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Dzongkhag Disaster Management and Contingency Plan
2019



Dzongkhag Administration, Tsirang
ROYAL GOVERNMENT OF BHUTAN

Vision and Mission of Tsirang Dzongkhag

Vision:

An economically vibrant, culturally rich, organic Dzongkhag with peaceful and knowledgeable society co-existing in perpetual harmony with the pristine environment.

Mission:

1. To bring sustainable socio-economic development through quality infrastructure development, improved nutrition, enhance food security and sustainable management of natural resources;
2. To deliver efficient and effective public service; and
3. To preserve and promote culture and tradition.

Objectives:

The following are the objectives of the Dzongkhag:

1. To increase rural household income and food security in the Dzongkhag;
2. To improve health status of the communities;
3. To enhance sustainable management and utilization of natural resources;
4. To preserve and promote religion, culture and tradition;
5. To improve urban infrastructure in Damphu Town; and to enhance adult literacy and school enrolment with higher learning outcome

FORWORD

Disasters impede socio-economic development and affect the livelihood of people. Each disaster could be considered as an opportunity to reinforce the resilience of the communities and the resistance of the infrastructure so that adversity of the future disasters could be minimized. The higher the individual and other vulnerabilities, higher are the risks. Identification of various disasters and the assessment of the consequent effects of such disasters are essential to adopt preventive, preparedness, response and recovery measures to minimize losses during disasters and ensure quick recovery. For a multi-hazard prone Dzongkhag like Tsirang, it is essential to ensure that vulnerability and risk reduction aspects are taken into account for all developmental plans and program.

In accordance with Chapter 7, section 77 of the Disaster Management Act of Bhutan 2013, Tsirang Dzongkhag has developed Dzongkhag Disaster Management and Contingency Plan during the training phase conducted by Department of Disaster Management, MoHCA from 7th January to 11th January 2019. These Plans were prepared through conduct of Hazard, Vulnerability and Capacity Assessment (HVCA) of the 12 Gewogs. The Dzongkhag with support from the DDM has conducted a week long workshop in Dzongkhag Tshogdue Hall with participants from the Local Government, Sectoral and Regional Offices who have made vital contributions in drafting the plan. Data collection and analysis, mock drills and simulations on Standard Operating Procedures (SOPs) were simultaneously conducted and endorsed by the Dzongkhag Disaster Management Committee (DDMC). Thus, we believe that there is Disaster Management linkages across the sectors.

The Dzongkhag Disaster Management Focal Point started drafting the Disaster Management and Contingency Plan since 2016 but could not come to a proper document owing to lack of Budget. During the training period from 7th January till 11th January 2019, the draft Plans were thoroughly discussed with inputs from expertise from DDM and field knowledge from Gewogs. The experiences and expertise in this particular field by stakeholder, participants have contributed in developing those strategies.

The Disaster Management Plan, which shall be revised every after five year, is to be referred by Dzongkhag Administration and sectors to ensure mainstreaming and integration of disaster risk reduction into their annual plans. All the stakeholders, relevant National Disaster Management Institutions and agencies are required to take ownership and fulfill their own roles and responsibilities to making this Dzongkhag a disaster resilient and safe place.

Tashi Delek!

(Pema)
DZONGDAG

Acknowledgement

For making this Dzongkhag a disaster resilient and safe place, Tsirang Dzongkhag would like to proudly express that now we have a full fledged disaster management and contingency plans. For the successful development of the plans, this Dzongkhag Administration would like to extend our sincere gratitude and appreciation to the Department of Disaster Management, Ministry of Home and Cultural Affairs, for providing guidance, inputs to the Dzongkhag DM and Contingency Plan.

The Dzongkhag would also like to extend our appreciation to the Local Government elected leaders, all the sector head, heads of the regional offices and the Gewog Administrative Officer for providing constant support and cooperation in coming up with systematic Dzongkhag Disaster Management and Contingency Plan.

Finally, we would like to acknowledge every individual for your active participation throughout the course of drafting and finalizing this DDMCP.

Acronyms

CBDRM	Community Based Disaster Risk Management
DDM	Department of Disaster Management
DM Act, 2013	Disaster Management Act of Bhutan, 2013
DM	Disaster Management
DDMC	Dzongkhag Disaster Management Committee
DT	Dzongkhag Tshogdue
GNH	Gross National Happiness
GT	Gewog Tshogdey
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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Scope & Objectives

As mandated by the Disaster Management Act 2013, the Disaster Management and Contingency Plan for this Dzongkhag is prepared during the training period from 7th January till 11th January 2019. The plan was endorsed by the Dzongkhag Disaster Management Committee (DDMC) on and will serve as a document for reference by all relevant stakeholders – different Dzongkhag Sectors and Gewog Administrations - for implementation of prioritized disaster risk reduction and preparedness activities through mainstreaming. The plan will address all hazards in the Dzongkhags covering the whole disaster management cycle (*Pre-disaster-awareness, capacity building and mainstreaming, during disaster- effective response and post-disaster- early recovery and reconstruction*).

The objectives of the Dzongkhag Disaster Management and Contingency Plan are:

- To ensure mainstreaming and facilitation for implementation of disaster risk reduction and preparedness activities in Dzongkhag;
- To ensure required capacities are developed for risk reduction, mitigation, preparedness and response;
- To increase awareness on disaster risks, risk reduction and preparedness measures in the Dzongkhag;
- To establish coordination mechanism and standard operating procedures for emergency response and relief operations.
- To ensure safety of community, reduce loss to property, protect critical infrastructure, and environment and continuity of essential services.

Chapter 1: Overview of the Dzongkhag

1.1 Geography

Tsirang Dzongkhag is located in the South-Central belt of the Country. The altitude ranges from 250-2000 meters above sea level. Tsirang has an area of approximately 638.3 Km² 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 comprising mainly of broadleaf and Chirpine species. The vegetation is of sub-tropical in the lower valleys and the temperate forest towards the North. The Common wild animals seen are Leopard, Sambar, Black bear, Wild pigs, Gray langurs.

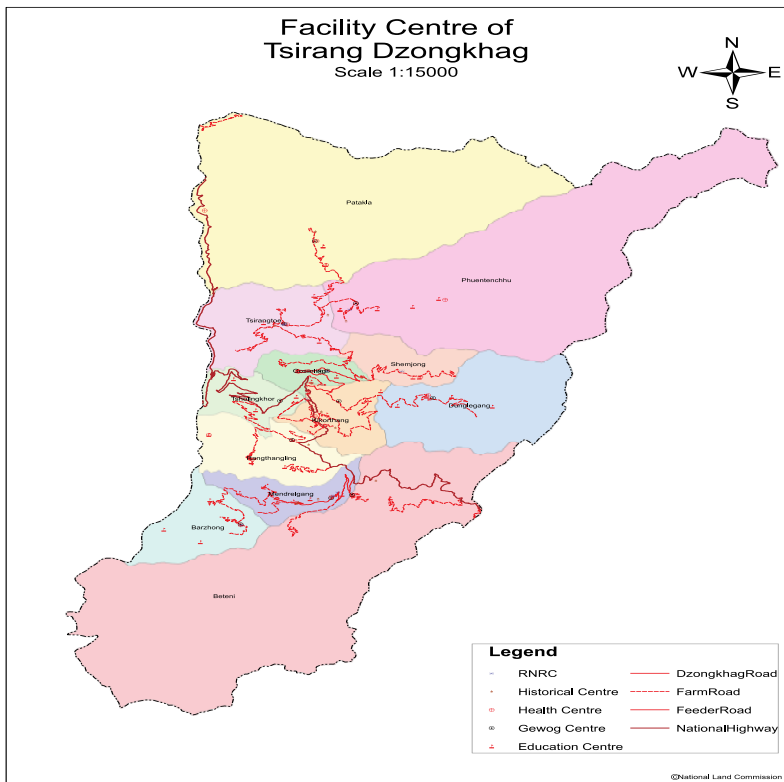


Figure 1: Dzongkhag Boundary Map (Source: NSB)

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 12 Gewogs, further divided into Chewogs. Under the provision of LG Act 2009, the dzongkhag has established Dzongkhag Tsogdue with respective Gewog Tshogdaes. 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 very 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 minor floods in the plain 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 a 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

The total population of Tsirang Dzongkhag as of 30 May 2017 is 22,376 persons (Annex Table A2.1). This is the total number of people found within the territory of Tsirang on the census reference day irrespective of their nationality. Of the total, 22,376 persons, 51.5% are males and 48.5% are females. The total population of Tsirang Dzongkhag represents 3.1 % of the total population of Bhutan. Tsirang Dzongkhag has experienced an increase in population size by about 4,183 persons during the intercensal period, a growth of about 22.4% between 2005 and 2017. This change could be attributed to migration and other factors. The population of Tsirang

Dzongkhag in 2005 was 18,667 persons. Tsirang Dzongkhag ranks thirteenth highest in population size among all Dzongkhags in the country.

