# Pastoral Community Organization, Livelihoods and Biodiversity Conservation in Mongolia's Southern Gobi Region

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Abstract—In this paper I describe processes and impacts of collective action by mobile pastoralist communities, and of external support strategies to strengthen local institutions and cooperation In Mongolia southern Gobi. The need for pastoral mobility triggered the processes leading to community organization, and the emergence, or re-emergence, of local informal institutions. Their growing role in natural resource management, conservation, rural self-governance and service delivery, and the onset of self-organization and scaling-up without external input may suggest success in terms of developing institutional capacity, and of strong local ownership of donor supported activities. With the development of a participatory monitoring system, evidence is mounting of positive social, economic and environmental impacts of collective action facilitated by community institutions, both for pastoral and non-pastoral rural livelihoods in the Gobi region.

**Keywords**: livestock mobility, collectives, participatory monitoring, selfgovernance, nomadic livestock management.

## Introduction

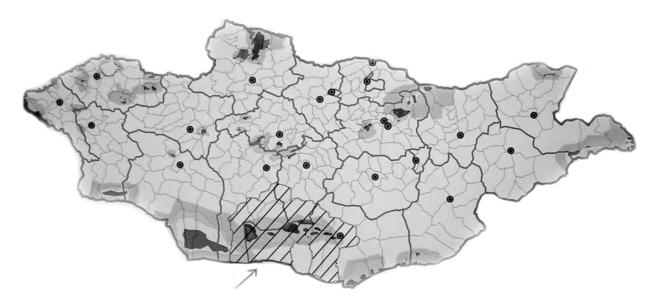
I describe the development of community organization among pastoralists in Mongolia's Southern Gobi Region and describe how community organization has provided a number of benefits, environmentally and to the livelihoods of the people. The need for community organization has been triggered by the need of herders for mobility and appropriate services, and supported through participatory analysis and planning. First, I provide a background on pastoral institutions in Mongolia and on mobility as a strategy for sustainable dry lands management. In the next section, I explain the rationale for the approaches taken, both from the viewpoints of pastoralists and from that of conservation and development practitioners, and how approaches converged towards the same objective of conservation. Here I also refer to the methods and tools that we applied in participatory research and planning.

I dedicate the main section of the paper to the processes of community self-help initiatives and institutional strengthening, of mutual learning and improved local cooperation, and elaborate on the environmental, economic and social impacts felt to date by local communities. I also report on our first quantitative data on impacts derived from a participatory monitoring and evaluation system that was jointly developed by local communities and project workers.

To conclude, I revisit the theme of pastoral institution and offer an interpretation of the role and significance of the community organizations that have emerged in the Gobi. Finally, I summarize what lessons may be learned from our work in the Gobi for conservation and development policies and practice. I have intended this contribution as a critical reflection on approaches and strategies for integrating conservation and local livelihoods, and to share experiences in programming support to sustainable pastoralism of which the development agenda is set by pastoralists themselves.

The work I describe has been undertaken in the framework of two projects of Mongolian-German Technical Cooperation ("Nature Conservation and Buffer Zone Development", 1995-2002, and "Conservation and Sustainable Management of Natural Resources – Gobi Component" 2002-2006), currently implemented by the "Initiative for People Centered Conservation" (IPECON) of the "New Zealand Nature Institute" (NZNI). The area concerned includes 13 districts (soums) in Omnogobi, Bayankhongor and Uvurkhangai aimags (provinces) in Mongolia's South (fig. 1). It represents a significant portion of one of Mongolia's major ecological zones, the arid and semi-arid Gobi that encompasses 40% of the country. The Gobi region is an ancient cultural landscape of desert and desert-steppe ecosystems, utilized by nomadic, and sedentary, populations for thousands of years as illustrated in numerous

Bedunah, Donald J., McArthur, E. Durant, and Fernandez-Gimenez, Maria, comps. Rangelands of Central Asia: Transformations, Issues, and Future Challenges, January 27, 2004; In conjunction with the 57th Annual Meeting for the Society for Range Management, Rangelands in Transition, Salt Lake City, Utah; January 24-30, 2004. Proceedings RMRS-P-39. Fort Collins, CO: U.S. Department of Agriculture. Forest Service, Rocky Mountain Research Station.



