



Contingency Planning Guidelines for Bhutan



DEPARTMENT OF DISASTER MANAGEMENT
MINISTRY OF HOME AND CULTURAL AFFAIRS
ROYAL GOVERNMENT OF BHUTAN

"Reducing Disaster Risk For Safe and Happy Bhutan"

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ACRONYMS

| | |
|---------------------|--|
| ADPC | Asian Disaster Preparedness Center |
| DDM | Department of Disaster Management |
| DDMC | Dzongkhag Disaster Management Committee |
| DM | Disaster Management |
| DM Act, 2013 | Disaster Management Act of Bhutan, 2013 |
| GFDRR | Global Facility for Disaster Reduction and Recovery |
| IFRC | International Federation of Red Cross and Red Crescent Societies |
| NDMA | National Disaster Management Authority |
| SOPs | Standard Operating Procedures |
| TWG | Technical Working Group |
| WB | The World Bank |

ACKNOWLEDGEMENT

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The development of this Guidelines would not been possible without the support and dedication of all the members of the Technical Working Group (TWG) from various agencies, Dzongkhag Planning Officers, Dzongkhag Disaster Focal Persons, Wangduephodrang Dzongkhag and Gelephu Thromde.

The Department also acknowledge the technical support provided by the Asian Disaster Preparedness Center (ADPC) and the financial assistance from the Global Facility for Disaster Reduction and Recovery (GFDRR) and the Government of Sweden through The World Bank (WB).

CHAPTER 1
INTRODUCTION TO
GUIDELINES





Legislative Mandate

As per the Disaster Management Act of Bhutan 2013, Sections 67, 68, 74, 76 and 77 state that every agency notified by the National Disaster Management Authority (NDMA) and private sector are mandated to prepare its Contingency Plan. Under Section 31 and 77, the Dzongkhags, through the Dzongkhag Disaster Management Committees (DDMC), shall develop, review, update and implement the Dzongkhag Contingency Plan in consultation with the local governments within its jurisdiction. Section 74 states that the Department of Disaster Management (DDM) shall prepare the National Plan in line with the Contingency Plan prepared by the agencies and Disaster Management Committees. The Dzongkhag Contingency Plans shall be submitted to NDMA as per Section 78. The Section 79 prescribes that the Contingency Plan should be updated at least once a year whereas the review of the plans will take place every five years.¹

Objectives of the Guidelines

This guideline is being prepared keeping in view the following objectives:

- i. To provide a systematic approach and methodology to develop Contingency Plans in accordance with Sections 74, 76 and 77 of the DM Act, 2013;
- ii. To provide assistance and guidance to the NDMA, DDMC, notified agencies and private sector for preparing realistic and implementable respective Contingency Plans by establishing linkages with the National Disaster Risk Management Strategy, Annual Work Plans and the Five Year Plans.

These guidelines aim to ensure that disaster response of the Royal Government of Bhutan is consistent, prompt and efficient as per Type I, II and III disasters classified in the Act. The Guidelines provide an overview of the key elements of contingency planning. This guide seeks to assist all stakeholders responsible for developing contingency plans at the local, municipal, district and national levels. It is essential to develop contingency plans in consultation

¹ The schedule for review and updation may be followed in coherence to the scheduled followed for/during the preparation of the Annual Work Plan and the Five Year Plan.

and cooperation with those who will have to implement or approve them. This document provides guidelines for development of Contingency Plans; each Contingency Plan will differ based on any given situation, according to the context and scope of that situation.

Framework

The Guidelines have been developed considering the following framework:

- i. Guidelines are consistent with the DM Act, 2013 as well as the Disaster Management Strategic Policy Framework so that all the technical and operational aspects could be managed within a legal and technical framework.
- ii. Guidelines seek to provide the opportunity of mainstreaming DRR into socio-economic development process.
- iii. Guidelines focus on developing mitigation and preparedness measures.

Key Considerations

While developing a Contingency Plan, the following key considerations should be kept in mind:

- i. Guidelines for Disaster Management Planning and strategy for response management are developed separately.
- ii. It is closely linked to Disaster Management Plan. The Act, therefore, refers to it together as Disaster Management and Contingency Plan.
- iii. Contingency Plan has to be developed for a specific disaster at a specific location.

Guidelines Development Process

A number of relevant documents were reviewed in addition to multi-stakeholder consultations and pilot testing of the guidelines at Dzongkhag and Thromde. The overall process is summarized below:



- i. Presentation explaining the concept and process of contingency planning was made to officers of Department of Disaster Management (DDM), Technical Working Group (TWG), Dzongkhag officers and other stakeholders;
- ii. The outline of template was developed by different groups of officers/ stakeholders in a participatory mode and presented;
- iii. Based on inputs received, draft contingency planning guidelines were developed and referred to DDM;
- iv. Comments were obtained from District level Officers and other stakeholders by DDM, TWG and The World Bank;
- v. Simulation exercises were conducted in Wangdue Phodrang Dzongkhag and Gelephu Thromde, in order to pilot the draft Guidelines and help prepare the core parts of the Contingency Plans. Participants' feedback was documented and incorporated into the Guidelines;
- vi. Guidelines were revised and finalized taking into consideration the comments received;
- vii. Guidelines were approved by DDM and shared with Dzongkhags and other relevant stakeholders.

Intended User

This guideline is developed with the primary aim of enabling the local governments and Dzongkhag Disaster Management Committees (DDMC) to prepare their Contingency Plans. Therefore, the Dzongkhag Disaster Management Officers, Dzongkhag Planning Officers and other stakeholders identified by the DDMC, will be the primary users of this guideline.

However, Thromde Disaster Management Sub-committees, Dungkhag Disaster Management Sub-committees and Gewog Disaster Management Sub-committees, notified agencies such as ministries, Department of Disaster Management (DDM), autonomous organizations, government control companies and private sector can also use this guideline if the formations of such sub-committees, agencies and private sector are mandated by the Dzongkhag in terms of relevant provisions of the Act.

CHAPTER 2
INTRODUCTION TO
CONTINGENCY
PLANNING





Contingency Planning

A contingency is a situation that is likely to occur, but may not. A **Contingency Plan** is devised for a specific situation when things *could* go wrong and developed by Governments or businesses, which want to be prepared for anything that could happen. Contingency Planning is the preparatory process of identification of and planning for such situations. It is activated if such a situation does arise; in that case the plan will provide a basis for rapid and appropriate actions, involving all concerned stakeholders, who are associated in the planning process and are well aware of their respective roles, if such a situation arises.

Contingency planning aims to prepare an organization to respond well to an emergency and its potential humanitarian impact. Developing a contingency plan involves making decisions in advance about the management of human and financial resources, coordination and communications procedures, and

being aware of a range of technical and logistical responses. Such planning is a management tool, involving all sectors, which can help ensure timely and effective provision of humanitarian aid to those most in need when a disaster occurs.

