

Holistic and Community-based Approaches to Building Sustainable Livelihoods for Herders in Mongolia



Cover Photo: A Mongolian horseman (*from the presentation by Ayurzana Enkh-Amgalan*)

Holistic and Community-based Approaches to Building Sustainable Livelihoods for Herders in Mongolia

Ayurzana Enkh-Amgalan

Centre for Policy Research, Mongolia

Background

The secret to why nomadic pastoralism existed and fed Mongolians for centuries was its capacity to keep ecological balances. How? 'Traditional grazing technologies' – four seasonal pastures with sufficient reserves for emergencies, and grazing with due consideration of growth phases of vegetation and recovery after previous grazing – were the first secret. The moderate demand resulting from the subsistence nature of Mongolians' lifestyle was the second secret.

The extensive livestock industry of Mongolia provides almost half of national employment and contributes 34% of gross domestic product and 31% of export earnings, including animal fibre. Yet, it still remains largely a subsistence economic activity. The major characteristics of this extensive livestock industry in the context of the current study are its absolute dependence on an extremely harsh and highly variable natural environment, and the resulting low and basically constant yield per animal over time. The most extreme natural hazard is 'dzud', a winter disaster involving the mass starvation and death of livestock. The second most important danger is drought, which usually happens due to the failure of principal rains in June-August.

The beginning of the transition of the Mongolian economy to a market-oriented system in 1990-1991 caused the collapse of the extensive livestock production system developed over the previous 30 years. The government privatised the ownership of stock, and in reaction to long years of central planning, stepped back, leaving the industry to reorganise itself. During the ten years of transition since, the dominant policy has been to pursue livestock privatisation and price liberalisation, expecting the market to do the rest. The following have been the results.

- Opening Mongolia to globalisation had a drastic effect in increasing human demand, and herders were not an exception.
- Livestock privatisation provided tremendous incentives for increasing livestock numbers.
- The state cancelled its subsidies in most livestock-related areas, and herders responded by increasing livestock numbers to overcome increased risk.
- The break of centralised livestock procurement, and the absence of an adequate replacement, significantly restricted the marketing of animals.
- Increasing livestock numbers as 'savings' against future uncertainties became a dominant risk management strategy.
- Low to moderate growth in other industries made herders save more animals for their children.

- The state continued its policy of awarding herders who had 1,000 animals.
- The destruction of thousands of wells because of inadequate ownership and maintenance curtailed utilisable pastures.
- Mass migration of herding families from remote to central regions worsened ecological imbalances.
- Livestock privatisation resulted in fragmentation of the industry; 84% of herding families own less than 200 head of livestock, leading to fierce competition among them to increase livestock numbers and possess more pasture resources.

These changes were hastened by private interests of new, small household economies and free competition, yet the land tenure system remained unchanged: state ownership and largely free access to 'common property' resources. As a result, private interests of individual herders in maximising livestock numbers contradicted the national interest in ensuring long-term sustainable development of the industry by maintaining the potential of pasture resources. Increasing overstocking and improper grazing practices began to destroy the ecological balance, a keystone for nomadic pastoralism. Analysis covering 20 years of time-series data from 36 meteorological stations (where other non-meteorological data were also collected) shows that a 1% increase in stocking rate (the number of sheep units per hectare) leads to a decline in the natural growth rate of animals (birth rate minus mortality rate) by 0.58% for cattle and 0.007% for sheep and goats, suggesting that a shortage of pasture is more serious in the cattle industry. A larger proportion of cattle are located near urban areas, where pasture is the most degraded.

It is becoming increasingly clear that existing small households badly lack resources for such important services as preparation of supplementary fodder, medication for livestock, transportation and marketing, and overcoming production and price risks. Utilisation of supplementary fodder and veterinary services is decreasing, and herders are apparently unwilling to use superior stock for breeding purposes, indicating the danger of a long-term decline in animal productivity and quality of outputs.

The gap between rich and poor herders is increasing dramatically. Many poor herders have just recently begun herding. Because of the transportation and labour constraints on conducting seasonal moves and marketing products, poor herders are mostly restricted to low-quality pastures near district ('sum') centres, and are thus exposed to increased poverty. Furthermore, relative to established richer herders, poor herders have limited capabilities to acquire the good winter and spring camps crucial to surviving cold seasons.