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;

- a) Dasho Dzongdag, Chairperson (ex-officio)
- b) Dasho Dzongrab, deputy chairman
- c) DT Chairperson, member
- d) Dzongkhag Welfare Officer, member
- e) Gups of all Gewogs, member
- f) Thromde Thueme, member
- g) SP, RBP
- h) Drungchen, Dratshang
- i) Dzongkhag Disaster Management Officer, Member Secretary

Other member co-opted in accordance with the rules framed under the DDM Act (2013)

- j) Manager, RICBL
- k) Manager, BPC
- l) In charge, BTL
- m) Base In charge, RSTA
- n) Dzongkhag Agriculture Officer
- o) Dzongkhag Forestry Officer
- p) Dzongkhag Accounts Officer
- q) Dzongkhag Kuktural Officer
- r) Dzongkhag Health Officer
- s) Dzongkhag Engineer
- t) Dzongkhag Environment Officer

2.2 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

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.

2.3 Functions of 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

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 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.

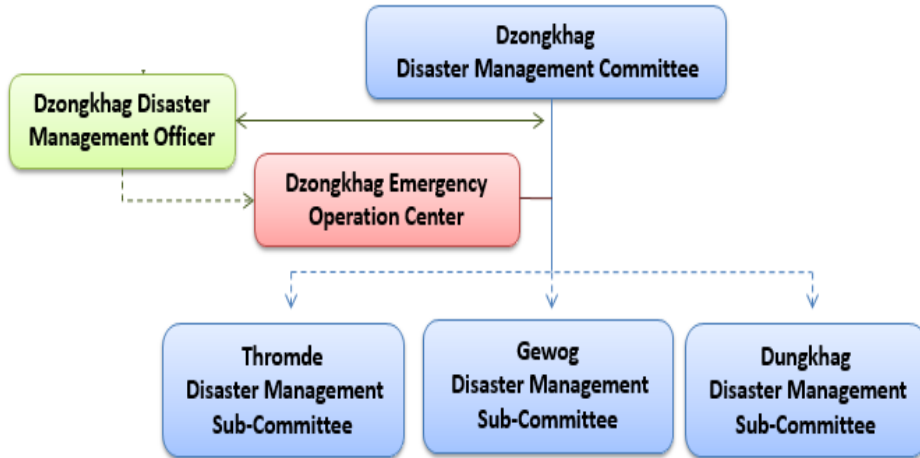


Figure 2: Dzongkhag Disaster Management System

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

Chapter 3: Disaster Risk Profile of Dzongkhag

Tsirang 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 windstorms causing extensive damages to roofs of houses and government 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 Tsirang Dzongkhag, as per consultations with the community, is presented below:

3.1 Hazard Assessment

S/N	Hazard	Secondary Hazard	When it could occur	Probability of Occurrence	History of Past Disaster	Impact
1.	Wind Storm	Structural Fire	March, April, May	Medium	April 2015	88 HHs affected
2.	Landslides	Flash Flood	June-September month	High	2016,2017	Public and Private Infrastructures, Firm roads, Private Lands.
3	Structural Fire	Forest fire	During Winter Season	Medium	2018	2 house affected.
4.	Bush Fire	Structural fire	Winter season	Medium	2018	14 acres affected.
5	Lightning and Thunder	Structural fire/forest fire	Summer season	medium	2016	Electric lines short circuited and a Women electrocuted
6	Earthquake	Landslide, Structure Fire	Anytime	High	2009, 2011	More than 100 HHs affected.

7	Flood	Landslides	June to August	medium	1995	Damaged crops and cultivatable land.
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3.2 Vulnerability Assessment

S/N	Hazard	Element at risk	Why they are at risk	How will they be affected
1	Wind Storm	Structure and crops	<ol style="list-style-type: none"> 1. Rural Homes and dwelling built in temporal in nature. 2. Temporary Roofing 3. Lack of proper anchorage 4. Lack of 'Lung-go' (wind to pass through) 	<ol style="list-style-type: none"> 1. Roofing will be blown off. 2. Structures collapse. 3. Lives lost/injury
2	Landslides	1. All rural homes)	<ol style="list-style-type: none"> 1. Houses located in terrian 2. Moonsoon is heavy in this dzongkhag 	<p>Properties and lives will be lost.</p> <p>Orange orchard</p>
3	Structural Fire	People and property (Daphu town, the Dzong, dratsang, government Infrastructures and rural homes)	<ol style="list-style-type: none"> 1. Poor wiring, old and clustered structures 2. use of butter lamp, heaters and firewood 3. Carelessness. 4. Due to natural causes like lightening and thundering. 	<ol style="list-style-type: none"> 1. Property 2. Lives
4	Forest Fire	Houses and Environment	<ol style="list-style-type: none"> 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	Property and affect human lives.

			2. Poor earthing, electric wiring.	
6	Earthquake	1. Traditional houses 2. Dzong and Lhakhangs	1. Traditional houses are not constructed as per Standards and codes	1. Collapse/ cracked 2. Live lost/ injury
7	Flood	People, propertities, livestock.	Settlement near rilangthang, Burichu Changchay, Sunkosh River and Barshong toedsang.	Damage property and human lives will be affected.

3.3 Capacity Assessment

S/N	Hazard	Physical capacity	Economic capacity	Social/Institutional capacity	Environment capacity
1	Wind Storm	Most of houses have wind tie.	House Insurance, life insurance		
2	Landslides		Land Exchange		
3	Structural fires	Fire extinguishers and fire hydrant in Dzong area and offices, schools and lhakhangs. Dzongkhag Excavators/ JCB	Insurance (house and life)	DDMC (IMT) Fire Fighting Unit Community SAR team Desuups Schools (students)	
4	Forest Fire	Fire line		Forest personnel Desuups and community	

5	Flood	JCB (1) Plantation/ land management Water source and catchment area protection		RBP Desuups IMT members	
6	Earthquake	Open spaces in Dzongkhag and all Gewogs.	House Insurance, Life insurance.	Hospital and BHUs Schools Cooperatives	

3.4 Probability and impact matrix

Very probable			Windstorm	Earthquake	
Probable		Flood	Structural Fire	Landslides	
Less probable			Forest Fire		
Improbable					
Impact	Unimportant	Limited	Serious	Very serious	Catastrophic

Overall, in all the Gewogs there are certain capacities and some level of awareness on prevailing hazards and some knowledge on the measures to take to reduce risk before and during disasters. Following are summary of capacity needs in Dzongkhag:

1) Risk Reduction and Mitigation

There is need for capacity development for all staffs working at the Dzongkhag premises to lead both structural and non-structural mitigation activities in the communities, schools, health facilities, etc. Rural homes, school structures, health facilities and cultural structures have been particularly vulnerable in past earthquake events. Therefore vulnerability assessment of old and important/ public structures is important to determine strengthening needs or replacement decisions. In terms of earthquake, and also other hazards, there is need to strengthen the construction quality monitoring system to ensure constructions adhere to standards and building codes.

Structural Fire and Landslide is also a priority hazard for Tsirang and there is need to build capacities in the Dzongkhag to raise awareness in the community on ways of land management

and to carry out mass awareness inclusive of nonstructural mitigation measures in preventing structural fires. Community groups such as community forest groups and system of having Re-suups, Me-suups, Chu-suups, etc. need to be encouraged. Also there is still need to raise awareness within the Dzongkhag and in the communities on key messages for risk reduction and preparedness.

2) Preparedness

As a part for early preparedness for any types of disaster, there is a need to ensure early warning capacities for heavy rainfall, thunderstorms, hailstorms, and other such extreme weather conditions and have systems in place to provide the early warning/ advisory to the affected communities in time. Capacities also need to be built in terms of raising community awareness on risks and family preparedness. Similarly preparedness capacities need to be developed in important public institutions such as schools and health facilities.

3) Response

In terms of response, capacities for Search and Rescue, First Aid, conducting various assessments (rapid, damage, safety etc.) need to be built at various levels. There is also need to support and organize volunteers for response and coordinate with existing volunteer organizations such as Desuups. For effective response, Standard Operating Procedures (SOPs) need to be developed for each Gewog. Simulations and drills should be carried out to test and practice the procedure. At the Dzongkhag level, EOC should be established along with related Standard Operating Procedures (SOPs).

