



# COUNTRY PRESENTATION BHUTAN

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**Galey Tenzin, National Commission for Women and Children**



དབལ་ལྷན་འབྲུག་གཞུང་།  
ROYAL GOVERNMENT OF BHUTAN  
རྒྱལ་ཡོངས་ཨམ་སྲུང་ཨ་ལེའི་ལྷན་ཚོགས།  
NATIONAL COMMISSION FOR WOMEN AND CHILDREN



# Situation of Children

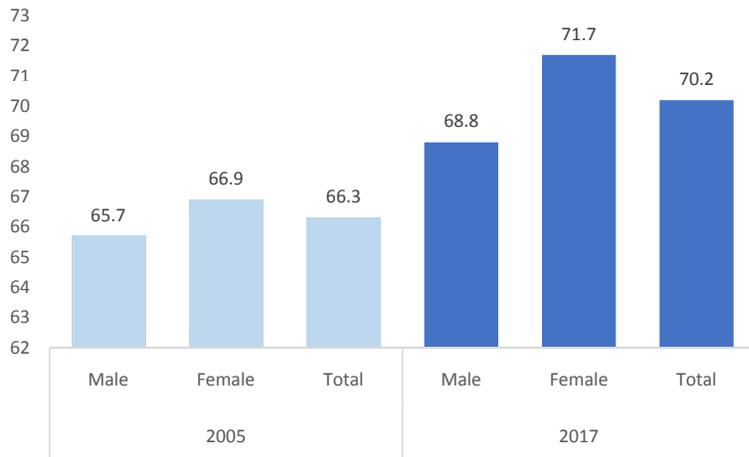






# Health

Life Expectancy at Birth



Maternal Mortality Ratio (per 100,000 live births)	89
Total Fertility Rate (births per woman)	1.7

- 97.2% births attended by health professionals (312 not attended by HP)



Ministry of Home & Cultural Affairs  
Royal Government of Bhutan  
Tashichho Dzong, Thimphu

# Overview of Disaster Management System in Bhutan



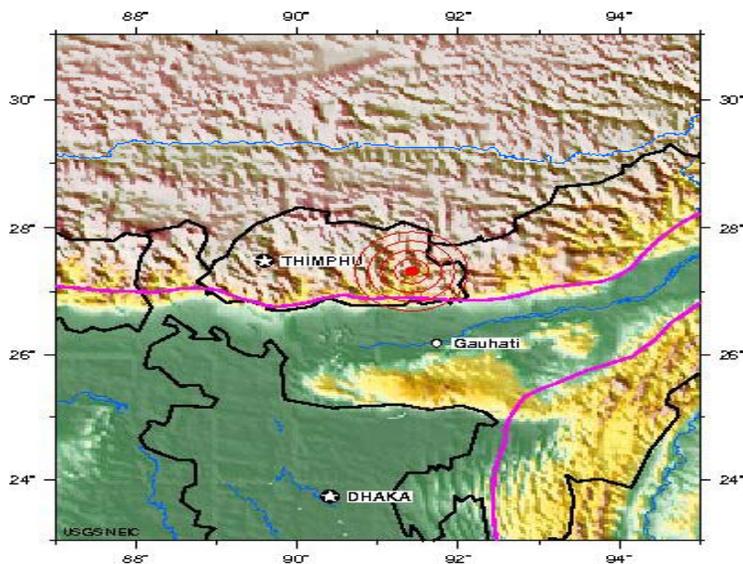
Department of Disaster Management  
Ministry of Home and Cultural Affairs  
[www.ddm.gov.bt](http://www.ddm.gov.bt)

Child Care & Protection Act 2011  
Ratified the Convention on Rights of the Child (May 23, 1990)  
[www.ncwc.gov.bt](http://www.ncwc.gov.bt)

# Hazards: EARTHQUAKE



- High Risk
- Location in Seismic zone IV & V
- High likelihood of major earthquake

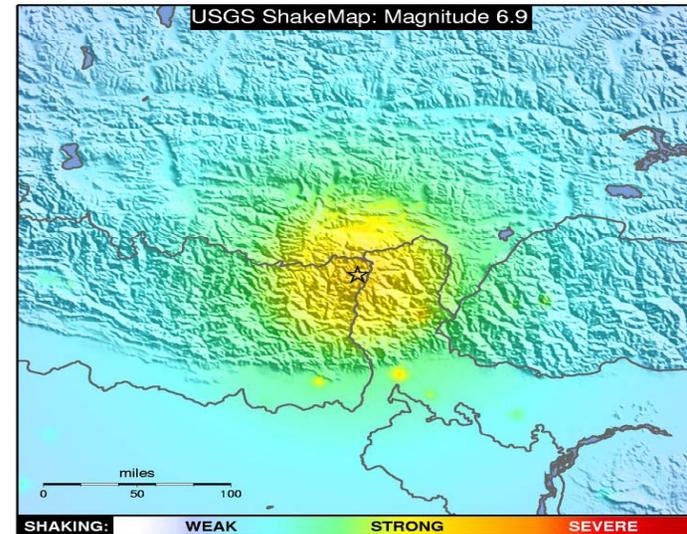


## BHUTAN

2009 09 21 08:53:06 UTC 27.32N 91.42E Depth: 14 km, Magnitude: 6.1  
Earthquake Location

