

## Webinar on Monsoon Preparedness and Response Plan – 2021



Department of Mines and Geology  
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### INTRODUCTION



- Established in 1967 as Nepal Geological Survey
- As Department of Mines and Geology in 1977

#### Objectives:

- Geological investigations and research
- Provide geo-scientific information and expert services
- Mitigation of natural hazards and protection of the environment through research
- Aware the people for natural hazards



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## ROLE OF DMG IN LANDSLIDE RISK REDUCTION

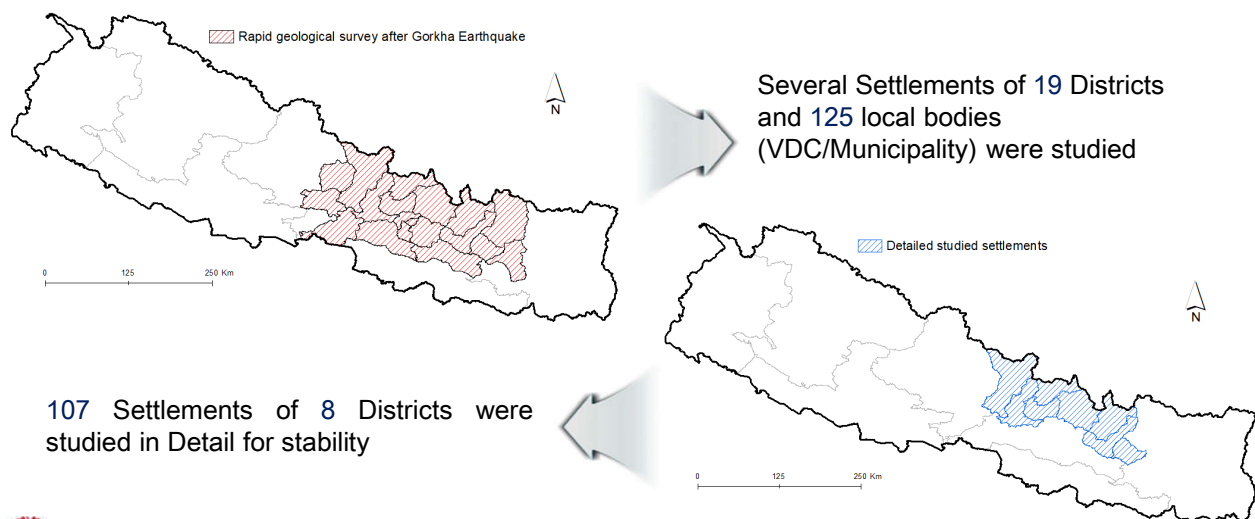
- Prepares landslide inventory and landslide distribution maps.
- Prepares landslide hazard zonation maps
- It carries out Emergency Geological Studies in the landslide affected areas as per the request made through the Ministry of Home Affairs, Municipalities or other organizations and submits reports to the respective organizations.
  - Carries out geological study of landslide affected areas, find out the cause of landslide and recommend suitable mitigation measures.
  - Identification and Geological study of resettlement area.



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## EMERGENCY GEOLOGICAL STUDIES

### Stability Study of Settlements Due to Landslides Triggered by Gorkha Earthquake 2015



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## EMERGENCY GEOLOGICAL STUDIES, 2077/78

