Date of Submission

November 5, 2015

IPL Project Proposal Form 2016

(MAXIMUM: 3 PAGES IN LENGTH)

1. Project Title: Landslide disaster risk communication in mountain areas

2. Main Project Fields

Select the suitable topics. If no suitable one, you may add new field.

- (1) Technology Development
 - A. Monitoring and Early Warning, B. Hazard Mapping, Vulnerability and Risk Assessment
- (2) Targeted Landslides: Mechanisms and Impacts
 - A. Catastrophic Landslides, B. Landslides Threatening Heritage Sites
- (3) Capacity Building

A. Enhancing Human and Institutional Capacities

B. Collating and Disseminating Information/ Knowledge

(4) Mitigation, Preparedness and Recovery

A. Preparedness, B. Mitigation, C. Recovery

3. Name of Project leader: Irasema Alcántara-Ayala

Affiliation: Institute of Geography, National Autonomous University of Mexico (UNAM), Full Professor

Contact: **Circuito Exterior, Ciudad Universitaria, 04510, México City, +5255 5623022 ext. 45466** Core members of the Project

Names/Affiliations:

Ana Rosa Moreno, Faculty of Medicine, National Autonomous University of Mexico (UNAM) (expert on risk communication)

Ricardo Garnica-Peña, Institute of Geography, National Autonomous University of Mexico (UNAM)

- 4. Objectives: (5 lines maximum; what you expect to accomplish?)
 - Developing a landslide risk communication strategy that can be applied at local level.
 - Helping to induce landslide capacity building in the municipality of Teziutlán by incorporating landslide risk awareness and preparedness.
 - Merging the efforts and capabilities of Civil Protection authorities and the community to implement a successful strategy of landslide risk communication.
- 5. Background Justification: (10 lines maximum)

The municipality of Teziutlán has been historically affected by landsliding. However, in spite of the scientific research developed to understand landslide's dynamics, no systematic efforts have been carried out to establish a landslide risk communication strategy that can be useful to improve landslide awareness and preparedness. Therefore, the spatial analysis of landslide occurrence and landslide risk

perception of population can be used as a base for the design and implementation of a solid strategy to communicate risk concerning landslide disaster risk.

- 6. Study Area: The project will be conducted in the municipality of Teziutlán, Puebla
- 7. Project Duration: **2 years**
- 8. Resources necessary for the Project and their mobilization

Core members of the project and students will be involved. Facilities and resources of the Institute of Geography will be available. Resources involved vehicles for transport, computer facilities, in addition to a budget of US\$5000.00 for community based workshops and development of materials (already available).

9. Project Description: (30 lines maximum)

Landslide disaster risk is a major issue in mountain areas of Mexico. As such, reducing levels of vulnerability through community awareness and preparedness can be regarded as one of the most significant means to reduce disasters. Information and knowledge therefore should be not only transferred to people, but to communicate in a way that can be useful and used. Risk communication therefore cannot be regarded as a simple task, but a challenge. Under such framework, the perception of risk is an important element contributing to develop and implement a risk communication plan to protect vulnerable people exposed to landslides. Therefore, this project aims at developing a landslide disaster risk communication strategy based on a risk perception analysis that is being carried out at the moment. Results derived from such analysis will allow delineating specific actions to build a solid risk communication strategy. For the latter to be successful it is necessary to consider the participation of different actors. Of particular interest will be the participation of local authorities and population given that there is a lack of interaction among them. The mixture of ways to get knowledge is of great importance for reducing vulnerability. Actions not only to avoid impacts, but to manage risk can be inspired by a solid risk communication strategy as it is an essential approach to strengthen disaster reduction capacity building. The landslide communication strategy therefore will have to be build not only by introducing scientific knowledge in terms of landslide's dynamic, but based on perception of people and on ideas and needs to be identified as authorities and community interact.

10. Work Plan/Expected Results:

Work plan:

Based on results derived from a landslide risk perception survey applied in the municipality of Teziutlán, Puebla, specific actions for risk communication will be defined.

The main idea is to work in collaboration with the Director of Civil Protection of the town and key actors of the community, including people who have work in mass media in recent years and have been involved with previous landslide episodes.

Risk communication strategies will be defined in terms of age groups, gender, and degree of exposure to landslides, in addition to other factors resulting from the risk perception analysis.

Feedback from the population in terms of the best practice for landslide risk communication also is considered as a very significant input; therefore, community workshops will be organized.

Once the strategies of risk communication are defined, there will be put in practice and an evaluation

of impact will be undertaken.

Expected results:

- Capacity building in terms of community awareness and preparedness.
- Involvement of authorities and communities in activities
- 11. Deliverables/Time Frame: (10 lines maximum; what and when will you produce?)
 - Definition of a risk communication strategy that can be used and implemented by local authorities in Teziutlán in the short term, and can be extended to the region on medium and long term basis. The activities for the short term will be developed during 2016, while those for the medium and long term will be carried out in 2016 and 2017.
 - Preparation of materials (to be defined according to the risk perception strategy and the input from local actors) to be used for implementing the landslide risk communication strategy at local level. This also will be undertaken within the two years framework.
 - These will be parallel activities.
 - Preparation of a couple of manuscripts to be submitted for publication in journals (at the end of the project).
- 12. Project Beneficiaries: The authorities of Civil Protection of the municipality and the inhabitants of municipality and the region.
- 13. References (Optional): (6 lines maximum; i.e. relevant publications)
 - Fischhoff, B. (1995). Risk perception and communication unplugged: Twenty years of process. Risk Analysis, 15(2), 137-145.
 - Landeros-Mugica, K., Urbina-Soria, J., Alcántara-Ayala, I. (on line) The good, the bad and the ugly: on the interactions among experience, exposure and commitment with reference to landslide risk perception in México, Natural Hazards, DOI 10.1007/s11069-015-2037-7.
 - Slovic, P. (Ed.). (2000). The perception of risk. London: Routledge.

Note: Please fill and submit this form by 15 November 2015 to ICL network <<u>ICL-network@iclhq.org</u>>