3.5 Disaster Management Action Plan (2018 – 2022)

Priority Area	Key Activities	Target	Lead Agency/Person	Supporting agencies	Timeline	Budget estimate (Nu. in M)
DDMC Meetings as per the DM Act of Bhutan 2013	Conduct DDMC meetings bi-annual as per the DM Act of Bhutan 2013 (to review the DM and Contingency plan, assess implementation of the activities and dissemination of plan)	DDMC	DDMO	DDMC	To be clubbed with DT Meetings and also conducted in Gewog Centres	0.100
Awareness and Education	1.1 Raise awareness on top priority hazards – Landslide, structural Fire, earthquake, windstorm	All 12 Gewogs, Dratshang, Monasteries, Schools, Business Community	DDMC	Gewog Administration, DDM, RBP	2018-2020	0.200
	1.2 Distribute posters with key messages on risk reduction and disaster preparedness prepared by the DDM	Both to urban and rural public	DDMO	DDMC, DDM, Gewog Adm., Relevant sectors	2018-2021	0.060
	1.3 Encourage contractors to incorporate risk reduction features in the farm road, irrigation and other	Both rural and urban communities	DE, Gups, DDMO	DDM, Gewog Adm., DDMC	2019–2020	0.100

	infrastructural development projects					
	1.4 Dzongkhag observes International disaster day and Annual school preparedness drill day	Schools, communities, Rabdey, Business community	DDMO	DDMC, DDM, Gewog Adm. MoE Dratshang	Annually	0.25
	1.5 Raise awareness on family preparedness	All Gewogs Communities	DDMO/GAOs	DDM, Gewog Adm.	2019-2020	0.200
	1.6 Conduct awareness programs on insurance benefits and encourage families to insure their property against various hazards	All Gewogs Communities	DDMO/GAOs	Insurance companies, DDM, Gewog Adm.	2019 – 2020	(club with other awareness activities)
Enhance risk reduction and mitigation	2.1 Conduct training on good construction practices	Engineers, carpenters, Masons and house owners	DDMO/ DE	DDM, DES, MoWHS	2020 - 2021	0.100
	2.2 Carry out vulnerability assessment of old/ existing government buildings – schools, health facilities,	Engineers	DDMO/DE	DDM, DES, MoWHS, MoE,	2020-2021	2.00

cultural buildings, office buildings				Gewog Adm., Dratshang		
2.3 Implement structural mitigation measures or replacement as per vulnerability assessment recommendations on a prioritized basis	Mitigation for priority structures	DE/ DDMO		DDM, DES, MoWHS, MoE, Gewog Adm. Dratshang	2022 onwards	Based on assessment
2.4 Institute construction quality control and monitoring mechanism for materials and adherence to standards and designs	Engineering Division	DE/ DDMO		DES, MoWHS, DDM Other relevant sectors	2019	0.200
2.5 Implement mitigation measures on a prioritized basis in the Gewogs as per HVCA: - Fire safety training in all gewogs - Landslide mitigation in 12 gewogs- Encourage anchorage of roofs and other mitigation for Windstorm in 12 gewogs	Gewogs, Respective Sectors.	Gewogs/ Sector heads/ DDMO		DDM, GNHC, MoF, relevant sectors	2019– 2020	Based on identified priority mitigation activity

2.6 Training of Engineers, Sector heads and GAOs on Rapid Damage Assessment skills	Engineers, Sector heads and GAOs	DE/DDMO	DES, MoWHS, DDM, DDMC	2018-2019	0.150
2.7 Refresher course for the Dzongkhag SAR Team	Dzongkhag SAR team, RBP	DDMO	DDM, RBP	2019-2022	0.300
2.8 Hands on training on use of fire-fighting equipment	DDMC/Lhakhang caretakers/Business Community and Communities	DDMO	RBP DDM Dratshang Relevant sectors	2019-2020	0.300
2.9 Form and train Gewog SAR teams	Gewogs	Dzongkhag and Gewog Administration	DDM	2020-2022	1.650
2.10 Procure additional SAR, VHF sets	Dzongkhags/ Gewogs	DDMO	Dzongkhag/ Gewog Administration	2018-2020	0.300
2.12 Ensure fire preparedness measures is put in place in the BOD in the Damphu town	BOD	DDMO	DDMC RBP	2018-2019	

3. Enhance preparedness, response and recovery levels	3.1 Establish Dzongkhag Emergency Operation Center	Dzongkhag	DDMO	DDMC, DDM, NDMA, Relevant sectors	2018-2022	0.200 (for furnishing only)
	3.2 Raise awareness and sensitize on Dagana Dzongkhag DM and Contingency plan other response measures	Dzongkhag, Gewog, Dratshang, RBP, RBA, Judiciary, Regional Offices, Desuups, Communities	DDMO	DDM	2018-2019	0.300
	3.3 Stockpile materials required for emergency response and immediate recovery at strategic locations	Dzongkhag	DDMC	DDM, MoF, relevant sectors	2018-2020	0.500
	3.4 Establish and institute pre-arrangements for emergency procurement and requirements	Dzongkhag	Procurement Officer DDMO/ Finance Officer	DDMC, DDM, MoF	2018-2019	0.200
	3.5 Coordinate wangdue dzongkha establish Flood	Dzongkhag	DDMC	Dzongkhag Adm, wdue, RBP,	2019	1.500

	early warning for low lying gewogs			Gewog Adm.		
	3.6 Identify Evacuation sites for various hazards (keeping in mind the needs of people with disabilities, women, children and elderly)	Community and Offices	DDMC, Gewog Administrations	DDM, relevant sectors	2018	
	3.7 Sensitize, conduct mock drill/ simulation on Dzongkhag DM and Contingency plan	Dzongkhag, Drungkhag Administration, Gewog Administration, Dratshang, RBP, RBA, Judiciary, Regional Offices, De-Suung, Business and Communities	DDMC	DDM	2018-2022	0.500
	3.8 Procure additional SAR equipment	Gewog Administration	Dzongkhag/ Gewog Administration	DDM	2019	3.000
	3.9 Establish community based early warning system for floods and landslide	Dzongkhag	DDMC/ Dzongkhag	DDM, RBP,	2018	0.500

	including monitoring and reporting system		and Gewog Adm			
	3.10 Identify Dzongkhag Disaster Assessment Team for various hazards	Dzongkhag and gewogs	DDMO	DDM	2018	

Chapter 4: Dzongkhag Contingency Plan

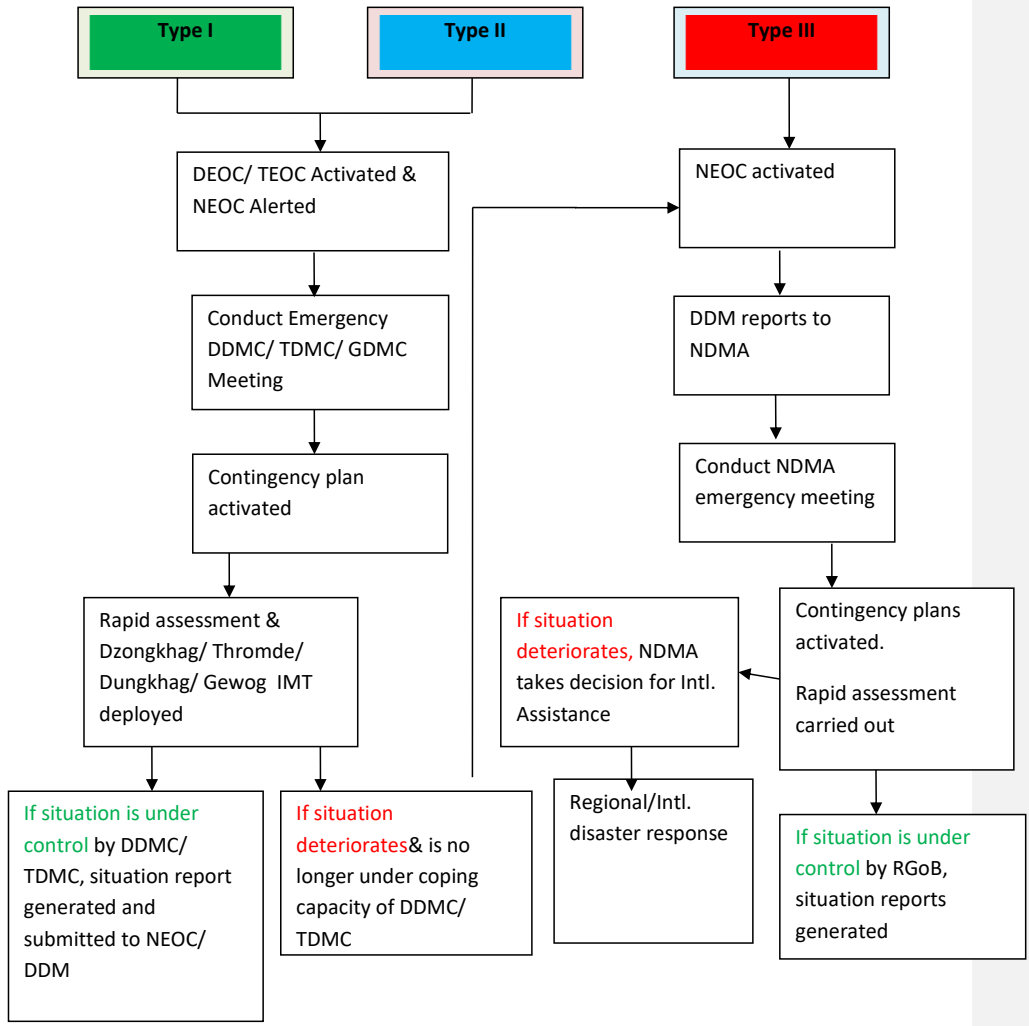
As per the Contingency Planning Guidelines for Bhutan 2014, a contingency plan ‘aims to prepare an organization to respond well to an emergency and its potential humanitarian impact’. Thus developing a contingency plan involves making decisions in advance about the management of human and financial resources, coordination and communication procedures, and being aware of range of technical and logical response.

