

# **Standard Operating Procedure for Forest Fire Fighting in Chukha Dzongkhag**



**Interagency Forest Fire Coordinating Group  
March 2022**

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## **1 Background**

Forest in Bhutan plays an important role in providing numerous tangible and intangible services. It is home to many rare and endangered wildlife species including flagship animals. Despite valuable contributions to socio-economic development and habitat to wildlife, there are numerous drivers to deforestation and forest degradation. Among several drivers, forest fire is considered as one of the primary causes to the loss of forest cover and biodiversity

In February 2017, His Majesty commanded on to strengthen inter-agency coordination and ensure that the forest fire fighters are adequately and appropriately dressed and equipped while on firefighting. Upon the command of the His Majesty, the Department of Forests and Park Service (DoFPS) formed Interagency Forest Fire Coordination Group (IFFCG) and framed the Standard Operating Procedure (SOP) for IFFCG, Thimphu Dzongkhag. Subsequently, DoFPS instructed Concerned Field Division to form respective IFFCG and SOP to combat the forest fire.

Based on the letter no. FPED/FFMS-02/2021-22/854 dated 14.03.2022 of the Chief Forestry Officer, Forest Protection Enforcement Division, Thimphu has asked Gedu Forest Division to coordinate and form Interagency Forest Fire Coordinating Group (IFFCG) for better management of forest fire in the Upper Chhukha Dzongkhag especially Chapcha and Bjabcho gewog. Those two gewogs harbors conifer forest and frequent forest incidents have occurred in the past.

To ensure better coordination among different stakeholders in forest fire fighting, stakeholders of Chukha Dzongkhag came together on March 29, 2022 to form IFFCG.

## **2 Purpose:**

The SOP of IFFCG is being framed, to strengthen the coordination among the agencies during forest fire incidences within Chukha Dzongkhag by the IFFCG Team. The IFFCG Team also supports the roles and responsibilities as outlined in the Dzongkhag Disaster Management and Contingency Plan (DDMCP), in carrying out fire suppression work. The IFFCG need be harmonized and incorporated in Dzongkhag Disaster Management and Contingency Plan (DDMCP) as Forest fire is disaster in nature.

### 3 Objectives:

- ✓ To form a central coordination group and formulate clear roles and responsibilities.
- ✓ To ensure the safety of fire fighters during forest fire incidents.
- ✓ To provide timely, efficient and effective fire fighting action on forest fire incidents.
- ✓ To achieve cost-efficient and optimal resources distribution for all forest fires.

### 4 Standard Operating Procedure for IFFCG Operation

These SOPs describe the method by which various forest fires fighting actions should be carried out in a coordinated approach during forest fire incidents.

## 5 PRE INCIDENT PLANNING AND PREPAREDNESS

### 5.1 Nomination of Focal officers for inter-Agency Forest Fire Coordinating Group( IFFCG)

The pre-incident planning is an important part for formation of coordination group members or focal officers from concerned agencies involved in fire fighting in upper Chukha dzongkhag. The following focal officials have been nominated from all the concerned agencies to act as the member of the Inter Agency Forest Fire Coordinating Group (IFFCG) and served as primary official contact during forest fire incidents (Table 1).

**Table 1.** IFFCG Focal members

Sl. no	Agency	Focal ( By Position)	Remarks
1	Dzongkhag Administration, Chukha	Dasho Dzungda or	Incident Commander
		Dasho Dzungrab	Alternate IC
2	Dzongkhag Tshogdu	Dy. Chairperson	Focal Member
3	Dzongkhag Disaster Management Office	Dzongkhag Disaster Management Officer	Logistic Manager
4	Dzongkhag Environment office	Environment Officer	Focal Member
5	Dzongkhag Kidu Office	Kidu Officer	Focal Member
6	Gedu Forest Division	Chief Forestry Officer	Incident Manager and focal member

