





ABHILASH R

SCIENTIST

 B.E(Civil), M.Tech (Water & Land Management), Ph.D (Hydrology & WRE)
PGDEL (Envi. Law) ..*pursuing*
C.Eng (India), M.I.E,

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15° 52' 21.9" N

74° 30' 23.8" E



PERSONAL PROFILE

An active researcher with expertise in applications of RS and GIS for Irrigation, Hydrology and Water resources Projects. Demonstrated history of working 12 years with Government, R&D Consultancy institutions, Industry, and NGOs.


FIELD INVESTIGATIONS

- Total station, GPS and DGPS
- Hydro-meteorological observations and instrument set-up
- Field observations (Surface & Groundwater)
- Spatial Data collection & management
- Ground truth verifications

CONTRIBUTIONS

- Technical Reports : 24 Projects
- Publications : International - 2
National - 8
- Technology : Resource Person at
Transfer Training / Workshops - 10
M.Tech guidance - 3

Refer Annexure for Details

 0000-0002-7505-5263

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SOFTWARE EXPOSURE

- RS & GIS : ArcGIS, ArcGIS pro -online, ERDAS, Google Earth Engine Survey123 app development
- Irrigation : CROPWAT, CLIMWAT
- CAD : AutoCAD Map 3D, CIVIL 3D, Raster design
- Optimization : LINGO, PuLP, Python
- Surface water : ArcSWAT, e-Water, HEC-HMS
- Ground water : ArcHydro GW, MODFLOW
- Flood Analysis : HEC-RAS,
- Statistical : SPSS, Python, CMhyd, Minitab, XLSTAT

PROFESSIONAL CAREER

Scientist 'C' 2022 onwards
Research Scientist (4yr 8mo) 2018 - 2022

National Institute of Hydrology. Regional Centre - Belgaum
Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, Government of India

Senior Scientist (1yr 3mo) 2016 - 2017

Environmental Management and Policy Research Institute (EMPRI) - Bangalore
Department of Forest Ecology and Environment, Government of Karnataka

Assistant Prof. / M.Tech Co-ordinator (2yr 2mo) 2014 - 2016

Department of Civil Engineering,
School of Engineering and Technology, Jain University, Bangalore

Project Associate (3yr 1mo) 2009 - 2012

Department of Civil Engineering,
Global Academy of Technology, Bangalore

Jr. Site Engineer (1yr 3mo) 2008 - 2009

Total Environment, Bangalore

ACADEMIC BACKGROUND

Doctor of Philosophy (Ph.D.) Hydrology & WRE

National Institute of Hydrology

Title of Research: Integrated command area management

Thesis submitted

2015 - 2022

Post Graduate Diploma in Environmental Law

National Law School of India University

Pursuing Distance Education

2020 - 2022

Institution of Engineers (India)

Chartered Engineer (C.Eng), Member (MIE)

2019 onwards

Master of Technology (M. Tech) in Water and Land Management

Visvesvaraya Technological University (VTU)

Thesis: Study on availability of groundwater and recharging methods for Kumudvathi watershed - A case study

Graduated with First class distinction

Award of Gold Medal for securing 1st Rank in the State.



2012 - 2014

Bachelor of Engineering (B. E) in Civil Engineering

R V College of Engineering, VTU

Graduated with First Class.

2004 - 2008

Thank You!

Research Projects handled and technical reports published

	Sl. No.	Name of the Project	Year	Role	Funding / Sponsoring Agency
NATIONAL INSTITUTE OF HYDROLOGY	Completed				
	1.	Studies on Occurrence, Distribution and Sustainability of Natural Springs for Rural Water Supply in parts of Western Ghats, India.	2018 - 2021	Research Scientist	National Hydrology Project (NHP) Sponsored Study with Groundwater Surveys & Development Agency, Govt. of Maharashtra.
	2.	Status Assessment of Vrishabavathi River	2018 - 2019	Research Scientist	National Institute of Hydrology Annual Work programme RC-Belagavi.
	3.	Preparing Emergency Action Plan (EAP) for Krishna River within the Karnataka	2020-2021	Research Scientist	National Institute of Hydrology and Home department, Govt. of Karnataka.
	Ongoing				
	4.	Climate Change Impact Assessment for Jayakwadi Project Catchment	2019 - 2022	Research Scientist	Sponsored Study with Maharashtra State Water Resources Department,
	5.	Groundwater Model Development in micro basin of hard rock in Krishna and Godavari River Basins of Telangana	2020 - 2023	Research Scientist	National Hydrology Project (NHP) Sponsored Study with Telangana State Groundwater Dept.
	6.	Impact of Sand Mining on Groundwater regime in parts of Manjira River Basin in Telangana State	2021-2022	Research Scientist	National Hydrology Project (NHP) Sponsored Study with Telangana State Groundwater Dept.
	7.	Comprehensive Assessment of Water Availability, use and issues for Goa state	2022-2024	Research Scientist	National Hydrology Project (NHP) Sponsored Study with Goa State Water Resources Department.
	Assisted in				
	8.	Preparation of Emergency Action Plan (EAP) and study of Tail channel Design flood carrying capacity of Amabazari lake, Nagpur	2019-2020	Research Scientist	Command area development authority, Nagpur, Maharashtra.
9.	Flood Studies for projects in Kali and Sharavathi River basin	2018 – 2021	Research Scientist	Karnataka Power Corporation Limited, Government of Karnataka	
10.	Flood Management Plan and Channel Depth calculation to assure Flood Safety for Unkal Lake	2019-2020	Research Scientist	Hubli Dharwad Smart City Limited, Karnataka	
11.	Impact of LULC and catchment characteristics on run-off and groundwater dynamics of Western Ghats, Karnataka	2019-2022	Research Scientist	National Institute of Hydrology and MOES sponsored study	