21<sup>st</sup> Sept., 2009 – Mongar Earthquake  
Magnitude 6.1 (10 KM) Time 2:53 PM  
12 people killed

18th September, 2011 – Sikkim  
Earthquake  
Magnitude 6.9 (19.7 Km)

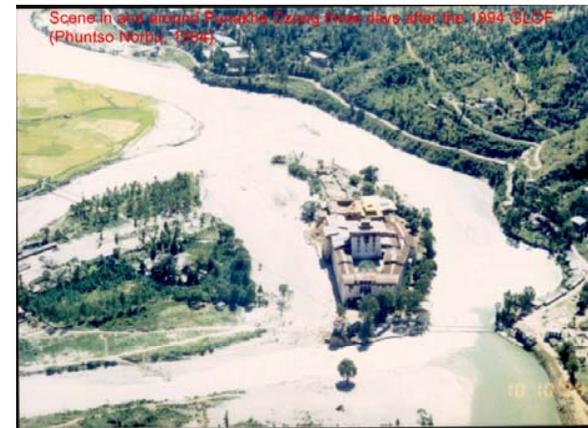
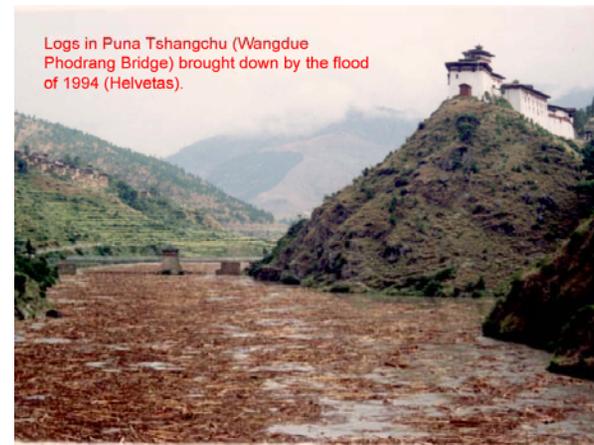


Map Version 3 Processed Tue Sep 20, 2011 08:01:13 AM MDT – NOT REVIEWED BY HUMAN

## GLACIAL LAKE OUTBURST FLOOD



- 677 glaciers and 2,794 glacier lakes
- 25 glacier lakes potentially dangerous
- 21 outburst cases in Bhutan (SATREPS Project, 2012)
- 4 cases of outburst in the last 40 years



# FLOODS



- Recurrent Event
- Eastern & Southern Region most vulnerable

## Past events

- Phuentsholing & Pasakha – Year 2000
- Eastern Bhutan – Year 2004
- Cyclone Aila – Year 2009 flood
- July 2016 (Phuentsholing and Sarpang)