7	Royal Bhutan Police (RBP)	Dasho OC	Focal member
8	Desuung Office	Desuup Gojey	Focal member
9	Thromdey Office	Tshogpa	Focal member
10	Gewog Administration	Concerned Gup	Focal member
11	Department of Roads (DoR)	Executive Engineer	Focal member
12	Bhutan Power Corporation (BPC)	Manager	Focal member

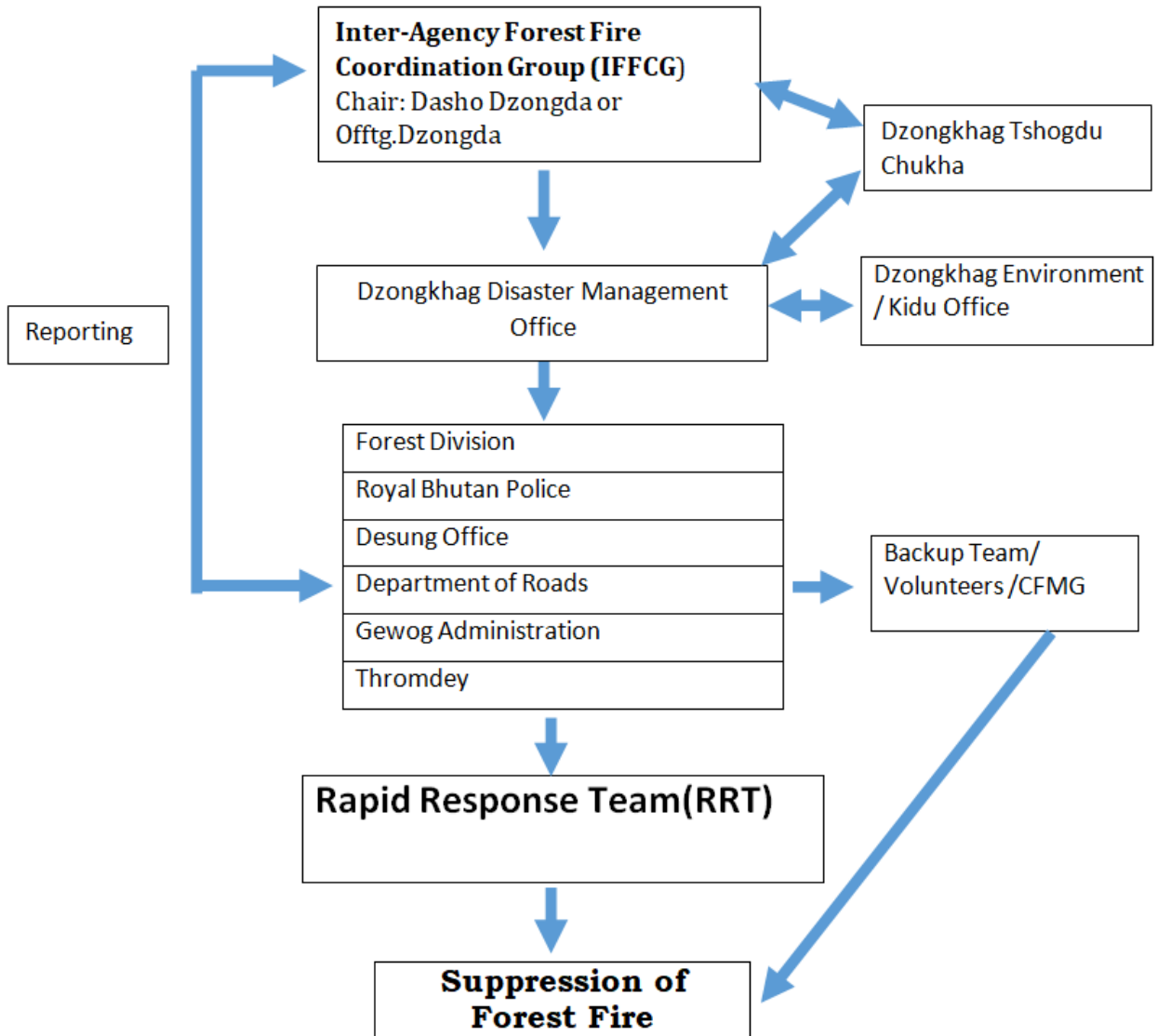
- In the event of any change in membership of IFFCG, the updated information and contact of individual members will be shared immediately in IFFCG Group.
- The IFFCG Members shall hold an annual meeting to facilitate coordination and discuss any issue related to suppression of forest fire. The Divisional Forest office member shall update the other member on fire incidences and other details during the meeting.