The above problems illustrate that, although transitional reforms centred on privatisation and price liberalisation have laid out a framework in line with overall movement towards a market economy, they are far from complete. In addition to these difficulties, Mongolia has been faced with three consecutive years of dzud. About 2.4 million head of livestock died as a result of dzud in 1999-2000, another 2.2 million in 2000-2001, and 1.5 million since then. This has left thousands of herding families with no animals and has added significantly to the ranks of the rural poor and destitute. There has been a surge of aid to dzud-affected areas, including provision of fodder (mainly hay) to save remaining animals and restocking of herders who are left with no livelihood. Unfortunately, all this happens after dzud has occurred. The true question is how to make the industry capable of withstanding the affects of dzud.

This is ultimately a question of putting the industry on a sustainable path of development through solving accumulated problems.

The current project

In April 2000, the Centre for Policy Research (CPR) hosted the UNDP-SURF (Sub-Regional Resource Facilities) International Seminar, 'Recovery with Incomplete Reforms', which was attended, among others, by top officials of UNDP missions in Asian countries. A proposal was presented by the CPR to launch a small pilot project to register informal grazing rights of customary herding communities. UNDP was supportive of the project proposal and started discussions with CPR on launching the project. An 18-month pilot project, costing approximately US \$135,000 and co-financed by UNDP and the New Zealand Government under the UNDP umbrella project MAP-21, started in August 2000 and ended in February 2002.

The objective of the project was to develop and pilot a model or framework of activities that would gradually lead the extensive livestock industry of Mongolia onto a sustainable path. The project hoped to accomplish this by changing the existing behaviour of herders attempting to maximise livestock numbers – a rational choice under the existing incentive structure. The project attempted to assist herders in adopting more sustainable strategies of income generation: namely, building capacities to mitigate risks, improving productivity, and introducing alternative businesses. Enhancing collective actions among herders through strengthening of traditional customary arrangements was seen as key to achieving the project's objective.

The project team worked closely with 'aimag' (province) and 'sum' (district) governments. In each sum, a working group involving key experts was organised to support project implementation and to link the project with non-project communities in both the sum and the aimag. In addition, the project managed to establish strong collaboration with central government agencies, especially the Ministry of Food and Agriculture and the Parliament Standing Committee for Environment and Rural Development. This collaboration with top policy-making agencies was very beneficial in terms of communicating project findings quickly to policy-makers and getting broad support for the project. Also, working with these agencies helped the project deliver development approaches and findings to other donor agencies.

As mentioned earlier, building communities' capacities to mitigate risks, improve productivity, and start alternative businesses was seen as a way to build long-term sustainability of the industry. Therefore, project institution-building activities were used to facilitate implementation of other activities. To ensure sustainability and continuity of activities started by the project, mechanism building and community efforts were maximised.

The seven main project components

The project adopted a holistic approach and maximised participation of direct beneficiaries in design and implementation of activities. The participatory or bottom-up approach was necessary given the failure of the government's top-down approach to designing development programmes, as well as to delivering disaster relief assistance to areas affected by dzud. The holistic approach was necessary because

problems faced by herders in different areas were closely interrelated, and no single problem could be fully solved without addressing problems in other areas. For example, improving the supply of technological inputs, such as supplementary fodder and veterinary services, could not be achieved without improving marketing to increase herders' incomes. Marketing could only be improved partially if weaknesses in the existing production organisation were not overcome. And, combating pasture degradation near urban settlements required addressing the social problems that had caused rural-to-urban migration. As a result, the initial project focus – grazing land management – was broadened to include the following seven areas.

- 1) Institution building and strengthening of customary herding communities
- 2) Grazing land and water management
- 3) Supplementary feeding
- 4) Veterinary services
- 5) Livestock breeding
- 6) Marketing and SME (small and medium-sized enterprises) development
- 7) Herder business skills

Each of these seven aspects of the project is discussed in detail below, together with lessons learned.

1) Institution-building and strengthening of customary herding communities

Upgradation of informal herder institutions into formal institutions was seen by many herders as one of the necessary first steps in strengthening herding communities. These herders referred to problems caused by the existing legal status of herding families. In contrast to formal economic entities, herders are not 'legal bodies', meaning they are not registered and do not have a bank account; that seriously restrains them in terms of developing the capacity to advocate their own interests and have equal powers in relationships with other bodies. One of the main problems is that financial institutions are commonly reluctant to provide loans to herders because of their institutional uncertainty and the high transaction costs of dealing with individual herding households scattered over an enormous territory. Upgradation to formal institutions would make it much easier for herders to receive loans. Further, resolving the institutional problem and integrating several herding families into one institution facilitates many important services such as veterinary care, breeding, social services, and banking. The following are some of the clearest reasons for which cooperation is important.

