Clay Feasibility Study for Siam City Cement (Lanka) Limited

Siam City Cement (Lanka) Limited, also popularly known as INSEE Cement, is a member of the Siam City Cement Public Company Limited (SCCC) Thailand and has been an active supplier of cement to Indonesia, Cambodia, and now Sri Lanka. Taking into consideration the Geology and the availability of good quality clays, SCCC Sri Lanka is now aiming to manufacture LC₃ in its existing cement plants. To produce LC₃, SCCC Sri Lanka is taking consultancy help from Technology Action and Rural Advancement (TARA) for the clay feasibility study in and around southern Sri Lanka. This visit was carried out as part of the study’s Phase III, based on the results of Phase-I and -II studies.

For this, Dr Soumen Maity, Chief Technical Officer, TARA & Vice President, The Development Alternatives Group (DA Group) and S Abinash, Geologist, Technology Applied Research Centre (TARC), DA Group visited Sri Lanka to examine clay feasibility in and around the existing cement plants in the country. During the Phase-I study, we had received samples from Sri Lanka and based on the test results of those samples, feasible locations were identified and sampling was conducted.

A total of 25 kg of clay samples from each location was collected and brought to the Development Alternatives’ Headquarters in New Delhi for further processing and testing. The clay found in these geographies is formed because of hydrothermal alterations of quartz-feldspathic gneisses, which informs that the thickness of the clay layer can extend up to 20 meters down from the mean sea level. This is the biggest boon for the cement company as there will not be any shortage of clay to produce LC₃ in its plants.

Apart from this, cement plants located in Galle in southern Sri Lanka and Puttalam in western Sri Lanka were also scrutinised to assess their overall annual production as well as for the installation of rotary calciner to manufacture LC₃ in future. The manufacturing head of the SCCC Sri Lanka was receptive to the idea of manufacturing LC₃ because of its low carbon emissions and other advantages such as improving the life of limestone quarry, enhancing the production rate, etc.

Based on the Phase-III test results along with the published Sri Lankan standards for mining and cement production, Sri Lanka is soon going to be a leading manufacturer of LC₃.