



Curriculum Vitae (March, 2021)

Dr. PANDURANG CHOUDHARI

M.A., B.Ed, M.Phil, SET, NET³, Phd

Assistant Professor

Department of Geography, University of Mumbai
Lokmanya Tilak Bhavan, Vidyanagari, Santacruz (East)
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Academic Qualifications:

1. Ph.D. on “**Modeling of Upper Bhima River Watershed Dynamics for Integrated Water resources Management**” using **SWAT Hydrological Model**, through University of Mumbai (awarded June 2019).
2. Masters in Geography - Specialization: Remote Sensing & Geomorphology- 2002
3. SET (State Level Eligibility Test) for Lectureship in Maharashtra, 2007.
4. M.Phil. from Tilak Maharashtra University, Pune 2007 – Theory Exam Passed, 2007.
5. NET (National Eligibility Test) for Lectureship in India. (December 2012, December 2013, December 2014)
6. Teaching Experience – 12 Years
7. Coordinator Indian Institute of Remote Sensing (IIRS) Outreach E learning

Research Interests: Hydrological Modeling, Watershed Management, Land use Land cover change Modeling, and Prediction, Climate Change Impact analysis, Drought Modeling.

Courses teaching/ taught: Geomorphology, Remote Sensing, GIS, Hydrology, Climatology, Statistical Geography

Membership of Academic Institutions:

1. National Association of Geographers, New Delhi (Life Member)
2. The Deccan Geographical Society, Pune (Life Member)
3. Bombay Geographical Association, Mumbai (Life Member)
4. Indian Metrological Society, New Delhi (Life Member)

Software Knowledge:

RS and GIS and Other software: ArcGIS, Arc SWAT, QSWAT, SWAT Editor, SWAT-CUP, HEC-HMS, ERDAS, QGIS, SAGA, GRASS, SPSS and Climate Perturbation Tool etc

Programming languages: C language, R Language.

Publications:

1. Pande, C.B., Moharir, K.N., Kumar Singh, S., Varade, A.M., Elbeltagi, A., SFR, K., **Choudhari, P.**, Estimation of crop and forest biomass resources in a semi-arid region using satellite data and GIS, Journal of the Saudi Society of Agricultural Sciences Elsevier (2021), doi: <https://doi.org/10.1016/j.jssas.2021.03.002>
2. Kolekar, S.S., Mishra, A., **Choudhari, P.** & Namit Choudhari: Identification of specific areas for water conservation measures using Geoinformatics approach. Arab J Geosci 14, 531 (2021). <https://doi.org/10.1007/s12517-021-06721-3>.
3. Shinde, S., **Choudhari, P.P.**, Popatkar, B. et al. Assessment of groundwater quality using GIS in Thane Municipal Corporation, Maharashtra, India. Model. Earth Syst. Environ. (2020). <https://doi.org/10.1007/s40808-020-00906-7>
4. Paper Published in International Journal of **Taylor & Francis, Journal Geology, Ecology and Landscapes**, entitled “Morphometric based prioritization of watershed for groundwater potential of Mula river basin, Maharashtra, India, **DOI:10.1080/24749508.2018.1452482**, ISSN: (Print) 2474-9508 (Online) Journal homepage: <https://doi.org/10.1080/24749508.2018.1452482>
5. Kanak Moharir, Chaitanya Pande, Sudhir Kumar Singh, **Pandurang Choudhari**, Rawat Kishan, Lordwin Jeyakumar; Spatial interpolation approach-based appraisal of groundwater quality of arid regions. Journal of Water Supply: Research and Technology-Aqua 1 September 2019; 68 (6): 431–447. doi: <https://doi.org/10.2166/aqua.2019.026>
6. Namit Choudhari & **Pandurang Choudhari**: Trend Analysis of Long term Meteorological Variables of Mulshi Taluka, Pune, India. 2018, IJSR, ISSN 2319-7064
7. **Pandurang Choudhari** & Ambadas Jadhav: Estimation of evapotranspiration for upper Bhima River watershed using SWAT model. Research direction journal, UGC approved No 45489, ISSN

