



**17th Session of the ICC on the RESAP for Sustainable  
Development**  
Bangkok, Thailand  
26-28 November 2013

## **Management of Forest Fire Risk Reduction using Satellite Data in Nepal**

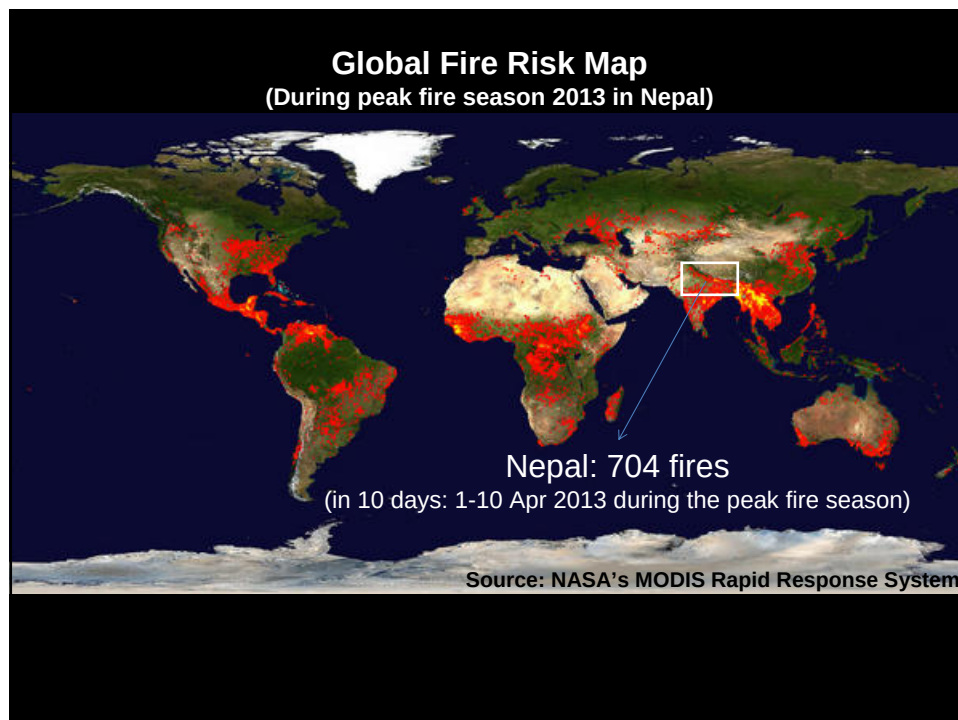
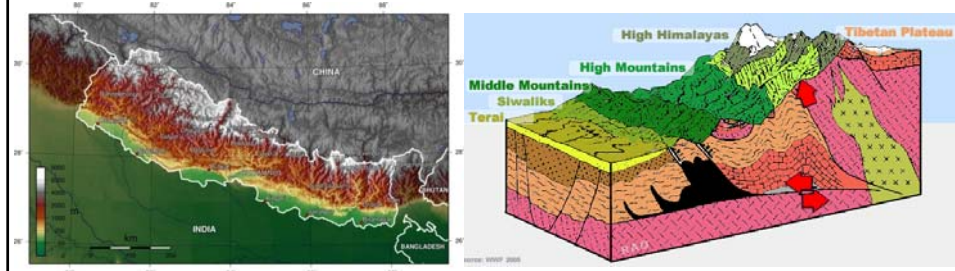
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## **Structure of Presentation**

- **Introduction**
- **General fire situation in Nepal**
- **Recent development including application of  
satellite data for forest fire monitoring,  
detection and response**
- **Ways forward**

