



**Name:** Souvik Das

**Designation:** Assistant Professor

**Qualification:** B.A.(Geography Hons.), M.A.(Geography),  
UGC-NET(SRF), M.Phil, Ph.D(Pursuing)

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### **Educational Qualification**

- B.A.(Honours) Geography, Raja Rammohan Roy Mahavidyalaya, The University of Burdwan, 2016
- M.A. in Geography, The University of Burdwan, 2018
- M.PHIL. The University of Burdwan, 2021
- Ph.D. The University of Burdwan, 2021-Present

### **Professional Qualification**

- UGC NET (JRF) in June 2019

### **Areas of specialization**

- Geomorphology
- Remote Sensing and GIS
- Soil Geography and Agricultural Management
- Watershed Modelling
- Disaster Management

### **Publications:**

Sl. No	Name of Journal (ISSN Number)	Publisher	Impact Factor*	Paper Title	Year of Publication	Author(s)
1	Journal of Indian Geomorphology  (ISSN: 2320-0731)  Volume 8, pp. 73-89  (CITATIONS: 06)	Indian Institute of Geomorphologists (IGI)	NA	Drainage Basin Morphometry and its Relation to Erosion Susceptibility in the Barakar River Basin, Jharkhand & West Bengal  <a href="https://indiageomorph.org/uploads/pdf/S-Das-23-7-21.pdf">https://indiageomorph.org/uploads/pdf/S-Das-23-7-21.pdf</a>	2020	Souvik Das, Subha Roy and Somasis Sengupta

2	<p>Journal of Earth System Science (ISSN: 0973-774X )</p> <p>Volume: 134, 24</p> <p><b>(CITATIONS: 02)</b></p>	Springer	1.7	<p>Identifying topographic disequilibrium conditions and their lithological and tectonic implications in a rifted river basin of Eastern India: Insights from DEM- derived longitudinal profiles and their derivatives</p> <p><a href="https://doi.org/10.1007/s12040-024-02492-z">https://doi.org/10.1007/s12040-024-02492-z</a></p>	2025	<p><b>Souvik Das</b>, Subha Roy, Jaya Chatterjee, Md Hasanur Jaman and Somasis Sengupta</p>
3	<p>Journal of Cleaner Production (ISSN (eISSN): 1879-1786)</p> <p>Volume: 538, 147235</p>	Elsevier	10.0	<p>Understanding the complexities of mustard intercropping: Inferences based on land suitability and farmers' choices in a paddy-dominated cropping system of eastern India</p> <p><a href="https://doi.org/10.1016/j.jclepro.2025.147235">https://doi.org/10.1016/j.jclepro.2025.147235</a></p>	2025	<p>Prakash Mistri, <b>Souvik Das</b>, Md Hasanur Jaman, Subha Roy, Jaya Chatterjee, Somasis Sengupta</p>
4	<p>Environment, Development and Sustainability (ISSN 1387-585X)</p> <p>Volume: 27, 17719-17740</p>	Springer	4.5	<p>Interlinking erosion susceptibility, channel geometry and stream power: a case study of the Mayurakshi River, eastern India</p> <p><a href="https://doi.org/10.1007/s10668-024-04634-1">https://doi.org/10.1007/s10668-024-04634-1</a></p>	2025	<p>Subha Roy, <b>Souvik Das</b>, Jaya Chatterjee, Md. Hasanur Jaman and Somasis Sengupta</p>
5	<p>Journal of Earth System Science (ISSN: 0973-774X )</p> <p>Volume: 133, 119</p> <p><b>(CITATIONS: 02)</b></p>	Springer	1.7	<p>Sub-basin prioritisation from morphometry for erosion management in an undulating rocky terrain: Validating different MCDM techniques with respect to RUSLE in the Chaka River Basin, Eastern India</p> <p><a href="https://doi.org/10.1007/s12040-024-02295-2">https://doi.org/10.1007/s12040-024-02295-2</a></p>	2024	<p>Md Hasanur Jaman, <b>Souvik Das</b>, Jaya Chatterjee, Subha Roy and Somasis Sengupta</p>

6	Environment, Development and Sustainability (ISSN 1387-585X) Volume: 25, 50317-50332 <b>(CITATIONS: 16)</b>	Springer	4.5	Predicting terrain erosion susceptibility from drainage basin Morphometry using ALOS-PALSAR DEM: Analysis from PCA-weighted AHP approach in a river system of Eastern India <a href="https://doi.org/10.1007/s10668-022-02450-z">https://doi.org/10.1007/s10668-022-02450-z</a>	2023	Subha Roy, <b>Souvik Das</b> , Somasis Sengupta
7	Journal of Earth System Science (JESS) (ISSN: 0973-774X ) Volume: 131, 249 <b>(CITATIONS: 09)</b>	Springer	1.7	Monitoring the temporal dimension of soil erosion in Mayurakshi Basin, India: A novel approach integrating RUSLE, Shannon's entropy and landscape ecological metrics <a href="https://doi.org/10.1007/s12040-022-02006-9">https://doi.org/10.1007/s12040-022-02006-9</a>	2022	Subha Roy, <b>Souvik Das</b> , Somasis Sengupta, Sukhendu Mistri and Jaya Chatterjee
8	Agricultural Systems (ISSN: 1873-2267) Volume: 222, 104171 <b>(CITATIONS: 07)</b>	Elsevier	6.1	Integrating agricultural land suitability and farmers' perception on crop selection in a water- stressed region of eastern India <a href="https://doi.org/10.1016/j.agry.2024.104171">https://doi.org/10.1016/j.agry.2024.104171</a>	2025	Md. Hasanur Jaman, Subha Roy, Jaya Chatterjee, <b>Souvik Das</b> , Prakash Mistri and Somasis Sengupta
9	Sustainable Water Resources Management (SWAM) (ISSN: 2363-5045) Volume: 10, 127	Springer	2.1	GIS-based delineation of potential recharge zones of groundwater and its validation with actual recharge in the Nangasai River Basin of Eastern India <a href="https://doi.org/10.1007/s40899-024-01103-5">https://doi.org/10.1007/s40899-024-01103-5</a>	2024	Md. Hasanur Jaman, Jaya Chatterjee, <b>Souvik Das</b> , Subha Roy and Somasis Sengupta

