

STANDARD OPERATING PROCEDURE FOR INTER-AGENCY FOREST FIRE CORDINATION GROUP



Wangdue Phodrang Dzongkhag

2026

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1. Introduction

Forest fires pose a major threat to Bhutan's forests and environment, with several outbreaks each year scorching thousands of hectares nationwide. National forest and environmental conservation policies stress the urgent need for robust prevention and control measures to combat this risk.

In Bhutan, Wangdue Phodrang Dzongkhag ranks among the forest fire hotspots, fuelled by prolonged dry spells, fierce year-round winds, and fire-prone forest types characteristic of its dry valley system, which receives maximum annual rainfall of about 1,000 mm.

Effective responses demand significant manpower and resources, which the Department of Forests and Park Services cannot manage alone—it requires active collaboration from local communities and other agencies. Even with sufficient personnel from multiple stakeholders, success hinges on well-coordinated strategies.

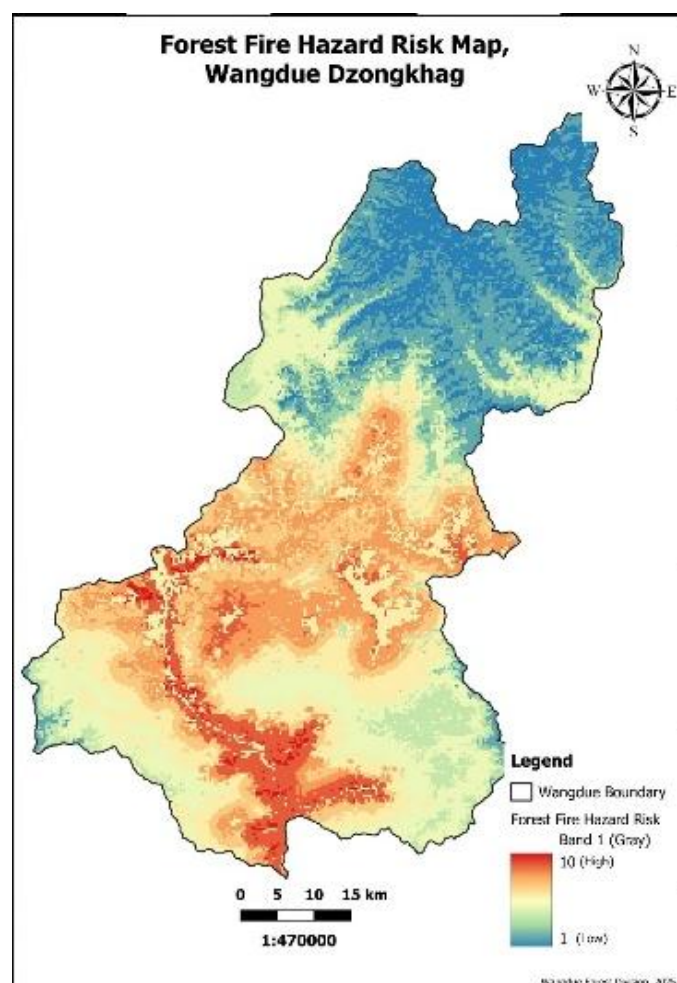
Under Bhutan's Forest and Nature Conservation Act of 2023, Section 73 mandates forest fire prevention and protection as a fundamental duty of every citizen. Section 76 directs the Department to establish an Inter-Agency Forest Fire Coordination Group for combating fires and Community-based Forest Fire Management Groups for prevention, suppression, and management.

This document provides practical guidance on mobilizing adequate manpower and streamlining coordination for efficient forest fire management in the Dzongkhag. It defines roles, responsibilities, and engagement protocols for agencies beyond forestry in both prevention and response efforts.

2. Forest Fire Status and Risk

A substantial portion of Wangdue Phodrang Dzongkhag lies within the inner dry valleys of the Bhutan Himalaya, characterized by a generally arid climate and relatively low annual rainfall. These conditions favor Chir Pine (*Pinus roxburghii*) as the dominant forest type on valley slopes, which is highly fire-prone due to its resinous needles and thick litter layers that ignite easily in dry weather.

Pine forests cover approximately 5.6 % of the Dzongkhag's total area (about 22,595 hectares), including 14,877 hectares of Chir Pine and 7,718 hectares of Blue Pine. Consequently, Wangdue Phodrang records one of Bhutan's highest forest fire incidences, averaging around seven outbreaks annually and resulting in hundreds of hectares burned each year.



