

THE ROYAL GOVERNMENT OF BHUTAN

TRONGSA DZONGKHAG

དཔལ་ལྷན་འབྲུག་ཁྱུང་།

རྫོང་གསར་ཆོང་ཁག།



རྫོང་ཁག་རྒྱུན་དུ་འཛིན་སྐྱོང་དང་འབྲུང་ཤེས་པའི་ཐབས་ལམ་འཆར་གཞི།

Dzongkhag Disaster Management and Contingency Plan

April 2022

## **Vision and Mission of Trongsa Dzongkhag**

### **Vision:**

"A socio-economically vibrant Dzongkhag living in harmony with nature"

### **Mission:**

- a. Ensure efficient and effective service delivery
- b. Enhance economic prosperity and social well being
- c. Preserve and promote the rich cultural and heritage
- d. Protect and conserve the natural resources

### **Objectives:**

- 1. To enhance food and nutrition security
- 2. To improve health status of the communities
- 3. To enhance adult literacy and enrolment with higher learning outcomes
- 4. To improve urban amenities
- 5. To enhance and strengthen local economy
- 6. To keep Dzongkhag and Gewog Clean
- 7. To preserve and promote traditional heritage in the Dzongkhag
- 8. To enhance efficiency and effectiveness of public service delivery
- 9. To ensure availability of timely, relevant and reliable data/information at the Dzongkhag Level
- 10. To reduce corruption.

## Background

As the vision of the Dzongkhag states “*A socio-economically vibrant Dzongkhag living in harmony with nature*”, every individual under Trongsa Dzongkhag Administration works hard with great endurance and dedication to achieve the vision within a short span of time by achieving plan target percent providing service to all stakeholders.

Trongsa Dzongkhag is located amongst the young mountains and it is always at high risk from different types of natural hazards that pose varying degrees of threat to the lives and resources of the people.

Trongsa is also vulnerable to recurrent and seasonal hazards such as landslides, flash floods, windstorms and forest fires, which account for huge damage and loss on a continuing basis. The effects of climate change further impact seasonal hazards.

## Acronyms

CBDRM	Community Based Disaster Risk Management
DDM	Department of Disaster Management
DDMC	Dzongkhag Disaster Management Committee
DM Act, 2013	Disaster Management Act of Bhutan, 2013
DM	Disaster Management
DT	Dzongkhag Tshogdu
GNH	Gross National Happiness
GT	Gewog Tshogde
HVCA	Hazard, Vulnerability and Capacity Assessment
NASART	National Search and Rescue Team
NDMA	National Disaster Management Authority
RBP	Royal Bhutan Police
SDMP	School Disaster Management Plan

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## **Introduction**

Dzongkhag Disaster Management Committee, Dzongkhag Administration Trongsa hereby prepared a comprehensive set of Dzongkhag Disaster Management Contingency Plan to provide clear directions and its responsibilities during the emergency response operations.

This is also in line with the Disaster Management Act of Bhutan 2013, Chapter 7, Section 77, *“The Dzongkhag Disaster Management Committee shall prepare a Dzongkhag Disaster Management and Contingency Plan for its Dzongkhag in consultation with the Local Government within its jurisdiction”*.

This DMCP will clearly establish the standard plan and procedure that had to be followed by the relevant Stakeholders during an emergency response. This will also provide a mechanism to ensure the responsibilities of DDMC members and relevant agencies during the event of emergency. This plan will establish daily behavioral guidelines and rules for safe operations and enhancement of required training, operational proficiency and elevate the liabilities to the responders. This plan will be updated as and when deemed necessary.

## **Purpose**

The main purpose of the Contingency Plan is to ensure that the Trongsa Dzongkhag returns to its normal situation as early as possible after unexpected damages and disruptions caused by disaster events. The Contingency Plan also aims to prevent or minimize the losses to lives and resources in other words be better prepared by already designating key staff with specific responsibilities in the context of recovery, restoration of facilities and operate the working place in an orderly manner.

## Objectives of Contingency Plan

The Contingency Plan main objectives are to:

1. Deliver effective, appropriate and timely response in emergency situations
2. Establish and strengthen linkages with the Dzongkhag level and to the national DDM
3. Develop strategic partnerships with other partners in order to prepare and respond effectively to emergency situations.
4. To have effective coordination among the stakeholders as first responders in emergency situations.
5. To be better prepared for any disaster events so that losses are minimized.

## Chapter 1: Overview of the Dzongkhag

### 1.1 Geography

Trongsa Dzongkhag is located in the Central region of the Country. The altitude ranges from (....) meters above sea level. Trongsa has an area of approximately 638.3 Km<sup>2</sup> and is noted for its gentle slopes and mild climates with its rich biodiversity. About 58% of the total land area is under Forest cover consisting mainly of broadleaf and Chirpine species. The vegetation is subtropical in the lower valleys and the temperate forest towards the North. The Common wild animals seen are Tigers, Leopard, Sambar, Black bear, Wild pigs, Gray langurs.

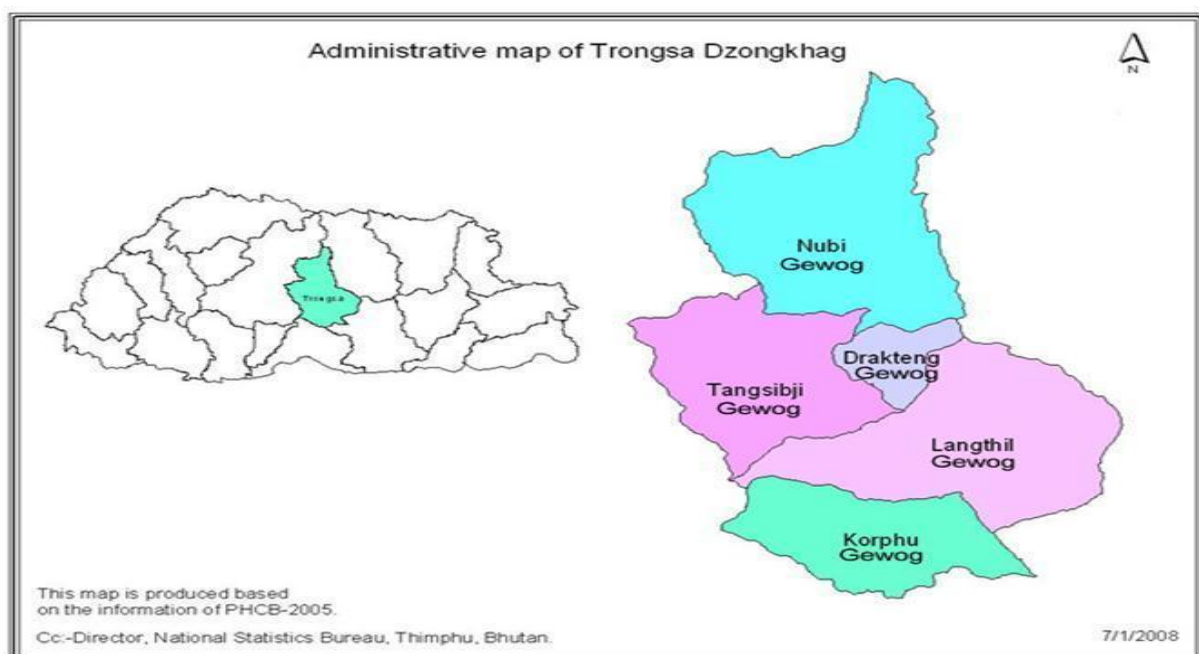




Figure 1: Dzongkhag Boundary Map

### ***1.2 Administrative Profile***

The administrative structure is of two levels of Local Government administration- the district administrations, and block administrations. The Dzongkhag is currently divided into 5 Gewogs, further divided into Chewogs. Under the provision of LG Act 2009, the dzongkhag has established Dzongkhag Tsogdue with respective Gewog Tshogdes. The system of GTs and DT fosters a sense of participation and responsibility for a successful implementation. Moreover, for implementation of all planned activities the dzongkhag and geows are being equipped with civil servants.

