



**Open Science Seminar**  
**Future of Water Resources in India under a Changing Climate**  
*13 and 14 of May 2009,*  
*TERI, New Delhi, India*

**Wednesday 13 May**

**09:15 – 10:45 Opening**

**Mr Ashok Jaitly**, Director Water Resources Division, TERI

**Ms Danièle Smadja**, Head of the European Commission Delegation to India

**Mr. Tasos Kentarchos**, European Commission, Climate Change and Environmental Risks Unit)

**Stefan Agne**, European Commission, DG-ENV

**11:00 – 12:30 Topic area: Glacier and snow melt in the Himalayas**

**Eddy Moors**, is head of the Earth System Science and Climate Change group of Alterra, Wageningen University and Research Centre, The Netherlands. He is trained as a hydro-meteorologist. He is the coordinator of the EU funded HighNoon project which aims to design adaptation measures to mitigate climate change induced changes in water resources.

**Richard Harding**, is a meteorologist working at the Centre of Ecology and Hydrology at Wallingford, England. He has worked on evaporation and energy balance of snow and ice. He co-ordinates the EU funded WATCH project which aims to bring together climate, hydrology and water resource scientists to improve our estimates of the global water cycle.

**Madhav Karki**, ICIMOD, a native of Nepal, is a Forestry and Agro-forestry specialist by training in the US universities. Since 2005, working as the Dy. Director General – Programs, at ICIMOD. His research interest is ecosystem framework including integrated river basin management of natural resources strengthening upstream-downstream linkages. He has authored and co-authored papers in integrated water resources management, sustainable forest management and biodiversity conservation.

**Dr. Madan Lall Shrestha** is a visiting Professor in Nagoya University, Japan. In Nepal He is an academician in Nepal Academy of Science and Technology. He had been the Director General of Department of Hydrology and Meteorology in Nepal. He has the meteorology background. His main interest is the climate change and its impact on the glacier dynamics. He has been involved in the glacier monitoring work in Nepal since 1974. He is also the Scientific Planning Group Member of Asia Pacific Network for Global Change (APN).

**13:30 – 15:00 Topic area: Glacier and snow melt in the Himalayas**

**David Collins**, is a glacier hydrologist working at the University of Salford, in Manchester, UK. He has worked on river flows from glaciers in Switzerland, the Rockies and the Karakoram Himalaya. He is a member of the EU funded High Noon project, looking at the effects of declining glaciers on river from the Himalaya.

**Dr Shresth Tayal**, is working at The Energy Resources Institute (TERI), New Delhi as Associate Fellow. He has obtained his doctoral degree from Jawaharlal Nehru University, New Delhi on “Hydrological Systems of Gangotri glacier” and has been involved in various hydrological and meteorological research activities. Now with more than 8 years of experience in glaciology, he has served Glacier and Climate Change Commission, Government of Sikkim, India as Post Doctoral Fellow and is a member of Scientific Research Council, Indian Mountaineering Foundation.

**15:30 - 17.00 Topic area: Predicted changes in Indian monsoon**

**Jan Haerter**, Max Planck Institute, Hamburg, Germany, is a climate researcher working within the EU-WATCH project on uncertainty and statistical bias correction.

**Jeff Ridley**, Met Office Hadley Centre, UK is a climate scientist specialising in ice processed in climate models.

**Pankaj Kumar**, Max Planck Institute for Meteorology, Hamburg, Germany Climate Scientist with research interest in monsoon modelling and variability. with a focus over India.

**Thursday 14 May**

**09:00 – 10:30 Topic area: Impacts on the hydrological cycle and water resources**

**Gwyn Rees**, is a hydrologist from the Centre of Ecology in Wallingford, UK. He has worked in the Himalayan region since 1996, coordinating several projects studying water resources, including the DFID-funded SAGARMATHA project. Gwyn is a Steering Committee member of the UNESCO-IHP Hindu Kush-Himalayan FRIEND project.

**Ashvin K. Gosain**, is a Professor in the field of Water Resources Engineering in the Civil Engineering Department, Indian Institute of Technology Delhi. Prof. Gosain is a member on the National Climate Change Committee of India. He has contributed to the India’s Initial Communication to the UNFCCC by quantifying the climate change impact on Indian River systems. He is also spearheading the water sector for the study on Second Communication undertaken by the Ministry of Environment and Forests.

He has also been engaged in the research on appropriate technologies for water resource planning and management, first through a UNDP funded project with the Department of Science and Technology, and recently through a Department for International Development (DFID) funded collaborative project “Low Flows” with the University of Newcastle, UK. Prof. Gosain is the Indian Coordinator of the Memorandum of Understanding between the SWAT group at TAES, USA and IIT Delhi for the last one decade. Through these initiatives, Prof. Gosain is demonstrating the use of latest technologies of hydrological modelling and GIS for providing scientific backup and sustainable approach to our watershed interventions.

