

Dr. Rajesh Kumar Mall

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Dean & Head

Institute of Environment & Sustainable Development, Banaras Hindu University

Professor and Coordinator

DST-Mahamana Centre of Excellence in Climate Change
Institute of Environment & Sustainable Development
Banaras Hindu University, Varanasi – 221 005, India

Nodal Officer,

Gramin Krishi Mausam Seva (GKMS) & FASAL, BHU, Varanasi –
221 005, India

<https://scholar.google.co.in/citations?user=tdn2viQAAAAJ&hl=en>

ORCID iD

<https://orcid.org/0000-0002-3118-096X>



Date of Birth: 04 October, 1965

Professional Experience

Academic

- i. **Professor**, Institute of Environment & Sustainable Development, Banaras Hindu University, Varanasi (April, 2014 - continue).
- ii. **Associate Professor**, Institute of Environment & Sustainable Development, Banaras Hindu University, Varanasi (April, 2011 to April 2014).
- iii. **Associate Professor**, Hydromet Disaster Div., National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Govt. of India, New Delhi (Feb., 2008 to April, 2011 – On deputation).
- iv. **Assistant Professor**, Department of Geophysics, Banaras Hindu University, Varanasi, (Nov. 2005 to Jan. 2008)
- v. **Scientist B** (Group A, Gazetted, Selected through UPSC), Central Ground Water Board, Ministry of Water Resources, Govt. of India, New Delhi---110 001 (Feb. 2001--- Nov. 2005)
- vi. **Research Scientist**, Division of Environmental Sciences, Indian Agricultural Research Institute, New Delhi (March 1998 – Feb. 2001)
- vii. **Project Scientist**, Centre for Atmospheric Sciences, Indian Institute of Technology, New Delhi, India (Dec. 1996 – March 1998)

Administrative

- i. **Dean**, Institute of Environment & Sustainable Development, Banaras Hindu University, Varanasi (August, 2020 - continue) - *Management of academic and administrative activities of teaching and research at University/ Faculty level*
- ii. **Head**, Department of Environment & Sustainable Development, Banaras Hindu University, Varanasi (August, 2020 - continue) - *Management of academic and administrative activities of teaching and research at Department level*

- iii. **Nodal Officer**, Gramin Krishi Mausam Seva (GKMS) & FASAL at BHU, India Meteorological Department, Ministry of Earth Science in collaboration with State Agricultural Universities /Indian Council of Agricultural Research (July 2020 -Continue) - *Issuing crop and location specific weather based advisories for the benefit of farming community of eastern UP region on every Tuesday and Friday and occurrence of extreme weather.*
- iv. **Member**, State Board for Wild Life, Govt. of Uttar Pradesh, Lucknow, India (July 2019 -Continue) - *Advisor to Govt. of Uttar Pradesh on Protection of wild life, recognition and management of wild life sanctuaries, national parks and protected areas etc.*
- v. **Coordinator**, Environmental Science and Technology, RGSC-Barkachha, Banaras Hindu University, Varanasi (July, 2018 - continue) - *Coordinating M Sc Tech (Environmental Technology) course and leading the researchers/faculty team for improving capacity of doctoral and masters students through technical assistance in collaboration with industries / UN organization*
- vi. **Co-coordinator**, Project Advisory and Management Committee, Climate Change & Health Programme, Department of Science and Technology, New Delhi (July, 2018 - continue) - *Review and monitoring of the overall progress of the Projects undertaken under network programmes by DST-Govt. of India*
- vii. **Coordinator / Principal Investigator**, DST-Mahamana Centre of Excellence in Climate Change Research, Banaras Hindu University, Varanasi (May, 2017 - continue) - *Coordinating the research team to develop infrastructure facilities for climate simulation modeling, to understand climatic impacts and vulnerability assessment of agriculture, water, health, socio-economic sector and to develop proper adaptation and mitigation strategies for government decision makers.*
- viii. **Student Advisor**, Institute of Environment & Sustainable Development, Banaras Hindu University, Varanasi (July, 2016- June 2018 - *Managing the students research/academic/personal problems, placements etc.*
- ix. **Team Leader / International Lead Technical Consultant** for Implementation of Thimphu statement in SAARC countries: Integration of DRR and CCA (A joint project by UNISDR, SAARC-DMC and BHU) - *Prepared policy recommendations for implementation of Thimphu statement on Climate Change in SAARC countries: Integration of DRR and CCA (A joint project by UNISDR, SAARC-DMC and BHU*
- x. **Team Leader /International Lead Technical Consultant**, National Institute of Disaster Management, Govt. of India for Climate Change/ Disaster Risk Management in ICIMOD/SIDA and UNISDR sponsored project in Hindukush Himalaya region (June 2008 – Sept. 2010) - with partner country China, Nepal, Pakistan, Bhutan and India “Prepared country policy dossier and institutional mapping for adaptation to climate change; and Analysis of the impact (or lack of impact) on people’s ability to adapt to climate change in Hindukush Himalaya region”
- xi. **International course coordinator**, National Institute of Disaster Management, Govt. of India: Ecole Polytechnique Fédérale De Lausanne (EPFL), Switzerland and NIDM, Delhi “Certificate of Advanced Studies Course in Disaster Risk Reduction in the context of Climate Change”, at EPFL, Lausanne, SWITZERLAND (1-12 Sept, 2008) and IISC, Bangalore, India (3---14 Nov. 2008).
- xii. **Head**, Hydromet Disaster Div., National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Govt. of India, New Delhi (Feb., 2008 to April, 2011 - On deputation) – *Managing the research and capacity building on Hydro-met disaster management programmes-Drought, Flood, Cyclone and Coastal zone mitigation and management; Policy planning, supervision, training, implementation and coordination at national and international level.*
- xiii. **Hostel Warden**, Bhabha Hostel, Banaras Hindu University, Varanasi, India (July 2006- January 2008) - *Management of Hostel and student activities*
- xiv. **Scientist B** (Group A, Gazetted, Selected through UPSC), Central Ground Water Board, Ministry of Water Resources, Govt. of India, New Delhi---110 001 (Feb. 2001--- Nov. 2005) – *Being in the group of leading scientist and administrators of India Govt. to prepare legislations, laws, terms & conditions, policy on*

the basis of scientific evidences and worked in newly established Central Ground Water Authority for Management, Regulation and Development of Groundwater in India.

Academic Qualification

- i. Ph. D. in Geophysics (Climate Change and its impact) --- 1996, Banaras Hindu University, Varanasi (worked at IIT-Delhi)
- ii. M. Sc. Tech. Geophysics---1991--- FIRST Div., Banaras Hindu University, Varanasi
- iii. B.Sc. Geology (Hons.) --- 1988--- FIRST Div., Banaras Hindu University, Varanasi

Experience:

With about thirty years of professional career, he has gained extensive research, academic, administrative, and managerial experience in the fields of climate change / disaster risk management and related issues, including institutional and legislative systems for climate change and disaster risk reduction; Climate Services; capacity building; sustainable development and poverty alleviation, agro-advisory services for farmers, knowledge management and networking; inter-agency coordination at local, national and international level etc. He made good contribution towards policy and plan formulation for Climate change/ Disaster Risk management/environmental management at state, national and international levels and remarkable achievements and contributions in research and documentation in climate services and information technology. His robust model based on social, economic and environmental vulnerability of India and the region, which found applicable to regional and sub regional planning (UNDRR, SAARC-Disaster Management Centre, UNDP, World Bank, IMD, CGWB etc) where Prof Mall contributed as the policy adviser and consultant.

Apart from teaching and training to masters/doctoral students in university/institute, he has wide contribution in knowledge networking using Information Technology. He has been deeply associated in developing / upgrading interactive portals/ knowledge hubs to share/ disseminate Climate Change, environmental management, Agro-advisory services, Garmin Krishi Mausam Seva and DRR information for India and SAARC Countries.

Distinctions / Recognitions/ Awards/ Honor's

- Establishes the “***DST---Mahamana Centre of Excellence in Climate Change Research***” in Banaras Hindu University under Prime Minister’s National Action Plan on Climate Change (~ Rs 10 Crore Funding by DST, Delhi). This is First “***Centre of Excellence in Climate Change***” in any Indian Universities and first “Centre of Excellence” in Banaras Hindu University.
- ***Member, State Board for Wildlife***, Lucknow, Govt. of Uttar Pradesh, India.
- Invited to attend “The World Urban Database and Access Port Tools (WUDAPT) workshop” at the Chinese University of **Hong Kong**, 8-10 Dec, 2018.
- Invited to participate in “10th International Conference on “Urban Climate/ 14th Symposium on the Urban Environment”, **New York**, U.S.A, 6-10 Aug., 2018 (***Funding by Purdue University***).
- Invited as Senior Associate to ICTP---Italy and delivered a talk on “Climate Change and Impacts” during 10---17 Sept. 2018, Trieste, **ICTP---Italy** (***Funding by ICTP***).
- Invited by the Centre For Science & Technology of The **Non---Aligned & Other Developing Countries (NAM S&T Centre)** to deliver lecture in “International Workshop on Mitigation of Disasters due to Severe Climate Events: From Policy To Practice”, Colombo, **SRI LANKA**, 10–13 March 16. (***Funding by NAM S&T Centre***).