**Figure 1**—Map of Mongolia showing project area (cross-hatched). The project area encompasses 13 districts in the South Gobi, Bayankhongor, and Uvurkhangai Provinces.

petroglyphs (fig. 2). The region is one of the country's major tourist destinations due to its outstanding historic and ecological conservation values. It includes Gobi Gurvan Saikhan National Park with globally significant prehistoric and paleontological sites, habitat of globally endangered species such as snow leopard (*Panthera uncia*) and argali (*Ovis ammon*), as well as Wetlands of International Importance (Ramsar Sites). Data and discussions on ecology, biodiversity conservation, protected



**Figure 2**—An example of petroglyphs found in the southern Gobi. The Gobi region is an ancient cultural landscape used by nomadic populations for thousands of years.

area management and pastoralism are provided by numerous papers including Bedunah and Schmidt (2000; 2004), Reading and others (1999) and Retzer (2004).

In recent history, Mongolia was dominated by the Soviet Union to which it was a provider of meat and raw materials. After the collapse of the Soviet Union, Mongolia underwent immense socio-economic changes. Its own production system, based on collectives and state owned farms and factories, collapsed. The loss of employment in the collectives led to migration to rural areas and the emergence of new herding households. Neglect of pasture water supplies, particularly on remote pastures, lead to concentration around functioning wells. Many pasture areas degraded around water points and near administrative centers. Export markets for Mongolian pastoral products had ceased to exist after the Soviet Unions disintegration. The new herding was for subsistence or mere survival. Poverty and vulnerability were exacerbated by several years of winter disasters (dzud) causing loss of livestock and livelihoods and starting a reverse trend of rural to urban migration.

# Pastoral Institutions and the Role of Mobility for Sustainable Drylands Management\_\_\_\_\_

Since the decline of tribal organization and herd management that existed in the times of Chinggis Khan, large territories were allocated to clergy and nobility while on the local level, pasture management was rested with local herder communities. During the socialist period, livestock and pasture management was the mandate of rural collectives (negdel). After 1990, following the collapse of the authoritarian government and the central command economy, the rural collectives disintegrated and rural infrastructure deteriorated and most government services ceased to exist. Private herds, generally of several kinds of livestock but mostly in low numbers per herd, were grazed on state owned land. Probably for the first time in known history, Mongolian herders were operating individually with little or no control on land use. For in-depth descriptions and discussion of pastoral institutions throughout history and during the recent socio-economic and political changes a number of sources exist (Erdenebaatar 1996; Fernandez-Gimenez 1999, 2002; Humphrey and Sneath 1999; Mearns 1993, 1996; Mueller and Bat-Ochir 1996; Upton 2003).

Nomadic livestock herding has often been blamed for land degradation and threatening biodiversity, especially in the past. The case for mobility as a rational strategy for sustainable dry lands management has recently been established (Behnke and Scoones 1993; Ellis and Swift 1988) and mobility is probably the single most important element in the traditional management and knowledge systems of pastoral cultures in arid areas. Today, the contribution of mobile pastoralism to biodiversity conservation and to national economies is gaining greater recognition among social and natural scientists and development practitioners. Recent initiatives such as the "Dana Declaration on Mobile Peoples and Conservation", the development of a "Worldwide Initiative for Sustainable Pastoralism" and the support to the establishment and strengthening of the "World Alliance of Mobile Indigenous Peoples" represent this new recognition.

# Approach to Institutions, Community and Participatory Practice\_\_\_\_\_

When the processes described here began, participatory analysis with local herder communities revealed that they perceived a lack of formal institutions to regulate pasture management and recognized a need for collective action to fill this vacuum. The following planning with and support to communities of pastoralists and rural center citizens addressed immediate needs of livelihoods and of the restoration and sustainable use of the natural resource base. While this was to lead into a focus on human and institutional capacity building, it was not based on a strategic approach to institutions or on a thorough analysis of existing informal institutions. Upton (2003) provides a preliminary analysis of the approach in relation to the informal institutions in one local study area.

The project was originally conceived by Mongolian and international scientists and conservationists, supported by provincial government and central government institutions mandated with protected area management, and agreed between the Mongolian and German governments. While planned jointly among these partners, it lacked active grassroots involvement nor was its conception driven by local communities. However, as analysis and planning with the pastoral communities would show, the project objectives of "nature conservation" were not at all perceived by pastoralists as contradictory to their own objectives. When the role of external support was changed into a more facilitative one, and the project approach shifted from subsidy and externally driven to a self-help and selfdetermined approach the responsibility for implementation of activities was devolved to local community groups. As a result, the maintenance, restoration or improvement of mobility became a focus of the project. It soon became apparent that the "project" objective of "nature conservation" translated into the Gobi herders' objective of "mobility".