## **5.2 Roles and Responsibilities of IFFCG during Forest Fire Incident**

- 5.2.1 As soon as a forest fire incident report is received (information received by any of the IFCCG group members and shared in Group), Chief Forestry Officer (CFO), Gedu Forest Division will lead the team of IFFCG as Incident Manager under the direct command of Incident Commander of Dzongkhag Disaster Management Committee (Figure 1).
- 5.2.2 As per the Command, the Rapid Response Team (RRT) from Forestry, Desung, Royal Bhutan Police(RBP), DoR, and Geog Administration will immediately gather and move to the forest fire Incident site with firefighting equipment and proper Personal Protective Equipment (PPE).
- 5.2.3 The Chief Forestry Officer, Gedu Forest Division will make the action plan and report to the Incident Commander (Dasho Dzongdag). Then, CFO will brief RRT about fire operation as per the Action plan and instruction from Incident Commander.
- 5.2.4 After the RRT team leaves for forest fire operation, the focal Officer from different organizations will keep the Backup Team ready and brief the team, equipped with basic PPE and other firefighting tools for reinforcement.
- 5.2.5 RRT team will be transported by vehicle of the concerned agency or arranged by DDMO.

- 5.2.6 The Backup teams or volunteers will be dispatched to suppress large forest fires with proper planning and logistics arranged by the DDMO.
- 5.2.7 In event of lives or properties being threatened, IFFCG with coordination with DDMO, helicopter services may be hired after prior approval for the concerned agency.
- 5.2.8 The Concerned Gewog shall institute the Forest Fire management committee chaired by the concerned Gup.

## IFFCG Communication Chain of Command



**Figure 1:** Incident coordination system during forest fire

## **6 Pre- Incident Roles and Responsibilities of IFFCG**

The IFFCG shall have numerous roles and responsibilities before the fire occurs (pre-incident), during the fire incident (suppression) and after the fire (post-fire). The Pre-Incident roles and responsibilities of the IFFCG shall be as follows:

### **6.1 Collective Roles and Responsibilities**

- 6.1.1 Coordinate before the onset of the fire season and prepare for the oncoming fire season including planning, training, awareness, identification of fire prone zones and conduct of prescribed burns wherever required.
- 6.1.2 Meet as and when required to discuss issues related to forest fire management and suppression activities.
- 6.1.3 Coordinate, conduct or participate in all necessary training before the onset of the fire season.

### **6.2 Specific Responsibilities**

- 6.2.1 Agency members shall facilitate procurement of PPE and fire fighting gear for their respective agencies before the onset of fire season and distribute to the RRT's and other firefighters as necessary.
- 6.2.2 Agency members shall ensure that their respective agencies have basic requirements such as transportation and logistics arranged and ready for deployment for the RRT and other firefighters.
- 6.2.3 Agency members shall ensure that RRT's from their respective agencies are ready and always-on stand-by during the forest fire season to deliver effective first coordinated response.
- 6.2.4 The CFO, Gedu shall coordinate conduct of fire fighting and prescribed burn training and awareness programs.
- 6.2.5 The DDMO shall bear overall responsibility for arrangement of logistics during fire incidents in coordination with the IFFCG. DDMO shall facilitate reimbursement of expenses. Food, refreshments and other logistics shall be made available to IFFCG members of respective agencies for optimal distribution to fire-fighters.



