

# Standard Operating Procedure (SOP)



**Inter-agency Forest Fire Coordination Group  
(IFFCG)**

**Mongar Dzongkhag.**

## **Table of Contents**

1. BACKGROUND.....	2
2. Objectives.....	4
3. Scope.....	4
4. IFFCG Members.....	4
5. Preventive Measures.....	4
6. Forest Fire.....	5
7. Fire in settlements/houses/cultural and religious sites.....	8
8. Post fire management.....	8
9. Roles and Responsibilities of integrated groups.....	8
10. Roles and Responsibilities of agencies.....	9
11. Coordination and Communication.....	10
12. Fire Fighter Safety ( <i>SAFETY FIRST</i> ).....	10
13. Water Tankers.....	10

## **1. BACKGROUND**

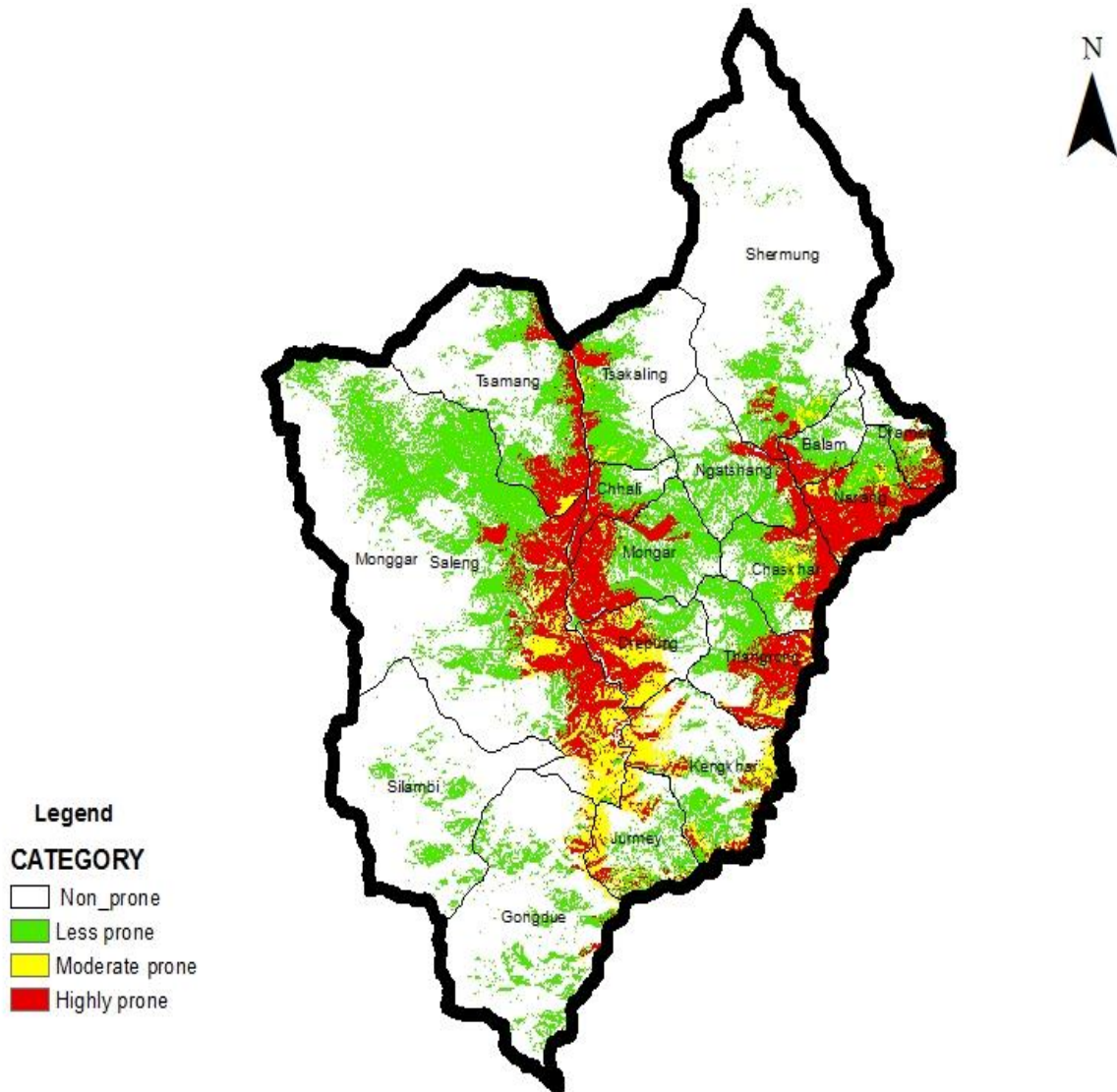
Forests play an integral role in the socio---economic development and environmental health of Bhutan. Amongst other drivers of deforestation and forest degradation, forest fire is the primary cause for loss in forest cover and valuable biodiversity. Therefore, forest fire poses the single most important threat to the Constitutional requirement of maintaining 60 percent forest cover. Catastrophic forest fires also undermine national conservation and developmental efforts and are often a cause for serious concern for communities.