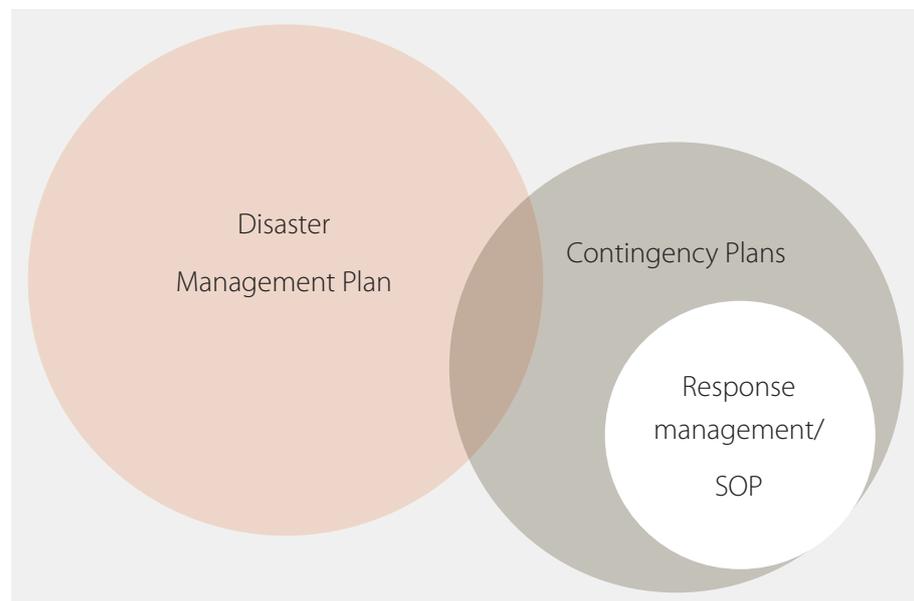
“TIME SPENT IN
CONTINGENCY PLANNING
EQUALS TIME SAVED WHEN
A DISASTER OCCURS

Effective contingency planning should lead to timely and effective disaster-relief operations². The Contingency Plan is therefore not a substitute for Disaster Management (DM) Plan but it supplements the DM Plans and is specific to each event or situation.

² International Federation of Red Cross and Red Crescent Societies (2012) Contingency Planning Guide.

Disaster Management, Contingency Planning and Response Management

Contingency Plans are intricately linked with the Disaster Management Plans and response systems. When response planning is needed for a *specific event*, contingency planning comes into force. In order to activate a contingency plan, relevant Standard Operating Procedures (SOPs) have to be put in place. This would be clear from the diagram given below:



Therefore, it can broadly be stated that contingency plans are a subset of disaster management plans to deal with *specific disasters* at *specific locations* whereas Disaster Management Plans lay down actions to be taken for mitigation, preparedness, response and recovery in *any disaster situation*.

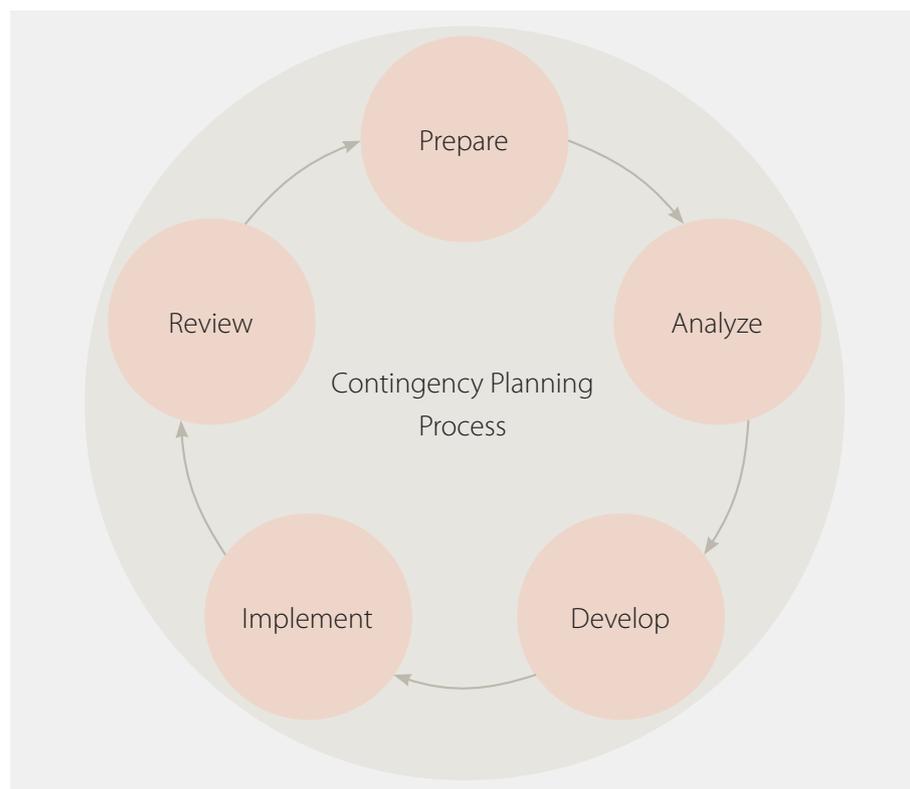


Contingency Planning Process

The contingency planning process basically needs to answer three simple questions:

- What is going to happen?
- What are we going to do about it?
- What can we do ahead of time to get prepared?

For further conceptual understanding, contingency planning may be broken down into five main steps, as shown below.



Prepare

While preparing the contingency plan, the following aspects may be kept in view:

- **What** is contingency planning?
- **When** and how to plan?
- **What** do we need to plan for?
- **Who** should plan?
- Inter-agency/ multi-stakeholder contingency planning
- **Where** to plan?
- Data collection and practical steps to prepare for planning.

In order to be relevant and useful, contingency plans must be a collaborative effort. They must also be linked to the plans, systems or processes of other bodies at all levels – national, regional and global.

Analyze

The 'analyze' step helps planners to assess priority hazard/disaster and its impacts, vulnerability and capacity of local, municipal, district and national levels. It creates realistic scenarios on which the contingency plan will be based, including what the likely priority social and humanitarian needs will be and the role of different stakeholders in addressing these issues.

Develop

The 'develop' step sets out the detailed process of writing a contingency plan. The step outlines some of the key components of the plan including purpose, scope and objectives of the plan, the priority disaster and its characteristics, disaster response phases, contingency structure, functions and responsibilities of each concerned stakeholder, disaster response strategy, coordination mechanism and network, resources arrangements for each stakeholders and contingency teams, contact lists and approval and review of the plan.



Implement

The 'implement' step includes preparedness gap analysis and action plans, Standard Operating Procedures (SOPs), early warning, alert systems and triggers, logistics and program preparedness, human resources, resource mobilization, training and simulation and linkages and communications.