### ***1.3 Weather and Climate***

The Dzongkhag has two major climatic conditions. Summer is usually hot and wet while winter months are dry and cold. Heavy rainfall is expected in the month of June-August which leads to abundant water flow causing landslides and floods in various areas. Cold winter starts from October till February. The temperature ranges from 20-37 degree Celsius.

### ***1.4 Economy***

The main source of income of the Dzongkhag is Agriculture and livestock farming. The Dzongkhag has fertile land and a suitable climate for agricultural production, making it one of the major producers of mandarin and cardamom in the country. All the Gewogs are connected by farm road and telecommunication networks, and electricity except for few far flung areas.

### 1.5 Demography

<b>GENERAL INFORMATION</b>	
Total Area (sq km)	1807
Forest cover (%)	87.15%
Location of Dzong	Chhokhor Rabten Tse
<i>Source: Land Cover Mapping Project report 2010</i>	
<b>Administrative units</b>	
Dungkhag	00
Thromday	01
Gewogs	05
Chiwogs	25
Villages	87
Gungtong	79
Households <sup>1</sup>	3690
Population <sup>2</sup>	22276
<i>Note: 1. Households is based on PHCB 2017 report.</i>	
<i>2. Population is based on Dzongkhag population projection 2017-2027</i>	
<b>Local Government</b>	
Gup	05
Mangmi	05
Gewog Administrative officer	05
Tshogpa	25
Dzongkhag Tshogdu Member	11
Gewog Tshogde Member	35

## **Chapter 2: Dzongkhag Disaster Management System**

### ***2.1 Dzongkhag Disaster Management Committee (DDMC)***

As per clause 24 of the Disaster Management Act 2013, the Dzongkhag Disaster Management Committee is constituted as follow;

1. Dasho Dzongdag, Chairperson (ex-officio)
2. Dasho Dzongrab, Deputy Chairperson
3. DT Chairperson, member
4. Dzongkhag Welfare Officer, member
5. **Gups of all Gewogs, (concern Gewog) member**
6. Thromde Thuemi, member
7. SP, RBP
8. Drungchen, Dratshang
9. Dzongkhag Disaster Management Officer, Member Secretary
10. Dessung Coordinator

Other members co-opted in accordance with the rules framed under the DDM Act 2013. The following members will be co-opted members as and when necessary.

11. Joint Managing Director, MHPA
12. Managing Director, THyE
13. Executive Chief Engineer, DoR
14. Manager, RICBL
15. Manager, BPC
16. In charge, BTL
17. Base In charge, RSTA
18. Dzongkhag Planning Officer
19. Dzongkhag Agriculture Officer
20. Dzongkhag Forestry Officer
21. Dzongkhag Finance Officer

- 22. Dzongkhag Health Officer
- 23. Dzongkhag Engineer
- 24. Dzongkhag Environment Officer
- 25. Dzongkhag Static Officer

## ***2.2 Contact Details of Dzongkhag Disaster Management Committee (DDMC) Members***

Table: The contact details of DDMC members and co-opted members.

Sl. No.	Members	Name	Contact No.
1	Chairperson – Dzongda	Phub Rinzin	17603521
2	Deputy Chairperson - Dzongrab / Dzongkhag Kidu Officer	Tshewang Rinzin, (Offtg.)	17777107
3	Dzongkhag Disaster Management Officer	Tshewang Norbu	17779463
4	<b>DT Chairman</b>	<b>Gembo Drukpa</b>	<b>17115537</b>
5	<b>Drakteng Gup</b>	<b>Dubala</b>	<b>17535871</b>
5	<b>Korphu Gup</b>	<b>Sangay Khandu</b>	<b>17538006</b>
6	<b>Langthel Gup</b>	<b>Rinzin Wangchuk</b>	<b>17737437</b>
7	<b>Tangsibjee Gup</b>	<b>Jigme Namgyel Tangbi</b>	<b>17745929</b>
8	<b>Nubi Gup</b>	<b>Pema Lhamo</b>	<b>17713136</b>
9	Superintendent of Police	Sangay Penjor	77281514
10	Dratshang Drungchen	Sonam Yeshi	17113811
<b>Co-opted Members.</b>			

11	MHPA JMD	Chencho Dorji	17608030
12	THyE MD	Ugyen Namgyel	17141118
13	Executive Chief Engineer, DoR	Ugyen Dorji	17164074
14	Manager, RICBL	Tshering Gyeltshen	17610173
15	Manager, BPC	Ugyen Thinley	167643271
16	In charge, BTL	Kinley Tshering	17113185
17	Dzongkhag Environment Officer	Dorji Khando	17684956
18	Dessung Coordinator	Gem Tshering	17694967
19	Base In charge, RSTA		17790008
20	Dzongkhag Planning Officer	Phuntsho Rinzin	17824828
21	Dzongkhag Forest Ranger	Jigme Tshering	17654531
22	Dzongkhag Finance Officer	Ugyen Dema	17615350
24	Dzongkhag Health Officer	Dorji Gyeltshen	17572256
24	Dzongkhag Static Officer	Sonam Wangdi	17778785
25	Dzongkhag Chief Engineer	Tharchin	17685895
26	Dzongkhag Education Officer	Tshewang Penjor	17629985
27	RNR (DAO, DLO)	Karma Wangchuk Jigme Chopel	17304155 77866096

### ***2.3 Functions of DDMC***

The DDMC shall be responsible for coordinating and managing all disaster management operations in the Dzongkhag under the direction and supervision of the National Disaster Management Authority (NDMA). The DDMC and Chairperson shall function as mandated under section 31 & 38 of DM Act 2013.

In line with clause 31 of DM Act 2013, the DDMC shall:

- a) Prepare, review, update and implement the Dzongkhag Disaster Management and Contingency plan
- b) Monitor and evaluate measures taken for prevention, mitigation, preparedness, response, recovery and capacity building by each sector in the Dzongkhag
- c) Ensure establishment and functioning of the Dzongkhag Emergency Operation Center
- d) Ensure mainstreaming of disaster risk reduction into the development plan, policy, program and project
- e) Ensure compliance of the approved hazard zone and vulnerability map
- f) Ensure the enforcement of structural and non-structural measures
- g) Ensure that information about an event or a disaster is promptly communicated to the NDMA, DDM and all concerned.
- h) Ensure that the damage assessments in the field are carried out professionally and efficiently without fear or favor
- i) Coordinate and support disaster response and relief operation including recovery and reconstruction
- j) Ensure that detailed reports and regular updates on disaster event is provided to the DDM upon completion of field assessment of the situation
- k) With the support of the DDM promote education, awareness, capacity building and community training on hazard, risk, vulnerability and measures to be taken by the community to prevent, mitigate and respond to disaster
- l) Conduct regular mock drill
- m) Report on a quarterly basis to the NDMA on the progress of implementation of its DM plan

- n) Perform such other function as may be prescribed under the Act or any law in force or as directed by the NDMA/ DDM.

additional responsibilities:

- o) DDMC should get clear timeframe for response from DDM base on DDMC report.  
(suggesting for max. 10 working days)

In the case of a disaster, the Chairperson of the DDMC may exercise all or any of the functions of the DDMC, subject to ex post facto ratification of the Committee.