Forest fire fighting in Bhutan is a challenging task due to steep, rugged terrain, erratic and increasingly severe weather patterns. Many forest fire incidents are anthropogenic in nature, which makes the role of fire managers challenging in managing new fire incidents. While the current approach to forest fire fighting remains unchanged, fire fighters continue to respond to the fire with limited management guidance, planning and co-ordination of roles and minimal communication between agencies.

The ability of the first responders to effectively respond to fire incidences surrounding urban areas can greatly reduce damage to forests and quickly deter risk posed by such fires to urban communities. Effective response will depend on inter-agency coordination, preparedness and how adequately response teams are equipped and trained. Currently, fire fighters lack a common coordinated system for command and control for incident management planning during forest fire incidents. In the absence of a reliable incident management planning, all concerned agencies often fail to coordinate effective suppression response and also are exposed to unnecessary safety concerns.

Inter agency fire fighters, such as the Royal Bhutan Police (RBP), Desuung, Dzongkhag Officials, Agencies, volunteers and local communities all contribute to fight forest fires. The response to forest fire incidence throughout the country requires a proper incident management system taking into consideration coordination, effective response mobilization and putting fire fighter safety first. The system should describe and define the responsibilities for all the stakeholders involved. There should be a standard operational flow from the designated Officers---in---Charge down through the entire operational task force.

His Majesty The King Commanded in February 2017 to strengthen inter-agency coordination and ensure that forest fire fighters are adequately and appropriately dressed and equipped while on fire fighting duty. As a follow-up on the Command, the interagency forest fire coordination group was initiated in the country throughout the nation with a series of meetings among agencies to redress issues, strengthen coordination and to enhance effective first response. The Standard Operating Procedure (SOP) described below is being submitted for endorsement.



**Figure 1 Map showing forest fire prone areas under Mongar Dzongkhag**

The risk area categorically identified was based on the factors fire occurrences and frequency, forest type, road and settlements, slope and aspects

## **2. Objectives**

- ❖ To ensure the safety of fire fighting personnel during forest fire incidents.
- ❖ To provide for timely, efficient and effective fire fighting action on forest fire incidents in the Dzongkhag.
- ❖ For better coordination among the different stakeholders involved in fire fighting under Mongar Dzongkhag.
- ❖ To achieve cost-efficient and optimal resources distribution for all forest fire fighters.

## **3. Scope**

The SOP will enable timely response towards effective coordination, mobilization and actions during the following fire incidences/outbreaks in the Dzongkhag:

1. Forest Fire
2. Fire in settlement/Houses
3. Fire incidences in Culture and religious sites

## **4. IFFCG Members**

- i. Dzongkhag Administration
- ii. Divisional Forest Office (DFO)
- iii. Royal Bhutan Police (RBP)
- iv. Desuung
- v. Local Government
- vi. Regional Offices
- vii. Park Ranges
- viii. Local Communities

## **5. Preventive Measures**

### 5.1 Awareness and Advocacy

Conduct extensive awareness and advocacy on forest fire through available social media forums (Wechat, telegram whatsapp, Facebook, etc..) to general public. This will be spearheaded by members of the Inter-Agency Forest Fire Coordination Group (IFFCG) of Mongar through their respective contacts and e-groups.

### 5.2. Monitoring

#### 5.2.1. Mongar Forests division

Mongar Forests Division emergency team will conduct constant monitoring of fire incidences/outbreak in Mongar Dzongkhag. All site In-charges of Mongar Division shall conduct reconnaissance of their respective area for any sign of fire and smokes and report to CFO. It is the responsibility of all foresters and public to report any sign of fire to respective site in-charges.

