United Nations/Islamic Republic of Iran Workshop
on
the Space Technology Applications for Drought, Flood and Water Resources Management

09 August 2021		
Time (Local time in Tehran)	Activity	Moderator/Speaker
11:00-11:20	Opening Remarks	Simonetta Di Pippo, Director, UNOOSA H.E. Dr. Kazem Gharibabadi, Ambassador and Permanent Representative of I.R.Iran to UN and other International Organizations in Vienna k.Gharibabadi@mfa.gov.ir
11:20-11:30 11:30-11:40	Key note speech	Dr.Morteza Barari, Head of Iranian Space Agency, ICT Barari@isa.ir Ms.Fatemeh Fereydooni,Center for International Relations & Cooperations,ISA fereidooni@isa.ir
11:40-12:00	Key note speech- Setting the context	Dr. Shirish Ravan, UNOOSA
12:00-13:00	**Session 1** **National, regional and international initiatives for Flood and Drought Monitoring**	**Moderator:** **Shirish Ravan, UNOOSA**
12:00-12:15	1. GAR Special Report on Drought	Adam Fysh, United Nations Office for Disaster Risk Reduction (UNDRR)
12:15-12:30	2. Managing water variability, from floods to droughts	Dr. Giriraj Amarnath, International Water Management Institute and Coordinator of the UN-SPIDER Regional Support Office
12:30-13:00	Discussion	
13:00-14:00	Break	
14:00–16:00	**Session 2** **Space technology for ecosystem health, drought and flood monitoring, early warning, preparedness and response**	**Moderator:** **Prof. Mohammadreza Mobasheri, I.R.Iran**
14:00-14:15	3. Drought monitoring in Iran using remote sensing data	Dr.Saeid Hamzeh, Assiciate Professor of Remote Sensing and GIS, Faculty of Geography, University of Tehran Saeid.hamzeh@ut.ac.ir

14:15-14:30	4. Utilizing TVDI and NDWI to classify severity of agricultural drought in Chuping, Malaysia	Veena Shashikant *et al*, Universiti Putra Malaysia
14:30-14:45	5. Application of Satellite Remote Sensing to Regional Agriculture and Water Resource Management	Prof. Masahiro Tasumi, P.E.Jp. , Agricultural Engineer University of Miyazaki tasumi@cc.miyazaki-u.ac.jp
14:45-15:00	Discussion	
15:00-15:15	6. Space technologies for early warning, preparedness and response	Prof. Nishakant Ojha, Broadcast Engineering Consultants India Limited nishakant02@gmail.com
15:15-15:30	7. Heat island detection on 4meters Spatial resolution.	Prof. Mohammadreza Mobasheri, KNToosi university of technology,Tehran Mobasheri@kntu.ac.ir
15:30-15:45	8. The Afghanistan Drought Early Warning Decision Support Tool (AF-DEWS): an online platform combining satellite-based earth observation with weather forecasting.	Efrem Ferrari, World Bank Group
15:45-16:00	Discussion	
10 August 2021		
11:00-13:00	**Session 3** **Vulnerability mapping and risk analysis of sand & dust storm**	**Moderator:** **Ms. Letizia Rossano, APDIM, UNESCAP**
11:00-11:15	9. Geoinformatics for Sand and Dust Storm Studie - A vulnerability mapping and risk analysis procedure.	Dr. Ali Darvishi Boloorani, Department of Remote Sensing and GIS, Faculty of Geography, University of Tehran ali.darvishi@ut.ac.ir
11:15-11:30	10. Contributing to a broader understanding of climate-related disaster risk through information management, the case of sand and dust storms in Asia and the Pacific	Mr Amin Shamseddini rossano@un.org mostafa.mohaghegh@un.org
11:30-11:45	11. Geospatial-based information for agricultural drought monitoring in the sandy soil of the Eastern Netherlands	Dr. Ali Abkar, Managing Director AgriWatch BV, Enschede, the Netherlands ali.abkar@agriwatch.nl
11:45-12:00	Discussion	
12:00-12:15	12. Sand and dust storm risk assessment over West Asia	Dr. (Ms) Saviz Sehat, Atmospheric Science and Meteorological Research Center (ASMERC) savizsehat@yahoo.com
12:15-12:30	13. Space technology applications for drought, flood, water resources management and early warning systems in Syria	Marwan Koudmani, Remote Sensing and Space Sciences Office (RSSSO)
12:45-13:00	Discussion	
13:00–14:00	Break	
14:00-16:00	**Session 4** **Earth Observation and environmental modelling for flood and water resources management in the context of global climate change**	**Moderator:** **Dr. Talbot Brooks, Coordinator of the UN-SPIDER Regional Support Office**

