CURRICULUMN VITAE (CV)

**Name Dr. Basanta Raj Adhikari**

**Institute** Director, Centre for Disaster Studies, Institute of Engineering, Tribhuvan University, Nepal

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**Profile:** Dr. Basanta Raj Adhikari has done his PhD in Earth Science from the University of Vienna, Austria. His research interests are climate change, hill-slope movement and human interaction, Himalayan sediment flux generation, Multi-hazard risk assessment community-based disaster risk reduction for different kinds of natural hazards e.g. landslide, flood, earthquake. He has published more than dozen research papers in both national and international journals and received various recognitions for his work in the field of earth science.

**Education:**

* PhD in geology, University of Vienna, Vienna, Austria, Department of Geodynamics and sedimentology, 2009
* MSc in Geology, Central Department of Geology, Tribhuvan University, Nepal. 2001-2003

**Academic experiences:**

* **(From June 2023 to date) Director,** Centre for Disaster Studies, Institute of Engineering, Tribhuvan University, Responsible for Training, research and development in different kinds of disaster in Nepal and aboard.
* **(From April to September 2023) Guest Professor,** Keio University, Japan, Responsible for Training, research and development in different kinds of research and development on disaster risk reduction.
* **(From June 2015 to June 2018, From January 2021 to May 2021) Deputy Director,** Centre for Disaster Studies, Institute of Engineering, Tribhuvan University, Responsible for Training, research and development in different kinds of disaster in Nepal and aboard.
* **(From June 2021 to date) Distinguished foreign Associate professor,** Institute for Disaster Management and Reconstruction, Sichuan University, Chengdu, China.
* **(From November 2011 to date) Assistant Professor of Engineering Geology,** Department of Civil Engineering, Central Campus, Pulchowk Institute of Engineering, Tribhuvan University, Responsible for teaching engineering geology, landslide, supervise students in field as well as in lab to conduct research. Course coordinator of landslide for M.Sc. in Disaster Risk Management. Course coordinator of engineering geology for M.Sc. in Geo-technical Engineering.

**Training:**

* “Science Diplomacy online course” organized by S4D4C, 1 September, 2020.
* Training on “Training of Instructors on Ecosystem-based Disaster Risk Reduction” UN Environment, UGM, Indonesia, 18-22 March, 2019.
* A week training on “Major Natural Disaster Alleviation of the Belt and Road” Chengdu, Sichuan, China, Institute of Mountain Hazards and Environment CAS, 2-8 September 2017.
* Training on "Geotechnical Earthquake Engineering with Emphasis on Ground Failure Risk and Mitigation" NSET, CalTech, USGS and ESS, Nov 29-Dec 2, 2016.
* Two weeks training on "Summer Institute for Disaster and Risk Research", Beijing Normal University, China, 25July-5 Aug. 2016.
* Worked as a resource person on “Piloting Early Warning System (EWS) for Landslides in Far West of Nepal” Mercy Corps, Nepal, August 13-17, 2014.
* Worked as a resource person on “Climate Change science: Mitigation and Adaptation” International Sustainability School, Handson, Nepal, June 15-26, 2014.
* Training on “Training for Policy Makers on Climate Change Impact Adaptation”, Institute of Engineering and Center for Natural Resources and Development, 30th Oct-1st Nov, 2013
* Training on “Geotechnics Training/Seminar”, Institute of engineering, Tribhuvan University and Local Road Bridge Program (LRBP), Government of Nepal, Sept.24-Oct.4, 2013.
* Training on “Geographic Information System (GIS)” Department of Road and Institute of engineering, Tribhuvan University, 5-9 June, 2013.
* Short course on “Soil and Rock Mechanics in Engineering”, Faculty of Geo-Information Science and Earth Observation University of Twente, Enschede, The Netherlands, January-March, 2013.
* Training on “Risk Management during Design and Construction”, Nepal Tunneling Association/ ITACET foundation, 11-12 December, 2012.
* Post-graduate Course on “Natural Hazards and Disaster Risk Management in Mountains” University of Torino, Faculty of Agriculture, Torino, Italy, July 2011.
* "Alternative Technologies and Renewable Resources For a sustainable Development", 25-28 February, 2009, Leibnitz, Austria.
* “Community-based disaster risk Management” online course/training by Asian Disaster Preparedness Center (ADPC), 2008.