The DDMC is mandated to meet at least twice a year and to frame rules and regulations concerning the conduct of its meeting.

#### ***2.4 Functions of DDMC Chairperson***

1. The Chairperson of the DDMC shall exercise and discharge such functions of the DDMC as the committee may delegate

2. Without prejudice to the generality of the provision contained in section 37 of this Act, the **Chairperson of the DDMC shall:**

- a) Regularly review and assess the effectiveness of DM Plan.
- b) Ensure decision and policy formulated by the DDMC is implemented.
- c) Ensure that disaster risk reduction and disaster management activities are consistent with Disaster Management Strategic Framework.
- d) Provide prompt information on a disaster or an impending disaster situation to the DDM.
- e) Provide regular updates and detailed reports on a disaster event to the DDM upon completion of filed assessment of the situation.
- f) Manage response and relief operation in accordance with the directives issued by the national Disaster Management authority; and
- g) Coordinate delivery of services and resources to disaster affected communities.

## 2.5 DISASTER MANAGEMENT STRUCTURE

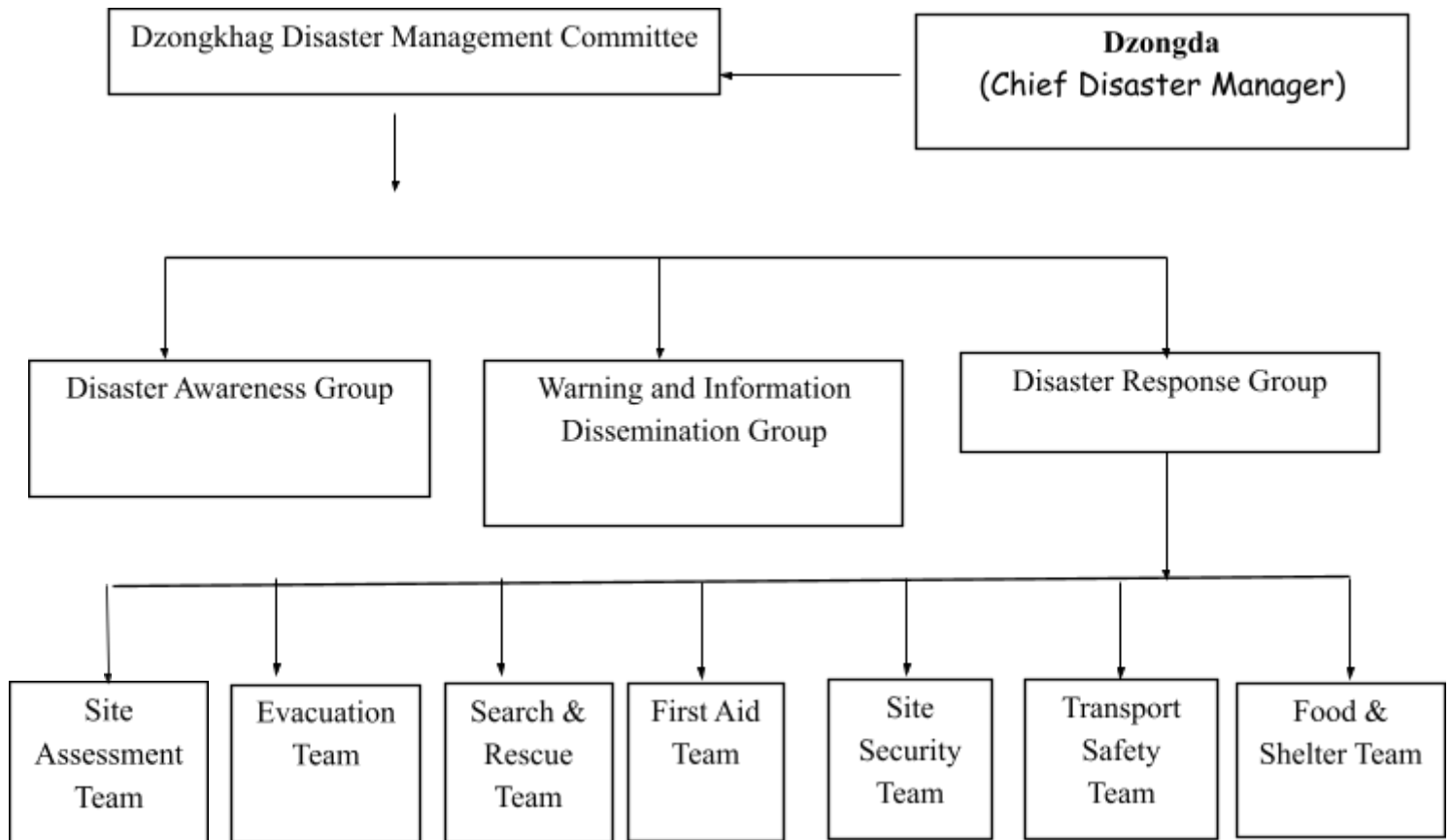


Figure 2: Dzongkhag Disaster Management Structure

**Note: Dzongkhag shall ensure to build the capacity of all the Gewog leaders to come up with similar plans for disaster preparedness.**

## 2.6 Disaster Management Subcommittee

The DDMC may, if it considers necessary, constitute a subcommittee at the Dungkha, Thromde or Gewog level to assist the DDMC in the performance of its functions under the DM Act of Bhutan 2013. The DDMC may frame rules and regulations under this Act to determine the composition and function of a sub-committee constituted under section 35 of the DM Act.



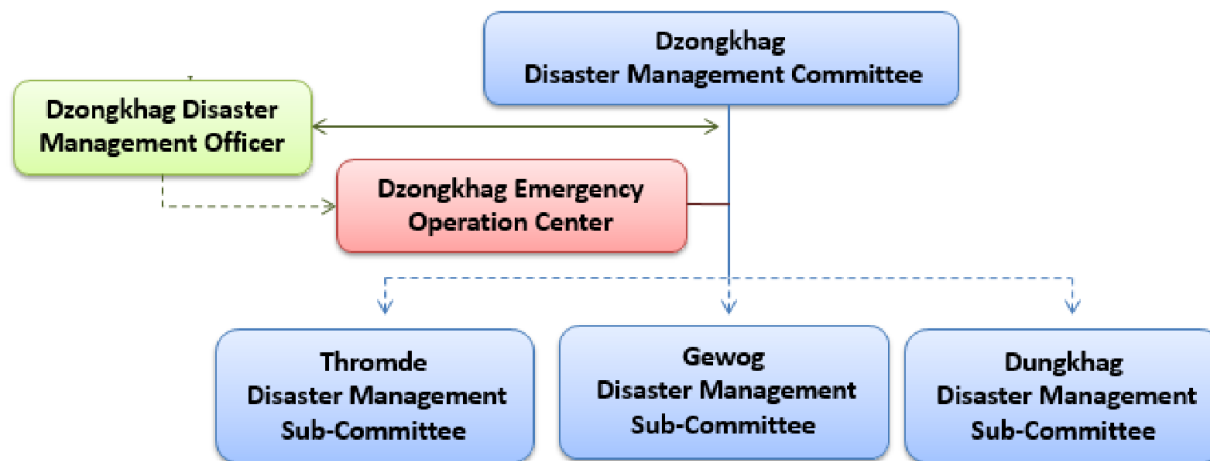


Figure 3: Dzongkhag Disaster Management Subcommittee

In line with the provisions of the Act, Disaster Management Sub-Committees have been formed in all Gewogs