The contingency procedures and arrangement will cover the response and early recovery phases:

- a. Immediately before a disaster when/if early warning of an impending situation or an event is received;
- b. During a disaster when immediate response and relief measures need to be implemented; and
- c. After a disaster for measures to be taken in terms of relief and setting the recovery process in motion.

The chart below shows the general decision making, information flow and reporting mechanism during disaster Type I, II and III.

General disaster decision making and information reporting chart



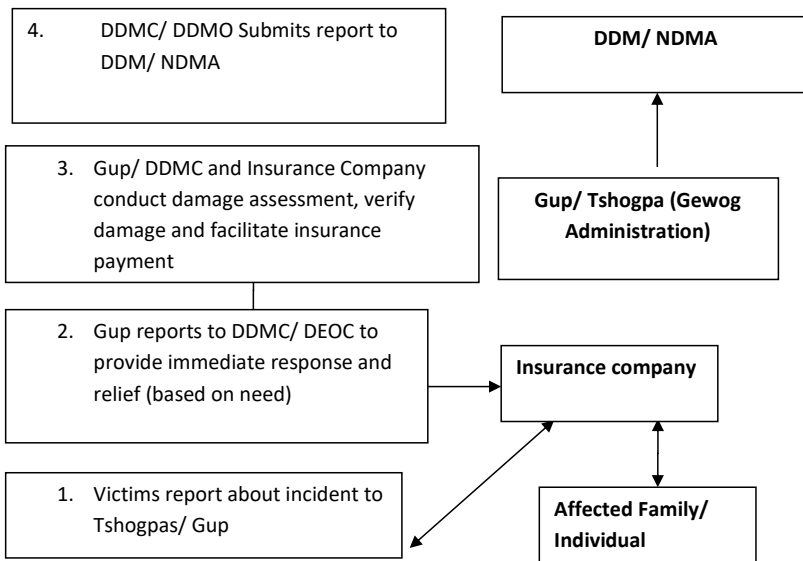
4.1 Standard Operating Procedures for Response

a. Isolated local incidents

Isolated Local Incident - An isolated local incident is an incident which does not have a widespread effect on people and property and can be managed within the normal operations of the agencies concerned, and such incident shall not require emergency procurement and funding

For isolated local incidents, such as fire affecting single house or windstorm blowing off roof of one structure in a locality, and cases which do not qualify under Disaster Types I - III of the Disaster Management Act of Bhutan 2013, the following standard procedure shall be followed.

Figure 2 – Standard procedure for isolated local incidents



b. Disaster Types

As per the DM Act of Bhutan 2013 and the DM rules and regulations standard procedures for response at the Dzongkhag level for different Disaster Types will be as follows:

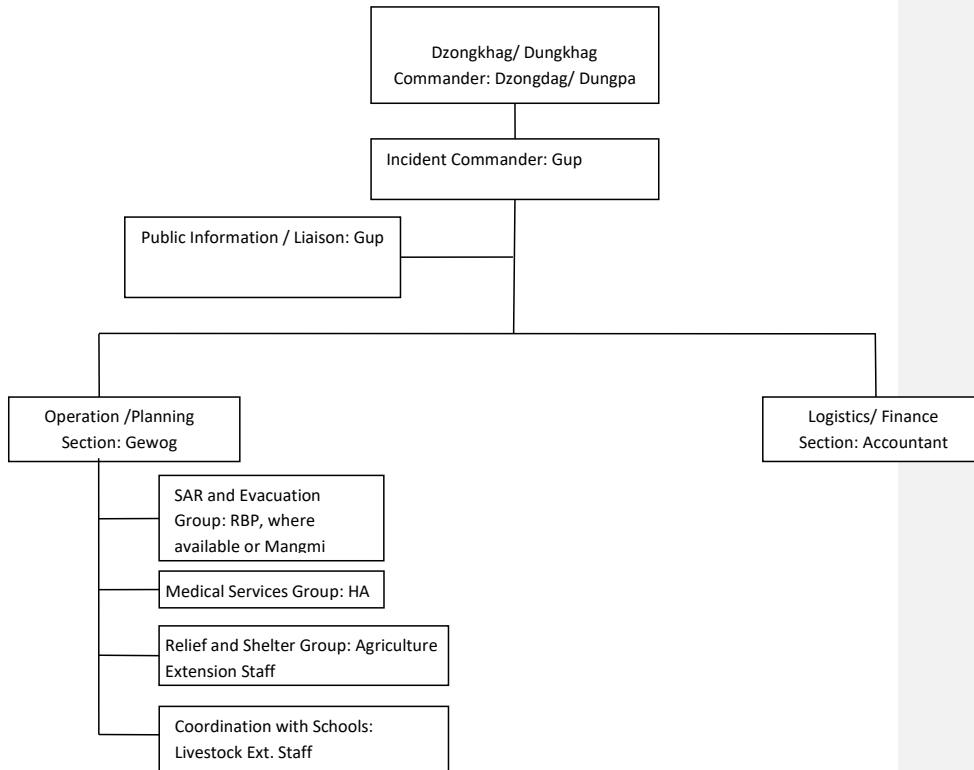
1. In case of Disaster Type I

Disaster Type I - A disaster shall be classified as Type I if it can be managed with available resources and is within the coping capacity of the Gewog/Thromde concerned

- a. In case of an impending disaster situation, Gewog/ Thromde administration will be responsible for establishing immediate contact with likely affected areas as soon as there is early warning information and provide orders for evacuation and immediate response.
- b. In case of an incident/disaster situation:
 - a. Gewog shall immediately submit first information to the Gewog DM Sub-Committee/ DDMC/ Dzongkhag Disaster Management Officer (DDMO).
 - b. Gewog Incident Management Team (IMT) shall be activated and the IMT shall provide immediate response and relief within their capacity.
 - c. Gewog Incident Management Team shall conduct rapid needs assessment as per the required format.
 - d. Gewog shall provide immediate relief and early recovery support as per rapid needs assessment using available funds at Gewog level and submit expenditure report and bills to DDMC for further submission to DDM, for reimbursement.
 - e. The DDMO shall submit the first information report to the DDM within 24 hours of the incident.
 - f. In case the incident is beyond the coping capacity of the Gewog, the Gewog will submit for SAR and other response needs to the DDMC.
 - g. Gewog shall conduct detailed damage assessment along with insurance companies for rehabilitation and reconstruction and submit report to DDMC.

Incident Management Team at Gewog level

The Gewog Incident Response Management Team will be led by Gup and monitored by Dzongdag. Due to the lack of sufficient officers at the Gewog level, the Logistics and Finance functions will be undertaken by the same officer especially in Type I disasters. In case the disaster becomes Type II but still limited to geography of the affected Gewog then the IMT from the Dungkhag / Dzongkhag will assume command with the support of the IMT at the Gewog.