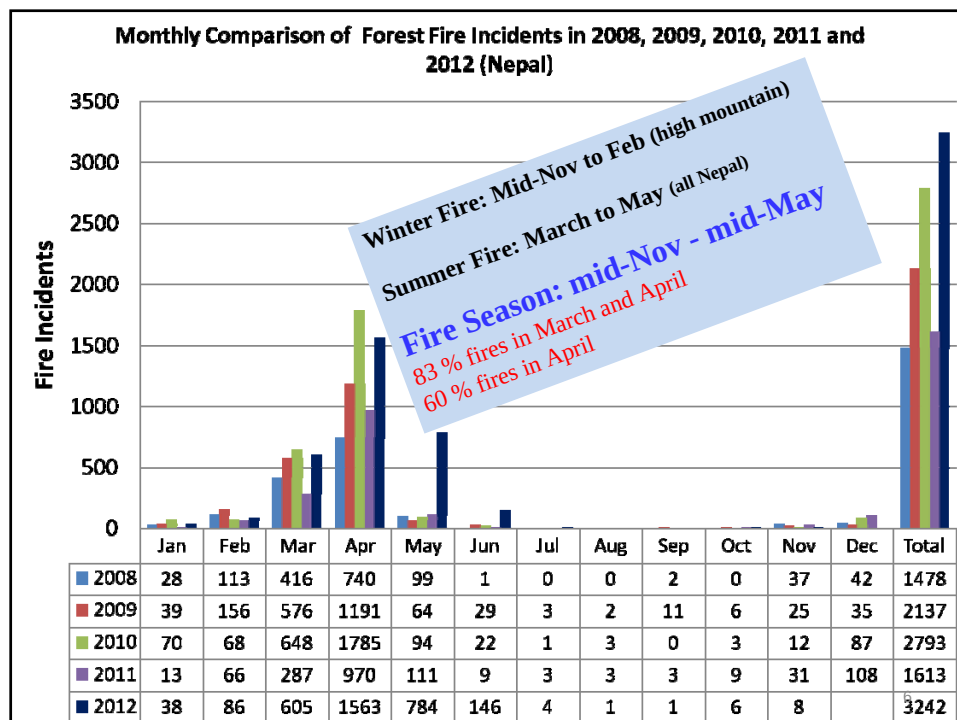
## INTRODUCTION

- a small landlocked, mountainous and least developed country in South Asia
- Bounded by Tibet Autonomous Region of China on the North and by India on the East, West and South
- Area: 147,181 square kilometers
- Population: 26 million as of 2011 Pop. census
- Forest and Shrub: 5.83 million hectares (39.6%)