## 2.7 Dzongkhag Emergency Operation Center (DEOC)

1. Dzongda: Phub Rinzin 17603521
2. Offtg. Dzongrab: Tshewang Rinzin 17164448
3. RBP OC: Pema Jamtsho 17951405
4. Dzongkha Disaster Management Officer: Tshewang Norbu-17779463
5. Desuung Coordinator: Gem Tshering 17694967
4. Ambulance No: 112
5. Doctors phone No: Surash Mokhai 17946181
6. BPC No. 17643271
7. Telecom No. 17163603

### Chapter 3: Disaster Risk Profile of Dzongkhag

Trongsa Dzongkhag has experienced several disasters over the last 20 years, the most devastating being the September 18, 2011 Sikkim earthquake of M 6.7, which caused widespread damages to rural homes and government infrastructure. The other major and recurrent hazard has been landslides causing extensive damage to private and public infrastructure. The Hazard Vulnerability and Capacity Assessment (HVCA) process carried out for the Gewogs also identified other hazards such as – forest fire, structural fire, flood, landslides, thunder storms and pests and diseases. The HVCA of Trongsa Dzongkhag, as per consultations with the community, is presented below:

#### *3.1 Hazard Assessment*

Sl no.	Hazard	Secondary Hazard	When it could occur	Probability of Occurrence	History of Past Disaster	Impact
1	Wind Storm	Structural Fire	at any time	Medium		Public and Private Infrastructures
2	Landslides	Flash Flood	March, April, May, June	High	2020, 2021	Public and Private Infrastructures, Firm roads, Private Lands
3	Structural Fire	Forest fire	During Winter Season	Medium		Public and Private Infrastructures
4	Bush Fire	Structural fire	During Winter Season	Low		Public and Private Infrastructures

5	Lightning and Thunder	Structural fire/forest fire	Summer season	Low		Public and Private Infrastructures
6	Earthquake	Landslide, Structure damage	Anytime	High		Public and Private Infrastructures, Firm roads, Private Lands
7	Flood	Landslides	June to August	High		Public and Private Infrastructures, Firm roads, Private Lands

### 3.2 Vulnerability Assessment

SL no.	Hazard	Element at risk	Why they are at risk	How will they be affected
1	Wind Storm	Structure and crops	1. Rural Homes and dwelling built temporally in nature. 2. Temporary Roofing 3. Lack of proper anchorage 4. Lack of 'Lung-go' (wind to pass through)	Roofing will be blown off. Structures collapse. Lives lost/injury
2	Landslides	All rural homes	1. Houses located in terrain 2. Monsoon is heavy in this dzongkhag	Properties and lives will be lost.

3	Structural Fire	People and property (Trongsa town, the Dzong, dratsang, government Infrastructures and rural homes)	1. Poor wiring, old and clustered structures 2. use of butter lamp, heaters and firewood 3. Carelessness. 4. Due to natural causes like lightning and thundering.	Property Lives
4	Forest Fire	Houses and Environment	1. Carelessness while burning debris 2. Dry season	Properties and lives will be lost.
5	Lightning and Thunder	People and property	1. Working in paddy field and Domestic Animals	Property and affect human lives
6	Earthquake	1. Traditional houses 2. Dzong and Lhakhangs	Traditional houses are not constructed as per Standards and codes	Collapse/ cracked Live lost/ injury
7	Flood	People, properties, livestock	Settlement near Streams, Bji Zam, Chendebji, Semjoling.	Damage property and human lives will be affected.

## Chapter 4: Disaster Response Strategy

### *4.1 Activities to be Undertaken before an Emergency*

Sl. No.	Activities	By Whom	When
1	Mock Drills	All stakeholders/school principals	Twice a year
2	Advocacy/information dissemination	Awareness team	Once a year
3	Dissemination of DDMCP to all stakeholders	FP of respective areas	March and October
4	Video clips on earthquake, fire, landslide, flood ect	Awareness team	Once a year
5	Hazard hunt [structural, non structural and mitigation]	Respective coordinators	February to March
6	Review of DDMCP on disasters plan	DDMC	As and when required

### *4.2 Activities to be Undertaken during an Emergency*

Sl. No.	Activities	By Whom	When
1	Evacuate the victims to the evacuation site.	Evacuation Team/ SAR Team	During and After the disasters.

#### ***4.3 Activities to be Undertaken after an Emergency***

Sl. No.	Activities	By Whom	When
1	Roll call and report to the incident commander	By respective coordinators	After the emergency
2	Activate Disaster Response groups	Search and Rescue Team	After the emergency
3	Structural damage and casualties assessment	Assessment Team	After the emergency

#### ***4.4 Disaster Mitigation Activities to be Undertaken***

Sl. No.	Activities	By Whom	When
1	Hazard hunting and mitigating	Respective coordinators	January-December

#### ***4.5 Disaster Awareness Team***

Members of this group are responsible for raising awareness among the stakeholders and the general public through information dissemination and conduct of awareness activities.

Sl. No	Members Name	Contact No.	Remarks
1	Tshewang Norbu	17779463	Team Leader
2	Tharchin (Chief DE )	77487363	Member
3	Tshewang Penjor (Chief DEO)	17629985	Member
4	Tshering Gyeltshen (Fire In-Charge)	17874741	Member

5	Gem Tshering (Desuup Coordinator)	17694967	Member
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#### ***4.6 Warning and Information Dissemination Team***

Members of this group are responsible for Monitoring and taking regular updates from DEOC. Inform the authorities of any impending hazardous situation. Post warning signals have different warning levels at prominent and designated places. Disseminate information to all the stakeholders and Coordinate with other teams and inform them about the latest weather/ warning situation.

Sl. No.	Member	Contact No.	Area	Remarks
1	Kuenzang Namgay (IT Officer)	17271466	Dzongkhag Store (DEOC)	Team Leader
2	Tshewang Dorji (Telecom Manager)	17163603		Member
3	Thinley Wangmo (IT Asst.)	17480606		Member

#### **4.7 Search and Rescue Team**

Members of this group are responsible to minimize the casualties during the disaster and to provide emergency aid to those affected by the disaster.

Sl. No.	Members	Contact No.	Remarks
1	Pema Jamtsho, OC	17951405	Team Leader
2	All Trongsa RBP		Member
3	All Trongsa Desuups		Member

4	All search and rescue members		Chencho Gyeltshen(17500507)
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#### ***4.8 First Aid Team***

Take care of the injured, provide First-Aid, record all cases and treatment given, and make necessary arrangements for referral to the nearest hospital and to identify and make stakeholders aware of the First-Aid service areas.