Forest fire data of Wangdue Phodrang Dzongkhag:

Year	Wangdue Phodrang	
	No. of incidence	Area burnt
2018	10	1052.2
2019	8	68.21
2020	6	1044.4
2021	2	690.69
2022	0	0
2023	5	112.17
2024	6	2099.1
2025	6	750.54
	43	5817.41

3. Policy Background

Legislation	Relevance
Constitution of Kingdom of Bhutan 2008	Article 5 (1) <i>“Every Bhutanese is a trustee of the Kingdom’s natural resources and environment for the benefit of the present and future generations and it is the fundamental duty of every</i>

	<i>citizen to contribute to the protection of the natural environment.....”</i> Article 5 (3) <i>“The Government shall ensure that, in order to conserve the country’s natural resources and to prevent degradation of the ecosystem, a minimum of sixty percent of Bhutan’s total land shall be maintained under forest cover for all time.”</i>
Forest and Nature Conservation Act of Bhutan 2023	Section 73 <i>“Prevention and protection of forest fire hazard shall be the fundamental duty of every Bhutanese”.</i> Section 76 <i>“The Department shall institute Inter-Agency Forest Fire Coordination Group to combat forest fire and Community-based Forest Fire Management Group to prevent, combat and manage forest fire”.</i>
Forest and Nature Conservation Rules and Regulations of Bhutan 2023	Section 152 <i>“The Department shall institute Inter-Agency Forest Fire Coordination Group and Community based Forest Fire Management Group”.</i>
Disaster Management Act of Bhutan 2013	Section 67 <i>“An agency notified by the National Disaster Management Authority shall:</i> <i>a) Prepare, implement, review and update Disaster Management and Contingency Plan in accordance with the guideline formulated under this Act”</i> Section 76 <i>“Every agency and private sector notified under Sections 67 and 68 of this Act shall prepare its Disaster Management and Contingency Plan”</i>

4. Goal

Enhance the efficiency and effectiveness of forest fire management in Wangdue Phodrang Dzongkhag through collaborative multi-agency action, proactive prevention strategies, and robust community participation, safeguarding vital forests and natural resources

5. Objectives

1. Mobilize and pool manpower, equipment, and resources from all participating agencies to enable effective forest fire management.

2. Establish a coordinated, unified system for organizing and deploying forest fire crews.
3. Ensure clear communication, direction, and operational guidance for all firefighting teams during incidents.
4. Prioritize the health and safety of all personnel involved in fire suppression and response operations.
5. Strengthen readiness and preparedness for timely, effective forest fire responses.
6. Foster inter-agency collaboration and joint participation in large-scale forest fire prevention activities.

6. Roles and Responsibilities

As members of the Inter-Agency Forest Fire Coordination Group (IFFCG), all participating agencies must provide manpower and transport support using their available vehicles. Beyond this general obligation, specific roles and responsibilities align with each agency's professional mandate, as outlined below:

Sl. No.	Agency	Roles and Responsibilities
1	Divisional Forest Office	➤ Lead the establishment and development of the Inter-Agency Forest Fire Coordination Group (IFFCG). ➤ Initiate procurement and supply of firefighting tools and Personal Protective Equipment (PPE). ➤ Convene and coordinate IFFCG meetings. ➤ Conduct advocacy and awareness programs on forest fire prevention. ➤ Coordinate and implement prevention measures, including fire line construction and prescribed burning. ➤ Perform post-fire assessments and prepare reports. ➤ Maintain records of IFFCG activities and forest fire incidents. ➤ Explore and mobilize funding support for IFFCG initiatives. ➤ Deliver firefighting training and capacity-building programs.
2	Dzongkhag Administration	➤ Arrange transportation of firefighters during large-scale deployments or when agencies are unable to provide transport for their personnel. ➤ Provide meals and refreshments for firefighters during operations when responding personnel cannot make such arrangements.
3	Military Training Centre and Royal Bhutan Army, Wing XII	➤ Provide manpower. ➤ Provide firefighting vehicles and tankers when required.