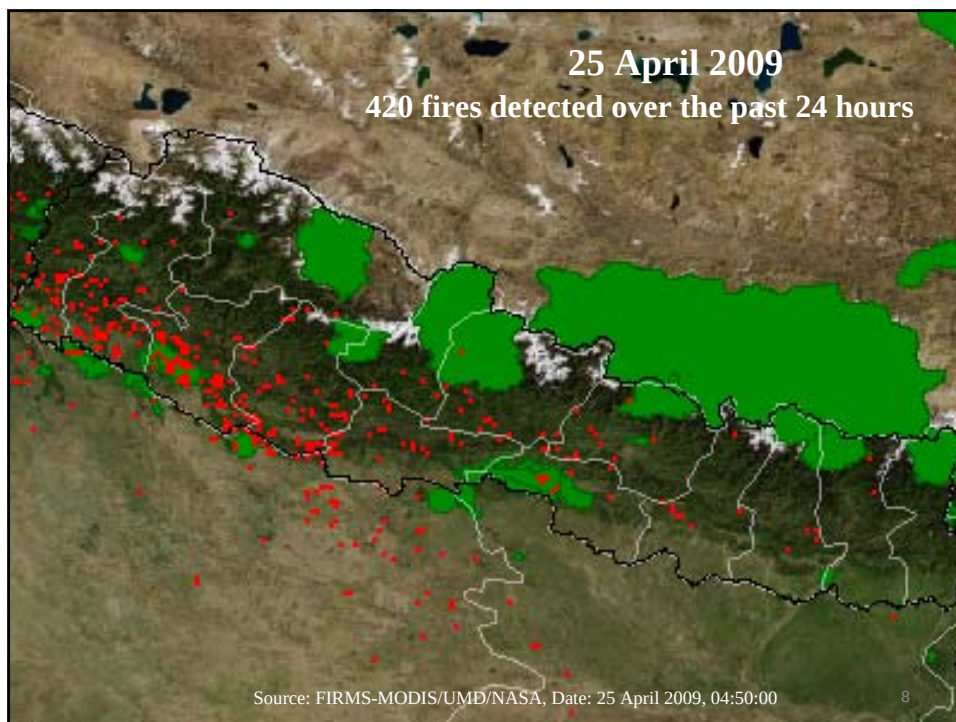
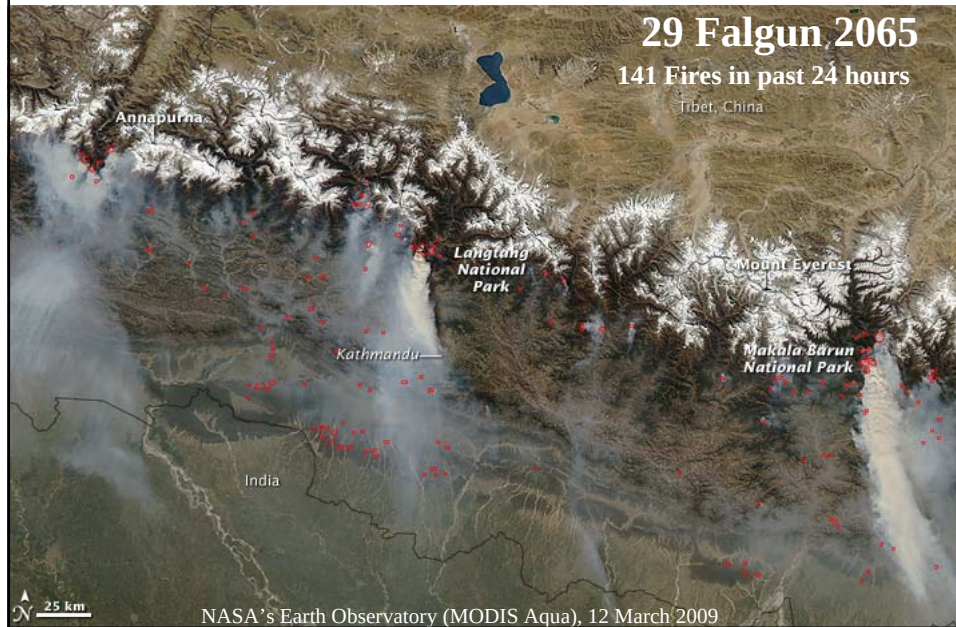