Sl. No	Members	Contact No.	Remarks
1	Dorji Gyeltshen (DHO)	17572256	Team Leader
2	All Trongsa medical teams (CMO)	<u>17381829</u>	Members

#### ***4.9 Evacuation Team***

Members of this group are responsible to evacuate the victims to the safer place during the disaster, to train the stakeholders how to behave themselves during the disasters and conduct mock drills for different disasters in coordination with other teams.

Sl. No.	Name	Contact No.	Remarks
1	Pema Jamtsho (OC)	17777107	Team Leaders
2	Tashi Dubjur (DCRCO)	17703319	Members
3	Sonam Wangdi (DSO)	17778785	Members
4	RBP personnels		Members



#### ***4.10 Transportation Team***

Members of this group are responsible to make necessary transportation arrangements of all the Victims during the emergency, find the shortest and most suitable route, Keep contact nos. of relevant personals. (RSTA, Traffic police, Doctors/DHO), take over the victims from the First Aid team, inform relevant agencies, handover to the concerned authorities and report the data of casualties to the incident commander.

<b>Sl.No.</b>	<b>Members</b>	<b>Contact no.</b>	<b>Remarks</b>
1	offtg. Dzongrab, Tshewang Rinzin	17777107	Team Leader
2	Tshewang Rinzin (MTO)	17777107	Member
3	All Dzongkhag Divers : Leki Tshering Sonam Dorji Sonam Norbu Passang Dorji Nima Wangchuk Uttam Rai	17908351 17870491 17343393 77299570 17585631 17671772	Member

#### ***4.11 Site Security Team***

Members of this group are responsible to identify the site to keep evacuated properties, identify entry/exit point, seal the entry gate, restrict people from entering the site, call police (traffic police) to manage the traffic, ensure to look after the evacuated materials till the relocation team takes over, inspect all the entry and exit point, report to the Incident Commander.

<b>Sl.No.</b>	<b>Members</b>	<b>Contact no.</b>	<b>Remarks</b>
1	Sangay Penjor (SP)	77281514	Team Leader

2	Tashi Dubjur (Census Officer)	17646112	Member
3	Cheten Zangmo (DLRO)	17663548	Member
4	Nima Thinley (Store Asst.)	17647873	Member
5	Culture Officer		
6	Tensung Lobey		

#### ***4.12 Food, Shelter and Relief Team***

Members of this group are responsible for making necessary arrangements of food and shelter for the victims during an emergency, asking and arranging food supplies and necessary items from relevant agencies ,taking care of the displaced stakeholders and providing psychosocial care.

<b>Sl.No.</b>	<b>Members</b>	<b>Contact no.</b>	<b>Remarks</b>
1	Karma Wangchuk (DAO)	17304155	<b>Team Leader (Food)</b>
2	Jigme Chopel (DLO)	77866096	Member
3	Lemo (FCB Manager)	17416786	Member
4	Tharchin (Chief DE)	17685895	<b>Team Leader (Shelter)</b>
5	All Engineers		Member
6	Ugyen Dema ( FO )	17615350	Member
7	Dzongrab / Kidu Officer		<b>Team Leader (Relief)</b>
8	Cheten Zangmo, (DLR)	17533356	Member (Demobilization)

#### ***4.13 Assessment Team***

Members of this group are responsible to carry the assessment and prepare the reports for further submission.

<b>Sl.No.</b>	<b>Members</b>	<b>Contact no.</b>	<b>Remarks</b>
<b>1</b>	Tshewang Norbu (DDMO)	17685490	<b>member</b>
<b>2</b>	Tharchin (Chief DE)	17685895	<b>member</b>
<b>2</b>	Phuntsho Rinzin (Planning Officer)	17824828	<b>Team Leader</b>
<b>3</b>	Relevant Sectorhead if required		
<b>4</b>	Site Engineer		
<b>5</b>	RICBL Manager if required	17610173	

#### ***4.14 Resource Keeping Team***

Members of this group are responsible to arrange the emergency kits before-hand and keep the materials available all the time to supply during the disaster time.

<b>Sl.No</b>	<b>Name</b>	<b>Contract No.</b>	<b>Remarks</b>
<b>1</b>	Karma Wangdi (Internal Auditor)	17524030	Team Leader
<b>2</b>	Pema Chophel (Procurement Officer)	17728483	Member
<b>3</b>	Disaster Management Officer	17779463	Member

#### 4.15 Identified Temporary shed construction area during major Disasters

Sl.No	Gewog	Identified area
1	Korphu	Football ground (Nimshong and Nabji PS)
2	Langthel	Football ground (Langthel LSS and Tongtophey PS)
3	Drakteng	Football ground/CLCS Ground (Samcholing HSS, Taktse HSS)
4	Nubi	Football ground (Bemji PS)
5	Tangsibjee	Football ground (Tsangkha HSS, Chendebji PS)
6	Choethrom	Football ground (Sherubling HSS)

#### 4.16 Suggested Resources for procurement (Equipment)

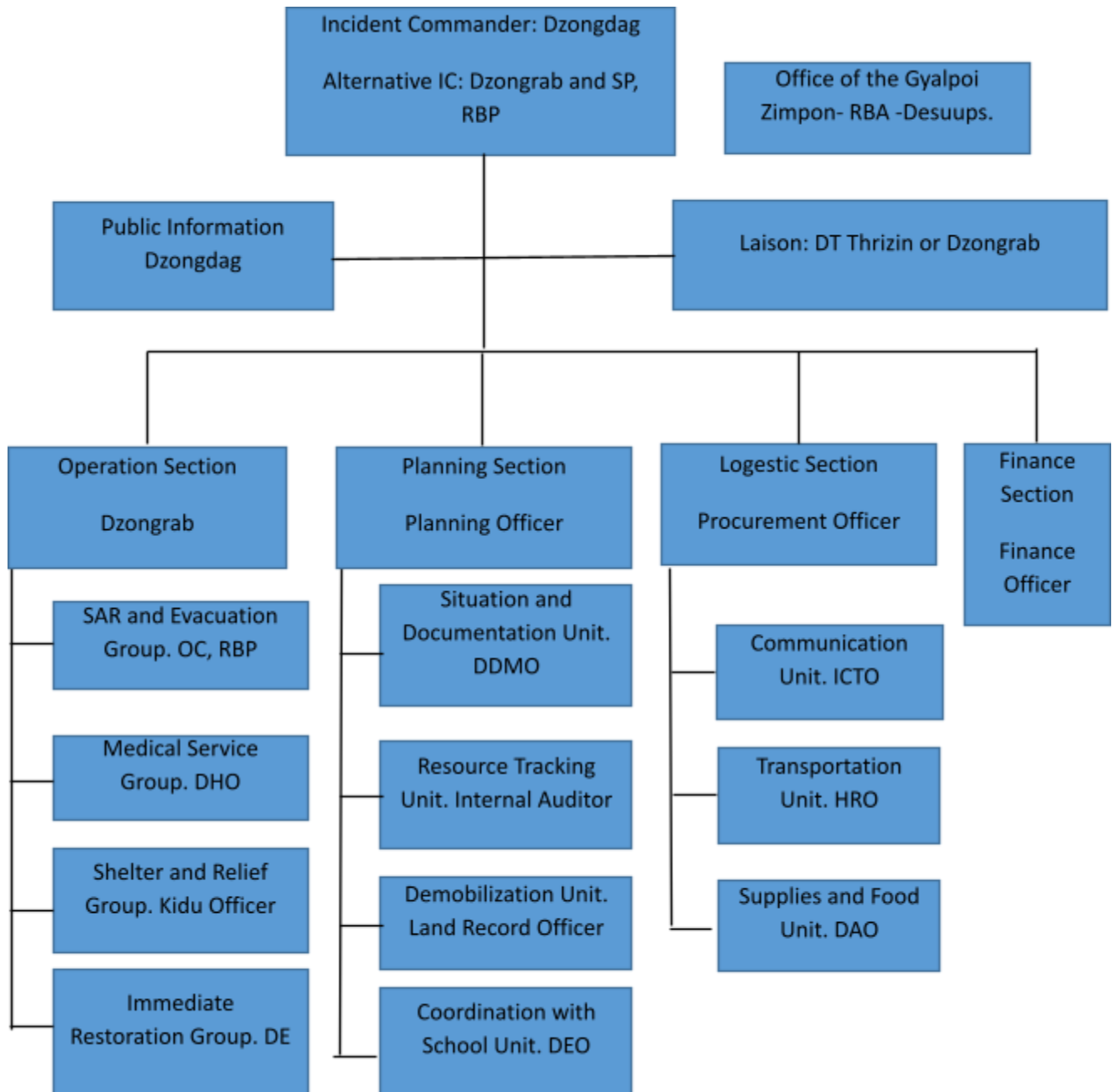
Sl. No	Materials	Existing	Required	Remarks
1	First aid boxes	0	5 nos	
2	Ladders	0	5 nos	
3	Fire Extinguisher	10	20 nos	procured
4	Tent	0	10 nos	
5	Jute rope	0	10 kg	
6	Fixable Water pipes	0	10 bundles	
7	Buckets	0	20 nos	
8	Siren/Whistle	0	5 nos	

