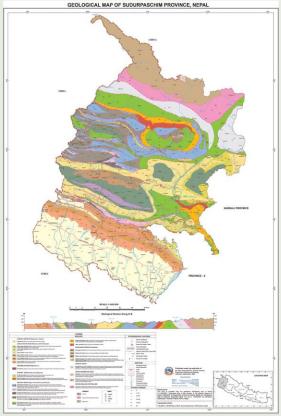
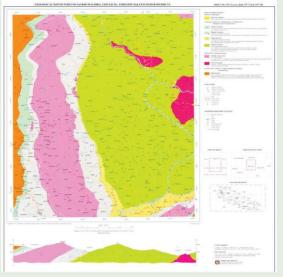
Description	Area (km2)	Sheet	
Total area of Nepal	147,181	-	
Total area surveyed(Published + Unpublished)	119,681	-	
First Generation Map published	93,000	7	
Second generation Map published (1: 50,000)	22,750	35	









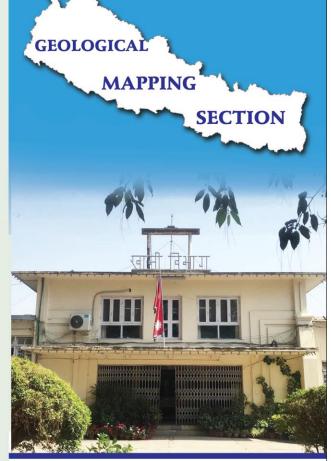
## **Future Plan**

Being rugged and topographic difficulties, many parts of the Higher Himalayas in Nepal is still geologically unmapped and unexplored by DMG. We are seeking international help to explore Higher Himalayas. With our own resources and effort, we aim continuation of production of regional geological maps of second generation 1:50,000 scale. Production of geological maps based on zonal and district boundaries

Production of geological maps/guide books along major highways to assist researchers and interested people to get acquainted with geology of Nepal.







# Contact

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Government of Nepal
Ministry of Industry, Commerce and Supplies
Department of Mines and Geology
2022

#### Introduction

Nepal Himalaya lies in the central sector of the Himalayan range. Morpho-tectonically it can be divided into Indo Gangetic Plain, Sub-Himalaya, Lesser Himalaya, Higher Himalaya and Tibetan Tethys Himalaya

Geological mapping section (GMS) is under the Geoscience division which is responsible for preparation of general geological map of the country in various scales. This section maintains a library of available topographical maps and published geological maps of various parts of the country.

## Objective

- To carry out geological mapping of Nepal for:
   Prospecting and exploration of all types of mineral
- resources, and
   Planning of developmental infrastructures and disaster mitigation
- 2. To conduct geo-scientific research of Nepal Himalayas
- 3. To publish and disseminate geo-information



### **Mineral Potential**

Geologic	gic Major Mineral	
al Unit	Rock Type	Potential
Tibetan- Tethys Zone	Fossiliferous Sedimentary rocks like Sandstone, Limestone, Shale	Gypsum, limestone
Higher Himalayan Zone	High grade metamorphic rocks and migmatites	Lead, zinc, tin, uranium, limestone, gemstones, REEs
Lesser Himalayan Zone	Largely unfossiliferous metasedimentary rocks Limestone, dolomite, sandstone, quartzite, slate, phyllite, schist, gneiss, amphibolites, granite etc	Cu, Fe, Pb, Zn, Sn, W, Mo, Co, Ni, Bi, Au, Ag, U etc, limestone, dolomite, construction material, coal, roofing slate, slab stones, REEs, graphite, talc, and others.
Sub Himalaya Zone	Molasse sediments of mid Miocene to Upper Pleistocene age Sandstone, shale, siltstone, conglomerate	Petroleum, construction material, REEs, U/Th Indo-Gangetic Plain/ Terai Zone Gravel, sand and clay Petroleum, Construction material, Industrial clay.
Indo- Gangetic Plain/Terai Zone	Gravel, sand and clay	Petroleum , Construction material, Industrial clay



As a second phase of the regional mapping, the checking of field data produced earlier, analysis, interpretation and compilation for printing was carried out during 1980-85. A unified stratigraphic scheme and tectonic structure of the Lesser Himalayas and Siwalik was established.

