Memorandum of Understanding signed on exploring feasibility of introducing Green Cement in Nepal for an Eco-Friendly Future

Cement Production is one of the most resource and energy intensive processes causing significant impact on environment and natural resource base. To meet and balance the environmental and economic needs, the Department of Mines and Geology, Government of Nepal, Nepal Cement Manufacturing Association (NCMA) signed a Memorandum of Understanding for the launch of the Limestone Calcined Clay (LC\(^3\)) Cement in Nepal with TARA.

Limestone Calcined Clay Cement or LC\(^3\), which is a new type of composite cement based on a blend of clinker, calcined clay and raw limestone is being used. The use of LC\(^3\) technology has several advantages, which is that it reduces Carbon Dioxide emissions by 40% as compared to the popularly used OPC and has improved durability.

The adoption of the LC\(^3\) Cement in Nepal will bring about significant changes in the Cement Industry as it has lower production cost as compared to PPC and OPC. The adoption of this unique cement will also save Nepal Foreign Exchange against the import of Fly Ash, Coal Imports, and Investment of 320 million US Dollars by the private sector.

The Swiss government will be supporting TARA in undertaking this study as its subsidiary - The Swiss Development Corporation - have in the past played a critical role in developing the technology for LC\(^3\) Cement.

The MoU Signing which was held at Hotel Raddison in Kathmandu, Nepal. The Chief Guest of the event was Mr. Mukunda Prasad Niroula, Secretary, Ministry of Industry, Commerce and Supplies. The Guests Of Honour were Mr. Narayan Prasad Sharma Duwadi, Secretary, Ministry of Industry, Commerce and Supplies, Ms. Denise Favre-Chatagny, Chargée d’Affaires, Embassy of Switzerland, Nepal and Dr Ashok Khosla, Chairman Of TARA group of companies and Development Alternatives.
The MoU was signed by Mr Ram Prasad Ghimire for Government of Nepal and Dr. Soumen Maity, Chief Technology Officer of TARA and Dhruba Thapa President of NCMA.

Talking about the MoU - Dr Ashok Khosla, Chairman of Development Alternatives and TARA group of companies said, “This is a Landmark event where a Government of a country has shown interest in adopting LC3 cement, thus ensuring sustainable practices are adopted in the construction value chain. This will help Nepal significantly reduce its carbon footprint.”

Today all the cement scientists around the globe concentrate on how to reduce the cost of production, environmental impact on producing cement and how to enhance the quality. For this I believe this cooperation from all the stakeholders is important to achieve our goals, said Dhruba Thapa, the President of the NCMA.

Ms. Denise Favre-Chatagny, Chargée d’Affaires, Embassy of Switzerland of Nepal said, “We truly hope this project will bring scientific evidence and will be able to open in the avenues of the joint journey Nepal Authorities and the Private Sectors towards greener cement for a sustainable environment.”

LC3 is one of the major innovations in the last decade by a consortium of EPFL Switzerland, IIT Delhi, IIT Madras and CIDEM Cuba, supported by Swiss Development and Cooperation, India, Embassy of Switzerland to reduce the clinker factor in cement production by addition of calcined clay and waste limestone. TARA is an implementing partner.