Review

The final step 'review' would include:

1. Updating and evaluating the plan
2. Evaluating during (real-time) and after the response

The Contingency Plan may also be reviewed based on mock drills and simulation exercises. It is not necessary to wait for a specific disaster to occur before undertaking review.³

³ For details, the Contingency Planning Guide of IFRC may be referred to at www.ifrc.org

CHAPTER 3
CONTINGENCY PLAN
TEMPLATE AND
PROCESS





Introduction and Recommended Template

As a result of the Guidelines Development Process documented in Section 1.5, the international concepts and tools of contingency planning have been adapted and aligned to the specific context and conditions in Bhutan. The intended users have been considered throughout the development process.

The following sections provide a recommended contingency plan template; explanatory notes; and the process and method for preparation of the contingency plan.

- **Recommended Template.** The recommended template details the chapters, sub-chapters, and process and method for contingency plan preparation.
- **Explanatory Notes.** The explanatory notes provide a brief narrative for the purpose and contents of each sub-chapter.
- **Recommended Process.** The recommended process provides detailed guidance (exercises, tips, templates) for preparation of the contingency plan and each sub-chapter.

| CONTINGENCY PLAN | | METHOD |
|---|--|---------------|
| Chapter 1: Introduction | 1.1 Purpose | DESK REVIEW |
| | 1.2 Scope | DESK REVIEW |
| | 1.3 Objective | EXERCISE 1 |
| Chapter 2: Contingency Plan Overview | 2.1 Characteristics of Priority Disaster | EXERCISE 2 |
| | 2.2 Phases: pre-disaster, during disaster, post-disaster | STANDARD TEXT |
| Chapter 3: Contingency Structure | 3.1 Contingency Structure | EXERCISE 3 |
| | 3.2 Functions and responsibilities of each stakeholder | EXERCISE 4 |
| Chapter 4: Disaster Response Strategy for Concerned Stakeholders | 4.1 Disaster Response Strategy for each stakeholder | EXERCISE 5 |
| | 4.2 Resource Arrangements for each Stakeholder | EXERCISE 6 |
| Chapter 5: Disaster Response Strategy for Multi-Agency Coordination | 5.1 Multi-Agency Contingency Teams | EXERCISE 7 |
| | 5.2 Resource Arrangements for Contingency Teams | EXERCISE 8 |
| | 5.3 Communication Network | EXERCISE 9 |
| Annex: Additional Documents | A. Contact List | EXERCISE 10 |
| | B. Approval and Review | EXERCISE 11 |
| | C. Other Documents | EXERCISE 12 |
| | | AS NECESSARY |

Explanatory Notes

Chapter 1: Introduction

1.1 **Purpose:** The purpose of contingency planning is to help ensure that response to an event or disaster is prompt, effective and appropriate. It should be specific to a particular disaster which might arise in an identified area, national; district or local; rural or urban or both. If the purpose is clearly spelt out, it will facilitate the entire process of contingency planning and keep it focused so that costs are also contained. It should preferably be a collaborative effort involving all concerned stakeholders to develop shared perspective on a potential crisis or emergency.

1.2 **Scope:** The scope should clearly lay down planning principles adopted, assumptions made and constraints or limitations taken into consideration. It should also specify geographical area and type of hazard for which planning has been undertaken and its interface with other plans, government policies and different stakeholders.

1.3 **Objective:** The objective of a Contingency Plan in case of an anticipated disaster is to ensure safety of community; reduce loss to property and livestock; protect critical infrastructure, lifeline buildings and environment; ensure essential services continue to be operational during and after a disaster; and be better prepared to recover from a major disaster within a reasonable time frame.

The objective(s) has to be formulated for a specific contingency keeping in view that when there is a specific threat of a disaster, exactly how that threat will actually impact is not known while preparing a contingency plan. Therefore, developing different scenarios of possible impacts may be a good way to plan for it. Besides, it may be kept in view while developing objectives that the contingency plan is in accordance with provisions contained in the DM Act, 2013 and to ensure that the plan provides assistance and guidance to different stakeholders who are responsible to respond to the threat.



Chapter 2: Contingency Plan Overview

2.1 Characteristics of Priority Disaster: The history of particular disaster experienced in the area, for which the contingency plan has to be prepared may be listed bringing out the frequency; predictability; speed of onset and warning signs; time duration between early warning and the onset of the hazard; magnitude; intensity of disaster; extent of loss of lives and damage; location of the most hazard-prone areas and safer areas and types of secondary hazards can the major hazard generate; the lessons learned and remedial measures taken. For this purpose, documentation of past disaster may be undertaken, to the extent feasible. This will help in developing different possible scenarios.

This process is actually the Hazard Assessment, which needs to be conducted as part of Risk Assessment (Hazards, Vulnerabilities and Capacities Assessment: HVCA) when developing the Disaster Management Plan. If a Disaster Management Plan has already been prepared in the same location as the Contingency Plan, it is an excellent resource to analyze the characteristics of the priority disaster.

2.2 Phases: Contingency Plan has to cover the response phase; immediately before disaster, during disaster and immediately after the disaster.

1. During 'immediately before disaster', one has to ask questions like 'if a particular disaster takes place at a near future date after receiving warning signs, what measures can be taken from now to prevent it or reduce its impact?'. Necessary measures then can be included in the contingency plan and its implementation initiated. It must be noted here that sudden-onset events such as earthquake do not provide warning for action immediate before the disaster.
2. In the 'during disaster' phase, when the disaster strikes, all response and relief measures have to be taken up by concerned stakeholders by activating trigger mechanism and based on Standard Operating Procedures (SOPs), which should already be in place.
3. In the 'immediately after disaster' phase, measures taken immediately after a disaster, which cannot be undertaken when the disaster strikes will be identified, in order to bring relief to people and communities affected by the disasters.

All these measures during the three phases must be included in the contingency plan.

Chapter 3: Contingency Structure

3.1 Contingency Structure: The contingency (or 'organizational') structure will include all concerned government departments at the level at which the contingency plan is being prepared and would also include departments, notified agencies and private sector, NGOs and international organizations which will function as a back-up support system. It should also include the community where awareness has to be generated among them or training imparted to them to respond to that particular hazard. Preparing an accurate structure will significantly assist in the development of coordination mechanisms (a later section in the Contingency Plan).

3.2 Functions and Responsibilities of each Stakeholder: The functions and responsibilities assigned to each stakeholder should be clearly detailed. For each stakeholder, it is important to consider: i) the normal objectives and routine activities, ii) potential impacts of the priority disaster on the normal objectives and routine activities, and iii) the objectives and responsibilities to reduce the impacts of the priority disaster.

If the stakeholder is a ministry, sector, organization, agency or private sector, they should indicate the nodal point and alternate nodal point for each action point in their respective SOPs, a copy of which may be shared with the key stakeholders, which has the overall responsibility to respond to the disaster. It may also be ensured that respective department, organization, agency or private sector has the requisite capacity to respond to the specific action points. If the capacity is less than the desired level, it may be built up through intensive training, mock drills or simulation exercises.