8. Paper Published in International Research Front Journal-(A Peer –reviewed Impact factor 1.11) Analysis of Morphometric Parameters of a Pavana river basin, India: Using DEM and GIs (pp 333-343) Special Issue August 2016, **ISSN 2320-8341**
9. Paper Published in Edited Book (Society, Politics and Climate Change) entitled “Bottled Water Production and Climate Change: Mitigation Strategies for Climate Change (pp-361-370), Aug 2014, **ISBN: 978-81-924836-2-7**
10. Paper Published in Edited Book (*Environmental Issues & Remedies*) entitled “World Bottled water Industry and Climate Change: Mitigation Strategies for Climate Change (pp-142-150), Aug 2013, **ISBN978-81-927211-4-9**
11. Paper Published in International Journal of Thematics (A Peer –reviewed) entitled “Importance of Growth Centers for Regional Development: A Case study of Dharwad District, Karnataka (pp 28-34) Volume 2, Issue 1, Jan 2013, **ISSN 2277-2995**
12. Published Paper in International Journal of Contemporary Research in India (A Peer-reviewed Journal) entitled “Forecasting of Foreign Tourist Arrivals & Foreign Exchange Earnings of India by 2015: Challenges & Strategies for Tourism Promotion. (pp 46-50), **ISSN – 2231-2137** Special Issue October 2012.
13. Paper entitled “Application of Remote Sensing GIS and GPS in Roof-Top rain water harvesting of Chowgule College Campus, Margao: A Micro Level Analysis Published in One day State Level Seminar at R.K. Talreja College, Ulhasnagar, Mumbai on 8 September 2012 (**ISBN-978-81-903978-8**)
14. Paper Published in National Conference entitled “Transportation and Climate Change: Technologies for Climate Change Mitigation for the Transportation Sector of India”, at Mahatma Phule College, Panvel on August 25 2012, (**ISBN 978-81-924995-0-5**)

Papers presented:

- Presented paper on “Modeling of Runoff and water yield for Tropical River Watershed using Geospatial Technology, in one days National Conference on “ Water Resources: Remediation and Rejuvenation at Dept. of Biotechnology, University of Mumbai, Mumbai, 26th February 2020.
- Presented paper on “Prioritization of watershed of Mula River, Maharashtra, India, using Geoinformatics Approach, in two days International conference on Multidisciplinary Research in Geo Environmental Studies for Sustainable Development (MRGESSD) at Solapur University, Solapur, 15th to 16th September 2017.
- Presented paper on “A study of Urban Sewage on soil and water quality: A case study of Degaon village, Solapur, Maharashtra ” in two days International conference on Multidisciplinary Research in Geo Environmental Studies for Sustainable Development

(MRGESSD) at Solapur University, Solapur, 15th to 16th September 2017.