- The small size of most herding households places a major constraint on efficient running of their business, influencing all aspects of herding.
- There exists a great potential to improve the performance of the industry by realising economies of scale through enhanced cooperation among herding households. Economies of scale can be realised in the following two ways:
 - delivering maximum services in an organised way,
 - cooperation to undertake alternative income generation activities not possible under the existing separation of herding families.
- Cooperation is a potentially easy solution to a longstanding institutional problem of herders – non-legal body status. Upgradation of existing customary groups of herders to some type of formal institution can change this status.

The major shortcomings of current government and donor activities in promoting cooperation are the following.

- The organisations typically supported by governments and donors are not based on existing forms of cooperation among herders.
- They generally indicate or impose one particular form of institution or cooperative.

Project experience shows that existing customary groups or communities of herders provide a good basis for promoting cooperation among herders. It is significant that these groups of herders are not equivalent to villages or city communities, where bonds between members and strength and frequency of collaborative activities are usually very high. In a community of nomadic and semi-nomadic herders, memberships and boundaries are generally loose, although they vary among communities, and cooperation is mostly associated with seasonal production and livestock marketing activities.

There exist at least two types of herding communities. First, some communities are formed around area-based key resources that play major roles, including seasonal camping areas, water points, and marshlands. In forest-steppe areas, these groups are generally people from one valley or river; in steppe and Gobi regions, they are people from one water source. This type of community has usually developed customary arrangements for regulating grassland use to some extent, which provides a good basis for upgrading into some form of grassland management unit. Second, some communities are based on non-area factors; usually, some important business activity is common to all members. The primary activity on which a community is based varies and can be marketing, crop farming, haymaking, or processing. Because member-herders might not have the same camping area, this type of community may not be easily upgraded into a grassland management unit. However, it does provide a good basis for strengthening herders' community-based organisations and providing support or indirect inputs for grassland management.

With support from the project team, herding communities formally established six NGOs and one cooperative. The project became very popular among herding communities and local aimag and sum governments. Increasing numbers of herding communities expressed interest in joining the project. According to a survey conducted in June-July 2001 among herding families in project sums, 80% supported community-based cooperation, and 55% expressed interest in formally establishing community-based institutions.

Lessons Learned

- Despite their willingness, herders seriously lacked the leadership, knowledge, and skills to engage in deep collaborative activities. The project spirit provided leverage for leadership and advice on how to collaborate, and thus inspired herders towards deeper cooperation.
- Strengthening herding communities empowered people to take the initiative for development, thus contributing to the distribution of development resources more evenly in favour of the rural and the poor.
- The NGO form of institution was preferred by herders due to its simplicity, its few requirements for establishment, and its low transaction cost.
- Transparency and accountability of activities among communities, especially those associated with funding, are crucial for further strengthening newly-established herders' institutions.

- Newly-established herders' organisations lacked management skills to run businesses on a collaborative basis, so strong capacity-building activities were needed.
- Voluntarism is and should be a key principle in promoting cooperation among herders. Demonstration should be the only method allowed for attracting herders and convincing them to join community-based organisations and activities. One must expect outsiders to coexist with community-based organisations; making sure that these individuals are not discriminated against in any way, including grazing rights, is crucial.

2) Grazing land and water management

Recognition and protection of herding communities' rights to possess and use pastoral resources – such as seasonal pastures, water points, and marshlands – were proposed as tools to build disincentives for increasing animal numbers. Recognition of grazing rights also provides an effective tool for resolving grazing conflicts.

Introduction of long-term possession contracts aims at making protection and efficient use of pasture resources a matter of self-interest for herders. It also provides increased incentives to invest in improvement of pasture resources, thus promoting adoption of more advanced methods of production. Further, it impacts poverty alleviation. Poorer herders tend to occupy poor-quality pastures, and as pressure on pastures increases, poorer herders are pushed to increasingly less productive pastures. In this situation, protecting the grazing rights of poor herders, who are heavily dependent on livestock herding, is crucial.

