



Workshop on Space Technology Inputs for Disaster Risk Reduction in North Eastern Region with special emphasis on Early warning, Preparedness and Mitigation

March 16-17, 2017

Venue: NESAC, Umiam

Registration: 08:30 – 09:30 hrs (Venue: NESAC office entrance lobby)

Programme at a Glance				Venue: NESAC auditorium	
Date: 16.03.2017					
09:30 – 10:40 hrs	11:00 – 13:00 hrs	14:00 – 15:30 hrs	16:00 – 17:30hrs	18:30 –19:30hrs	20:00 –21:30hrs
Inaugural Ceremony	Technical Session-I Space Technology for disaster management	Technical Session-II Flood and Riverbank Erosion	Technical Session-III Geo Hazards	Cultural Programme	Workshop Dinner
Tea: 10:40 – 11:00 hrs, 15:40 – 16:00 hrs, 17:30– 18:00 hrs			Lunch: 13:00 – 14:00 hrs		
Date: 17.03.2017					
09:30 – 11:00 hrs	11:30 – 13:00 hrs	14:00 – 15:30 hrs	16:00 – 17:00hrs		
Technical Session-IV Forest Fire, Disease Epidemics	Technical Session-V Cyclone, thunderstorm and agricultural drought	Technical Session-VI Communication, IT services and Institutional framework for disaster management support	Panel Discussion		
Tea: 11:00 – 11:30 hrs, 15:40 – 16:00 hrs, 17:00– 17:30 hrs			Lunch: 13:00 – 14:00 hrs		

Inaugural Ceremony (09:30 – 10:40 hrs)		
(Venue: NESAC Auditorium)		
09:30 - 09:35 hrs	Welcome	Dr. K. K. Sarma <i>Convener of the workshop, NESAC</i>
09:35 - 09:40 hrs	Invocation and Lighting of Lamp	All dignitaries
09:40 - 09:50 hrs	Opening Remarks	Shri P.L.N. Raju <i>Director, NESAC & Chairman of the workshop</i>
09:50 - 09:55 hrs	Release of Workshop Abstract	All dignitaries
09:55 - 10:10 hrs	Address by Guest of Honour	Shri P.P. Shrivastava, IAS (Retd.) <i>Former Member, North Eastern Council (NEC)</i>
10:10 - 10:20 hrs	Address by the Special Guest	Dr. P.G. Rao <i>Vice Chancellor, USTM</i>
10:20 - 10:35 hrs	Address by the Chief Guest	Shri C.K. Das, IAS (Retd.) <i>Hon'ble Member, NEC</i>
10:35 - 10:40 hrs	Vote of Thanks	Shri Shyam S. Kundu <i>Organising Secretary of the workshop, NESAC</i>
10:40 - 11:00 hrs	Hi-Tea	

Technical Session – I (11:00 – 13:00 hrs)
Space Technology for disaster management
(Venue: NESAC Auditorium)

Chair: Shri P.P. Shrivastava, IAS, Former Member, North Eastern Council (NEC)
Co-Chair: Dr. K. K. Sarma, NESAC

11:00 - 11:05 hrs	Opening Remarks	Chair
11:05 - 11:30 hrs	Lead Talk: Disaster Risk Reduction in NE region: the road ahead	Shri P.P. Shrivastava, IAS <i>Former Member, North Eastern Council (NEC)</i>
11:30 - 11:55 hrs	NER-DRR present activities and way forward	Shri P.L.N. Raju <i>Director, NESAC</i>
11:55 - 12:15 hrs	Fluvial dynamics and hazard vulnerability in Brahmaputra valley: A geological perspective	Prof. Parag Phukon <i>Dept. of Geology, Gauhati University</i>
12:15 - 12:35 hrs	Integrated UAV solutions for disaster management	Dr. Senthil Kumar <i>Director, CAR, Anna university</i>
12:35-12:55 hrs	Improving preparedness and emergency management in flood risk management – A case of complementing technical early warning system with flood forecasting	Dr. D. Gurung <i>ICIMOD, Nepal</i>
12:55- 13:00 hrs	Concluding Remarks	<i>Chair/ Co-Chair</i>
	Lunch	

Technical Session – II (14:00 – 15:40 hrs)
Flood and Riverbank Erosion
(Venue: NESAC Auditorium)