- Presented a paper on “Assessment of water balance of Purna river basin using Semi-distributed Hydrological Model- SWAT, 17th to 19th March 2017, **Xth IGU International Thematic conference** on “Urbanization, Health and Well being and Sustainable Development Goals” organized by Osmania University at Hyderabad.
- Presented a paper on “Assessment of Spatio temporal variation in Land use and Land cover of Mula river basin using remote sensing and GIS Techniques, in the National Conference “Water and Soil Management for Sustainable Development” at Dr. Babasaheb Ambedkar Marathwada University, 21st March 2017.
- Presented a paper on “Analysis of Morphometric Parameters of a Pavana river basin, India: Using DEM and GIS, in the National Conference “Watershed Development in India: Issues and Realities” at Balwant College, Vita, Sangali, 26th and 27th August 2016.
- Presented a paper on “Change Detection in Land use and Land cover Using Remote Sensing and GIS: A case study of Pune District” in the 5th International Conference on Future Earth Perspectives in South Asia(**NAGI**), 5th to 7th February 2016, Mohanlal Sukhadia University, Udaipur, Rajasthan, India.
- Presented a paper on “Bottled Climate Change, Bottled Water: Developed and Developing Nations” in the International Conference on “Sustainable Planet Earth: Ecological Dimensions and Strategies”, October 17th to 19th October 2015, Mohanlal Sukhadia University, Udaipur, Rajasthan, India.
- Presented a paper on “Problems and Prospects of mango production and marketing with special reference to Konkan region” in the National Conference on “Resource Management & Agricultural Development in India”, 29th to 30th September 2014, Jaysingpur College, Jaysingpur, Kolhapur, Maharashtra.
- Presented a paper on “Application of geo-spatial technology for the change detection analysis of forest cover in Rajapur taluka Ratnagiri district, Maharashtra” in the National Conference on “Applications of Remote Sensing and GIS for Society, Environment and Sustainable Development”, 21st to 23rd march 2014, Department of Geography, University of Mumbai, Mumbai.
- Presented a paper on “GIS Education in India: with special reference to Maharashtra” in the National Conference on “GIS Education, National and International Status”, 30th November 2013, Department of Geography, Kumaun University, SSJ Campus, Almora, Uttarakhand.
- Presented a paper on “Application of geo-spatial technology for the change detection analysis of forest cover in Rajapur taluka Rajapur Taluka, Maharashtra” in the National Conference on “Applications of Remote sensing and GIS in Geography”, 3rd & 4th February 2014, Department of Geography, Abasaheb Marathe college, Rajapur,

Maharashtra.

- Presented a paper on “Bottled Water Production and Climate Change: Mitigation Strategies for Climate Change” in the International Conference on “Society, Politics and Climate Change”, 3rd & 4th December 2012, Nagindas Khandwala College, Malad, Mumbai.
- Presented a paper on “A Critical review of the Performance of Indian dairy Industry with special reference to milk yield per animal per annum” in the National Conference on “New Challenges Before the Indian Dairy Industry”, 10th & 11th August 2012, Ganpatrao Arwade College, Sangali.
- Presented a paper on “Micro level analysis of flood disaster in Sangali District: A case study of Village Kanegaon” in the National Conference on “Natural Hazards, Food Security and Sustainable development”, 10th March 2012, Sangameshwar college Solapur, Solapur.
- Presented a paper on “Prospects of Tourism in Konkan ’entitled “SWAT analysis of Tourism: A case study of Ratnagiri District” in the State Level Seminar on “Prospects of Tourism in Konkan ’entitled “SWAT analysis of Tourism: A case study of Ratnagiri District”, 5th December 2011, Abasaheb Marathe College, Rajapur, Maharashtra.

Attended International conferences and seminars:

- ✓ Attended one day National conference on “Emerging Trends in Geography and Environmental Dynamics”, at University Department of Geography, University of Mumbai, Mumbai, 3rd March 2018.
- ✓ Attended one day National conference on “Emerging dimensions in geographical research for Sustainable Development”, at University Department of Geography, University of Mumbai, Mumbai, 23rd February 2017.
- ✓ Attended Two days National conference on “Promotion and Development of Cartographic Education: Contemporary situation and future plans” at University Department of Geography, University of Mumbai, Mumbai, 30th and 31th August 2016.
- ✓ Attended Indian Science Congress December 2015 at University of Mumbai, Mumbai.
- ✓ Attended National conference on “Recent Advances in Geography” at University of Mumbai, 30th March 2015.
- ✓ Attended one day National Seminar on “Inclusive Growth in Agriculture (Measurement & Policy issues)’ organized by Osmania University, Hyderabad on 10th March 2012.

