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A PARTICIPATORY APPROACH TO TRAINING FOR THE HERDERS OF THE INNER MONGOLIAN GRASSLANDS

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ABSTRACT
An understanding of the livestock systems and grasslands in Inner Mongolia is essential in order to identify a solution to the enormous issues these people face. These issues include the degradation of the Inner Mongolian grasslands, poor public perception of farming areas due to dust storms in Beijing and the possibility of an unsustainable future in agriculture. A participatory method was used to determine the training needs of herders in 2 villages of Inner Mongolia and a hands-on workshop series was developed to meet these training needs.

INTRODUCTION
Overstocking is believed to be one of the principal causes for grassland degradation in northern China (*Yu et al, 2004*). The farmers of Inner Mongolia are subsistence farmers who see their wealth in the number of animals they own. The result has been a rapid increase in livestock numbers over the last fifty years in part driven by government policy to increase meat production by running more animals. The situation has been exacerbated by the fact that herders now reside in towns and villages instead of living the nomadic existence Mongolians are famous for. The area itself has abundant resources but grazing management is based on similar practices used during the time when all herders were nomads and animals were moved to areas of available feed as needed. Without training to assist them in protecting their precious resources, the long-term survival of both the herders and the grasslands are threatened immensely.

Currently, the grasslands are suffering from severe overgrazing which is having a significant effect on plant diversity, plant health, plant numbers and consequent loss of productivity and increased soil erosion. However, in order to rectify these problems, we first have to examine the cause.

METHOD
The grassland environment of Inner Mongolia is harsh by any standards. The pasture production is severely limited, green feed is usually available for only five months (approximately mid May to mid October) and dry pasture residues and low quality hays are the main sources of fodder for the remaining seven months of each year *(Masters et al, 1995).*
Yet it has been estimated that there are three to four times the animals in China as there would be in Australia on similar grassland types.

In order to help curb the phenomenal issue of grassland degradation, various Australian groups have provided funding for numerous initiatives. This project is funded by the Department of Agriculture, Fisheries and Forestry and is a collaborative effort between Charles Sturt University and the NSW Department of Primary Industries, as well as the Inner Mongolian Agricultural University (IMAU) and Grassland Research Institute (GRI).

The two main objectives of the project are:

1) To establish & initially evaluate on-farm demonstration of practical strategies to improve herder incomes and to rehabilitate grasslands within the ‘desert’ and ‘meadow’ steppe of Inner Mongolia
2) To train Chinese scientists and advisory staff in participatory techniques for the development & adoption of improved livestock grazing systems.

(Kemp, 2006)

Two villages were chosen as study villages, Siziwang, which is approximately 150km north of Hohhot (the capital of the Inner Mongolian Autonomous Region or IMAR) and Taipusi, approximately 500km east of Hohhot and 500km north of Beijing. Siziwang is within the desert steppe, an extensive ecosystem of central to western IMAR, whereas Taipusi is meadow steppe, one of the major grassland ecosystems of east Asia.

The project involves the comparison of demonstration (experimental) farms with control groups. Each village nominated six households to participate in the project and these households were then divided into two groups.

1) **Group 1 (Control)**
   This group will receive training and support but will also be paid to maintain their enterprises as they have in the past.
2) **Group 2 (Demonstration)**
   This group will also receive training and support to adopt a specific range of new livestock production and grasslands management practices expected to result in significant increase in profits and grassland rehabilitation.

(Kemp, 2007)

The format of the project allows herders within the Demonstration group to act as role models for herders not just in their village, but in their banner and province. It is believed that the approach will allow herders to identify benefits as well as costs of improved practices, but at the same time isolating implementation issues that may hinder adoption. With the guidance of those involved in the project, adoption issues should be able to be resolved in an efficient manner.

During the course of this and other projects, in addition to work performed by scientists in China, there has been a large amount of data collected and documented that relates to the grassland and livestock production in Inner Mongolia. In order to implement change it was crucial to use the results of this work as a tool in developing practical but effective solutions to the problems herders face on a regular basis. It was agreed that the most effective way to utilise past research and empower herders was to develop and deliver a training package that was specific to the region.

At the commencement of our visit, we interviewed the herder families who are participants in the project and Animal Husbandry Bureau staff to gather information on the livestock and grassland systems. The interview followed a semi-structured interview technique. This information was collected to assist us in establishing an understanding of their system as well as determining what the herders need in order to improve agricultural practices and hence implement solutions in agricultural improvement. The interview also allowed us to gain some understanding of social issues and barriers to change.

At the conclusion of each interview a question was asked to determine the herder's personal training needs as we wanted to know what information they believed necessary to improve their individual situations. The responses we got were, not surprisingly, very similar. For example how to produce higher quality fodder, improved breeding, grazing management, supplementation and infrastructure were common answers amongst the groups. Many of the issues raised by the herders were problems that we could identify during our time in Inner Mongolia.

Following our interviews with the herders, we designed a small hands-on workshop based on topics that were generated during these discussions, the main focus being winter feeding strategies and selecting the most profitable sheep or goats to feed during this tough period. It is important to remember that traditional Chinese training courses are conducted in very large groups using a lecture style format and that the on-farm training format that we implemented was a completely new concept to them. Our observations however, showed that herders responded favourably to this interactive,

hands-on approach. This conclusion was drawn through the active participation during the training, as well as comments and questions that arose throughout.

CONCLUSION

The simple methods of production and an overdependence on livestock have exerted a great deal of pressure on the ecological system in this region causing the issues of grassland degradation and soil erosion.

The uptake of technological advancement in China is quite pronounced so evidence suggests that herders may well be enthusiastic about implementing the changes highlighted during the training period. The authors believe that the participatory approach and small-scale hands-on workshops will assist herders in Inner Mongolia and provide them with the tools and training needed to protect their precious resources and ensure their long term survival.

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