

# DR. KOYEL SAM

M.A. (Gold Medalist), P.G. Diploma (Geoinformatics),  
Ph.D. (Geography)



## Present Position

- **State Aided College Teacher (Category-I)**  
in Geography at Dr. Bhupendra Nath Dutta Smriti  
Mahavidyalaya, Purba Bardhaman.  
U.G. Level (Hons. + Pass graduate)

Department of Geography,  
Dr. B.N.D.S. Mahavidyalaya  
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Purba Bardhaman,  
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## Fields of Specialization

- Environmental Issues in Geography
- Applied Remote Sensing and GIS

## Certification

- CITA in Computer Application
- Communicative English
- Web GIS using Open Layers
- SAR Image Processing
- Programing in ArcGIS with Python
- GNSS surveying and Mapping using Android phone
- Analysis and Simulation of Urban Growth from Remote Sensing Data
- LiDAR and UAV
- Basic Python & It's Application in Google Earth Engine with QGIS

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## Value Addition

- **Software Known:** Arc-GIS, Q-GIS, Erdas Imagine, ENVI, Mapinfo, Fragstats, SNAP, SPSS and R-Studio
- **Programming Language:** Java, Python - Its application in Mapping and Spatial Analysis

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## Language Known

Bengali, English, Hindi


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## Research Details

- **Title of the Ph.D. Thesis:** *“Changing Forested Landscape and Climate in Bengal Duars and Its Impact on Life and Livelihoods”*
- **Name of the Supervisor:** Prof. Namita Chakma, Department of Geography, The University of Burdwan.
- **Research Interests:** Climate Change, Adaptation to Climate Change, Forest and Urban Landscape, Change Detection, Simulation and Modelling
- **Year of Experience:** More than 6 years

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## Award and Achievements

- University **“Gold Medal”** for securing First position in First Class, M.A. Examination, 2013 in Geography, The University of Burdwan.
  - **UGC-Junior Research Fellowship** (2014)
  - **UGC-Senior Research Fellowship** (2017)
  - **1<sup>st</sup> position in oral presentation (Earth Science Section)** of 2<sup>nd</sup> Regional Science and Technological congress (WR), Govt. of West Bengal, 2017
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## Workshops/ Short-term Courses/ Training Programme Participated

Sl. No.	Workshops/Short-term Training/Courses	Duration	Organized by
1	Workshop on " <i>Statistical Techniques used in Research</i> "	16-19 Feb, 2016	Dept of Statistics, The University of Burdwan.
2	GIAN (MHRD) Training Course on " <i>Climate Change Impact Analysis</i> "	23 May - 03 June, 2016	IEST, Shibpur
3	Technical Knowledge Exchange Workshop for Bangladesh and India on " <i>Vulnerability of Sundarban in Changing Climate</i> "	5 <sup>th</sup> Feb, 2017	The World Bank, Kolkata
4	Faculty Development Programme on " <i>Research Methodology</i> "	27 <sup>th</sup> Jan, 2018	The department of commerce, St. Xavier's College, Burdwan
5	Workshop on " <i>Species Distribution Modelling</i> "	24 <sup>th</sup> – 27 <sup>th</sup> Feb, 2018	IIT-Kharagpur
6	A short course on " <i>Understanding Statistical Analysis in Geography</i> "	May 20 - July 31, 2018	The Indian Society of Spatial Scientists, Chandernagore
7	GIAN (MHRD) Training Course on " <i>Land Cover and Land Use Changes and Their Impacts on Climate</i> "	29 <sup>th</sup> Oct - 2 <sup>th</sup> Nov, 2018	IIT- Kharagpur
8	GIAN (MHRD) Training Course on " <i>Improved Climate Change Adaptation Strategies in Water Resources</i> "	12 <sup>th</sup> -16 <sup>th</sup> Nov, 2018	IIT- Kharagpur
9	International Course on " <b>Earth Observation Data for Forest and Agriculture Carbon Modelling</b> "	18 <sup>th</sup> - 22 <sup>nd</sup> Feb, 2019	CORAL, IIT-Kharagpur
10	Workshop on " <i>Drone Mapping</i> "	03 - 07 Feb, 2020	Jadavpur University, Kolkata
11	National workshop on " <i>Thermal Remote Sensing &amp; Its Application in Research</i> "	16 - 20th Oct, 2020.	Integrated Institute for Advanced Research and Information
12	Online training course on " <b>Assessment of Reservoir Sedimentation using Geo-Spatial Technique and QGIS</b> "	19 - 20 Nov, 2020.	National Institute of Hydrology (NIH), Roorkee
13	3-day Webinar based Training on " <b>Hyperspectral Remote Sensing</b> "	6 – 8 <sup>th</sup> April, 2021	NRSC/ISRO, Hyderabad
14	75 <sup>th</sup> IIRS Outreach Programme on " <b>Geoinformatics for Disaster Management</b> "	5-16 <sup>th</sup> April, 2021	IIRS-ISRO, Dehradun
15	International workshop on " <b>Lidar : A Spatial Tool In Research</b> "	17- 18th April, 2021 .	Integrated Institute for Advanced Research and Information
16		21 <sup>st</sup> June- 02 <sup>nd</sup> July, 2021	IIRS-ISRO, Dehradun