## Research Projects:

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| Project | Role | Responsibility | Collaborative Partners | Year |
| “GIS-based educational cooperation project for mountain disaster resilience improvement in the South Asian countries and China | Multi-hazard risk assessment expert | Remote cooperation to jointly guide students, co-publish papers, carry out online lectures, communicate and consult, and cooperate to complete GIS-based educational cooperation project for mountain disaster resilience improvement in the South Asian countries and China Scientific Research Project and to finish other tasks, and pay the appropriate remuneration according to the agreement. | Ministry of Science and Technology, China | 2022-2023 |
| Multi-hazard vulnerability and risk assessment in lower Dudhkoshi watershed, Nepal | Landslide risk assessment expert | Geological and landslide hazard mapping of the project area. Field visit and data collection of the Dudhkoshi watershed. Contributed for the preparation of Multi-hazard map preparation. Ensure the quality of the assignment, track the progress and accomplish on time. | United Nations Development Programme, Nepal, Department of forest and Soil conservation | 2021 |
| Impact assessment of Kulekhani 1,2 and 3 HEP on water resource management, watershed management associated with socioeconomic and livelihood | Geologist | Geological and landslide hazard mapping of the project area. Prepared the geological map from the field as well as satellite imagery. Contributed for the report preparation. | Water Resources Research and Development Center, Government of Nepal | 2021 |
| Local disaster and climate resilience plan local municipality, Nepal | DRM expert | Preparation of, multi-hazard map, team leading, discussion with local representative bodies, preparation of digital local disaster and climate resilience plan (LDCRP). | AWO, BEE | 2021 |
| Strengthening livelihoods of the vulnerable people through community-based landslide risk reduction interventions in the earthquake-affected district, Nepal | Landslide expert | Conduct the existing landslide hazards and landslide early warning system practices in Nepal to prevent loss of lives and their assets, review major landslides/debris flow events in Nepal while collecting disaster information in Nepal. Explore potential areas for capacity building of federal and local government’s actors and local CBOs to address landslide risk reduction and explore the best possible ways of collaboration and replication of the best practices in similar problematic areas through the government’s regular development programs. | FAO | 2021 |
| Providing consultation service for Bagmati Provincial Assembly and Province Number 2 on Natural Resource Management and Disaster Preparedness for Relevant Committees | Climate Change Adaptation and Disaster Risk Reduction | Provide orientation to the members of the Natural Resource and Environment Committee on key technical aspect of the Chure conservation and DRR, climate actions related to SDGs, agenda and role of Member of Parliaments. Prepare a comprehensive report from the study with recommendations to reduce/manage the impacts of the disaster in the Bagmati Province, Nepal. | UNDP | 2021 |
| Development of Provincial Climate Change Strategy and Action Plan of Sudurpaschim Province and Karnali Province | Climate Change Adaptation and Disaster Risk Reduction expert | Provide orientation to the members of the Natural Resource and Environment Committee on key technical aspect of the Chure conservation and DRR, climate actions related to SDGs, agenda and role of Member of Parliaments. Prepare a comprehensive report from the study with recommendations to reduce/manage the impacts of the disaster in the Bagmati Province, Nepal. | UNDP/WWF | 2021 |
| Study on opportunities for investment in Nature-based Solution in Lower Karnali flood exposed Palikas | Nature-based solution expert | Identification of potential sites for nature-based solution intervention in the Karnali flood affected palikas with the help of GIS and community interaction. Opportunity mapping for the communities for income generation. | Practical Action | 2021 |
| Municipal COVID-19 Recovery and Disaster Preparedness Assessment, Nepal | Disaster Risk Mitigation and risk-sensitive land-use planning | Develop methodology and tools for multi-hazard municipal risk profile and identify required data for the preparation of risk sensitive land use planning (RUSLP). | World Bank/GeoAdaptative/NAXA/Utopia/Zite | 2021 |
| Development of risk sensitive land use planning for Neelkantha and Dullu Municipalities | Geohazard risk assessment expert | Development of multihazard risk assessment/probabilistic risk assessment. Develop methodology and tools for the preparation of risk sensitive land use planning (RUSLP). | USAID/DAI/NDC | 2021 |
| Geomorphic River classification for Nepal | Team leader | Geomorphic classification of rivers on the major characteristics that shape the physical template of rivers across Nepal | WWF | 2020 |
| Illuminating the speed of sand-quantifying sediment transport using optically stimulated luminescence | Co-Investigator | Carry out the field investigation to understand the sedimentary depositional environment of Pokhara valley and preparation of OSL sample | University of Potsdam, Germany; wageningen university, The Netherlands | 2019-2020 |
| Filling in the Central Himalayan Seismic Gap: A Structural, Neotectonic, and Paleoseismic Investigation of the Western Nepal Fault System | Co-Investigator | Study fault systems in the western Nepal Himalaya and understand the important with paleo-seismic analysis | National Science Foundation, USA; University of Houston and Tribhuvan University | 2019-2021 |
| Multi-hazard Urban Risk Transition Hub | Co-Investigator | Study the natural disaster and its impacts in the urban areas in Nepal | Edinburgh University, Tribhuvan University, Practical Action, NSET | 2019-2024 |
| Preparation of Urban Sustainability Index in Nepal | Environment Risk Analyst | Preparation of environmental indicators for Urban Sustainability index. Presentation of data using GIS | National Planning Commission, Nepal | 2017-2018 |
| Preparation of land zoning map in Gaupalika Level, Nepal | Team Leader | Preparation of present land use, soil land capability, Land-use zoning, cadastral layer, superimpose and municipal profile in GIS platform. | NLUP, Nepal | 2017-2018 |
| Threshold calculation for floods and Landslides in Selected Watershed/Sub-watersheds and Deliver Community Based EWS Trainings for Two Communities in Sindhupalchowk and Surkhet Districts, Nepal | Engineering geologist | Identification of land surface and landslides interaction and calculation of rainfall threshold for landslides and floods. Preparation of index maps in GIS environment | UNDP, Nepal | 2017-2018 |
| Nepal Urban Resilience Project | Environment Risk Analyst | Environmental indicators identification for risk analysis in selected municipalities. Identification of Solid, electronic and industrial waste, hazardous waste, landslide, flood etc. | DFID, ADRA Nepal, NDRC | 2017-2018 |
| Soil Hydraulic Assessment for slope stability using Slope Index Map at Kavre District | Engineering Geologist | Geological investigation of the area with slope stability analysis for disaster risk reduction. | Nepal Agricultural Research Council, GoN, Nepal | 2017-2018 |
