



Considering the future of Integrated Water Resources Management (IWRM) in Central Asia

IWRM Model Region Mongolia Wrap-up and Relay Conference

-International Conference and Symposium-

AGENDA and List of Posters

29 -30 May 2018

Red Rock Resort

Gorkhi Terelj National Park, Mongolia

IWRM MoMo Wrap-up and Relay Conference 29 – 30 May 2017

DAY 1- 29.05.2018, TUESDAY	
Moderation: Mr. Lkhagva	
09:00	Reception
10:00	Opening ceremony: Traditional Mongolian music
10:10	Opening address by Mr. Tsengel, Ts. , State Secretary of Mongolian Ministry of Environment and Tourism
10:20	Opening address by Mrs. Lkhagvatseden, O. , Mongolian Ministry of Urban Development and Construction
10:30	Opening address by Acad. Prof. Dr. Regdel, D. , President of Mongolian Academy of Sciences
10:40	Opening address by Dr. Christian Alecke , German Federal Ministry for Education and Research
10:50	Opening address by Dr. Battogtokh, D. , Director of the Institute of Geography and Geoecology, MAS
11:00	Welcome Address & Talk: “Integrated Water Resources Management in Mongolia and beyond: my personal lessons learned” Prof. Dr. Borchardt, Helmholtz Centre for Environmental Research-UFZ, MoMo Project
11:20	Honorary Doctor Ceremony for Prof. Dr. Borchardt
11:40	Presentation of IWRM River Basin Management Plan Mrs. Dolgorsuren, G., independent consulting
11:50	Presentation & Film “Decentralized Waste Water Treatment Technology” Dr. Buren Scharaw, Fraunhofer IOSB-AST, MoMo Project
12:00	Handing over of MoMo Policy briefs Dr. Ines Dombrowsky, German Development Institute, MoMo Project <ul style="list-style-type: none"> • MoMo Policy brief 1: Urban water management in Mongolia • MoMo Policy brief 2: Strengthening environmental monitoring and data accessibility • MoMo Policy brief 3: Improvements to Mongolia’s fisheries management and conservation • MoMo Policy brief 4: Geodata management using Free and Open Source • MoMo Policy brief 5: Water education • MoMo Policy brief 6: Implementing River Basin Management in Mongolia: Administrative and financial dimensions
12:15	"Effective Human Resources Development strategy in IWRM" Dr. Saulyegul, A., Helmholtz Centre for Environmental Research-UFZ and Institute of Geography and Geoecology, Mongolian Academy of Sciences; MoMo Project

12:25	<p>“Kharaa Yeröö River Basin Atlas: perspectives for future contents and applications”</p> <p>Dr. Jürgen Hofmann, Leibniz Institute of Freshwater Ecology and Inland Fisheries, Berlin , MoMo Project & Dr. Battogtokh, D., Institute of Geography and Geoecology, Mongolian Academy of Sciences</p>
12:35	<p>“MoMo-Geoportal: Data management using Free and Open Source Software”</p> <p>H. Paulsen, terrestris GmbH & Co. KG, Bonn, Germany, MoMo Project & Dr. Sarantuya, G., Information and Research Institute of Meteorology, Hydrology and Environment</p>
12:45	Conference group photo
13:00	Lunch Break
14:00	<p>Keynote Talk 1: “The “I” in MoMo: an integrated consideration of more than a decade of environmental research in the basins of Kharaa, Shariin Gol and Yeröö”</p> <p>Prof. Dr. Daniel Karthe, German Mongolian Institute for Technology, Ulaanbaatar, MoMo Project</p>
14:30	<p>Three Parallel Sessions about Scientific Topics and Water Management</p> <p>(program see below)</p>
15: 30	Coffee break
16:00	<p>Three Parallel Sessions about Scientific Topics and Water Management</p> <p>(program see below)</p>
18:00	<p>Short summary of the day</p> <p>Bus transport to and from World Terelj Hotel (12 min away)</p>
19:15	Conference Dinner at Red Rock Resort
22:00	Bus to and from World Terelj Hotel (12 min away)

