

PARTNERSHIP DEVELOPMENT WORKSHOP

Water sEcurity assessment of Indian rivers oriGinating from the Himalayas (WEIGH)

7th – 11th September | Online | www.globalmass.eu/weigh

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PROGRAMME SCHEDULE

WEIGH workshop, Session 1, 7th September 2020

Invited Lectures

Time IST	Time BST	Activity	Resource Person
1.30 pm – 1.40 pm	9.00 am – 9.10 am	Welcome address	Prof. Jonathan Bamber, UoB and Prof. RAAJ Ramsankaran, IIT Bombay
1.45 pm – 2.25 pm	9.15 am – 9.55 am	Invited Guest Lecture: Recent advances and future research challenges in understanding Asia's Water Tower	Prof. W. Immerzeel, Utrecht University, Netherlands
2.30 pm – 2.40 pm	10.00 am – 10.10 am	Policy, Funding, and People	Dr. Varshney ICD, DST, GoI
2.45 pm – 2.55 pm	10.15 am – 10.25 am	Policy, Funding, and People	Mr. Rowan Kennedy, Deputy Director India & SRO, UKIERI
3.00 pm – 3.20 pm	10.30 am – 10.50 am	Water SEcurity Assessment of Indian Rivers oriGinating from Himalayas	Shri. R.K. Sinha, Member River Management, Central Water Commission (CWC), GoI
		<i>Break</i>	
3.40 pm – 4.00 pm	11.10 am – 11.30 am	Himalayan Cryosphere under Warming Climate and Implications for Water Security in India	Prof. Anil Kulkarni, IISc Bangalore
4.05 pm – 4.25 pm	11.35 am – 11.55 am	Insights from Newton Bhaba project in Sutlej Basin Hydrology	Prof. C.S.P Ojha, IIT Roorkee
4.30 pm – 4.50 pm	12.00 am – 12.20 pm	Role of Indian Himalayan rivers in water security for India	Prof. Sharad Jain, IIT Roorkee, Former Director NIH Roorkee
			Moderator: Prof. Jonathan Bamber, University of Bristol (UoB)

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PROGRAMME SCHEDULE

WEIGH workshop, Session 2, 8th September 2020

In-situ Observations, Remote Sensing and Integrating Data and/or Models to Improve Reconstructions and Projections

Time IST	Time BST	Activity	Resource Person
1.30 pm – 1.35 pm	9.00 am – 9.05 am	Welcome address	Prof. RAAJ Ramsankaran, IIT Bombay
1.35 pm – 1.55 pm	9.05 am – 9.25 am	Glacier response in the western Himalaya through in-situ observations	Prof. A.L. Ramanathan JNU, New Delhi
2.00 pm – 2.20 pm	9.30 am – 9.50 am	How well can GRACE detect the mass changes at the sub-catchment level?	Prof. Balaji Devaraju, IIT Kanpur
2.25 pm – 2.45 pm	9.55 am – 10.15 am	Suspended sediment characteristics of Gangotri Glacier melt stream: Quantification and variability	Dr. Manohar Arora, National Institute of Hydrology (NIH) Roorkee
		<i>Break</i>	
3.05 pm – 3.25 pm	10.35 am – 10.55 am	Water budget and hydrograph apportionment of the Chandra River (Upper Indus Basin), western Himalaya	Mr. Ajit Singh, National Centre for Polar and Ocean Research (NCPOR), Goa
3.30 pm – 3.50 pm	11.00 am – 11.20 am	An overview of remote sensing approaches from catchment to continental scale	Prof. Jonathan Bamber, UoB
3.55 pm – 4.15 pm	11.25 am – 11.45 am	Ice in the Himalaya is more resilient to climate change than we thought	Prof. Stephan Harrison, University of Exeter
4.20 pm – 4.40 pm	11.50 am – 12.10 pm	Integrating observations and hydrological model to improve the spatial resolution of mass change estimates from GRACE	Dr. Bramha Dutt Vishwakarma, UoB

Moderator: Prof. RAAJ Ramsankaran, IIT Bombay

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PROGRAMME SCHEDULE

WEIGH workshop, Session 3, 9th September 2020

Modelling Hydrology and Climate

Time IST	Time BST	Activity	Resource Person
1.30 pm – 1.35 pm	9.00 am – 9.05 am	Welcome address	Dr. RAAJ Ramsankaran, IIT Bombay and Prof. Jonathan Bamber, UoB
1.35 pm – 1.55 pm	9.05 am – 9.25 am	Demystifying WDs and their linkages to Climate Change	Prof. A.P. Dimri, JNU New Delhi
2.00 pm – 2.20 pm	9.30 am – 9.50 am	Snow/glacier Change and its impact on runoff in a Himalayan Basin	Dr. Sanjay Jain, NIH Roorkee
2.25 pm – 2.45 pm	9.55 am – 10.15 am	Impact of high-resolution regional earth system model on dynamical and thermodynamical variability of Tropical Indian Ocean.	Prof. Pankaj Kumar IISER, Bhopal
		<i>Break</i>	
3.05 pm – 3.25 pm	10.35 am – 10.55 am	Remote sensing Big Data and observed data for better groundwater resource assessment, monitoring and management in India	Prof. Pennan Chinnasamy, IIT Bombay
3.30 pm – 3.50pm	11.00 am – 11.20 am	Human-Natural Water Cycle in the Indo-Gangetic Plain	Prof. Subimal Ghosh, IIT Bombay
3.55 pm – 4.15 pm	11.25 am – 11.45 am	Hydrological modelling and spatiotemporal analysis of water balance components in the River basin through the VIC model hydrological simulations	Prof. Janga Reddy, IIT Bombay
			Moderators: Prof. Subimal Ghosh, IIT Bombay & Prof. Pankaj Kumar, IISER Bhopal

