

# When Forest Fires Become Disaster:

## Examining the Evolving Governance of Forest Fires in India

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### INTRODUCTION

Globally, forest fires have remained a focus area in national forest legislation and policies for nearly a century. Recently, with the emergence of megafire events and climate change, forest fires have been increasingly included in disaster risk management policies. What are the implications of recognizing forest fires as disasters? This study examines the evolving governance of forest fires in India as they gain recognition under disaster management policy. In particular, it focuses on forest fires in the Himalayan state of Uttarakhand, a state prone to frequent forest fires that experienced large wildfire events in 2016, which influenced the disaster recognition of forest fires at the national level.

### OBJECTIVE

To analyze how policy recognition of forest fires as disaster influences forest fire management in India

### RESEARCH QUESTIONS

- How has the policy focus on forest fires in India transformed in response to their recent recognition under disaster management?
- What are the consequences of classifying fires as disaster for forest fire management?
- How do different stakeholders perceive the causes of forest fires and propose solutions to address them?

### POLITICAL ECOLOGY OF DISASTER

- The decision to declare a problem as a disaster has material and ideological consequences. Claims of technocratic expertise can be used to maintain power (Remes and Horowitz, 2021).
- The traditional distinction between man-made and natural disasters is difficult to sustain under the conditions of the Anthropocene. Disasters are more than human and more than natural (McGowran and Donovan, 2021).
- Causes of disaster matter in shaping solutions. Disasters are defined according to the solutions at hand (Quarantelli, 1998).
- Disaster is both an event and process. It is important to examine the conditions that lead to them (Pelling, 1999).

### METHODS

#### Data Collection

- Thirty semi-structured interviews with government officials, ecologists, remote sensing scientists, and news reporters conducted at the national and state level.
- Document analysis of government policies, schemes, action plans and reports on fires at national level and for Uttarakhand state.

#### Data Analysis

Thematic Analysis of interviews and documents

### RESULTS AND DISCUSSION

**History of different management objectives (overlapping) guiding forest fire management**

- Indian Forest Act of 1865
- Indian Forest Act of 1878
- Indian Forest Act of 1927
- Wildlife (Protection) Act of 1972
- National Forest Policy of 1988
- Forest Rights Act, 2006
- National Disaster Management Policy, 2019

**Management Paradigms:**

- Production-oriented scientific forestry guides fire management
- Wildlife conservation guides fire management
- Environmental sustainability guides fire management
- Disaster Management

**Row 1: Are forest fires a new phenomenon in Uttarakhand? Have they changed, and if so, how?**

- Recognition of the long history of forest fires in Uttarakhand.
- Lack of consensus regarding the increase in the frequency and area of forest fires.

**Row 2: Are forest fires a 'disaster' in Uttarakhand?**

- Different views on whether forest fires are disasters are based on differing interpretations of 'what is a disaster?'
- The adverse consequences of forest fires are seen as not alarming but can become more severe in the future.

**Row 3: How does fire management change under disaster management?**

- The emergence of a comprehensive emergency approach for fire management.
- Additional resources.
- Sustains response-centric approach involving fire detection and suppression.

**Row 4: What are the causes of forest fires? How do they shape the solutions for forest fires?**

- The causes of forest fires are explained by anthropogenic ignition.
- There is a lack of focus on the flammability of vegetation and fuel continuity.
- The role of the history of forest management practices and the lack of preventive fire management practices have been overlooked.
- The solutions proposed focus mainly on fire suppression and marginally emphasize the need for better fuel management.

### CONCLUSION

The recognition of forest fires under India's National Disaster Management Policy has brought a renewed focus on forest fire prevention and management. Forest fire management involves coordination between different government agencies across levels of governance. However, the current approach upholds the conceptualisation of forest fires as anthropogenic by identifying human ignition as the cause of fires. In doing so, it overlooks the role of fuel and vegetation in the start and spread of fires. Consequently, the proposed solutions remain response-centric, focusing on fire detection and suppression. Although fire suppression is an important aspect of fire management, its success is limited, and continuous suppression can lead to a higher fuel build-up. Furthermore, suppression frames all fires as bad and fails to consider the ecological and livelihood roles of fires. We argue that recognising forest fires as a disaster can contribute to their effective management and mitigation, but this would require an anticipatory approach to forest fire risk reduction. There needs to be sustained focus on fuel reduction or modification measures. We concur with Gill (2005) that the problem of forest fires has multiple partial solutions, and all partial solutions must be considered to minimise risk. There is no policy panacea for forest fires.

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