

PROJECT PROPOSAL FOR JAPAN'S TECHNICAL COOPERATION

**DEVELOPMENT OF EARLY WARNING TECHNOLOGY OF
RAIN-INDUCED RAPID AND LONG-TRAVELLING LANDSLIDES IN SRI LANKA**



Coordinating Agencies:

**National Building Research Organisation of the Ministry of Irrigation and Water Resources & Disaster Management, Democratic Socialist Republic of Sri Lanka (NBRO)
International Consortium on Landslides (ICL)**

Sri Lanka Implementing Agency:

**National Building Research Organisation of the Ministry of Irrigation and Water Resources & Disaster Management (NBRO) with supports from
Department of Meteorology of the Ministry of Irrigation and Water Resources & Disaster Management (DOM),
Department of Irrigation of the Ministry of Irrigation and Water Resources & Disaster Management (DOI)
Disaster Management Center of the Ministry of Irrigation and Water Resources & Disaster Management (DMC)**

Sri Lanka Cooperating Agencies

**Central Engineering Consultancy Bureau (CECB)
Department of Civil Engineering, University of Moratuwa (UOM)
Department of Civil Engineering, University of Peradeniya (UOP),
Department of Civil and Environmental Engineering, University of Ruhuna (UOR)**

Japanese Implementing Agencies:

**International Consortium on Landslides (ICL)
Center for Earth Information Science and Technology of the Japan Agency for Marine-Earth Science and Technology (JAMSTEC)
Disaster Prevention Research Institute (DPRI), Kyoto University
Forestry and Forest Products Research Institute (FFPRI), Japan
Faculty of Agriculture and Marine Sciences, Kochi University,
Faculty of Sustainable Design, Toyama University
Graduate school of Environmental Information, Teikyo Heisei University**

Colombo, August 2018

Development of early warning technology of rain-induced rapid and long-travel landslides in Sri Lanka - 2019 SATREPS (JICA)

The International Landslide Consortium (ICL) based in Kyoto University in Japan, the leading authority for landslide studies in the world and NBRO jointly applied to Science and Technology Research Partnership for Sustainable Development (SATREPS) of Japan Science and Technology Agency (JST), Department of International Affairs, the Government of Japan and to National Planning Department of Sri Lanka simultaneously for the approval of the project titled "Disaster risk reduction of rain-induced rapid and long-travelling landslides". This five-year Japan-Sri Lanka joint project has been approved for implementation in 2019-2023 period. This proposal proposes introducing advanced technology through the global partners of ISDR-ICL Sendai Partnerships 2015-2025, to disaster risk reduction of rain-induced rapid and long-travelling landslides. Several local and Japanese collaborating and support agencies participate in this project work and major works have been already started. The expected outcomes are:

1. Technology of 24 hours in-advance prediction of heavy rainfalls and resulting ground water pressure build-ups is developed. A technology to identify locations of rain-induced rapid long-travelling landslides and their moving areas is developed.
2. Technology and framework for effective risk communication to community people living in mountains and local cities are developed.
3. A system for early warning of rain-induced rapid long-travelling landslides is developed by integrating the technologies mentioned above based on the joint research in the pilot study sites. The developed system with guidelines and manuals is provided for the use in other areas in Sri Lanka.
4. The above technologies that are developed will ensure the safety of the public and secure vulnerable communities from landslides and associated hazards.