



Assessing Rangelands for Sustainability and Carrying Capacity Workshop

Date: every Wednesday from 12 May to 9 June 2021

Time: 18:00 – 21:00 PM Almaty time, 4.00pm – 7.00pm Manila time.

Venue: Zoom Platform

Rangelands are the largest land cover type in the world covering > 50% of the global land surface. Approximately 40% of Asia (1.7 billion hectares) is composed of arid, semi-arid and dry sub-humid rangelands. Land degradation from mismanagement, desertification, and drought affect more than 50% of rangelands across Asia.

With the support of the Asian Development Bank (ADB) under Joint Government of Kazakhstan and ADB Knowledge and Experience Exchange Program, a group of experts from the Michigan State University (MSU), Agricultural Research Service at the United States Department of Agriculture (USDA-ARS) and Kazakh National Agrarian University (KAZNAU) are carrying out a series of activities to achieve the rangeland assessment, integrated assessment of soil, water and vegetation conditions in the Akmola region, as well as specialized capacity building to support strategic objectives of the beef livestock sector. The specialists are world leaders in their field.

During May–June 2021, five training lectures, each of 3 hours, will be organized as part of the above activities. The training program is designed to provide participants with the basics of dominant assessment tools, methods for calculating stocking rate/carrying capacity, and tools to assess sustainability of rangelands at the scale of a pasture or regional assessments. Each training lecture is designed to provide a specific method and approach for assessing and managing rangelands.

Registration link:

<https://forms.gle/ie6SZqB8BJJqLgaH6>

Expected Outcomes of the Workshop: The participants will:

- 1) Understand rangeland management principals and how to use this knowledge when assessing Indicators of Rangeland Health.
- 2) Have acquired the basic skills for assessing rangeland vegetation productivity.
- 3) Understand the basic principles of using Geographic Information Systems and Remote Sensing to assess annual production on rangelands.
- 4) Have acquired the skills to estimate initial stocking rates for grazing livestock and estimating forage budget for the year at producer or regional scale.
- 5) Develop an understanding of the Rangeland Hydrology and Erosion Model input and output and how to use this tool for assessing sustainability and benefits of conservation.

AGENDA

Time	Session	Speakers/Facilitators
Day 1 (12 May 2021): Qualitative methods to assess rangeland health at scale of pasture		
18.00-21.00	Opening remarks	Nariman Mannapbekov, Country Director, ADB Resident Mission, Kazakhstan. Tlektes Yespolov, Chairman of the Board – Rector of Kazakh National Agrarian University Yerkebulan Akhmetov, Ministry of Agriculture of Kazakhstan
	Lecture	Mark Weltz, ARS-USDA Jiaguo Qi, MSU
Day 2 (19 May 2021): Quantitative methods to assess status and trends in rangeland production and sustainability at scale of pasture		
18.00-21.00	Lecture	Mark Weltz, ARS-USDA
Day 3 (26 May 2021): Techniques to scale estimates of rangeland productivity to ranch, regional or national assessments		
18.00-21.00	Lecture	Jiaguo Qi, MSU
Day 4 (2 June 2021): Methods to estimate initial stocking rate/carrying capacity and forage demands for herd at ranch and regional scale		
18.00-21.00	Lecture	Mark Weltz, ARS-USDA
Day 5 (9 June 2021): Quantitative tool to assess sustainability as a function of hydrologic and soil erosion processes		
18.00-21.00	Lecture	Mark Weltz, ARS-USDA
	Closing remarks	Hans Woldring, Asian Development Bank