# UNITWIN/UNESCO Chairs Programme Progress report

Period of Activity: July 2011-June 2012

Title of the UNESCO Network: UNITWIN UNESCO/KU/ICL Landslide and Water-related Disaster Risk Management for Society and the Environment Cooperation Programme

**Institution/Country**: Kyoto University and the International Consortium on Landslides /Japan

Report established by: Kyoji SASSA<sup>1)</sup> and Kaoru TAKARA<sup>2)</sup>

#### Function / Title:

- 1) UNITWIN Coordinator form ICL, Executive Director of ICL
- 2) UNITWIN Coordinator from Kyoto University, Assistant to the Executive Vice-President, Kyoto University and Professor of the Disaster Prevention Research Institute (DPRI)

(sent by electronic mail to both: unitwin@unesco.org and i.nichanian@unesco.org)

# Summary

The UNITWIN Network in Kyoto University and the International Consortium on Landslides was suggested from six participants of UNESCO to promote the International Programme on Landslides (IPL) as the research and capacity development activities of ICL. It was established in 2003. It has developed together with IPL and ICL.

The outcome is to integrate multi-disciplinary and multi-field of research and capacity development activities to reduce landslide and water related disasters and create a strong international network cross the world. One of core activity is publication the first full color scientific journal "Landslides: Journal of International Consortium on Landslides" (Editor-in-Chief: K. Sassa). It has published 4 issues since 2004, and the

impact factor has increased. The latest number issued in June 2012 was 2.216 which is the top within 30 ISI journals in the category of Engineering, Geological. 100 world wide editors are from this Network. This journal will develop to a bimonthly journal of 600 pages/year since Vol.10 in 2013.

The another outcome is the successful organization of the Second World Landslide Forum at the Headquarters of Food and Agriculture Organization of the United Nations (FAO) in Rome, Italy. 864 persons from 63 countries attended, and 25 technical sessions were organized. All accepted papers were edited in 7 volumes of books from Springer, which will be published in later 2012.

ICL organized 10<sup>th</sup> annivesary conference at the same location of ICL foundation meeting in Kyoto, Japan and adopted the ICL Strategic Plan 2012-2021. The review of the first decade of ICL activities and the plan for the second decade in included in the Plan, and all detailed information was published in ICL 2012 Leaflet (60 pages).

The impact has raised the profile of "Landslides" as an integrated scientific field and "Landslide communities". It contributed the promotion of institution and individuals of the Network. The international recognition was very effective of fund raising of the international research activities of the Network.

# I. Address and Contact

Address of the Host Institution	Address of the Coordinators
Disaster Prevention Research	Name: Kaoru TAKARA
Institute, Kyoto University.	Function/Title: UNITWIN Coordinator of Kyoto University
Gokasho, Uji, Kyoto 611-0011	/ Assistant to the Executive Vice-President, Kyoto
Japan	University and Professor of the Disaster Prevention

Research Institute (DPRI)

International Consortium on Address: The Disaster Prevention Research Institute, Kyoto

University, Gokasho, Uji, Kyoto 611-0011

Japan

Kyoto 611-0011, Japan Name: Kyoji SASSA

Function/Title: UNITWIN Coordinator of ICL / Executive

Director of the International Consortium on Landslides.

Address: UNITWIN Headquarters Building, Kyoto

University Uji Campus, Uji, Kyoto 611-0011, Japan

E-mail:sassa@iclhq.org

## II. Available Resources

#### 1. Human resources

Landslides.

UNITWIN Headquarters Building,

Kyoto University Uji Campus, Uji,

Website of UNITWIN/IPL:

http://www.iplhq.org/

Members related to landslides and water disasters in the DPRI, Kyoto University, all of the Headquarters of ICL and 53 member organizations of ICL over the world are available recourses for this network.

Key persons are Kaoru Takara, Hiroshi Fukuoka from DPRI, Kyoto University, Kyoji Sassa, Osamu Nagai, Kumiko Fujita, Mie Ueda from Headquarters of ICL.

Other members are Hideaki Marui of Niigata University and Hirotaka Ochiai of Forestry and Forest Product Research institute, Japan, Yueping Ying from China Geological Survey of China, Claudio Margottini of Italian Geological Survey, Vít Vilímek from Charles University, Czech Republic, Zeljko Arbanas from Rijeka University and Snjezana Mihalic from Zagreb University in Croatia, Dwikorita Karnawati and Faisal Fathani from Gadja Mada University in Indonesia, Alexandar Strom of JSC Hydroproject in Russia, and others.

