

DATA SHEET FOR RESEARCH SCHOLARS



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8. Contact Number: 8280006236
9. Funding Agency: UGC-NFOBC.
10. Date of commencement of Fellowship: 28/08/2019
11. Period of Fellowship: Five Years
12. Title of Research Work: Study of geomorphic evolution of Budhabalanga River basin, Odisha by Geospatial Technology.
13. Name of the Guide: Dr. Jagadish Kumar Tripathy
14. Registration Number: 45/2021/Geology
15. A Brief Abstract of your Research Work (Within 200 words):

Geomorphology is the science of evolution of landforms in terms of its lithology, structures, basin geometry and other morphometric factors. Rivers are not only the vital resources for human activities, but also are crucial implement towards the understanding of geomorphology of most regions. The morphology of a river is defined by a series of physical features notably slope, cross-sectional shape, deposition, erosion and channel patterns, which reflect the continuous adjustment of water and sediment discharge in space and time. In turn, all these features are responsible to express the particular basin characteristics. Over time, river develop numerous channels, those are able to carry their average flow and sediment loads. The form of the channel highly influences the water flow so as the erosion and deposition. The changes in the channel forms are the result of variations in the flux (water, sediment and wood) and their input-output relationship (magnitude, frequency and their transfer to downstream). The interpretation of channel change required the analysis of several controlling factors and their interrelations. The present study is an attempt to describe the geomorphic evolution of the Budhabalanga River Basin, Odisha. In this context, remote sensing data is a key source of information about studying and monitoring the river shifting or migration. For morphometric analysis, drainage map of the study area will be prepared from the data downloaded from USGS Earth Explorer (SRTM DEM), Bhuvan portal (Cartosat 1-DEM) using ArcGIS-10 by adopting the standard procedures.

16. Status of Research Work:

- |                             |                                     |
|-----------------------------|-------------------------------------|
| a) Writing the Synopsis     | <input checked="" type="checkbox"/> |
| b) Review of Literature     | <input checked="" type="checkbox"/> |
| c) Data Collection          | <input checked="" type="checkbox"/> |
| d) Data Analysis            | <input checked="" type="checkbox"/> |
| e) Writing the Draft Thesis | <input type="checkbox"/>            |

17. Do you have your profile in the following research networks?

- a) Google Scholar
- b) Research Gate
- c) Academia

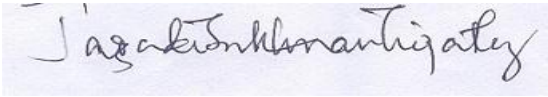
18. Do you access the following e-resources subscribed by the university

- a) E-sodh Sindhu from INFLIBNET
- b) ProQuest

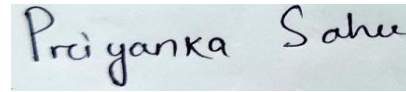
19. Number of Papers published in referred journals with ISSN: 02(0973-4570, 2229-3620)

20. Mention any two of your best publications in APA standard:

- a) Sahu, P., Sahoo, D., Panda, S. R., & Barik, K. K. ASSESSMENT OF GROUNDWATER QUALITY IN THE KARANJIA BLOCK, MAYURBHANJ DISTRICT, ODISHA.



Countersigned by the Research Supervisor & Head



Signature of the Research Scholar