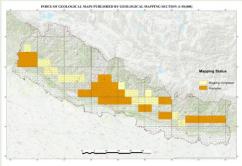
#### Resources

According to the current approved organizational structure of the Department of Mines and Geology, there are altogether four permanent staffs in this section. Among them, two are Geologists (Gazetted III class officers) and one Assistant Geologist who work under the Head of the section, a Senior Divisional Geologist (Gazetted II class officer).

### **Achievement**

1st generation geological mapping in 1: mile scale is completed in most of the accessible areas and produced 5 regional geological maps which are now upgraded into provincial geological maps. 2nd stage geological mapping in 1:50,000 scale is concentrated in central and western part of Nepal. 35 sheets of geological maps in 1:50,000 scale have been published and 11 in the process of publication.

All maps and reports are made available to governmental agencies, consultancies, NGO's, INGO's, other relevant organizations and general public under the prescribed policy of DMG after paying approved fixed rate. Present Status of Geological Mapping (1:50,000 scale)



**List of Published Maps** 

$\overline{}$	List of Published Maps								
S. N.	Code No.	Title of Map	Scale	Year of Publication	Price (NRs.)				
1	GM1	Geological Map of Nepal	1:1,000,000	1994	550				
2	GM2	Geological Map of Eastern Nepal	1:250,000	1984	475				
3	GM3	Geological Map of Central Nepal	1:250,000	1985	330				
4	GM4	Geological Map of Western Nepal	1:250,000	1983	330				
5	GM5	Geological Map of Mid Western Nepal	1:250,000	1987	330				
6	GM6	Geological Map of Far Western Nepal	1:250,000	1987	330				
7	GM7	Geological Map of Kathmandu and Central Mahabharat Range	1:250,000	1980	330				
8	GM8	Geological map of the Province 1	1:250,000	2021	475				
9	GM9	Geological map of the Province 2, Madhesh Province	1:250,000	2021	475				
10	GM10	Geological map of the Province 3, Bagmati Province	1:250,000	2021	475				
11	GM11	Geological map of the Province 4, Gandaki Province	1:250,000	2021	475				
12	GM12	Geological map of the Province 5, Lumbini Province	1:250,000	2021	475				
13	GM13	Geological map of the Province 6, Karnali Province	1:250,000	2021	475				
14	GM14	Geological map of the Province 7, Sudurpaschim Province	1:250,000	2021	475				
15	GM15	Photogeology Map of part of Central Nepal	1:1,000,000	1982	275				
16	GM16	Geological Map of Parts of Tanahun, Gorkha and Nawalparasi Districts (72 A/5)	1:50,000	1996	275				
17	GM17	Geological Map of Parts of Tanahun and Kaski Districts (71 D/4)	1:50,000	1996	275				
18	GM18	Geological Map of Parts of Syangia, Kaski and Tanahun Districts (62 P/16)	1:50,000	1999	275				
19	GM19	Geological Map of Parts of Tanahun and Nawalparasi Districts (72 A/1)	1:50,000	1999	275				
20	GM20	Geological Map of Parts of Syangja, Palpa and Tanahun Districts (63 M/13)	1:50,000	1999	275				
21	GM21	Geological Map of Parts of Parbat, Baglung and Gulmi Districts (62 P/12)	1:50,000	2000	275				
22	GM22	Geological Map of Parts of Gulmi and Baglung Districts (62 P/8)	1:50,000	2000	275				
23	GM23	Geological Map of Parts of Palpa, Syangja and Gulmi Districts (63 M/9)	1:50,000	2000	275				