| Landslide hazard mapping in the Nepalese Himalaya | Principal Investigator | Study of landslide, interaction with community, preparation of landslide risk map, developed methodology for landslide risk mapping in the local context, field investigation, training to local level engineer and policy makers triggered by earthquake. | FAO, UN | 2017-2018 |
| Perturbation of Earth Surface Systems by Earthquakes | Co-Investigator | Investigation of the interaction between earthquake and hill slope movement in the Nepal Himalaya | Helmholtz Centre Potsdam, GFZ Germany | 2015-2018 |
| Dynamic Flood Topographies in the Terai, Nepal; community perception and resilience | Co-Investigator | generation of high resolution of DEM in the Karnali River and long-term dynamic flood modeling for early warning system | University of Edinburgh, England and Practical Action, Nepal | 2016-2017 |
| DRR initiatives for Landslide treatment and monitoring training in Sindhupalchowk and Dolakha districts of Nepal | Team leader/ Landslide expert | landslide monitoring and stabilization by using different local technology and materials and training for the local people | Save the Children, Nepal | 2015-2017 |
| Enhancement of urban disaster resilience through activities of local participatory platform, Nepal | Co-Investigator | Enhance resilience of cities against natural disasters through capacity buildings of stakeholders in Kathmandu, Nepal and Yangon, Myanmar. | Kyoto University, Japan; NSET, Nepal; Centre for Disaster Studies, TU; Lalitpur and Karyabinayk Municipalities | 2015-2018 |
| Impacts of the earthquake 2072 on selected protected area (Langtang, Shivapuri, Sangarmatha, Makalubarun, Manaslu and Gauri Shankar Protected areas) Nepal. | Engineering Geologist | Identification of landslides and threat to bio-diversity due to earthquake | Department of National Parks and Wildlife conservation, Government of Nepal, Practical Solution Pvt. LTD. | 2016 |
| Present Land Use, Soil, Land Capability, Land Use Zoning, Cadastral Layer Superimpose and VDC profile, Sunsari district, Nepal. | Team Leader | Overall team management, guidance and monitoring for land use zoning and risk mapping up to VDC level | Ministry of Land Reform and Management | 2016 |
| Pro-poor environmentally sustainable Green Recovery and Rehabilitation Plans in Nepal | Team Leader | Multi-hazard mapping and preparation of GRRP in different districts. | Ministry of Federal Affairs and Local Development | 2015 |
| Detailed assessment, Master plans and technical documents for Schools in Sindhupalchowk district. | Engineering Geologist | Identification of different hazard for safe place to construct school | CARITAS Switzerland | 2015 |
| Detail study of earthquake triggered landslides and liquefaction in the different part of Nepal. | Engineering Geologist | Reconnaissance study of Earthquake | Geotechnical Extreme Events Reconnaissance, USA | 2015 |
| Nationwide Risk Assessment-Stocktaking and preparation Phase | Risk Assessment expert | Provided professional input on nationwide consultation and prepare methodology for risk assessment, Stocktaking of natural hazard and risk assessment. | DFID/Evidence on demand, UK, Nepal Risk Reduction Consortium (NRRC) | 2015 |
| Climate Risks Assessment and Integrated Watershed Management Plan of Riu-Khola Sub-watershed, Maadi, Chitwan, Nepal | Team leader (Climate change and DRM expert) | Coordinate study team, communicate and collaborate with DDC and UNDP, Design methodology for the work and supervise field survey, compile and finalize the report and presentation | UNDP, Nepal | 2015 |
| Quantitative and qualitative analysis impacts of landslide to local communities including infrastructure and recommend future course of action of disaster risk reduction, Kalikot District, Nepal. | Team Leader/Disaster Risk Management Expert | Identification of vulnerable community from the natural hazard with collection of socio-economic data such as loss of life, property, migration, impact on women etc. Data analysis and production of analytical report on the socio-economic impacts of landslide and recommendation for future action on landslide monitoring. | Mission East | 2014 |
| Design and develop low cost and low tech Community Based Early Warning System (CBEWS) for Flash flood, Eastern Nepal | Team Leader/Disaster Risk Reduction Expert | Identification of flood hazard and develop a physical prototype of low-cost, low-tech flash flood early warning system. | CFGORRP/UNDP Nepal | 2014 |
| Preparation of District environment policy, Morang, Nepal | Environmental Geologist | Identification of physical features, geology and climate. Preparation of different environmental indicators map by using GIS and focus group discussion. | District Development Committee, Morang, Nepal | 2014 |
| Development of Ecosystem Based Sediment control techniques and Design of Siltation Dam to Protect Phewa Lake, Pokhara, Nepal | Team Leader/ Disaster Risk Reduction Expert | Responsible for preparation of landslide hazard map, debris flow and flood hazard map of the basin using remote sensing and GIS techniques, Preparation of Siltation dam to control the sediment, Propose the Integrated Watershed Management Plan. | Western Region Forest Directorate, Government of Nepal | 2014 |
| Understanding the links of climate change forest fire and species regeneration and resilience pattern in Sacred Himalayan Landscape, Nepal | Team Leader/Climate Change expert | Responsible for study of land degradation due to forest fire, climate change and analysis of soil parameters with forest fire using field data, Remote sensing and GIS techniques. | World Wide fund, Nepal | 2014 |
| Hydrology/Hydrogeology study in Bangsingh VDCs of Panchase Area/Ecosystem based Adaptation in Mountain Ecosystem in Nepal | Team Leader/Hydro-geologist | Responsible for preparation of hydrogeological map using GIS and prepared a management plan for sustainable water use | IUCN, Nepal | 2013 |
| Preparation of the National Environmental policy and state of environment, Nepal | Environmental Geologist | Responsible for analysis of physical environment focused on policy and state of environment. | Ministry of Environment, Government of Nepal | 2012 |
| Geological and Engineering geological study of Different Hydropowers | Engineering Geologist | Professional (Engineering geologist/geologist) input in feasibility and detailed studies of several hydropower projects.Carried out field studies, prepared geological, engineering geological and hazard map in GIS and prepared report focused to geological hazards in and around the project area with potential impact to project structures. | Butwal Power Company; Fillbright Pvt. LTD.; ITECO Nepal; ADMcarto consult Nepal; Engen Consultancy Pvt. LTD.; PNet (p) LTD; BPC-ERMC, Nepal | 2010-2016 |
| Preparation of EIA/IEE in different Projects | Engineering Geologist | Carried out field studies, prepared geological, engineering geological and hazard map in GIS and prepared report focused to geological hazards in and around the project area with potential impact to project structures | DDC, Jhapa; LRBP/ITECO Swiss; Prakriti Consult; FNCCI, Nepal | 2010-2016 |
| Geo-technical study and Mitigating Measures Design of Landslides and Road in Nepal | Engineering Geologist | Carried out field studies, prepared geological, engineering geological and hazard map in GIS. Prepared report focused to geological hazards in and around the project area with potential impact to project structures and prepared landslide hazard map | Department of Road, Nepal; Practical Action, Nepal; Civil Aviation Authority of Nepal; Full Bright Consultancy (p) Ltd, Nepal; Department of Water Induced Disaster and Management, Government of Nepal; Care Nepal |  |