## General Forest Fire situation in Nepal

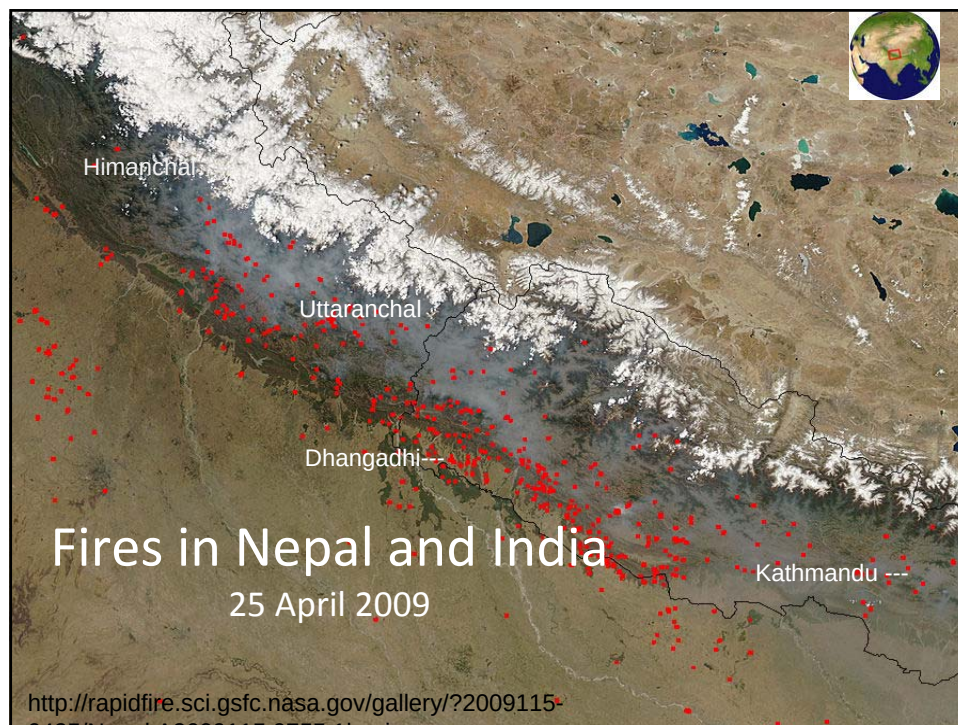
- Most of the Forest fire in Nepal is human induced
- Of the total, 58% forest fire is deliberate burning by grazers, poachers, hunters and NTFP collectors; 22% due to negligence and 20% by accident (IFFN 2006)
- Erratic climatic variation, prolonged dry season and very low winter rainfall in recent years have increased the incidences of wildfires in Nepal
- As a result, serious threats have occurred damaging human lives and properties, destruction and degradation of forests in Nepal



