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Sustainable Natural Resource Use and Livelihood Improvement in South Gobi Protected Areas

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Abstract

Many of the species in Gobi are in decline. People and livestock are dependent on scarce water supplies. Consequently, there is a strong competition between wild animals and livestock for water sources, grazing pastures and forage plants. This project assists conservation efforts by working with nomadic herding communities who have critical importance in the future of the Gobi desert ecosystem. Training nomadic herders in ecology, conservation and natural resource use is a unique approach to ecosystem management in Mongolia. Using this approach, the project aims to help herding families establish a sustainable use of natural resources, improve their livelihoods, and also conserve rare species of the Gobi Desert.

Key words: community based conservation, natural resource, wildlife monitoring

Introduction

The South Gobi includes two important Protected Areas: Gobi Gurvan Saikhan National Park and Little Gobi Strictly Protected Area (LGSPA). These protected areas are globally significant for their desert and semi-desert grassland ecosystems. They are also home to globally endangered species such as snow leopard (*Uncia uncia*) and globally significant species such as Asiatic wild ass (*Equus hemionus hemionus*). However the knowledge of species distributions and capacity to mange the protected area system is weak. One ranger is responsible for an area of 200-400 thousand hectare. Therefore involvement of local communities in nature conservation is key to attaining long term sustainable livelihoods, as well as having effectively managed protected areas in Mongolia. Even though the South Gobi is one of the most sparsely populated region in Mongolia species such as Asiatic wild ass threatened by poaching, plants (*Cistanche deserticola*)with a market value intensively collected and bushes and trees (*Haloxylon ammodendron*) are heavily used as fuel. The traditional approach of excluding people from protected areas has been proved not effective globally. The aim of the project is to assist protected areas through: 1). forming nomadic herder community conservation and livelihood initiatives in LGSPA and its surrounding buffer zone area, and 2). establishment of long term wildlife monitoring and management through training herders in ecological census techniques and sustainable natural resource use. The project is implemented since May 2004.

Methods

Forming herder community groups

Experiences in other parts of Mongolia with strengthening community institutions and stakeholder co-operation for sustainable protected area and natural resource management (e.g. the project implemented by IPECON) have shown encouraging results for collaborative and community based natural resource management. Therefore community mobilisation approach was chosen.

Participatory Rural Appraisal (PRA) was used in order to facilitate analysis of problems and opportunities by herder communities themselves, to support their emerging initiatives and help set up community based conservation and livelihood improvement activities. PRA was used to assess changes and trends in wildlife abundance, climatic events and local attitudes to wildlife. This method is also used to draw resource use calendar (tree and bushes use and intensity of

use) and resource location map by local herders. Drawing maps and calendar help herders to visualize changes and trends.

Establishing community based long term wildlife monitoring

Two herder community groups who are keen in establishing community based wildlife management and community based tourism in GGNP were chosen to be collaborated. Two park rangers, two volunteer rangers from the herder community groups and two ecology students from National University of Mongolia were trained in large mammal census techniques, vegetation monitoring techniques, amphibian and reptile monitoring techniques. Then herder community groups were trained by rangers and students from May 2005 to September 2005. During this training period herders in Zuun saikhan mountain and Ikh argalant mountain conducted argali (*Ovis ammon*) and ibex (*Capra sibirica*) counting once in every 10 days by using vantage point survey method. Sheep and goat dung counting data were collected from different habitat by using strip transect in order to reveal grazing pressure in Zuun Saikhan and Ikh argalant mountains. Changes on vegetation cover and plant biomass in different habitat were monitored by quadrate method. The number of the livestock of herder families was asked by students.

Results

Due to strong response and interest from local communities 7 herder community groups have been established in LGSPA and in buffer zone area. The herder community groups have initiated and conducted the following activities: indigenous tree planting in Nomgon soum centre to reduce impact of sand storms and to enhance the local environment; implementation of waste management started in soum centre; improved vehicle access to winter camp of herder families in the Khurkh mountains; collective cashmere combing which has increased efficiency and morale of families; home manufacture of fuel briquettes using waste materials including broken dung pieces; production of fuel efficient stoves designed by the soum community group; sign posting at entry points into LGSPA; enclosures placed around native *Tamarax sp*. bushes to protect them from browsing animals. Open water streams are protected by herder groups in LGSPA. One herder group (4 families with their livestock) has moved out from an important wild ass area from May to July 2005 to decrease water resource competition. A broken well was repaired by the project. Herders dug hand wells and left small ponds next the well for wild ass and black tailed gazelle.

Experience sharing workshops are organised between successful herder community groups and newly formed groups. Two herder community groups from Gobi Gurvan Saikhan National Park are trained in wildlife monitoring and species identification. They are collecting a large amount of information on species distribution in the park and buffer zone area. This idea of monitoring wildlife with herder community groups is going to be transferred to Little Gobi Strictly Protected Area in 2006. Presence and absence survey of wild ass is being conducted by local herder communities in LGSPA.

Livelihood improvement trainings were organised such as diary product improvement training and wool spinning and felt craft training.

Expected long term outputs

We are aiming to establish community based wildlife management, community based conservation through developing long term wildlife monitoring and management by training protected area staff, local government officials and herder community groups.

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