Participatory approaches to conservation and community development among pastoralist peoples have been described as difficult (McCabe and others 1992; Upton 2003). In the initial stages of our work, and sometimes to this day, the notion of "community" has met with doubt and skepticism in Mongolia. Several factors may have prompted such sentiments and perceptions. After the experience of Socialist collectivization, feelings against cooperative arrangements did exist among herders. Incidents of fraud by middlemen who had promised herders to market their products, caused distrust for cooperation in joint marketing. A general lack of organized delivery of services and a lack of information contributed to a situation in the early to mid nineties where individual households struggled with the new challenges of a market-driven economy and of increasing pressures on their natural resource base. Using scarce and highly variable resources, herder households in the Gobi tend to camp alone or in very small groups rather than in "Khot Ail" (groups of households) as in other parts of the country. This may have exacerbated the perception of outsiders that there are no "communities" among Gobi pastoralists. It is suggested here that this disregard for the notion of community in rural Mongolia is based on a narrow interpretation of community, that associates community with a more formally and spatially defined group, like a village or settlement, and on a lack of understanding of the institutions or norms inherent to a group of herding households who manage local pasturelands communally. A more in-depth analysis that we undertook with groups of herders indeed showed that mechanisms of cooperation were in place. These probably represented customary institutions and norms that had prevailed or were re-emerging. Also, when the interventions described here started, the social, economic and ecological situation had become so dire that the initiatives for collaboration among herders were driven by the need to survive under very adverse conditions.

Under these circumstances, our approach sought to address immediate survival needs of people and livestock while developing sustainable mechanisms for the long term. But the approach to institutions was not strategic and not based on thorough prior analysis. Rather, we accepted that the situation with regard to local institutions was extremely dynamic and complex. When we began to work with groups of local households, these were households that utilized pastureland together, with varying degrees of problems or conflicts. In many cases, they probably were "People of one Well", but a dysfunctional well at the time. The threat was that they would become people of a slum in an urban center or the capital city as their livelihoods deteriorated with the collapse of sustainable grazing.

Our approach was not explicit "institution building" in a sense of building institutions that were externally conceived. The approach was to strengthen collective action and selfhelp initiatives that emerged, while making the best effort to maximize inclusion and participation. This implies that the approach to the notion of "community" recognized that communities are not homogeneous groups. Our methods and attitudes attempted to facilitate functional participation of all. It considered in its application of tools of participatory action research to include men and women, young and old, poor and rich. Our approach was mindful of power relations, differences in access to information, and capacity to communicate and express concerns.

As this paper describes general processes, detailed methodological descriptions are not provided. The tools and methods used in appraisals and planning with communities typically included mapping (natural resources, social, mobility), seasonal calendars in relation to men's and women's workloads, resource use, income and expenditures, ranking and scoring on wealth and wellbeing and income sources, venn diagrams for institutional analysis, household livelihood analysis, changes and trends in local environment and biodiversity, analysis of problems and opportunities, weaknesses and strengths. (fig. 3-5). We also included semi-structured interviews with key informants, interviews with focus groups and transect walks. Often, facilitators left the initial community meetings when problems and opportunities had been identified and the group had begun to plan collective action. At this stage, the facilitators offered to come back if the group felt they wanted support in planning. Tools and findings are documented in numerous unpublished field reports. While the PRA exercises provided a wealth of information and insights into local natural resource management issues and livelihoods, the primary objective was to initiate local community action.

# A Chain of Processes - from Restoring Pastoral Mobility to Improving Governance

In the early surveys and PRA exercises, herders frequently expressed the need for regulation of pasture use and for an institution to coordinate herders' movements. While the district governments are formally charged with this responsibility, livestock herders frequently rated the local government as the least relevant institution in their lives. This need for restoring and coordinating pastoral mobility provided the initial and primary rationale for community organization among herders. This organization set in action a series of processes that eventually was to lead to improved governance in local target areas. A 2002 Workshop with community leaders in Bogd soum (Uvurkhangai aimag) sought to evaluate factors for successful leadership and organizational development of community organizations. The jointly identified factors clearly reflected principles of good governance, such as transparency, joint decision-making, and accountability for use of funds.



**Figure 3**—Elderly community members discussing changes in the environment and natural resources over the last decades in the area near Orog Lake (Bogd Soum, Bayankhongor Province.



**Figure 4**—Community members preparing a profile of ecological zones.



**Figure 5**—Community members discussing natural resource map of their local area.

Findings of the workshop also indicated that the most successful groups (in terms of social cohesion and effective implementation of activities) were those where elders supported young people who took initiative and where men supported women who took on a leadership role. Typically, well functioning groups had a leader identified by consensus, a council, a community fund established through contributions by all member households, and a community center, the latter mostly being a communal ger (yurt) for meetings and other joint activities.