## FIRES ON FOREST AND HUMAN SETTLEMENT



### Forest fires

- Annual event
- 99.9 % manmade

### Fires on Human Settlement

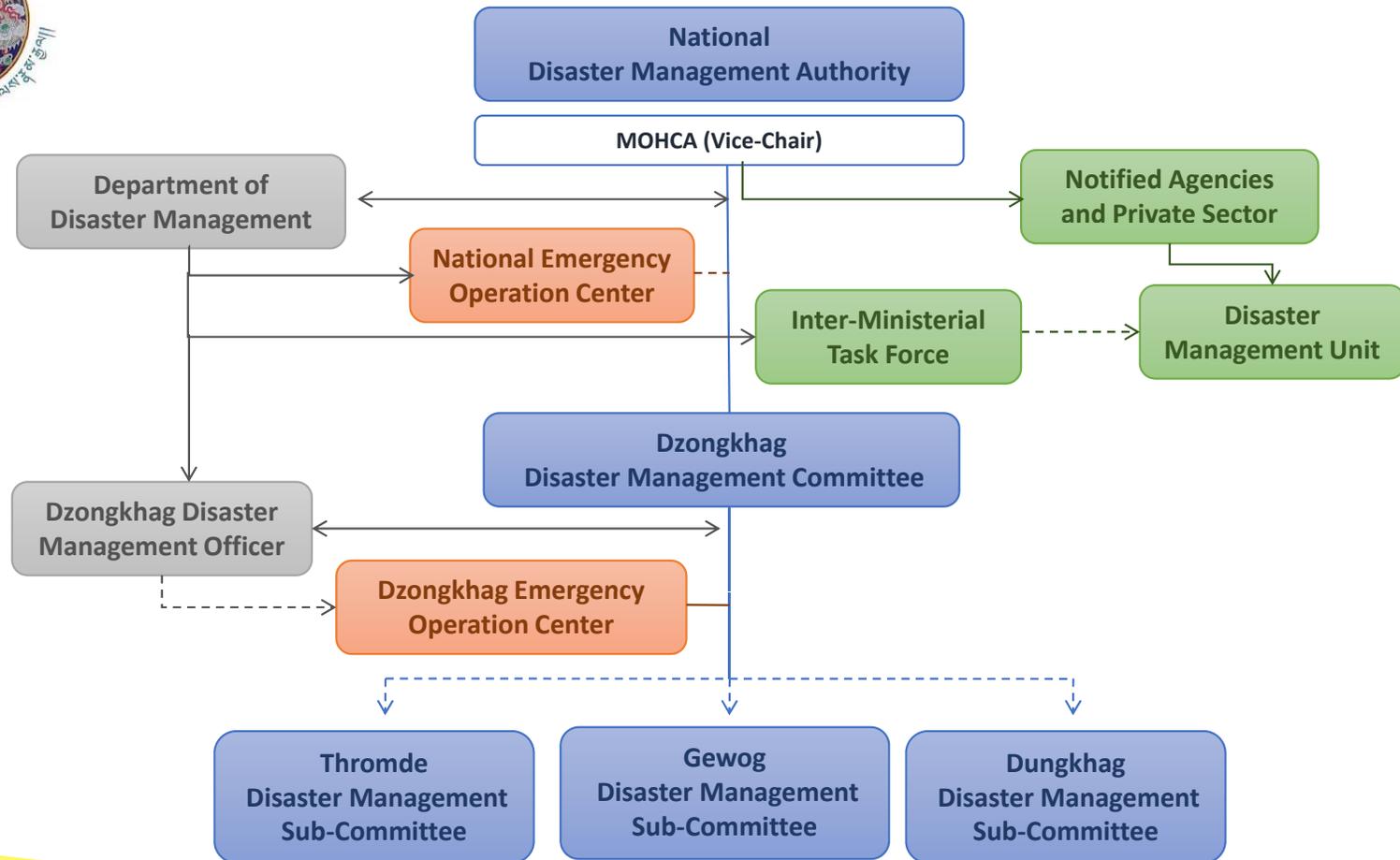
- Unsafe habits – electrical wiring, temporary housing
- Use of wood

### Other Hazards

1. Windstorms/ Thunderstorms/ Snowstorms/ Hailstorms
2. Epidemics, pests and diseases



# DISASTER MANAGEMENT SYSTEM (DM ACT 2013)



## Classification of Disaster Type I, II & III

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A disaster shall be classified as Type I, if it:

- a. Affects a City (Thromde) or Block (Gewog) or any part thereof
- b. Can be managed with available resources of the Gewog/Thromde

A disaster shall be classified as Type II, if it:

- a. Affects a District (Dzongkhag) as whole or in part or more than one Dzongkhag
- b. Can be managed with available resources of the Dzongkhag(s)

A disaster shall be classified as Type III, if it:

- a. It affects the nation as a whole or in part
  - b. Severity and magnitude is so great that it is beyond available resources of the affected dzongkhag(s)
- 



Ministry of Home & Cultural Affairs

Royal Government of Bhutan

# **Disaster Response and Coordination Mechanism at the National and Dzongkhag level Incident Command System (ICS)**





# ICS is....

- Standardized, on-scene, all-hazards incident management system
- Integrated organizational structure that can match the complexities and demands of single or multiple incidents without being hindered by jurisdictional boundaries.
- Used on daily basis for routine incidents as well as major emergencies; activated at first response