Sl. No	Name of Journal (ISSN Number)	Publisher	Impact Factor*	Paper Title	Year of Publication	Author(s)
10	Journal of Indian Geomorphology (ISSN: 2320-0731)  (CITATIONS: 02)	Indian Institute of Geomorphologists (IGI)	NA	Modelling Soil Erosion Risk in the Kumari River Basin, India: A Revised Universal Soil Loss Equation (RUSLE)-Based Empirical Approach  <a href="https://indiageomorph.org/uploads/pdf/JoIGv12(2024)_Jaman-et-al---Modelling-Soil-Erosion-Risk-in-the-Kumari-River-Basin.pdf">https://indiageomorph.org/uploads/pdf/JoIGv12(2024)_Jaman-et-al---Modelling-Soil-Erosion-Risk-in-the-Kumari-River-Basin.pdf</a>	2024	Md. Hasnur Jaman, Subha Roy, Jaya Chatterjee, <b>Souvik Das</b> and Somasis Sengupta
11	Journal of Indian Geomorphology (ISSN: 2320-0731)  ACCEPTED AND IN PRESS	Indian Institute of Geomorphologists (IGI)	NA	Geospatial Approach to Assess the Erosion Susceptibility by Morphometry and RUSLE in the Mayurakshi Drainage Basin, Eastern India  <a href="https://indiageomorph.org/journals/14">https://indiageomorph.org/journals/14</a>	2026 (FORTH COMING)	Subha Roy, <b>Souvik Das</b> , Jaya Chatterjee, Md. Hasnur Jaman, Prakash Mistri and Somasis Sengupta
12	Geography of the Physical Environment (ISBN 978-3-030-79634-1 (eBook))  pp. 193-211	Springer Chapter in Edited Book	NA	Sedimentation and Shifting of Lower Mundeswari and Rupnarayan River, West Bengal, India  <a href="https://doi.org/10.1007/978-3-030-79634-1_9">https://doi.org/10.1007/978-3-030-79634-1_9</a>	2022	<b>Souvik Das</b> and Subodh Chandra Pal

\* Impact Factor as per Thomson Reuters (Clarivate Analytics) published in 2025

### Paper presented in Workshops, Seminars and Webinars

- 1. Presented a paper entitled “*Morphometric Characteristics of Drainage Basin to Predict the Erosion Potential in the Barakar River Basin, Eastern India*” at the IGU INDIA International Conference on Agriculture, Food, Water, Biodiversity and Health in Changing Climate. Organized by Department of Geography, The University of Burdwan, Burdwan – 713104, West Bengal, India from 6th to 8th March, 2022.
- 2. Presented a paper entitled “Detecting the Structural and Tectonic Control of the Barakar River Basin, Eastern India” at the 34th National Conference of the Indian Institute of Geomorphologists (IGI) (Focal theme: Geomorphology, Natural Hazards and Environment). Organized by Department of Geography,

Savitribai Phule Pune University, Pune from 2nd-4th November, 2022.

- 3. Presented a paper entitled “***Analysis of tectonic and structural control on river system by employing longitudinal profile in the Barakar River Basin, Eastern India***” at the 5th Regional Science & Technology Congress (Region 7), 2022-23 [RSTC (R7), 2022-23] Organised jointly by The University of Burdwan, Burdwan and Department of Science & Technology and Biotechnology, Government of West Bengal from January 06-07, 2023.
- 4. Presented a paper entitled “***Earthquake risk zonation mapping in the Barakar basin, India: Inferences from DEM-morphotectonic indices, land use land cover, and geophysical signatures***” at the **35th National Conference** of the Indian Institute of Geomorphologists (IGI) on Geomorphology, Environment and Management. Organized by Centre for the Study of Regional Development (CSR), School of Social Sciences Jawaharlal Nehru University, New Delhi, India, from 25th - 27th November, 2023.
- 5. Presented a paper entitled “***Geomorphic Indices of Active Tectonics in the Barakar River Basin, India***” at the 8th NAGI International Conference 2024 on Geography for a Sustainable Future: Land, Water, Climate and Society Interface Organized by Department of Geography Kazi Nazrul University Asansol, West Bengal, India in association with National Association of Geographers, India (NAGI) from September 23-25, 2024.
- 6. Presented a paper entitled “***Tectonic and Geophysical Control in the Barakar River Basin, India***” at the 36th National Conference of the Indian Institute of Geomorphologists (IGI) on Geomorphology, Environment and Society. Organized by Department of Geography, Maharshi Dayanand University, Rohtak-124001, Haryana, India, from 11th to 13th January 2025.

#### **Workshops/ Seminar/ Conferences/ Training Programmes/FDP participated in**

- 1. Participated at the Indian Institute of Geomorphologists–Young Geomorphologists Forum (IGI-YGF) organized its first Intensive Training Programme for Young Geomorphologists of India, Organized by Department of Geography, University of Calcutta, Kolkata, India, from 2nd to 5th March, 2020.
- 2. Participated at the 2nd Intensive Training Programme for the Young Geomorphologist, Organized by Indian Institute of Geomorphologists (IGI) and Young Geomorphologists Forum(YGF) from Nov 1-2, 2021.