	Sl. No.	Name of the Project	Year	Role	Funding / Sponsoring Agency
EMPRI	12.	Baseline study and monitoring of Ecological impacts on river basin of Yettinahole drinking water project as stipulated by MoEFCC	2017*	Research Scientist	Visveswaraya Jala Nigam Limited Govt. of Karnataka.
	13.	Dissemination of Environmental Rules, Regulations and Preventive Measures to the Public through the Use of Mass Media and Training Programmes	2017	Sr.GIS Scientist / Research Scientist	Govt. of Karnataka, Department of Forest Ecology and Environment.
	14.	Assessing Metro Rail system as a means of mitigation strategy to Climate change	2017	Sr.GIS Scientist / Research Scientist	Environmental Management and Policy Research Institute (EMPRI), Govt. of Karnataka DST funded project.
	15.	Assessment of Current Status of Cauvery River in Karnataka and Study of 300m Buffer Zones on Both sides of the river	2016 - 2017	Sr.GIS Scientist / Research Scientist	EMPRI, Govt. of Karnataka for Lok Adalat Court
	16.	Inventorisation of Water Bodies in Bengaluru Metropolitan Area (BMA) - Volume 1 and Developing GIS mobile app for inventorization of waterbodies and user manual	2016 - 2017	Sr.GIS Scientist / Research Scientist	EMPRI, Govt. of Karnataka in association with Karnataka Lake Conservation and Development Authority (KLCDA), Govt. of Karnataka and Regional Remote Sensing Centre – ISRO
	17.	Impact of Climate Change on Incidence of Vector-Borne Diseases and Vulnerability Mapping for Karnataka 2015-16	2016	Sr.GIS Scientist / Research Scientist	EMPRI, Govt. of Karnataka DST funded project - Climate change
	AOL	18.	River Rejuvenation Action Plan for <ul style="list-style-type: none"> • Kumudvathi River • Naganadi River • Vedavathi River 	2012 - 2014	Technical Team Lead
GLOBAL ACADEMY OF	19.	Preparation of watershed development scheme on the lines of IMSD for the watershed of Ajjampura Tunnel area	2012	Project Associate	KNNL, Irrigation Department, Govt. of Karnataka
	20.	Flood Studies in Bennihalla Basin VTU R&D project	2011-2012	Project Associate	Visvesvaraya Technological University through Global Academy of Technology

21.	Action Plan for Sustainability of MI Tanks and Groundwater regime for <ul style="list-style-type: none"> • Chikkaballapura watershed • Jayamangali Watershed • Koundinya Watershed • Kaiwara Watershed 	2011-2012	Project Associate	Minor Irrigation Department (South Zone), Govt. of Karnataka
22.	Integrated Urban Watershed Management Project: Hydrogeological study of Doddaballapura town urban watershed	2011	Project Associate	Society for Voluntary Action Revitalization and Justice (SVARAJ) and Arghyam NGOs
23.	IWRM – ADB TA No.7418-IND: Manual Upper Tungabhadra GIS Background paper	2010	GIS Analyst	Asian Development Bank through ANZDEC Limited Consultants for Water Resources Department, Govt. of Karnataka
24.	Hydrogeological Study along the proposed tunnel of Upper Bhadra Project near Ajjampura, Chikamagalur District	2009	GIS Analyst	KNNL, Irrigation Department, Govt. of Karnataka

- Number of Projects Completed and Technical reports published / submitted to Funding / Sponsoring Agency: NIH – 7 no's, EMPRI – 5 no's + 1 (ongoing), AOL – 3 no's, GAT – 9 no's; **TOTAL – 24 projects.**
- Project ongoing: 4 no's

Paper Publications / Presentations

International		
1.	<i>“Geospatial Approach for Integrated Command Area Management”</i>	2022
	ASCE: Journal of Irrigation and Drainage Engineering Volume 148 Issue 4 - April 2022	
2.	<i>“Visualization For Planning Integrated Water Resource Management Using Geomatic Techniques-A Case Study”</i>	2012
	<i>The 12th Asian Symposium on Visualization ASV12</i> National Cheng Kung University, Tainan, Taiwan, ROC; May 19 th -23 rd ,2013	