### 5.2.2 Chiwog Tsogpas

Respective Chiwogs tshokpas will monitor fire signs and immediately report to Gup/Forest officials/RBP. All Tshokpas to ensure that, burning of debris are done with prior permission (from tshokpa/forest officials) either through phone call or any electronic medium. All debris burning should be carried out in the morning or evening to avoid accidental fire outbreak due to wind.

## 6. Forest Fire

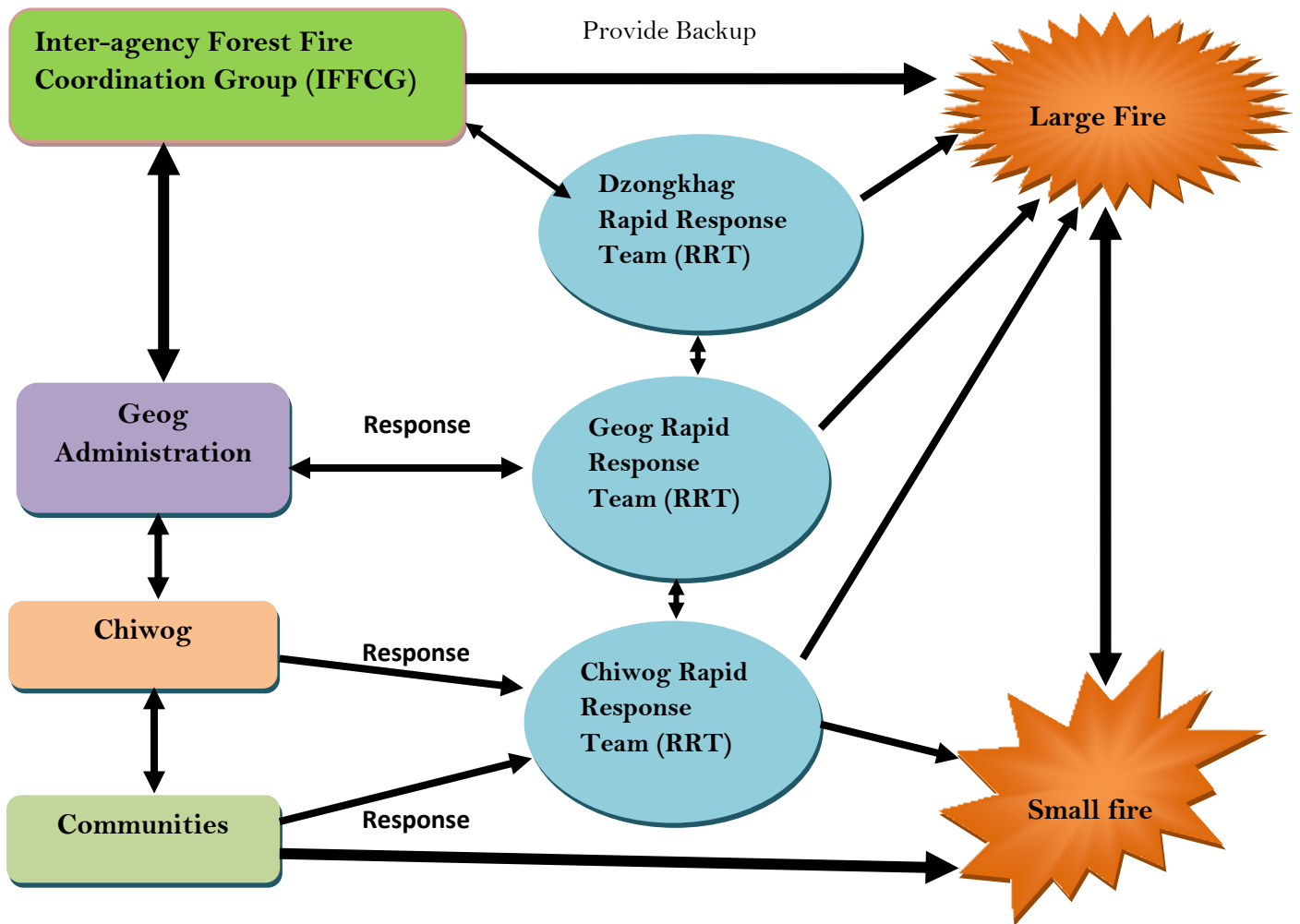
### 6.1. Immediate Fire Suppression

- In case of any forest fire outbreak in the Chiwog, the Chiwog RRT shall initiate first response to suppress and contain the fire. They shall inform the Geog RRT for backup
- The Geog level RRT shall arrange for fire fighters and inform the Dzongkhag for backup if the fire is beyond control.
- Divisional Forests Office, RBP, Desuung, BPC will act as Rapid Response Team (RRT (Ref. Table 4)
- Based on the situation and status report from RRT, the incident commander will call for backup to the IFFCG.