The first of these community centers was established in the Middle Beauty mountains (Bayan bag, Bayandalai soum, South Gobi aimag) by local herder women who believed that a "mobile community center" would serve needs better than a meeting house in the bag (smallest administrative and territorial unit) center. The women were not able to attend bag center meetings because of their responsibilities in care of small livestock and their children at the summer campsites. Their response was the mobile community center that traveled with them when they moved to new pastures. The center and the community group, now named "Shine Ireedui" ("New Future") were to become a rural center for organizational development and learning.

The success of the group, namely the completion of a resource use contract with local authorities, led to numerous exchanges for experience sharing. Individuals and groups from the region began to visit the "successful" herder community to learn about their processes of organizational development, their community norms, their planning and implementation of communal activities and natural resource management, and their cooperation with government and other organizations. The learning was not confined to inter-community learning. District governors and other officials attended training with the community organization that was becoming a model in the region. By going through the process of developing their organizations, communities themselves had learned about principles of good governance, and government organizations benefited by learning from them. Moreover, the strengthened community organizations became more able and active partners in collaborative management of natural resources and in addressing rural development issues, and they begun to demand better services from government and to communicate their concerns more effectively.

# The Environmental, Economic and Social Impacts of Community Organization

As of 2004, over 70 community organizations are active in the project area. The majority of these are rural livestock herder households, fewer groups are in rural district centers and the South Gobi provincial center. While household incomes of these are derived predominantly from non-livestock production or activities, livestock-based incomes also contribute to household livelihoods. In turn, household incomes in the rural herder groups are increasingly supplemented through income from diversification, on top of traditional income from livestock, other natural resources and trading.

A workshop in 2004 with 46 leaders of community organizations identified interventions the groups have engaged in and expertise that is being developed on the community level. The areas of intervention include pasture management, livestock quality improvement, dairy processing, services and products for tourism, organizational management and training, waste management, fuel and energy efficiency, small enterprise development, and rural micro-finance (community fund management) (fig. 6). Moreover, community organizations are actively involved in biodiversity conservation and park management by providing volunteer rangers, rehabilitating and protecting water resources, protecting medicinal plants, establishing grazing reserves and managing community conserved areas. An innovative formal agreement between district government, national park administration and the "Shine Ireedui" herder community organization pioneers the transfer of management rights and responsibilities of a "community conserved area" within Gobi Gurvan Saikhan National Park that includes core zone of the protected area. The willingness of local government to transfer the management rights to the community was in part due to the social coherence and demonstrated adherence to group norms on grazing management. In the initial two years of the organization, only one household reportedly did not



**Figure 6**—A community of poor households with few livestock has diversified income sources by the manufacture of building blocks (Bogd Soum, Uvurkhangai province).

respect the agreed upon dates for moving camps and livestock to other pastures, and now was experiencing group pressure from member households who demanded adherence to community norms. The group norms for pasture management of the "Shine Ireedui" herder community included:

- Rotational grazing;
- Agreements on moving dates;
- Reserving winter pastures;
- Educating, and negotiating with outsiders (which allows for reciprocity in cases of adverse natural conditions when non-member herder households would have to utilize pasture within the area managed by the group);
- Mutual support in preparing winter camps and in risk management; and,
- Commitment to alternative fuel and fuel efficiency, and the protection of shrubs (that are a reserve grazing resource for livestock in the Gobi);

In 2004, the community leader of "Shine Ireedui" community (Gantuul. 2004) reported that the four most visible local impacts of community organization were: (1) improved nature conservation; (2) maintenance of mobility of herder households; (3) improved skills in collaborating with each other and with local government; and, (4) better skills on resolving conflicts. Other perceived changes since community organization include acknowledgement by local government of the local institutions and shared governance. The community, as opposed to single households, received services and had better access to information. Particularly women-headed households benefited in this regard. Organized communities are able to take better advantage of other government and non-government initiatives, such as credit opportunities for community projects. Through extended cooperation the "Shine Ireedui" Community has been able to improve veterinary care for the livestock of all member households, thereby improving quality of raw materials and entering into an agreement with a leather processing company to supply animal hides. Community organization has taken the lead here to improve veterinary service delivery by the government, development of value added products, marketing of products, ensuring pastoral mobility, and protection of local natural resources. The commitment of households for fuel efficiency through improved household stoves is supporting conservation of shrubs, which in turn has prompted the local government to exempt the group from paying the fuel tax.