**PEER REVIEWED PUBLICATIONS:**

**Journal Article**

**2023**

* Tian, B., Liu, W., Mo, H., Li, W., and **Adhikari, B.R.,** 2023. Detecting the Unseen: Understanding the Mechanisms and working principles of earthquake sensors, Sensors, V. 23 (11), 5335, [**https://doi.org/10.3390/s23115335**](https://doi.org/10.3390/s23115335).
* Jiang, H., Xu,C., **Adhikari, B.R.,** Liu, X., Tan, X. and Yuan, R., 2023. Editorial: Environmental change driven by climate change, tectonism and landslide. Front. Earth Sci. 10:1076801. doi: 10.3389/feart.2022.1076801
* Wu, S., Di, B., Ustin, S.L., Wong, M.S., **Adhikari, B.R.,** Zhang, R., and Luo, M., 2023. Dynamic characteristics of vegetation change based on reconstructed heterogenous NDVI in seismic regions. Remote Sensing, *15* (2), 299; <https://doi.org/10.3390/rs15020299>.

**2022**

* **Adhikari, B.R.** and Gautam, S., 2022. A review of policies and institutions for landslide risk management in Nepal. Nepal Public Policy Review, v. 2, pp. 93-112.
* Sharma, S., Talchabhadel, R., Nepal, S., Ghimire, G.R., Rakhal, B., Panthi, J., **Adhikari, B.R.,** Pradhanang, S.M., Maskey, S and Kumar, S., 2022. Increasing risk of cascading hazards in the central Himalayas, Natural Hazards, https://doi.org/10.1007/s11069-022-05462-0
* Kunwar, B.M., **Adhikari, B.R.,** Muensit, N., Techato, K., and Gyawali, S.,2022. Role of vegetation for the protection of Phewa Watershed, Kaski, Nepal, Environment and Ecology Research, 10(2): 161-173.
* **Adhikari, B.R.,** Gautam, S., and Paudel, B, 2022. Landslide, landcover and landuse changes in its impacts in Nepal: In: Sarkar, R., Shaw, R. and Pradhan B. (eds) Impact of Climate Change, Land use and Land Cover, and Socio-economic Dynamics on landslides. Springer, Singapore. pp. 149-164.