- The incident Manager, IFFCG will inform the respective team in order to coordinate and mobilize manpower for fire fighting.
- Water tanker/fire brigade should be deployed by RBP, Mongar wherever possible and accessible.
- All fire fighters should carry firefighting tools.

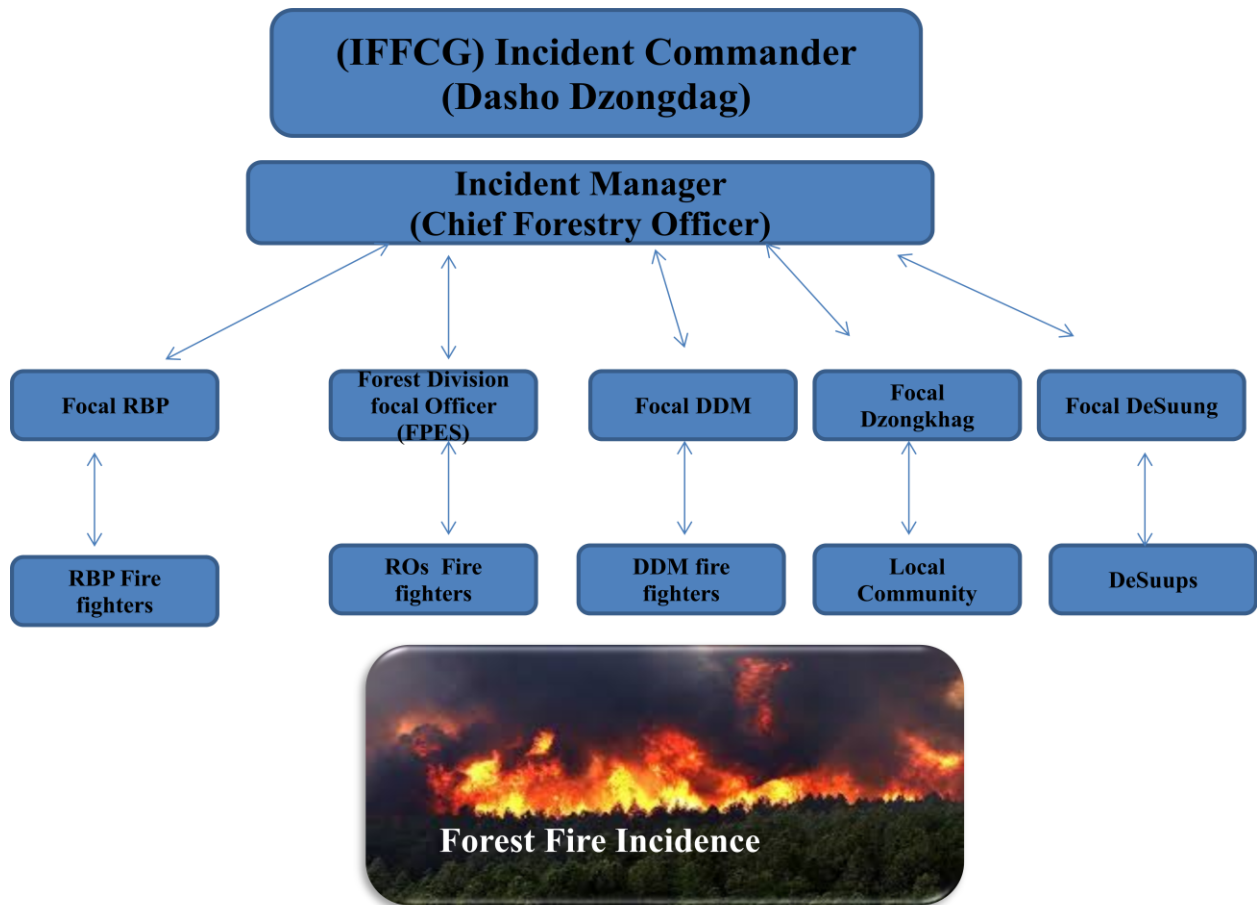
### 6.2. Health and Safety Measures

- Forest fire fighters should be appropriately attired to protect themselves from the dangerous effects of fire. (Personal Protective Equipment)
- Clothing made from natural fibre should be worn that covers all major parts of the body to give protection from radiant heat.
- Garments made from synthetic materials, (nylon, rayon, etc) should not be worn.
- Helmet to protect the head from falling, low or over-hanging objects should be worn at all times during fire fighting.
- COVID protocols to be followed at all times by every individual involved in fire fighting.