Chair: Dr. D. Dutta, RRSC-East, Kolkata
Co-Chair: Dr. Diganta Barman, NESAC

14:00 - 14:05 hrs	Opening Remarks	Chair
14:05 - 14:30 hrs	Lead Talk: Managing flood and erosion – lessons learned and looking ahead	Dr. Bipul Talukdar, <i>Assam Engineering College, Guwahati</i>
14:30 - 14:40 hrs	Flood Early Warning System (FLEWS) in Assam	Dr. Diganta Barman, <i>NESAC</i>
14:40 - 14:50 hrs	Extreme event of flood in desert – A rapid action plan for disaster management support using Remote Sensing and GIS	D. Dutta and J. R. Sharma <i>RRSC-East, Kolkata & NRSC, Hyderabad</i>
14:50 - 15:00 hrs	Development of passive microwave sensing based flood early warning technique for Brahmaputra valley in Assam, India	Shri Bikramjit Goswami & Shri Manoranjan Kalita <i>Assam Don Bosco University, Guwahati</i>
15:00 - 15:10 hrs	Strategic community based approach to combat flood risk and bank erosion at Majuli, Assam	Rituraj Neog and Biman Lahkar <i>Center for studies in Geography, Dibrugarh University, Dibrugarh</i>
15:10 - 15:20 hrs	Mapping and monitoring of embankment breaches with temporal satellite data	Shri Ranjit Das, <i>NESAC</i>
15:20 - 15:30 hrs	A Framework for Flood Risk Assessment of Regulated River System	Chandan Pradhan, Vinay Chembolu and Subashisa Dutta <i>IIT, Guwahati</i>
15:30 - 15:40 hrs	Water and sediment waves and associated fluvial disasters in the Brahmaputra river	Vinay Chembolu and Subashisa Dutta <i>IIT, Guwahati</i>
15:40 - 16:00 hrs	Tea	

Technical Session III (16:00 – 17:30 hrs) Geo Hazards (Venue: NESAC Auditorium)		
Chair: Prof. Parag Phukon, Gauhati University, Co-Chair: Shri M. Somorjit Singh, NESAC		
16:00 - 16:05 hrs	Opening Remarks	Chair
16:05 - 16:15 hrs	Lead talk: Support from earth observation data for landslide disaster	Dr. Tapas R. Martha NRSC, Hyderabad
16:15 - 16:35 hrs	Continuous GNSS observations for earthquake precursor and associated deformation analysis	Gopal Sharma & P K Champati Ray NESAC, Umiam & IIRS, Dehradun
16:35 - 16:45 hrs	Earth's outgoing long wave radiation as an effective earthquake precursor: A correlative study	Anjan Debnath, Navaneet Kishan, Amal Kumar Pandey NESAC, Umiam & NIT Sikkim
16:45 - 16:55 hrs	Landslide hazards, their effects and mitigation: A case study in and around the Aizawl city, Mizoram, India.	Raghupratim Rakshit, Devojit Bezbaruah and Bubul Bharali Dibrugarh University & Pachhunga University College
16:55 - 17:05 hrs	Landslide mapping and landform evolution around Shillong plateau, North-East India	Falguni Bhattacharya, Navin Juyal ISR, Gandhinagar & PRL, Ahmedabad
17:05 - 17:15 hrs	Mapping and assessment of landslide vulnerable areas in East Khasi hills district	Fettleman RN Dohling, Norita N. Sohlang, Stebanshon Myllemngap GIS Laboratory, MBDA, Shillong
17:15 - 17:25 hrs	Building vulnerability assessment for hazards management: A case study of Riatamthiah Shillong	F. P. Kharpran and P. K. Rynngnga NEHU, Shillong
17:25 - 17:30 hrs	Concluding Remarks	Chair/ Co-Chair

Technical Session IV (09:30 – 11:00 hrs) Forest Fire and Disease Epidemics (Venue: NESAC Auditorium)		
Chair: Dr. C.S. Jha, NRSC Co-Chair: Dr. B.K. Handique, NESAC		
09:30 - 09:35 hrs	Opening Remarks	Chair
09:35 - 10:00 hrs	Lead talk: Monitoring of forest fires from Space – ISRO's initiatives for near real time monitoring of recent forest fires	Dr. C.S. Jha NRSC
10:00 - 10:10hrs	Assessment of ecological disturbance caused by flood and fire in Assam forests, India, using MODIS time series data (2001-11)	Dibyendu Dutta, Prabir Kumar Das, Libeesh Lukose RRSC-East, Kolkata
10:10 - 10:25 hrs	Vector borne diseases causing health disaster: Aerial eyes, a refuge for planning mitigation!	Dr. Siraj Ahmed Khan RMRC-ICMR
10:25 - 10:35 hrs	Forest fire scenario of North East India	K Chakraborty, Mi Chabukdhara, Partho P. Mondal, Suranjana B. Borah, Kasturi Goswami, Arup Borgohain, K K Sarma and P L N Raju NESAC
10:35 - 10:45 hrs	Spatial Statistical analysis for identifying disease epidemics hotspots	Bijoy K. Handique NESAC
10:45 - 10:55 hrs	Modeling potential spatial accessibility to primary health center of Pune, Maharashtra	Punam Rosy Ekka & Shamita Kumar Bharati Vidhyapeeth University, Pune
10:55- 11:00 hrs	Concluding Remarks	Chair/ Co-Chair
11:00-11:30 hrs	Tea	