4	Royal Bhutan Police	➤ Provide manpower support for firefighting operations. ➤ Manage traffic control in forest fire-affected areas when necessary. ➤ Offer fire brigade support during forest fire incidents.
6	Gewog Administration	➤ Arrange refreshments in consultation with the Dzongkhag Disaster Management Office. ➤ Issue permits for debris burning. ➤ Deploy Quick Response Teams (QRTs) alongside forestry personnel stationed in or near the Gewog.
7	Bhutan Power Corporation Limited	➤ Control and manage power supply in and around forest fire affected areas when required. ➤ Create firebreaks around substations and transmission lines before the onset of fire season. ➤ Remove overhanging branches or trees posing risk to power infrastructure.
8	Dzongkhag Desuup Office	➤ Manpower support.
9	Dzongkhag Medical Officer	➤ Provide medical emergencies as and when required.

7. Pre-Incident Planning and Preparedness

7.1 Nomination of Focal Officers

A communication group shall be created to include all nominated focal officers. This group will be reviewed and validated annually prior to the fire season to ensure it is up to date and fully functional. During this validation, any focal officer who has transferred, resigned, or otherwise left the agency shall be removed and replaced by a new nominee as recommended by the respective agency.

A dedicated communication group, including all nominated focal officers, shall be established and validated annually before the fire season to ensure it remains current and operational. During validation, any focal officer who were transferred, resigned, or left the agency must be promptly replaced by a new nominee recommended by that agency.

The Divisional Forest Office shall lead and coordinate this entire process.

IFFCG Member Agencies

Sl. No.	Agency	Focal member
1	Dzongkhag Administration	Dasho Dzongdag and DDMO
2	MTC, RBA	Dasho Commandant & Disaster Focal
3	Wing XII, RBA	Dasho Commandant & Disaster Focal
4	RBP	Dasho SSP, Dasho OC Wangdue and Zawakha
5	Gewog (10)	Gup

6	Desuung	Coordinator
7	PHPA I	Fire Chief
8	PHPA II	Fire Chief
9	BPC	Manager
10	DoST	Chief Engineer

7.2 Firefighting Training

Ideally, all firefighting participants should receive adequate training to ensure both operational efficiency and safety. Training scope, however, depends on available funding. Unless member agencies agree to participate without financial support for DSA or meals, the Divisional Forest Office shall provide basic firefighting trainings.

7.3 Quick Response Team (QRT)

Forest fires are inherently unpredictable and can spread rapidly; thus, immediate response is critical to minimizing containment and suppression costs in time and resources. Establishing predetermined Quick Response Teams (QRTs) ensures swift action with minimal personnel, enabling rapid initial intervention.

Given that all Inter-Agency Forest Fire Coordination Group (IFFCG) members including the forestry sector bear ongoing service delivery mandates beyond fire management, dedicating personnel exclusively to this role proves impractical. Accordingly, first responders (QRTs) shall be drawn from local communities within respective Gewogs, operating in close coordination with stationed forestry personnel.

7.4 Meetings and discussions

The Chief Forestry Officer (CFO) shall coordinate and convene IFFCG meetings at least once a year. Additional meetings may be called as needed, based on situational demands and urgency.

8. Deployment of Firefighters from Villages under Gewogs

Based on observations from past forest fire incidents, participation of local communities has remained minimal which may be due to farming and other livelihood commitments. However, in accordance with the constitutional mandates, all Bhutanese citizens are responsible to protect and conserve forests and the environment. It is imperative that local communities actively participate in forest fire prevention and suppression in their respective areas.

To operationalize this responsibility, followings are the mandates with this SOP:

1. Role of the Gup

The Gup of the respective Gewog shall oversee preventive measures and mobilize sufficient community participation during forest fire incidents. Upon notification of a fire within Gewog jurisdiction, the Gewog Administration shall promptly deploy nearby residents.

2. Community Obligation

All residents within the affected Gewog shall provide necessary support during forest fire emergencies, unless exempted for valid reasons such as health conditions, age, or other justified circumstances.

3. Record of Participation

The Gewog Administration shall maintain proper records of all individuals deployed during each forest fire incident.

4. Non-Participation and Reporting

In cases of non-participation by residents without valid justification, the Gewog Administration shall document such instances and report them to the Inter-Agency Forest Fire Coordination Group (IFFCG).

5. Follow-Up Measures

Based on the report, the forestry representative in the IFFCG may review and regulate provision of certain forestry-related service deliveries to the concerned individuals, in accordance with applicable rules and regulations.

9. Operating Procedures

Forest fire responses shall adhere to a simplified Incident Command System (ICS) to ensure clear communication channels, effective coordination, and unequivocal accountability during incidents.

