

## **Progress Report Form of ICL Network 2017**

**1 January 2016 to 31 December 2017**

1. **Project Title of Network:** Capacity Development Network (Landslide School Network)
2. **Name of coordinators (Affiliation and emails):** Prof. Dwikorita Karnawati  
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3. **List of member organizations**
  - a. Alexander Strom (Geodynamic Research Center - branch of JSC "Hydroproject Institute" Russia)
  - b. Teuku Faisal Fathani (Faculty of Engineering – Universitas Gadjah Mada, Indonesia).
  - c. Yin Yueping (China Institute of Geo-environmental Monitoring(Center of Geohzds Emergency, MLR )
  - d. Irasema Alcántara (Institute of Geography at the National Autonomous University of Mexico - UNAM)
  - e. Hiroshi Fukuoka (Niigata University, Japan)
  - f. Virajh Dias, Central Engineering Consultancy Bureau (CECB), Sri Lanka
4. **Progress report of activities up to 31 December 2017**

Loss of life and socio-economical losses because of the landslide disasters are mostly related to poor awareness of the local community and the local authority for landslide hazard and risk, which mainly due to the lack or poor knowledge about landslide phenomena and mitigation. Thus, efforts to improve the knowledge on landslide cause, mechanism and control, as well as landslide mitigation and risk reduction are urgently required. Accordingly, ICL Network for Capacity Development was established in order to facilitate the efforts for knowledge improvement and capacity development in landslide mitigation and risk reduction, through various mechanisms as stated in the objectives below:

  - a. Capacity Development with respect to landslide disaster risk reduction such as through courses/training, summer camp, expert and student exchanges.
  - b. Establishment of knowledge management system to support the capacity development program in landslide risk reduction.

Description of progress activities up to 31 December 2017:

- a. Community Empowerment Program of Landslide Hazard Prone area in 30 districts In Indonesia. January – December 2017.

Aims to :

- produce the landslide risk map and evacuation map by empowerment of local community
- increase the community knowledge and awareness of landslide hazard
- conduct the evacuation drill for landslide disaster mitigation
- build the local disaster mitigation team in the village scale
- implement landslide monitoring and early warning system

Target groups : Students of Universitas Gadjah Mada, and students from various countries (i.e. Japan, Australia, USA, and Southeast Asia in the AUN Seed Net Program), local community, local universities and local government

Remarks/ Lesson learned : The activities managed to :

- Established and empower the local task-force of landslide disaster mitigation at the village.
- The increasing knowledge and awareness for landslide disaster mitigation of the community
- The changing of community habit related to daily activities especially during rainy season
- The community-based landslide risk map and evacuation route.

- b. Workshop and Training on Capacity Development for the Local Government of 4 provinces (West Sumatera, Central Sulawesi, West Nusa Tenggara and Bengkulu Provinces), on Disaster Risk Reduction, conducted in January-December 2017, by Universitas Gadjah Mada, Indonesia – GNS Science, New Zealand, National Agency for Disaster Management (BNPB), Ministry for Village, Development of Disadvantaged Regions and Transmigration (Kemendesa), funded by MFAT-New Zealand Aid.
- c. Short Course on Spatial Planning for Disaster Mitigation (Especially for Landslide Mitigation) for the Staffs and Leaders at the Directorate General of Spatial Planning, Ministry of Public Works, Indonesia, conducted in partnership with the Indonesian Ministry of Public Work.
- d. Regular Workshop for the Empowerment of the Local Agency of Disaster Management at Central Java and Yogyakarta Provinces on Landslide Disaster Risk Reduction Program, conducted in partnership with the R3ADY Asia-Pacific, Pacific Disaster Center (PDC) and the University of Hawaii.
- e. Double Degree Master Program with special concentration study on landslide mitigation, conducted by Universitas Gadjah Mada, Indonesia and San Diego State University, USA (on-going program at the 2<sup>nd</sup> year).

- f. Publishing ISO 22327 on Landslide EWS at the Meeting of ISO TC-292 in Sydney, March 2018; based on the technical meeting in Edinburgh UK 2016 and Jeju Korea 2017.

## 5. Plan of future activities

To continue the existing program and try to broaden the scope and the impact of the capacity development program and network under ICL.

## 6. Publication (in Landslides, proceedings, meeting reports, or WEB)

1. Karnawati D., Fathani T.F., 2018. A socio-technical approach for landslide mitigation and risk reduction. *Landslide Dynamics: ISDR-ICL Landslide Interactive Teaching Tools*, Springer: 621 – 630.
2. Karnawati D., Fathani T.F., Wilopo W., Andayani B., 2018. Community hazard maps for landslide risk reduction. *Landslide Dynamics: ISDR-ICL Landslide Interactive Teaching Tools*, Springer: 599 – 606.
3. Fathani T.F., Karnawati D., 2018. A landslide monitoring and early warning system. *Landslide Dynamics: ISDR-ICL Landslide Interactive Teaching Tools*, Springer: 297 – 308.
4. Fathani T.F., Karnawati D., Wilopo W., 2017. Promoting a global standard for community-based landslide EWS. *Advancing Culture of Living with Landslides*, Springer, Vol. 1: 355 – 361.
5. Fathani, T.F., Karnawati, D., and Wilopo, W. (2016) An integrated methodology to develop a standard for landslide early warning systems. *Natural Hazards and Earth System Sciences 16(9):2123-2135*.
6. Fathani TF., Wilopo W., Karnawati D. (2016) International Standard for Landslide Early Warning System, the 3<sup>rd</sup> International Meeting of ISO TC-292, September 2016 in Edinburgh UK.
7. Karnawati D., Ma'arif S., Fathani TF., Wilopo W. (2013) Development of Sociotechnical Approach for Landslide Mitigation and Risk Reduction Program in Indonesia. *ASEAN Engineering Journal Part C, Vol. 2 Number 1, ISSN 2286-8150*. June 2013, p. 22– 47 C.
8. Karnawati D., Wilopo W., Setianto A., Suharman and Fathani TF. (2013) Student Community Service Program for Landslide Disaster Risk Reduction in Indonesia. *Landslide Science and Practice, Volume 7: Social and Economic Impact and Policies*. p.317 – 323. Eds : Claudio Margottini • Paolo Canuti • Kyoji Sassa.
9. WCoE of Landslide Risk Reduction of UGM (2013) National Master Plan for Landslide Mitigation in Indonesia, Eds. Fathani TF, Wilopo W. and Karnawati D. *National Agency for Disaster Management of Indonesia*, December 2013.
10. Various training material, workshop proceeding, guideline and Standard Operating Procedures.