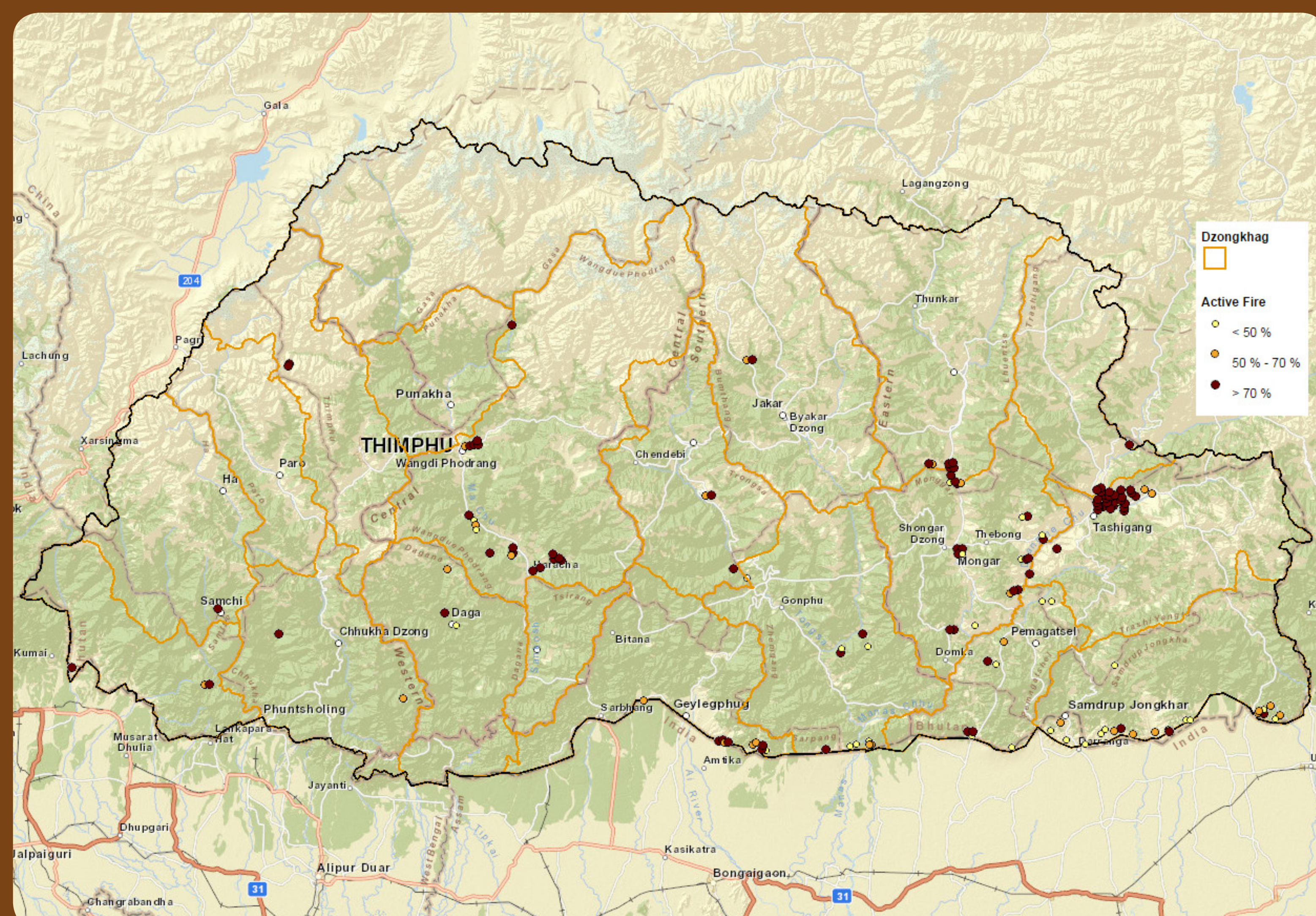
FOR MOUNTAINS AND PEOPLE

Forest fire has adverse ecological and economic impacts and is a major concern in many countries. An effective fire detection and monitoring system is an important component of forest fire management. ICIMOD has developed a forest fire detection and monitoring system for Nepal and Bhutan based on MODIS (Moderate Resolution Imaging Spectroradiometer) data. The work was carried out in close collaboration with the Department of Forests in both countries, and was supported by the United States Agency for International Development (USAID) and the NASA (National Aeronautics and Space Administration) under the SERVIR-Himalaya initiative.

What are the leading causes of forest fires?



Forest fire incidents in Bhutan (2014)



Satellite data and imagery is captured by the MODIS receiving station at the ICIMOD Headquarters.



NASA's Terra and Aqua satellites (equipped with MODIS instruments) capture images of the region's landscape four times a day.



SERVIR-Himalaya Forest Fire Detection and Monitoring System

Alerting regional partners with timely information on forest fires to help save trees and reduce damage from forest fires

Information such as administrative units, land cover type, protected areas, and elevation are added to the active fire data.

Fire alerts are disseminated through SMS and e-mail to officials at the Ministry of Agriculture and Park Services, Department of Forests, and District Forest Officers.

Designated officials act on the information received and mobilize resources to extinguish the forest fire.

Fire information is also shared to the wider public through an online web mapping application. This application also provides historical fire incidents occurring in the country.