9.1. Command Structure

9.1.1. Incident Commander (IC)

Dasho Dzongdag of the Dzongkhag Administration will serve as the Incident Commander (IC), holding ultimate authority over all forest fire response operations within the Interagency Forest Fire Coordination Group (IFFCG) framework. As the apex decision-maker, the IC is vested with comprehensive oversight responsibilities, including strategic planning, resource mobilization, operational approvals, and final decision-making authority to ensure seamless inter-agency coordination and effective fire suppression. In the event of the Dasho Dzongdag's unavailability, the Dzongrab shall assume the IC role, maintaining continuity of command.

9.1.2. Incident Manager / Operations Lead

The Chief Forestry Officer (CFO) of the Divisional Forest Office shall serve as the Incident Manager / Operations Lead responsible for providing clear directives, orchestrating seamless coordination among all responding agencies including the Royal Bhutan Army (RBA), Royal Bhutan Police (RBP), Dessung, and local authorities and ensuring the efficient execution of suppression, assessment, and support operations.

9.1.3. Operational Unit

The Operational Unit shall encompass a dedicated Rapid Response Team (RRT) comprising the following core team members, who are collectively responsible for the timely suppression and containment. This unit will operate under the direct supervision of the Incident Manager /

Operations Lead (Chief Forestry Officer) and execute frontline tactical operations to minimize fire spread, protect lives, property, and ecosystems:

1. Fire Suppression Team
2. Forestry personnel
3. Quick Response Team (QRT)
4. Volunteers and agency staff

9.1.3 Logistics Arrangement

In the event of a forest fire occurrence within the dzongkhag, all necessary logistics arrangements shall be coordinated by the Dzongkhag Disaster Management Office (DDO) under the overarching authority of the Incident Commander (Dasho Dzongdag). This unit ensures the seamless provision of critical resources, equipment, transportation, and support services to the Operational Unit and Coordination Group, thereby facilitating uninterrupted fire suppression, containment, and post-incident recovery operations within the Interagency Forest Fire Coordination Group (IFFCG) framework.

9.1.4 Safety and Medical Support

Safety and Medical Support Unit shall operate under the direct oversight of the Incident Commander (Dasho Dzongdag), to ensure safety protocols and deliver immediate medical care. The CMO of the Dzongkhag shall be the focal point for this unit and the unit shall be responsible for:

- Deployment of a dedicated Medical Team (124 personnel from Health Sector/Dessung trained in wilderness first aid) with first-aid kits, oxygen and burn dressings.
- Pre-positioning ambulances at nearest roadhead to facilitate immediate transport of injured/sick personnels.
- Responsible for firefighter safety and medical emergencies.

9.1.5 Support Agencies

The Support Agencies shall form an integral component of the Interagency Forest Fire Coordination Group (IFFCG), providing specialized manpower, technical expertise, and logistical reinforcement to augment core operations led by the Incident Commander, Incident Manager/Operations Lead, Operational Unit, Logistics Arrangements, and Safety and Medical Support Unit.

Key Support Agencies and their delineated responsibilities include:

1. Royal Bhutan Police (RBP):

- Deployment of manpower for fire suppression, crowd/traffic control at fire sites and evacuation routes.
- Activation of fire brigade units for interface fires near settlements, Lhakhangs, or power infrastructure.