DAY 2- 30.05.2018, WEDNESDAY	
09.00	Keynote Talk 2: “Integrated approach to higher education in the water sector as a leverage for its sustainable management. Lessons learned from Central Asia” Prof. Dr. Barbara Janusz-Pawletta, UNESCO Chair in Water Management in Central Asia
9:30	Three Parallel Sessions about Scientific Topics and Water Management (program see below)
10:30	Coffee Break
11:00	Three Parallel Sessions about Scientific Topics and Water Management (program see below)
13:00	Lunch break
14:00	Keynote 3: “Urgent issues in the development of the Water sector in Mongolia” Dr. D. Dorjsuren, 2030 Water Resources Group and Freshwater Institute
14:30	Panel Discussion (Panelists will be announced during the conference)
15:00	Open Forum (everybody is invited to discuss)
16:00	Coffee Break/Poster Session
16:30	Closing Ceremony

Session 1: Integrated Water Resource Management

DAY 1- 29.05.2018, TUESDAY	
Chair: Prof. Dr. Barbara Janusz-Pawletta, Sc. Dr. Anna Mikheeva	
14:30	River basin management and fiscal decentralisation: mutually supportive or counterproductive? A case study of Mongolia; Part 1 Dr. Ines Dombrowsky et al., German Development Institute (DIE)
15:00	River basin management and fiscal decentralisation: mutually supportive or counterproductive? A case study of Mongolia; Part 2 Prof. Dr. Ariunaa Lkhagvadorj et al., Mongolian Academy of Governance
15:30	Coffee Break
16:00	Reflections on implementing River Basin Management in Mongolia Dr. Jean Carlo Rodriguez de Francisco and Dr. Ines Dombrowsky, Department Environmental Governance and Transformation to Sustainability; German Development Institute (DIE)
16:30	Water use and wastewater discharge licenses as coordination mechanisms – theory and practice in Mongolia Mirja Schoderer, Program <i>Environmental Governance and Transformation to Sustainability</i> , German Development Institute (DIE)
17:00	Estimation of the economic damage to recreational water use on the Lake Baikal coast (the case of the Republic of Buryatia) Dr. Erdeni Sanzheev, Baikal Institute of Nature Management SB RAS, Ulan-Ude, Russia
17:30	Problems faced in Shishkhed River Basin and a way forward Dr. D. Dorjsuren et al., Freshwater and Ecosystem Research Institute, Ulaanbaatar
DAY 2- 30.05.2018, WEDNESDAY	
Chair: Dr. Erdeni Sanzheev, Dr. Ines Dombrowsy	
9:30	Water policy of Mongolia considering the regional geo-ecological character Prof. Dr. Nyamdavaa, .G., Ministry of Environment and Tourism, Mongolia
10:00	Economic instruments for water management in the region: Practice of application and prospects of development Dr. Taisiya Bardakhanova & Dr. Anna Mikheeva, Baikal Institute of Nature Management, Siberian Branch of the Russian Academy of Sciences, Ulan-Ude
10:30	Coffee Break
11:00	A City at Baikal: Problems and prospects of development O. V. Gagarinova, N. V. Emelianova; V.B. Sochava Institute of Geography SB RAS, Irkutsk
11:30	Application of the City Blueprint approach in Ulaanbaatar city, Mongolia Enkh-Uur Munkhsuld et al., Department of Environment and Forest Engineering, School of Engineering and Applied Science, National University of Mongolia,

	Ulaanbaatar, Mongolia
12:00	Introduction to the Umard Govi Guveet-Khalkh River Basin Council and its implemented activities. Enkhmaa, Umard Govi Guveet-Khalkh River Basin Council

Session 2: Hydrology and Biology

DAY 1- 29.05.2018, TUESDAY	
Chair: Prof. Dr. Altansukh Ochir, Dr. Dr. h. c. Martin Pfeiffer	
14:30	Present day ecological status of the Ob-Irtysh River Basin Prof. Dr. Viktor Abramovich Puzanov, Institute for Water and Ecological Problems SB, RAS, Russia
15:00	Ecological assessment of threatened salmonids populations (<i>Hucho taimen</i>, <i>Brachymystax lenok</i>, <i>Thymallus baicalensis</i>) across Mongolia Dr. Andrew Kaus et al., Helmholtz Centre for Environmental Research, Magdeburg, Germany
15:30	Coffee Break
16:00	Aquatic macroinvertebrate communities in the Kharaa river basin, North Mongolia: pressures, assessment and future challenges Michael Schäffer et al., Department of Aquatic Ecosystem Analysis and Management, Helmholtz Centre for Environmental Research, Magdeburg, Germany
16:30	An estimation of the efficiency of fresh-water ecosystems of the Baikal Region on an example of fish resources Daba Zhamyanov, Baikal Institute of Nature Management SB RAS, Ulan-Ude, Republic of Buryatia, Russia
17:00	Importance of forests for keeping water in landscape: Development of forests and the gene pool of local forest tree ecotypes in Mongolia Oldřich Zajíček, Embassy of the Czech Republic in Ulaanbaatar, Mongolia
17:30	Flood risks' maps – effective management instruments Dr. Tatiana A. Borisova, Laboratory of Geographic Information Systems, Baikal Institute of Nature Management, Siberian Branch of the Russian Academy of Sciences (BINM SB RAS)