6.2.6 Concerned Agency will clear the fire hazard after seeking approval before onset of dry season.

## 7 Rapid Response Team (RRT)

7.1 Rapid Response Teams (RRT) will be fully trained, equipped and kept on standby during the onset of dry season from following agencies to respond quickly and effectively to all kinds of forest fire incidents within Chukha Dzongkhag (Table 2).

**Table 2** : Information on RRT member

Sl.no	Office	RRT member	Remarks
1	Forest Division	15	
2	Desung Office	15	
3	RBP	10	
4	Concerned Thromdey	10	
5	Concerned Geog Administration	15	5 Geog Official and 10 each from chiwog
6	DoR	1	
7	BPC	10	
	<b>Total</b>	<b>76</b>	

7.2 Each RRT team (Table 2) will be led by a focal officer of adequate command and decision-making authority.

7.3 All the RRT will be fully trained and equipped with personal protective equipment (PPE) and other firefighting tools and accessories by the concerned parent organization (Table 3).

**Table 3.** Equipment and Tools

Sl.#	Tools/equipment	Quantity	Unit
1	Handsets	Concerned agencies	Number
2	Rake	2	Numbers
3	Spade	Individual	Numbers
4	Water Bag Pump	2	Numbers
5	Water bottle	Individual	
6	Torch	Individual	
7	Whistle	2	Numbers
8	Fire mask	Individual	
9	Patang	Individual	
10	Small bag	Individual	

## **7.4 Roles and Responsibilities of RRTs**

- 7.4.1 The RRTs should be fully equipped and will always be on standby for immediate deployment during the forest fire season (Oct-March).
- 7.4.2 Provide the first incident response and combat all forest fires at the initial stage.
- 7.4.3 The RRT will assess the incident and report to the IFFCG, who will then take further decisions for suppression and containment of the fire.
- 7.4.4 The RRTs will try to suppress the fire and call for backup based on the situation and status of the incident.

## **8 Backup Teams**

Backup team shall include all the remaining individuals and institutions not in RRT including Desuung, RBP and Forestry who are not included in RRT.

### **8.1 Roles and Responsibilities of Backup Teams**

- 8.1.1 The backup teams will get ready as soon as the RRT is dispatched to the forest fire incident site.
- 8.1.2 Deployed on instruction from their respective IFFCG members based on RRT's initial incident report.
- 8.1.3 The size of backup teams and timing of deployment will be decided by the respective IFFCG members based on the situation of the incident.
- 8.1.4 Should be adequately equipped with PPE and firefighting equipment with PPE and firefighting equipment.

## 9 Coordination and communication

In order to provide fast and efficient suppression response and to ensure fire fighter safety during forest fire incidents, interagency coordination and communication flow are crucial.

### 9.1 Coordination Protocol

- 9.1.1 For any reported forest fire incident, the incident manager shall immediately meet with focal officers to plan and deploy fire fighters at an agreed vantage point.
- 9.1.2 All IFFCG members should use the common call sign and frequency and commonly used online forum (whatsapp).
- 9.1.3 All focal officers will be responsible for coordinating all communication requirements for their respective agencies(Table 4).

**Table 4:** Name List and Call sign of IFFCG

Sl.no	Agency	Focal (By position)	Handset Call Sign
1	Dzongkhag Administration	Dasho Dzongdag or Offtg Dzongdag	By Designation
2	Royal Bhutan Police	Dasho OC, RBP, Tsimasham	
3	Gedu Forest Division	CFO, Gedu	
4	De-sung	De sung Gojay	
5	Department of Road	EE, DoR, Darla	
6	Concerned Thomday	Thomdey Ngotshop	
7	Concerned Geog	Concerned Gup	

### 9.2 Communication Protocol

To ensure timely and effective communication amongst IFFCG members and with the RRTs and firefighters on the forest fire incident, all IFFCG members must use radio handsets or mobile phones for information flow.