- Invited by Australian National University, Canberra, **AUSTRALIA** to deliver lecture on “Climate change & Water resource management” during 20---27 February 2015 (**Full funding by UN**).
- Invited by George Mason University, Fairfax, **USA** to deliver lectures on “Climate change & Food Security in South Asia” during 20---25 October 2014 (**Funding by UN and SAARC**).
- **Consultant** (Climate Change) for UNDP to prepare “*Course module on mitigation and management of hydro---meteorological disasters in Himanchal Pradesh*”.
- Invited as Senior Associate to visit ICTP, Trieste, **ITALY** for collaboration and climate modeling study during 1 June – 30 June 2014 (**Funding by ICTP**).
- **Consultant** (Climate Change) for SAARC Disaster Management Centre, New Delhi and Expert for SAARC countries.
- **Consultant** to **UN-ISDR-Geneva** for Climate Change Adaptation and Disaster Risk Reduction issues).
- Prepared a policy document for *SAARC countries on “Integration of Disaster Risk Reduction and Climate Change Adaptation in SAARC countries (Implementation of Thimphu Statement on Climate Change, UNISDR/SAARC---DMC / BHU”*
- Invited as SAARC countries expert to participate in **4th Global Platform on Disaster Risk Reduction**, 19--23 May 2013, Geneva, **SWITZERLAND**; also presented the draft outcome of the Project funded by UN---ISDR and SAARC on Climate Change and Disaster Risk Reduction in SAARC countries (**Funding by UNISDR**).
- Invited by World Climate Research Programme (WCRP), European Commission (EC) and IPCC in “International conference on regional climate – CODEX 2013”, Brussels, **BELGIUM**, 4---7 November 2013 (**Funding by WCRP & IPCC**).
- **SENIOR ASSOCIATE AWARD** in **2012** (2012---2017) from **ICTP---ITALY (A UNESCO and IAEA---Austria organization)**
- Invited as SAARC countries expert in “Workshop on Climate Change and Water Resources Management for Drought prone areas of South Asia” 15---20 Nov. 2012, at Afghanistan National Disaster Management Authority, Kabul, **AFGHANISTAN (Funding by SAARC/ANDMA)**.
- Invited as SAARC countries expert to participate in **5th Asian Ministerial Conference on Disaster Risk Reduction** (5th AMCDRR), 21---25 Oct. 2012, Yogyakarta, **INDONESIA (Funding by UNISDR)**.
- Expert Reviewer of the first---order draft (FOD) chapters of the Working Group II **IPCC Fifth Assessment Report (WGII AR5)-2012**.
- **CAS---TWAS Scholar Fellow Award---2006** (A Chinese Academy of Sciences & the Academy of Sciences for the Developing World Award)
- **REGULAR ASSOCIATE AWARD** IN 2004 (2004---2011) FROM **ICTP---ITALY (A UNESCO AND IAEA ORGANIZATION)**
- Faculty in **World Bank** Institute---NIDM online course on “Climate Change & DRR”, Sept. 17---Oct. 12, 2012.
- Visited as Regular Associate, **ICTP---Trieste, ITALY** during 15 May – 3 July 2011 (**Funding by ICTP**).
- Course Director in **World Bank** Institute---NIDM online course on “Climate Change & Disasters”, June 14---Jul 11 2010.
- Invited as **guest Lecturer** in “Joint ICTP---IAEA Workshop on Vulnerability of Energy Systems to Climate change and Extreme Events” Organized by IAEA---Vienna--- **AUSTRIA & ICTP---Trieste---ITALY**, 19 --- 23 April 2010 (**Funding by ICTP**).
- Faculty in **World Bank** Institute-NIDM online course on “Climate Change & Water Resources”, March 01---28. 2010.
- Course Director World Bank Institute---NIDM online course on “Climate Change & Disasters”, Sept. 14 --- Oct. 11, 2009.

- *Invited as expert* in Write shop on "Assessing Local Adaptation Strategies to Climate Induced Water Stress and Hazards in the Greater Himalayan Region", 2---8 August 2009, Kathmandu, **NEPAL (Funding by ICIMOD)**.
- Faculty in World Bank Inst.---NIDM online course on "Comprehen. Disaster Manage. Framework" April--May, 2009.
- Invited as **lead speaker** in Workshop on "Assessing Local Adaptation Strategies to Climate Induced Water Stress and Hazards in the Greater Himalayan Region", 2---6 March 2009, Kathmandu, **NEPAL (Funding by ICIMOD)**.
- International course coordinator: Ecole Polytechnique Fédérale De Lausanne (EPFL), **Switzerland** and NIDM, Delhi "*Certificate of Advanced Studies Course in Disaster Risk Reduction, Vulnerabilities and Capacities in the context of Climate Change*", at EPFL, Lausanne, **SWITZERLAND** (1---12 Sept, 2008) and partly in **IISC, Bangalore, India** (3---14 Nov. 2008).
- *Invited as lead speaker* Consultation Workshop on GLOF and Flash Flood Risk Assessment in the Hindu Kush---Himalayas" 30 July to 1 August 2008, Kathmandu, **NEPAL (Funding by ICIMOD)**.
- *Visited as Regular Associate*, **ICTP**, Trieste, ITALY from 11 May – 30 June 2008 (**Funding by ICTP**).
- Visiting Scientist, ICTP, Trieste--- **ITALY** Feb. 15 – March 30, 2007, 2008 (**Funding by ICTP**).
- Visited as Regular Associate, ICTP, Trieste, **ITALY** from 15 March – 8 July 2006 (**Funding by ICTP**).
- "GEWEX 2005", Costa Mesa, Los Angeles, **USA** from 20---24 June, 2005 (Invited and **funded by WCRP, World Meteorological Organization**).
- Visiting Scientist at Michigan State University, **USA** during June---July, 2004.
- "CLIVAR Science Conference 2004", Baltimore, **USA** from 21---25 June, 2004 (Invited and **funded by WCRP, World Meteorological Organization**).
- Visiting Scientist, ICTP, Trieste--- **ITALY**, Feb. 02 – May 30, 2004 (**Funding by ICTP**).
- Invited to attend "International Seminar on Development and Application of Isotope Tracer Diagnostics in Regional Climate Models", ICTP, Trieste, **ITALY** from 22---26 September 2003 (**Funding by UNESCO**).
- Invited to attend "International Conference on Monsoon Environments: Agricultural and Hydrological Impacts of Seasonal Variability and Climate Change", at ICTP, Trieste, **ITALY** from 24---28 March, 2003(**Funding by UNESCO**).
- Invited to attend "Climate Change: Thresholds and Response Functions" Potsdam Institute of Climate Impact Research, Potsdam, **GERMANY**, January 23---24, 1997.
- Member of "Expert Research Committee on climate change" Central Ground Water Board, MoWR, New Delhi.
- U P Ekikrit / State Scholarship / CSIR fellowship

TOTAL NUMBER OF Referred PUBLICATIONS: 140

	International	National	Total	Total Citation: More than 2150
Referred Journals	61	36	97	
Book and Book Chapters	12	5	17	
Conference Proceedings	19	6	26	

RESEARCH PROJECTS: 15

Funding Agencies: UNISDR, UNDP, ICIMOD, DST, MoES, CGWB, IMD, SAARC Disaster Management Centre, MoWR	Extra-Mural Research Funding Generated > Rs 180 Million (Rs 18 Crores)
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<p>FOREIGN VISITS: Germany (1997, 2003), USA (2004, 2005, 2014, 2018), Japan (2005), Thailand (2005, 2016), Italy (2003, 2004, 2006, 2008, 2010, 2011, 2014, 2017), Austria (2006, 2014), Switzerland (2008, 2013, 2014), Bangladesh (2009), Nepal (2008, 2009, 2010), Indonesia (2012), Afghanistan (2012), Belgium (2013), France (2014), Australia (2015), Sri Lanka (2016), Hongkong (2018), France (2014), China (2007)</p>	<p>COLLABORATIONS: ICTP-Italy, ANU-Australia, Purdue University-USA, University of Florida-USA, IMD, CGWB, IITM, SAC, IARI, NCMRWF, NIDM, NDMA, CRIDA etc</p>
<p>CONFERENCES/TRAINING PROGRAMME: 53 (36 abroad + 22 in India)</p>	<p>RESEARCH SUPERVISION: Ph D.: 8 M Sc Tech: 15 M Phil: 6 M Sc : 14</p>
<p>UNIVERSITY CORPORATE RESPONSIBILITIES: Member of University/ Institute/ Faculty Policy Planning, Department Research, Academic Council, Centres, University Ragging Committee, Convocations, Hostel Warden, Student Advisor</p>	<p>CONFERENCE/ WORKSHOP/ CONTINUING EDUCATION/ TRAINING ORGANIZED: 48</p>

Institute/Organization building experience

- Establishes the “**DST---Mahamana Centre of Excellence in Climate Change Research**” in Banaras Hindu University under Prime Minister’s National Action Plan on Climate Change. This is First “**Centre of Excellence in Climate Change**” in any Indian Universities and first “Centre of Excellence” in Banaras Hindu University (Since April 2017).
- Worked in **Institute of Environment and Sustainable Development (IESD)**, BHU since inception of this Institute in 2011.
- Worked in **National Institute of Disaster Management (NIDM)**, Ministry of Home Affairs during Feb 2008---April 2011. NIDM formed in late 2006 for Disaster Risk Management in India.
- Worked in **Central Ground Water Authority (CGWA)** during Sept. 2001 – November 2005. CGWA formed in Central Ground Water board, Ministry of Water Resources, New Delhi, during 2000 to regulate and manage ground water in India.
- Worked in **Centre for Application of System Simulation** in Agriculture, Division of Environmental sciences, IARI---New Delhi during March 1998---Feb. 2001. Centre formed in 1998 for training and research in Crop weather modeling and Climate change.

Other Skills

- Twenty eight years research & teaching experience in Agro meteorology, Hydrometeorology, Groundwater Modeling, Crop---weather modeling, Climate variability and climate change impact on agriculture by coupling GIS and crop models; Climate Change impact, vulnerability, resilience and adaptation studies; Water Resource climate risk Management; Food Security etc.
- Teaching to Doctoral/post---graduate/graduate students at University level on Disaster /Climate Change, Climate Risk Management, Climate Change & its impact on water & agriculture, GIS

- applications, Early Warning System, Communication, Information technology, Sustainable Water Resources Management, Food security, Environmental policy and issues
- iii. Well versed with Computer Applications namely Linex/Unix, MS Word, Excel, Power Point, Programming, data analysis and standard PC communication tools--- Skype, mail, mail merge, Google talk, yahoo messenger, WhatsApp
 - iv. Course coordinator / Course Director / Training instructor / Faculty in Number of capacity building /short---term training courses in India and abroad related to Disaster / Climate Change, Climate Risk Management, Climate Change & its impact on water & agriculture, GIS applications, Early Warning System, Communication, Information technology, Sustainable Water Resources Management, Food security, Forestry & Environmental issues, vulnerability, resilience and adaptation studies; Drought, Flood, Cyclone and Coastal zone mitigation and management and Administrative management.
 - v. Writing reports/ documents/ course materials for policy makers/decision makers/ university faculty/ students --- Prepared a policy document for SAARC countries on *“Integration of Disaster Risk Reduction and Climate Change Adaptation in SAARC countries (Implementation of Thimphu Statement on Climate Change, UNISDR/SAARC---DMC / BHU”*
 - vi. Worked/working with the public, policy makers and with an interdisciplinary team of researchers.
 - vii. Applications of crop simulation models for crop & water management, soil---water estimation, yield prediction and yield forecasting.
 - viii. Regional Climate models (RCMs), Crop models DSSAT shell (CERES---rice, CERES--- wheat, CERES---Maize, CROPGRO---soybean, SUBSTOR---potato and CANEGRO--- sugarcane), ORYZA1, ORYZA1N, ORYZA_W, WTGROWS, SPAW and MACROS used/using for climate change / disaster risk management studies in different agro--- environments of India.
 - ix. Methodology developed to combine climatologically data with climate, crop and water resource model to assess early warning/ yield predictions before rice, wheat, sugarcane and soybean crop harvesting for policy makers/decision makers.
 - x. Developed Crop Growth Monitoring System (CGMS) by coupling soil, weather and crop data, crop model and GIS for early warning and development of adaptation strategies.
 - xi. Planning and organizing workshops, seminars and training of Scientists/Faculty of State Universities / Institutions on Disaster Risk Management, crop simulation techniques; Groundwater Management ; Flood/Drought Management and climate change impact and adaptation studies.
 - xii. Impact of climatic variability and climate change on natural resources of India. Determine vulnerability of regional water resources to climate change and identification of Key risk and prioritizing adaptation responses.
 - xiii. Planning, coordination and monitoring of « progress of water conservation and management, Artificial Recharge schemes » and organization of training courses, workshops on "Rain Water Harvesting including Roof Top Rain Water Harvesting" and Mass Awareness Programs.