	81 <sup>st</sup> course on “ <b>Overview of Web GIS Technology</b> ”		
17	83 <sup>rd</sup> course on “ <b>Geospatial technology for hydrological modelling</b> ”	19-30 <sup>th</sup> July, 2021	<b>IIRS-ISRO, Dehradun</b>
18	Faculty Development Programme / Summer Training on “ <b>Climate Change analysis using R and Cloud Computation</b> ”	19-26 July , 2021	Department of Geography, School of Basic and Applied Sciences, Adamas University
19	5-days Webinar based Training on “ <b>Geospatial Technologies for Climate Studies</b> ”	22-26 <sup>th</sup> Nov, 2021	<b>NRSC/ISRO, Hyderabad</b>

### **Seminars and Conference Attended**

<b>Sl. No.</b>	<b>Title of Conference / Seminar</b>	<b>Organized by</b>	<b>Whether International / National/State/College Level</b>
1	“ <b>Contemporary Issues in Education</b> ”	Govt. college of Education, Burdwan. 6th May, 2015	National
2	“ <b>Health Education</b> ”	Institute of Preventive Awareness, 18th Mar, 2015	National
3	One Day International Seminar on " <b>Environment, Public Health and GIS</b> "	Department of Geospatial Science, The University of Burdwan. 26th Aug, 2016	International
4	One Day International Webinar Talk on " <b>Climate Change and Earth's Landscape</b> "	Department of Geography, Kazi Nazrul University, Asansol, 24th Jun, 2020	International
5	International Webinar on " <b>Challenges of Climate Change and Sustainable Development Goals</b> "	Department of Geography, School of Basic and Applied Sciences, Adamas University, 29th Jun 2020.	International
6	A webinar on " <b>Recent trends of Space Technology in Geographical Science</b> "	Symbiosis Institute of Geoinformatics from 1st - 2nd Feb, 2021	International

## Seminars and Conference Participated

Sl. No.	Title of the Paper Presented	Title of Conference / Seminar	Organized by	Whether International / National/State
1	"Change detection of vegetation cover in forest areas of Alipurduar district, West Bengal, using Normalized Difference Vegetation Index technique"	International Conference on Urbanisation and Regional Sustainability	Dept. of Geography, University of Calcutta, 28-30 January, 2016.	International
2	"Change detection of vegetation cover in forest areas of Alipurduar district, W.B. using NDVI technique"	UGC Sponsored National Seminar on Remote Sensing and GIS in Environmental Management	Dept. of Geography & Applied Geography, University of North Bengal. Held on 02-03 February, 2016.	National
3	"Geospatial Changes in Forested Landscape of Himalayan Foothill of Alipurduar District, W.B. : A Sub-Himalayan Dilema"	International Seminar on Environment and Society: Historical Perspectives and Contextual Reality"	Dept. of Geography, University of Burdwan. Held on 28-03 March, 2017.	International
4	"An Account of Climatic Oscillations in Fragile Geomorphological Settings of Himalayan Foothills, India"	9 <sup>th</sup> International Conference on Geomorphology	Indian Institute of Geomorphologists (IGI) at Vigyan Bhawan, New Delhi. 6-11 Nov, 2017.	International
5	" The Changing Climate of Bengal Duars through 100 years' Trends and Oscillation analysis"	2 <sup>nd</sup> Regional Science and Technological congress (Western Region), 16-17 Nov, 2017	the university of Burdwan and Department of Higher Education, Science and Biotechnology (DHESTBT) Govt. of West Bengal, during November 16-17, 2017	Regional
6	"Future Climate of Bengal Duars: A Fragile Geomorphological Set up"	3rd International Seminer on System	Dept. of Geography, The University of	International