To maintain the flexibility of herding households in accessing pastoral resources, land possession contracts are based on strengthening or formalising the best customary arrangements for regulating grazing land use, rather than neglecting or destroying these prior arrangements. These contracts are based on the following principles:

- existing allocation of pastoral resources among communities and families;
- normal or equilibrium pattern of herder migration, including specific provisions for reciprocal grazing rights in cases of emergency;
- 'point possession' of family camping points – boundaries around camping points and resolution of conflicts should be ruled by customary arrangements; and
- a combination of formal powers (aimag, sum, and 'bag' governments, the latter referring to the smallest administrative unit in Mongolia) and informal arrangements to resolve grazing conflicts between families and communities, with informal arrangements always preceding intervention by formal powers.

Grazing management is inseparable from water management. The project piloted a scheme that can be used for digging new wells or rehabilitating old ones. The scheme focused on the following activities:

- identifying communities' needs for watering points, determining designation (whether for drinking water, irrigation of seasonal pastures, or other uses), location, and capacity;
- building communities' commitment to invest in and maintain a well by clearly specifying responsibilities and incentives;
- legitimising community possession of a well with the sum government;
- assisting herding communities in accessing facilities or organisations to dig or rehabilitate wells, and establishing contracts with them when necessary; and

- assisting herding communities in maintaining wells (including training, developing, and implementing rules for community possession or ownership).

The pilot scheme, in the case of Ulziit community in Erdene Sum, demonstrated that herding communities are able to invest in digging or rehabilitation of wells if it fits into the specific needs of the community and if their possession or ownership is ensured. Herding community members agreed to contribute 30% of the total cost of digging a new well (the total cost was around US \$6,000), in the form of a soft loan. It was also agreed that wells with the capacity to water animals would be dug in pastures previously possessed by the community for 60 years.

Lessons Learned

- Formalisation of informal grazing rights can produce positive results. For example, as a result of introduction of the possession contract, member-households of Ardiin Eysel community, Erdene Sum, took action to protect winter-spring pastures possessed under the contract from trespassers during the summer-autumn season by allocating one family to stay in the winter-spring camping area and guard the pastures.
- Community-based grazing land management has great potential to reduce pastoral risks. For example, community-based organisation of remote grazing and fodder preparation helps poor members of the community avoid losses during disasters, which is not possible individually.
- Project land tenure activities inspired local governments. The Erdene Sum government, based on the pilot project model, decided to introduce possession contracts into the whole sum territory. The sum government is expecting much from planned project activities.

3) Supplementary feeding

Currently, most fodder preparation (purchase or production) and delivery is organised by government and aid agencies, without due consideration of fodder demand. Thus, there is a high risk of inefficient use of budget and aid money. Assisting herding communities in enhancing cooperation towards efficient preparation, storage, and consumption of supplementary fodder was thus crucial for making herding communities more resilient to the harsh winter conditions in Mongolia. The project-initiated revolving supplementary fodder fund works on the principle of self-sustainability. To launch the fund, the project used the following scheme.

- The fodder requirement of each household was identified in the field.
- The minimum cost for purchasing and transporting fodder to sums was identified.
- The project allocated funding to finance the purchase and transportation of fodder.
- Actual delivery of the service was carried out through competitive bidding procedures.
- Fodder was delivered upon signing a tripartite (CPR, herders' NGO, and individual member or household of the NGO) loan agreement, with collateral shared by member-households. The loan was repaid over a six-month period. Later loan agreements were established only between NGOs and their members.
- Revenues from repayment of loans were used to finance a revolving supplementary fodder fund under the ownership of the NGO.

The cost of establishing a reserve supplementary fodder fund was US \$460-1,223 per community or \$25-91 per family. The repayment rate of fodder loans was 100%, and the funds collected were used for preparing fodder for the next year.