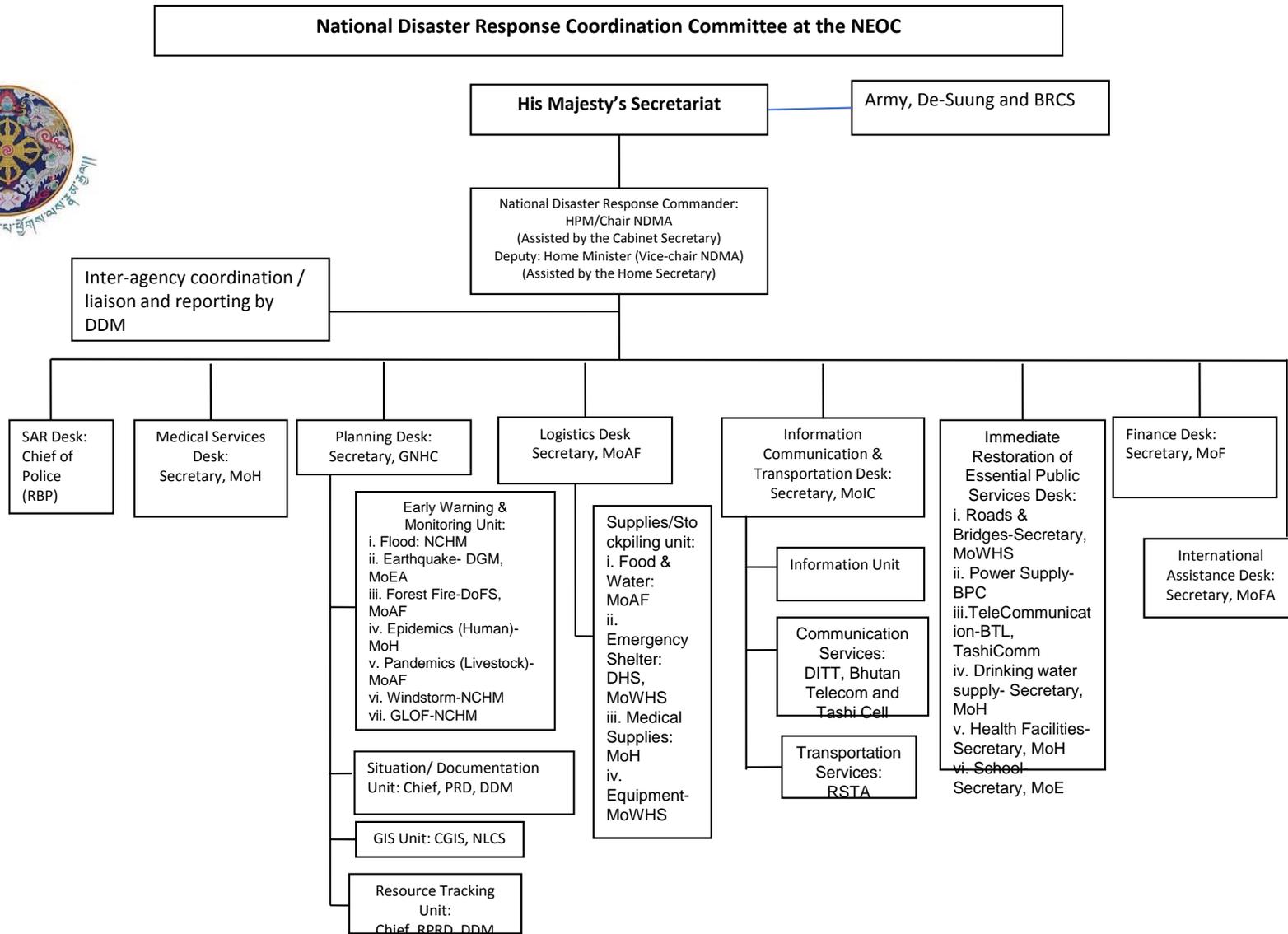


## Disaster Response and Coordination Process at the National and Dzongkhag level

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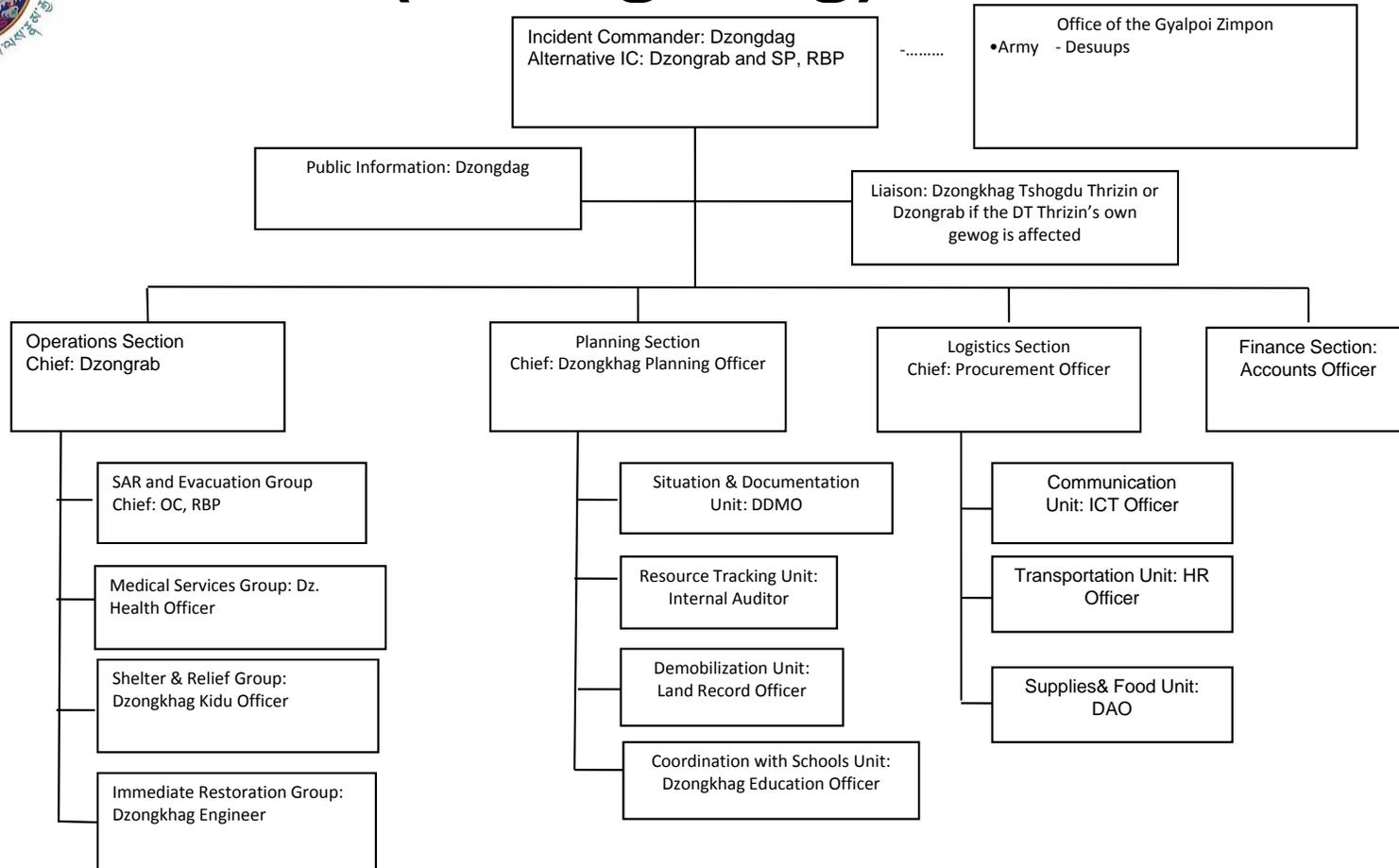
- National Disaster Response Coordination Committee (NDRCC) at the national level
- Incident Management Teams (IMT) at the Dzongkhag, Dungkhag and Gewog levels (prepared through consultation with the Dzongkhags)