Chapter 4: Disaster Response Strategy for Concerned Stakeholders

4.1 Disaster Response Strategy for each Stakeholder: The disaster response strategy for each stakeholder includes the specific - and sequential - actions which must be conducted, in order to minimize the impacts of the priority disaster. The response strategy also refers to information and resource requirements, in order that the stakeholder can implement the actions. The response strategy for each stakeholder



is prepared from the perspective of the stakeholder – coordination and team efforts with other stakeholders are addressed in a later step.

Therefore, each stakeholder should consider the phases of the priority disaster (immediately before, during, and immediately after), and the actions which can be conducted by the stakeholder themselves, in due consideration of information and resource requirements.

4.2 Resource Arrangements for each Stakeholder: The disaster response strategy for each stakeholder includes specific actions and the identified resource requirements to conduct the actions. In order to prepare a more complete plan, for each resource it is important to specify the details, including: quantity, location, specifications/quality, and how to obtain the resource.

It is recommended that all resource requirements identified in the response strategy are detailed: materials or equipment, human, and financial resources. Because resources are always scarce, obtaining resources should be considered from the most practical perspective; not from an ‘ideal world’ perspective. Resources may be allocated from Annual and Five Year Plans, loaned, donated, bought through pre-arranged contracts, filled-in “Form 5: Notice requisitioning human and material resources and securing premises” (refer to DM Act, 2013 Rules and Regulations) etc.

Chapter 5: Disaster Response Strategy for Multi-Agency Coordination

5.1 Multi-Agency Contingency Teams: In the Contingency Plan, many specific actions should be identified and conducted by each stakeholder (as documented in Chapter 4: Disaster Response Strategy for each Stakeholder). However, it is also important to consider the shared actions which require ‘contingency teams’ and coordination between the different stakeholders.

Depending on the Contingency Plan stakeholders (as documented in Chapter 3: Contingency Plan Structure) and the specific priority disaster, one or more contingency teams may be established with members from several relevant stakeholders. Each contingency team must identify the sequence of specific actions, the contingency team lead and member stakeholders, and the resources required to implement the specific actions. Contingency team examples include: healthcare and medical operations, public information, and evacuation operations.

5.2 **Resource Arrangements for Contingency Teams:** In a similar process to prepare the resource arrangements for each stakeholder, the contingency teams must discuss the resource arrangements for the respective teams. An additional consideration for the contingency teams is more opportunity to pre-arrange stockpiles and pooling of resources between team members.

5.3 **Communication Network:** From the lessons of many previous large and small disasters, coordination and communication between different stakeholders and agencies is a common issue. Lack of communication in disaster response leads to critical coordination gaps, as well as duplications of effort. This means that response may not be efficient, or effective, and therefore the impacts of the disaster are higher.

The Contingency Plan can directly address this potential issue, by preparing communication network structures. Based on the Contingency Structure documented in Chapter 3, direction-of-travel communication arrows can be added, as well as the means of communication (e.g. telephone, email, fax). A similar communication network structure can be prepared for the contingency teams.

The specific contact details of focal points in the communication networks are to be documents in the Annex: Contact Lists.

Annexes

A. **Contact List:** A contact list of all concerned stakeholders with their nodal officers and alternate nodal officers may be prepared and should be shared with all stakeholders. The list should contain their telephone numbers including residence numbers, alternate numbers if traditional communication channels are not functional during a disaster, and also email addresses. In addition, if there are other support agencies/ persons including suppliers of goods, food materials, medicines, etc., their numbers should also be included in the contact list.

B. **Approval and Review:** The Contingency Plan can serve as a very useful document for all the stakeholders involved, in addition to stakeholders who are indirectly involved. However, unless the Contingency Plan is officially approved through the correct channels, the Plan will not gain authority. This will likely mean that the potential to significantly reduce the impacts of the priority disaster is not reached. It is therefore



important to identify the steps and schedule/deadline for approval of the Contingency Plan.

It is good practice to monitor the implementation of the Contingency Plan. Indeed, the DM Act, 2013 requires progress reporting of selected Plans, such as Dzongkhag Contingency Plans. Similarly, it is also necessary to periodically review/update the Contingency Plan. The steps and schedule/deadline for reporting and review/update should also be documents in Annex B: Approval and Review.

- C. **Others as necessary:** Besides above annexes, if anything is left out or its need arises, it should also be included in the Annexes.

How to Develop Contingency Plans

Introductory Note:

Effective Contingency Planning requires strong coordination between the involved personnel, units, and sectors. Therefore, the planning process should be both participatory and consultative through several meetings.

However, for effective time management in the planning process, a **Principal Drafter** should be assigned to document and compile the Contingency Plan. For example, if the Contingency Plan is developed at Dzongkhag level, the “Dzongkhag Disaster Management Officer” may be assigned as Principal Drafter. It is also more efficient if several sections are prepared through desk review by the Principal Drafter, and presented as a draft at meetings.

The suggested exercises, templates, and tips are directly linked to the Contingency Plan template, for easy user-reference. The exercises, templates, and tips can also be used separately, as appropriate.

Planning – what’s important?

- ✓ The plan itself
- ✓ The process of its development (‘planning’)
- ✓ Implementation!

It is important to remember that the Contingency Plan incorporates two perspectives:

1. From the individual stakeholder (compiled into the Contingency Plan).
2. From the coordination between all stakeholders.

Therefore, the exercises are a combination for individual stakeholders, and for all contingency plan stakeholders together. For the individual stakeholder exercises, these should be compiled by the Principal Drafter.

The individual stakeholder exercises are very beneficial to each stakeholder, and can be presented and approved in their own internal meetings, as well as the presentation of the compiled Contingency Plan.



IMPORTANT NOTE: The term 'stakeholder' is used in the following sections, to refer to organizations or sectors which are directly involved in this specific Contingency Plan.



CHAPTER 1 : INTRODUCTION

1.1 Purpose

DESK REVIEW 1 : What is the main purpose of this Contingency Plan?

The purpose of this Contingency Plan is to ensure a prompt, effective and appropriate response to [priority disaster] in [location]. This will help [e.g. reduce impacts on ...].

-
- This text is only a suggestion, as a starting point.
 - The Purpose can be drafted in a desk review, and presented to participants in order to focus discussions on the Contingency Plan. Participants can edit and reach consensus.
-

1.2 Scope

DESK REVIEW 2 : What is the scope of this Contingency Plan?

The scope of this Contingency Plan notes the following:

- Principles: [e.g. Prepared through consensus]
- Assumptions: [e.g. the Contingency Plan will be reviewed annually]
- Limitations: [e.g. Does not include disaster mitigation or recovery planning]
- Geographic Area: [e.g. Wangdue Phodrang Dzongkhag]
- Priority Disaster: [e.g. Earthquake]
- Interface with other plans, policies, and stakeholders: [e.g. Does not conflict with Five-Year Plan]

-
- The Purpose can be drafted in a desk review, and presented to participants in order to focus discussions on the Contingency Plan. Participants can edit and reach consensus.
-

1.3 Objective

EXERCISE 1: What are the objectives of the Contingency Plan?

| | |
|-------------|----------|
| Objective 1 | To [...] |
| Objective 2 | To [...] |
| Objective 3 | To [...] |



- All meeting participants should discuss together.
- Refer to the Purpose and Scope.
- Remember that the Objectives, Purpose, and Scope, are focused on the Priority Disaster (not general).