2. In case of Disaster Type II

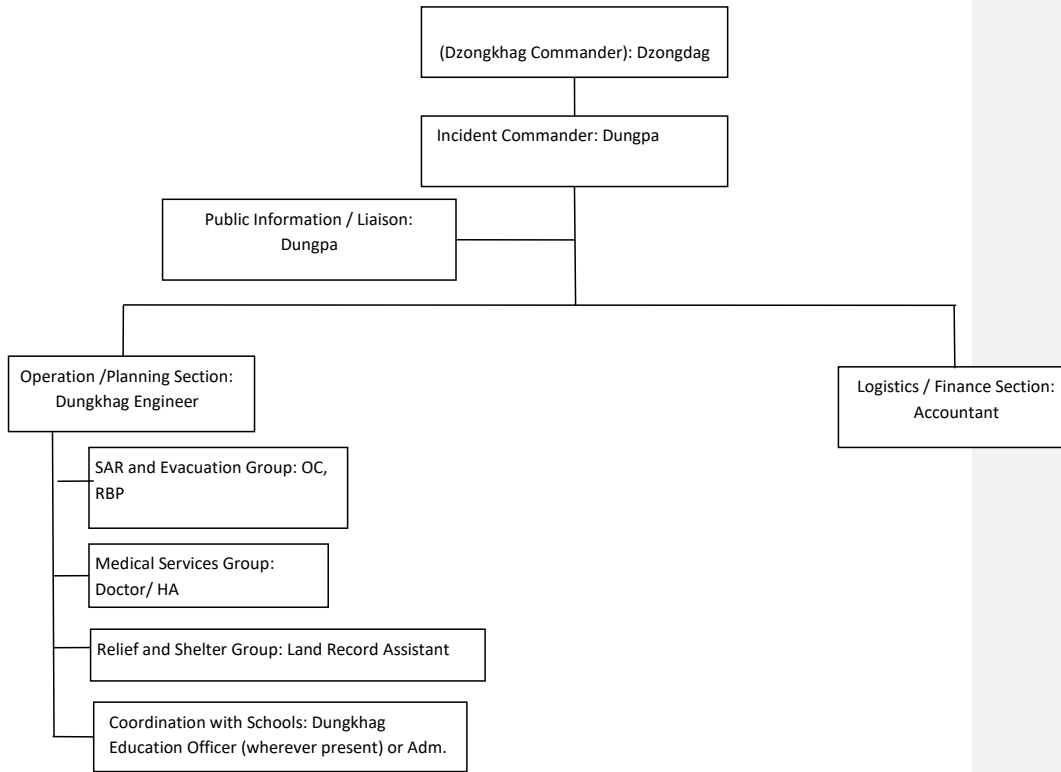
Disaster Type II - A disaster shall be classified as Type II if it can be managed with available resources and is within the coping capacity of the Dzongkhag concerned.

- a. In case of receiving early warning of an impending disaster situation, the DDMC Chairperson shall immediately activate the Dzongkhag Emergency Operation Centre and relay the early warning to all the Gewog/Thromde offices along with orders for evacuation, deployment of Search and Rescue Teams or any other response as required.
- b. In case of an incident/disaster situation:

- a. The DDMC Chairperson shall activate the DEOC and be in contact with the National Emergency Operation Centre.
- b. Dzongkhag/ Dungkha Incident Management Team shall establish contact and line of communication with disaster site and provide immediate response and relief within their capacity and submit for SAR and other response needs to NEOC, if required.
- c. Dzongkhag/ Dungkha Incident Management Team shall direct evacuation of disaster-affected communities to safe areas and temporary shelters.
- d. Dzongkhag/ Dungkha IMT shall conduct rapid needs assessment as per Bhutan Disaster Assessment (BDA) tool within 72 hours.
- e. The DDMO shall submit the First Information Report to DDM within 24 hours of the incident.
- f. DDMC shall provide relief and early recovery support as per the rapid assessment using available funds at Dzongkhag level and submit expenditure report and bills to DDM for further submission to Ministry of Finance for reimbursement.
- g. In case the incident is beyond the coping capacity of the Dzongkhag, request for up-gradation of disaster from Type II to Type III shall be submitted to the NDMA.
- h. Dzongkhag/ Dungkha shall conduct detailed damage assessment along with insurance companies for rehabilitation and reconstruction and submit report to DDMC.

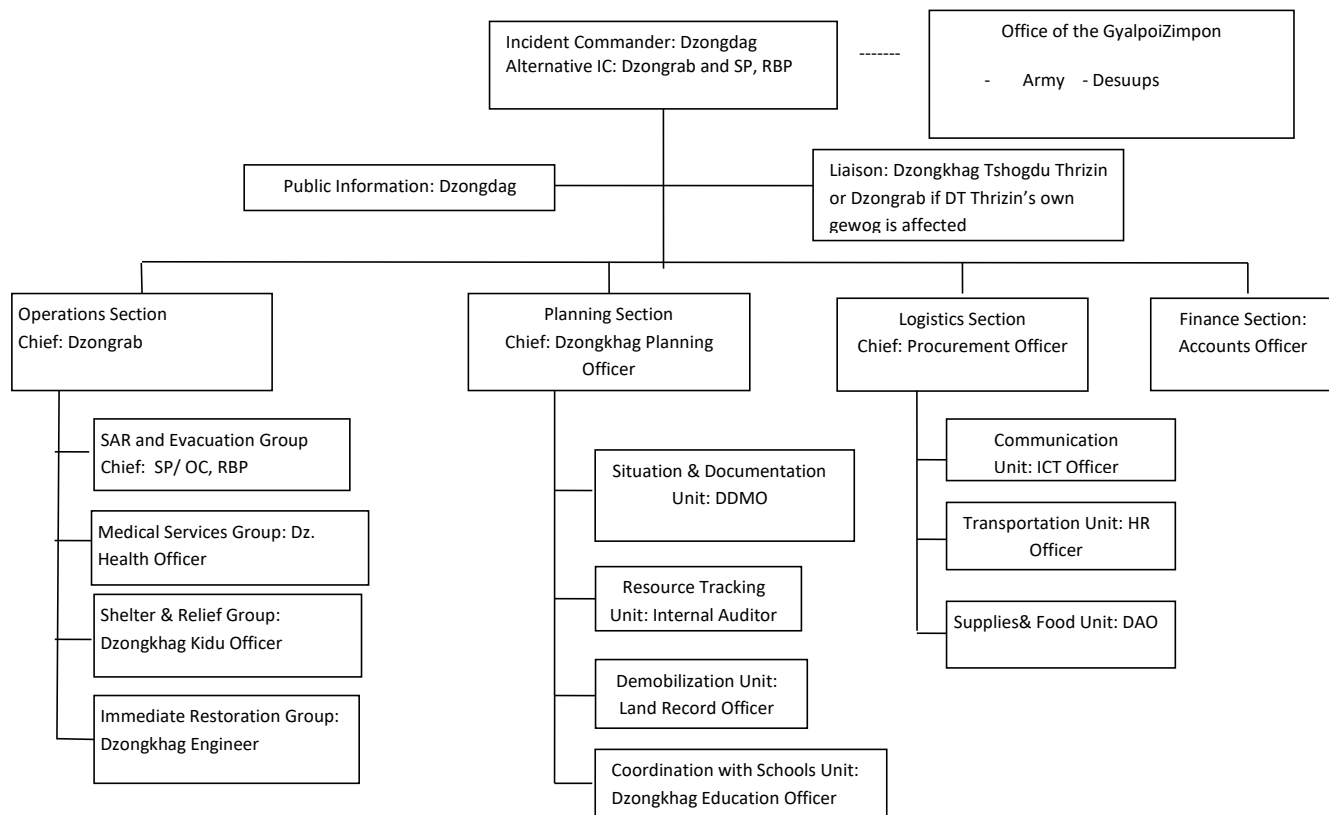
Incident Management Team at Dungkha level:

The Dungkha Incident Response Management Team will be led by Dunga and monitored by Dzongdag. Due to a shortage of human resources and smaller scale of response, Operations and Planning will be combined in to a single section and Finance and Logistics will also be combined in to a single section. However, when the scale of response escalates to Type II then the organizational structure discussed for Dzongkhag will be adopted.



Incident Management Team at Dzongkhag Level

The Dzongkhag Incident Response Management Team will be led by the Dzongdag with Dzongrab being the alternate. The IC will liaise with office of the Gyalpoi Zimpon, Army, and Desuups for effective coordination with these entities. Various positions in the team will be occupied by the officers present at the Dzongkhag level and together they will respond to a disaster in a well-coordinated manner using the resources that are available within the Dzongkhag.



Transportation Unit leader to liaise with RSTA Base In-charge

Note: The support of Desuups/ Dratshang/ NGOs/ CSOs/ Corporations/ Regional Offices/ Private businesses and communities will be coordinated through the NDRCC and IMT at the national and dzongkhag level. As per Section 41 of the Disaster Management Act 2013, the Dzongdag (chair of DDMC) has the authority to 'requisition necessary human and material resources from any agency, CSO, private sector or person' for the purpose of response and relief operations.