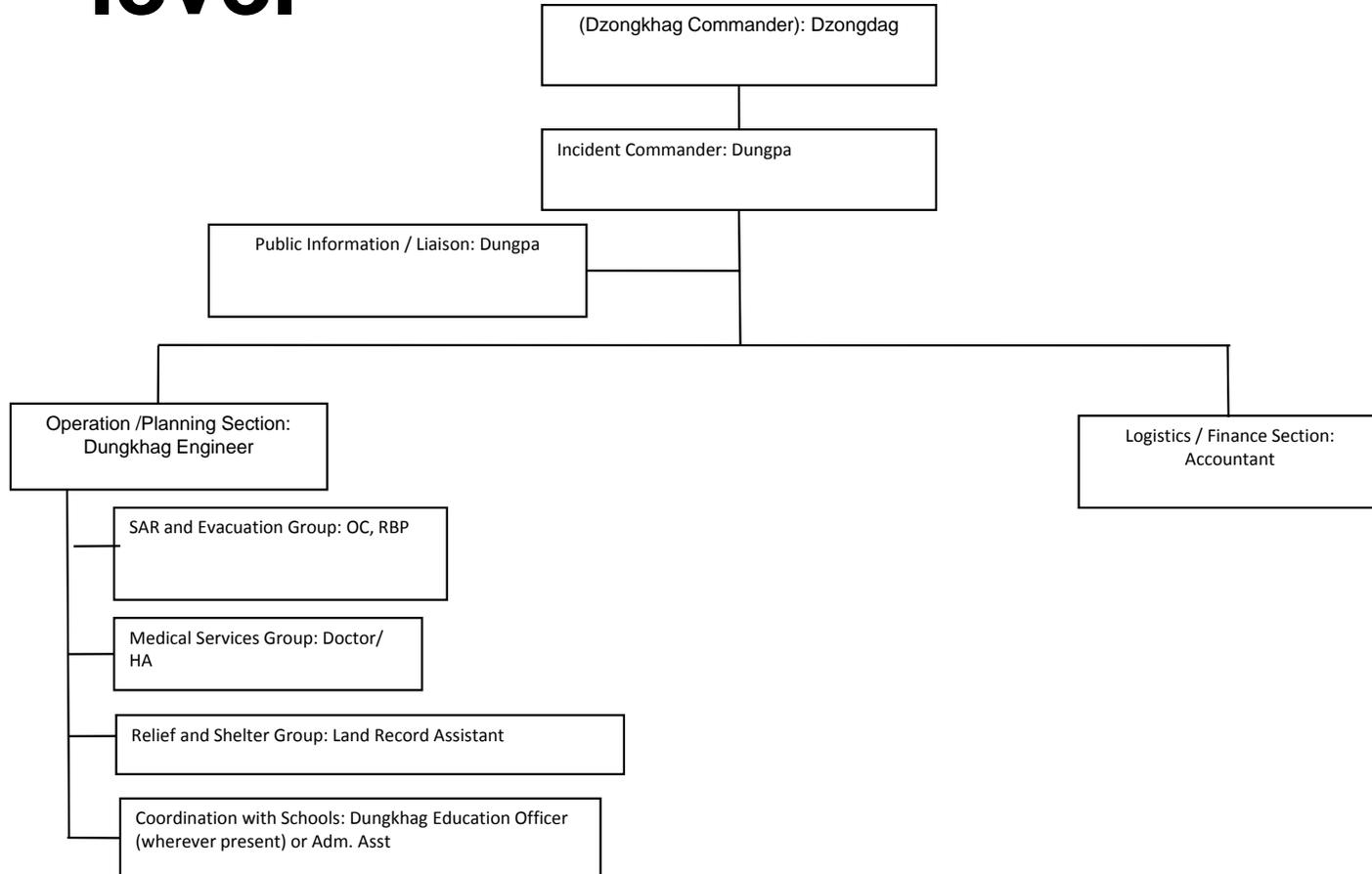


# Incident Management Team at District (Dzongkhag) Level



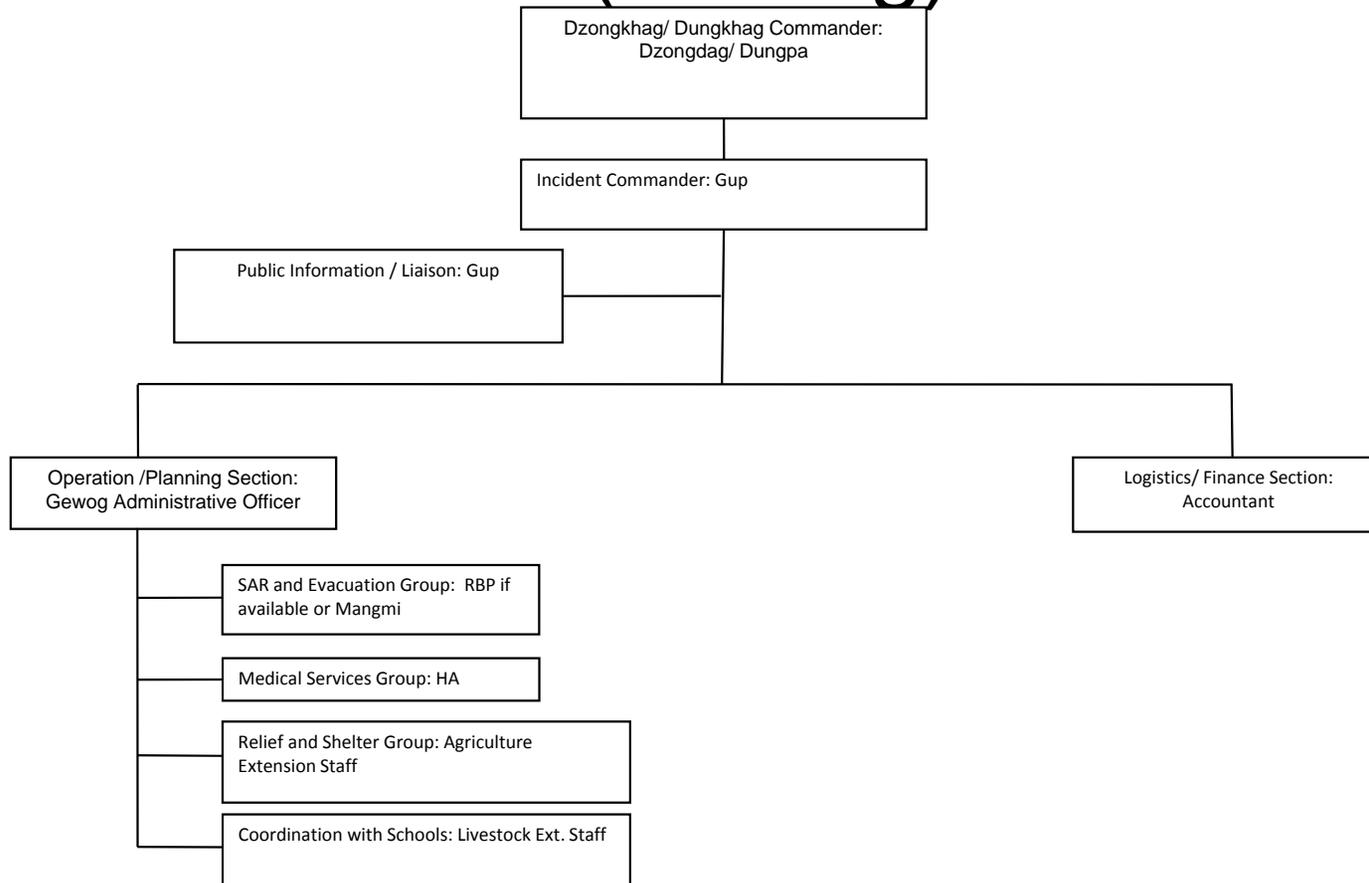


# IMT at Sub-District (Dungkhag) level

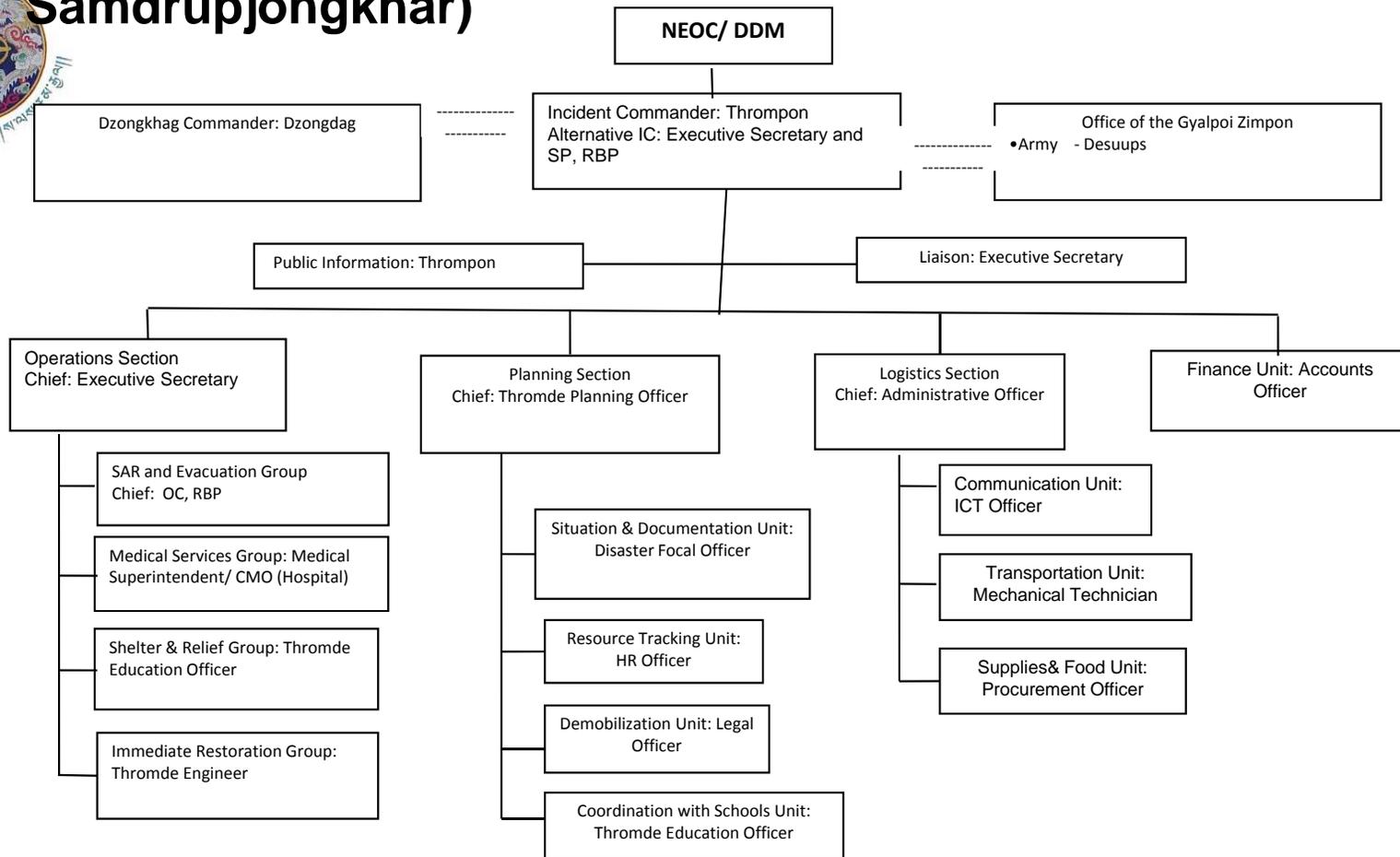




# IMT at Block (Gewog) Levels



# IMI at Municipality (Thromde) level (Thimphu, Phuentsholing, Gelephu and Samdrupjongkhar)





## Financial Arrangement as per the DM Act 2013

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Budget for **Prevention, Mitigation and Preparedness**: to be mainstreamed into Annual and Five Year Plans of the sectors and Districts

The DM Act, 2013 provides DDMCs with the authority to meet expenses for **response and relief operations** from their annual budget

- Guidelines already formulated jointly with the Ministry of Finance.

For the purpose of **recovery and reconstruction**, the Act specifies DDMCs to carry out damage assessments of public assets and infrastructure and submit assessment and cost estimates to DDM for review and onward submission to NDMA.