Ph. D Supervision

- **Dr R. K. Srivastava (Indian Admin. Service)** on “Catastrophe of Climate Change and Urbanization in South Asia”
- **Dr (Ms.) Geetika Sonkar** on “Modelling the influence of atmospheric aerosol on crop production over Indo---Gangetic Basin”.
- **Dr (Ms) Neha Singh** on “Simulating the impact of climate change on wheat crop”

- **Dr Manvendra Singh** on “Climate change impact on wheat crop in NEPZ region”
- **Ms. Diva Bhatt** on “Climate change impact on water resources in Gomti river basin: Developing Adaptation Strategies”.
- **Ms. Nidhi Singh** on “Impact of Climate variability and change on Human Health in Eastern Uttar Pradesh”
- **A. K. Baxla (Sr. Scientist, IMD-New Delhi)** on “Study on Influence of aberrant variations in meteorological parameters on wheat using crop simulation model”
- **Ms. Priyanka Singh** on “Sub-district level Decision Support System using Medium Range Weather Forecast and Geospatial Technology for Agriculture Risk Management”
- **Mr. Rohit K Jaiswal** on “Multimodel approach to assess the crop yield response under changing climate”
- **Mr. Pawan K Chaubey** on “Extreme precipitation events over River Basins of India.
- **Ms. Saumya Singh** on “Impact of climate change on extreme weather events over India”
- **Ms. Pyagya Mehrishi** on “Assessment of community vulnerability and resilience to climate change”
- **Ms. Shubhi Patel** on “Impact of climate change on crop production and adaptation strategies in India”

Teaching

- M. Sc Tech Geophysics
- M. Sc. & M Tech Meteorology
- M. Sc. Disaster Management
- M. Sc. Environmental Science
- M. Sc. Hydrogeology
- M. Sc. Agro meteorology
- M.Phil. and M Sc Environment and Sustainable Development
- M Sc Tech Environmental Science & Technology

International & National Projects carried out / ongoing

1. **Principal Investigator/Coordinator: Funding by DST-India, Mahamana Centre of Excellence in Climate Change Research, ~ Rs. 10 Crores (Since May 2017).**
2. **Principal Investigator (BHU part): Funding by National Water Mission, Ministry of water Resources, Impacts of climate change on water resources of the Ganga Basin (Rs 359 lakhs, BHU part ~ Rs 64 Lakhs) in the consortium of IIT-Delhi, IIT-Chennai, Anna Univ.-Chennai and BHU)– (Since March 2018-Continue).**
3. **Nodal Officer / Principal Investigator: Funding by IMD-New Delh/ MoES/Min. of Agriculturei Gramin Krishi Mausam Seva (GKMS) “Integrated Agro meteorological Advisory Services for the Farmers of east Vindhyan Agro-climatic zone of U.P.”- long term (July 2020- Continue).**
4. **Principal Investigator: Funding by IMD- New Delhi/ Min. of Agriculture, “Yield forecasting for different crops in Eastern Indo-Gangetic Plain of Uttar Pradesh under FASAL.”, in collaboration with Department of Geophysics, Banaras Hindu University, Varanasi. Annual- long term (July 2020-Continue)**

5. **Consultant/ PI: funding by UN-ISDR-Geneva and SAARC Disaster Management Centre-New Delhi**, “Operationalizing the Thimphu Statement on Climate Change: Action, Planning for DRR-CCA integration in South Asia ”, US \$ 1,25,000, **(April 2013-March 2016)**
6. **Principal Investigator: Funding by CGWB, Min. of Water Resources**, Impact of Climate change on groundwater resource in Sai- Gomti Interflue, Central Ganga Plain, Uttar Pradesh, India”, Rs 46.60 Lakhs, (April 2016 -Sanctioned-Returned)
7. **Principal Investigator: Funding by DST-India**, Impact and Vulnerability of Agriculture in Different Agro-climatic Regions of Uttar Pradesh to Climate Variability and Changes: A Pilot Study using Simulation Models, Rs 33. Lacs, **(April 2013-Jan. 2017)**
8. **Consultant/ PI: Funding by SAARC Disaster Management Centre-New Delhi** funded “Development of a Compendium on Lessons learnt and best practices of Climate Change Adaptability (CCA) in SAARC countries”, US \$ 10,000, **(Sept. 2012-March 2015)**
9. **Co-Principal Investigator: Funding by UGC-India**, Ambient air quality assessment for chemical characterization and source apportionment of suspended particulate matter, Rs 11 lakh **(Sept. 2012-March 2015)**
10. **Co-Principal Investigator: Funding by DST-New Delhi**, Simulation of Different Epochs of Indian Summer Monsoon using Regional Climate Model Rs 24.30 Lakhs, **(July 2012-March 2016)**
11. **Principal Investigator: Funding by ICIMOD-Nepal**, international project with partner country China, Nepal, Pakistan, Bhutan and India “*Preparation of a country policy dossier and institutional mapping for adaptation to climate change; and Analysis of the impact (or lack of impact) on people’s ability to adapt to climate change*” at **National Institute of Disaster Management, Ministry of Home Affairs**, New Delhi. ~ \$ 45,000/ **(Jan. 2009 – March 2010)**.
12. **Co-Principal Investigator: Funding by IMD-New Delhi** “*Integrated Agro meteorological Advisory Services for the Farmers of east Vindhyan Agro-climatic zone of U.P.*”, at Department of Geophysics, **Banaras Hindu University**, Varanasi.~ more than Rs 5 Lakhs Annual- **long term (Since June 2008-July 2020)**.
13. **Co-Principal Investigator: Funding by IMD- New Delhi** , “*Yield forecasting for different crops in Eastern Indo-Gangetic Plain of Uttar Pradesh under FASAL.*”, in collaboration with **Department of Geophysics, Banaras Hindu University**, Varanasi. ~ more than Rs 5 Lakhs Annual- **long term (Since October 2010-July 2020)**
14. **Principal Investigator: Funding by DST-New Delhi**, “*Study on climatic impacts on sugarcane growth and yield in eastern Uttar Pradesh region*”, at Department of Geophysics, **Banaras Hindu University**, Varanasi. ~ Rs 9.9 Lakhs **(June 2006 – June 2011)**
15. **Co-Principal Investigator: Funding by DST-New Delhi**, “*GPS based TEC measurements and ionospheric perturbations associated with Earthquake*”, at Department of Physics, **Banaras Hindu University**, Varanasi. ~ Rs 27 Lakhs **(June 2007 – June 2011)**
16. **Co-Principal Investigator: Funding by DST-New Delhi**, “*Running and Maintenance cost of GPS Measurements at the Rajiv Gandhi South campus, Banaras Hindu University, Barkachha*”, at Department of Physics, **Banaras Hindu University**, Varanasi. ~ Rs 14 Lakhs **(Feb. 2007 – June 2012)**
17. **Project Coordinator: Funding by CGWB, Ministry of Water Resource**, “*Climate change and water resources in India*”, Central Ground Water Board, Ministry of Water Resources **(Jan. 2003 to December 2004)**.

Professional/Organizational Abilities:

- **Convener**, 2nd National workshop on Techniques in Hyperspectral Data Analysis and Processing, 27-31st Jan, 2020, Institute of Environment & Sustainable Development, Banaras Hindu University, Varanasi

- **Director**, ICTP-Workshop on Climate Impacts on Health in Asia (SMR-2838), 5-16 Dec. 2016, New Delhi, India (Other organizers: S.K. Dash, IITD, New Delhi, Adrian Tompkins, ICTP-Italy, Fabien Solmon, ICTP-Italy) – *Sponsored by ICTP-Italy and DST-India*
- **Course Coordinator**: 8th Refresher Course in Environmental Studies (Interdisciplinary), UGC-ASC, BHU, Dec. 8-28, 2015.
- **Course Coordinator**: 7th Refresher Course in Environmental Studies (Interdisciplinary), UGC-ASC, BHU, Oct. 8-28, 2014.
- **Organizing Secretary** National Workshop on “Climate Change and Simulation Modeling: Issues and Challenges”, 21 April 2014 at BHU, Varanasi
- **Organizing Secretary** “SAARC consultation workshop on Integration of Disaster Risk Reduction and Climate Change Adaptation in South Asia, UNISDR-SAARC Disaster Management Centre-BHU, Aug 29-31, 2013.
- **Course Coordinator**: 5th Refresher Course in Environmental Studies (interdisciplinary), UGC-Academic Staff College, BHU, Aug 14-Sept 3, 2012
- **Training Coordinator**: National Training Workshop on Crop growth simulation Modeling, 25-30 June, 2012 at BHU, Varanasi; sponsored by IMD-New Delhi
- **Joint Organizing Secretary**: National Seminar on Environmental Concerns and Sustainable Development: Issues and Challenges for BHU, India, 2-4 March, 2012
- **Organizing Secretary**: Annual Review Meeting on FASAL, 1-2 March, 2012 at BHU, Varanasi; sponsored by IMD-New Delhi
- **Coordinator/ Facilitator**: “Climate Change and Disasters”, 2nd India Disaster Management Congress (IDMC), 2-4 November 2009, Vigyan Bhawan, New Delhi.

