

REPORT OF THE “CLIMATE CHANGE AND ITS IMPACTS ON PASTURE AND DESERTIFICATION” TRAINING WORKSHOP IN INNER MONGOLIA, CHINA

14-17 September 2023,

The Mongolian Academy of Sciences, Mongolia, Natural Conservation Bureau of Bayannur, Meteorology Bureau of Bayannur, Uran Desert-grassland Research Station, Chinese Academy of Sciences and other project partners were organized “**The climate change and its impacts on pasture and desertification**” training workshop from 14-17 September 2023 in Linhe City of Bayannor, Inner Mongolia, China under “Science-policy adaptive capacity for local herding and government groups to reduce climate vulnerability” project.

13 presentations and lectures from 12 organizations were discussed and 25 representatives (5 from Mongolia, 1 from Japan and 19 from china) participated.

The aim of the workshop is to bring together project partners of leading academic scientists, researchers, decision makers, policy formulators and local communities to exchange and share their experiences and research results on climate change and its impacts, pastoral vulnerability and adaptation options. Moreover, the participants will discuss the basic knowledge and methods to assess own local policies, participating options, tools and methods to form policy documents, mainstreaming the process, practice and transferring of research outputs into local policy making by using local root governance channel.

Mr. Feng Chen, director of Bayannur Nature Conservation Bureau, deputy chairman Zhong Ren, deputy chairman Shenling Li, representative of Bayannur weather station, Professor Zhao Xia of Northwest Eco Environment and Resources Institute of Chinese Academy of Sciences, Prof. Gensuo Jia from Institute of Atmospheric Physics of CAS were attended and opened their remarks and opening speeches on 15 September.



According to the program, on September 16, 2023, we visited and got acquainted with the activities of the Urat Research Center of the Northwest Eco-Environment and Resources Institute of the Chinese Academy of Sciences. Also, on this occasion, it was proposed to determine the location of the places where a research center of the same type can be established along the vertical axis of the central region of Mongolia, and to reflect the proposal in the next cooperation.

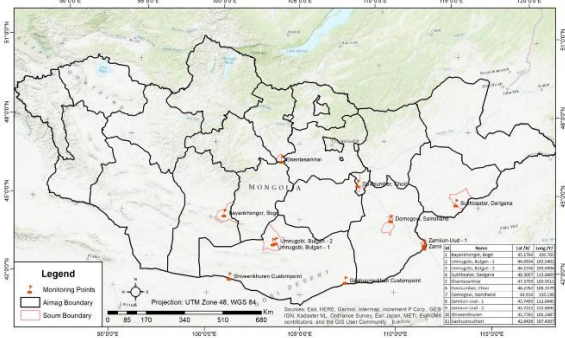
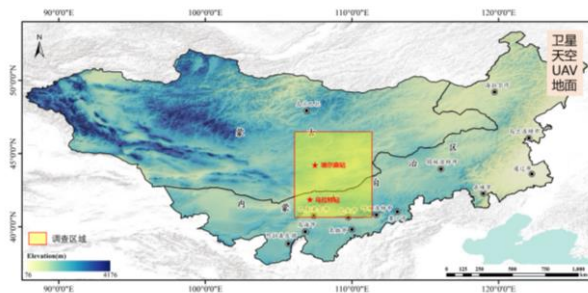


The research center is equipped with the most modern technology and equipment among the 108 research centers established by the Chinese Academy of Sciences in 2013 and located in the Gobi and desert regions. Here, research on carbon flow, changes in rainfall, nitrogen gas, plant growth and cycles, effects of sun and wind, effects on livestock pastures, drought, fertilizers, stress, plant species, and soil micro-organisms are comprehensively studied. constantly provides information and helps to make policy decisions.

四、研究平台 Research platform		灌木和草本对比观测		四、研究平台 Research platform		灌木和草本对比观测	
<p>1. 水汽碳通量观测场 Carbon flux</p>  <p>观测指标: 水汽和CO₂通量、沙尘暴、土壤环境、植被生长及物候 建立时间: 2017和2020年</p>	<p>2. 增减雨实验平台 Precipitation change</p>  <p>实验处理: 对照、±20%、±40%、±60% 建立时间: 2015年</p>	<p>3. 氮沉降实验平台 Nitrogen deposition</p>  <p>实验处理: N0, N0.5, N1, N3, N6, N12, N24, N40; 2018年</p>	<p>4. 不同强度放牧实验场 Grazing intensities</p>  <p>实验处理: 对照、中牧、重牧; 1000亩; 30个小区 观测指标: 植被组成、性状和生物量特征; 土壤特性 建立时间: 2013年;</p>	<p>5. 植被退化与风蚀观测场 Wind erosion</p>  <p>实验处理: 对照、中牧、重牧; 32套观测装置 观测指标: 土壤风湿度、营养元素损失量 建立时间: 2017年;</p>			

The advantage of the research center is that advanced research students from institutes affiliated to the Chinese Academy of Sciences come from the end of March to the end of October every year to conduct research, professional practice, and basic analysis. When we visited, 16 students from 15 branches of 4 institutes were working. It was proposed to determine the location of the places where a research center of the same type can be established along the vertical axis of the central region of Mongolia and to reflect the proposal in the next cooperation.