Lessons learned

- Project experience shows that it is feasible to establish a revolving supplementary fodder fund under community ownership. This approach seems to have the following advantages against reserve funds established or administered by outside bodies, including the government.
 - Ownership by direct beneficiaries means greater efficiency and less possibility for intermediaries to seek rents.
 - The sustainability of reserve fund handling by government bodies is highly questionable, given the high costs of delivery and limited budget resources.
 - Community ownership decreases the dependency of herders on subsidies and other forms of grant assistance and promotes a self-reliant mentality, crucial for building long-term industry sustainability.
- Community-based arrangements for fodder preparation significantly promoted voluntary initiatives by community members. For example, Mr. Dagva, a member of Ardiin Evsel community, Erdene Sum, Tuv Aimag, started an initiative to expand horse-drawn hay-mowing to prepare hay for the community reserve supplementary fodder fund.
- In the future, if herders can manage excess resources in normal years, community fodder funds can be increased to cover risks in abnormal years. This could be another interesting pilot activity. Eventually, if a community's capacity was built up, there might be no need to differentiate strictly between funds. In this case, one common fund, augmented by internal savings, could be manipulated to address urgent community needs, including risk coverage or social problems. The project hopes that community funds may develop this way in the future. To facilitate this, the project assisted herding communities in developing and approving rules for the use of common-purpose funds.

4) Veterinary services

The livestock sector loses much productivity to unavailable and/or low quality veterinary services. Problems with veterinary service provision include the following:

- low financial, professional, and business capacities of recently-privatised veterinarians;
- high costs of veterinary medicines relative to purchasing power of herders;
- frequent shortages of medicines; and
- weak partnerships between veterinarians and herders.

The project focused on the following three activities to address these problems:

- establishment of a revolving fund for veterinary medicines, including more than 20 kinds of frequently-used medicines. This fund was similar to the supplementary fodder fund;
- establishment of contractual arrangements between herding communities and selected local veterinarians;
- building of a mobile dipping bath for small stock, a new design to accommodate current conditions.

Lessons Learned

- Willingness of herders to obtain veterinary services is increasing and can be significantly enhanced if herding families are organised to obtain the services in a collective manner.
- There is much room for improvement in delivery of veterinary services, through partnerships between veterinarians and herders and improved managerial and business skills of veterinarians.
- The revolving veterinary medicine fund can significantly contribute to the improvement of veterinary services for herders.
- There is good potential among herding communities to maintain the revolving veterinary medicines fund on a self-sustainable basis.

5) Livestock breeding

The project aimed to address livestock breeding and productivity problems by promoting herders' interest in investing in activities to improve livestock productivity. We succeeded in increasing herders' interest through on-site trainings by project experts on the benefits of quality animals, as well as through promotion of collective action by established herder communities and NGOs. Herding communities discussed pressing issues concerning animal quality and breeding and decided to purchase superior breeding animals in order to improve the quality of their animals. A general agreement was made between the communities and the project that the project would cover transportation costs of delivery of superior animals from the supply source to the communities, and the communities would pay the price of the animals. The project also assisted herding communities in certifying cashmere quality through a competent organisation.

Planned breeding activities, however, have not been implemented fully, mostly because of natural disasters in 2000-2001, which severely impacted both project sums and sums from which the project was planning to supply breeding animals. For example, in 2001, Bayanhongor Aimag faced a severe summer drought, followed by a cold, snowy winter. As a result, the quality of breeding animals in Shinejinst Sum was severely eroded, and project communities decided to postpone the planned purchase of animals.

Lessons learned

- Herders generally understand the benefits of quality livestock; however, the existing incentive structure does not provide enough incentive for herders to take action without intervention or support. For example, incurring additional costs for quality improvement is uneconomical for herders while cashmere is priced by gross weight.
- Herders need assistance in obtaining information about accessing quality breeding animals and livestock products. Assistance in funding purchase and delivery of breeding animals also provides a strong incentive for herders to invest in livestock improvement.
- Herders' knowledge of elementary breeding activities must be improved, and local access to professional breeding services must be greatly increased.
- Project experience shows that herders are generally able to pay the price for breeding animals. Assistance, when possible, might be needed only for providing information and funding delivery costs.

6) Marketing and SME development

The project attempted the following activities to improve the marketing capabilities of herding communities:

- enhancing collective actions among member households to build up collective bargaining power;
- improving access to reliable markets and information;
- providing technical assistance in gaining economies of scale in transportation, storage, and processing of livestock products;
- analysing and certifying the quality of livestock products; and
- establishing long-term partnerships with marketing partners.

These activities were carried out through three channels – short-term training in best marketing practices, provision of up-to-date information, and implementation of SME projects. These SME projects played a very important role by providing an opportunity for learning by doing. However, accessing potential lenders (bank and non-bank financial institutions) was a difficult problem for implementation of SME projects.