9	Helmet	0	50 nos	
10	Stretcher	0	5 nos	
11	Search light	0	10 nos	procured 3 nos.
12	Tarpaulin sheet	0	25 nos	
13	Water sprinkle	0	10 nos	
14	Disaster rope	0	200 kg	
15	Nails	0	25 kg	
16	Potable Mike	0	6 nos	
17	Pliers	0	10 nos	
18	Spade	0	25 nos	
19	Crowbar	0	15 nos	
20	Drilling Machine	0	4 nos	
21	Hammer	0	25 nos	
22	Saw	0	25 nos	
23	Patang	0	25 nos	
24	Shovel	0	25 nos	

**Note: Mini Power chain (5nos), Electrical fittings, Sintex, motorolla set, life Jackets, solar lamp, Generator,**

## Chapter 5: Incident Command System

The Incident Command System (ICS) is a standardized approach to the command, control, and coordination of emergency response providing a common hierarchy within which responders from multiple agencies can be effective. The following is the proposed incident command system of the Dzongkhag. The responsible person under various job delegations needs to be identified.



: Incident Command System

## ***5.1 Various functions under ICS***

### **5.1.1 Incident Commander**

- Responsible for entire team work to bring situation to normalcy with efficient coordination
- Responsible to keep Dzongkhag updated on the situation and report
- Liaise with DDM, Office of Gyalpoi Zimpon and higher authorities
- Act as a spokesperson of the Dzongkhag
- Overall supervision, coordination and central command of the disaster management activities.

### **5.1.2 Disaster Management Officer**

- Shall ensure emergency kits are made available
- Should be well versed with all the emergency routes and safety areas for the evacuation at sites
- Work closely with regional institutions.

### **5.1.3 SAR Team**

- Shall be directly under the control of the operation unit
- Shall be responsible for evacuation from vulnerable areas to the designated safe zone as per the given evacuation plans.
- Shall locate the missing personnel and evacuate them, however the rescuer safety is the top most priority

### **5.1.4 Functions of Planning under ICS**

- In smaller events, the Incident Commander is responsible for planning

- When the incident is of larger scale, the Incident Commander establishes the *Planning Section*.
- Collection, evaluation, dissemination, and use of information about the development of the incident and status of re-sources.
- Creation of the Incident Action Plan (IAP), which defines the response activities and resource.
- Utilization for a specified time period.

#### **5.1.5 Functions of Operation Section under ICS**

- Carry out the response activities described in the IAP.
- Coordinates Operations Section activities.
- Primary responsibility for receiving and implementing the IAP.
- Reports to the Incident Commander
- Direct and coordinate all operations, ensuring the safety of Operations Section personnel
- Keep the Incident Commander informed of situation and resource status within operations.

#### **5.1.6 Functions of Logistic Section**

- Food, Water, Shelter, electricity and other Emergency requirement.
- Post Incident Recovery (Restore to electricity, communication, water and road)

#### **5.1.7 Functions of Finance and Administration**

- Is critical for tracking incident costs and reimbursement accounting.

**Note: line of reporting**



**need to distr**

## **Annexes**

1. SOP on Trongsa Dzong Fire Safety.
2. Covid -19 Contingency Plan

**STANDARD OPERATING PROCEDURE ON TRONGSA DZONG FIRE**  
**SAFETY**

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5	Strategic Prevention of fire in Dzong	
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9	Firemen general Code of Conduct	
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## **Background History of Trongsa Dzong**

Trongsa Dzong was built in 1644 by Second Druk Desi Chogyel Minjur Tempa. It was a seat of all the power of the Wangchuk dynasty for the centuries. This Dzong represents the significant of Bhutan's precious Institution of Monarchy. It was in this Dzong where the future Kings of Bhutan first formalized their ascension as a Trongsa Penlop (governor) of this Dzong before ascending to the Golden Throne. The Dzong holds a unique honor of being the largest Dzong in the country and located in the center of the country having an easy control over eastern and central regions in the past. The Trongsa Dzong is a symbol of Bhutan's rich cultural and religious heritage, sacred monument and a vital installation that needs to be preserved and resolute from any kinds of hazard and disaster. Today, the Dzong houses the district administrative center and it's a home for second largest monastic body. Inside the Dzong, there are more than 25 important lhakhangs and its Nangtens (relics).

For around last 460 years, the Dzong is well secured from the fire hazards and today we need to further safeguard the Dzong with the strategic plans while the fire outbreaks have become most rampant and caused easily.

Trongsa Dzong is geographically challenged as it is situated atop a steep ridge above the gorges of the mangde Chuu surrounded by the brutal terrains and the valleys.

## **Introduction**

Royal Bhutan Police, Trongsa division VII and Dzongkhag Administration Trongsa hereby come up with a comprehensive set of SOP to provide clear directions and its responsibilities in the emergency response operations.

This was also in line with the Royal Bhutan Police Act 2009 Section 122,

*“The Royal Bhutan Police shall have a Fire Service Division with the required unit in the Division Headquarters and Fire Stations in the Dzongkhag and municipal areas to provide professionalized fire and rescue services”.*

This SOP will clearly establish the standard of Fire Safety procedure that had to be followed and required by the fire personnel of RBP and the relevant Stakeholders during emergency response. This will also provide a mechanism to ensure the fire responsibilities of different agencies and procedures of firemen during the fire emergencies. This SOP will establish daily behavioral guidelines and rules for safe operations and enhancement of required training, operational proficiency and elevate the liabilities

to the responders. This SOP shall be followed by the fireman and other relevant stakeholders and it will be updated when deemed necessary.