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PROGRAMME SCHEDULE

WEIGH workshop, Session 4, 10th September 2020

Student Presentations

Time IST	Time BST	Activity	Resource Person
1.30 pm – 1.35 pm	9.00 am – 9.05 am	Welcome address	Prof. RAAJ Ramsankaran, IIT Bombay & Prof. Jonathan Bamber, UoB
1.35 pm – 1.55 pm	9.05 am – 9.25 am	Long-term mass balance, runoff and area change in Stok group of glaciers, Ladakh, India, between 1969 to 2019	Mr. Sohaib Mohd, JNU, New Delhi
2.00 pm – 2.20 pm	9.30 am – 9.50 am	Modelling mass changes of Chhota Shigri (Western Himalaya) and Dokriani (Central Himalaya) glaciers, India using energy balance approach	Ms. Smriti Srivastava, IIT Indore
2.25 pm – 2.45 pm	9.55 am – 10.15 am	Model cascade from meteorological drivers to river flood hazard	Mr. Peter Uhe, UoB
2.50 pm – 3.10 pm	10.20 am – 10.40 am	In-situ metrological observations and glacier melt study of Patsio glacier, western Himalaya, India	Dr. Thupstan Angchuk, JNU, New Delhi
		<i>Break</i>	
3.30 pm – 3.50 pm	11.00 am – 11.20 am	Regional climate models performance under various coupling mechanisms for mass balance estimates	Mr. Javed Aaquib, IISER Bhopal
3.55 pm – 4.15 pm	11.25 am – 11.45 pm	Sub-seasonal rainfall variability during Indian summer monsoon: A regional coupled atmosphere-ocean model assessment	Ms. Amita Kumari IISER Bhopal
4.20 pm - 4.40 pm	11.50 pm – 12.10 pm	Snow sublimation and surface energy balance of Chhota Shigri Glacier, importance and meteorological drivers	Mr. Arindan Mandal, JNU, New Delhi
4.45 pm – 5.05 pm	12.15 pm – 12.35 pm	Glacier Lake Outburst Floods hazards, Downstream Impacts and Risks over the Indian Himalayas	Mr. Saket Dubey, IIT Indore
			Moderator: Dr. B. D. Vishwakarma, UoB

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PROGRAMME SCHEDULE

WEIGH workshop, Session 5, 11th September 2020

Breakout Sessions and Closing Remarks

Time IST	Time BST	Activity	Resource Persons
1.30 – 1.40 pm	9.00 am – 9.10 am	Opening Remarks	Prof. RAAJ Ramsankaran, IIT Bombay & Prof. Jonathan Bamber UoB
1.45 pm – 2.45 pm	9.15 am – 10.15 am	Research priorities in modelling hydrology and climate Focus: <i>Sources of variability; climate change and human activity; latest developments and ongoing innovations; gaps in understanding; ways forward</i>	Panel 1 Prof. Subimal Ghosh, Prof. A.P.Dimri, Prof. Pankaj Kumar, Prof. Janga Reddy, Prof. CSP Ojha, Prof. Sharad Jain, Prof. Pennan Chinnasamy, Dr. Sanjay Jain, Dr. Manohar Arora, Prof. Kasiviswanathan, Dr. Bramha Dutt (Rapporteur)
1.45 pm – 2.45 pm	9.15 am – 10.15 am	Research priorities in <i>in-situ</i> observations; remote sensing and Integrating data and/or models to improve reconstructions and projections Focus: <i>Latest developments and ongoing innovations; gaps in understanding; ways forward</i>	Panel 2 Prof. Anil Kulkarni, Prof. AL Ramanathan, Prof. Farooq Azam, Prof. Geetha Priya, Prof. Jonathan Bamber, Prof. Balaji Devaraju, Prof. Stephan Harrison, Prof. RAAJ Ramsankaran (Rapporteur)
		<i>Break</i>	
3.00 pm – 3.45 pm	10.30 am – 11.15 am	Report and summarize panel discussions Closing Remarks and Votes of Thanks	WEIGH workshop team
3.45 pm – 4.00 pm	11.15 am – 11.30 am	Focus: <i>Summary of the workshop proceedings, Follow-up activities: Workshop report, Future plan for R&D Proposal Development</i>	Prof. RAAJ Ramsankaran, IIT Bombay & Prof. Jonathan Bamber UoB

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