Details of IMT positions and Functions

INCIDENT COMMANDER

The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources. The IC has overall authority and responsibility for conducting incident/disaster operations and is responsible for the management of all incident/disaster operations at the incident site.

Public Information: responsible for interfacing with the public and media or with other agencies with incident-related information requirements.

Liaison: responsible for coordinating with representatives from cooperating and assisting agencies.

Operations Section: responsible for all tactical operations at the incident such as search and rescue, medical, infrastructure, and shelter/relief.

Groups under the Operations Desk

- a. **SAR and Evacuation Group:** will be responsible for conducting the SAR and providing evacuation at the site of the incident. Also responsible for monitoring and assessing safety hazards or unsafe situations, and for developing measures for ensuring personnel safety.
- b. **Medical Services Group:** will provide medical assistance to the victims.
- c. **Shelter & Relief Group:** responsible for providing shelter and relief to the affected families
- d. **Immediate Restoration of Essential Public Services Group:** responsible for immediate restoration of essential public services

Planning Section: responsible for the collection, evaluation, and dissemination of information related to the incident, and for the preparation and documentation of Incident Action Plans. The Section also maintains information on the current and forecasted situation, and on the status of resources assigned to the incident.

Units within Planning Section

- a. **Situation and Documentation Unit:** Responsible for the collection, organization, and analysis of incident status information, and for analysis of the situation as it progresses. Responsible for collecting, recording, and safeguarding all documents relevant to the incident.
- b. **Resources Unit:** Responsible for maintaining the status of all assigned resources (primary and support) at an incident.
- c. **Demobilization Unit:** responsible for assuring orderly, safe, and efficient demobilization of incident resources.

Logistics Section: Responsible for providing facilities, services, and materials for the incident.

Units within Logistics Section

- a. **Communications Unit:** responsible for providing communication services at an incident.
- b. **Transportation Unit:** responsible for the fuelling, maintaining, and repairing of vehicles, and the transportation of personnel and supplies.
- c. **Supplies and Food Unit:**
 - o Responsible for ordering equipment and supplies required for incident operations.
 - o Responsible for providing meals for incident personnel and for providing food/ supplies for the Relief and Shelter Unit (for victims).

Finance Section

- a. Responsible for all incident costs and financial considerations.
- b. Responsible for tracking costs, analyzing cost data, making cost estimates, and recommending cost-saving measures.
- c. Responsible for financial concerns resulting from property damage, injuries, or fatalities at the incident.
- d. Responsible for fiscal matters involving hiring, purchasing goods and services, and establishing local sources for obtaining equipment and supplies.

3. In case of Type III

Disaster Type III - A disaster shall be classified as Type I if severity and magnitude is so great that it is beyond available resources and coping capacity of the Dzongkhag concerned.

A disaster Type III is at national scale and will be managed by the NDMA and the DDMC shall follow the directives of the NDMA/ National Disaster Response Coordination Committee.

4.2 Mode of Communication during disaster/ threatening disaster situation:

- First line of communication: VHF handsets
- Alternative modes of communication: Mobile phones
- Social media (whatsapp, wechat and Telegram groups for Dzongkhag, Dungkhag and Gewogs)
- BBS and radio for giving information to communities
- Sat phone: not activated (to be used for emergencies when other modes of communication fail)

4.3 Dzongkhag Emergency Operation Centre Management (DEOC)

The DEOC is established as per Section 105 of the Disaster Management Act of Bhutan 2013. The DEOC will perform the following functions for coordination and management of disasters:

1. Receive disaster alerts and warnings from responsible agencies and other sources and communicate the same to all relevant agencies
2. Forward reports to relevant agencies
3. Monitor response and relief operations
4. Facilitate coordination
5. Requisition resources during disaster
6. Other functions as may be necessary

Location of the DEOC: DT hall

Staffing during normal times as per the Disaster Management Rules & Regulations 2014:

2. Officer in charge of DEOC: DDMO
3. Manned by two full time technicians as per Section 62 of the Disaster Management Rules and Regulations 2014

During threatening/ disaster situations

1. Dzongdag to head the DEOC as per the DM Act 2013.
2. Other sector experts to staff the DEOC

DDMC to meet in the DEOC to make critical decisions.

4.4 Disaster Lessons Learnt

Disasters offer opportunity for the DDMC and the Dzongkhag IMT to learn from it and to improve their DM and Contingency plan. Thus the DDMO will facilitate the conduct of lessons learnt after every disaster in the format attached as Annexure 1. The lessons learnt will then be incorporated

in the Dzongkhag DM and Contingency Plan. In case of Disaster Type II, the lessons learnt will also be shared with DDM for record and reference.

Commented [Office1]: The Business Continuity Mechanism which was discussed during the development of plan needs to be included here

Chapter 5: Implementation Mechanism

As per the DM Act, the DDMC will be responsible for the formulation, endorsement, implementation, monitoring and updating of the Dzongkhag DM and Contingency plan. The DDMC shall meet at least twice a year to review and update the plan's implementation progress.

Dzongkhag and Gewog administrations will be responsible for implementation of the prioritized plan activities and ensure that the activities are mainstreamed into their annual and five year plans. The Dzongkhag Disaster Management Officer will facilitate mainstreaming of priority disaster risk reduction, preparedness, awareness and capacity building activities in annual and five year development plans of the Dzongkhag.

In the event of disaster, DDMC will activate the Dzongkhag Contingency Plan. DDMC will, as an emergency measure, meet the expenses for response and relief operation from the annual budget of the Dzongkhag in accordance with the financial guidelines. For immediate restoration of critical disaster management facilities, DDMC will submit the fund request to DDM, secretariat to NDMA as per financial guidelines.

The budget requirement for the recovery and reconstruction works should follow the normal budgetary process. The DDMC and concerned sectors shall, for the purpose of recovery and reconstruction of public assets and infrastructure, undertake detailed damage assessment within its area of responsibility as per the post disaster assessment framework endorsed by the NDMA. The detailed damage assessment along with the work program and cost estimate will be submitted to DDM who will review and forward to NDMA for further submission to MoF.

The DDM, as the national coordinating agency for disaster management and the executive arm of the NDMA, shall ensure support of the NDMA and of concerned sectors and agencies. The DDM will also provide technical and monitoring support and help in mobilizing resources for the plan.

As member secretary, the DDMO will keep record, maintain data, and assist the chairman of the DDMC in monitoring the Dzongkhag DM plan activities. The DDMO shall present the plan's progress during DDMC meetings and update DM plan activities and budget annually. DDMO will also ensure that reports are submitted to the DDM and the NDMA, as required.

5.1 Financial Provisions as per the Disaster Management Act of Bhutan 2013

As per the Disaster Management Act 2013, there four different types of financial arrangement such as *Response and Relief Expenditure, Budget for National Disaster Management Activities, Budget for Department of Disaster Management* and *Recovery and Reconstruction* budget.

However, there are three main categories of the disaster management activities in the Dzongkhag for which the budget allocation is required;

- i) Preparedness
- ii) Response and Relief Expenditure
- iii) Recovery and Reconstruction

Preparedness

The Disaster Management Act 2013(DM Act 2013) mandates Gewog, Thromde, Dzongkhag, Agency and Private Sector notified to ensure mainstreaming of Disaster Risk reduction into its development plan, policy, programme and project. Thus, any expenditure on disaster preparatory works, like mitigation, prevention, purchase of equipment and so on should be proposed by the concerned agency/sector following the normal planning and budgetary procedures. For instance, any construction in the country should incorporate the disaster resilient technology inclusive of its budget.

Response and Relief Expenditure

As per the DM Act 2013, there shall be a Dzongkhag Disaster Management Committee (DDMC). The Chairperson of DDMC shall, upon declaration of disaster, have the authority to use annual budget of the concerned Dzongkhag, to provide Response and Relief support to the affected people and communities. Response and Relief shall include the following:

- a. Providing food, shelter and other essential relief items for the affected people and *Responders (if need be)* as per the minimum standards set by the Department of Disaster Management (DDM).

“Procurement of items/ goods/ services for the purpose of relief and response, not reflected in the annual quotation of the Dzongkhag/Sectors, may be exempt from standard procurement procedures specified in the Procurement Rules and Regulations, where exigencies of the disaster situation demand, as per section 89 of the DM Act 2013”.

4. Payment of compensation to person or private entities, whose property is used, lost or damaged during relief, response and recovery operation in accordance with Chapter 11 of the DM Act 2013.