At the time of development of the new community organization, most households of the group were poor. Poverty alleviation was an important aspect of the community organizations work. Poverty alleviation was addressed first by communal support (labor and material) to poor and vulnerable households, thus ending their social exclusion. Later, it expanded into microcredit strategies by providing household loans from the community fund. Access to micro-credit is a crucial step in breaking a cycle of poverty in remote rural areas. As investigation on seasonal household income and expenditure, and on demand for credit had shown earlier, households depend on trader's credit to receive fodder or other needed supplies in fall. When paying back the loan in the spring, after combing cashmere, traders demand payback in cash if cashmere prices are low, and in cashmere when prices are high. Herder households loose out on potential savings or income twice a year. On community level, losses amount to thousands of dollars per season. Household credits from the community fund provide a way out of this dependency, and a tool to better manage risk in livestock husbandry in the harsh environment of the Gobi.

The "Eson Bulag" community of Bayanlig soum, Bayankhongor aimag has been successful in poverty alleviation of member households since being organized. The community of 24 poor households, many of which had become very poor after consecutive winter disasters, has collaborated in cultivation of vegetables and rye, crops that had been previously grown in the area. Most of the people involved had worked as members of a brigade tasked with fodder and vegetable production during socialist times. After witnessing successes in livelihood improvement and social solidarity in a women's self-help group in their soum center, the households opted to work as a group, now voluntarily and with objectives set by themselves (fig. 7). Their modest community fund is used to enable members to participate in public meetings, provide assistance in case of sickness and extend micro-credits to member households. While much of the produce is for subsistence, modest income has been generated through sales in the soum center; among reported use of cash are school supplies for children, enabling them to attend school. Any "savings" are invested in livestock (goats). Now (2004) 15 households own livestock, as compared to 10 households in 1999; in total this community owns 300 livestock (Garvaa, pers. Comm. 2004, internal workshop report).



**Figure 7**—Leader of "Eson Bulag" community presents community activities in non-livestock sector and results for poverty alleviation among community households (Bayanlig soum, Bayankhongor province).

The examples of organized groups of poor households and their achievements provide sound evidence that the community organization in the Gobi represents a strategy of self-help oriented poverty alleviation and may be a key to rural and urban poverty alleviation in the country. An ongoing Participatory Poverty Assessment, undertaken by the Asian Development Bank in Mongolia's rural areas found that in their South Gobi study areas the "Nukhurlul" (as the community organizations soon named themselves) were viewed by key informants and focus groups of the study as important actors in poverty alleviation. Quantitative analysis, undertaken by the National Statistic Office of Mongolia in the framework of the Participatory Poverty Assessment, is pending (pers. Comm. Tungalag Ulambayar 2004).

The obvious preference of investing in livestock, even by poor and non-herder households, confirms the suggestion of Norton and Meadows (2000) that livestock is social and financial capital. While the "deposit" of savings as livestock may be an expression of the pastoral culture, it may likewise be an indication of the lack of options for rural households to invest savings reliably or profitably. It has to be seen critically in the context of resource conservation and sustainable livelihoods in rural Mongolia, in particular if households of "new" herders (who became herders after the collapse of socialist collectives after 1990) or non-herders, both may lack adequate pasture and livestock management skills, invest in livestock. Alternative saving schemes and rural banking services, building on the positive experiences with the community funds established by "Nukhurlul", may be a key strategy to address economic issues as well as alleviate undue pressure on resources. Livestock insurance schemes may be a viable option for professional herders to commit to lower livestock numbers without running the risk of loosing their livelihood basis through livestock loss in case of winter disasters.

The livestock herders in "Dzuun Bogdiin Uguch", Bogd soum, Uvurkhangai Aimag, provides a case study on impacts of community organization for an economically more advantaged group. In this community, developments included a communal pasture for grazing camels and establishment of rotational grazing (including seasonal movements and the long-distance migrations to fatten livestock before winter, called "otor" in Mongolian). These were considered as the most important elements of the community's strategy to improve pasture and livestock quality (Batkhuyag 2004). The community group has also enlarged the usable pasture area by providing irrigation to 18,000 ha of previously unused pasture. Fencing is being used to prevent grazing of degraded pasture and allow for recovery, until it is moved to other areas in need of rehabilitation. A community reserve pasture has been established to provide a grazing resource for emergencies. A well has been repaired and further expanded the usable pasture area. Breeding stock has been brought from other provinces to improve livestock and livestock products. These activities were largely made possible through cooperation of the households in sharing of labor and in the management of the community fund. Reported impacts included very few livestock losses during dzud (winter disaster), a communal annual income from livestock and livestock products of 35 million Tugrik (approx. \$30,000 USD), and community support for one student for tertiary education.

