**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:**

* [Sinclair, H.,  Brown, B.,  **Adhikari, B.R.,** Attal, M.,  Alistair, B., Budimir, M., Creed, M.,  Dingle, L.,  Dugar, S., Gautam, D., Gourmelen, N., Mudd, S., Neupane, S., Pedreschi, R., Ruwanpura, K. N., Sharma, J.,  Sneddon, A., Upreti, M. 2017. Improving Understanding of Flooding and Resilience in the Terai, Nepal. The university of Edinburgh and Practical Action. 16p.](https://reliefweb.int/sites/reliefweb.int/files/resources/Improving%20Understanding%20of%20Flooding%20and%20Resilience%20in%20the%20Terai%20Nepal.pdf)
* 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.
* **Adhikari, B.R.** and Suwal, M.K., 2013, Hydrogeological Study in BangsingDeurali VDC, Syangja, An Ecosystem-based Adaptation in Mountain Ecosystem in Nepal, IUCN, Nepal, 60p.
* 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.
* **Adhikari, B.R.** and Kolathayar, S., (2022): Geohazard Mitigation, Select Proceedings of VCDRR 2021, Springer, 460 p.

**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.