14:00-14:15	14. Data availability vs data demand - The challenges of space-based monitoring to support national disaster risk management	Ms Valerie Graw, Institute of Geography, Ruhr University Bochum
14:15-14:45	15. a) Application of Chinese satellite in drought and flood disaster and b) The application of multi-model risk assessment in natural disaster risk trend analysis	a) Liu Ming b) Ms Liao Hanqi National Disaster Reduction Centre of China
14:45-15:00	16. Satellite constellation for water cycle and global change studies	Jiancheng Shi, Senior research scientist shijiancheng@nssc.ac.cn
15:00-15:15	17. Deepwater rice field detection: Re-evaluating the 2011 flood in Thailand	Jainta Chomtoranin *et al*, Department of Economics, University of Birmingham
15:15-15:30	18. Use of thermal remote sensing to improve irrigation system efficiency	Dr.Talbot Brooks, Delta State University and Coordinator of the UN-SPIDER Regional Support Office
15:30-15:45	19. Multi-criteria modelling of drought: a study of Brandenburg Federal State, Germany	Taiwo Ogunwumi, United Nation University, Institute of Environmental Risk and Human Security
15:45-16:00	Discussion	
11 August 2021		
11:00 - 13:00	**Session 5** **Geoinformatics applications in water resources management; challenges and opportunities**	**Moderator:** **David Stevens, Resilient Expert (Former UN Staff)**
11:00-11:15	20. Use of Space-based Information to Support Global Frameworks – Aiming at risk-centred climate sensitive development	David Stevens, Resilient Expert (Formerly with UNOOSA and UNDRR)
11:15-11:30	21. Sentinel 1 time series for flood mapping; case study: north of Iran	Dr. Ms.Sara Attarchi, Department of Remote Sensing and GIS, Faculty of Geography, UT satarchi@ut.ac.ir
11:30-11:45	22. Improving the Water Sector through Space Technology for Water Resource Management	Funmilola A. Oluwafemi, National Space Research and Development Agency (NASRDA), Nigeria.
11:45-12:00	23. Recognition of Different Yield Potentials among Rain-fed Wheat Fields before Harvest Using Remotely Sensing	Hamed Sabzchi Dehkharghani, University of Tabriz, Faculty of agriculture, Department of water engineering, Email: h.sabzchi@tabrizu.ac.ir
12:00-12:15	24. Estimation of Water Consumption and Wheat's Crop Water Productivity in the Shikarpur District by Remote Sensing	Suhail Ahmed and Dr. Arjumand Zaidi, USA-Pakistan Center for Advanced Studies in Water, Mehran University Jamshoro, Sindh Pakistan
12:15-12:30	25. Probabilistic Flood Hazard Assessment using 2D Flood Modeling approaches	Dr Mohammad Farooq, SUPARCO, Pakistan, Coordinator of the UN-SPIDER Regional Support Office
12:45-13:00	Discussion	
13:00-14:00	Break	

14:00-16:00	**Session 6** **Advocacy Session: Institutional strengthening and preparedness for improving disaster management risk assessment (Strategies to raise cooperation among public and private stakeholders of disasters management in an international, national and regional scale)**	**Moderator:** **Dr.Ali Darvishi Boloorani, I.R.Iran**
14:00-14:15	26. Disaster Management in Iran. A review on policies, strategies and plans	Dr.Abbas Ostadtaghizadeh, Assistant Professor and Head, Department of Health in Disasters and Emergencies, School of Public Health,UT ostadtaghizadeh@gmail.com
14:15-14:30	27. Special Reporting Committee on Iran Floods 2019	Dr. Arash Malekian, International Coordinator of Special Reporting Committee on Iran Floods 2019, University of Tehran, Iran malekian@ut.ac.ir
14:30-14:45	28. Affordable Space Solution for Water Related Disaster Management	Sajjad Ghazanfarina, founder of fazadotir(startup on space education & outreach) founder@faza.ir
14:45-15:00	29. Smart Water Management Tools Based on Integrated flood and Drought management	Mehdi Rahnama
15:30-16:00	Closing Remark	Fatemeh Fereydooni, ISA Shirish Ravan, UNOOSA