- Attended two days National Level Workshop on “Remote Sensing & GIS Application in Geography” organized by Devrukh College, Devrukh, during January 9-10, 2012.
- Attended in Three day National Conference on “Population, Environment & Tourism” Organized by Devrukh College, Devrukh, on 3rd-5th March 2011.
- Attended a National Level Conference on “Global Warming: Causes, Consequences and Coping Strategies, organized by Vivekananda College, Chembur, Mumbai held on 22nd & 23rd January 2010.

Professional Training:

- Participated and successfully completed 7 days online capacity building program on “Hydro-metrological disaster: Techniques of measuring, monitoring, and management of floods” organized under the PMMMNMTT scheme of the Ministry of Education, center for Disaster Management studies, Shaheed Bhagatsingh college in collaboration with Ramanujan College, New Delhi during 1st to 7th March 2021.
- Participated in International webinar lecture series organized by Amity University during 11th June to 25th June 2020.
- Attended Two week training program on “Climate change and Hydrological impact assessment” organized by National Institute of Hydrology, Roorkee during 2nd to 13th December 2019
- Attended a short-term course on “**Statistical Methods in Social Sciences with R**” 18th to 24 August 2017, Human Resource Development Centre, University of Mumbai, Mumbai
- Attended a Short term course on “**Soil moisture and soil hydraulic Properties at Micro and macro-scales for water Resources Management**”, December 2016 at Indian Institute of Technology (IIT), Bhubaneswar.
- Participated in the training on “**Bhuvan Overview**” conducted by National Remote Sensing Centre (NRSC) 7th & 8th September 2016 at Hyderabad.
- Attended a Short term course on “**Land use / Land cover change Modeling and Prediction**” at NIT, Jaipur, July 2016.
- Attended a Short term course on “**Geographic Information system for water resources Management**” June 2016 at Shivaji University, Kolhapur.
- Attended a Short term course on “**Climate change Impact Analysis**” May 2016 at Indian institute of Engineering, Science and Technology, Shibur, Kolkata.
- Attended a Short term course on “**Hydrological Modeling using SWAT Model**” December 2015 at Indian Institute of Technology (IIT) Hyderabad.
- Attended one day workshop on “**Biodiversity Awareness using Open Source Geospatial Software “(FOSS4G)**, 10th September 2015 at Institute of Environmental Science and Research, Pune.

- Participated in One Week Programme on “**Research Methodology in Social Sciences**”, 13th to 17th July 2015 at ICSSR, Vidyanagari, Mumbai
 - Attended short term Course on “ **Flood Management using GIS**”, 26th to 30th October 2015 at National Water Academy (NWA), Pune.
 - Attended short term Course on “**Structural Measures for flood Management**”, 19th to 23th May 2014 at National Water Academy (NWA), Pune.
 - Attended short term Course on “**Non-Structural Measures for flood Management**”, 26th to 30th May 2014 at National Water Academy (NWA), Pune.
- Participated in two days workshop on “**Research Paper writing and Data Analysis using SPSS**”, 8th to 9th July 2013 at Sir. M. Visvesvaraya Institute of Management Studies & Research, Mumbai.
- Participated in two days workshop on “**Frontiers in Geospatial Technology**”, 1st & 2nd July 2013 at Central University of Karnataka, Gulbarga.
 - Attended short term Course on “**Principles and Application of Satellite Image Processing**”, 25th to 29th March 2013 at Indian Institute of Technology (IIT) Bombay.
 - Participated in the Short Term Course on **SPSS Hands on Training** held from 3 Jan to 9 Jan 2013 at Bharathiar University, Coimbatore, and Tamilnadu.
 - Attended Two Days Workshop on **Gram ++ software** organized by P K College, 30th & 1st December 2012 at Sawantwadi, Maharashtra
 - Attended a **DST sponsored Twenty one Days Programme on Geospatial Technology**, 10th May to 30th May 2012, at Goa
 - Participated in Workshop on “**Geoinformatics: Prospects & Application**” Organized by Dept of Geography, University of Mumbai held on 4th -6th March 2009.

