



Mining of Limestone Deposit at Dhuseni

Dhading District



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



Background

This project is aimed at mining the indispensable Carbonate rocks as raw materials for industrial development. Limestone, along with dolomite and marble, represents over 90% of the total rock quarrying activities in Nepal. The utility of these carbonate rocks and minerals depends significantly on their specific physical and chemical properties, which determine their varied industrial applications. Although more than one hundred uses exist for these substances, because of space limitations, only three of the many areas of active research on carbonate properties are discussed: solid solution and sub-solidus relations, thermoluminescence, and infrared absorption.



Sector

Mines and Minerals



Location

Mahadevsthan
Benighat Rorang Rural Municipality, Dhading District



Land Lease Area

5.55 Sq. Km.

Toposheet No: 2784 08A, Scale 1:25,000

Main point co-ordinates: Easting 575437.50m, Northing 3068625 m

Extension from the Main point:

East	west	North	South
412.5 m	1437.5 m	1375 m	1625 m

Objectives

- To utilize resources sustainably for mining of Limestone in the area
- To tap the probable potential of extracting Limestone

Accessible by road and lies about 94 km west of Kathmandu.

Presence of Nation Grid Domestic electricity approximately 16 km from project area.

Project Rationale

Estimated carbonated Deposit in area: 81.9 Million Tons (within 100 ha)

Limestone Reserve

Probable: 81.9 million ton

Application of Limestones

Construction Industry



Road Base material



Aggregate in concrete and asphalt



Railroad ballast



Cement Production



Riprap



Fill

Project Outcomes



Revenue Generation through mining activities



Enhances local land value



Creates employment opportunities



Stimulates growth in axillary industries and trade



Diverse Industrial Application



Utilization of domestic resources efficiently

Geology

- Constitute Metasedimentary rocks of Markhu Formation, Bhimphedi Group of Kathmandu Complex
- Trends of Rock: Due North
- Maximum thickness of road section: 300 m
- Major rock units: Limestone, dolomite, Calcite and Schist

Grade and Reserve

Composition Analysis (Surface Channel Samples):

Calcium Oxide (CaO)

Average Concentration: 45%

Magnesium Oxide (MgO)

Average Concentration: 3.5%

Strong presence of cement grade quality limestone across the sampled locations

Project Implementation Timeline

FY 073/74

Prospecting stage



Geological Mapping

FY 073/74

FY 074/75

Sampling



Topographical Survey

FY 079/80

FY 079/80

Resource Estimation



Project status

Ready to mine



Project Implementation Modality



Private
Investment



Royalty Structure for Limestone: Rs. 60 per ton
*(*Revenue Model will be followed as per the guidelines provided by
Department of Mines and Geology)*

Additional Information

“The individual who has received the excavation work permit must initiate the excavation work within 2 years from the date the permit is obtained. The duration of the excavation (generally > 10 years) is determined based on the level of the industry (very small scale, small scale, medium scale, and large scale) as per the arrangements made in the Mines and Minerals Rules, 2056 (with the fourth amendment)”

As per the Mines and Minerals Rules, 2056 (1999) – (including 4th Amendment), Limestone has been categorized as the Precious and Valuable Mineral

Relevant Agencies

- Ministry of Industry, Commerce and Supplies
- Department of Mines and Geology



About the Agency

The Department of Mines and Geology (DMG) established under the Ministry of Industry, Commerce and Supplies (MoICS), is the sole government organization that is responsible for all types of geological surveys, mineral exploration, and administration of Mining Rules and Regulations in Nepal. Its important mandate includes the exploration and evaluation of mineral resources, the promotion of minerals through the formulation of robust policies and laws, and the regulation and monitoring of mineral exploration, mining, and related industries. Furthermore, the DMG provides technology transfer and expertise services to organizations involved in mineral sector development, infrastructure development, natural hazard mitigation, and environment protection.

Website: www.dmgnepal.gov.np
Email: info@dmgnepal.gov.np
Tel: +977-1-4514740