To better capture, and quantify if possible, the impacts that community organization and the resulting processes described above are having on the local environment and livelihoods, a monitoring and evaluation system was established. The monitoring and evaluation is based on indicators that were developed with local communities for their local areas and thereby provides a tool for local planning, for monitoring change at household and community level, and it enables communities to adjust their strategies for improving their livelihood through sustainable use of natural resources. In community meetings every 6 months, changes are discussed and data are compiled (fig. 8). The indicators used as defined by the Nukhurlul include:

#### • Environmental Indicators

- *Fuel/Firewood Management.* Indicators included use of improved stoves; use of briquettes or dung as fuel; a reduction or lack of shrubs stored as firewood; and, the regeneration of shrublands previously used for firewood.
- *Pasture Management.* Indicators included the area of pasture protected by the Nukurlul collectively; the number of households practicing rotational grazing; and amount of area reserved for making hay.
- Soil Conservation. Indicators included the number of planted trees, percent survival of trees; and a decrease in damage from vehicles on Nukhurlul managed areas.
- *Community Conserved Areas.* Indicators included the amount of area reserved for use in different seasons, amount of wetlands and saxual (*Haloxylon ammo-dendron*) "forests" protected; and if the conserved or protected areas are marked and explained by use of signs.
- Livestock Management. Indicators included a decrease in livestock losses; number of households with adequate winter/spring shelters for livestock; number of households keeping written records on livestock breeding and management; and, improved water use and development such as the number of wells repaired in community managed areas.

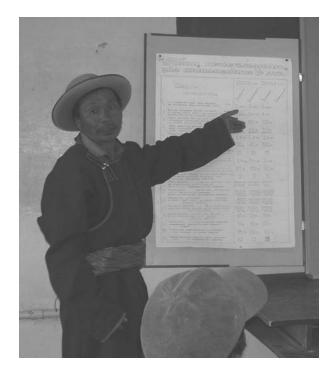
#### • Economic Indicators

Non-livestock income and value added livestock Income. Indicators included the number of households that have increased their income from non-livestock sources; the number of households that have increased their income from value-added livestock products, the development of market links established by the Nukhurlul for products; and, a reduction in number of very poor households. Access to Credit. Indicators included the establishment and amount of community funds, percentage of funds in circulation, and the number of households receiving credit from the community fund.

#### Social Indicators

Social indicators were a decrease in number of school dropouts, increased numbers of households joining the Nukhurlul, and a general aspect regarding the improved capacity and development of people in the Nukhurlul.

The monitoring and evaluation system is still evolving and indicators are being adjusted to maximize their relevance to local conditions. Community organizations and extension workers are being trained in data collection and the projectstaff strive to gather sound data on conditions. Data available so far support the suggestion made above that community organization is becoming a key strategy in poverty alleviation, through social solidarity that leads to collective action in labor and marketing, ends social exclusion and enables poor households to access micro-credits. The "Eson Bulag" (Bayanlig soum) community fund increased from about \$20 USD to nearly \$450 USD within six months in 2004. One household emerged from extreme poverty and nine households received micro-credits. Community organization enabled households to transport and market products and to cooperate with other



**Figure 8**—Community leader of "Taats" community (Baruun Bayan Ulaan Soum, Uvurkhangai aimag) presenting results of community action, recorded in Participatory Monitoring and Evaluation System.

organizations (Rentsenmyadag 2004). Preliminary analysis of poverty-related indicators of all community organizations suggest that in the first six months of 2004, 102 households emerged from extreme poverty, and that household incomes increased on average by 10,000 Tugrik over this period.

The monitoring system has also produced data to indicate positive impacts on pasture and risk management. Since community organization has been underway 985 more households practice rotational grazing. Areas for fodder growing, hay preparation and reserve pastures to specifically to reduce winter dzud risks have been increased. The participatory monitoring and evaluation system is still to be refined, and rigorous analysis of data needs to be undertaken. Nevertheless, our experience so far shows the system to be a viable and a valuable planning and evaluation tool.