Session 2: Hydrology and Biology

DAY 2- 30.05.2018, WEDNESDAY	
Chair: Dr. Tatiana A. Borisova, Dr. Saulyegul Avlyush	
9:30	<p>Land use classification of river floodplains in Kharaa River Basin based on ESA Copernicus mission data Prof. Dr. Martin Oczipka, University of Applied Sciences (HTW), Faculty of Geoinformation, Dresden</p>
10:00	<p>Monitoring of riparian vegetation in Kharaa river basin Dr. Jürgen Hofmann (IGB) & Ts. Bolormaa (IGG) -Institut für Gewässerökologie und Binnenfischerei, Berlin & Institute of Geography & Geoecology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia</p>
10:30	<p>Coffee Break</p>
11:00	<p>An overview of studies from the headwater catchment Sugnugur Munkhjargal Munkhdavaa et al., Chair in Hydrology and Climatology, Department of Geography, Heidelberg University, Germany</p>
11:30	<p>Accurate estimation of river catchment boundary using the Digital Elevation Model Prof. Dr. Altansukh Ochir & Enkh-Uur Munkhsuld, Department of Environment and Forest Engineering, School of Engineering and Applied Sciences, National University of Mongolia</p>
12:00	<p>Factors controlling groundwater recharge and baseflow in semi-arid region: a case study on upstream of the Tuul River Basin, Mongolia Dr. Chinzorig Sukhbaatar et al., Division of Water Resource and Water Utilization, Institute of Geography & Geoecology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia</p>
12:30	<p>Site selection methodology for water harvesting in Jargalan Soum, Tuv Aimag Davaajargal Boldbaatar & Prof. Dr. Altansukh Ochir; Department of Environment and Forest Engineering, School of Engineering and Applied Sciences, National University of Mongolia, Ulaanbaatar, Mongolia</p>

Session 3: Urban Water Management

DAY 1- 29.05.2018, TUESDAY	
Chair: Prof. Dr. Prof. Basandorj, Dr. Jens Illian	
14:30	Urban Water Management in city Darkhan and small villages in the Kharaa River Basin, Mongolia Dr. B. Scharaw; Fraunhofer IOSB-AST, Ilmenau, Germany
15:00	Czech ODA: Hydrogeological projects in Mongolia Oldřich Zajíček, Embassy of the Czech Republic in Ulaanbaatar, Mongolia
15:30	Coffee Break
16:00	Mongolia Water security and water resources challenges Batimaa et al.; Mongolia Water Forum Uskhelts
16:30	Resilience of urban water security in Mongolia Elisabeth Krueger et al.: Helmholtz Centre for Environmental Research – UFZ & Purdue University
17:00	Sanitation in peri-urban Ulaanbaatar - constraints and opportunities Dr. Shinenemekh Voloj et al.. Global Green Growth Institute, Ulaanbaatar.
17:30	Sustainable Algae Biodiesel Production and Wastewater Treatment Batsuren Sundui, Asian Institute of Technology, Thailand

Next day to continue with Session 4 (next page)

Session 4: Water Monitoring

DAY 2- 30.05.2018, WEDNESDAY

Chair: Prof. Dr. Daniel Karthe, Dr. Bolormaa Idesh

9:30	Drinking water and water container hygienic assessment among residents ger district of Ulaanbaatar city Unurtsetseg, Ch. et al., School of Public Health, MNUMS, Ulaanbaatar
10:00	Ecological and hygienic ranking of the Selenga River basin territories when consuming water contaminated with inorganic toxicants, based on the concept of risk Dr. I.D. Ulzetueva et al., Baikal Institute of Nature Management of the Siberian branch of the Russian Academy of sciences (BINM SB RAS), Ulan-Ude, Russia
10:30	Coffee Break
11:00	Suspended sediments in the Kharaa River, sources and impacts Dr. Philipp Theuring, SEBA Hydrometrie GmbH & Co. KG, Kaufbeuren, Germany
11:30	Chemical composition of water in the river Khiyagt and Khuder Auigul Minap, Central Laboratory of Environment, Information and Research Institute of Meteorology, Hydrology & Environment, Ulaanbaatar, Mongolia
12:00	Distribution and concentration of heavy metals in water and sediment affected by mining activity in Mongolia Ariuntungalag Yunden et al.; Department of Environment and Forest Engineering, School of Engineering and Applied Sciences, National University of Mongolia, Ulaanbaatar, Mongolia
12:30	Flow regime changes in the Kharaa River Basin Dr. Sodnom Tumurchudur & Munkhtsetseg Zorigt Egiin Gol HPP, State owned company

