

Name: Dr. Muzamil Amin

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Supervisor: Prof. Shakil A. Romshoo

Research Area: Remote Sensing, GIS, Land Degradation Assessment and Environmental modelling.



Research Interests:

My research has focused primarily on understanding and modelling of land surface processes, and the role of various biophysical and environmental factors for land degradation assessment. I have used methodologies such as remote sensing, GIS and geo-statistical simulations which are now profoundly changing research in the field of earth sciences. My research efforts focus on identifying and quantifying spatial distribution of Desertification vulnerable areas over the entire J&K state. J&K is one of the developing states in India with low economic status. I have been working on the major problem faced by the state i.e. Land degradation and soil erosion. These problems are being found to be increased with the time; therefore, if land is degraded due to soil erosion, agricultural production will further go down affecting the main part of the community.

Publications (if any):

- i) Romshoo, S. A., **Amin, M.**, Sastry K.L.N and Parmar M (2020). Integration of Social, Economic and Environmental Factors in GIS for Land Degradation Vulnerability Assessment in Himalaya. *Applied Geography*.
- ii) **Amin, M.**, and Romshoo, S. A. (2018). Comparative assessment of soil erosion modelling approaches in a Himalayan watershed. *Modeling Earth Systems and Environment*.
- iii) Romshoo, S.A., Altaf S., **Amin, M.**, and Ameen U. (2018) Sediment Yield Estimation for Developing Soil Conservation Strategies in GIS environment for the Mountainous Marusudar Catchment, Chenab basin, J&K, India. *J. Himalayan Ecol. Sustain. Dev.*
- iv) Rashid, I., Romshoo, S.A., **Amin, M.**, Khanday, S. A., and Chauhan, P. (2017). Linking human-biophysical interactions with the trophic status of Dal Lake, Kashmir Himalaya, India. *Limnologica-Ecology and Management of Inland Waters*, 62, 84-96.
- v) Romshoo, S. A., **Amin, M.**, Ahmad, I and Sastry K.L.N (2017) Soil Erosion Estimation of Lidder Watershed, Kashmir Himalaya Using Morgan-Morgan-Finley Model in a GIS Environment, *J. Himalayan Ecol. Sustain. Dev.*