

Revised version

Application for World Centre of Excellence on Landslide Risk Reduction (WCoE) 2023-2026

1. Name of Organization: National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Government of India, Delhi, INDIA

2. Name of Leader: Professor Surya Parkash, Ph.D.

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Core members of the activities Names/Affiliations:

- Mr. Shubham Badola, NIDM
- Ms. Karishma, NIDM
- Mr. Vimal Tiwari, NIDM
- Ms. Aafreen Haider, NIDM
- Ms. Parveen Sulthana, NIDM

3. Date of Submission of Application: 03-April-2023

4. Activity scale and targeted region: National - India

5. Short Title (10 words maximum): Capacity Development for Landslide Disaster Risk Reduction and Resilience in India

6. Objectives for the initial 3 years: (5 lines maximum; what you expect to accomplish?)

- Understanding landslide incidence, impacts and risks in India
- Develop human and institutional capacities at national, state and community level for landslide risk reduction and resilience
- Collaborate community and other stakeholders participation in landslide risk reduction and resilience

7. Background Justification: (10 lines maximum):

NIDM has been mandated by Parliament of India for training and capacity development on disaster management in India. It has a multi-disciplinary team of faculty members (geologists, engineers, sociologists, economists, planners, environmentalists, administrators and other related disciplines etc.) specializing on various aspects and dimensions of disaster management. The Institute has been regularly organizing training courses related to landslides risk management at national level as well as state level **in collaboration with Central Building Research Institute, Central Road Research Institute, Geological Survey of India, Administrative Training Institutes, State Institutes of Rural Development, State Disaster Management Authorities etc.** The Institute is involved in preparation of plans, policies and guidelines for disaster management (including landslides) at national level and also supporting the States in their strategies for disaster risk reduction and resilience.

Further, NIDM has also organized international programmes in collaboration with USAIDS, USFS, UNHCR, UNDRR, UNDP, UNICEF, IAFS, ADPC-Bangkok, FEMA-USA, ADRC-Japan. EMI-USA, PWRI-Japan, NILIM-Japan, ITC-Netherlands and various other international organizations/agencies in different areas of disaster management.

8. Resources available for WCoE activities:

NIDM has regular faculty members supported by young professionals, junior consultants and consultants, to assist in implementation of activities related to research, documentation, training and capacity enhancement on disaster risk reduction and resilience among different stakeholders throughout India. The Institute's activities are supported by several partners including international organizations, national and state level institutes / line departments as well as National and State level Disaster Management Authorities. The Institute library has a very good resource base of books, journals, periodicals, video CDs, cassettes and documentaries etc. related to disaster management. The Institute has good facilities for organizing training programmes and workshops with state-of-art IT infrastructure in the training halls and computer centre. It has prepared training module comprehensive landslides risk management and documented the archival records of the past landslides in Country. Also, it has already prepared a directory of organizations and resource persons working on different aspects of landslides in India as well as the annotated bibliographies database of publications related to landslides.

The Institute is fully funded by Government of India and executes several national disaster management and capacity building activities. It has links with several national and international organizations for collaborative programmes on disaster management. It has its own web server for running online training programmes (www.onlinenidm.gov.in) and self-study courses (www.ssp.nidm.in) on disaster management.

As a member of ICL/IPL-GPC, the Institute had the proud privilege of being conferred a WCoE on LDR (2011-2014 as well as in 2020-2023) and again made significant contributions as reported in its progress reports. The Institute would again like to host the WCoE on Landslide Disaster Reduction (2023-2026) and involve the international experts and experiences in the process of documentation, training and capacity enhancement on landslides risk reduction and resilience. It would be able to share its literary resources and infra-structure for supporting such activities related to landslides risk management, exchange experiences including organization of national and international trainings conferences. It expects to serve better and more effectively/efficiently with contributions from international consortium on landslides. The WCoE at NIDM organised an international conference on Landslide Risk Reduction and Resilience during 28th Nov 2019 at New Delhi, India.

9. Description of past activities related to risk reduction of landslides and other related earth system disasters (30 lines maximum)

NIDM was conferred the recognition as the World Centre of Excellence on Landslides Disaster Reduction during the period between 2011-2014 as well as in 2020-2023 by ICL and IPL ISDR. It has been organizing education, training and capacity enhancement related activities on various kinds of disasters with particular emphasis on geo-hazards like earthquakes, landslides and flash floods. The institute has also been involved with planning, policy development and formulation of guidelines as well as strategy for landslide management by the National Disaster Management Authority (NDMA), Government of India.

It plays a major role in networking, linkage and coordination among different stakeholders and resources. The Institute hosts a website for sharing information on resources for disaster management through a portal (www.idm.gov.in) and provides free access to its publications and presentations through its website www.nidm.gov.in.