Scientific Posters¹

(Poster Board spaces allow for A0 format (1189 x 841 mm))

1	Shishhed River Basin RBMP and challenges and measures Altankhuyag Avirmed, Anar Ganbat, Ankhbayar Ochirbat
2	Estimation of active layer thickness in discontinuous permafrost area Anarmaa Sharkhuu, Munkhtsetseg Zorigt, Otgonsuren Shar, Munkhtsetseg Erdenebayar
3	Estimation of groundwater recharge using soil water balance method: Application to Kharaa River Basin, Mongolia Ariunaa Chinbat, Enkhbayar Dandar
4	Mongolia Water Security: Urban Water Security Bilguun-ochir B. & Tsedendamba U.
5	Hygienic assessment of surface, ground and drinking water in the Kharaa River Basin Bolor-Erdene Ochirbold, Katja Westphal, Renchinbud Badrakh, Saulyegul Avlyush, Daniel Karthe
6	Riparian vegetation communities along the Kharaa River Ts. Bolormaa, J. Unurnyam, A. Saulyegul
7	Irrigation schemes constructed on Kharaa river basin, its structure design Baranchuluun Shirchin & Amartaivan Baranchuluun
8	Groundwater monitoring system in sources of water supply Ulaanbaatar city Byambasuren Z, Oyunerdene B, Enkhjargal T, Odontsetseg D
9	Mongolia Water Security: Household Water Security Davaadalai B. & Bekhbat T.
10	Estimation of water loss in irrigation canals Dorjiimaa.G, Munkhtuya.Kh
11	Water quality monitoring research of the River Kharaa and Yeruu Ts. Erdenetsetseg & Ch. Javzan
12	Relationship between rainfall-runoff in the Khyargas Lake-Zavkhan River Basin Ganbold B. & Otgonsuren Sh.
13	The research on fish heavy metal in Kharaa and Yuruu river basin Gantsooj Bavuukhand

¹ Strictly scientific format. Titles and honors of authors are not listed here

14	Macroinvertebrate communities in the forested Tunkhel River catchment, Mongolia Georg Küstner, Erdenetsetseg Erdenesukh, Narangarvuu Dashdondog, Martin Pfeiffer
15	Decentralized Wastewater Management J. Ilian and B. Scharaw
16	Water quality research of Boroo River Javzan Ch. & Renchinbud B.
17	Centralized Wastewater Treatment Jörn Heppeler
18	Industrial Wastewater Pre-Treatment Jörn Heppeler
19	Land use classification of river floodplains in Kharaa River Basin based on ESA Copernicus mission data Sven Hoser Martin Oczipka Jürgen Hofmann
20	Protection of forest and riparian zone is essential for maintaining chemical water quality in Kharaa River Basin Martin Pfeiffer, Gunsmaa Batbayar, Martin Kappas, Daniel Karthe
21	Change detection water body of Orog lake using multitemporal satellite images, Mongolia Munkh-Erdene.A, Byambadolgor.B, Nyamjargal.E
22	Effects of mining activities on river macroinvertebrate communities Dashdondog Narangarvuu, Tuuguu Enkhdul, Erdenesukh Erdenetsetseg, Enkhbat Enkhrii-Ujin, Batbayar Gunsmaa, Oyundelger Khurelpurev, Martin Pfeiffer
23	Turbidity dynamics during storm events – What hysteresis patterns tell us about the characteristics of the Kharaa River Basin Nergui Sunjidmaa, Katja Westphal, Martin Pfeiffer, Dietrich Borchardt
24	Characteristics and changes of streamflow over the Terelj river watershed Otgonsuren Sh. & Ganbold. B.
25	Water quality changes around Balgas Red Lake Basin Oyun-Erdene B., Janchivdorj L.
26	NDWI water area change of Mongolian Arctic basin A. Zolzaya, Bao Yu Hai

Posters hang at the poster board with the respective number