Short-term / Continuing Education Specialists Courses (as Course Director / Faculty Member)

- Invited Lectures in Capacity Building/Training programmes/workshops etc. on Climate Change, Climate Change Adaptation, Disaster Risk Reduction, Climate Risk Management, Water Resources, Food Security etc by different UN organizations, Government departments, NGOs, International Organizations, WMO, European Commission in India and abroad.
- Invited lectures in Academic Staff Colleges of several Universities of India during last five years for faculty capacity building on Climate Change, Climate Change Adaptation, Disaster Risk Reduction, Climate Risk Management, Water Resources and Food Security.
- National Workshop on “Urban Climate Network” held at Interdisciplinary Centre for Water Research, Indian Institute of Science, Bengaluru, 2-3 Aug, 2019
- The World Urban Database and Access Port Tools (WUDAPT) workshop at the Chinese University of Hong Kong, 8-10 Dec, 2018.
- National workshop on “Urban climate resilience: the context of river basins: Urban-Peri-urban-Ecosystems, Inclusive Governance and Partnerships”, Patna, Bihar. 27-28 Nov, 2018.
- 10th International Conference on “Urban Climate/ 14th Symposium on the Urban Environment”, New York, U.S.A, 6-10 Aug., 2018.
- Training Course on “Drought Mitigation & Management”, NIDM, New Delhi, 21-28 May 2018

- INTROMET-2017 (International Tropical Meteorology Symposium on Advancements in Space based Earth Observations and Services for Weather and Climate), 7-10 Nov. 2017, SAC- Ahmedabad.
- National Workshop on “Urban Climate: Science, impacts and Adaptation”, during 21-22 September 2017, IIT Bhubaneswar.
- 7th Asian Ministerial Conference on Disaster Risk Reduction (7th AMCDRR), New Delhi, 3-5 Nov. 2016
- National Workshop on “Climate Change and Health”, July 24-25, 2016 at IIT-Delhi
- National Workshop on “Climate Modelling”, July 19-20, 2016 at IIT-Delhi, New Delhi.
- International Workshop on Mitigation of Disasters due to Severe Climate Events: From Policy To Practice”, Colombo, SRI LANKA, 10-13 March 2016.
- International Symposium on “Weather and Climate Extremes, Food Security and Biodiversity” George Mason University, USA, 20 to 24 October 2014.
- International Conference on “Prediction of Weather and Climate Systems Seamlessly (PROWESS), 17-19 February 2014, National Centre for Medium Range Weather Forecasting (NCMRWF), Ministry of Earth Sciences, NOIDA.
- 2nd CLIM-RUN School “Building two-way communication: A week of Climate Services, Dec. 02-Dec 06, 2013, at Trieste, ICTP, ITALY
- International conference on regional climate – CODEX 2013, Brussels, BELGIUM, 4-7 November 2013, Organized by World Climate Research Programme (WCRP), European Commission (EC) and Inter governmental Panel on Climate Change (IPCC).
- SAARC consultation workshop on Integration of Disaster Risk Reduction and Climate Change Adaptation in South Asia, UNISDR-SAARC Disaster Management Centre-BHU, Aug 29-31, 2013, BHU-Varanasi, India.
- 4th Global Platform on Disaster Risk Reduction (GPDRR-13), 19-23 May 2013, Geneva, SWITZERLAND;
- National Training Workshop on Crop growth simulation Modeling, 25-30 June, 2012 at BHU, Varanasi; sponsored by IMD-New Delhi
- National Training Workshop on Crop growth simulation Modeling, 11-15 July 2011 at IMD, New Delhi
- Training workshop for Scientists/Technologists on “Climate Change and Carbon Mitigation (CCCM)” during 06-10 September 2010 and 4-8 October 2010 at Indian Council of Forestry Research and Education (ICFRE)-Dehradun.
- Training Workshops / SERC school in CGWB, IIT-Delhi, IIT-Madras, IIT-Kanpur and SIRDs / ATIs on Climate change, Hydrology, Soil-Plant-Atmosphere-Water studies, Drought / Floods, Crop-Weather and water balance studies.
- Training Workshops organized by India Meteorological Department on Use of ‘Crop Simulation Model to develop application tools for decision making in Agro-Advisory’ and “Development of Extended Range Forecasting System (ERFS) and Its Application in Agriculture Risk Management’.
- Training Course on “Climate Change & Disasters”, NIDM, New Delhi, April 2010.
- Training Course on “Climate Change & Disaster Management”, SIRD-Hyderabad, Feb. 2010.
- Training Course on “Mitigation & Management of Hydromet Disasters”, ATI-Mizoram, Aizwal, Nov-Dec 2009.
- Training Course on “Climate Change & Disaster Management”, NIDM, New Delhi, November 2009.
- Training of Trainer Course on “Climate Change & Disaster Management”, SPIPA, Gujarat, October 2009.

- Training of Trainer Course on “Climate Change & Disaster Management”, SKIPA, Ranchi, Jharkhand, July 2009.
- Training Course on “Flood Mitigation and Management”, UPAAM, Lucknow, U.P., June 2009.
- Training Course on “Drought Mitigation & Management”, NIDM, New Delhi, June 2008.
- Training Course on “Climate Change & Disaster Management”, NIDM, New Delhi, June 2009.
- Training Course on “Climate Change & Disaster Management”, NIDM, New Delhi, March 2009.
- Training Course on “Coastal Zone Management”, NIDM, New Delhi, Feb. 2009.
- International Summer School on “Hydrological Drought and Global Change”, ICTP, Trieste, ITALY, June 22-27, 2008.
- Training Course on “Climate Change & Disaster Management”, NIDM, New Delhi, April 2008.
- Training Course on “Drought Mitigation & Management”, NIDM, New Delhi, March 2008.
- Training Course on ‘Dynamic Crop Simulation Model based Decision Support System and its use in Agro-met Advisory Service’ at National Centre for Medium Range Weather Forecasting, Noida, November, 2005
- Training Course on ‘Hydro geological Investigations, Development and Management of Ground Water Resources – Techniques, Equipments and Practices’ at CGWB, Faridabad, August, 2005
- Training course on ‘CROP GROWTH MODELLING’, Indian Agricultural Research Institute, New Delhi, Jan., 2000.
- International Training Course on CO2 Enrichment Research And Technology" at Indian Agric.l Research Institute, New Delhi, July1999
- Training course on ‘Rice and Wheat growth models (CERES-rice, WTGROWS and ORYZA)’, Indian Agricultural Research Institute, New Delhi, Dec. 1998.
- International training course ‘POTATO GROWTH MODEL development’ at Central Potato Research Institute, Shimla, July1998.

Member of Professional Societies /Institution

- i. Life member of European Geophysical Union
- ii. International Consortium for Agricultural Systems Applications, USA
- iii. Council Member of Indian Meteorological Society,
- iv. Indian Society of Agro meteorologist
- v. International Centre for Theoretical Physics, Italy (UNESCO & IAEA org.)
- vi. Life Member and treasurer Mahamana Malviya Mission, New Delhi
- vii. Treasurer of Mahamana Malviya Mission, Delhi (2003-2005).
- viii. Executive member of Indian Geophysical Union
- ix. Life member of American Geophysical Union
- x. Member of American Meteorological Society

International Activities

- Convener of the European Geophysical Union (EGU), 2019, Session: Impact of Climate Change on Agriculture (CL4.27/BG2.37), 7-12 April, Vienna, Austria.
- Consultant to UNDP-Delhi for Hydro meteorological Disasters
- Consultant (Climate Change) for SAARC Disaster Management Centre, New Delhi and Expert for SAARC countries

- Consultant (**UN-ISDR** for Climate Change Adaptation and Disaster Risk Reduction issues)
- Expert Reviewer of the first-order draft (FOD) chapters of the Working Group II **IPCC Fifth Assessment Report (WGII AR5)-2012**.
- Reviewer of **Climatic Change** (Springer publ.) journal, **Agricultural and Forest Meteorology** (Elsevier), **Global Environmental Change** (Elsevier); **Journal of Hydrology**, **Bhujal News (CGWB)**, **Jalvigyan Sameeksha** (Min of Water Res.), **Journal of Agrometeorology**, and **Mausam** etc..
- Project reviewer of **APN project proposals**.
- **Faculty** in World Bank Institute-NIDM online course on “Climate Change & DRR”, Sept. 17-Oct. 12, 2012.
- **Course Director** in World Bank Institute-NIDM online course on “Climate Change & Disasters”, June 14-Jul 11 2010.
- **Faculty** in World Bank Institute-NIDM online course on “Climate Change & Disasters”, March 01-28. 2010.
- **Course Director** World Bank Institute-NIDM online course on “Climate Change & Disasters”, Sept.14-Oct.11, 2009.
- **Faculty** in World Bank Institute-NIDM online course on “Comprehensive Disaster Management Framework” April-May , 2009,

INTERNATIONAL COURSE COORDINATOR

- Ecole Polytechnique Fédérale De Lausanne (EPFL), Switzerland and NIDM, Delhi “**Certificate of Advanced Studies Course in Disaster Risk Reduction, Vulnerabilities and Capacities in the context of Climate Change**”, at EPFL, Lausanne, Switzerland (1-12 September, 2008) and partly in IISC, Bangalore, India (3-14 November).

National Activities

- Executive Member of Indian Geophysical Union, India.
- Member of Committee on Climate Change, M S Swaminathan Foundation, Chennai
- Member of “Expert Research Committee on climate change” Central Ground Water Board, Ministry of Water Resources, New Delhi (October 2009 onwards).
- Board of Studies member of Deptt of Environmental Sc., Central University, Ranchi; IESD, Banaras Hindu University; Central University, Patna
- “University Representative” of B. B.S. Purvanchal University to conduct CPMT-2007 at State level.
- “University observer” for BHU internal and entrance examinations.
- ‘Student Advisor’ of the Institute, IESD, BHU
- Member of Policy and Planning Committee (PPC), IESD-BHU.
- Member of Departmental Research Committee (DRC), IESD and Geophysics Department, BHU.
- Member of “Admission Committee”, IESD-BHU and Faculty of Science, BHU.
- Member of “Medal and Prize Committee of University Convocation” in March 2006 and April 2007.
- Member of “Research and Development Committee” of Central Ground Water Authority, New Delhi (2001-2005).
- Member of “Regulation of Ground Water Committee of Central Ground Water Authority”, New Delhi (2001-2005).