Training Programs Conducted:

- Conducted and worked as a Coordinator for One week National Level short term course on “ **Geospatial Technologies for Environmental Modeling** “, 24th to 28th February, 2020. Total 20 participants from all over India attended the course. Out of 20 participants, one was from Arba Minch University, Ethiopia, Africa.

Lectures Delivered:

- Delivered lecture on **Concept of image processing techniques, conversion of data, types and formats** in Online three weeks certificate course on Basic Geoinformatics for climate smart Agriculture, sponsored by Indian council of Agriculture Research (ICAR) from February 22nd to March 14th October 2021.
- Delivered lecture on **Basics of QGIS** in Online three weeks certificate course on Basic Geoinformatics for climate smart Agriculture, sponsored by Indian council of Agriculture Research (ICAR) from February 22nd to March 14th October 2021.

- Delivered lecture on Paper II – Social Science – **Geography Section** for PhD Course work students Organized by HRDC Aurangabad, to 18th January 2021.
- Delivered lecture on **Introduction to GIS and Spatial Query** in a Faculty Development Program on GIS and Remote Sensing Conducted by the School of Earth Sciences & HRDC, Goa University, sponsored by ATAL Academy, New Delhi from 12th to 16th October 2020.
- Delivered lecture on **Open Data Sources for Remote Sensing and GIS** in a Faculty Development Program on GIS and Remote Sensing Conducted by the School of Earth Sciences & HRDC, Goa University, sponsored by ATAL Academy, New Delhi from 12th to 16th October 2020.
- Delivered lecture on Basic concepts of Physical Geography in Bridge course, which was organized for MA Students during 22nd July to 26th July 2019.
- Lecture delivered on Introduction to GIS in National Level workshop on “Geoinformatics for Earth Sciences and Natural Resources Management”, organized by Dept. of Geography, University of Mumbai, Mumbai, 3rd March 2020
- Lecture delivered on Hydrological Model setup for watershed/Basin for MA/M.Sc Geography students organized by Department of Geography, Parvatibai Chowgule College, Margao, Goa, 29th March 2019.
- Lecture delivered on **Estimation of Hydrological Components using Hydrological Model** for MA/M.Sc Geography students organized by Department of Geography, Parvatibai Chowgule College, Margao, Goa 30th March 2019.
- Delivered a lecture “**How to do Preparation of Remote Sensing, GIS & Statistics for NET/ SET Examination**” in NET/ SET workshop organized by University Department of Geography, University of Mumbai, Mumbai.
- Delivered a lecture in Two days NET/SET workshop at University Department of Geography, University of Mumbai, Mumbai on “ **Preparing GIS, Remote Sensing and Other miscellaneous topic for Paper 2**” , 4th September 2018.
- Delivered a lecture in UGC sponsored Refresher course at Human Resource Development center, University of Mumbai, Mumbai on “ **Linking Remote Sensing and GIS in Social Sciences: Need and Challenges**” , 4th September 2018.
Delivered a lecture in University Sponsored NET/SLET examination training workshop on “**How to do Preparation for NET/SET Exam**” at Solapur University, Solapur, 23 January 2018.
- Delivered a lecture in National Symposium “Emerging Trends in Geosciences

Mineral Exploration and Environmental Sciences for Sustainable Development” on “**Applications of GIS and Remote sensing for Sustainable Development of Upper Bhima Watershed**, Organized by Indian Society of Applied Geochemists (ISAG) and Atomic Mineral Division (AMD), Government of India, 20th & 21st December 2017 at Hyderabad.