**2021**

* **Adhikari, B.R.,** 2021. Perturbation of earth surface process by geophysical and meteorological process in the Nepal Himalaya: In: Kolathayar S., Pal I., Chian S.C., Mondal A. (eds.) Civil Engineering for Disaster Risk Reduction. Springer Tracts in Civil Engineering. Springer, Singapore. pp. 181-189.
* **Adhikari, B.R.,** Menon, V. and Kolathayar, S., 2021. Geohazard Investigation and Management: An Introduction. In: Adhikari, B.R. and Kolathayar, S. (Eds.) Geohazard Mitigation: Select proceedings of VCDRR 2021, Springer, pp. 1-8.
* **Adhikari, B. R.,** 2021, Lightning fatalities and injuries in Nepal. Weather Climate and Society, v.13 (3), 449-458

**2020**

* **Adhikari, B.R.** and Paudayal, K.N. 2020, Palynological evidence for the Neogene environment analysis of the Thakkhola Graben, Nepal, Journal of Nepal Geological Society, v. 60, pp. 117-129.
* Chen, F., **Adhikari, B.R.** and Tian, B. 2020, Identification of Landslide Susceptible Areas For The Proper Settlement Planning In The Kali Gandaki Road Corridor, Nepal. IEEE International Geoscience and Remote Sensing Symposium, 5238-5241.
* Sargeant, S., Finlayson, A., Dijkstra, T., Flinn, B., Schofield, H., Miranda Morel, L., Twigg, J., Lovell, E., Stephenson, V., **Adhikari, B.R.,** 2020, The Influence of the physical environment on self-recovery after disasters in Nepal and the Philippines, International Journal of Disaster Risk Reduction, v. 50.
* Xiong, K., **Adhikari, B.R.,** Stamatopoulos, C.A., Zhan, Y., Wu, S., Dong, Z. and Di, B., 2020, Comparison of Different Machine Learning Methods for Debris Flow Susceptibility Mapping: A case Study in Sichuan Province, China, Remote Sensing, Vol. 12 (2), 295, <https://doi.org/10.3390/rs12020295>.
* Gnyawali, K. R., Zhang, Y., Wang, G., Miao, L., Pradhan, A.M.S., **Adhikari, B.R.,** Xiao, L., 2019, Mapping the susceptibility of rainfall and earthquake triggered landslides along China-Nepal Highways, Bulletin of Engineering Geology and the Environment, 79, pp. 587-601.

**2019**

* Menges, J., Hovius N., Andermann, C., Dietz, M., Swoboda, C., Cook, K.L., **Adhikari, B.R.,** Vieth-Hillebrand, A., Bonnet, S., Reimann, R., Koustdodendries, A., Sachse, D., 2019. Late Holocene landscape collapse of a Trans-Himalayan dryland: Human impacts and aridification, Geophysical Research Letters, (DOI: 10.1029/2019GL084192)
* Thapa, P.S. and **Adhikari, B.R.,** 2019. Development of community-based landslide early warning system in the earthquake-affected areas of Nepal, Journal of Mountain Science, 16 (12), pp. 2701-2713.
* Chen, F., Tian, B., **Adhikari, B.R.,** Gou, X., 2019. Mapping digital drainage network using geoprocessing: A case study of Kali Gandaki River basin, Nepal Himalaya. IEEE, 978-1-5386-9154-0/19, 3479-3482.

**2018**

* McAdoo, B.G., Quak, M., Gnyawali, K.R., **Adhikari, B.R.,** Devkota, S., Rajbhandari, P.L., Sudmeier-Rieux, K., 2018, Roads and landslides in Nepal: how development affects environmental risk, Nat. Hazards Earth Syst. Sci. vol. 18, pp. 3203-3210.
* Stolle, A., Schwanghart, W., Andermann, C., Bernhardt, A., Fort, M., Jansen, J.D., Wittmann, H., Merchel, S., Rugel, G., **Adhikari, B.R.,** Korup, O., 2018, Protracted river response to medieval earthquake, Earth Surface Processes and Landforms, vol. 44, pp. 331-341, <https://doi.org/10.1002/esp.4517>.
* Cook, K.L, Andermann, C., Gimber, F., **Adhikari, B.R.** and Hovius, N., 2018, Glacial lake outburst floods as drivers of fluvial erosion in the Himalaya, Science, Vol. 362, pp. 53-57.
* **Adhikari, B.R.** and Sitoula, N.R., 2018, Community based flash flood early warning systems: a low-cost technology for Nepalese mountains, Bulletin of Department of Geology, Tribhuvan University, Nepal, v. 20, pp. 87-92.