PUBLICATIONS

Referred International / National journals

1. Singh, S., **Mall, R. K.**, Dadich, J., Verma, S., Singh, J. V., & Gupta, A. (2021). Evaluation of CORDEX-South Asia regional climate models for heat wave simulations over India. **Atmospheric Research**, 248, 105228. <https://doi.org/10.1016/j.atmosres.2020.105228> [IF: 4.676]
2. Singh, S., **Mall, R. K.**, & Singh, N. (2020) Changing Spatio-Temporal Trends of Heat Wave and Severe Heat Wave Events over India: An emerging health hazard. *International Journal of Climatology*. <https://doi.org/10.1002/joc.6814> [IF: 3.928]
3. Singh H, N Singh, **R K Mall (2020)**. Japanese Encephalitis and Associated Environmental Risk Factors in Eastern Uttar Pradesh: A time series analysis from 2001 to 2016. **Acta Tropica**, Volume 212, 105701, <https://doi.org/10.1016/j.actatropica.2020.105701> [IF: 2.626]
4. Chaubey, P.K., Srivastava, P.K., Gupta, A. **Mall R K (2020)** Integrated assessment of extreme events and hydrological responses of Indo-Nepal Gandak River Basin. **Environ Dev Sustain**. <https://doi.org/10.1007/s10668-020-00986-6> [IF: 2.191]
5. Bhatla, R., Sarkar, D., Verma, S., **Mall R K (2020)** Regional climate model performance and application of bias corrections in simulating summer monsoon maximum temperature for agro-climatic zones in India. **Theor Appl Climatol** 142, 1595–1612 (2020). <https://doi.org/10.1007/s00704-020-03393-z> [IF: 2.882]
6. Varsha Pandey, P K Srivastava, **R.K. Mall**, F. M. Arriola & D Han (2020). Multi-Satellite Precipitation Products for Meteorological Drought Assessment and Forecasting in Bundelkhand region of Central India, **Geocarto International**, <https://doi.org/10.1080/10106049.2020.1801862> [IF: 3.789]
7. Vinjamuri, K.S., Mhawish, A., Banerjee, T., Sorek-Hamer, M., Broday, D.M., **Mall, R.K.**, Latif, M.T. (2020). Vertical distribution of smoke aerosols over upper Indo-Gangetic Plain. **Environmental Pollution**, 257, 113377. <https://doi.org/10.1016/j.envpol.2019.113377> [IF: 6.792]
8. Sonkar, G., Singh, N., **Mall, R. K.**, Singh, K.K., Gupta, A. (2020) Simulating the impacts of Climate Change on Sugarcane in diverse agro-climatic zones of Northern India using CANEGRO-Sugarcane model, **SugarTech**, 1-13. doi.org/10.1007/s12355-019-00787-w [IF:1.198]
9. Srivastava, P.K., Singh, P., **Mall, R.K.**, Pradhan, R.K., Bray, M., Gupta, A. (2020). Performance assessment of evapotranspiration estimated from different data sources over agricultural landscape in northern India. **Theoretical and Applied Climatology**, 1-12. doi.org/10.1007/s00704-019-03076-4 [IF: 2.882]
10. Pratap, S., Srivastava, P.K., Routray, A., Islam, T., **Mall, R.K. (2020)**. Appraisal of hydro-meteorological factors during extreme precipitation event: Case study of Kedarnath cloudburst, Uttarakhand, India. **Natural Hazards**. 100, 635–654. doi.org/10.1007/s11069-019-03829-4 [IF: 2.427]
11. Bhatla, R., Verma, S., Ghosh, S., **Mall, R. K. (2020)**. Performance of regional climate model in simulating Indian summer monsoon over Indian homogeneous region. **Theoretical and Applied Climatology**, 139(3), 1121-1135. doi.org/10.1007/s00704-019-03045-x [IF: 2.882]
12. Dey, S., Bhatt, D., Haq, S., **Mall, R. K. (2020)**. Potential impact of rainfall variability on groundwater resources: a case study in Uttar Pradesh, India, **Arabian Journal of Geosciences**, 13:114. <https://doi.org/10.1007/s12517-020-5083-8> [IF: 1.327]
13. Singh, M., Mishra, G. C., & **Mall, R. K. (2020)**. Calibration and Validation of CERES-Wheat Model in North Eastern Plain Zone (NEPZ) of India. **International Journal of Agriculture, Environment and Biotechnology**, 13(1), 99-103.

14. Bhatt, D., Kundu, A., **Mall, R. K.**, & Raju, K. P. (2020). Dynamics of Vegetation Response to Seasonal Rainfall in the Gomati River Basin (India) using Earth Observation Data Sets. **Journal of Scientific Research**, 64(1). DOI: <http://dx.doi.org/10.37398/JSR.2020.640103>
15. Singh, C.K., Chand, R., Mishra, V.K., Sonkar, G., **Mall, R.K.** (2019). Impact of climate on Spot Blotch (*Bipolaris sorokiniana*) severity on Wheat (*Triticum aestivum*) crop over Eastern Gangetic Plains (EGP) of India, **Journal of Agrometeorology**, 21(4). [IF:0.536]
16. Sonkar, G., **Mall, R. K.**, Banerjee, T., Singh, N., Lakshmi Kumar, T.V., Chand, R. (2019). Vulnerability of Indian wheat against rising temperature and aerosols, **Environmental Pollution**, 254, 112946. <https://doi.org/10.1016/j.envpol.2019.07.114> [IF: 6.792]
17. Singh, N., Mhawish, A., Ghosh, S., Banerjee, T., **Mall, R. K.** (2019). Attributing mortality from temperature extremes: A time series analysis in Varanasi, India. **Science of the Total Environment**, 665, 453-464. <https://doi.org/10.1016/j.scitotenv.2019.02.074> [IF: 6.551]
18. Purnadurga, G., Lakshmi Kumar, T. V., Koteswara Rao, K., Barbosa, H., **Mall, R. K.** (2019). Evaluation of evapotranspiration estimates from observed and reanalysis datasets over Indian region. **International Journal of Climatology**, 39(15), 5791-5800. <https://doi.org/10.1002/joc.6189> [IF: 3.928]
19. **Mall, R. K.**, Srivastava, R. K., Banerjee, T., Mishra, O. P., Bhatt, D., Sonkar, G. (2019). Disaster Risk Reduction Including Climate Change Adaptation Over South Asia: Challenges and Ways Forward. **International Journal of Disaster Risk Science**, 10(1), 14-27. <https://doi.org/10.1007/s13753-018-0210-9> [IF: 2.162]
20. Bhatla, R., Mandal, B., Verma, S., Ghosh, S., **Mall, R. K.** (2019). Performance of regional climate model in simulating monsoon onset over Indian subcontinent. **Pure and Applied Geophysics**, 176(1), 409-420. <https://doi.org/10.1007/s00024-018-1910-1> [IF: 1.586]
21. Bhatt, D., Sonkar, G., **Mall, R. K.** (2019). Impact of climate variability on the rice yield in Uttar Pradesh: an agro-climatic zone-based study. **Environmental Processes (Springer)** 6(1), 135-153. <https://doi.org/10.1007/s40710-019-00360-3>
22. Tyagi, S., Singh, N., Sonkar, G., **Mall, R. K.** (2019) Sensitivity of evapotranspiration to climate change using DSSAT model in sub humid climate region of Eastern Uttar Pradesh. **Modeling Earth Systems and Environment (Springer)**, 5(1), 1-11. <https://doi.org/10.1007/s40808-018-0513-2>
23. Srivastava, S., Kumar, M., Singh, R. S., Rai, B. N., **Mall, R. K.**, Banerjee, T. (2019). Long-term observation of black carbon aerosols at an urban location over the central Indo-Gangetic Plain, South Asia. **Atmosfera**, 32(2), 95-113. <https://doi.org/10.20937/ATM.2019.32.02.02> [IF: 1.083]
24. Chaubey, P. K., Kundu, A., **Mall, R. K.** (2019) A geo-spatial inter-relationship with drainage morphometry, landscapes and NDVI in the context of climate change: A case study over the Varuna river basin (India). **Spatial Information Research (Springer)** 27,627–641. <https://doi.org/10.1007/s41324-019-00264-2>
25. Ghosh, S., Bhatla, R., **Mall, R. K.**, Srivastava, P. K., Sahai, A. K. (2019). Aspect of ECMWF downscaled Regional Climate Modeling in simulating Indian summer monsoon rainfall and dependencies on lateral boundary conditions. **Theoretical and Applied Climatology**, 135(3-4), 1559-1581. <https://doi.org/10.1007/s00704-018-2432-6> [IF: 2.882]
26. Ching, J., Aliaga, D., Mills, G., Masson, V., See, L., Neophytou, M., **Mall, R. K.**, Niyogi, D. (2019) Pathway using WUDAPT's Digital Synthetic City tool towards generating urban canopy parameters for multi-scale urban atmospheric modeling. **Urban Climate (Elsevier)**, 28, 100459. <https://doi.org/10.1016/j.uclim.2019.100459> [IF: 3.834]
27. Nagalapalli, S., Kundu, A., **Mall, R. K.**, Thattai, D., Rangarajan, S. (2019). An appraisal of flood events using IMD, CRU, and CCSM4-derived meteorological data sets over the Vaigai river basin, Tamil Nadu (India). **Sustainable Water Resources Management (Springer)** 5, 1731–1744. <https://doi.org/10.1007/s40899-019-00325-2>