# Disaster Management in Education Sector



**MINISTRY OF EDUCATION**  
**Disaster Management Unit**

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विभाग

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<https://sites.google.com/a/moe.gov.bt/disasterunit/home/download>

## Download

- [1. Awareness Poster](#)
- [2. Earthquake\\_Publication](#)
- [3. Earthquake\\_Safety\\_in\\_schools](#)
- [4. Emergency Safety and First Aid Hand Book\\_Dzongkha](#)
- [5. Emergency Safety and First Aid Hand Book\\_English](#)
- [6. Non-Structural \(Falling Hazards\) Mitigation Manual](#)
- [7. Fire\\_Safety\\_and\\_Protection\\_Tips](#)
- [8. Safety\\_tips\\_for\\_flooding\\_event](#)
- [9. DM\\_act\\_2013](#)
- [10. Dm\\_rules\\_2014](#)
- [11. Key Messages](#)
- [12. Teacher's Handbook on DRR](#)
- [13. Education DM Plan](#)
- [12. Revised Teacher's Handbook on Disaster Risk Management](#)
- [13. Safety girl for DRR awareness](#)
- [14. Inclusive DRR poster](#)
- [15. Inclusive DRR Metta Cards](#)
- [16. EQ Story](#)



# Inclusive Disaster Preparedness – Wangsel Institute





# School Disaster Management Plan

SI NO.	CONTENT
1	Table of content
2	School profile
3	Building information
4	School Disaster Management Committee
5	School Disaster Management Teams
6	Roles and responsibilities
7	Orgonogram
8	Risk assessments:HVCA
9	DRR Action Plan
10	Evacuation Route Map
11	SOP for Earthquake
12	SOP for Fire
13	SOP for Windstorm
14	SOP for SEN, Children with Special Educational needs
15	Individual Disaster Plan for SEN child, Children with Special Educational needs
16	SOP for Family Reunification



# Inclusive Teaching Learning Material (TLM) – Earthquake story and song



One day Madam is reading a story to Dechen and her friends when everything starts to shake.