### 9.3 Transportation

- 9.3.1 DDMO will identify and arrange the transportation for IFFCG Team and fire fighting equipment upon prior approval from Incident Commander.
- 9.3.2 The expenditure for the transportation will be borne by the Dzongkhag Disaster Management Office budget.

9.3.3 All the vehicles from the different agencies will be pooled during forest fire incidents for emergency transportation of firefighting teams and equipment. Additional vehicles may be hired during the disaster as per the requirement upon approval from the Incident Commander.

#### **9.4 Logistics**

9.4.1 The DDMO shall bear the overall responsibility for arrangement of logistics during fire incidents in coordination with IFFCG. DDMO shall facilitate reimbursement of expenses, food, refreshment and other logistics shall be made available to IFFCG members for respective agencies for optimal distribution to fire fighters.

9.4.2 The Logistic Team Leader (DDMO) will arrange all the food and other materials, as and when required during the operation, if the fire suppression lasts longer than a day.

#### **9.5 Financing**

The expenditure during forest fire fighting/ suppression operation will be met by DDMO and Dzongkhag Finance Officer as per the Operational Guidelines for Disaster Financing 2017.

#### **9.6 Firefighting Training**

9.6.1 All fire fighters should be adequately trained in various fire fighting techniques, fire safety, and coordination and communication protocol.

9.6.2 Gedu Forest Division Chukha, DoFPS will conduct basic firefighting training of trainers (TOTs) for all the agency focal, who in turn will train their respective RRT and fire fighters.

9.6.3 Fire experts from DoFPS will train all focal officers on incident management system and coordination.

9.6.4 Equipment handling training will also be conducted for focal officers. Selected officials will be nominated and will be trained, who will use these equipment during fire fighting incidents.

9.6.5 As guided by the Forest and Nature Conservation Rules and Regulations 2017, GFD,Chukha will train members from stakeholder

agencies and communities to carry out prescribed burn techniques based on technical burn plans prepared by DoFPS.

## **9.7 Fire Line Construction**

- 9.7.1** The interface between built up areas and forest is becoming a threat, where human lives and properties are at risk from forest fires. Fireline as specified by experts from Gedu Forest Division/DoFPS will be constructed around important structures and property at risk. The identification of such areas will be coordinated by Gedu Forest Division, DoFPS in consultation with Chukha Dzongkhag.
- 9.7.2** The construction of the fire line will be coordinated by the IFFCG and implemented with personnel from Dzongkhag, RBP, DoFPS, Desuung, Regional Heads and Geog administrations.

## **9.8 Fire Fighter Safety**

- 9.8.1 All firefighters are individually responsible for their own safety.
- 9.8.2 All fire fighters should work collectively at the incident site to ensure safety of other firefighters and people in the area.
- 9.8.3 On the incident site, everyone should be aware of possible hazards and identify methods to eliminate, reduce or avoid them.
- 9.8.4 The first concern should be: “Is anyone in danger? If so, what can we safely do to protect them?”
- 9.8.5 The second concern should be, “Is there anything of value in danger? If so, can we safely protect it?”
- 9.8.6 The third concern should be, “Is there anything we can safely do to help restore normality to the affected area?”

## **9.9 Water Tankers**

- 9.9.1 It is essential to arrange water tankers when fire incidents occur within the road points by concerned IFFCG member (RBP).

- 9.9.2 Water tankers will be arranged to the nearest road head to suppress fire, which is accessible from the road, and to protect adjoining infrastructures.
- 9.9.3 The fire brigade with firefighting trucks will be dispatched by the RBP (focal member), if the fire incidents are within the road points.

## **10 Post Fire Assessment and Rehabilitation**

- 10.1 The Gedu Forest Division will be responsible for coordination and operation of all post fire activities as per provisions of the Forest and Nature Conservation Rules and Regulations 2017, and other technical guidelines and practices. The post fire status report will be shared with stakeholders through the IFFCG.
- 10.2 In case of government infrastructure damage by forest fire, DDMO will assess the damage and submit the report to the concerned agency.

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