**2017**

* Stolle, A., Swchwanghart, W., Andermann, C., Bernhardt, A., Wittmann, H., Merchel, S., Rugel, G., Fort, M., **Adhikari, B.R.** and Korup, O., 2017, Catastrophic valley fills record large Himalayan earthquakes, Pokhara, Nepal, Quaternary Science Reviews, vol. 117, pp. 83-103.
* **Adhikari, B.R.,** Nidal, N., Yadav, B.K. and Awasthi, S., 2017, Landslide risk assessment of the Patlekhet landslide, Myagdi district, Nepal, Journal of the Institute of Engineering, vol. 13 (1), pp. 78-89.
* Gnyawali, K.R. and **Adhikari, B.R.,** 2017, Spatial Relations of Earthquake Induced Landslides Triggered by 2015 Gorkha Earthquake Mw=7.8, Landslide research and risk reduction for advancing culture of living with natural hazards, Advancing Culture of Living with landslides, M. Mikos et al. (eds.) Spinger Publication, pp-85-93.
* [Rai, S.M., Upreti, B.N., Shakal, S., Bhattarai, T.N., **AdhiKari, B.R.,** Bajracharya, S.R. and Yoshinda, M., 2017, Climate Change Impact on Glacier Retreat and Local Community in the Langtang Valley, Central Nepal, Journal of Development Innovations, Vol. 1, No. 1, pp. 45-59.](http://karmaquest.org/journal/index.php/ILGDI/article/view/11)
* Bicker, J.D., Schwanghart, W., **Adhikari, B.R.,** Moriguchi, S., Roeber, V. and Giri, S., 2017, Performance of models for flash flood warning and hazard assessment: the 2015 Kali Gandaki landslide breach in Nepal, Journal of Mountain Research and Development. V.37, No 1, pp. 5-15.

**2016**

* Gnyawali, K.R., Maka, S., **Adhikari, B.R.,** Chamlagain D., Duwal, S. and Dhungana A.R., 2016, Spatial Implication of Earthquake Induced Landslides Triggered by the April 25 Gorkha Earthquake Mw 7.8: Preliminary Analysis and Findings, Proceeding of International conference on Earthquake Engineering and Post Disaster Reconstruction Planning, pp. 50-58.

**2015**

* Schwanghart, W., Bernhardt, A., Stolle, A., Hoelzmann, P., **Adhikari, B. R.,** Andermann, C., Tofelde, S., Merchel, S., Rugel, G., Fort, M., Korup, O., 2015, Repeated catastrophic valley infill following medieval earthquakes in the Nepal Himalaya. Science, vol. 351, 2015. 10.1126/science.aac9865
* Gotz, J.; Weidinger, J.T.; Kraxberger, S.; Hennecke, J.B.; **Adhikari, B.R.,** 2015, Geomorphologic and Hydrologic characteristics of Populated Rockslide Deposits (Sagarmatha National Park, Khumbu Himala, Nepal), Journal of Water Resource and Protection, vol. 7, pp. 1038-1048.
* Moss, R.E.S.; Thompson, E.M.; Kieffer, D.S.; Hashah, M.A.Y.; Acharya, I.; **Adhikari, B.,** Asimaki, D.; Clahan, K.B.; Collins, B.D.; Dahal, S.; Jibson, R.W.; Khadka, D., MacDonal, A.; Madugo, C.L.M.; Mason, H.B.; Pehliyan, M.; Rayamajhi, D. and Uprety, S. 2015, Geotechnical Effects of the 2015 Magnitude 7.8 Gorkha, Nepal Earthquake and Aftershocks, Seismological Research Letters, V. 86, no. 6, pp. 1514-1523

**2014**

* Emerman, S.H; Nelson, J.R; Carlson, K.; Anderson, T.R.; Sharma A.; **Adhikari, B.R.,** 2014, The effect of surface lithology on arsenic and other heavy metals in surface water and groundwater in Mustang Valley, Nepal Himalaya, Journal of Nepal Geological Society, vol. 47, pp. 1-21.
* Khadka, P and **Adhikari, B. R.** 2014, Flood vulnerability and capacity assessment of people of Holiya VDC in Banke district, Nepal, Proceedings of the International Symposium on ‘Geohazards: science, engineering and Management’ pp. 536-548.

**2013**

* **Adhikari, B. R.** and Wagreich, M., 2013, Microfacies analysis and paleoenvironmental significance of palustrine carbonates in the Thakkhola-Mustang Graben (Nepal Himalaya), Journal of Asian Earth Sciences, vol. 77, pp. 117-126.
* Emerman, S.H., Stuart, K. L., Sapkota, A., Khatri, S., **Adhikari, B. R.** and Williams, J., Garcia, P. K. 2013,Support for the fluvial recharge model for arsenic contamination of groundwater in Pokhara Valley, Nepal Himalaya, Journal of Nepal Geological Society, vol. 46, pp.75-94.

**2012**

* **Adhikari, B.R**. and Paudyal, K.N, 2012, Neogene pollen assemblage from the Thakkhola-Mustang Graben, central Nepal Himalaya, Bulletin of Nepal Geological Society, Vol. 29, pp. 53-58.

**2011**

* Rai, S.M., Yoshida, M., Upreti, B.N., Bhattarai, T.N., Ulak, P.D., Gajurel, A. P., Dahal, R. K., Dhakal, S., Koirala,M. P., Sharma, L. N. and **Adhikari, B.R.,** 2011, Field excursion guidebook series on geology, natural hazards and vegetation of the Nepal Himalaya, Bulletin of Nepal Geological Society, Vol. 28, pp. 93-98.
* **Adhikari, B. R.** and Wagreich, M., 2011,Facies analysis and basin architecture of the Neogene Thakkhola-Mustang Graben, central Nepal, Austrian Journal of Earth Sciences, vol. 104/1, pp. 66-80.