CHAPTER 2: CONTINGENCY PLAN OVERVIEW

2.1 Characteristics of Priority Disaster

EXERCISE 2: What are the characteristics of the priority disaster? What is a possible future scenario?

| Parameter | Disaster Characteristics in ... [LOCATION] |
|-------------------|--|
| Hazard | [e.g. Earthquake] |
| Secondary Hazards | [e.g. Fire, GLOF, Landslide, (Unstable structures)] |
| Predictability | [e.g. No] |
| Speed of Onset | [e.g. Sudden] |
| Magnitude | [e.g. 4-6.3 Richter Scale (located in earthquake zones III and IV)] |
| Location | [e.g. Whole Dzongkhag] |
| History | [e.g. 2009: Infrastructural Damage: schools, hospitals, private homes 2011: Higher impact including loss of human life] |

- All stakeholders should discuss together.
- If a Disaster Management Plan is already prepared, refer to the Risk Assessment for further information about the priority disaster.



2.2 Phases: Pre-disaster, During Disaster, Post-disaster

Standard Text: Recommended text for all contingency plans.

Phases: Contingency Plan has to cover the response phase; immediately before disaster, during disaster and immediately after the disaster.

1. During 'immediately before disaster', one has to ask questions like 'if a particular disaster takes place at a near future date after receiving warning signs, what measures can be taken from now to prevent it or reduce its impact?'. Necessary measures then can be included in the contingency plan and its implementation initiated. It must be noted here that sudden-onset events such as earthquake do not provide warning for action immediate before the disaster.
2. In the 'during disaster' phase, when the disaster strikes, all response and relief measures have to be taken up by concerned stakeholders by activating trigger mechanism and based on Standard Operating Procedures (SOPs), which should already be in place.
3. In the 'immediately after disaster' phase, measures taken immediately after a disaster, which cannot be undertaken when the disaster strikes will be identified, in order to bring relief to people and communities affected by the disasters.

All these measures during the three phases must be included in the contingency plan.

- It is recommended to use the above standard text for all contingency plans, in order to ensure that everyone is clear about the focus on immediately before, during, and immediately after the disaster.
-

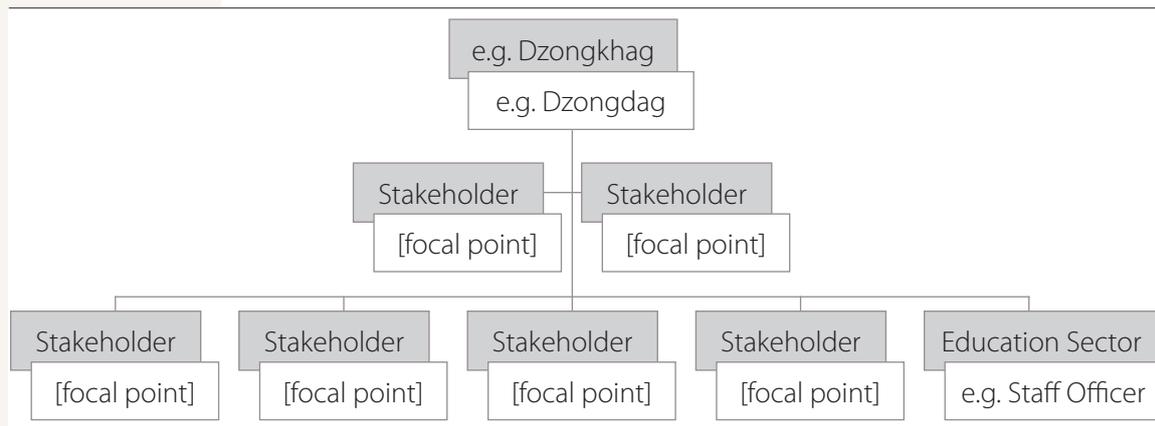




CHAPTER 3: CONTINGENCY STRUCTURE

3.1 Contingency Structure

EXERCISE 3: What is the organizational structure of the Contingency Plan? Who is involved?



- All stakeholders should discuss together.
- This diagram should clearly show the structure of the sectors/units/personnel involved in this Contingency Plan.
- The diagram can also include private companies, NGOs, international organizations, and communities which may have an indirect role in this Contingency Plan.

3.2 Functions and Responsibilities of each Stakeholder

EXERCISE 4: What are the functions and responsibilities of each stakeholder in the Contingency Plan? During the normal times and during the priority disaster?



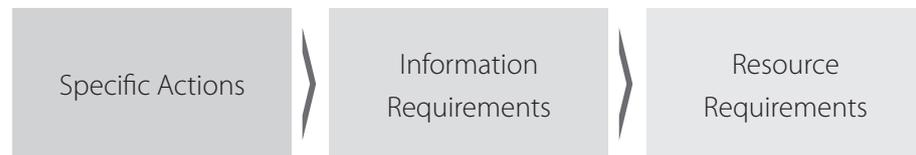
- Every stakeholder should answer each question in sequence.
- Each stakeholder can use the **PART A template** on page 26-27.
- The **Principal Drafter** can easily compile each stakeholder's answers in the template.

CHAPTER 4: DISASTER RESPONSE STRATEGY FOR CONCERNED STAKEHOLDERS

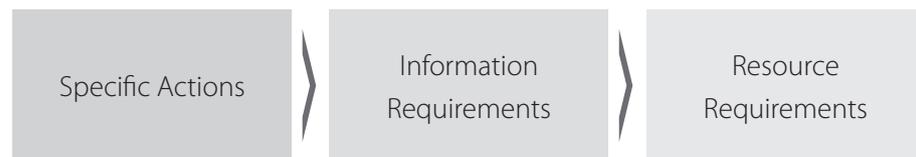
4.1 Disaster Response Strategy for each Stakeholder

EXERCISE 5: What are specific actions of each stakeholder: immediately before, during, and immediately after the priority disaster?

