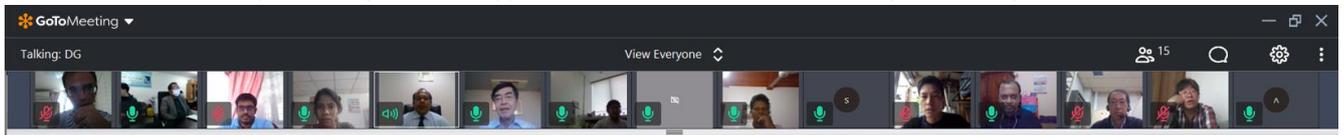




スリランカにおける降雨による高速長距離土砂流動災害の早期警戒技術の開発
Development of early warning technology of rain-induced rapid and long-travelling landslides in Sri Lanka



Online kickoff meeting on April 9, 2020

◆ Kickoff meeting was held online

April 9, 2020

In the wake of the Coronavirus pandemic, the Kickoff Meeting of the Project RRL (Rapid Rain-induced Long-travelling Landslides) was held online on 09th April 2020. Eight and nine members of the project from Sri Lanka and Japan, respectively, joined the meeting. Based on the common understanding that the states of COVID-19 affairs of the time (and even now) allow us only to do what we can do remotely, group leaders and sub-leaders told their plans that they had come up with. The followings have been agreed among the members:

(1) We will invite some important external collaborating entities such as the Central Engineering Consultancy Bureau (CECB) and some active researchers as official members of the Joint Coordination Committee (JCC), which has been postponed to April 2021.

(2) For the success of our project, we should elicit cooperation from landslide-concerned organizations in addition to the JCC members. For this, we will hold a Landslide Technical Forum (LTF) concurrently with the JCC meeting. Both JCC and the Forum may be held online if the situation is not favorable for overseas travels by then.

◆ Students from Sri Lanka newly admitted to Kyoto University and Kochi University

October 2020

The encouraging news for the project in Autumn 2020 is that two students from NBRO, Sri Lanka, Mr. Sanchitha Jayakody and Ms. Imaya Ariyaratna have newly been admitted to Kyoto University and Kochi University, respectively.

Mr. Sanchitha Jayakody

Upon graduating with a BSc (Hon) degree in civil engineering from University of Moratuwa (UoM), Sri



Sanchitha-san

Lanka, I was fortunate enough to start working for the Geotechnical Engineering Division of the National Building Research Organization (NBRO), which is the focal point for handling geotechnical-engineering

problems and landslide disaster-risk-reduction in Sri Lanka. Following five years of professional experience as a geotechnical engineer, I earned a Master's degree in Foundation Engineering and Earth Retaining Systems from UoM, where I graduated with the highest Grade-Point-Average in the 2016/2017 master course.

I was motivated to choose landslide mechanics as my area of specialization, and broaden my knowledge about identification and mitigation of geo-hazards, because of the uniqueness of the geotechnical and landslide related problems that I have encountered during my career. In October 2020, I was awarded a JICA scholarship to undertake a doctoral degree at the Disaster Prevention Research Institute, Kyoto University. I consider this will be a huge milestone in my life and am determined to do my best throughout the doctoral course as well as the RRL project, as one of key members of the team. Last but not least, I would like to express my sincere gratitude to JICA, JST, ICL, Kyoto University, NBRO and all the members of project RRL for their continuous support in this journey.

Ms. Imaya Ariyaratna



Imaya-san

I am a Geologist, graduated in 2014 from the Department of Geology, University of Peradeniya with a B. Sc. Special degree in geology with honors. Since then I have been working as

a geo-Scientist, at Landslide Research and Risk Management Division (LRRMD) of National Building Research Organisation (NBRO). During my service, I have actively been engaged in the landslide risk management services such as landslide risk assessment for lands, building and/or projects, identification of potential landslides, mitigation of landslides, awareness and education programs and community base early warning system developments. Further in consultancy services on landslides, slopes and rock failures and resettlement project activities too. Meanwhile, I followed Engineering Geology and Hydrogeology Masters programme in the Post Graduate Institute of Science (PGIS), University of Peradeniya and successfully graduated from it.