		Dynamics, Human-Nature Interaction & Societal Discourse	Burdwan, 18th Nov, 2017	
7	"Changing Climate and Vulnerability Profiles of Forested Landscape in Bengal Duars"	2 <sup>nd</sup> International Workshop on Biodiversity and Climate Change	IIT Kharagpur, from 24 <sup>th</sup> – 27 <sup>th</sup> February, 2018.	International
8	" The Changing Climate of Bengal Duars through 100 years' Trends and Oscillation analysis"	25 <sup>th</sup> West Bengal State Science and Technology Congress, 2018	Department of Higher Education, Science and Biotechnology, Govt. of West Bengal, held on 4 <sup>th</sup> & 5 <sup>th</sup> March, 2018, at the Science City, Kolkata.	State
9	"Evaluating Past and Present Scenario of Forested Landscape in Bengal Duars, India"	The 7 <sup>th</sup> ANGIS International Conference, on GIS-Connecting Geography, History & Economics.... Looking Beyond Where	Dept. of Geography & Dept. of Geospatial Science, University of Burdwan. held on 29 <sup>th</sup> -1 <sup>st</sup> December, 2018	International
10	"Vulnerability Assessment of Forested Landscape to Climate Change in Bengal Duars using Geospatial Technology"	31 <sup>st</sup> IGI Conference and National Seminer on Application of Geospatial Technology in Geomorphology and Environment	Dept. of Geography & Applied Geography, University of North Bengal. held on 12-13 November, 2019.	National
11	“ Forest Villager’s Perception and Adaptation Attitudes to Climate Change in Himalayan Foothills”	4 <sup>th</sup> Regional Science and Technological congress (Western Region),	The University of Burdwan and Department of Higher Education, Science and Biotechnology (DHESTBT) Govt. of West Bengal, during 09-10th December, 2019	Regional
12	“ Perception and Adaptive Capacity of Forest Villagers to	XIV International	Dept. of Geography,	International

	Climate Change in Himalayan Foothills”	Geographical Union (IGU)- India, International Conference on Agriculture, Food, Water, Biodiversity and Health in Changing Climate	University of Burdwan. held on 6-8th March, 2020.	
13	“Forest Dependency and Rural Livelihood: A Strategically Survival of People in Forested Landscape of Bengal Duars”	International Conference on Rural Transformation: from Natural to Cultural	CRDIST, IIT-Kharagpur, 5-6 <sup>th</sup> May, 2021	International

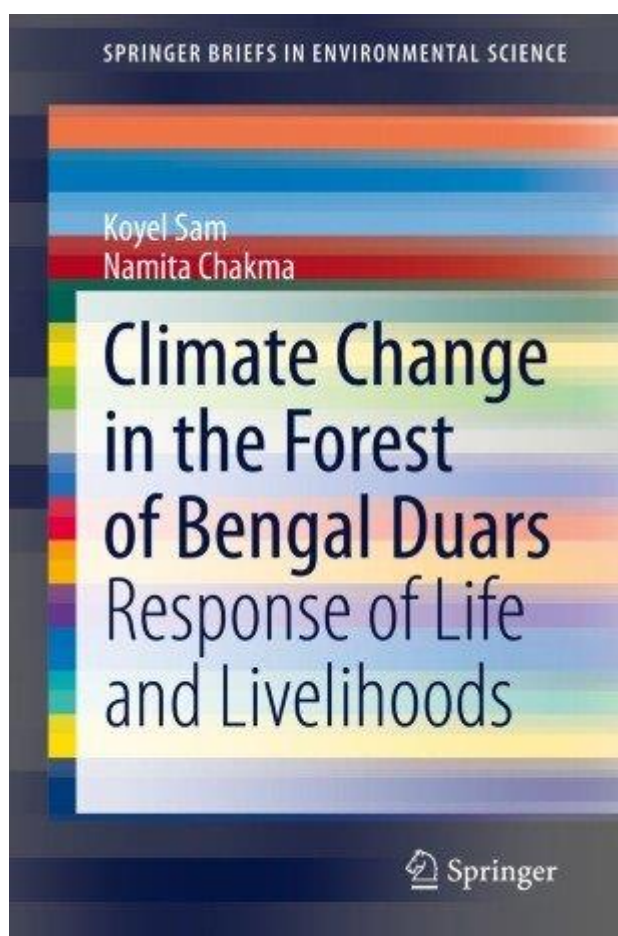
### International and National Publication of Articles in Journal / Book Chapter