五、展望 Perspectives for Further collaboration



According to the program, in the afternoon, they visited the governors and pastoral families of Hyangan Gatsa and Bayanbula in Bayannur and exchanged experiences on local management, planning, policy implementation, livelihoods of pastoralists, the effects of climate change, and measures to adapt to it.



Future Cooperation:

1. Partner organizations will continue to actively participate in project training and experience sharing activities, and expand future cooperation on a wider scale by exchanging good practices on overcoming global climate change and its effects with minimal damage, and neutralizing the effects.
2. In cooperation with Chinese Academy of Sciences, we will establish integrated fixed ecosystem research centers in our MAS, develop policy solutions based on research results by conducting sustainable long-term research, and focus on providing local, regional, and national level policy makers and implementers with information from the MAS.
3. Provide research information by involving local representatives as much as possible in the next training seminars organized within the project, create opportunities to get to know each other and work together

DETAILED PROGRAM		
14 September 2023		
8:30-23:00	Arrival	Designated hotel in Linhe city, Inner Mongolia, China all delegates arrival
15 September 2023		
09:00-09:30	Opening Remarks	Feng Chen , Director of Natural Conservation Bureau of Bayannur Prof. Xueyong Zhao , Northwest Institute of Eco-Environment and Resources, CAS, China Prof. Gensuo Jia , Institute of Atmospheric Physics, Chinese Academy of Sciences, China
SESSION 1: COLLABORATION MEETING		
09:30-10:00	CAS collaboration	Dr. Shaokun Wang director of Urat Desert-steppe research station, Chinese Academy of Sciences
	MAS collaboration	Dr. B. Suvdantsetseg , director of administration and international cooperation department, MAS
10:00-10:30	Group photo and Coffee break	
SESSION 2: CLIMATE CHANGE ADAPTATION OPPORTUNITIES: SCIENCE-POLICY NEXUS <i>This session will share the social-ecological management and governance related research progress, key findings, and concrete activities for adaptation options.</i> CHAIR: (Dr. M.Altanbagana, IGG, MAS)		
10:30-12:30	<ul style="list-style-type: none"> ➤ Dr. B.Suvdantsetseg, Mongolian Academy of Sciences “Science-policy adaptive capacity for local herding and government groups to reduce climate vulnerability” ➤ Prof. Gensuo Jia, Institute of Atmospheric Physics, Chinese Academy of Sciences, China Heterogeneous response of dryland ecosystems to rainfall extremes ➤ Ms Uchiyama Christmas and Dr. Ria Lambino, Research institute of humanity and nature, Japan Climate change adaptation efforts in Japan ➤ Fuying Qin, college of Resources and Environmental Economics, Inner Mongolia University of Finance and Economics Vegetation and Climate Change in the Mongolian Plateau 	
12:30-15:00	Lunch and break	
SESSION 3: CLIMATE CHANGE IMPACTS AND PASTORAL SOCIAL-ECOLOGICAL VULNERABILITY <i>This session will share the pasture socio-ecological systems vulnerability assessment related research progress, and key findings for project partners.</i> CHAIR: Dr. Shaokun Wang, director of Urat Desert-steppe research station, CAS, China		

15:00-16:30	<ul style="list-style-type: none"> ➤ Dr. Altanbagana Myagmarsuren, Institute of Geography and Geoecology, MAS Climate Change impact on Mongolian Socio-Economic Systems ➤ Prof. Zhao Xueyong, Northwest Institute of Eco-environment and Resource, CAS Theory and practices in desertified land restoration ➤ Dr. Bazarkhand Tsegmed, Advisor, Ministry of Economy and Development of Mongolia Science based policy making and challenges in Mongolia and regional development planning and opportunities based on local resources ➤ Dr. Professor Chao Lu Mengqiqige, Institute of Grassland Research, Inner Mongolia, Academy of Forestry Sciences, China Study on key technology of ecological restoration and protection in arid and semi-arid grassland mining area
16:30:17:00	Tea Break
17:-18:00	Discussion
18:00	Dinner
16 September 2023	
8:00-14:00	Field visit of Urat research station and local farmers
Afternoon	Departure for some delegates
17 September 2023	
All day	Departure for delegates

WORKSHOP ORGANIZERS

- Mongolian Academy of Sciences, Mongolia
- Natural Conservation Bureau of Bayannur
- Meteorology Bureau of Bayannur
- Uran Desert-grassland Research Station, Chinese Academy of Sciences

LIST OF PARTICIPANTS

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