28. Bhatla, R., Ghosh, S., Verma, S., **Mall, R. K.**, Gharde, G. R. (2019). Variability of monsoon over homogeneous regions of India using regional climate model and impact on crop production. **Agricultural Research (Springer)** 8(3), 331–346. <https://doi.org/10.1007/s40003-018-0368-9>
29. Kumar, M., Parmar, K. S., Kumar, D. B., Mhawish, A., Broday, D. M., **Mall, R. K.**, Banerjee, T. (2018). Long-term aerosol climatology over Indo-Gangetic Plain: Trend, prediction and potential source fields. **Atmospheric Environment**, 180, 37-50. <https://doi.org/10.1016/j.atmosenv.2018.02.027> [IF: 4.012]
30. Singh, N., Banerjee, T., Raju, M. P., Deboudt, K., Sorek-Hamer, M., Singh, R. S., **Mall, R. K.** (2018). Aerosol chemistry, transport, and climatic implications during extreme biomass burning emissions over the Indo-Gangetic Plain. **Atmospheric Chemistry and Physics**, 18(19), 14197-14215. <https://doi.org/10.5194/acp-18-14197-2018> [IF: 5.668]
31. **Mall, R. K.**, Singh, N., Singh, K. K., Sonkar, G., Gupta, A. (2018). Evaluating the performance of RegCM4. 0 climate model for climate change impact assessment on wheat and rice crop in diverse agro-climatic zones of Uttar Pradesh, India. **Climatic Change**, 149(3-4), 503-515. <https://doi.org/10.1007/s10584-018-2255-6> [IF: 4.168]
32. Bhatla, R., Ghosh, S., **Mall, R. K.**, Sinha, P., Sarkar, A. (2018). Regional climate model performance in simulating intra-seasonal and interannual variability of Indian summer monsoon. **Pure and Applied Geophysics**, 175(10), 3697-3718. <https://doi.org/10.1007/s00024-018-1886-x> [IF: 1.532]
33. Singh, N., **Mall, R. K.**, Sonkar, G., Singh, K. K., Gupta, A. (2018). Evaluation of RegCM4.0 climate model for assessment of climate change impact on crop production. **Mausam**, 69(3), 387-398. [IF: 0.467]
34. Baxla, A. K., Singh, K. K., **Mall, R. K.**, Singh, P. K., Gohain, G. B., Rana, M. (2018). Wheat yield prediction using CERES-wheat V4.6 an operational approach for Uttar Pradesh, India. **Journal of Pharmacognosy and Phytochemistry**, 7(S1), 2494-2497.
35. Banerjee, T., Kumar, M., **Mall, R. K.**, Singh, R. S. (2017). Airing 'clean air' in clean India mission. **Environmental Science and Pollution Research**, 24(7), 6399-6413. <https://doi.org/10.1007/s11356-016-8264-y> [IF: 2.914]
36. **Mall, R K**, Singh, N., R. Prasad., Tompkins, A. and Gupta, A. (2017). Vulnerability of Human Health to Climate Variability and Changes: A pilot study in Tertiary Care Hospital of Eastern Uttar Pradesh, **Mausam**, 68, 3, 429-438. [IF: 0.467]
37. Srivastava, P.K., Han, D., Yaduvanshi, A., Petropoulos, G.P., Singh, S.K., **Mall, R.K.** and Prasad, R., (2017). Reference Evapotranspiration Retrievals from a Mesoscale Model Based Weather Variables for Soil Moisture Deficit Estimation. **Sustainability**, 9(11), 1971. <https://doi.org/10.3390/su9111971> [IF: 2.114]
38. **Mall, R. K.**, Neha, S., H, Singh. (2016). Evaluation of CERES-Wheat model for different wheat cultivars. **Journal of Agro meteorology**, 18 (1): 149. [IF:0.536]
39. Yadav, M.K., Singh, R.S., Singh, K K, **Mall, R.K.**, Patel, C., Yadav, S.K. and Singh, M.K. (2016). Assessment of climate change impact on pulse, oilseed and vegetable crops at Varanasi, India. **Journal of Agrometeorology**, 18(1), 13. [IF:0.536]
40. Bhatla, R., Ghosh, S., Mandal, B., **Mall, R.K.** and Sharma, K., (2016). Simulation of Indian summer monsoon onset with different parameterization convection schemes of RegCM-4.3. **Atmospheric Research (Elsevier)**, 176, 10-18. <https://doi.org/10.1016/j.atmosres.2016.02.010> [IF: 4.614]
41. Singh, P. K., Singh, K. K., Rathore, L. S., Baxla, A. K., Bhan, S. C., Gupta, A., Gohain, G. B., Singh, R. S. and **Mall, R. K.** (2016). Rice (*Oryza sativa* L.) yield gap using the CERES-rice model of climate variability for different agro climatic zones of India, **Current Science**, 110 (3), 405 -413 [IF: 0.856]
42. **Mall, R. K.**, Sonkar, G., Bhatt, D., Sharma, N. K., Baxla, A. K. and Singh, K. K. (2016). Managing impact of extreme weather events in sugarcane, **Mausam**, 67 (1), 233-250 [IF: 0.467]

43. Bhatla, R., Raju, P. V. S., **Mall, R. K.**, Bist, S. (2016). Study of surface fluxes during onset of summer monsoon over India. **International Journal of Climatology**, 36, 1821-1832. <https://doi.org/10.1002/joc.4462> [IF: 3.901]
44. Bhatla, R., Gupta, P., Tripathi, A. and **Mall, R.K.** (2016). Cold Wave/Severe Cold Wave Events during Post-Monsoon and Winter Season over Some Stations of Eastern Uttar Pradesh, India. **Journal of Climate Change**, 2(1), 27-34.
45. Bhatt, D. and **Mall, R. K.** (2015). Surface Water Resources, Climate Change and Simulation Modeling, **Aquatic Procedia (Elsevier)**, 4, 730-738
46. Bhatt, D., **Mall, R.K.** and Banerjee, T. (2015). Climate change, climate extremes and disaster risk reduction. **Natural Hazards**, 78(1), 775-778, DOI 10.1007/s11069-015-1874-8 [IF: 2.419]
47. Bhatla, R., Singh, M., **Mall, R. K.**, Tripathi, A., Raju, P. V. (2015). Variability of summer monsoon rainfall over Indo-Gangetic plains in relation to El-Nino/La-Nina, **Natural Hazards**, 78(2), 837-857 <https://doi.org/10.1007/s11069-015-1746-2> [IF: 2.319]
48. Yadav, M. K., Singh, R. S., Singh, K. K., **Mall, R. K.**, Patel, C. B., Singh, M. K. (2015). Assessment of climate change impact on productivity of different cereal crops in Varanasi, India, **Journal of Agrometeorology**, 17 (2), 179-184. [IF:0.536]
49. **Mall, R. K.**, Bhatt, D., Sonkar, G., and Banerjee, T. (2014). Simulation modeling and climate change: issues and challenges. **Environmental Science and Pollution Research**, 11605-11608. <https://doi.org/10.1007/s11356-014-3096-0> [IF: 2.914].
50. Singh, B. P., Srivastava, A. K., Tiwari, S., Singh, S., Singh, R. K., **Mall, R. K.**,... & Srivastava, M. K. (2014). Radiative Impact of Fireworks at a Tropical Indian Location: A Case Study. **Advances in Meteorology**, 1-8. <https://doi.org/10.1155/2014/197072>
51. **Mall, R. K.**, Attri, S. D., Singh, K. K. (2013). Climate Change and Sustainable Water Resource Management, **Vayu Mandal**, 39 (1-2), 76-90
52. **Mall, R. K.** (2013). Water Security and Climate Change: An Indian Perspectives, **Newsletter of the Indian Society of Remote Sensing**, Ahmedabad Chapter, India Vol. 25, No.1, January-March 2013, 119-133
53. Bhatla, R., Gyawali, B., **Mall, R. K.** and Raju, P.V.S. (2013). Study of possible linkage of PDO with Indian Summer Monsoon in relation to QBO, **Vayu Mandal**, 39 (1-2), 09-14.
54. Bhatla, R., and **Mall, R. K.** (2012). Study of Diabetic Heating during monsoon depression cases over India, **Nat Geogr J India**, 58 (2), 89-96.
55. Patel, C.B., Singh, R.S., Yadav, M.K., Singh, M.K., Singh, K.K., **Mall, R. K.** (2012). Response of different wheat (*Triticum aestivum* L. emend Fiori & Paol.) genotypes to various nitrogen levels under late sown conditions of eastern Uttar Pradesh. **Environment and Ecology**, 30 (3C), 1192-1196
56. **Mall, R. K.**, Attri, S. D., and Kumar, S. (2011). Extreme Weather Events and Climate Change Policy in India, **Journal of South Asia Disaster Studies**, 4 (2), 27-76.
57. **Mall, R. K.**, Kumar, R. and Bhatla, R. (2011). Climate Change and Disasters in India, **Journal of South Asia Disaster Studies**, 3(2), 1-32.
58. Bhatla, R., Mohanty, U. and **Mall, R. K.** (2011). Study of Energy Fluxes over the Indian Ocean Prior and During the Summer Monsoon, **Marine Geodesy**, 34(2), 119-137.
59. Singh, K. K., **Mall, R. K.**, Singh, R. S. and Srivastava, A. (2010). Evaluation of CANEGRO Sugarcane model for water management in East Uttar Pradesh, India, **Journal of Agrometeorology**, 12 (2): 181-186. [IF:0.536]
60. Singh, P. K., Rathore, L. S. and **Mall, R.K.** (2010). Modeling the effect of planting date on maize (*Zea mays* L.) crop in Sabour region of Bihar using DSSAT 3.5 crop simulation model, **Mausam**, 61 (1), 75-80. [IF: 0.467]

61. Pandey, S. N., Bhatla, R., **Mall, R .K.** (2010). Floods and hazardous heavy rainfall in India: Comparison between Local versus Oceanic impact, **Journal of Agrometeorology**, 12 (1), 40-43. [IF:0.536]
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Recent Papers in Proceeding / Lead Paper in Conferences / Symposia/ Workshop

1. R K Mall, Sonkar, G., (2019). Modeling the Impact of Climate Change and Developing Management Strategies for Pigeon Pea Crop in Agro Climatic Zones of India, American Geophysical Union, Fall Meeting, San Francisco, USA. CA, 9-13 December, 2019.
2. Geetika Sonkar, R K Mall, Tirthankar Banerjee, Nidhi Singh, TV Lakshmi Kumar, Ramesh Chand (2019) Assessing the Influence Climate and Aerosols on Indian Wheat Crop: A study over Wheat Growing Zones of India, American Geophysical Union, Fall Meeting, San Francisco, USA, CA, 9-13 December, 2019.
3. R K Mall (2018). Extreme temperature and hyphen health in eastern UP, India, 10th International Conference on "Urban Climate/ 14th Symposium on the Urban Environment", New York, U.S.A, 6-10 Aug., 2018, pp 56-78.
4. R K Mall and Akhilesh Gupta (2016). Extreme weather events and Disaster risk Reduction in south Asia, Proc of International Workshop on Mitigation of Disasters due to Severe Climate Events: From Policy To Practice", Colombo, SRI LANKA, 10–13 March 2016, pp 22-34.
5. R K Mall (2014) Climatic impacts on crop production in Indo-Gangetic Plain, India, Proc of International Symposium on "Weather and Climate Extremes, Food Security and Biodiversity" George Mason University, USA, 20 to 24 October 2014.
6. R K Mall (2013). Impact of climate change water resources of Gomti River Basin, International conference on regional climate – CODEX 2013, Brussels, BELGIUM, 4-7 November 2013, Organized by World Climate Research Programme (WCRP), European Commission (EC) and Inter governmental Panel on Climate Change (IPCC).
7. Bhatt, Diva, and R. K. Mall, (2012). Surface water resources, climate change and simulation modeling. Aquatic Procedia 4: 730-738.
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9. Mall, R. K, and R Bhatla, 2012: Climate Change, Souvenir of 20th National Children's Science Congress, 27-31 December, 2012, BHU, Varanasi, Pp. 64-72, 2012,
10. Mall, R. K., 2010, 'Impacts of Extreme Weather on Energy Systems in India: Future Challenges', In the Joint ICTP-IAEA Workshop on Vulnerability of Energy Systems to Climate change and Extreme Events, F. Toth (IAEA) and C. Tuniz (ICTP), Trieste --- Italy, 19- 23 April 2010, pp 87-98.
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15. Mall, R. K., 2009, 'Too much and Too little water in changing climate", Write shop on "Assessing Local Adaptation Strategies to Climate Induced Water Stress and Hazards in the Greater Himalayan Region", 2-8 August 2009, Kathmandu, Nepal, pp 2-9.