24	GM24	Geological Map of Parts of Palpa, Arghakhanchi and Gulmi Districts (63 M/5)	1:50,000	2000	275				
25	GM25	Geological Map of Parts of Kaski and Parbat Districts (62 P/15)	1:50,000	2002	275				
26	GM26	Geological Map of Parts of Myagdi, Parbat and Baglung Districts (62 P/11)	1:50,000	2002	275				
27	GM27	Geological Map of Parts of Myagdi, Baglung and Gulmi Districts (62 P/7)	1:50,000	2003	275				
28	GM28	Geological Map of Parts of Baglung, Pyuthan and Gulmi Districts (62 P/3)	1:50,000	2003	275				
29	GM29	Geological Map of Parts of Myagdi and Mustang Districts (Western Part) (62 P/6)	1:50,000	2004	275				
30	GM30	Geological Map of Parts of Myagdi and Mustang Districts (Eastern Part) (62 P/10)	1:50,000	2004	275				
31	GM31	Geological Map of Parts of Gulmi, Pyuthan, Arghakhanchi and Baglung Districts (62 P/4)	1:50,000	2004	275				
32	GM32	Geological Map of Parts of Sindhupalchok and Nuwakot Districts (Melamchi Area) (72 E/9)	1:50,000	2005	275				
33	GM33	Geological Map of Parts of Sindhupalchok Districts (Barhabise Area) (72 E/13)	1:50,000	2005	275				
34	GM34	Geological Map of Parts of Dang, Rolpa and Pyuthan Districts (62 L/12)	1:50,000	2006	275				
35	GM35	Geological Map of Parts of Pyuthan and Arghakhanchi Districts (62 L/16)	1:50,000	2006	275				
36	GM36	Geological Map of Parts of Chitwan, Dhading and Makawanpur Districts (72 A/14)	1:50,000	2007	275				
37	GM37	Geological Map of Parts of Dhading, Makawanpur, Kathmandu and Lalitpur Districts (72 E/2)	1:50,000	2007	275				
38	GM38	Geological Map of Parts of Kavrepalanchok and Sindhuli Districts (72 E/11)	1:50,000	2008	275				
39	GM39	Geological Map of Parts of Kavrepalanchok, Ramechhap and Sindhuli Districts (72 E/15)	1:50,000	2008	275				
40	GM40	Geological Map of Parts of Baitadi and Dadeldhura Districts (2980 10)	1:50,000	2009	275				
41	GM41	Geological Map of Parts of Baitadi and Dadeldhura Districts (2980 11)	1:50,000	2010	275				
42	GM42	Geological Map of Parts of Baitadi, Bajhang and Doti Districts (2980 12)	1:50,000	2011	275				
43	GM43	Geological Map of Parts of Doti, Dadeldhura and Kailali Districts (2980 15)	1:50,000	2010	275				
44	GM44	Geological Map of Parts of Doti and Kailali Districts (2980 16)	1:50,000	2011	275				
45	GM45	Geological Map of Parts of Solukhumbu, Okhaldhunga, Khotang and Udaypur Districts (2786 11 Lower Half, 2786 15A and 2786 15B)	1:50,000	2019	275				
46	GM46	Geological Map of Parts of Sankhuwasabha, Taplejung, Terhathum and Panchthar Districts (2787 11 Lower Half, 2787 15A and 2787 15B)	1:50,000	2019	275				
47	GM47	Geological Map of Parts of Terhathum, Taplejung and Panchthar Districts (2787 12 Lower Half, 2787 16A and 2787 16B)	1:50,000	2019	275				
48	GM48	Geological Map of Parts of Khotang and Bhojpur Districts (2786 12 Lower Half, 2786 16A and 2786 16B)	1:50,000	2019	275				
49	GM49	Geological Map of Parts of Bhojpur, Sankhuwasabha and Dhankuta Districts (2787 9C, 2787 9D, 2787 13A and 2787 13B)	1:50,000	2019	275				
50	GM50	Geological Map of Parts of Bhojpur, Sankhuwasabha, Taplejung, Dhankuta and Terhathum Districts (2787 10 Lower Half, 2787 14A and 2787 14B)	1:50,000	2019	275				