The Institute also established a Centre of Excellence on Landslides at Disaster Management Cell in the Dr. R.S. Tolia Uttarakhand Academy of Administration, Nainital in the Uttarakhand State of the Himalayan region to enhance the national efforts in documentation, training and capacity building on landslides. It works to bring knowledge into practice and develops indigenous knowledge/ resources for reducing disaster risks. The Institute has also developed a national plan for capacity building and development of human resources for disaster management in the country. It has documented several socio-economically significant landslide disasters in the state. It has also coordinated for development of a national database on landslides.

10. Planned future activities/Expected Results: (20 lines maximum, work phases & milestones)

The Institute has a vision to become a Centre of Excellence in the field of Disaster Management. NIDM mandate also focuses on research, documentation and development of national level information base along with training programmes and conferences (same can be seen at its website www.nidm.gov.in). The main activities related to landslides are research, documentation, national/state level training programmes, national workshops/conferences and joint activities on landslides studies with NILIM and PWRI, Tsukuba, Japan as part of Indo-Japanese Action Plan. Mention worthy, some joint training programme were also conducted with ICL under the IPL projects in past by NIDM. In addition, NIDM also conducted several researches and documentation along with training and capacity development programmes on Community Based Disaster Risk Management, District Disaster Management Planning, Earthquake Risk Management, Risk Analysis etc. NIDM has also worked on knowledge web-portal namely, India Disaster Knowledge Network (IDKN) which also forms a part of the South Asia Disaster Knowledge Network (SADKN). It is expected that Institute's efforts in different directions with multiple perspective and integrated approach would lead to development of an effective and efficient disaster risk management system and strategies leading to drastic reduction in disaster damages / losses. This study tries to achieve safe and sustainable development of structures, infrastructure, facilities and services in this region under changing climatic conditions and accelerated pace of urbanization. A better informed, trained and prepared community would not only be able to assess, prevent, mitigate/resist and respond to the impacts of landslide hazards but also help in reducing the vulnerabilities of elements exposed to landslide hazards. It will promote the applicability of disaster resistant technologies and practices which will ensure greater safety from the disasters and also ensure reduced chances of disaster incidences. The Institute craves to cater to the needs of the people of this region with specific emphasis on disaster risk reduction and resilience following Prime Minister (PM's) 10 point agenda, Sustainable Development Goals (SDGs), Sendai Framework for Disaster Risk Reduction (SFDRR), New Urban Agenda and Climate Change Adaptation/Agreements.

The WCoE LDR will also attempt to make publications with ICL including P-LRT and the Journal on Landslides as well as World Landslide Forum held by ICL.

Expected result from the study:

- It may provide a comprehensive understanding of the landslide incidences, impacts and risk
- It may help in developing human and institutional capacity for landslides risk reduction and resilience
- It may promote community and other concerned stakeholders' participation in landslide DRR & R

11. Beneficiaries of WCoE: (5 lines maximum; who directly benefits from the work?)

- Central, State and Local Governments in India
- Ministries/Departments/Organizations/Institutes/Agencies working on landslides
- Administrators, Developers, Planners, Policy and Decision Makers
- Professionals, Academicians, Researchers, Disaster Managers and Authorities etc. Line Departments, Community and Humanity

12. References:

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- Parkash Surya: "Tools, Techniques and Technologies for Capacity Enhancement to Reduce Landslide Risks and Promote Community Resilience", Proceedings of

International Conference on Landslides and Slope Stability (SLOPE 2015) Advancement of Research, Practice and Integrated Solutions on Landslides, held at Bali, Indonesia during 27-30 September 2015, pp.3-1 to 3-8, ISBN 978-602-71964-5-2, published by Parahyangan Catholic University, Bandung, Indonesia

- Parkash Surya: "PDF-tool-4.091-1.3: Community based Landslide Risk Reduction (24 pages)", ICL Landslide Teaching Tools (Editors: Kyoji Sassa, Bin He, Mauri McSaveney and Osamu Nagai), published by ICL, IPL and UNESCO, pp.376, ISBN: 978-4-9903382-2-0
- Parkash Surya: "PDF-tool-4.091-1.1: Guidelines for Landslides Management in India (190 pages)", ICL Landslide Teaching Tools (Editors: Kyoji Sassa, Bin He, Mauri McSaveney and Osamu Nagai), published by ICL, IPL and UNESCO, pp.374, ISBN: 978-4-9903382-2-0
- Parkash Surya: "PDF-tool-4.091-1.2: Training Module on Comprehensive Landslide Risk Management (304 pages)", ICL Landslide Teaching Tools (Editors: Kyoji Sassa, Bin He, Mauri McSaveney and Osamu Nagai), published by ICL, IPL and UNESCO, pp.375, ISBN: 978-4-9903382-2-0
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