Presently, I have just started my doctoral studies at Kochi University as a student of the United Graduate School of Agricultural Sciences, Ehime University under the supervision of Professor Katsuo Sasahara. I am very fortunate and happy that I can study in Japan. In that regard, I would like to express my sincere gratitude to JICA, JST, ICL, NBRO, Ehime University, Kochi University and all the members of Project RRL.

◆ New ICL/SATREPS office opening

December 14, 2020

The opening ceremony for the new ICL/SATREPS Office was held on 14th December 2020. The spick-and-span new office, which has been remade from an existing old wooden Japanese house, is not only the project office but also a venue particularly for young scientists from Sri Lanka to pursue their new research challenges with also brand-new testing apparatuses.



02nd floor for office



01st floor for lab with testing apparatuses



Entrance of ICL-SATREPS office

◆ Project RRL Interim meeting of the fiscal year 2020

December 15, 2020

With the participation of major project researchers on the Japanese side, Sri Lankan students and JICA officers in charge of the Project RRL, the Project RRL interim online/onsite meeting of the fiscal year 2020 was held at the Disaster Prevention Research Institute, Kyoto University. As has been reported in the preceding issue of the Newsletter (No. 1), the project comprises of the following three research groups:

G1 working as a hub for this joint research to integrate individual technologies,

G2 in charge of developing technologies for (1) 24 hours in-advance prediction of heavy rainfalls, and (2) assessing groundwater pressure build-up, initiation of an RRL and its flowing dynamics.

G3 strengthening RRL risk communication protocol, developing an augmented reality system for the last mile communication of RRL early warning information.

Each group leader and sub-leaders reported on progress of each group activity, and it was confirmed that the development of each key technology for the RRL early warning went on just as planned in the Kickoff Meeting on 09th April 2020. Moreover, the Sri Lankan students newly enrolled at Kyoto and Kochi Universities gave their presentations about their study plans. The followings are also agreed/ confirmed:

(1) The JCC meeting and the concurrent Landslide Technical Forum (LTF) will be held in April 2021; later LTF and JCC meeting were scheduled for 21st and 22nd April 2021, respectively. And,

(2) In the 5th World landslide Forum, which has officially been postponed in the wake of the Coronavirus pandemic to 02nd to 06th November 2021, a session for the Project RRL will be organized inviting not only key members of the project but also those deeply involved in our activity including those from JICA, JST, etc.



The Project RRLI interim meeting at Collaboration Research Hub, DPRI, Kyoto University (keeping distance)

◆ Greetings from the project leaders

The COVID-19 pandemic has brought so many changes and challenges to our working lives. Though COVID-19 cases are yet soaring worldwide, we are somehow relieved seeing that things including procurement of equipment and materials, development of each key technology, etc. have gone remotely and smoothly almost as planned thanks to the great helps from officers in charge at JICA and JST. The encouraging news are (1) New students from Sri Lanka, who have successfully enrolled at Kyoto University and Kochi University in October 2020 are starting their research activities, (2) The new ICL/SATREPS office opened on 15th December 2020 equipped with brand-new testing apparatuses, etc.

Though it is currently impossible to foresee all that can happen in the next stage of the project, the above things reported in this issue of the Newsletter certainly offer brighter prospects for our project, and we are building up some confidence that there will be plenty of ways to solve the problems through high-speed internet communications, i.e., high-volume data transfer and processing, etc. On behalf of the members of the Project RRLI, we would like to tender our sincere thanks to all supporters from both Sri Lanka and Japan.

Project leaders

Kazuo Konagai
International Consortium on Landslides (ICL)
Asiri Karunawardena
National Building Research Organisation (NBRO)