### 6.3. Incident Coordination System during Forest Fire



#### 6.4 Chain of command during forest fire incidences





## **7. Fire in settlements/houses/cultural and religious sites.**

- RBP will act as Rapid Response Team (RRT) and the nearest community to respond at the earliest at the site of incidences without waiting for RRT.
- Based on the situation and status report from RRT, RBP will call for backup to the IFFCG.
- IFFCG to inform and coordinate their respective team and to mobilize manpower for fire fighting.
- Water tanker/fire brigade should be deployed by RBP, Mongar.
- BPC to initiate appropriate action on power line.

## **8. Post fire management**

### *8.1. Mopping up*

- DFO along with nearest community will undertake mopping operation.
- Periodic monitoring of burnt area will be done by site In-charges.
- DFO will conduct assessment of burnt area for further action.

### *8.2.COVID protocol*

- Social distancing to be strictly maintained during and after fire fighting
- Wear face mask during fire fighting.
- Dzongkhag and Desuung should arrange hand sanitizers for fire fighters before departure from site.

## **9. Roles and Responsibilities of integrated groups**

### *9.1.Interagency Forest Fire Coordination Group (IFFCG)*

- As soon as the fire incident is reported, the IFFCG will coordinate and plan response.
- The IFFCG will start mobilizing backup teams and keep them ready for deployment depending on first incident report from the RRTs.
- The IFFCG should make the medical support team always available at the incident site.
- Arrangement for transportation of the fire fighters and deployment will be done by IFFCG from their respective agencies.
- On large fire incidents the IFFCG member from Divisional Forest office will take the lead role in planning and coordinating the next steps for fire suppression.

### *9.2. Rapid Response Team (RRT)*

- RRT should be fully equipped and will always be on standby for immediate deployment during the forest fire.
- They will provide the first incident response and combat all forest fires at the initial stage.
- The RRT will conduct assessment of the incident and report to the IFFCG, who will then take further decisions for suppression and containment of the fire.
- The RRTs will try to suppress the fire and call for backup based on the situation and status of the incident.

## 10. Roles and Responsibilities of agencies

### 10.1. Divisional Forest Office

- Conduct constant monitoring of fire incidences/outbreak in Mongar dzongkhag.
- Coordinate and mobilize the inter-agency man power/resources during the outbreak of forest fire/ fire in settlements/fire disasters.
- Lead Rapid Response Team and inform/alert IFFCG.
- Coordinate with local government, institutions and other agencies.
- Distribute fire fighting tools and equipment to fire fighters.
- Coordinate with Mongar Regional hospital for emergencies medical needs.
- Undertake post fire assessment and rehabilitation.

### 10.2. Royal Bhutan Police

- Provide immediate support for firefighting.
- Support with water tanker/fire brigade
- Facilitate the traffic movement during fire disaster.
- Support in apprehension of culprits responsible for setting forest fire.

### 10.3. Dzongkhag Administration.

- Advise and coordinate with local government on the fire incidences.
- Support transport and mobility of fire fighters.
- Provide backup force with man power.

### 10.4. Local Government (LG)

- Advocate forest fire awareness to general public through available communication forum.
- Ensure all public are well informed about the risk of fire during lockdown and its consequences.
- Mobilize and inform the nearest settlement for immediate response.
- Based on situation, LG will coordinate to deploy local community for fire suppression.

### 10.5. Desuung

- Immediate support of manpower during fire outbreak.
- Provide first aids safety to fire fighters.
- Implement **COVID-19** protocol during fire fighting.

### 10.6. Bhutan Power Corporation.

- To clear branches and canopy along the transmission corridor.
- Joined RRT, if fire incidences are from electric source.
- Support manpower for fire suppression.
- Provide transport and mobility for forest fire fighters.