16. **Mall, R. K., 2009**, 'Assessing Local Adaptation Strategies to Climate Induced Water Stress in India', **Workshop on "Assessing Local Adaptation Strategies to Climate Induced Water Stress and Hazards in the Greater Himalayan Region"**, 2-6 March 2009, Kathmandu, Nepal.
17. **Mall, R. K., 2008**, 'Simulating the effect of climate on sugarcane growth & yield', 'Proc International Symposium on "Agro-meteorology & Food Security"', Feb. 18-21, 2008, CRIDA-Hyderabad.

Books/ Chapters/Monographs/ Outcome /Contribution in Govt. Documents/ New Courses

1. Kundu, A., Denis, D. M., Patel, N. R., **Mall, R. K.**, Dutta, D. (2020) Geoinformation technology for drought assessment. In: Srivastava, P. K., Singh, S. K., Mohanty, U. C., Murty, T. (Eds.) *Techniques for Disaster Risk Management and Mitigation*. John Wiley & Sons, pp. 171-180 (ISBN: 978-1-119-35918-0)
2. Bhatla, R., Raj, R., **Mall, R.K.**, and Shivani. (2020) Tropical Cyclones Over the North Indian Ocean in Changing Climate 65-76. In: Srivastava, P. K., Singh, S. K., Mohanty, U. C., Murty, T. (Eds.) *Techniques for Disaster Risk Management and Mitigation*. John Wiley & Sons, pp. 65-76 (ISBN: 978-1-119-35918-0)
3. Singh, N., Singh, S., **Mall, R. K.**, (2020) Urban ecology and human health: implications of urban heat island, air pollution and climate change nexus. Verma P, Singh P, Singh R, Raghubanshi A (Eds.), *Urban Ecology*. Elsevier. Pp 0000 (ISBN: 9780128207307)
4. **R K Mall (2018)** Numerical modelling for climate and crop yield prediction, study material and hands on experiments prepared for masters and doctoral students.
5. **July 2018:** Lead the faculty members to introduce (develop) M Sc,Tech Environmental Science (Environment Technology) course in Banaras Hindu University.
6. **R K Mall**, A Gupta and Geetika S (2017). Effect of Climate change on crop production in 'Current Developments in Biotechnology and Bioengineering, 1st Edition: Crop Modification, Nutrition and Food Production' (Eds. Dubey, Ashok Pandey & Sangwan) Elsevier publication (16 Sept. 2016) Print Book ISBN: 9780444636614, pp 23-46. doi: <https://doi.org/10.1016/C2014-0-04871-X>
7. **R K Mall and Santosh Kumar (2014)** Integration of Disaster Risk Reduction and Climate Change Adaptation in SAARC countries (Implementation of Thimphu Statement on Climate Change, UNISDR/SAARC-DMC / BHU, pp 252
8. **July 2014:** Lead the faculty members to introduce (develop) M Sc, Disaster Management course in Banaras Hindu University.
9. **July 2013:** Numerical Modelling and numerical weather prediction course and practical developed for M Tech and M Sc students in Banaras Hindu University.
10. **July 2012:** Lead the faculty members to introduce (develop) M Phil, Environment and Sustainable Development course in Banaras Hindu University.
11. **April, 2012:** Local Role of Policy and Institutions in Local Adaptation to Climate Change; Case studies on responses to too much and too little water in the Hindu Kush Himalayas (Ed. Pradhan N, Khadgi, V R, Schipper, L, Kaur N, Geoghegan, T), Kathmandu, Nepal: **ICIMOD**, pp 74.
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13. **June 2011:** "Simulation of Growth and Yield Attributes of Wheat Genotypes Under Changing Climate in Recent Years in India" (pp. 221-234) In "Challenges and Opportunities in Agro meteorology" (Attri, S.D.; Rathore, L.S.; Sivakumar, M.V.K.; Dash,S.K. (Eds.), **Springer Dordrecht Heidelberg** London New York, 1st Edition., 2011, XX, 560p. 279 illus.

14. **Dec. 2009:** "Local Responses to Too Much and Too Little Water in the Greater Himalayan Region" was released by ICIMOD at "Development and Climate Change day", which was a parallel side event at **COP 15 in COPENHAGAN in December 2009** pp 63.
15. **R K Mall** and A D Kaushik (2009). Course module on "Hydrometeorological Disasters and climate change " for central govt. officer developed, Jan. 2009, TR no. 19, pp 67
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17. **R K Mall** and V K Sehgal (2008). Course module on "Drought Risk Management" for central govt. officer developed, June 2008, TR no. 12, pp 56
18. **July 2005:** Dynamic Meteorology and Groundwater management course developed for M Tech Geology and M Sc Tech Geophysics in Banaras Hindu University.
19. **Dec 2002:** "Global change and biogeochem. Cycles: the S. Asia region", In: "Global-Regio Link in the Earth System" (Eds. P. Tyson, R. Fuchs, C. Fu, A.P. Mitra, E. Odada, J. Perry, W. Steff and H. Virji), **Springer-Ver.**, Berlin, pp.75-107.

Technical reports including handbook, manual, flow sheet, design/drawing

- 1) **R K Mall** and P G Dhar Chakraborty (**2010**). Report on Glacial Lake Outburst Floods in Himalayan region alongwith Bhutan, Nepal team, National Institute of Disaster Management, New Delhi, Dec. 2010, pp 23.
- 2) P G Dhar Chakraborty, D R Sikka and **R K Mall (2009)**. Climate change and Disaster Management in India, 2nd Indian Disaster Management Congress, report submitted NDMA, New Delhi Nov. 2009, pp 34.
- 3) **Nov 2009:** Manual on Drought Management, **Ministry of Agric. and Cooperation**, Govt. of India, New Delhi, pp 192.
- 4) **Y B Kaushik and R K Mall (2002)**. A report on Groundwater monitoring and management in India, Central Ground Water Authority, New Delhi, submitted to honorable Water Resource Minister, Ministry of Water resources, India

Participation in Conferences /Seminars /Symposia /Workshops

International

- International Conference on Ensemble Methods in Modelling and Data Assimilation (EMMDA), National Centre for Medium Range Weather Forecasting (NCMRWF), Ministry of Earth Sciences (MoES), Government of India, 24-26 February 2020.
- International Conference on Climate Change Impacts, Vulnerabilities, and Adaptation: Emphasis on India and Neighborhood (CCIVA-2019), Centre for Oceans, Rivers, Atmosphere and Land Sciences (CORAL), Indian Institute of Technology-Kharagpur (IIT-KGP), West Bengal, 26 Feb - 02 Mar 2019.
- International Symposium on Advances in Agrometeorology for Managing Climatic Risks of Farmers (INAGMET-2019), JNU, New Delhi
- The World Urban Database and Access Port Tools (WUDAPT) workshop at the Chinese University of Hong Kong, 8-10 Dec, 2018.
- 10th International Conference on "Urban Climate/ 14th Symposium on the Urban Environment", New York, U.S.A, 6-10 Aug., 2018.

- INTROMET-2017 (International Tropical Meteorology Symposium on Advancements in Space based Earth Observations and Services for Weather and Climate), 7-10 Nov. 2017, SAC- Ahmedabad.
- 7th Asian Ministerial Conference on Disaster Risk Reduction (7th AMCDRR), New Delhi, 3-5 Nov. 2016
- International Workshop on Mitigation of Disasters due to Severe Climate Events: From Policy To Practice”, Colombo, SRI LANKA, 10-13 March 2016.
- International Symposium on “Weather and Climate Extremes, Food Security and Biodiversity” George Mason University, USA, 20 to 24 October 2014.
- International Conference on “Prediction of Weather and Climate Systems Seamlessly (PROWESS), 17-19 February 2014, National Centre for Medium Range Weather Forecasting (NCMRWF), Ministry of Earth Sciences, NOIDA.
- 2nd CLIM-RUN School “Building two-way communication: A week of Climate Services, Dec. 02-Dec 06, 2013, at Trieste, ICTP, ITALY
- International conference on regional climate – CODEX 2013, Brussels, BELGIUM, 4-7 November 2013, Organized by World Climate Research Programme (WCRP), European Commission (EC) and Inter governmental Panel on Climate Change (IPCC).
- SAARC consultation workshop on Integration of Disaster Risk Reduction and Climate Change Adaptation in South Asia, UNISDR-SAARC Disaster Management Centre-BHU, Aug 29-31, 2013, BHU-Varanasi, India.
- 4th Global Platform on Disaster Risk Reduction (GPDRR-13), 19-23 May 2013, Geneva, SWITZERLAND;
- 5th Asian Ministerial Conference on Disaster Risk Reduction (5th AMCDRR), Yogyakarta, INDONESIA, Oct. 22-25, 2012
- South Asia Regional Consultation Workshop on Climate Change Adaptation-Managing Risk for Resilience, Hotel Oberoi, New Delhi, 24-27 June 2013 (NDMA, NIDM and UNDP programme)
- Workshop on “Climate Change and Water Resources Management for Drought prone areas of South Asia” 15-20 Nov. 2012, Afghanistan National Disaster Management Authority, Kabul, AFGHANISTAN
- Joint ICTP-IAEA workshop on “Uncovering Sustainable Development CLEWS; Modeling Climate, Land-use, Energy and Water (CLEW) interactions”. May 30 – June 3, 2011 at Trieste, ICTP, ITALY
- “Climate Change, Agriculture and Food Security in the Indo-Gangetic Plains: Exploring Key Research Opportunities and Developing Regional Scenarios”, 8-10 November, 2010, NASC Complex, New Delhi, India
- Write shop on "Assessing Local Adaptation Strategies to Climate Induced Water Stress and Hazards in the Greater Himalayan Region", 9-13 August 2010, Kathmandu, NEPAL.
- Write shop on "Assessing Local Adaptation Strategies to Climate Induced Water Stress and Hazards in the Greater Himalayan Region", 2-8 August 2009, Kathmandu, Nepal.
- Workshop on "Assessing Local Adaptation Strategies to Climate Induced Water Stress and Hazards in the Greater Himalayan Region", 2-6 March 2009, Kathmandu, Nepal.
- "Consultation Workshop on “GLOF and Flash Flood Risk Assessment in the Hindu Kush-Himalayas" 30 July to 1 August 2008, Kathmandu, Nepal organized by ICIMOD.
- Conference on “African Drought: Observations, Modeling, Predictability, Impacts”, ICTP, ITALY, 2-6 June, 2008.