- Delivered a talk on ‘**Application of SWAT Model in Water Resource Management**’ in the One-day national conference “Application of Geoinformatics and Economic Development” at Social College, Solapur, 13th January 2018.
- Delivered lecture on “Global Warming and Job Opportunities in Geography” at Mauli Mahavidyalaya, Vadala, 15th September 2017.
- Solapur University, Solapur- School of Earth Science, Department of Environmental Science, January 2017, “Hydrological Modeling using SWAT”.
- Solapur University, Solapur- School of Earth Science, Department of Environmental Science, January 2017, “How to Prepare for NET / SET Exam”.
- Social College, Solapur- Department of Geography, January 2017, “Applications of remote sensing and GIS”.
- Delivered lectures on various themes in 6 days University level Short term workshop January 2016, on “Applications of Remote sensing and GIS in Geography”, Sangmeshwar College, Solapur.
- Delivered Lectures in 21days Winter Training Program sponsored by Department of Space and Technology (DST) Gov. of India at smt. Chowgule College, on various themes Terrain analysis in saga, Watershed Management, Hydrological Modeling with HEC HMS, Change detection analysis in SAGA, 23rd to 27th November 2015.
- Veer Wajekar college- Department of Geography, March 2015, “Job Opportunities in remote sensing and GIS field”.
- Delivered lecture as a **Resource person** in Two days State level seminar on “Sustainable Development of Rainwater harvesting in Drought Prone areas of Maharashtra, 12th February 2014.
- Veer Wajekar college- NSS Camp, December 2008, “Global Warming Causes and Consequences”.

Research Projects:

- **Principle Investigator**, University of Mumbai, Minor research project on, “, Application of Remote Sensing GIS and GPS in Roof-Top rain water harvesting of University of Mumbai, Kalina Campus: A Micro Level Analysis (**Ongoing 2019-20**)
- **Principle Investigator**, University of Mumbai, Minor research project on, “Effects of Urbanization on LU/LC and Stream flow of Pavana River basin, Western Maharashtra,

- **Principle Investigator**, University Grants Commission, Minor research project on, “Functional characteristics of Pilgrims: Case study of Ganpatipule and Pawas. (Completed 2015)

MA/MSc Dissertations (Supervised):

▪ **Academic Year 2020-21**

1. Prioritization of Bhama watershed for soil erosion using morphometric analysis, PCW and AHP method
2. Assessing Groundwater quality for domestic, irrigation purpose in Malvan Tehsil, Maharashtra, India, using Hybrid fuzzy-GIS-based water quality index
3. Assessment of Future Changes in the Maximum Temperature at selected stations in Maharashtra using CanESM2 and HADCM3 model
4. Site Suitability analysis for Urban Solid Waste Disposal Using Geo Informatics; A Case Study of Thane District, Maharashtra, India
5. Assessment of Land Degradation for Marathwada Region, “In context of United Nations Sustainable Development Goal 15.1”

▪ **Academic Year 2019-20**

1. Soil erosion estimation of Tulsi river basin using RUSLE model, Kolhapur district, Maharashtra
2. Watershed Prioritization for natural hazards susceptibility assessment of river Kasari basin, Kolhapur, India
3. Evaluating groundwater suitability for the domestic, irrigation and Industrial purposes in Panvel Tehsil, Maharashtra, India using Geospatial Technology
4. A Geographical analysis of Thane District’s Kalyan-Badlapur Flood 2019

▪ **Academic Year 2018-19**

1. Estimation of Soil erosion of Ghod river watershed using RUSLE Model and Geospatial Techniques
2. Land use Land cover change assessment of Shirur Taluka, Pune district, Maharashtra India
3. Identifying potential sites of water harvesting for Kukadi River watershed using SCS-CN method and Geospatial technology

▪ **Academic Year 2018-19**

1. Application of SWAT hydrological model for study of Runoff in River Bhima
2. Application of SWAT model for study of sediment yield of Bhima river watershed
3. Assessment of groundwater quality using GIS in Thane municipal corporation, Maharashtra, India

Other:

Reviewer- Springer Journal: Environment, Development and Sustainability Journal, Arabian Journal of Geosciences, Journal of the Indian Society of Remote Sensing, Landscape and Environment.

Date: March 2021

Dr. Pandurang Choudhari