## Fire! Fire!

Fire in the classroom, make a Line (2)  
Fire in the classroom Go, Go, Go.



If your clothes catch on fire,  
Stop, Drop and Roll



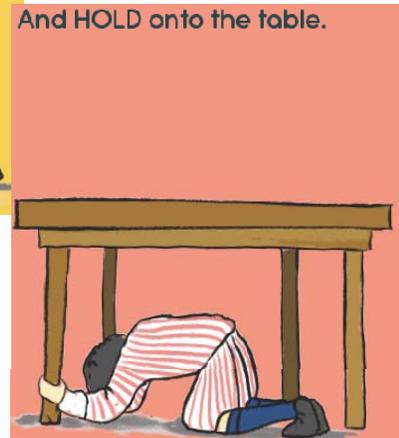
If you are inside during a fire,  
Get down Low and Go, Go, Go.  
Fire in the classroom, make a Line (2)  
Fire in the classroom Go, Go, Go.



(To be sung in the tune of "Fire on the mountain")

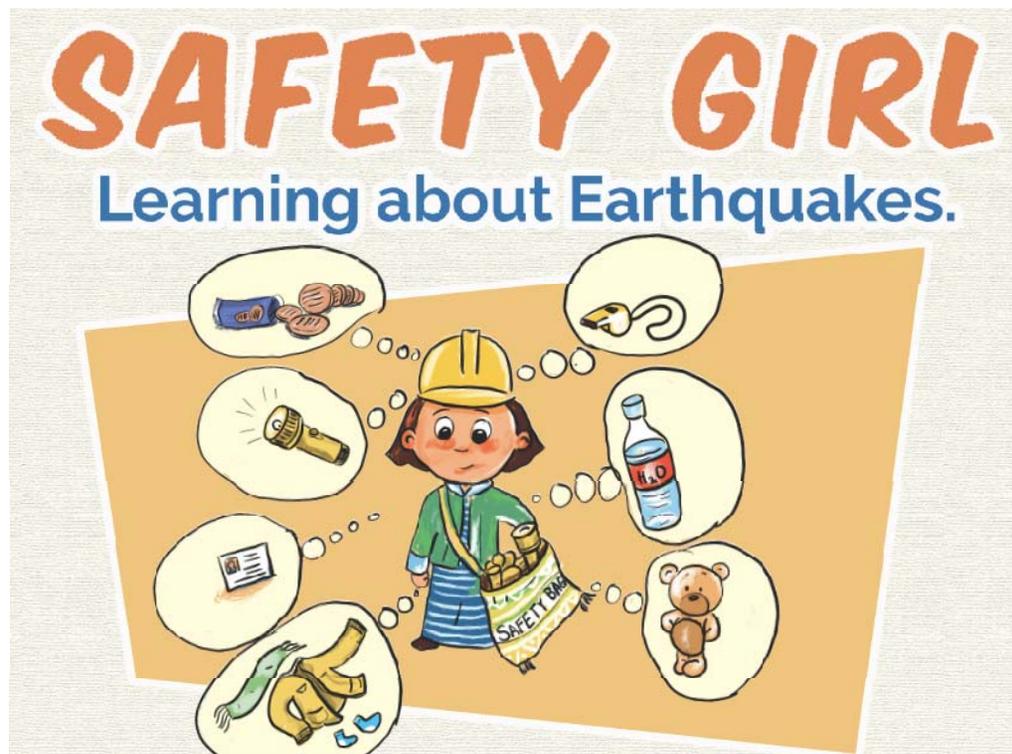


# Inclusive Teaching Learning Material (TLM) – Inclusive poster & Meta card





# Inclusive Teaching Learning Material (TLM) – Safety Girl





# Inclusive Teaching Learning Material (TLM) – Video





## CHALLENGES

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- Increasing risks
  - Low institutional and technical capacities
  - Not all Dzongkhags/ Sectors have Disaster Management and Contingency Plans
  - Insufficient mainstreaming of DRR and climate change
  - Multi-sectoral coordination
  - Lack of capacity and coordination to develop multi-hazard atlas
  - Inadequate budget for recovery and re-construction
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## Recommendation

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- Capacity building
- Strong coordination mechanisms
- Strengthened advocacy and awareness
- National SAR Training Unit and capacity development
- Emergency Operation Centers (EOC) at the national level and in all 20 district and emergency communication
- Multi Hazard Atlas
- Incident Command System to be made fully functional





THANK YOU  
Kadrinchey la