## Fire Disaster episode 2009

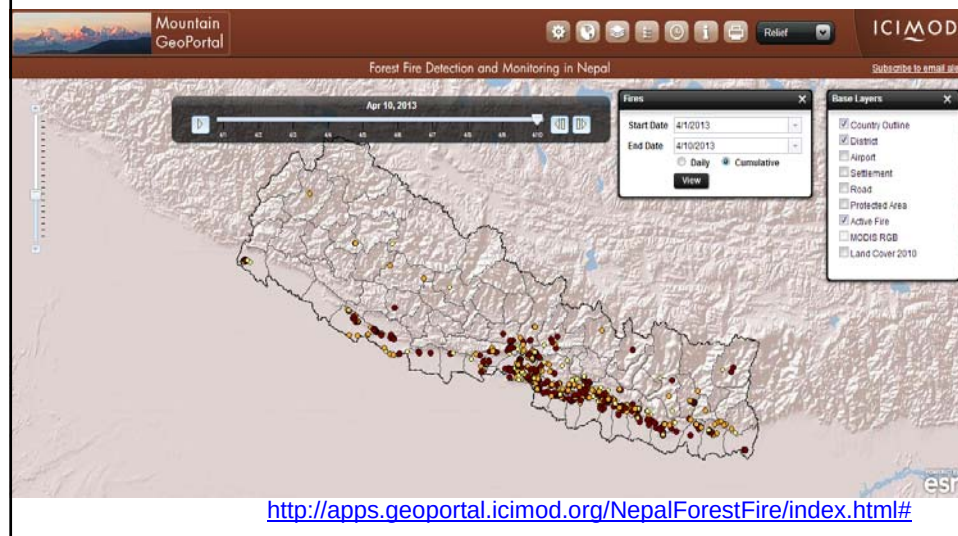


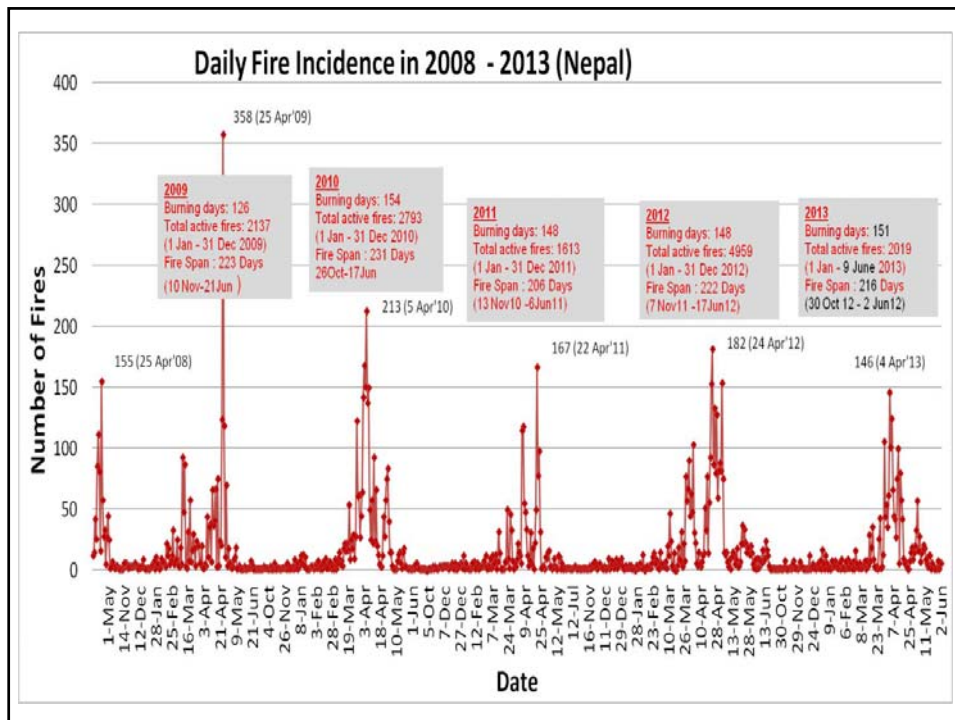




## Forest Fire Detection and Monitoring in Nepal

(Forest fires in 10 days from 1-10 Apr 2013 during the peak fire season)







# Consequences of forest fires

## Fatality 2009 (Nepal)

| Country       | Nepal      |          |
|---------------|------------|----------|
|               | Fatalities | Injuries |
| Firefighters  | 9          | 0        |
| Civilians     | 26         | 9        |
| Militaries    | 14         | 0        |
| <b>Total</b>  | <b>49</b>  | <b>9</b> |
| Country Total | 58         |          |

Source: Global Wildland Fire Fatality Report 2009 (GFMC 2010)/  
UNISDR-RSAWFN Record 2009

| Area Burnt<br>(ha.) | Affected<br>Family (No.) | Animal<br>Loss (No.) | House Destroyed (No.) |      |
|---------------------|--------------------------|----------------------|-----------------------|------|
|                     |                          |                      | Complete              | Shed |
| 146,742             | 516                      | 371                  | 64                    | 22   |

Source: UNISDR-RSAWFN Record 2009



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# Consequences of forest fires

Bandar Jhula Fire, Chitawan, Nepal

3 April 2010

## Fire Impacts 2010 (Nepal)

| Area<br>Burnt<br>(ha.) | People (No.) |         | Affected<br>Family<br>(No.) | Animal<br>Killed<br>(No.) | House<br>Destroyed<br>(No.) |
|------------------------|--------------|---------|-----------------------------|---------------------------|-----------------------------|
|                        | Death        | Injured |                             |                           |                             |
| 82,087                 | 11           | 34      | 685                         | 92                        | 431                         |

## ? Assessments

- Wildlife, medicinal plants?
- Secondary disasters?
- Regional climate?
- ...Smokes/ABC?

Data Source: UNISDR-RSAWFN Record 2009  
Photo courtesy: B. Gurung (Nepal Chapter), 3 Apr 2010

## Consequences of Forest Fires

| Year | Fatalities | Injured | House destroyed |
|------|------------|---------|-----------------|
| 2011 | 1          | 8       | 20              |
| 2012 | 4          | 6       | 74              |

### ? Assessments

- Wildlife, medicinal plants?
- Secondary disasters?
- Regional climate? ...Smokes/ABC?

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## Asian Brown Cloud (ABC)



预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_6150](https://www.yunbaogao.cn/report/index/report?reportId=5_6150)

