Livestock

Strengthening incentives for improved grassland management in China and Mongolia

Overview

China and Mongolia have over 520 million ha of inter-connected grasslands that support the livelihoods of more than 5 million low-income pastoral households.

These grasslands provide various ecosystem services, from improving air and water quality to acting as a carbon sink.

Growing concerns over the condition of these grasslands have prompted the Chinese government to invest CNY13.6 billion (AUD is equivalent to CNY4.82) annually on grassland management programmes and grassland incentive payment schemes.

Policy-makers, research scientists and the wider community are keen to know if these programmes and payments are meeting their environmental and livelihood objectives, and if they can account for the heterogeneity in grassland systems and changes in socio-economic, market and climatic conditions.

In Mongolia, policy-makers, concerned about the resilience of herders and grasslands to adverse climatic events, seek information on the management systems and the impact of alternative policy and institutional settings needed to sustain grasslands and pastoral livelihoods.

The similarities and contrasts between the two countries provide a larger context in which to test ideas and principles for managing grasslands and improving pastoral livelihoods that have wider application throughout east and central Asia.

KEY FACTS

ACIAR Project No. ADP/2012/107
Duration: September 2015 to 31 December 2019 (4.5 years)
Target areas: China, Mongolia
Budget: A$1,799,649

Project Leader
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Key partners
- Charles Sturt University (CSU)
- Commonwealth Scientific and Industrial Research Organisation (CSIRO)
- Australian National University (ANU)
- Inner Mongolia Agricultural University (IMAU)
- Chinese Academy of Agricultural Sciences (CAAS)
- State Administration and Management Department, Mongolia
- Mongolian University of Life Sciences (MULS)

ACIAR Research Program Manager
Dr Anna Okello

Objective

The project's overall aim is to improve grassland management practices and pastoral livestock systems in China and Mongolia through research into the incentives driving these systems and the design of incentive-based policies.

The project's three main objectives are to:

- Design more efficient incentive schemes for improved grassland and livestock management in China.
- Design more efficient incentives for improved livelihoods and grassland condition in Mongolia.
- Facilitate linkages between China and Mongolia for improving grassland management.

Expected scientific results

- Scientific research providing insights into the design of resilient grassland payment for ecosystem service schemes.
- Greater knowledge of interactions between climatic variability, pastoral livelihoods, grassland condition and government interventions.
- Interdisciplinary research linking the biophysical, economic and socioecological components of the grasslands.
- Rigorous assessment of economic policy incentives in Mongolia.

Expected outcomes

- Greater capacity to undertake grassland research in China, Mongolia and Australia thanks to the cross fertilisation and exchange of ideas among grassland scientists from diverse disciplinary backgrounds in all three countries.
- Strengthening of inter-disciplinary skills and capacity in China and Mongolia, and links between biophysical and economic capacity.
- Contributions towards advancing ecosystems service research and its application to some of China's most important natural resource management issues.
- Socioeconomic benefits for communities through identification of improved livestock/grazing systems and market channels.
- Indirect trade and other benefits to Australia.
- Positive impact of improved grasslands and livestock and grazing systems on the environment and other ecosystem services, including those related to wind and soil erosion, water resources, biodiversity and greenhouse gas emissions.

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