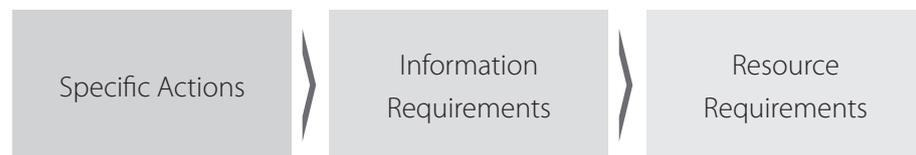
Immediately Before:



During:



Immediately After:



-
- Each stakeholder should identify the specific actions, information requirements, and resource requirements.
 - Each stakeholder can think of the impacts and possible (better) response actions experienced from past disasters.
 - Each stakeholder should think carefully about the correct sequence of specific actions.
 - Each stakeholder can use the **PART B template** on page 26-27.
 - “Resources” can be in terms of: materials/equipment, human resources, or financial resources.
-



SEPARATE STAKEHOLDER INFORMATION

PART A (See Exercise 4)

| | | |
|---|---|---|
| Stakeholder: | | |
| Priority Disaster: | | |
| Stakeholder's Normal Objectives and Routine Activities: | v | v |
| Potential Impact of Priority Disaster on these Objectives and Activities: | | |
| Stakeholder's Objectives and Responsibilities to Reduce the Impacts of Priority Disaster: | | |
| | | |
| | | |
| | | |

PART B (See Exercise 5)

| | |
|--|------------------|
| Stakeholder's Specific Actions to Reduce the Impacts | |
| Immediately before the disaster strikes (from ... hours/days to ... hours/days) before | |
| 1. | In sequence v |
| 2. | |
| 3. | |
| During the disaster strikes | |
| 1. | In sequence v |
| 2. | |
| 3. | |
| 4. | |
| Immediately after the disaster strikes (from ... hours/days to ... hours/days) after | |
| 1. | In sequence v |
| 2. | |
| 3. | |
| 4. | |



4.2 Resource Arrangements for each Stakeholder

EXERCISE 6: What are the resource requirements for each stakeholder's specific actions?

| STAKEHOLDER: [E.g. Education Sector] | | | | |
|--------------------------------------|----------|--------------------------|--------------------------------|---------------------------------|
| Name of Resource | Quantity | Location | Specifications and Quality | How to get the Resource |
| [e.g. Temporary Tents] | [e.g. 1] | [e.g. Stored at HSS 'X'] | [e.g. Capacity for 30 persons] | [e.g. Allocated in annual plan] |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

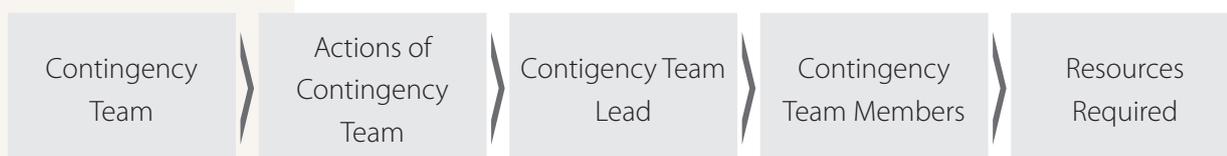


- Each stakeholder should identify the resources, quantities, location, specifications, and how to get the resources.
- Use the identified resources in Section 4.1 "Disaster Response Strategy for Priority Disaster".
- "How to get the resource" refers to:
 - Loaned from another stakeholder (specify)
 - Donated by another stakeholder (specify)
 - Filled-in "**Form 5: Notice requisitioning human and material resources and securing premises**" (refer to DM Act, 2013 Rules and Regulations).
 - Buy-now using internal regular budget (specify)
 - Pre-arranged contract with another stakeholder (specify)
 - Etc. (specify)
- Each stakeholder should consider the DM Act, 2013 Section 71: resource funding for specific actions in the contingency plan, should be provisioned from the five-year plan and annual plan and budget.
- Remember that resources can be: materials/equipment, human resources, or financial resources.

CHAPTER 5: DISASTER RESPONSE STRATEGY FOR MULTI-AGENCY COORDINATION

5.1 Multi-Agency Contingency Teams

EXERCISE 7: What are the shared actions which require contingency teams and coordination between different stakeholders



Example Contingency Teams are:

- Priority disaster monitoring
- Forecasting and early warning dissemination
- Evacuation operations
- Safe area and temporary shelter management
- Search and rescue operations
- Healthcare and medical operations
- Rapid assessments
- Relief coordination and management
- Public information



-
- All stakeholders should discuss together.
 - The template below may be used for this exercise.
 - For Contingency Team specific actions, it is not essential to separate according to the phases of the priority disaster: immediately before, during, and immediately after.
 - Contingency teams can help different stakeholders work closely together to minimize the impacts of the priority disasters, but it is not always necessary to establish all the teams in this template. For example, earthquake disasters do not need a priority disaster monitoring team.
 - Resources can be in terms of: materials/equipment, human resources, or financial resources.
 - It is recommended that the contingency Team Lead Departments and Members are the same for all priority disasters.
 - Contingency team Tasks will differ, depending on the priority disaster type.
-



5.2 Resource Arrangements for Contingency Teams

EXERCISE 8: What are the resource requirements for each Contingency Team's specific actions?

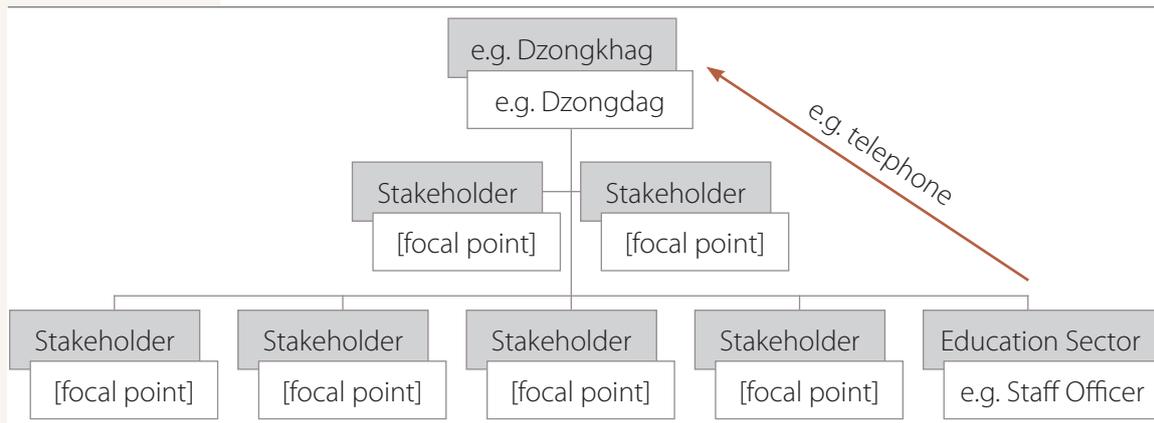
| CONTINGENCY TEAM: [e.g. Priority Disaster Monitoring] | | | | |
|---|----------|----------------|-----------------------------|-------------------------|
| Name of Resource | Quantity | Location | Specifications and Quality | How to get the Resource |
| [e.g. Expert from DHMS] | [e.g. 1] | [e.g. Thimphu] | [Experienced staff officer] | [Contact DHMS] |
| | | | | |
| | | | | |
| | | | | |
| | | | | |



- Each stakeholder should identify the resources, quantities, location, specifications, and how to get the resources.
- Use the identified resources in Section 4.3 "Coordination Mechanism".
- Each contingency team should consider the DM Act, Section 71: resource funding for specific actions in the contingency plan, should be provisioned from the five-year plan and annual plan and budget.
- "How to get the resource" refers to:
 - Loaned from another stakeholder (specify)
 - Donated by another stakeholder (specify)
 - Filled-in "**Form 5: Notice requisitioning human and material resources and securing premises**" (refer to DM Act, 2013 Rules and Regulations).
 - Buy-now using internal regular budget (specify)
 - Pre-arranged contract with another stakeholder (specify)
 - Etc. (specify)
- Remember that resources can be: materials/equipment, human resources, or financial resources.