National		
3.	<i>“Impact of Rainfall Trend on Irrigated Agriculture of Narayanapura Command in a Semi-Arid Region of South India”</i>	2022
	Journal of Agriculture and Ecology Research International 23(3): 1-18, 2022; Article no. JAERI.84009; ISSN: 2394-1073	
4.	<i>“Analysis of long-term aquifer information to facilitate sustainable groundwater management in Hard rock regions”</i>	2021
	Awarded Best Paper Fourth Indian National Groundwater Conference (INGWC-2021): VII Annual Convention of Association of Global Groundwater Scientists (AGGS), Organized by Centre for Water Resources, JNTU and Association of Global Groundwater Scientists (AGGS), Coimbatore, India, in collaboration with IIT, Hyderabad and NGRI, Hyderabad. March 22-24, 2021	
5.	<i>“Impact of Landscape Dynamics on Hydrological Parameters and Springshed Development”</i>	2019
	Young Scientist Award for best paper 2nd Triennial Congress of FIGA held at CSIR- NGRI, Hyderabad October 13th -16th, 2019.	
6.	<i>“Effective Rainfall availability for command area management under various climate change scenarios”</i>	2019
	Two Days National Seminar on Water Management through Inter-basin Water Transfer Institution of Engineers (India) Belgaum Centre, 14th – 15th Sept. 2019	
7.	<i>“Role of GIS models in assessing vulnerable districts for vector borne diseases under different climate change scenarios”</i>	2017
	National Seminar on Climate Change: Challenges and Solutions 2017 By Dept. of Science and Technology, Govt. of Karnataka and EMPRI, Department of Forest Ecology and Environment, Govt. of Karnataka; 23 rd January 2017	
8.	<i>“Estimation of missing rainfall data using GIS techniques – A case study around Kumudvathi watershed”</i>	2013
	All India Conference on Waste Management and Pollution Control (WMPC-2014) Institution of Engineers (India) Belgaum Local Centre and KLE Dr. M.S. Sheshgiri College of Engineering and Technology, Belgaum, 7 th & 8 th March 2014	
9.	<i>“Planning Integrated Urban Water Resource Management using Remote Sensing and GIS”</i>	2013
	National Conference on Recent Advances in Civil Engineering-2013 KLE Dr. M.S. Sheshgiri College of Engineering and Technology, Belgaum. 29 th and 30 th April 2013	
10.	<i>“Planning Integrated Water Resource Management Using Geomatic Techniques A case study around Ajjampura, Chikkamagalur District”</i>	2012
	<i>5th Annual KSTA Conference</i> by KSTA Dept. of Science and Technology, Govt. of Karnataka and Dayananda Sagar College of Engineering (DSCE), Bengaluru. 19 th – 20 th December 2012	

Resource Persons in conducting Trainings, Workshops and Lectures

1.	One Week “Hands-on training on Geographical Information System (GIS)” 3 rd – 7 th Jan 2022 at KLE Society's Dr. M. S. Sheshgiri College of Engineering and Technology, Belagavi	2022
2.	Hands-on-Training Workshop on “Estimation of Yield and Floods” during 8 th – 12 th Feb 2021, for officers of Karnataka Power Corporation Limited, Bangalore	2021
3.	“STTP workshop on skill upgradation in Total Station and IRNS” during 9 th – 13 th Jan 2020 at AMC Engineering College, Bengaluru	2020
4.	Applications of Inverse Modelling and GIS in Water Resources Engineering during 9 th – 10 th June 2020 at B.L.D.E. A’s V.P. Dr.P.G.Halakatti College of Engineering and Technology, Bijapur	2020
5.	Training on Irrigation Management during Water Crisis for Engineers working in WRD, Govt. of Karnataka during 29 th – 31 st August 2019 at Water and Land Management Institute, Dharwad	2019
6.	Workshop on “QGIS” and hands-on training during 5 th – 10 th April 2019 at KLE Society's Dr. M. S. Sheshgiri College of Engineering and Technology, Belagavi	2019
7.	Training course on Yield and Flood Estimation during 12 th - 16 th November 2018 at Maharashtra Engineering Training Academy, Nashik	2018
8.	Guest Lecture on “Water Resource Management” during 2 nd April 2018 at East West Institute of Technology, Bengaluru	2018
9.	National Workshop on “Application of Remote sensing and Geographical Information System” during 2 nd – 4 th February 2018 at S.G.Balekundri Institute of Technology, Belagavi	2018
10.	“Training Program “Geographical Information Systems – Basic Course” during 28 th – 30 th June 2010 at Global Academy of Technology, Bengaluru	2010