Technical Session V (11:30 – 13:00 hrs) Cyclone, thunderstorm and agricultural drought (Venue: NESAC Auditorium)		
Chair: Dr. Devendra Pradhan Co-Chair: Shri S.S. Kundu , NESAC		
11:30 - 11:35 hrs	Opening Remarks	Chair
11:35 - 12:00 hrs	Lead talk: Meteorological disasters and role of IMD in their prediction and mitigation	Dr. Devendra Pradhan <i>IMD</i>
12:00 - 12:15 hrs	Agricultural drought monitoring	Prof. Pradip K. Bora <i>CAU</i>
12:15 - 12:25 hrs	Assessment of agricultural drought in NER	J. Goswami, S. Roy, M. Prashnani, P.L.N. Raju <i>NESAC</i>
12:25 - 12:35 hrs	Urban flash flood early warning system using doppler weather radar	A. Anjaneyulu, Neeraj K. Jareda, Kamaljit Ray, Subashisa Dutta <i>IIT-Guwahati & IMD, Pune</i>
12:35-12:45 hrs	Application of numerical weather prediction models for rainfall prediction over NER	R.B. Gogoi, N. Barman, A. Chhari, S.S. Kundu, P.L.N Raju <i>NESAC</i>
12:45- 12:55 hrs	Flooding patterns and analysis in Langol sub-urban catchment, Imphal	Ngangbam Romeji, M. Bipinchandra, L. Chandramani, and S. Birendra Singh <i>NIT- Manipur, Imphal</i>
12:55 - 13:00 hrs	Concluding Remarks	<i>Chair/ Co-Chair</i>
13:00 - 14:00 hrs	Lunch	

Technical Session VI (14:00 – 15:40 hrs) Communication, IT services and Institutional framework for disaster management support (Venue: NESAC Auditorium)		
Chair: Prof. B.S. Mipun, NEHU Co-Chair: Dr. D. Chutia, NESAC		
14:00 - 14:05 hrs	Opening Remarks	Chair
14:05 - 14:20 hrs	Lead Talk: Role of NEC in disaster management support in NER.	Shri A.D. Kharshing. <i>NEC</i>
14:20 - 14:30 hrs	Use of space based inputs in disaster management – Assam experience	Biren Baishya, ASDMA
14:30 - 14:40 hrs	Role of SATCOM based emergency communication system during catastrophic natural	Ramani K. Das, Anjan Debnath & Debabrata Gogoi
14:40 - 14:50 hrs	IT-enabled geospatial services to support disaster risk reduction activity	D. Chutia, P. S. Singh, V. Saikhom, A. Chouhan, and S. Bhuyan <i>NESAC</i>
14:50 - 15:00 hrs	Application of Unmanned Aerial Vehicle (UAV) in Disaster Support	C. Gupta, M. prashnani, D. Chutia, J. Goswami, V. Saikhom, P. S. Singh, A. Chouhan & P.L.N. Raju <i>NESAC</i>
15:00 - 15:10 hrs	Experimental study of local scour around spur dike in a straight channel	Dharmendra Nath & Utpal Kumar Misra <i>Assam Engineering College, Guwahati</i>
15:10 - 15:20 hrs	Use of geoinformatics and vetiver grass with geotextile fabric cover in disaster mitigation in Itanagar area, Arunachal Pradesh, India.	Rakesh Kumar Singh, B. Singh, P.R. Gajurel <i>NERIST, Itanagar</i>
15:20 - 15:30 hrs	A participatory approach towards making resilient cities	Shantanu Das <i>NESAC</i>
15:30- 15:40 hrs	Concluding Remarks	<i>Chair/ Co-Chair</i>
15:40 - 16:00 hrs	Tea	

Plenary Session (16:00 – 17:00 hrs) Panel Discussion & Workshop Recommendations (Venue: NESAC Auditorium)	
Moderator: Dr. K.K. Sarma, Workshop Convener	

Note: Any updation and modification in the Technical programme will be available at NESAC website