Rural Water and Food Security
An action supported by the European Union

GEUS

PI RURAL Groundwater Dialogue Seminar

Aspects of Sustainable Groundwater Management and Use

2-day PI RURAL Webinar

17th and 19th May 2022

Time: 8:30 – 11:30 CET / 14:30 – 17:30 CNT

(Simultaneous translation English and Chinese by SSITrans)

Day 1 - Setting the Scene

Chair: Dr Jin Hai, MWR International Cooperation Centre (INTCE)

1 Opening (08:30 – 09:30 CET + 6:00 for China)

1.1 Welcome. Dr Jin Hai, MWR International Cooperation Centre (INTCE) (5 min)

1.2 Logistics. Mr Lars Skov Andersen. Coordinator of the Rural Water and Food Security Policy Dialogue Seminars and Webinars (10 min)

1.3 Opening Speech: United Nations World Water Development Report 2022. **Groundwater: Making the invisible, visible**. Dr Richard Connor, WWDR Editor in Chief, UNESCO (25 min)

1.4 Key Groundwater Challenges addressed by the 2021 Chinese Groundwater Management Regulation (地下水管理条例). Dr Yu Lili, General Institute of Water Resources and Hydropower Planning and Design (GIWP) (15 min)

2 Groundwater Quantity Management and Use (09:30 – 10:30 CET + 6 for China)

2.1 Droughts and Water Scarcity Issues with Groundwater and Food Security Considerations. Professor Em. Dr Luis Santos Pereira, Institute of Agronomy, University of Lisbon. (15 min)

2.2 Progress and measures of groundwater access management. Dr Mu Enlin, MWR Water Resources Management Centre (15 min)

2.3 A Path to Sustainability of Groundwater Overexploitation on the North China Plain. Professor (em.) Wolfgang Kinzelback, ETH Zürich and Mr. Lars Skov Andersen, ChinaRM (15 min)

ChinaRM
China Resources Management

2.4 Recommendations of the 2019 Water Saving by Groundwater Management Policy Dialogue Seminar. Mr Lars Skov Andersen, PI RURAL Policy Dialogue Coordinator (5 min)

2.5 Selection of 3 key issues for consideration as policy recommendations by voting. Mr Henrik Bregnhøj, Good Deed Consulting (10 min)

3 Groundwater Quality Management and Use (10:30 – 11:30 CET + 6 for China)

3.1 Global Aspects of Groundwater Quality: Importance, Methods, and New Initiatives. Dr Karen Villholth, Water Cycle Innovation (Ltd) (15 min)

3.2 European nitrate pollution, groundwater quality and measures in the Nitrates Directive[1]. Mr Peter Kristensen, European Environment Agency (emeritus) (15 min)

3.3 Recommendations of the 2021 Water Quality Management Webinar. Mr Lars Skov Andersen, PI RURAL Policy Dialogue Coordinator (5 min).

3.4 Selection of 3 key issues for consideration as policy recommendations by voting. Mr Henrik Bregnhøj, Good Deed Consulting (5 min)

3.5 Q&A moderated by Bjørn Kaare Jensen, PI RURAL Manager, GEUS (20 min)

Day 2 - PI RURAL Results

Chair: Mr Bjørn Kaare Jensen, PI RURAL PI RURAL Manager, GEUS.

4 WP 5 Report and Policy Recommendations: Socio-economic efficiency of water allocation and use for irrigated agriculture (08:30 – 09:20 CET + 06:00 for China)

4.1 (Previous 5.1) Sustainable Irrigation Management. Dr Kiril Manevski and Dr Finn Plauborg, Aarhus University (15 min)

4.2 (Previous 5.2) Socio-economic sustainability of irrigation investment. Mr. Lars Skov Andersen on behalf of Dr. Yao Jingwei, Yellow River Institute of Hydrology Research (15 min)

4.3 (Previous 5.3) Recommendations on Sustainability of Groundwater Use in Agriculture and simple hydro-economic model to support decision making. Professor Julio Berbel and Javier Martinez-Dalmau, University of Cordoba (20 min)

[1] 2021 Status Report on the Nitrates Directive: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC1000&from=EN

5 WP3 Report and Policy Recommendations: Protection and restoration of ground-water dependent eco-systems (GDEs) in karst areas & WP 4 Report: Integrated measures to protect groundwater quality against diffuse pollution (09:20 – 10:00 CET + 6:00 h for China)

5.1 (Previous 4.1) Groundwater status and eco-hydrological characteristics in chalk-limestone aquifer-stream system. Mr Bertel Nilsson, GEUS and Dr Chen Huawei, WRISD (15 min)

5.2 (Previous 4.2) Groundwater Quality Monitoring and Data Management. Ms Lærke Thorling, GEUS. (15 min)

5.3 Q&A (10 min)

6 WP 7 Report and Policy Recommendations: Develop and adapt Managed Aquifer Recharge (MAR) Systems to restore severely depleted groundwater aquifers on the North China Plains (10:10 – 10:40 CET + 6:00 h for China)

6.1 Managed Aquifer Recharge – risks and benefits. Dr Jens Aamand, GEUS and Dr Wang Weiping, University of Jinan (15 min)

6.2 Clarifying the Regulatory Requirements for Adaptation of Managed Aquifer Recharge as Groundwater Resource in China. Professor Yan Zheng (郑焰), Southern University of Science and Technology (15 min)

7 Discussion and selection of policy recommendations (10:40 – 11:30 CET + 6:00 h for China)

7.1 Groundwater Management challenges in the 21st century. Discussion moderated by the Chair (20 min)

7.2 Selection of Groundwater Management issues for policy recommendations. Mr Lars Skov Andersen, ChinaRM (10 min)

7.3 Voting (5 min)

7.4 Q&A and closure by Mr Bjørn Kaare Jensen, PI RURAL Manager, GEUS (15 min)