# Community Organizations—New Pastoral Institutions?

When revisiting the issue of local institutions that this contribution referred to earlier, a new picture is emerging with the strengthening of the community organizations. The impacts described above and the priority that most community groups assign to communal pasture management demonstrate the role of community organizations as local institutions for pasture management. The "Nukhurlul" may offer a modern adapted approach to institutions of mobile pastoralism in the Gobi, and perhaps in all of Mongolia's grasslands. It may be argued that sustainable grasslands management in itself is a major contribution to biodiversity conservation considering the high diversity of grassland plant communities. However, I suggest here that community organizations in the Gobi could, with appropriate technical guidance and policy support, become important institutions for biodiversity conservation. Community organizations are responsible for the management of areas in Gobi Gurvan Saikhan National Park (see above, "Shine Ireedui" community) and for local protected areas such as "Khuren Khad" (Baruun Bayan Ulaan soum, Uvurkhangai). District governments are allocating territorial units to community organizations (all of Bogd soum, Bayankhongor aimag, and one bag in Bulgan soum of South Gobi aimag) and community organizations are engaged in protecting conservation values including wetlands, local protected areas, and prehistoric sites. It is fair to say that community organizations are becoming recognized local institutions.

Community organizations are contributing to park management and protection by providing volunteer rangers, allocating certain valleys to households for guardianship against poaching and other illegal activities. The role and potential of community participation in law enforcement has been examined by Swenson (2004) in Mongolia's Bayan Olgii aimag. Here, community organization has taken place following exchanges with community leaders from the Gobi and facilitation supported by NZAID. The above-described contract between the park authority, soum government and community organization places into practice community participation in protected area management by assigning the management rights and responsibilities within a the National Park to the Nukhurlul. The innovation here is that the community-managed area includes the core zone of the park. Considering Mongolia's ambitious goal of placing 30% of its territory under formal protection, the system of "Community Managed Areas" that is evolving may present a viable solution to achieve conservation management and protection of such a large area. Even more so since resources for protected area management are scarce. However, for this effort to be successful, government has to develop enabling policies, provide for enforcement of laws, and funds need to be made available for extension and necessary technical input in conservation management and ecology.

The models of community participation in the management of an established park, as well as the evolving "community managed areas" are a valuable contribution to the international discourse on innovative governance of protected areas, and on discussions on new categories of protected areas, such as "community conserved areas", and "protected landscapes". Relevant discussions on the paradigm shift in protected area management and case studies on innovations in the governance of protected areas have been provided by Jaireth and Smyth (2003) and Phillips (2003). The notion of community-managed areas, with defined borders (fig. 9), provokes questioning in the context of mobile pastoralism. As far I could establish in field interviews with community representatives and from information gathering from extension workers, the "community managed areas" do not restrict mobility of herders. Rather, they are core areas that the self-defined groups of herder households consider themselves stewards of while the seasonal pastures of the same group extend beyond these areas. Neither seasonal movements nor reciprocity and flexibility in case of droughts or other disasters that require diversion from usual grazing areas and possible transgression into other groups' usual areas, are perceived as being limited through the defined community conserved areas. It appears that mobility as a management strategy is not being compromised while communities have developed a strategy to improve protection of local resources and biodiversity conservation. The experiences in the Gobi are supporting the notion promoted in the Dana Declaration that "mobile peoples are still making a significant contribution to the maintenance of the earth's ecosystems, species protection, and genetic biodiversity" (Dana Declaration, 2002).

The areas currently under protection and management by Nukhurlul, are now being mapped and transferred to a geographic information system. Data on seasonal pasture utilization and campsites will be added, as well as biodiversity and other conservation values identified jointly by community resource persons and outside experts in conservation sciences. Based on these inventories, and with the foundation of functional community organizations and local cooperation, management plans for conservation and sustainable use of natural resources in the community-managed areas can be developed.

It has been suggested, in discussions on improving governance in rural areas, that the Nukhurlul may be emerging units of local self-governance in Mongolia (Tserendorj 2004).



**Figure 9**—Example of local area (one bag of Bulgan district) being divided into community managed areas. Community managed areas are currently recorded on a geographic information system.

Already, during the 2000-2004 legislative period, parliament members from the South Gobi introduced community organizations under their chosen name of "Nukhurlul" as civil society organizations into Mongolia's civil law. With community organization becoming more widespread, and more vocal and articulate in voicing their concerns, the question arose whether a parallel structure to the territorial administrative (government) structure has been developed through donor support; and, if local government sees community organizations as a threat. We addressed this question in fieldwork and found that key informants from local government (Bayaraa 2004, Altantsetseg 2004) believed that community organizations are contributing to good governance in rural areas, and that they are crucial as institutions for pastoral resource management. So far, we have generally found a very positive attitude of local government officials, at provincial, district and bag level, towards Community Organizations and their activities. Having very few resources at their disposal, local governors are finding that community organization makes their tasks easier, as they can work with community leaders mandated by local households to represent them or obtain information for them.