#### 2. Other resources

Financial resources for the activities in 2011-2012 have been obtained from the Ministry of Education, Culture, Sports, Science and Technology, Japan (MEXT), the Ministry of Foreign Affairs, Japan (MOFA) for International Strategy for Disaster Reduction, the Japan Science and Technology Agency (JST) and the Japan International Cooperation Agency (JICA), the United Nations Secretariat of the

International Strategy for Disaster Reduction (UNISDR) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

# III. Activities

#### 1. Academic activities

We are conduction the International Programme on Landslides which is jointly managed by ICL, UNESCO, UNISDR and other 5 global stakeholders. Main activities are IPL projects proposed and implemented by 53 member organizations of ICL. All 41 projects and their activities are reported and uploaded in IPL WEB: <a href="http://www.ipl.org/">http://www.ipl.org/</a>. Refer the page 25-27 of the ICL leaflet 2012 (attached as Annex).

#### 2. Conference / Meeting

- The Second World Landslide Forum was organized at the Food and Agriculture Organization of the United Nations (FAO) on 3-9 October 2011. 864 persons from 63 countries attended, and 25 technical sessions were organized. All accepted papers were edited in 7 volumes of books from Springer, which will be published in later 2012.
- The ICL 10<sup>th</sup> Anniversary Conference was organized in Kyoto with supports from MEXT, UNESCO, UNISDR, MOFA, JST and JICA. 96 persons from 23 countries attended it, and adopted the ICL Strategic plan 2012-2021. The network organized many symposia, meetings, and schools in Croatia, Viet Nam, Iran, and others.
- 10th Session of the Board of Representatives of ICL and 6th Session of IPL Global Promotion Committee was organized at the FAO Headquarters on 3 and 5 October 2011.
- ICL International Summer School on Rockslides and Related Phenomena was organized in the Kokomeren River Valley, Tien Shan, Kyrgyzstan from July 30 till August 14 in 2011. This is IPL106-2 started as a capacity development project of ICL from 2008.
- The 2<sup>nd</sup> Workshop "Monitoring and analyses for disaster mitigation of landslides, debris flow and floods" was held in Rijeka, Croatia from 15<sup>th</sup> to 17<sup>th</sup> December 2011. This workshop is an activity of the SATREPS (The Science and Technology Research Partnership for Sustainable Development Programme of the Government of Japan) which is approved as IPL161 Risk Identification and

- Land-Use Planning for Disaster Mitigation of Landslides and Floods in Croatia (Leader: H. Marui) in 2009.
- The meeting of ICL Thematic Network "Landslides in Cold Regions" organized its first meeting together with the field trip at Shangri-La Hotel, Harbin, China on 22-27 July 2012.

#### 3. Interuniversity Exchange / Partnerships

As a part of IPL 161 for Croatia, IPL175 for Vietnam, 2-6 persons from Croatia and Viet Nam are invited to Japan, 2-3 times, in the length of 2 weeks to 8 weeks. Japanese researchers visited their countries, 2-6 persons for 2 weeks 2-3 times. As the project to create "Landslide teaching tool box" financed by MEXT, 5 persons were invited to Kyoto for 1 week from Indonesia, India, Taiwan and New Zealand. 3 students for Master Course and Doctor Course are invited from Croatia, Indonesia, Cambodia, and study in DPRI, Kyoto University.

On 24-28 October 2011, the DPRI organized the IHP Symposium on Extreme Events: "Meteorological, Hydrological and Tsunami Disasters: Social Adaptation and Future" (EXTREME2011) in conjunction with the 19th Regional Steering Committee Meeting for UNESCO-IHP for Southeast Asia and the Pacific at Uji Campus, Kyoto University, Kyoto, Japan with supports by the Japanese National Committee UNESCO-IHP; the Global COE Program "Sustainability/Survivability Science for a Resilient Society Adaptable to Extreme Weather Conditions" (GCOE-ARS); and the UNESCO Jakarta Office. In this symposium, a special session for the International Sediment Initiative (ISI) was held for focusing on scientific issues on landslides, debris flows and sedimentation disasters.

#### 4. Publication and multimedia materials.

- ICL edited and published Vol.8, No.3, Vol.9, No.2 of Landslides: Journal of the International Consortium on Landslides in this period. The published papers are much referred. The Impact factor of this journal was 2.216 which was the top of 30 ISI Journals in the subject of Engineering, Geological.
- ICL published a book Landslides: Global Risk Preparedness (editors: Kyoji Sassa, Badaoui Rouhban, Salvano Briceno, Mauri McSaveney, Bin He) from Springer. This book introduces the result of International Programme on Landslides (IPL) since 2003 and contains Part I IPL Programme; Part II Joint

Coordinating Projects; Part III Projects by Word Centres of Excellence; Part IV Risk Assessment Technology; and Part V Risk Management and Capacity Development with full color pages in the total page of 385.