Lenders were unwilling to deal with herders for the following reasons.

- They had no experience in lending to herders or herders' groups.
- Herders previously had not constituted legal bodies and had created problems for financial institutions. This mentality was dominant, even though project communities had upgraded into formal institutions.
- Financial institutions were not willing to accept livestock, the only assets herders own, as collateral.

Thus, an agreement was made with UNDP that allowed CPR to provide loans to project communities. The project assisted herding communities in developing SME projects. All projects were initiated by the communities themselves and reviewed by project experts. Starting in May, 2001, CPR released six loans of a total sum of US \$8695. The average loan term was three months, and interest was 3% per month. As of February, 2002, four loans had been repaid fully, and two loans had outstanding balances with a total sum of US \$459. Cow losses during the dzud of spring 2000 caused a major problem in one of these two communities, due to reduced milk yields during the summer and lack of managerial experience. The other community was unable to start its planned felt shoemaking activity due to a lack of raw material.

Lessons learned

- Organised adequately and provided with technical advice, herding communities have the potential to develop and implement viable SME projects using spare labour and cheap raw materials, and thus generate additional income.
- Implementation of SME projects can contribute significantly to a solution of the longstanding problem of shortage of financial capital, especially cash.
- Community-based organisations can greatly increase marketing power of herders through increased bargaining power and access to better markets.
- Community-based organisations have great potential to increase both absorptive and repayment capacities of herders in relation to external financial sources.
- Community-based organisations, if supported by the necessary capacity-building activities, can successfully cooperate with financial institutions, and thus facilitate the building of efficient and viable micro-finance services for herders.

- Considering the high seasonality of herders' cash incomes, the bulk of which come twice a year during cashmere combing in May and animal slaughtering in December, herders prefer to obtain loans for periods of at least one year.
- Most herders cannot afford commercial interest rates of more than 4.5% monthly, simply because they are not able to launch viable income-generation activities and repay loans. However, when incorporated into a group or community, which naturally includes both rich and poor herders, demands for loans for productive purposes are increased. As communities, herders are better able to take out, and pay off, productive loans.
- Commercial loans to groups vary, so that a uniform approach cannot be employed with all group loans. Under our pilot project, some communities were reluctant to take out loans with interest rates higher than 3%. This may indicate that, at the beginning stages when communities are not well established, commercial loans could financially ruin communities. However, some very well established communities already have experience with complicated collaborative financial activities. This kind of community may have the courage and skills to deal with commercial loans.

7) Herder business skills

Project PRA activities lead to the discovery that livestock herding as a business has the following weaknesses.

- Very poor consideration of long-term economic and ecological consequences
- Absence of clearly-stated objectives and plans
- Lack of knowledge, especially among young herders, of conventional livestock herding technologies, contributing to poor performance of household economies
- Lack of basic skills for running a business in a market economy
- Lack of knowledge and skills to operate in emergency situations like dzud
- Limited access to international best practices in livestock raising

Thus, project activities to increase herder business skills included the following.

- Assisting herding communities in developing and implementing business plans
- Organising a seminar to launch twinning tutorship between experienced and young herders in the communities
- Organising on-site seminars on basic knowledge of modern farm economics, management, elementary cost-benefit analysis, and accounting
- Producing a handbook for herders with questions and answers on issues most frequently encountered in livestock herding, including veterinary techniques, breeding guidelines, and conventional methods of weather forecasting (future activity)

Lessons learned

- Herders, especially younger family members, are eager to obtain new knowledge
- Herders' learning performance is better when learning-by-doing methods are used, compared with academic methods like classroom teaching
- Possibilities must be sought for organisation of trainings for young herders at the national level. A community-based pilot approach by the project might provide a good model for efficiently organising such trainings.

Analysis of the project

Acknowledged strengths

The following strengths of the project are widely acknowledged.

- The project's approach, a combination of participatory and holistic approaches
- The novelty of some unique project ideas
- Successful cooperation with central and local government agencies
- Replicability/sustainability of some models and initiatives
- Strong public relations activities

The project initiated a workshop to discuss project findings among policy makers and donors. In the opening speech, the Chairman of the Parliament Standing Committee for Rural Development and Environment said that the project's participatory approach provided a model of how policy decisions can be implemented at the herder level. He also noted that the project-initiated revolving supplementary fodder and veterinary medicine funds contributed significantly to building herder capacities.