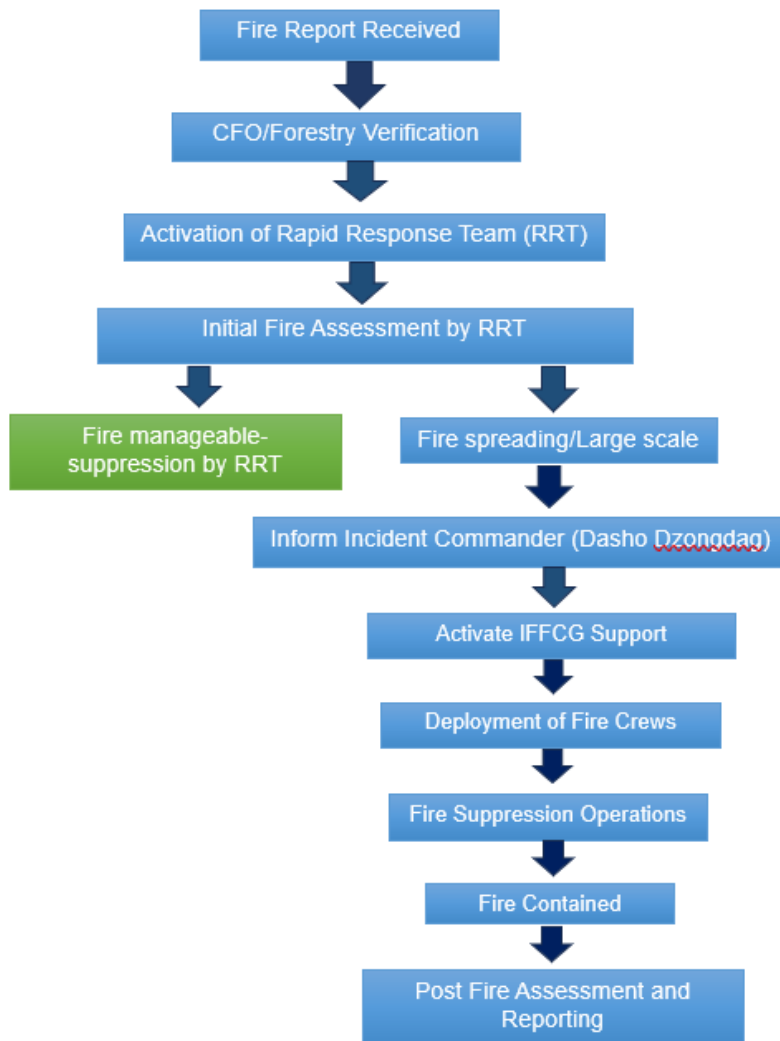
2. Bhutan Power Corporation (BPC):

- Ensuring power line safety through immediate inspections, de-energization of at-risk lines, and trimming of overhanging vegetation in high-fire zones.
- Prevention patrols in fire areas prone to detect faulty lines and coordination for post-fire infrastructure repairs.
- Provision of technical advisors for electrical hazards during suppression to prevent secondary ignitions.

3. **Royal Bhutan Army (RBA) / Military Training Centre:**

- Manpower support for fire suppressions and fire line construction.
- Transportation logistics including military vehicles and water tankers.

9.2 Forest Fire Response Flow Chart



9.3 Fire Crew Organization Structure

Fire crews form the operational backbone of forest fire suppression, organized hierarchically for efficiency, safety, and clear command during incidents. This structure aligns with the simplified Incident Command System (ICS), enabling scalable responses from initial attack to prolonged operations.

Crew Structure

Team Leader

A member agency deploying fire fighters shall ensure to nominate a team leader amongst the firefighters from their agency. The team leader shall preferably be one with experience in firefighting or one with good coordination and command.

Crew Responsibilities

Team Leader

- Ensure crew safety

- Assign tasks
- Responsible for directing the crew and communicating with the Incident Manager
- Communicate progress and challenges

Firefighters

- Fireline construction
- Suppression of fire with fire beaters
- Removing combustible materials
- Monitoring fire spread

9.4 Firefighter Safety Protocol

Safety shall be the highest priority during all firefighting operations.

Basic Safety Measures

- All personnel should wear Personal Protective Equipment (PPE) whenever available.
- No firefighter shall work alone; teams must operate in groups.
- Maintain constant awareness of fire direction, wind conditions, and terrain.
- Avoid working upslope directly above active fire.
- Identify safe escape routes and safety zones before beginning suppression work.
- Maintain adequate hydration and rest breaks.
- Immediately withdraw crews if the fire becomes uncontrollable or poses a risk to life.

Personal Protective Equipment list (if available)

- Helmet
- Gloves
- Fire resistant clothing
- Boots
- Eye protection
- Face mask

9.5 Communication Protocol

Effective communication is critical for coordinated forest fire response.

Communication Channels

Primary communication

- Mobile phone communication
- Messaging groups (e.g., official coordination chat groups)

Secondary communication

- Wireless radio communication (if available)

Communication Procedures

1. The first-person receiving fire information must immediately inform the forestry office.
2. The forestry office shall verify and if needed inform the Incident Commander (Dzongdag)
3. All focal officers shall remain on station during fire season.
4. Operational updates shall be shared regularly through the designated communication group.
5. Any emergency situation or casualty must be reported immediately to the Incident Commander or Incident Manager.