Sl. No .	Title of the Book /Chapter/Paper	Name of the Journal/publisher	International/National/State	ISSN/IS BN numbers	Year of Publication	Whether Peer-reviewed/ UGC - Approved / Impact factor, if any.
1	“Changing land use and land cover in fringe area using GIS: A case study of Barddhaman town, West Bengal”	International Journal of Geomatics and Geosciences	International	ISSN:09 76-4380,	2014	Peer reviewed
2	“Analysis of Population Growth Dynamics-Situation and Trend: A Study on Barddhaman Planning Area (BDA), West Bengal, India”	International Journal of Current Research	International	ISSN:09 75-833X.	2014	Peer reviewed
3	“An Inter-Block Level Analysis of Regional Disparity in the Youngest Alipurduar District of West Bengal”	Space and Culture, India,	International	e-ISSN 2052-8396	2016	Peer reviewed, UGC-approved
4	“Spatio-Temporal Change Detection of	Remote sensing and GIS in	State	ISBN 978-81-	2017	

	Vegetation Cover in Forest areas of Alipurduar District, West Bengal, using Normalized Difference Vegetation Index Technique”	Environmental Management, North Bengal University Press,		921692-8-6		
5	“Vulnerability profiles of forested landscape to climate change in Bengal Duars region, India”	Environmental Earth Sciences, Springer	International	ISSN: 1866-6280 (Print) 1866-6299 (Online)	2018	<b>IF (TR): 1.7</b> (Peer reviewed, UGC-approved)
6	“Discourse on Forested Landscape of Bengal Duars, Eastern India”	Rhito Prakashan,	State	ISBN: 978-81-9380 90-8-2	2018	-
7	“An exposition into the changing climate of Bengal Duars through more than 100 years’ trend and climatic oscillations analysis”	Indian Academy of Sciences & Journal of Earth System Science, Springer	International	ISSN: 2347-4327 (Print) 0973-774X (Online)	2019	<b>IF (TR): 0.89</b> , (Peer reviewed, UGC-approved)
8	“Variability and trend detection of temperature and rainfall: A case study of Bengal Duars”	Mausam, India Meteorological Department	International	ISSN: 2529416	2019	<b>IF (TR): 0.467</b> (Peer reviewed, UGC-approved)
9	“Transformation of Forested Landscape in Bengal Duars: A Geospatial Approach”	Spatial Modeling in Forest Resources Management Rural Livelihood and Sustainable Development, Environmental Science and Engineering, Springer,	International	ISBN: 978-3-030 - 56542-8 (e Book)	2020	-
10	“Modeling the effectiveness of natural and anthropogenic disturbances on forest health in Buxa Tiger Reserve, India, using fuzzy logic and AHP approach”	Modeling Earth Systems and Environment, Springer	International	ISSN: 2363-6211	2021	Peer reviewed, UGC - approved



## Published Book



### **Climate Change in the Forest of Bengal Duars - Response of Life and Livelihoods (2021).**

DOI: [10.1007/978-3-030-73866-2](https://doi.org/10.1007/978-3-030-73866-2)

Publisher: Springer, Cham

ISBN: 978-3-030-73865-5

<https://doi.org/10.1007/978-3-030-73866-2>

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## Reviewer of Journals

1. Physical Geography (WOS): Taylor and Francis Group. IF: 1.183.  
<https://www.tandfonline.com/toc/tphy20/current>
2. Human Ecology: Springer Science (WOS). IF: 1.683. <https://www.springer.com/journal/10745/>
3. SN Applied Sciences: Springer Nature. <https://www.springer.com/journal/42452/>
4. Environment, Development and Sustainability (WOS). IF: 2.19.  
<https://www.springer.com/journal/10668/>
5. Acta Geophysica: PAS and Polish Academy of Science; Springer (IF: 1.39)  
<https://www.springer.com/journal/11600>

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## Research Profiles

- [https://www.researchgate.net/profile/Koyel\\_Sam](https://www.researchgate.net/profile/Koyel_Sam)
- <https://publons.com/researcher/2991738/koyel-sam/>
- <https://scholar.google.com/citations?user=Z-vkPOIAAAAJ&hl=en>

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## Declaration

I hereby declare that all statements present in this document are complete and correct to the best of my knowledge and belief.