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Summer Field School [Online] on
MOUNTAIN ECOSYSTEMS AND RESOURCE MANAGEMENT
Ivano-Frankivsk Region, Ukraine :: 19-28 September, 2021

DELEGATE PARTICIPANT'S PROFILE

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Highest Education	MS (Thesis)
Personal Statement	I am an Assistant Professor of the Institute of Forestry and Environmental Sciences, University of Chittagong (IFESCU), Bangladesh since May 2020. Before joining as an assistant professor, I was a lecturer in the similar institute from May 2019 to May 2020. Previously, I served as a lecturer in the Department of Land Administration, Faculty of Land Management and Administration, Patuakhali Science and Technology University (PSTU), Bangladesh from December 2016 to May 2019. I also worked at Community Development Center (CODEC) during 2014-2016 and *Shushilan* in 2014. I completed my BSc (Hons.) and MS (Thesis) in Forestry from IFESCU in 2012 & 2013 respectively. I have fifteen published research articles from different international and national peer reviewed journals and seven book chapters, two of them published by Springer Nature. I also edited a book "Examining International Land Use Policies, Changes, and Conflicts" published by IGI Global. Presently, I am an Academic Editor of an international journal 'Asian

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	Research Journal of Arts & Social Sciences'. I also am serving as editorial member and reviewer of thirteen different international peer reviewed journals. I have experience to work in seven different projects as Project Director, Co-Project Investigator, NRM Facilitator, Assistant Research Officer, and Research Assistant. I received and attended 25 training programs and workshops both in international and national levels, most important programs are modelling surface flow hazards, Harnessing Economic Opportunities for Transformative Change in the Hindu Kush Himalaya, Fundamentals of GIS, Fundamentals of Remote Sensing, Research Methodology and Publication Strategy, Pilot Training Program on Disaster Management, Training on Basic Land Management, etc. I also got an Honorary Rosalind membership from the London Journals Press.
Paper/Presentation Title (Unpublished Research or Review or Field Work)	*Modelling Land Use Changes of Hill Tracts Using Cellular Automata in Khagrachari Upazila of Bangladesh*
Keywords	Hilly region; Environment; Landsat imageries; Vegetation; Prediction
Abstract (100-300 words)	Chittagong Hill Tracts are the extensively hilly region in Bangladesh and consists of Rangamati, Khagrachari and Bandarban districts. Land use change is a major concern in these hilly areas that disrupt the ecosystem and environmental balance on one side and support a wide range of plants and animals on the other. In the present study, the land use changes pattern of the last 30 years was calculated using Landsat imageries, and a future trend of changes of one of the major hilly upazila, Khagrachari was modeled using Cellular Automata method. The model was used to simulate land use changes from 1990 to 2020 and a prediction was made for 2050. The results show that a gradual increase in vegetation coverage observed during 1990-2020. Almost 23% vegetation coverage increased at

	Khagrachari in the last 30 years. On the other hand, barren areas decreased about 23%. The simulation results revealed that nearly 6033.42 ha area are converted to vegetation coverage since 1990, and it is predicted that the forest coverage will increase by 6275.61 ha in the next 30 years if other situations are constant. The Kappa index shows, the overall Kappa accuracy for the prediction was 92.33% and the Kappa value was 0.85, which means almost perfect agreement. This indicates the model used was an acceptable method for the simulation of land use and land cover changes, and the method can be applicable in analyzing land use changes in other areas.
More Information (weblinks)	Web: https://cu.ac.bd/public_profile/index.php?ein=5948