- Joint ICTP-IAEA Conference on “Predicting Disease Patterns According to Climatic Changes”, ICTP, ITALY, 12-16 May, 2008.
- International Symposium on “*Agro-meteorology & Food Security*”, Feb. 18-21, 2008, CRIDA-Hyderabad.
- “GEWEX 2005”, Costa Mesa, Los Angeles, USA from 20-24 June, 2005.
- International Conference on “*MONEX & its Legacy*” Organized by Indian Meteorological Society and University Corporation of Atmospheric Research (UCAR), USA, at India Habitat Centre, New Delhi, India, Feb. 3-7, 2005.
- “CLIVAR Science Conference 2004”, Baltimore, USA from 21-25 June, 2004.
- Second Workshop on “The Theory and Use of Regional Climate Models”, ICTP, Trieste, ITALY from 31 May-9 June 2004.
- Seminar on “Development and Application of Isotope Tracer Diagnostics in Regional Climate Models” Abdus Salam International Center for Theoretical Physics (ICTP), Trieste, ITALY, 22-26 September 2003.
- International Conference on “Monsoon Environments: Agricultural and Hydrological Impacts of Seasonal Variability and Climate Change” Abdus Salam International Center for Theoretical Physics (ICTP), Trieste, ITALY, 24-28, March 2003.
- International Conference on “*Science and Technology Capacity Building in Climate Change*” FICCI Auditorium, Department of Science & Technology (DST), New Delhi, India, October 20-22, 2002.
- Workshop on “Climate Change: Thresholds and Response Functions” Potsdam Institute of Climate Impact Research, Potsdam, GERMANY, January 23-24, 1997.

National


- National Workshop on “Urban Climate Network” held at Interdisciplinary Centre for Water Research, Indian Institute of Science, Bengaluru, 2-3 Aug, 2019
- National workshop on “Urban climate resilience: the context of river basins: Urban-Peri-urban-Ecosystems, Inclusive Governance and Partnerships”, Patna, Bihar. 27-28 Nov, 2018.
- National Workshop on “Urban Climate: Science, impacts and Adaptation”, during 21-22 September 2017, IIT Bhubaneswar.
- National Workshop on “Climate Change and Health”, July 24-25, 2016 at IIT-Delhi
- National Workshop on “Climate Modelling”, July 19-20, 2016 at IIT-Delhi, New Delhi.
- National Workshop on “Climate Change and Agriculture”, April 28-29, 2016 at NASC Complex, Indian Agricultural Research Institute, New Delhi.
- National Knowledge sharing workshop on “Assessing sectoral impacts of climate Change”, 26-27 Feb. 2016, Bhopal, MP.
- National Workshop on “Climate Change and Simulation Modelling: Issues and Challenges”, 21 April 2014, BHU, Varanasi
- National Training Workshop on Crop growth simulation Modeling, 25-30 June, 2012 at BHU, Varanasi; sponsored by IMD-New Delhi
- National Seminar on “Environmental Concerns and Sustainable Development: Issues and Challenges” for BHU, India, 2-4 March, 2012

- National Training Workshop on “Drought Risk Mitigation and Management”, 28 Nov.–2 Dec. 2011 (on 2nd Dec. 2011)
- National Roundtable on “Climate Change and Disaster Management”, 26th November 2011, at NIDM, New Delhi
- Workshop on “Vulnerability Assessment and Adaptation Strategies, an Indo-UK Climate Change Research Programme” on 30th September 2011 in EPCO, Bhopal.
- Workshop on sharing experience of climate change action in Semi-arid regions of India-A case study in Bundelkhand Region”, at J N Palace, Bhopal, Sept. 19, 2011.
- National Workshop on Role of higher education in Disaster Management in India: Issues and Challenges, 29-30 April 2011 at BHU-Varanasi.
- Annual Conference of Relief Commissioners / Secretaries of Department of Disaster management of States / UTs –2010, 12th May 2010, Vigyan Bhawan, New Delhi.
- 2nd National Ground Water Congress, Ministry of Water Resources, New Delhi, March 22, 2010, New Delhi.
- Workshop on Ground Water Resources Estimation, Central Ground Water Board & IIT-Delhi, New Delhi, February 23-24, 2010.
- National Symposium on Climate Change and Rainfed Agriculture, Indian Society of Dryland Agriculture, Central Research Institute for Dryland Agriculture (CRIDA) February 18-20, 2010, Hyderabad, India
- International Conference on Disaster Management and Mitigation (ICDMN-2009), December 16-18, 2009, Dindigul, Tamilnadu, India
- National Seminar on Accelerating the Pace of Highways Development in India, 30th July, 2009, FICCI Auditorium, New Delhi.
- “UK-India Climate Change Business Seminar”, FICCI Auditorium, Federation House, New Delhi, October 6-7, 2004.
- Roundtable on “KFW Carbon Fund –Waste management”, Federation of Indian Chambers of Commerce and Industry (FICCI), Federation House, New Delhi, September 17, 2004.
- International workshop on “Role of Indian Ocean in Climate Variability over India” Indian Institute of Tropical Meteorology, Pune, India, February 23-27, 2004.
- International Symposium on “Natural Hazards (INTROMET) and Seminar on Impacts of Climate Change”, NRSA, Hyderabad, India, February 24-27, 2004.
- Symposium on “Geo-informatics for sustainable Development” Water Technology Centre, Indian Agricultural Research Institute, New Delhi, February 17-19, 2004.
- National Symposium on “Emerging Trends in Agricultural Physics”, Indian Agricultural Research Institute (IARI), New Delhi, India, February 20-22, 2003.
- National Symposium on “Meteorology for sustainable development”, Indian Meteorological Society, Mumbai, India, Feb. 6-9, 2000.
- National Workshop on “Crop Modelling for Agro-meteorological Advisory Service”, DST, National Centre for Medium Range Weather Forecasting, New Delhi, India, Jan. 4-9, 1999.
- National Symposium on “Crop Pest and Disease Management: Challenges for the next Millennium”, Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra, India, Nov. 27-28, 1999.
- National Seminar on “Advances in the Studies of Physical Environment for Resource Management and Sustainable Crop Production”, Indian Agricultural Research Institute, New Delhi, March 23-25, 1998.

Professional Training

Organization	Period		Details of Training
	From	To	
Indian Institute of Science, Bengaluru	2 nd Aug, 2019	3 rd Aug, 2019	National Workshop on “Urban Climate Network” held at Interdisciplinary Centre for Water Research, Indian Institute of Science, Bengaluru
Chinese University of Hong Kong	8 th Dec, 2018	10 th Dec, 2018	The World Urban Database and Access Port Tools (WUDAPT) workshop at the Chinese University of Hong Kong,
GEAG, BSDMA and NIDM with the support of The Rockefeller Foundation	27 th Nov, 2018	28 th Nov, 2019	National workshop on “Urban climate resilience: the context of river basins: Urban-Peri-urban-Ecosystems, Inclusive Governance and Partnerships”, Patna, Bihar
International Centre for Theoretical Physics (ICTP), Italy	2 nd Dec., 2013	6 th Dec, 2013	2nd CLIM---RUN School “Building two-way communication: A week of Climate Services
ICTP, Italy	30 th May, 2011	3 rd Jun, 2011	Joint ICTP---IAEA workshop on “Uncovering Sustainable Development CLEWS; Modeling Climate, Land---use, Energy and Water (CLEW) interactions”. Assessing Local Adaptation Strategies to Climate Induced Water Stress and Hazards in the Greater Himalayan Region"
ICIMOD, Kathmandu, Nepal	9 th Aug.,2010	13 th Aug.,2010	International Summer school on “Hydrological Drought and Global
ICTP, Italy	22 nd Jun, 2008	27 th Jun, 2008	Workshop on “Reducing and Representing Uncertainties in High---Resolution Proxy Climate Data”
ICTP, Italy	09 th Jun, 2008	11 th Jun, 2008	On “African Drought: Observations, Modeling, Predictability, Impacts”
ICTP, Italy	02 nd Jun, 2008	06 th Jun, 2008	Indo---US Training School on “SWAT and ADAPT Modeling for Integrated Water Resources Management”
Indian Institute of Technology – Delhi	20 th Aug., 2007	30 th Aug.,2007	Advanced School in “High Performance Computing Tools for e-Science”
ICTP, Italy	05 th Mar 2007	16 th Mar, 2007	44 th Orientation course for University Teachers
UGC-Academic staff college, Banaras Hindu University	15 th Sept., 2006	12 th Oct.,2006	Third Training Workshop on the “Theory and Use of Regional Climate Models: Applying RCMs to Developing Nations”
ICTP, Italy	29 th May, 2006	09 th Jun,2006	“Training Course on “Mathematical Modeling of Groundwater Systems”
Indian Institute of Technology, Roorkee,	28 th Mar, 2005	08 th Apr,2005	Second Training Workshop on “ <i>The Theory and Use of Regional Climate Models</i> ”
ICTP, Italy	31 st May, 2004	9 th Jun, 2004	

Central Ground Water Board (CGWB)	25 th Nov., 2002	05 th Dec,2002	Training Course on "Ground Water Estimation And Management (GEMS)"
M. C Mehta Environmental Foundation, New Delhi	01 st June 2002	05 th Jun,2002	Training Course on "Understanding Environmental Ethics, Law And Policy For Ensuring Environmentally Sustainable Development"
Indian Agricultural Research Institute, New	20 th Jan., 2000	31 st Jan.,2000	Training Course on "Modeling Growth and Yield of Crops"
Indian Agricultural Research Institute, New	20 th Sept., 1999	01 st Oct.,1999	International Training Course on "CO2 Enrichment Research And Technology"
Center for Atm Sci, Indian Institute of Technology, New Delhi	02 nd Dec., 1996	21 st Dec.,1996	"Intensive Training on Use of Statistical Methods In Weather Forecasting"
Banaras Hindu University	25 th Aug., 1995	10 th Sept.,1995	"Computer Concepts and Fortran-77"
Indian Institute of Tropical Meteorology, Pune	23 rd May, 1995	24 th Jun,1995	"Second SERC School on Advanced Geophysical Fluid Dynamics"
Banaras Hindu University,	14 th Apr, 1994	04 th May,1994	Second SERC School on Seismology and Earthquake Process"
Banaras Hindu University	15 th Jun, 1992	30 th Jun,1992	"Familiarization and Usage of Personal Computer"


(R. K. Mall)