## **Purpose**

The purpose of this SOP is to ensure the fire safety of Trongsa Dzong. It is basically to save the lives and properties of the Dzong from the blazing fire hazard. This set of SOP is subjected to prevention, safety and comfort and smooth service delivery during any fire emergencies. It is also aimed for ensuring the coordination and readiness for the firemen and the relevant stakeholders anytime.

## **Fire Resources & Equipment**

### **i. Fire Brigade**

#### a) Fire Personnel

13 including divers (on ground 5)

#### b) Fire Brigade/Tanker

02 (Japanese tanker with 1500 liters and Indian with 5000 liters.)

#### c) Total Manpower and Strength

02 Officers and 82 NCOs/ORs. (Strength of manpower subjected to change)

### **ii. Infrastructure and equipment inside the Dzong**

a) 20 water hydrants within Dzong (9 inside and 11 around the Dzong) with the reserved water tank with capacity of 5000ltrs with continuous flow of Thrupang water as a source/supply to DG pump.

b) All the smoke detectors are non-functional.

c) Total of 30 CCTV cameras installed and all functional as of 18/11/21.

d) All the 52 heat/smoke detectors are non-functional.

e) Stand Jet water Monitor 2 numbers.

f) There are 78 numbers of extinguisher which 34 are installed and rest are stored for additional purposes.

g) 11 numbers of extinguisher installed inside Dzongkhag administration and

- 23 numbers installed inside Dratshang/Temple.
- h) Portable water monitors 2 numbers.
- i) Indian Host Pipe 2 inches with 50m long 31 nos.

### **Inspection, operation & Installations**

- a) The Trongsa RBP shall inspect and operate each fire equipment and apparatus on a regular basis and after every use to ensure that equipment are clean, functioning properly, and safe to operate. Any unsafe or malfunctioning and mechanical problem of equipment and system shall be informed and mend by RBP with the financial technical support from the Dzongkhag Administration.
- b) For the fire safety system installations like fire alarm, smoke detectors, electric transformer for fire Hydrants, generator for water pump will be maintained by Dzongkhag Administration (Disaster Focal Person, Dzong maintenance unit) with assistance from RBP. This is based on the reference minutes of the Fire Safety Meeting dated 27<sup>th</sup> March 2017. RBP fireman and Dzongkhag Disaster Focal Person to ensure the all installation and equipment are mended and to keep them operational all the time for the Dzong Fire safety.

### **4. Inspection for the Preventive Measures.**

The Trongsa Dzong was installed with fire alarms, smoke detectors, water hydrants and water pumps for the fire protection system. In addition fire extinguishers and Close circuit TV are also installed round the Dzong. These fire protection systems are inspected, tested, maintained and checked on each day and we ensure readiness all the time. The fire alarming systems, Hydrants, fire brigades are also checked and maintained all the time in readiness to encounter the emergency. Therefore, ensures the constant readiness of the equipment and systems by the following inspection team.

#### **a) Inspection team inside the Dzong**

i) The Fire Security In charge and the Personnel posted at Dzong, Misup & one from Dratshang (migyen) are responsible for daily inspection and accordingly ensuring switching off lights, electrical appliances and other office equipment.

ii) The following team shall be responsible for forth-nightly inspection as per the annexure checklist inside the Dzong.

1/ Electrical eng/ technician

2/ Misugpa

3/ Dratshang Sungkhorp

4/ RBP

Team shall submit the monthly inspection report to respective Dasho Dzongda and SP.

iii) The inspection team shall serve warning to the defaulter for the first time and repeated users will be let to confiscate the restricted items.

iv) BPC is responsible for regular inspection and maintenance of incoming power supply lines and control gears towards Dzong.

v) While on test the parts of the systems should be checked and shall need to keep the record. Anything that needs to be maintained and repaired shall be informed to the Dzongkhag administration for immediate rectification.

**b) Weekly basis inspection of physical Equipment by RBP.**

i) The main water tank should be cleaned every week.

ii) The water source and the pipelines need to be checked and clean if there is blockage.

iii) The Fire extinguisher needs to be checked and monitored if anything unsafe or malfunctioning to operate.

iv) The DG pump and fire brigade shall be tested and run on a regular basis by the RBP fire team.

The IC shall maintain all the equipment and systems checked and submit to SP FSD on every Monday counter signed by OC.

### **C) Monthly Basis Inspection.**

- i) The OC and the Disaster Focal Person from the Dzongkhag and Dratshang Representative shall inspect the Dzong for any electrical short circuit, unsafe wirings, temporary electrical equipment used and other appliances in Dratshang and offices which will pose a risk of fire.
- ii) Any temporary and illegal electrical line used should be informed to concern and need to stop using the unprecedented risk materials.
- iii) The Dratshang Drungchen and Dzongkhag Disaster Focal personnel will brief their own monks and staff to maintain a check and balance with their premises and offices. The Police Fire Personnel will inspect all the hydrants and all types of fire extinguishers in presence of Dratshang representatives and Focal person to ensure the equipment and systems are maintained in constant readiness.
- iv) The inspected and checked fire protection equipment and systems are maintained in register and also submit the HQs FSD on every month.
- v) The Fire Safety Training and awareness shall be also conducted to the Dzongkhags staffs, Dratshang Monks, General public and to the Desups every after a month.

### **Fire Mock Drill Demonstration.**

Fire drill demonstration is a very effective means of ensuring the clear and smooth response to emergencies. It is also a mechanism to test the operational skills of the firemen and the alertness of the personnel. The demonstration program shall be coordinated by the OC after the notification is delivered to the stakeholders.

\* The similar warning alarm will be blown to evacuate the office staff and monks.

\* The firemen and other personnel will be carrying a normal duty to test the readiness of the firemen and personnel based on the time and distance covered within a given time.



\*Distance to emergency scene from fire duty station - 500mtrs.

\* Dzong Parking to Courtyard - 200mtrs

\* Time taken by the Fire Brigade to reach Emergency scene (Dzong) - 3 mins.

\* Time taken by firemen and personnel to reach the courtyard from parking - 3 mins.

\* The record should be maintained and updated for improvement in the next demonstration.

### **Roles and responsibilities in times of emergencies.**

#### **General roles of Dratshang.**

- ü Identify the specific Ku ngyers (caretakers) of the respective lhakhangs
- ü Ku ngyers to keep a clear note or record of all the Kuten and Nangtens for accountability during worse situations.
- ü Ku ngyers are responsible to offer a safe butter lamp (only one butter lamp) and incense in a metal box.
- ü Respective ku ngyers to put off the switches and follow fire safety protocols
- ü Inform the firemen of RBP or Dzongkhag administration if any defects found in any electrical appliances () and fitting in the temples or place of stay inside the Dzong.
- ü No self/in room cooking shall be allowed except Lam Neten, Umzee, Bumdhey lam and kudrung. (they will use rice cooker, instant water boiler, penal heater and electric stove). All the monastic monks shall dine in common dining which is located outside of the Dzong.
- ü Every monk should use penal heater instead of rod heater.
- ü Every ku ngyers shall be able to use the fire extinguisher which are placed in front of the each temples inside the Dzong. Ku ngyers shall be the first responsible person to use the fire extinguishers.

