# Dr. Prolay Mondal (MA, PhD) Assistant Professor of Geography

Department of Geography

Raiganj University / Raiganj / North Dinajpur / West Bengal / 733134 / India

**Specialization:** Ecogeomorphology

# Research Interest:

* Eco-Geomorphological assessment and its management
* The spatio-temporal study of Rivers
* The study of Terrain evaluation with the help of Remote sensing & GIS technique
* Environmental Degradation
* Socio – Economic Status
* Agricultural issues
* Folk Song (BOLÂN).

**Teaching Experience**: 18+ years as a teacher in different levels and institutions.

1. Assistant Professor (29.05.2015 to till date) in the Department of Geography, Raiganj University, Raiganj, West Bengal, India.
2. Assistant Professor (13.09.2014 to 28.05.2015) in the Department of Education Khejuri College, Purba Midnapore, West Bengal, India.
3. Assistant Teacher (12.102007 to 12.09.2014) in the Makhaltore Madhyamik Vidyalaya, Makhaltore, Kalikapur, Katwa, Purba Bardhaman, West Bengal, India.
4. Assistant Teacher (23.12.2002 to 11.09.2007) in the Paikar High School, Paikar, Rampurhat, Birbhum, West Bengal, India.

**Ph.D. Scholars:** 07 (Seven)

**Project:** Co-Principal Investigator (NRDMS DST); PROJECT TITLE: Soil Loss Estimation of Dwarkeswar River Basin using Remote Sensing and GIS Techniques; Collaboration with dept. of Geography, The University of Burdwan, W.B.

# Administrative Experience:

**H.O.D.;** Dept. of Education, Khejuri College, Vidyasagar University, Purba Medinipur, W.B. (From 13th Sept, 2014 to 28th May 2015)

**Chairman of B.O.S.;** (**1st** Geography’s departmental Chairman of Raiganj University), Dept. of Geography, Raiganj University, Uttar Dinajpur, W.B. (From 21th Sept, 2015 to 20th Sept, 2016) **Departmental Co-ordinator.;** Dept. of Geography; Raiganj University, Uttar Dinajpur, W.B. (From 1st March, 2016 to 4th Oct, 2016)

# Co-ordinator of Education Syllabus Committee and Departmental Co-ordinator.; Dept. of Education,

Raiganj University, Uttar Dinajpur for 2015-16 and 2016-17 academic year

**Co-ordinator of Network institute of IIRS/ISRO Outreach Programme:** Dept. of Geography; Raiganj University, Uttar Dinajpur, W.B. (From 14th September, 2020 to till date)

# Financial Assistances from following Organisations for attending International Conferences in abroad:

1. **ICSSR** for visit to participate in the conference held at Frankfurt, Germany from 4-5th July 2019.

**LIST OF PUBLICATIONS:**

* 1. **Books:**
     1. China-Clay Mines of Patelnagar, Md.Bazar C.D.Block,Birbhum, Lap Lambert Academic Publishing GmbH KG, 2013, p. 88
     2. Environmental Impact of China-Clay Mining: A Case Study, Lap Lambert Academic Publishing GmbH KG, 2013, p. 76
     3. Vegetation Status of Birbhum District, Lap Lambert Academic Publishing GmbH KG, 2013, p. 52
     4. Land Degradation of Birbhum District, Lap Lambert Academic Publishing GmbH KG, 2013, p. 124

# Chapter in a Book:

* + 1. Environmental Degradation and Their Effective Measures in Patel Nagar, Mahamad Bazar Block, Birbhum District, West Bengal, India, Laxmi Books Publication, Solapur, Maharastra,

