## Assisting Landslide Risk Reduction Efforts in Sri Lanka

## Dr. Asiri Karunawardena (Ph.D.Eng.)

Director General, National Building Research Organisation of Sri Lanka

Landslides were almost unheard of in Sri Lanka in 1984, when the National Building Research Organisation (NBRO) was formed as a multi-disciplinary research institution. Regardless, the NBRO initiated a program of landslide studies and risk management. More than 35 years on, the impact of climate change is being felt in growing numbers of landslides and the NBRO's landslide risk management program is now a national focal point, a valued endeavor that saves lives and protects property from landslide disasters. As a long-standing friendly country, Japan has often extended assistance to Sri Lanka. The

NBRO first benefitted from JICA's assistance in the form of educational and training programs that provided many scholarships to NBRO staff. JICA assistance to the NBRO became even more prominent in the aftermath of the Indian Ocean earthquake and tsunami in 2004 that severely battered Sri Lanka.

Sri Lanka is significantly impacted by climate change, and pre-cyclonic rains from depressions and cyclones generated in Bay of Bengal occur every year. Consequently, highly localized extreme rain events that trigger landslides in the hill country have become more frequent. Japan's successful track record managing landslide risk by way of structural and non-structural mitigation prompted the NBRO to request JICA's assistance in enhancing local knowledge and sharing such advanced technologies. In 2011, JICA and the NBRO launched a three-year Disaster Management Capacity Enhancement project to bolster Sri Lanka's capacity to adapt to climate change. Subsequently, JICA assisted the NBRO through the Technical Cooperation for Landslide Mitigation Project (TCLMP) from 2014 to 2018, building the NBRO's capacity for structural mit-



igation of landslides. JICA's technical know-how and financial assistance made a major contribution toward mitigating four high-risk landslides as a pilot project. Realizing the benefit of the project, the TCLMP was extended. It continues to further the development and deployment of structural and non-structural measures for effective mitigation of landslides and associated hazards, and related capacity strengthening.

Japan's and JICA's ongoing contribution to Sri Lanka is highly valued. For example, there is the Landslide Disaster

Protection Project to stabilize unstable roadside slopes on major highways in the hill country, which include training local contractors in novel Japanese landslide mitigation practices. In addition, financial assistance has also been provided to the Rain-Induced Rapid Long-Travelling Landslides project to reduce landslide risk in Sri Lanka, an ambitious project recently launched by the NBRO together with the International Consortium on Landslides. Japan has a long and unique history of confronting various types of disaster and extensive experience in preventing damage. Through such projects as the above, experts from Japan are enhancing the capabilities of NBRO staff to effectively manage landslide disaster risk in Sri Lanka, enabling communities in Sri Lanka to live safely and sustainably.

## Profile:

Dr. Asiri Karunawardena is the Director General/Chief Executive Officer of the National Building Research Organization (NBRO), which is the designated national focal point for landslide risk management and promoting resilience construction in Sri Lanka. He is an expert in Geotechnical Engineering and holds a doctoral degree in Engineering from Kyoto University, Japan.