5.3 Communication Network

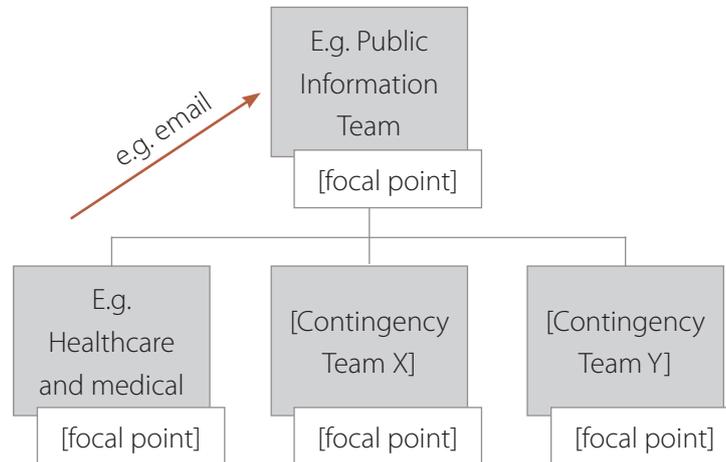
EXERCISE 9: How will the Contingency Plan stakeholders communicate immediately before, during, and immediately after the priority disaster?



- All stakeholders should discuss together.
- The diagram of section “3.1 Contingency Plan Structure” can be copied.
- Add the communication direction and method (e.g. telephone, fax, email)
- If the contingency plan stakeholders also need to communicate with other organizations or individuals not directly involved in this contingency plan, this should be added to the diagram.



EXERCISE 10: How will the Contingency Teams communicate with other Contingency Teams?



-
- All stakeholders should discuss together.
 - A similar diagram as the diagram of section “3.1 Contingency Plan Structure” can be drawn, but for Contingency Teams.
 - Add the communication direction and method (e.g. telephone, fax, email)
-



IMPORTANT NOTE:

The following is directly related to:

- Section 5.1: Multi-Agency Contingency Teams
- Section 5.3: Communication Network

As of 2014, the Department of Disaster Management is in the process of institutionalizing the Incident Command System (ICS) in Bhutan, supported by the US Forest Service.

It is intended that ICS is institutionalized at national, Dzongkhag, and Gewog levels. Part of this includes establishment of Incident Management Teams (IMT) at Dzongkhag and Gewog levels. It also includes necessary coordination between IMT and the Emergency Operations Centers (EOC) – if established at Dzongkhag and Gewog levels (refer to DM Act, 2013).

Incident Management Teams at Dzongkhag and Gewog levels include the following sections:

- Command Staff
- Operations Section
- Planning Section
- Logistics Section
- Finance and Admin Section

Until the Incident Command System in Bhutan is finalized, it is recommended to prepare the Contingency Plan according to Sections 5.1 “Multi-Agency Contingency Teams” and 5.3 “Communication Network”.



ANNEX: ADDITIONAL DOCUMENTS

A: Contact List

EXERCISE 11: What are names and contact details of all the Contingency Plan stakeholders?

| Contingency Plan Stakeholder | First Contact | | Back-up Contact | |
|-----------------------------------|---------------------|--|---------------------|--|
| [E.g. Dzongkhag Education sector] | <i>Name</i> | | <i>Name</i> | |
| | <i>Email</i> | | <i>Email</i> | |
| | <i>Office phone</i> | | <i>Office phone</i> | |
| | <i>Fax number</i> | | <i>Fax number</i> | |
| | <i>Mobile phone</i> | | <i>Mobile phone</i> | |
| | <i>Home phone</i> | | <i>Home phone</i> | |
| | <i>Name</i> | | <i>Name</i> | |
| | <i>Email</i> | | <i>Email</i> | |
| | <i>Office phone</i> | | <i>Office phone</i> | |
| | <i>Fax number</i> | | <i>Fax number</i> | |
| | <i>Mobile phone</i> | | <i>Mobile phone</i> | |
| | <i>Home phone</i> | | <i>Home phone</i> | |
| | <i>Name</i> | | <i>Name</i> | |
| | <i>Email</i> | | <i>Email</i> | |
| | <i>Office phone</i> | | <i>Office phone</i> | |
| | <i>Fax number</i> | | <i>Fax number</i> | |
| | <i>Mobile phone</i> | | <i>Mobile phone</i> | |
| | <i>Home phone</i> | | <i>Home phone</i> | |
| | <i>Name</i> | | <i>Name</i> | |
| | <i>Email</i> | | <i>Email</i> | |
| | <i>Office phone</i> | | <i>Office phone</i> | |
| | <i>Fax number</i> | | <i>Fax number</i> | |
| | <i>Mobile phone</i> | | <i>Mobile phone</i> | |
| | <i>Home phone</i> | | <i>Home phone</i> | |



- This table should contain the stakeholders, names, and contact details of all who are involved in this Contingency Plan.
- The table should be extended as necessary.
- It is a key reference for communication and coordination mechanisms, as identified in the Contingency Plan.

B. Approval and Review

EXERCISE 12: What is the official approval and review process of this Contingency Plan?

| Procedures | Steps | Schedule or Deadline |
|-------------------|--|----------------------|
| Approve | 1. [E.g. Principal Drafter sends Contingency Plan to Dzongdag] | [E.g. August 2014] |
| | 2. | |
| | 3. | |
| Report | 1. | |
| | 2. | |
| | 3. | |
| Review and Update | 1. | |
| | 2. | |
| | 3. | |



- “Approve” refers to official approval of the Contingency Plan by the relevant authority (e.g. National Disaster Management Authority (NDMA), Chairman of Dzongkhag Disaster Management Committee).
- “Report” refers to reporting on implementation progress of the Contingency Plan.
- “Review and Update” refers to the review, assessment, and update of the Contingency Plan.
- For each of the procedures, the DM Act, 2013 provides specific instructions, and is a key reference for Annex 2: Approval and Review.



ANNEX

TESTING THE CONTINGENCY PLAN

Introductory Note:

The purpose of a simulation exercise is to test the effectiveness and efficacy of the Contingency Plan (for the identified priority disaster in the specified location). The simulation exercise is designed as a practical activity that places participants in a simulated situation, requiring them to function in the capacity expected of them in a real event.

Therefore, the exercise participants should be the same stakeholders that developed the Contingency Plan. The exercise may also include the indirect stakeholders, which are also identified in the Contingency Plan.