ISBN - 978-81-924687-8-5, 2013

* + 1. Integrated Education: An Introduction to Provisions for Special Children in General School of West Bengal, Laxmi Books Publication, Solapur, Maharastra, ISBN - 978-81-924687-8-5, 2013
    2. Practicalities of Geography with Special Reference to Teaching Technique, Prograssive Publishers, College Street, Kolkata-73, ISBN - 978-81-8064-231-9, 2016
    3. Spatial and temporal pattern of population of Burdwan-I C.D. Block, West Bengal: A Geographical Study, IRAJ, Plot No. – 30, Dharma Vihar, Khandagiri, Bhubaneswar, Odisha, India, ISBN - 978-93-89090-60-4, 2019
    4. Assessment of Spatio-temporal Dynamics of LULC in Barind Tract using Earth Obsrvatory Techniques, Issues in Resources Utilization, Paiolck, Baruipur, Kolkata-700144, ISBN - 978-93-88207-30-0, 2019
    5. A Catastrophic Flooding Event in North Bengal, 2017 and its Impact Assessment: A Case Study of Raiganj C.D Block Uttar Dinajpur, West Bengal, APPLICATIONS OF GEOSPATIAL TECHNOLOGY IN GEOMORPHOLOGY AND ENVIRONMENTAt: North Bengal University Press, Raja Rammohunpur, Siliguri, W.B. March 2020, ISBN - 978-81-925799-3-1, 2020
    6. Applicability of Geospatial Technology, Weight of Evidence, and Multilayer Perceptron Methods for Groundwater Management: A Geoscientific Study on Birbhum District, West Bengal, India. In: Shit P.K., Bhunia G.S., Adhikary P.P., Dash C.J. (eds) Groundwater and Society. Springer, Cham. Pp – 473-499, March 2021, ISBN - 978-3-030-64136-8, DOI: <https://doi.org/10.1007/978-3-030-64136-8_22>
    7. Identification of Groundwater Potential Zones Using Multi-influencing Factors (MIF) Technique: A Geospatial Study on Purba Bardhaman District of India. In: Adhikary P.P., Shit P.K., Santra P., Bhunia G.S., Tiwari A.K., Chaudhary B.S. (eds) Geostatistics and Geospatial Technologies for Groundwater Resources in India. Springer Hydrogeology. Springer, Cham. Pp – 193-213, March 2021, ISBN - 978-3-030-62397-5 DOI: <https://doi.org/10.1007/978-3-030-62397-5_10>
    8. An Analytical Study of Gender Gap in Literacy Using Quantitative Technique: A Micro Level Study of Ketugram-I Community Development Block, Purba Bardhaman District, Population, Environment and Development issues, challenges and prospects, Progressive Publishers and Midnapore College (Autonomous), Raja Bazar, Midnapore – 721101, January 2021, ISBN – 978-81-8064-363-7
    9. A Critical Analysis of Development Index: An Overview of Bhatar C.D Block of Purba Bardhaman District, West Bengal, India, Population, Environment and Development issues, challenges and prospects, Progressive Publishers and Midnapore College (Autonomous), Raja Bazar, Midnapore – 721101, January 2021, ISBN – 978-81-8064-363-7

# RESEARCH PAPERS:

National:

1. Social degradation is to be eclipse folk song: “*BOLAN*”, *Bhogol Poribesh*, *ISSN - 2321- 4694*,

West Bengal; Vol.-2/ Issue-2/ April 2014

1. Dadhia Bairagyatala Mela, *Bhogol O Poribesh*, *ISSN – 2321-4694*, West Bengal, Vol.-1/ Issue- 3/ April 2015

International:

1. Image Analysis for Assessing Landscape Structural Change: A Case Study of Birbhum, *Indian Streams Research Journal, ISSN – 2230-7850*, Maharashtra; Vol. -3/ Issue-4/ May 2013
2. Water Degradation of Birbhum District, Maharashtra; *Golden Research Thoughts, ISSN – 2231- 5063,* Maharashtra; Vol. -2/ Issue-11/ May 2013
3. Ecogeomorphological Assessment: A Case Study on Land Degradation of Birbhum District,

*Electronic International Interdisciplinary Research Journal*, *ISSN – 2277-8721,* Maharashtra;