# Lessons Learned for Development Practice?

A project with the objective of strengthening community organization will encounter a dilemma sooner or later. At the onset, the participatory planning process involved the organization of communities. As community organization spreads, project support activities need to be extended to emerging organizations, and strategies to support self-sustained growth of the organizations need to be developed. The approach needs to remain flexible, and management adaptive. Self-sustaining mechanisms for scaling-up need to be recognized, understood, and supported.

To date, numerous community groups and officials from other provinces, as well as staff of other donor supported programs in rural development and natural resource management, including a group from neighboring China, have visited the "Shine Ireedui" and other community groups in the Gobi project area. Community-led learning and experience sharing began through word of mouth that triggered visits by individuals and groups to households that had organized to work together in resource management and livelihood improvement. These mechanisms have resulted in the formation of new groups, both in and beyond the project region. They have also contributed to the dissemination of knowledge on livelihood strategies, such as various diversifications into non-livestock based income generation, and on local technology innovations relevant to resource conservation such as technologies for improved fuel and energy efficiency that help reduce firewood use.

A workshop with community leaders presented an opportunity to learn about the genesis of groups, their organizational strength and vision for the future. Community leaders grouped community organizations into three categories according to their different type of genesis. Of 46 community organizations, 15 were formed without any external input and facilitation, but solely through local initiative after learning about other organized communities. The spontaneous formation of these groups can be seen as an encouraging sign that the mechanism of community organization, originally encouraged through external facilitation and initiated by joint appraisals of problems and opportunities related to natural resource management and livelihood development, is sustainable and that the project supported interventions enjoy a high degree of local ownership. Thus, a donor-assisted program is merely supporting development, the agenda of which is set by the pastoralists themselves.

Community based learning mechanisms are not limited to inter-community exchanges. Training by the community leader of community resource persons who can sustain community activity independent from the leader was also found to be a factor to strengthen organizations. The ongoing project seeks to support these mechanisms by providing capacity development on community level for training, facilitation and other management skills. The processes of self-organization, of experience and knowledge sharing that communities are applying still need to be fully understood in order to provide support as needed. The community led learning seen in the Gobi may be the emergence of "Herders Field Schools", a pastoral equivalent to the concept of "Farmers Field Schools" developed by farmers communities and supported by development practitioners in South Asian and African countries (CIP-UPWARD 2003).

The process of consensus building on land use, developing norms for natural resource management, the emergence and strengthening of institutions, and the development of cooperation among different stakeholders, all take time as well as flexibility and adaptability. Such processes may take decades even in countries with well-established institutions and mechanisms for decision-making. Too often, donor supported projects are planned for too short periods. This applies even more for countries that are undergoing major transformations, like Mongolia, and are developing a new institutional and legal framework. Short timeframes of donor projects promote the tendency of project workers to take shortcuts rather than allowing the time needed for participatory processes. Our project support has concentrated on facilitation, and material and financial assistance is, with few exceptions, provided as co-funding. This principle is applied to capacity development as well; participants in training sessions are expected to at least contribute to the cost if not cover fees entirely.

An important strategy for empowerment of local communities has been the development of linkages, on local, national and international level. The participation of representatives of livestock herder communities in a number of international events has been facilitated. As a result, members of rural communities in the Gobi have shared their experiences with pastoralists from many countries in events like the "Mobile Peoples Workshop" at the "World Parks Congress" in Durban 2004, at the "Karen Meeting of Livestock Keepers on Animal Genetic Resources", 2003, the "Eco Agriculture Conference, Nairobi, 2004" and most recently, the "Global Pastoralist Gathering", 2005, in Ethiopia. Participation in the events enabled representatives to form alliances to promote the role of mobile pastoralists in conservation and to advocate extensive livestock husbandry as an adapted, modern management strategy for dry lands. The shared experience of common concerns and experiences has empowered participants to articulate their concerns more effectively and to foresee challenges that may lie ahead for them. For herders in Mongolia, where currently intensive versus extensive livestock husbandry and changes in tenure of pasture land are being discussed, these international experiences may prove crucial in advocating enabling policies to maintain pastoral livelihoods and rational management of arid lands through mobility. International linkages have added another dimension to the empowerment of people to develop their own institutions and set their own development agenda.

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