**2010**

* **Adhikari, B. R.** and Wagreich, M., 2010, Provenance evolution of collapse graben fill in the Himalaya - the Miocene to Quaternary Thakkhola-Mustang Graben (Nepal), Sedimentary geology, vol. 233, pp. 1-14.

**2007**

* **Adhikari, B. R.,** 2007, An overview of Thakkhola-Mustang Graben, Bulletin of Nepal Geological Society, Vol. 23, pp. 53-57.

**2006**

* **Adhikari, B. R.** and Tamrakar, N. K., 2006, Bank instability and erosion problems of Bishnumati River, Kathmandu, Nepal, Nepal Geological Society, Journal of Nepal Geological Society, vol. 34, pp.109-116.

**Books:**

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* Devkota, S. and **Adhikari, B.R.**, 2015, Development of Ecosystem based Sediment Control Techniques and Design of Siltation Dam to Protect Phewa Lake, Government of Nepal/United Nations Development Programmes (UNDP), 64p.
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* Yoshida, M., Upreti, B.N., Rai, S.M., Bhattarai, T.N., Ulak, P.D., Gajurel, A. P., Dahal, R. K., Dhakal, S., Koirala, M. P., Sharma, L. N. and **Adhikari, B.R.,** 2011, Guidebook for Himalayan Trekkers (Series No. 2), Eco-trekking in the Everest Region, Eastern Nepal, Department of Geology, Tri-Chandra Multiple campus, Tribhuvan University, 192p.

**Book Edition:**

* Jian, H., Xu, C., Liu, X., **Adhikari, B.R.,** Tan, X. and Yuan, R.M. (2023): Environmental Change driven by climatic change, tectonism and landslides, Lausanne: Frontiers Media SA., doi: 10.3389/978-2-83251-525-9
* Kolathayar, S., Ghosh C., **Adhikari, B.R.,** Mondal, A. (2022): Resilient Infrastructure, Select Proceedings of VCDRR 2021, Springer, 467 p.
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**Book Chapters:**

* **Adhikari, B.R.,** Devkota, S. and Talchabhadel, R., 2021, Climate change and landslide risk reduction. In Shaw, R.(Eds.) Handbook on Climate change and disasters, Edward Elgar, pp. 56-63.
* Poudel, B. and **Adhikari, B.R.**, 2021, Land use and land cover. In: Ojha, R.B. and Panday, D. (Eds.) The Soils of Nepal, Springer, pp. 41-51.
* **Adhikari, B.R.** and Ojha, R.B., 2021, Geology and Physiography. In: Ojha, R.B. and Panday, D. (Eds.) The Soils of Nepal, Springer, pp. 29-39.
* Chaudhary, S., **Adhikari, B.R.,** Chaudhry, P., Dorji, T. and Poudel. R., 2021, Ecosystem-Based Adaptation (EbA) in the Hindukush Himalaya: Status, Progress and Challenges. In: Mukherjee, M. and Shaw R. (Eds.) Ecosystem-Based Disaster and Climate Resilience, Springer, pp. 29-51.
* **Adhikari, B.R.,** Bingwei, T., 2021, Spatiotemporal distribution of Landslides in Nepal, In: Eslamina, S. and Eslamina, F., (Eds.) Handbook of Disaster Risk Reduction for Resilience, Springer, pp. 453-471.
* Dhital, M.R. and **Adhikari, B.R.,** 2020, Thrust sheets, tectonic windows and internontane basins in the Nepal Himalaya. In: Biswal, T.K., Ray, S. K. and Grasemann, B. (eds.) Structural geometry of Mobile Belts of the Indian Subcontinent, Society of Earth Scientists Series, Springer, Cham, pp. 233-254.
* **Adhikari B.R.,** Shrestha S.D., Shakya N.M. (2019) Future Urban Water Crisis in Mountain Regions: Example of Kathmandu Valley, Nepal. In: Ray B., Shaw R. (eds) Urban Drought. Disaster Risk Reduction (Methods, Approaches and Practices). Springer, Singapore, pp. 169-182.
* Fort, M., **Adhikari, B.R.** and Rimal B., 2017, Pokhara (cental Nepal): A dramatic, yet Geomorphologically active environment Vs. a dynamic, rapidly developing city, Urban geomorphology: Landforms and processes in cities (Marry Thornbush and Casey allen eds.), Elsevier publication, pp. 231-258.
* **Adhikari, B.R.,** 2015, Land and Soil, Compendium of Environment Statistics, Central Bureau of Statistics, Government of Nepal, pp. 47-68.