Vol. -2/ Issue-5/ Sep – Oct 2013

1. To Classify the Geo-Ecological Regions of Birbhum and its Component Patches, Indian *Journal of Geomorphology*, *ISSN - 0973-2411*, Delhi; Vol. -18/ Issue-2/ July-Dec 2013
2. Morphometric Analysis of Birbhum District’, *Asian Journal of Multidisciplinary Studies, ISSN - 2321-8819,* Maharashtra; Vol. -1/ Issue-4/ Nov. 2013
3. Relief and Human Intervention are Major Reason for Flood and Drought: A Case Study of Birbhum’, *Online International Interdisciplinary Research Journal, ISSN - 2249 – 9598*,

Maharashtra; Vol. -4/ special Issue/ JAN 2014

1. A Review Study of Eco-geomorphology (An Interdisciplinary Approach to River Science)’,

*Golden Research Thoughts*, *ISSN - 2231-5063*, Maharashtra; Vol. -3 / Issue-8 / FEB. 2014

1. Effects of Ecogeomorphological Parameters on Environment: Case Study of Birbhum District, West Bengal’, *International Journal of Innovative Research and Studies*, *ISSN - 2319 – 9725*,

West Bengal; Vol. -3 / Issue-3/MAR. 2014

1. Professional Ethics and Accountability of Teaching’, *Review of Research*, *ISSN - 2249 - 894X*,

Maharashtra; Vol. -2/ Issue-10/ July 2013

1. Poverty: Issues and Challenges in India Aspect’, *Aarhat Multidisciplinary International Education Research Journal, ISSN - 2278- 5655*, Maharashtra; Vol. -1/ Issue-4/ Oct-Nov 2013
2. Effect of K-Yan Technology on Enthusiasm for Learning Geography’, *Golden Research Thoughts, ISSN - 2231-5063*, Maharashtra; Vol. -3 / Issue-12 / JULY 2014
3. Application of Action Research in Geography in School’, *Asian Journal of Multidisciplinary Studies*, *ISSN - 2321-8819*, Maharashtra; Vol. -2/ Issue-4/ Aug. 2014
4. Acceptability of Distance Education Among Students’ Society, *International Journal of Social Science and Humanities Research, ISSN - 2348-3164 (online); 2348-3156 (print)*, Lucknow;

Vol. -3/ Issue-1/ Jan. - March 2015

1. Urban Expansion Leads to Geomorphic Change: A Case study on Identified Zone of Kulick River, *Indian Cartographer, Journal of INCA*, *ISSN – 2321-4694,* Vol-36, 2016
2. Socio-Economic Status of Dokra Artisan in Bankura – II C.D. Block, Bankura District, west Bengal, *Asian Journal of Research in Social Science and Humanities, ISSN – 2249-7315;* Vol.

-8/ Issue-6/ June2018, pp 200-212.

1. Cost Effective Water Distribution in Irrigated Crop-Field, Online *International Interdisciplinary Research Journal, ISSN - 2249 – 9598*, Maharashtra; Vol. -8/ special Issue/ July-August 2018
2. The Health Status of Women, in Purba Bardhaman District, West Bengal: A study of Spatial Variation, *Review of Research*, *ISSN - 2249 - 894X*, Maharashtra; Vol. -7/ Issue-11/ August 2018
3. Identification of Determinant Factors for the Development of C.D. Blocks in Birbhum District: A Multivariate Statistical Approach, *Online International Interdisciplinary Research Journal,*

*ISSN - 2249 – 9598*, Maharashtra; Vol. -8/ Issue - 06/ Sept-Oct 2018

1. Gender Inequality and its Impact on Socio Economic Structure: A case study of Gopalpur Mouza of Dakshin Dinajpur District, West Bengal, India, *Online International Interdisciplinary Research Journal, ISSN - 2249 – 9598*, Maharashtra; Vol. -8/ Issue - 06/ Sept-Oct 2018
2. Aspects of flows of the rivers mentioned in the Indian Epic Ramayana, *Research Journal of Humanities and Social Sciences, ISSN(Online) - 0975 – 6795 & ISSN(Print) - 2321 – 5828,* A and V Publications, Raipur, Chattishgarh, Vol.- 9/ Issue – 4/ Oct-Dec. 2018
3. Assessment of the quality of the health in Rural Areas of Purba Bardhaman District, West Bengal, India: A quantitative approach, *Research Journal of Humanities and Social Sciences, ISSN(Online) - 0975 – 6795 & ISSN(Print) - 2321 – 5828,* A and V Publications, Raipur,