After the expenditures are met from the annual budget, *the agencies shall* submit detailed accounts of expenditure with copies of documentary evidences to the National Disaster Management Authority (NDMA) through the DDM for budget sanction by the Department of National Budget (DNB), MoF. The DNB, MoF shall, upon receipt of reimbursement letter from NDMA, reimburse the actual amount of expenditure to the agency concerned at the earliest possible (*within 3 weeks*).

In case the annual budget of the agencies is not enough to meet the expenses for response and relief operation, the Chairperson of DDMC may make written requests to the Chairperson of the NDMA for additional funds from DNB, MoF.

The Operation Coordinator or Chairperson of DDMC shall ensure that a detailed inventory of goods/items and services procured for response and relief operation.

Recovery and Reconstruction

The budget requirement for the recovery and reconstruction works should follow the normal budgetary process. The DDMC and concerned sectors shall, for the purpose of recovery and reconstruction of public assets and infrastructure, undertake detailed damage assessment within its area of responsibility as per the post disaster assessment framework endorsed by the NDMA. The detailed damage assessment along with the work program and cost estimate shall be submitted to DDM who shall review and forward to NDMA for further submission to MoF. The NDMA shall make recommendation to the Government (MoF) for release of fund to the sectors concerned. However, for any major recovery and reconstruction works, the concerned Dzongkhag or agency shall plan that such works are considered for the budget allocation during the preparation of the annual budget.

In the event of major disaster, where the restoration expenditures are huge and depending on the availability of resources, the government may have to reprioritize the plan activities to finance the requirement.

Annexure:

1. Disaster Lessons Learnt Template

Disaster Lessons learnt Template

Sl No.	Questions	Response	Remarks
1.	What was the Disaster/ incident?	Eg. Flood/ Earthquake/ Landslide etc	
2.	What was the impact of the disaster/ incident?		
3.	What was the response to the disaster/ incident: a) Initial response b) Coordination c) Reporting d) Response taken by the Dzongkhag/ Drungkhag/ Thromde/ Gewog IMT? e) Did you get feedback from the affected communities? f) How did you involve the corporate/ private sector and volunteer services?		
4.	Were you able to convene the DDMC meeting? What was the process and outcome?		
5.	EOC coordination and reporting		
6.	Lessons learnt from the disaster/ incident?		
7.	Actions required to implement lessons learnt with timeline and responsible official.		

Note: Dzongkhags to conduct lessons learnt for all incidents and improve their response. Lessons learnt report of disasters of higher magnitude to be submitted to DDM.

2. Contact details of DDMC members

Sl No	Name	Designation	DDMC	Contact No
1	Pema	Dzongdag	Chairman	17989818
2	Namgay Dorji	Dzongrab	Deputy Chairman	17699248
3	Shiva Lal Karariya	DT Chairman	Member	17921342
4	SP, RBP	Gyambo Tshering	Member	77301919
5	Lhab Tshering	Dratsang Drungchen	Member	17856878
6	Karma Wangmo	Kidu Offtg. Po	Member	17508179
7	Kuenzang Tenzi	Thromdae Ngotsab	Member	17879477
8	Sonam Phuntsho	DDM Focal	Member	17888883
9	Santalal Powdel	Barshong Gup	Member	17715828/77195354
10	Yeshi	Mendrelgang Gup	Member	17115695
11	Chabi Kumar	Patsaling Gup	Member	17867850
12	Bal Badhur	Rangthaling	Member	17722869
13	Beda Moni Chamlagai	Kilkhorthang Gup	Member	17425696
14	Ram Bdr. Karki	Gosaling Gup	Member	17114188
15	Passang Thing Tamang	Tsolingkhar Gup	Member	17982979
16	Top Nath	Shemjong Gup	Member	17618313
17	Nar Bdr. Rai	Tsirangtoed Gup	Member	17822577
18	Kharka Bdr. Pardhan	Dunglagang	Member	17643855
19	Man Bir Rai	Sergithang	Member	17839392
20	Changa Lham	RICBL Manager	Co-opted Member	17750021
21	Dasralli	BPC, Manager	Co-opted Member	17975737
22	Phurba	BTL, Manager	Co-opted Member	17100005
23	Ngawang Choedra	Incharge, RSTA	Co-opted Member	17602209
24	Dorji Gyeltshen	DAO	Co-opted Member	17612857
25	Wangchuk	FO	Co-opted Member	17633468
26	Kelzang Jamtsho	Culture	Co-opted Member	17160926
27	Kinley	DHO	Co-opted Member	17649593
28	Tshering Mokten	DE	Co-opted Member	77419206
29	Dorji Wangdi	DEnVo	Co-opted Member	17807474

3. Tsirang Dzongkhag SAR Team

Sl No	Name of person	Designation	Phone	Skills in SAR
1	Dessup Sonam Yodzer	(Gojay) DCRO	17871277	Trained
2	Dessup Sangay Chopel	DLSS, Teacher	17979669	Trained
3	Dessup Pema Tshering	DLSS, Teacher	17254021	Trained
4	Dessup Sonam Gyembo	DLSS, Teacher	17868183	Trained

5	Dessup Tshering Wangchuk	AE	17647854	Trained
6	Dessup Kelzang Jamtsho	DLSS, Teacher	17729046	Trained
7	Dessup Tshering Tenzin	AE	17667775	Trained
8	Dessup Kezang Wangdi	Tsholingkhar GAO	17568837	Trained
9	Dessup Kelzang Jamtsho	CO	17160926	Trained
10	Dessup Rinzin Dorji	DVH	17614406	
11	Wangchen Dorji	Technician	17707919	Trained
12	Tenzin	Khangnyer	77960857	Trained
13	Yeshe Dorji	RBP	17470840	Trained
14	Sherub Dorji	RBP	17860202	Trained
15	Pema Wangchuk	RBP	17956774	Trained
16	Prem Bdr. Ghalley	AE		Trained
17	Yonten Nima	RBP		
18	Ngawang Gyeltshen	RBP		
19	Jigmi Dorji			
20	Dendup Jamtsho			
21	Pema Dorji			
22	Sangay			

5. Firefighting (trucks, equipment, location, capacity)

Sl No	Facilities	Location	Capacity	Contact person	Phone
1	Fire Fighting Truck	RBP,	4500 L	Yeshe	17470840
2	Fire Hydrant	Dzong, Tsirang.	45000L	„	„

6. Medical

Sl. No	Name of Hospital/ BHU	Location	Capacity/number of patients that can be treated	Contact person	Phone number
1	Tsirang Hospital	Damphu	40 bedded	Dr. Tshering Penjor	17698736
2	Barshong BHU	Barshong (Gangtokha)	4 bedded	Mr. Duba Tshering	17150350
3	Mendrelgang BHU	Mendrelgang (Reserboo)	4 bedded	Mr. Karma	17150663
4	Doonglagang BHU	Doonglagang (Kherithang)	4 bedded	Mr. Chakara Pani	17150170
5	Semjong BHU	Semjong (Dzomling)	4 bedded	Mr. Tashi Norbu	17150625

6	Tsirangtoe BHU	Tsirangtoe (Tsirangtoe)	4 bedded	Mr. C.B. Nepal	17150892
7	Phungtenchu BHU	Phungtenchu (Peljorling)	4 bedded	Mr. R.B.Rai	17150510
8	Sergithang BHU	Sergithang (sergithang Mead)	4 bedded	Mr. Dreme Cheten	17150315
9	Patshaling Sub-post	Patshaling (Patshaling maed)	2 bedded	Mr. Sonam Tshering	17810520

7. Contact Details of Tsirang De-Suups

SI #	Name	DID	Designation	Mobile #
1	Pema	DS()	Dzongdag	17989818
2	Namgay Dorji		Dzongrab	17699248
3	Yeshi Wangdi	DS(06) 13-591	Teacher	17794689
4	Sangay Chhophel	DS(06)-13-602	Teacher	17979669
5	Chhime Dorji	DS(06)-13-624	Teacher	17800047
6	Pema Wangda	DS(06)-13-630	Dzongkhag Kidu Officer	17941399
7	Ugyen Dema	DS(06)-13-672	Teacher	77265739
8	Norbu Jamtsho	DS(08)-13-835	Transport Officer	17602209
9	Gyeltshen	DS(10)-14-1102	Teacher	17501504
10	Karma Dorji	DS(10)-14-1104	Teacher	17583011
11	Passang	DS(10)-14-1083	Teacher	17659872
12	Pelden Dorji	DS(10)-14-1085	Teacher	17720495
13	Sonam	DS(10)- 14-1126	Teacher	17866831
14	Kuenzang Wangdi	DS(10)14-1127	Teacher	17625156
15	Wangdi	DS(10)14-1128	Teacher	17657927
16	Kelzang Jamtsho	DS(10)14-1131	Teacher	17871173
17	Kelzang Dorji	DS(12)-14-1375	Mt. Hazelnut Venture	17121228
18	Sonam Gyembo	DS(14)-15-1587	Teacher	17868183
19	Karma Leki	DS(14)-15-1588	Teacher	17994139
20	Sonam Yodzer	DS(16)-15-1812	Civil Registration Officer	17871277
21	Sangay Wangmo	DS(16)-15-1861	Assistant ICT Officer	17692990
22	Kelzang Wangdi	DS{	Teacher	
23	Kinzang Dorji	DS(18)16-2078	Teacher	17729046
24	Pema Tshering	DS(18)16-2079	School Sports Instructor	17254021