Prof. Gosain has also contributed in promoting the geoinformatics in India. He has introduced the GIS course in the undergraduate and postgraduate curricula in IIT Delhi as early as 1995. Many of his students initiated in the field of geoinformatics are making significant contributions to the area in the industry, governmental and non-governmental organizations. He has been involved in the capacity building of many organisations by conducting a very large number of training programmes and also by undertaking specific purpose sponsored projects with the state government organisations.

**Christel Prudhomme**, is a hydrologist working at the Centre of Ecology in Wallingford, UK. She works in the assessment of climate change impacts on floods and drought in the UK and Europe, and is a participant of the EU-WATCH project.

**11:00 – 12:30 Topic area: Impacts on the hydrological cycle and water resources (continued)**

**Hester Biemans**, is a research scientist at the earth system science and climate change group of Wageningen University and Research Centre, The Netherlands. She obtained her degree in Environmental Sciences with a background in Applied Physics. Her expertise is in large scale water resources modeling in an integrated assessment framework. Her work is related to the EU WATCH and HIGHNOON .

**Fulco Ludwig**, is a research scientist at the earth system science and climate change group of Wageningen University and Research Centre, The Netherlands. Together with Pavel Kabat he coordinates as a part of the Watch project the research on the vulnerability of global water resources. His research focuses on climate change impacts and adaptation in relation to water resources and agriculture.

**13:30 – 15:30 Topic area: Water resources: scenarios and adaptation**

**Frank Voss**, is research scientist at the Center for Environmental System Research at the University of Kassel, Germany. His research focuses is on climate change modeling especially concerning the impacts on global water resources states (water availability and water demand).

**Dr K Sreelakshmi**, is working at The Energy Resources Institute (TERI), New Delhi.

**Ashok Mishra**, is Assistant Professor at Agricultural and Food Engineering Department, IIT Kharagpur, India. He is associated in the HighNoon project especially in Climate Forecast Applications in water and agricultural resources management. He is quite compatible in hydrological & water quality modeling along with the crop yield modeling. He works on the use of climate forecasts in crop input management backed with DSSAT crop model analysis. The objective of his research is to identify management options to adopt to the changing climate in agricultural and water resources sector.

**Annemarie Groot**, is a researcher at the Earth System Science and Climate Change group of Alterra of Wageningen University and Research Center. She is in particular experienced in the domain of multi stakeholder processes and the management of complex change. She has been involved in several international projects in the field of natural resource management in various African and Asian countries. Currently, she is involved in the HIGNOON project where her research focuses on the development of new prioritization tools.

## **16:00 – 17:45 Panel discussion**

**Philippe Quevauviller**, is scientific officer at DG Research, Climate Change and Environmental Risks. He studied at the university of Bordeaux. First in coastal oceanography carried out in Portugal (PhD in 1987). Secondly on chemical specialization linked to a post-doc contract in the Netherlands (PhD in 1990). Scientific Officer at the EC managing research on environmental measurements and testing. He moved to water policy from 2002 to 2006 at the EC-DG environment and came back at DG Research, at the end on 2008

**Pradeep Kumar**, is an officer of Indian Forest Service i.e. IFS. He is working in Sikkim Himalayas as Conservator of Forests in the Department of Forests, Environment and Wildlife Management, Government of Sikkim. He is in charge of preparation of Forest Management Plans for the forests of Sikkim and works on development of criteria and indicators for Sustainable Forest Management. He is the chairman of Environment Impact Assessment (EIA) Committee which examines proposals for Hydroelectric Projects. He is also in charge of Climate Change Cell in the Department. His interests include modelling biodiversity response to climate change.

**Ashok Jaitly**, an IAS (retd.) officer from the Jammu & Kashmir cadre (1964), is currently working as Distinguished Fellow with TERI (The Energy Resources Institute), New Delhi and is also the Director of its Water Resources Division besides being a faculty member in TERI University, a deemed university. He additionally holds the responsibility of Chairperson, India WASH (Water, Sanitation and Hygiene) Forum campaign of the WSSCC (Water Supply and Sanitation Collaborative Council), a UN sponsored body based in Geneva. Mr. Jaitly completed his Master's in Economics and Diploma in Development Studies from Cambridge University (UK). Mr Jaitly has over 40 years experience at senior management level in various Central and State Government Departments which includes Chief Secretary of J&K (Jammu and Kashmir) State, Principal Advisor to the Chief Minister of J&K, Addl, Secretary (MoRD, GoI), Director General of CAPART, etc. He is currently engaged in work issues of sustainable development including natural resources management, water issues, rural energy and decentralized governance.