Chattishgarh, Vol.- 9/ Issue – 4/ Oct-Dec. 2018

1. Spatio-temporal Changes of Land use and land cover in Bankura-I and Bankura-II C.D. Block, Bankura District, West Bengal, *International Journal of Scientific Research and Reviews, ISSN*: 2279–0543, Centre Of Scientific Innovation and Research Publication And IJSRR, Vol.

- 8/ Issue – 2/ April. – June 2019 PP 3209-3216

1. Groundwater quality assessment using multivariate statistical technique and hydro-chemical facies in Birbhum District, West Bengal, India, SN Appl. Sci. 1, 825 (2019). <https://doi.org/10.1007/s42452-019-0841-5>
2. Flood vulnerability mapping using frequency ratio (FR) model: a case study on Kulik river basin, Indo-Bangladesh Barind region. Appl Water Sci 10, 17 (2020). <https://doi.org/10.1007/s13201-019-1102-x>
3. Morphometric Analysis Using SRTM-DEM and GIS of Nagar River Basin, Indo-Bangladesh Barind Tract. J Indian Soc Remote Sens 48, 597–614 (2020). <https://doi.org/10.1007/s12524-020-01106-7>
4. Assessment of variation of land use/land cover and its impact on land surface temperature of Asansol subdivision. The Egyptian Journal of Remote Sensing and Space Science, Available online 15 May 2020. <https://doi.org/10.1016/j.ejrs.2020.05.001>
5. GIS and multi-criteria decision-making assessment of sites suitability for agriculture in an anabranching site of sooin river, India . Model. Earth Syst. Environ. (2020). <https://doi.org/10.1007/s40808-020-00936-1>
6. Road network accessibility analysis using graph theory and GIS technology: a study of the villages of English Bazar Block, India. Spat. Inf. Res. (2020). <https://doi.org/10.1007/s41324-020-00360-8>
7. The use of RUSLE and GCMs to predict potential soil erosion associated with climate change in a monsoon-dominated region of eastern India. Arab J Geosci 13, 1073 (2020). <https://doi.org/10.1007/s12517-020-06033-y>
8. Application of DRASTIC model for assessing groundwater vulnerability: a study on Birbhum district, West Bengal, India. Model. Earth Syst. Environ. (2020). <https://doi.org/10.1007/s40808-020-01047-7>
9. Delineation of groundwater potential zones using MIF and AHP models: A micro-level study on Suri Sadar Sub-Division, Birbhum District, West Bengal, India, Groundwater for Sustainable Development, Volume 12, 2021, 100547, ISSN 2352-801X, <https://doi.org/10.1016/j.gsd.2021.100547>
10. The response of groundwater to multiple concerning drivers and its future: a study on Birbhum District, West Bengal, India. Appl Water Sci 11, 79 (2021). <https://doi.org/10.1007/s13201-021-01410-8>
11. Asymmetric nexus between air quality index and nationwide lockdown for COVID-19 pandemic in a part of Kolkata metropolitan, India, Urban Climate, Volume 36, 2021, 100789, ISSN 2212-0955, <https://doi.org/10.1016/j.uclim.2021.100789>
12. Groundwater suitability assessment based on water quality index and hydrochemical characterization of Suri Sadar Sub-division, West Bengal, Ecological Informatics, 2021, 101335, ISSN 1574-9541, <https://doi.org/10.1016/j.ecoinf.2021.101335>
13. Variability and Trend Analysis of the Rainfall of the Past 119 (1901-2019) Years using Statistical Techniques: A Case Study of Uttar Dinajpur, India, Journal of Climate Change, Vol. 7, No. 2 (2021), pp. 49-61. DOI 10.3233/JCC210011