क्र.सं.	पठाउने कार्यालयको नाम	मिति-(च.नं. )	पत्रको विषय	अध्ययन गर्नु पर्ने स्थान-ठेगाना	कार्य सम्पन्न भएको-वाँकी	कैफियत
१	शहरी विकास मन्त्रालय	मिति २०७७-०३-११ ( च.नं. २२२५)	पर्वत जिल्लाको कुश्मा त.पा.३ दुर्लुङको पहिरो सम्बन्धमा	पर्वत जिल्लाको कुश्मा त.पा.३ दुर्लुङ	कार्य सम्पन्न भै प्रतिवेदन गृह मन्त्रालयमा पेश भएको	
२	गृह मन्त्रालय	मिति २०७७-०३-२९ ( च.नं. ३१२)	जोखिमयुक्त वस्ती अध्ययन गर्ने सम्बन्धमा (पहिरो गएको मिति २०७७-०३-१८)	गुल्मी जिल्ला इशमा गा. पा.का वडा नं. १ र ४ तथा मुसिकोट नगरपालिका वडा नं २	कार्य सम्पन्न भै प्रतिवेदन गृह मन्त्रालयमा पेश भएको (२०७७-०४-११)	
३	गृह मन्त्रालय	मिति २०७७-०४-२८ ( च.नं. ४३)	जोखिमयुक्त वस्ती अध्ययन गर्ने सम्बन्धमा	म्यादी जिल्लाका छ वटै स्थानीय निकायहरूका भूभागहरू		जोखिमयुक्त वस्तिहरू कितान गरि पठाउने भनि पत्राचार गरिएको (२०७७-०५-२१)
४	गृह मन्त्रालय	मिति २०७७-०४-३० ( च.नं. ४७)	जोखिमयुक्त वस्ती अध्ययन गर्ने सम्बन्धमा	कालिकोट जिल्लाका अधिकांश स्थानीय तहहरू (नरहरीनाथ गा. पा., रास्कोट गा. पा. र सान्नीत्रिवेणी गा. पा.)		
५	गृह मन्त्रालय	मिति २०७७-०४-३२ ( च.नं. ४८)	जोखिमयुक्त वस्ती अध्ययन गर्ने सम्बन्धमा (वर्षा भएको मिति २०७७-०३-२८ र त्यसपछि)	स्याङ्जा जिल्ला विरुवा गा. पा. वडा नं. ३ को खाडराड		फिल्ड कार्य सम्पन्न भएको ।



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## EMERGENCY GEOLOGICAL STUDIES, 2077/78

अध्ययन गर्न माग गरिएका निकायहरू	
१	गृह मन्त्रालय, विपद् अध्ययन, जोखिम न्यूनीकरण तथा पुनर्लाभ शाखा
२	आन्तरिक मामिला तथा कानून मन्त्रालय
३	जिल्ला प्रशासन कार्यालय
४	आर्थिक मामिला तथा योजना मन्त्रालय
५	शहरी विकास मन्त्रालय
६	गाउँपालिका/ नगरपालिका



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## EMERGENCY GEOLOGICAL STUDIES, 2077/78

SN	Village/Gaupalika	District	Remarks
1	Durlung	Parbat	Report Submitted
2	Rahughat	Myagdi	
3	Duwar	Lamjung	
4	Isma, Musiko, Ruru	Gulmi	
5	Balaucha, Aalital	Dadeldhura	
6	Mandandeupur	Kavre	
7	Ghyangphedi, Dupcheswor	Nuwakot	
8	Marag, Takam	Myagdi	
9	Ramarosan	Achham	
10	Sitganga, Sandhikharka, Bhumikasthan	Argakhachi	
11	Kaligandaki, Biruwa	Syangja	
12	Phulkhadka	Nuwakot	



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## EMERGENCY GEOLOGICAL STUDIES, 2077/78

S N	Village/GauPalika/NagarPalika	District	Remark
1	Whole district	Kalikot	has to be done
2	Whole district	Myagdi	
3	Ghairang, shahid lakhana Ga. Pa	Gorkha	
4	Dashinkali Na.Pa.	Kathmandu	
5	Warekot Ga.Pa.	Jajarkot	
6	Indrawati Ga.pa.	Sindhupalchowk	
7	Duhu Ga. Pa.	Darchula	
8	Miklajung Ga. Pa.	Morang	
9	Barahbise Ga. Pa.	Sindhupalchowk	
10	Raskot, NarhariNath, SanniTriveni Na. Pa.	Kalikot	
11	Others	.....	



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## FUTURE PLANS

- Preparation and Publication of Landslide Inventory Map of Karnali and Sudur-Paschim Provinces
- Study of Landslides upon demand from various Government Authorities
- Use of Geophysical Instruments for landslide investigation
- Detail study of large landslide using SAR
- Instrument aided monitoring of landslides
- Use of UAV, DGPS for precise location and Change Detection
- Preparation of district wise Landslide Susceptibility Maps



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## LESSONS LEARNED

- Most of our settlements in hilly areas are in older landslide deposited mass. Natural and anthropogenic causes have made them unstable
- Community have high expectations with government. But they rely on instruments rather than expert knowledge
- Community awareness about disaster risk is very low
- There is no clear cut task division/ co-ordination and data sharing among government organizations
- There is always no positive response from the local representatives/ conflict among different political views and personal interests
- **One time interpretation is not always valid for a particular location.**



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धन्यवाद !