**General Articles:**

* **Adhikari, B.R.,** 2021, **नेपालको विपद ब्यबस्थापनमा बिज्ञान र प्रविधिको महत्व, पूर्व तयारी, दिपिनेट-नेपालको रजत प्रकाशन,** pp. 70-71
* Thapa, G.B. and Adhikari, B.R., 2021, COVID-19 situation in the Tribhuvan University, Nepal, pp. 29-30
* **Adhikari, B. R.,** 2016, Gorkha Earthquake 2015: Cause and Effect, Techno-civil, vol 5, pp. 20-25.
* Fort M., **Adhikari B.R.,** Stolle A., Schwanghart W., Korup O. (2015). Catastrophic mountain wall collapses in the Nepal Himalayas: a review, with focus on Pokhara valley. Extended abstracts of the IAG Conference on « Gradualism versus Catastrophism in Landscape Evolution, Barnaul, Russia. pp. 15-18.
* **Adhikari, B. R.,** 2013, Rock mass classification system and problems associated with their parameters in underground excavation system, Techno-civil, vol 4, pp. 51-55.
* **Adhikari, B. R.,** 2013, **पोखरा उपत्यकाको भौगोलक उपती र बिकासक्रम, स्मारिका**, Lions Club of Pokhara Chautari, pp. 51-53 (Article in Nepali).
* **Adhikari, B. R.,** 2012, **बेगनास : भौगोलिक र भौगर्भिक परिचय, बेगनास पत्रिका, वर्ष ७, अंक १,** pp. 30-32
* **Adhikari, B. R.,** 2011, **पश्चिम नेपाल स्थित थाकखोला –मुस्तांग उपत्यकाका तालीय अवयवहरुको विस्लेषण , हाम्रो सम्पदा, वर्ष ११, अंक ६,** pp. 55-60 (Article in Nepali)
* **Adhikari, B. R.,** 2010, An introduction to Optically Stimulated Luminescence (OSL), GEOWORLD, pp 30-32.
* **Adhikari, B. R.,** 2000, Topography of the Ocean Floor, GEOWORLD, pp 88-89.

**Technical Study Reports:**

* Nepal Urban Resilience Project (NURP): Scoping study, The Department for International Development (DFID), 2018, Nepal.
* Investigation and treatment of landslides for recovery and reconstruction of earthquake affected areas of Sindhupalchowk and Dolakha district, Nepal, Save the Children International, 2017
* Geotechnical Field Reconnaissance: Gorkha (Nepal) Earthquake of April 25, 2015 and related shaking sequence, GEER Association Report No. GEER-040. 2015
* Design and develop low cost and low tech Community Based Early Warning System (CBEWS) for Flash flood, Eastern Nepal, CFGORRP/UNDP/DHM/IoE 2014.
* Piloting Early Warning System (EWS) for Landslides in Far West of Nepal, Mercy Corps/ IoE, Nepal, 2014

**Countries of work experience**

Nepal, India, Austria, Myanmar, China, Kenya, Bhutan

***Language***

|  |  |  |  |
| --- | --- | --- | --- |
| *Language* | *Speaking* | *Reading* | *Writing* |
| *Nepali* | Mother-Tongue |  |  |
| *English* | Excellent | Excellent | Excellent |
| *Hindi* | Good | Good | Good |
| *German* | Good | Good | Good |
| *Chinese* | Basic | Basic | Basic |

**Awards and grants**

* “Sichuan 1000 talents”, Sichuan Provincial Government, 2020.
* Travel Grants to attain the 36th International Geological Congress -2020, New-Delhi, India.
* “Sichuan University, China Double –Talent Category-B” Sichuan University, China, 2019.
* **“Young Affiliates”** The World Academy of Sciences (TWAS) 2017-2021.
* **"Young Scientist"** Integrated Research on Disaster Risk, 2017
* **"Established Scientist Award"** in European Geoscience Union (EGU)-2016.
* NFP for short course on **“Rock and Soil Mechanics in engineering geology”**, University of Twente, The Netherlands, January 7-March 8, 2012.
* **Nepal BiddhyaBhusan Nepal (Ka),** 2010, Ministry of Education, Government of Nepal.
* Travel grant for the SEG/ExxonMobil Student Education Program (SEP) and the EAGE 71st Conference and Exhibition in Amsterdam, June 6-11, 2009.
* Conference grant for European Geosciences Union, General Assembly 2009, Vienna, Austria, 19 - 24 April 2009 by OMV, Austria.
* PhD scholarship, 2006-2009, oead, Austria.

**Membership in Professional Associations**

* Editor, Journal of Coastal and Riverine Flood Risk.
* Editor, Environmental change driven by Climatic Change, Tectonism and Landslide, Frontiers in Earth Science
* Secretary, Geomorphological Society of Nepal, 2017-2019.
* Editor, Journal of Nepal Geological Society, 2016-2017.
* Regular member of Geotechnical Extreme Events Reconnaissance, USA
* Executive member of Nepal Tunneling Association
* Editor, Journal of Nepal Geological Society, 2012-2014.
* Life member of Nepal Tunneling Association
* Life member of Nepal Geological Society, LM 535
* Member of American Geophysical Union, 2009.
* Member of European Association of Geoscientists & Engineers, 2009
* Member of International Association of Sedimentologists, 2009.
* Member of European Geosciences Union, 2008-2009.