- ICL published the Proceedings of the IPL symposium in Kyoto, 2012 (Eds.: K. Sassa, K. Takara and B. He) on line in the IPL WEB (http://www.iplhq.org/) and CD (152 pages)
- ICL published ICL leaflet 2012 (60 pages, full color) to introduce all activities of ICL and IPL.

#### 5. Others

Nothing special

## IV. Outcomes

The International Consortium on Landslides was founded by UNESCO and developed by its UNITWIN Network Programme. Landslides are important factor of disasters, but they are not studied as an integrated way. Landslide research and researchers are in minor areas of almost all organizations, they do not get major funds and those works are not evaluated. However, the global network of landslide researchers has developed and raised the profile of ICL and members of UNITWIN Networks through the decade. Now members of ICL and Networks may raise competitive funds with increased evaluation and understanding of significance. It has been shown from various sources of funds for ICL and the network activities.

A very success of the Second World Landslide Forum (864 persons from 63 countries), and the high Impact Factor of Landslides: Journal of International Consortium on Landslides reached to be 2.216 for 2011, the top of 30 ISI Journals in the subject of Engineering, Geological are the evidence of the outcome of the activities.

ICL has identified 15 World Centres of Excellence on Landslide Risk Reduction at 7<sup>th</sup> IPL Global Promotion Committee and released it at the Second World Landslide Forum. Three IPL Awards for Success were identified to three groups in USA-CANADA, Norway, Indonesia, and the Best paper award for Landslides 2010 was bestowed to the paper by Christopher I. Massey (New Zealand) et al., Varnes Medal 2010 was awarded Dr Zaiguan Lin (China) in 2011.

ICL has the status of the consultative partnership with UNESCO, the thematic plat form on landslides within the Global Platform for Disaster Reduction of the United

# V. Forthcoming Activities

- The following seven volumes of books containing all accepted papers in the Second World Landslide Forum will be published within 2012: 1) Landslide inventory and susceptibility and hazard zoning (650 pages); 2) Early warning, instrumentation and monitoring (690 pages); 3) Spatial analysis and modeling (480 pages); 4) Global environmental change (420 pages); 5) Complex environment (520 pages); 6) Risk assessment, management and mitigation (430 pages); 7) Social and Economic Impact and Policies (430 pages)
- The Third World Landslide Forum will be organized on 2-6 June 2014 in Beijing, China.
- Landslides: Journal of International Consortium on Landslides will be developed from quarterly journal to bimonthly journal from Vol.10, No.1 in March 2013.
- A Symposium and 11<sup>th</sup> Session of the Board of Representatives of ICL and 7<sup>th</sup> Session of IPL Global Promotion Committee will be organized at the UNESCO Headquarters in Paris on 20-23 November 2012.
- ICL International Summer School on Rockslides and Related Phenomena will be organized from 25 August to 9 September 2012 in the Kokomeren River Valley (Kyrgyzstan)
- The 3<sup>rd</sup> Workshop of the Croatian-Japanese joint research project 'Risk Identification and Land-Use Planning for Disaster Mitigation of Landslides and Floods in Croatia' will be held in Zagreb, Croatia in March 2013.
- Landslide teaching tool box will be made for capacity development in developing countries with financial support from the Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan. This activity is a part of activities of IPL175 (K. Sassa & D. Tam) Development of landslide risk assessment technology and education in Viet Nam and other areas in the Greater Mekong Sub-region approved in 2011 and SATREPS Development of landslide risk assessment technology along transportation arteries in Viet Nam started in 2012.

# VI. Development Prospects

Since the foundation of the international Consortium on Landslides in January 2002 and the foundation of UNITWIN Network between UNESCO-Kyoto University-ICL in 2003, the international network activities on landslides and water-related disasters (have developed steadily. ICL has established the strategic plan for the second decade and created 3 regional networks and 5 regional networks based on this strategic plan. This UNESCO-KU-ICL network will further develop mobilizing the initiatives of current members by two crossing networks of thematic and regional.

#### Thematic networks

- 1. Capacity Development Network
- 2. Landslide Risk Management Network
- 3. Landslide in Cold Regions,
- 4. Landslide and Cultural & Natural Heritage Network
- 5. Landslide Monitoring and Warning Network

#### Regional networks

- 1. Adriatic-Balkan Network
- 2. North-East Asian Network:
- 3. Latin American Network