- ü Dratshang shall prepare tshog (for five temples, Gyembo, lhamoi, gyelpoi Sungkhorp, Garab wangchuk and mugtshen) as it is inside the Dzong. Rest will have to prepare outside in the common kitchen which Dzongkhag administration has identified the separate kitchen.
- ü Under no circumstances Dratshang and Dzongkhag Administration shall use LPG gas inside the Dzong.
- ü Dratshang will offer thousand butter lamp outside of the all the lhakhangs and the place to offer butter lamp shall be identified by the Dzongkhag Administration outside the Dzong.
- ü
- ü The Dratshang Drungchen to form a team comprising of RBP, Culture Officer and Dratshang Toensung to keep record of the each items rescued from specific lhakhangs while in evacuation process in emergency. Shall fix the accountability of the rescued items from these team members.
- ü The above team shall evacuate the nangtens/relics to safe place.
- ü Every kuten/ nangtens shall be placed under safe custody (RBP) and with ku nyger.
- ü If the fire outbreak is at Shargo location, the nangten evacuation team will rush out from Jango. If the fire outbreaks at lhogo, the evacuation will take from shargo (entrance door below court yard)
- ü Kudrung and teachers of the Dratshang has a responsibility to evacuate the younger monks to the safe place.
- ü Every Dratshang lops/monk to take Self defence in fire hazards.

### **General roles of Dzongkhag Administration**

- ü All the civil servants inside the Dzong shall be responsible for their respective offices to fire safety protocols such as;
- ü Switching off the lights while leaving the offices
- ü Should use penal heater instead of rod heaters.
- ü Safeguarding of the important documents in the respective offices shall be carried by concerned officers.
- ü No use of defective electric appliances
- ü Should be responsible for your own safety and your colleagues.
- ü Locate the exact point of fire outbreak.
- ü No self/in room cooking shall be allowed. However, instant water boiler is allowed in respective offices if deemed necessary.

- ü Fire extinguisher placed at respective offices shall be used by concerned staffs in the office who can react fast on time.
- ü All the office keys will be handed over misup after the office.

### **Fire Drill and Firemen Deployments (Only RBP)**

- a) There shall be two duties in the every shift. The IC (Alpha One) shall monitor the systems in the control room and the other duty Alpha Two shall make round the Dzong for any fire incidents, hazards, inspection, checking and locating the particular detectors. The duty roster shall be maintained and checked by SP/OC.
- b) Any fire alarm shall be reported to SP/OC/IC and under whatsoever condition NO fire alarms shall be left unattended.
- c) The proper handing taking of the duties shall be carried out during every shift.
- d) No other than the particular duty shall enter in the Dzong fire Control room.

### **Reporting Procedures during fire alarm (only RBP)**

#### **a) Duty Alpha I/(IC)**

- i) shall acknowledge the fire alarm and identify the location of the particular detector in the control room.
- ii) Immediately inform to Alpha II and give specific location of the detector.
- iii) Shall report the alarm incident to the OC immediately.

#### **b) Duty Alpha II.**

- i) Immediately the he shall rush to the exact location of the detector with the fire extinguishers.
- ii) Shall inform to Alpha I about the situation and the magnitude of the fire. (Small and big) and inform to the OC about the same.

**c) If fire is small.**

- i) OC and the IC along with fire personnel/ security personnel shall extinguish properly and ensure no further re ignition occurs.
- ii) The OC and the IC shall maintained a record with details of cause, damages, etc...
- iii) Inform concerned individuals and offices.

**d) If the fire is Big.**

- i) The OC shall rush to the location with the additional firemen/ fire personnel and tied up with the Alpha II and then immediately inform SP and Dzongda HQs, ADC and the disaster focal person for the necessary Coordination and support.
- ii) Inform or immediately alert the monks/ staff for the evacuation by any alarm such as bell and make to assemble at Dzong Parking.
- iii) Instruct foxtord I (pump operator) to rush to the pump house for the release of water.
- iv) Shall instruct Foxtord III for the fire Brigade / engine to get along with team at Dzong parking for supportive pump and etc..
- v) Instruct Foxtort II for the Hose Pipe layout and carry out a water hydrant operation immediately according to instructions.
- vi) The OC shall update timely report and information to HQs.
- vii) Response to the fire accident calls and conducts the suppression and protective operation, property conservation activities.

viii) Ascertain the cause of fire and submission of detailed reports to RBP HQs and concerned higher authorities.

ix) Monitors the firefighting duties, fire control rooms under the division.

x) Coordinates with the Dzongkhag Authorities for provision of water tank, water hydrant valves and related equipment.

xi) Execute the any other plans and orders issued from the HQs and intimate the HQs of works undertaken in division.

### **Firemen General Code of Conduct**

Firemen have the responsibility to:

a) Perform their duties to the very best of their abilities, in a manner that is efficient, cost effective, and meets the needs of the public.

b) Demonstrate integrity, honesty, and ethical behavior in the conduct of all department business.

c) Ensure that personal interest do not come in conflict with

official duties and avoid both actual conflicts of interest, and the appearance of conflicts of interest, when dealing with vendors; customers; and other individuals doing business or seeking to do business with the department (gratuities gifts, etc.).

d) Ensure that all the resources in hand, including budget, equipment, vehicles, and other property are used in strict compliance with policies and solely for the benefit of the division/Department.

e) Report for duty at the appointed time and place, fully equipped, fit, and able to perform assignments.

2) Officers and supervisors shall set the example for others and have a responsibility to ensure that their activities and decisions pertaining to public services and personnel actions.

### **Obedience to Orders**

- a) All Dzongkhag Staffs, Rabdhey and Police personnel/firemen should get familiar with the SOP.
- b) All RBP personnel and other uniform personnel (Desung) shall promptly and willingly respond to the lawful orders of superior officers abide by RBP rules and regulation 2012 and other guidelines.

### **Name list of the Temple and its Custodians of Trongsa Rabdhey**

<i>Sl.no</i>	<i>Name of Lhakhangs</i>	<i>Name of Custodian</i>	<i>Phone no</i>
1	Drolma Lhakhang	Lopen Ugyen	77204455
2	Damtshen Goenkhang	Lop Thubten Nima	17972897
3	Jampa Lhakhang	Lopen Dorji	77621565
4	Kunrey Lhakhang	Lop Tashi Tobgay	17699468
5	Chogyel mijur lhakhang	Lop Dorji Wangchu	17428694
6	Tshennyig & Namsey Lhakhang	Lop Sangay	17724281
7	Jigjey Lhakhang	Lop karma wangchuk	17971766
8	Thubwang Lhakhang	Lop Sherub Tenzin	17408494
9	Gaydor Lhakhang	Lop Tashi	17617600

10	Chenrizig Lhakhang	Lop Phnstho wangdi	175643404
11	Dechok Lhakhang	Zunglop Sangay	17604020
12	Utse lhakhang	Lop Tenzi Dorji	17692731
13	Utse Tshepamey	Lop Gyeltsehn	17471935
14	Yeshey goenkhang	Gemboi Lop Dorji Wangdi	17650503
15	Pelden lhamoi goenkhang	Lop Karma	17606440
16	Mithru & chakzoe lhakhang	Tshempoel yeshi	16915013
17	Garab wangchuk naykhang	Champon kunzang	17649707
18	Depai Sungkhorp	Lop Sonam peljor	17670680
19	Phurpai lhakhang	Lop Tenzi wangchuk	17570022
20	Guru lhakhang	Lop Pema Wangchuk	17971365
21	Changma ngye Lhakang	Lop Thubten	17830316
22	Choeshampa	Lop Sonam Peljor	77445775