25	Sithup Chophel	DS(18)16-2092	Teacher	17671197
26	Tenzin Pelmo	DS(18)16-2132	Teacher	17749294
27	Jamjang Gyeltshen	DS(18)16-2097	Teacher	17775710
28	Yeshi Gyeltshen	DS(18)16-2028	Teacher	17947428
29	Dawa Dema	DS(19)16-2145	Office Asstistant	17240808
30	Singye Wangmo	DS(19)16-2243	Matron	16910850
31	Rinzin Dorji	DS(21)16-2430	Veterinary In-charge	17614406
32	Sonam Tshering	DS(23)17-1994	Teacher	77423040
33	Kinley Dorji	DS(23)17-2763	Teacher	17725056
34	Tenzin Tshomo	DS(23)17-2736	Teacher	17477734
35	Kencho Dorji	DS(23)17-2764	Teacher	17641306
36	Karma Wangchuk	DS(24)17-2841	Graduate	17382116
37	Hema Devi		Business	17973105
38	Phub Rinzin	DS(18)16-2091	Teacher	17803651
39	Pema Choden	DS(06)13-686	Teacher	
40	Shiva Lal Karariya	DS(29)18-3	Thrizin	17921342
41	Beda Moni Chamlagai	DS(29)18-34	Thrizin Wom	17425696
42	Man Bir Rai	DS(29)18-34	Gup	17839392
43	Top Nath Acharja	DS(29)18-3	Gup	17618313
44	Amber Bdr. Pradhan	DS(29)18-	Gup	17643855
45	Chabi Kumar Rai	DS(29)18-	Gup	17867850
46	Santa Lal Powdel	DS(29)18-3401	Gup	17634315
47	Passang Thing Tamang	DS(29)18-3	Gup	17982979
48	Ram Bahadur Karki	DS(29)18-	Gup	17900604
49	Nar Bahadur Rai	DS(29)18-	Gup	17822577
50	Tshering Tenzin	DS(30)18-3510	Electrical Engineer	
51	Singye Dorji		Graduate	17801406
52	Tshewang Dorji	DS(01)11-	GAO	17844744
53	Phuntsho Gyeltshen	DS(11)14-1188	GAO	17661453
54	Lujay Wangdi		Graduate	17643723
55	Leki Wangmo	DS(28)18-3259	Teacher	17700048
56	Sonam Zangmo		Teacher	
57	Samten Lhendup	DS(31)18-	Adm Asst	17343398
58	Tshering Wangchuk	DS(21)16-2432	Engineer	17647854
59	Karma Tenzin	DS(10)14-1112	Teacher	
60	Norbu	DS(31)18-3698	Physiotherapist	17722674
61	Chophela	DS(28)18-3338	Teacher	17968536
62	Gajendra Rai	DS(32)19-3776	Teacher	17991292

63	Tshering Dorji	DS(32)19-	Teacher	17655688
64	Phub Dorji	DS(32)19-	Teacher	17689262
65	Tshegay	DS(32)19-	Teacher	17435950
66	Kelzang Wangdi	DS(25)17-2901	GAO	17658837
67	Kelzang Lhendup	DS(30)18-3618	GAO	17875721
68	Singye Wangchuk	DS(18)16-2066	Teacher	17990478
69	Sonam Tenzin	DS(06)13-628	Principal	17755255
70	Sanchu	DS(03)12-281	Teacher	17414646
71	Kharka Bahadur Pardhan		Gup	
72	Kelzang Jamtsho	DS(15)-16-1685	Sr. Culture Officer	17160926

2. Contact details of Gewog Administrative Officers

Sl No	Name	Designation	Contact Number
1.		GAO, Barshong	
2.	Sonam Phuntsho	GAO, Dunglagang	17616091
3.	Phuntsho Gyeltshen	GAO, Gosaling	17661453
4.	Tshewang Jigmi	GAO, Kilkhorhang	17697595
5.	Cheten Gyeltshen	GAO, Pungtenchu	17289772
6.		GAO, Rangthaling	
7.	Jigmi Wangmo	GAO, Shemjong	17618035
8.	Tsewang Dorji	GAO, Sergithang	17844744
9.	Sonam Rabten	GAO, Tsirangtoed	17607767
10	Kesang Wangdi	GAO, Tsolingkhar	17658837
11	Kesang Lhendup	GAO, Mendrelgang	17875721
12			

Contact number of Principals and DEO's office, Tsirang Dzongkhag

Sl	Name of Principal	School	Office No.	Mobile No.
1	Bhuwan Ghalley	Damphu CS	471102/ 471439p	17667792
3	Chokey Wangchuk	Mendrelgang CS	17150240p/ 17150239	17686563
2	Chuzang Norbu	Damphu LSS	471115/ 471611	17703298
4	Yeshi	Tsirangtoe CS	17686183	77686183
5	Sha Bdr. Subba	Sergithang PS	77105941	17605737
6	Passang Drukpa	Beteni PS	77105943	17151615
7	Rigzin Thinley	Salami PS	77105640	17693120
8	Tshiltrim	Pemathang PS	77105948	17979793
9	Tashi Wangchen	Barshong PS	77105942	17722488
10	Dawa Penjor	Gopini PS	77105944	17693113
11	Nidup Wangdi	Phuentenchu PS	77105645	17995677
12	Cheten Wangchuk	Shemjong PS	77105947	17573797
13	Sonam Tenzin	Tsholingkhar PS	77105946	17755255
14	Cheku	Rangthangling PS	77105643	17780046
15	Tek Bdr. Kharka	Gosaling PS	77105642	17688844
16	Dorji Phuntsho	Nimazor ECR	77105334	16933961
17		Norbugang ECR		
DEO's Office			471589	
19	Sangay Chopel D	Chief DEO	77105949	17978322
20	Tshering	Dy. DEO	77195259	17686234
21	Kelzang Chhodup	Adm. Assistant		17692965

10. Vehicles

Sl No	Type/model	Year of Purchase	Use	Remarks
1	Prado/2007	10 years	Dzongdag	Dzongkhag
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

Commented [Office2]: Please add list of SAR equipment and other resources within the dzongkhag

Disaster Management Terms

Capacity: The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals.

Capacity development: The process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions.

Coping capacity: The ability of people, organizations and systems, using available skills and resources, to manage a disaster.

Disaster: Subject to section 132 of the Disaster Management Act of Bhutan 2013, means a natural or man-made occurrence, which causes environmental loss, increased mortality, illness or injury, and destroys or disrupts livelihoods, affecting the people of an area as classified under Chapter 9 of the Act.

Disaster risk management: The systematic process of using administrative, directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

Disaster risk reduction: Means the conceptual framework of elements considered with the possibility to minimize vulnerability and disaster risk throughout the society and to avoid or to limit the adverse impact of hazard within the broad context of sustainable development.

Disaster risk reduction plan: A document prepared by an authority, sector, organization or enterprise that sets out goals and specific objectives for reducing disaster risks together with related actions to accomplish these objectives.

Early warning system: Set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

Mitigation: Measures aimed at reducing risk, impact or effect of a disaster or an impending disaster situation.

Preparedness: State of readiness to deal with a potential disaster situation or disaster and its effects thereof.

Prevention: Measures taken to avert a disaster from occurring or to impede a hazard so that it does not have any harmful effects.

Recovery and Reconstruction: Efforts, including development, aimed at: a) Restoring normalcy in condition caused by disaster; b) Mitigating the effect of disaster; OR c) Creating circumstances that will reduce the risk of similar disasters from occurring.

Response: Measures taken during or immediately after a disaster in order to bring relief to people and communities affected by the disaster and includes activities such as search and rescue, evacuation, rapid assessment, relief distribution among others.

Retrofitting: Reinforcing or upgrading of existing structures to become more resistant and resilient to the damaging effects of hazards.

Risk: The level of value of expected losses in the form of deaths, damage to property etc. caused by a hazard.