The exercise can be feasibly conducted in a classroom environment (e.g. meeting hall, school classroom), with all participants within the same room.

The key steps of the simulation exercise are broadly:

| | |
|-----------------|--|
| BEFORE EXERCISE | <p>1. Develop the scenario. Develop scenarios based on experiences from previous disasters (the scenario may be more, or less complicated; this depends on the creativity of the scenario designer). As noted above, the scenario must be developed for the identified priority disaster in the specified location.</p> <p>All participants should re-read and bring their copy of the Contingency Plan to the exercise.</p> |
| DURING EXERCISE | <p>2. Explain the scenario. Present the created scenarios to the simulation exercise participants. This should clearly explain the key elements of the scenario, and allow participants to ask questions and clarifications about the scenario.</p> <p>3. Use the Contingency Plan and act out the scenario. Based on the contents of the Contingency Plan, participants should then act on the scenario (as if it is actually happening now).</p> <p>The participants must refer to the details in the Contingency Plan, and during the exercise, must base their actions on these details.</p> <p><i>* The template below may be helpful to engage the participants in the exercise.</i></p> |
| AFTER EXERCISE | <p>4. End the exercise. The exercise ends when all of the key specific actions in the Contingency Plan are completed. The end of the exercise can usually be observed when participants naturally complete the key specific actions.</p> <p>5. Evaluate the Contingency Plan. The participants should reflect on the exercise and the potential improvements for the Contingency Plan. Guiding questions include:</p> <ul style="list-style-type: none"> • Did everything go according to the contingency plan? Why/why not? • How could coordination be improved between the stakeholders? • What lessons can we learn when we prepare Contingency Plans for other priority disasters? |

Simulation Exercise Communication and Coordination:

In Contingency Plans, effective communication between different stakeholders is often identified as key for successful coordination. For example, it is essential for multi-agency coordination.

In order to practice effective communication during the simulation exercise (and also to encourage active participation), it is helpful to use a simple messaging system. Participants can be given multiple blank paper templates, and should complete according to the Contingency Plan and the scenario details.

The suggested template below contains the following sections:

- **“From”**: the name of the person or agency who is sending the message
- **“To”**: the name of the person or agency who should receive the message
- **“Message”**: short details of information or request for help
- **“Sent via”**: the means of communication. In the simulation exercise, a paper template is used; in the real situation, one means of communications may be preferable to another.

| | |
|--|-----|
| From: | To: |
| Message: | |
| Sent via: (formal letter/ telephone/ fax/ email/ others (please identify)) | |



-
- Make multiple photocopies of the template.
 - Each stakeholder to write down their information/help needed from other agencies and give to them (used during the group exercise/simulation).
-



Example Simulation Exercises:

Whilst developing the draft Contingency Planning Guidelines in 2014, Contingency Plans were prepared in workshops in Wangdue Phodrang Dzongkhag and Gelephu Thromde. In order to evaluate the Contingency Plans, simulation exercises were conducted as follows:

- Earthquake in Wangdue Phodrang Dzongkhag
- Flashflood in Gelephu Thromde

The main contents of each simulation exercise are presented below. The exercises may be adapted for other priority disasters and other geographic locations, to evaluate new Contingency Plans. The Department of Disaster Management (DDM) is able to provide technical support in this regard.

Example Scenario 1: Earthquake in Wangdue Phodrang

- Date 21 May 2014
- Magnitude 6.5 earthquake
- Depth 9 km
- Epicenter – near Wangdi
- Time 6:45 am
- Ground shaking 15 seconds
- Most damage shaking occurs in Wangdi and Punakha
- Less severe, but still damaging shaking occur in Thimphu and Paro
- Aftershocks of varying density in several days after the main shocks cause further damage to structures already weakened by previous shaking

In Wangdue Phodrang,

- Focal person of health sector is on mission abroad
- Office of EOC is partially damaged and need to find safer place for EOC meeting
- More than 50 people with injuries requiring hospitalization and estimation of 3 fatalities and 40 receive injuries requiring minor medical attention
- Many of earthquake victims' homes and possessions are destroyed or damaged, causing many to seek short-term shelter
- Damage on bridges and roadways which blocks external assistance and cause shortage of essential supplies (fresh food, bottled water, fuel, etc)
- Damage occurs to water supply and distribution system, wastewater treatment system, power and communication system (telephone, internet)
- Few people are missing and separated from their families
- Damage to most of schools buildings and affect to students in the classes
- Partially damage to hospitals and a cultural heritage
- Landslide occurs and block roadways, waterway and cause damage to farmland

Immediate requests

- National level wants information to provide immediate assistance and supports
- Media wants information to report to public
- Private sectors and volunteers wants to provide relief assistance and helps
- Community people not sure when to move back to their houses and whether the structure will be strong enough



Example Scenario 2: Flash flood in Gelephu Thromde

- The Hydro Met department has announced through BBS, radio and website that there will be a heavy rainfall during 23-25 May 2014 in the Central and Southern part of Bhutan.
- The department expects riverine flood and flash flood particularly in Wangdue Phodrang, Danaga, Tsirang, Throngsa, Zhemgang, Sarpang and Gelephu.

In Gelephu Thromde,

- Water level of Setikharechu, Ipolechu is increasing. The heavy rainfall is continuing for 24 hours which cause high possibility of flash flood in Gelephu Thromde.
- DMC Chairman and a focal person of health sector are on mission abroad.
- Heavy rainfall continues for 48 hours which causes flash flood (water level 0.5-1.2 m) in Gelephu
- Office of EOC is flooded and need to find safer place for EOC meeting
- The residential area next to the irrigation canal is flooded. 8 houses damaged and 10 families required to be evacuated.
- Some members of the victims are asking immediate search & rescue. Overcrowding at the site
- More than 50 people with injuries requiring hospitalization and estimation of 3 fatalities and 40 receive injuries requiring minor medical attention. Some people developed diarrhea after drinking water
- Grave danger of the Satikhareychu up-stream villages being washed out if the stream changed its course
- The Royal Bhutan Police (RBP) residential areas hit the most and hardest. The residents, family members and children have to evacuate.
- Whole area near the border gate is flooding and inaccessible.

- A huge tree fallen right at the middle of the highway, blocking flow of the water towards the border gate and cause damage to paddy field
- Power black out in the town and water source cut off
- Damage occurs to wastewater treatment system,
- Communication system disrupted (telephone, internet)
- It is very dangerous for teachers and students to cross the stream to schools
- Partial damage to hospitals and a cultural heritage site

Immediate requests

- DDM wants information to provide immediate assistance and supports
- HM Secretariat is asking situation report within an hour
- 80 people were homeless and need food and shelters
- Dasho Dzungda is visiting the incident site shortly
- Media wants information to report to public immediately
- Welfare officer is asking Thromde representatives to attend the meeting in his office
- Ministries are asking the situation report from their relevant sectors
- Local private sectors and volunteers wants to provide relief assistance and help
- Some houses are about to collapse and inhabitants are not willing to go out



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