Debatable issues

The most criticised project issue involved the revolving funds the project provided to communities, for which the following criticism exists.

- 1) Sustainability of these funds has been questioned.
- 2) The size of grant funding might be too big once the funds replicate to all 180,000 herders or roughly 9,000 communities
- 3) The funds might be providing a wrong incentive to create or join communities.

Each of these criticisms is discussed individually below.

1) Sustainability of funds

Project experience shows that there is good potential for making the funds really revolving and sustainable in the long term. The following are some points that support this view.

- The project used a scheme under which each fund was partly a grant between the project and the recipient community. However, between the community and its members, it was not a grant but a loan in the case of the fodder fund and a commercial fund in the case of the veterinary medicine fund; the funds were understood thus by the herders (the final beneficiaries). This had very positive effects – 100% repayment of fodder loans and operation of the veterinary medicine fund on a commercial basis.
- All funds and equipment (dipping bath) are used in accordance with rules developed and approved by community members and, as such, these rules have mandatory power. This means that, during the life of the NGO into which all communities 'formalised', the rules shall be in power, and their enforcement shall be monitored by both internal and external bodies in accordance with the laws governing NGOs in Mongolia.

2) Size of funds

The ultimate aim of any project is to achieve welfare improvement in herders' lives. Welfare improvement is a shift from the current state of welfare to one in which somebody or something is better off, and nobody and nothing is worse off. The

following are some characteristics of the current state of welfare of the extensive livestock industry.

- Low preparedness of Mongolia at large for natural disasters, resulting in high direct material losses of animals and crops
- Low capability, both of herders and of policy-makers, to run the industry with a long-term view, resulting in significant productivity losses

These two situations are closely linked. For example, more than US \$25 million was spent on disaster assistance in the last two years. Again, money was spent without a long-term view (the assistance did not add much to the capacities of either the herders or the government to fight future disasters). Limitations for organising relief assistance with long-term views are understandable, but there is still much room for improvement in this area. Now, Mongolia is waiting to be exposed to the next dzud and to receive another large sum in assistance, unless efforts such as our project are made to build the capacities of (most importantly) the herders.

Under this project, one community benefited from roughly US \$1,000 for launching of funds for fodder and veterinary purposes. Replication of these funds to the total of roughly 9,000 communities would require US\$ nine million. The international community spent US \$25 million in dzud relief assistance in 2000-2001. The logical question is, how much of this money has been used for building the capacities of herders to better fight against dzud, and how much money does Mongolia need for each dzud? The answer is that the money spent has not covered the needs of Mongolia's herders.

3) Wrong incentive

Project experience shows that the funds did indeed provide an incentive for at least some herders to join communities. The argument can be made that there is nothing wrong with establishing these funds, if they are made really self-sustainable and if those who joined are still enjoying it. The funds constitute a big improvement in building the capacities of herders and a shift from the current state of welfare. Nonetheless, the project team acknowledges that there is room for improving both the effectiveness and the efficiency of grant funds. The project team especially agrees that strong community development activities should precede any provision of financial incentives.

Conclusions

This 18-month pilot project ended in February 2002. Many pilot activities by the project cannot produce real outcomes in the short term. Activities in institution building and land tenure are likely to have real direct impacts only in the medium and long terms. The primary outcome of the project is that it piloted quite courageous ideas and demonstrated the feasibility of at least some of them. It can be said that, overall, the project provided a useful model for any attempt to build sustainable livelihoods for the herders who constitute 40% of Mongolia's population. There was strong support for the project by central and local government agencies and by the project's direct beneficiaries, the herders.

There are also some tangible outcomes. In May, 2001, the project conducted an analysis of the performance of project communities, compared to neighbouring herding families, in overcoming the 2000-2001 winter-spring season, including an

analysis of animal losses. Non-member families lost 6.69% of their animals, while member families lost 4.96%. Project herding families successfully reared 88.22% of young animals, higher than their neighbours by 7.85%. The better performance of project communities in saving animals and in rearing offspring can be considered the real outcome of the project thus far. It can be safely attributed to the enhanced capacities of herders for mitigating risks, through activities such as community-based revolving supplementary fodder and veterinary medicine funds and collective actions in organising remote grazing.