### 10.7. Park Ranges (BWSn& PNP)

- Conduct constant monitoring of fire incidences/outbreak during lockdown period.
- Provide support and backup to division team as and when required.
- To be always on standby during lockdown period to attend forest fire incidences.

### **11. Coordination and Communication**

- For any report on forest fire incident, IFFCG members should use online forum, (WhatsAPP group) for communication and coordination.
- All IFFCG members will be responsible for coordinating all communication requirements for their respective agencies

### **12. Fire Fighter Safety (*SAFETY FIRST*)**

- All fire fighters are responsible for their own safety.
- All fire fighters should work collectively at the incident site to ensure safety of other fire fighters and other people in the area.
- On the incident site everyone should be aware of possible hazards and identify methods to eliminate, reduce or avoid them

### **13. Water Tankers**

- It is necessary to arrange water tankers when fire incidents occur in or around accessible road.
- RBP will take lead role on the arrangement.
- Dzongkhag Administration will support with tanker/syntax as per the needs.

**Table 1. Equipment Required for RRT**

<b>Sl No</b>	<b>Name of Equipments</b>	<b>Quantity</b>	<b>Remarks</b>
1	Shovel	2	
2	Flappers	10	
3	Fire Rake	2	
4	Spade	2	
5	Water bag Pump	5	
6	Water bottle		
7	Whistle	10	
8	Small bag		
9	Safety Ropes		

**Table 2. List of Individual PPE & Equipment**

<b>Sl No</b>	<b>Name of Equipments</b>	<b>Remarks</b>
1	Fire mask	
2	Gloves	
3	Safety Goggles	
4	Whistle	
5	Safety Helmet	
6	Water bottle	
7	Torch	
8	Knife/Patang	
9	Safety Ropes (4m)	

**Table 3: Inter-Agency Forest Fire Coordination Group (IFFCG), Mongar Dzongkhag**

Sl.#	Agency	Focal (by Position)	Focal (Current)	Remarks
1.	Dzongkhag Administration	Dasho Dzongdag	Dasho Ugyen Sonam,17610306	
2.	Royal Bhutan Police (RBP)	SP	Lt Col. Karma Dorji 17110525	
3.	Dept. of Forest and Park Services (DoFPS)	CFO, Mongar Forest Division	Karma Tempa, 17603552	
4.	DDMO (Disaster)	DDMO	Karma, 17691062	
5.	Desuung	Regional Coordinator	Tshering Wangchen 17730930	
6.	RSTA	RTO	Lhendup dorji	
7.	DoR	Chief Engineer	Kinzang Dorji, 17841735	
8.	BPC	Engineer	Karma Wangzom, 17828534	
9.	Geog Administration	Concerned Gup		
10.	Health	DHO	Tshering Dorji, 17613248	
11.	Other Agencies/Regional Offices			

**Table4: Rapid Response Team (RRTs)**

Sl No	Name of Agency	Focal	Head counts	Contact No
1	Dzongkhag Administration	DDM	5	
1	Divisional Forest Office	CFO	10	
2	Royal Bhutan Police	OC	10	
3	Desuung	Gojay	10	
4	BPC	Manager	2	
5	Geogs	Gup	10 each	
6	Other Agencies			

**Table 5: Current Gup and their contact number under Mongar Dzongkhag**

<b>Sl No</b>	<b>Name of Gup</b>	<b>Geog</b>	<b>Contact Number</b>	<b>Remarks</b>
1	Tshewang Dorji	Balam	17895080	
2	Tashi Dendup	Chali	17848687	
3	Tenzin Dorji	Chasikhar	17838737	
4	Yeshey	Drametse	17851931	
5	Sonam Phuntsho	Drepong	17130823	
6	Tshewang Tobgay	Gongdue	17383492	
7	Rinchen Norbu	Jurmey	17460166	
8	Pema Chedup	Kengkhar	17810755	
9	Tenzin Wangchuk	Mongar	17319232	
10	Dechen Zangmo	Narang	17775867	
11	Ugyen Yangzom	Ngatsang	17687788	
12	Sonam	Saling	77400167	
13	Dorji	Sherimung	17610700	
14	Dorji Wangchuk	Silambi	17978848	
15	Changa	Thangrong	17722128	
16	Karma Sonam Wangchuk	Tsakaling	17130445	
17	Sonam Phuntsho	Tsamang	17706422	

*\*\*\*Important Note: “subject to COVID-19 high alert zone” shall mean that no one from the community designated as Covid-19 Red zone will be involved.*