

Improving Grassland and Water Management with Participation of Local Community in Degraded Areas: Mongolia

A Project of ADB's Poverty and Environment Program (PEP)

A. Basics

- Total project cost: \$85,000
- PEP funding: \$70,500
- Approval date: October 2010
- Implementation period: March 2011 – December 2011
- Main project partner: Eco Asia University
- Project officer: Laurence Pochard, ADB Mongolia Resident Mission
- Type of intervention: Pilot intervention
- Focal area: Natural resources and sustainable livelihoods

B. Background

Land degradation and desertification in Mongolia for the past several years have caused serious environmental problems that threaten the country's livestock productive capacity, environmental



assets, and even its nomadic culture. It is generally agreed that about 90% of Mongolia's grassland is sensitive and vulnerable to climate change and its management is inappropriate for actual ecosystem. Grassland ecosystems in Mongolia, the Gobi desert ecosystems in particular, are fragile, highly susceptible to degradation, and slow in recovering, primarily due to the cold and dry climate. Grassland vegetation cover is continuously being degraded due to climate change effects, infrastructure development, and settlements in *soum* (the lowest administrative unit) centers.

C. Summary of PEP assistance

The project sought to implement community-based institutional arrangements in grassland and water resource management by presenting participatory solutions to improve the environmental condition and socio-economic well-being of the communities in the project areas.

The rural population, particularly the local herders with low income, were identified as target beneficiary groups for the project. The purpose was to improve the herders' livelihood and capacity to protect the environment in order to use natural resources efficiently and to take response measures against land degradation and desertification.

The long-term vision for the institutional arrangement for the local grassland management is that herders' organizations will become the main planners and actors in sustainable pasture management. With the support of local authorities, land officers, and co-financing, they would be able to implement sustainable pasture management practices and develop the productivity of the pastureland and their herds.

The project aimed to promote the community based participatory grassland management in degraded areas by formulating applicable methodologies suitable for Mongolian condition to improve response actions to mitigate effects of desertification and land degradation. In order to implement the primary objective, the following goals were targeted:



- Improve the capacity of relevant government organizations, local land managers and herders on grassland management issues through appropriate trainings;
- Develop and implement a comprehensive Grassland Management Plan (GMP) by integrating the aspects of natural resources, livestock and market demand with participation of local community;
- Identify user groups of water and grassland resources and institutionalize their rights by local community to improve responsibility of the community; and
- Reconstruct two abandoned wells and install solar and wind ground water pumps, which will replace manual pumps of existing wells.

To fulfil these goals, a project team was recruited consisted of: team leader; consultants on grassland management (GIS, livestock experts, engineer); translator; and support staff.

Project activities included data collection, an assessment of pasture crop yielding, formulation of the GMP, approval of the GMP, capacity building training for communities, reconstruction of abandoned well, creation of new groundwater well, establishment of databases on disaster early warning and environmental monitoring, and development of training manuals and video records.

The collected data served as the firm basis for the development of the GMP. The capacity of local authorities and herder groups was strengthened to develop the GMP and implement it on an annual basis. The GMP developed under the project frame will replace the existing *soum* pasture management plan. A GMP management team was established and consists of *soum* governor, land officer, bag governors, veterinarians, and herder group leaders. The team will ensure the sustainability of the GMP implementation at the *soum* level.

In addition, herder cooperatives were established and trainings were conducted on how to formulate the GMP, including pasture rotation, grazing and haying management, maintenance of wells, and land titling activities. A total of 10 herder groups, from 65 households were formed as a pasture user groups and they were encouraged to better coordinate among each other to ensure participatory management of their communal grassland.

Discussion among all herder groups and local government authorities was held and their comments and suggestions were reflected in developing a sketch map. The GMP was developed with participation of local community and the local administration, and was approved by the *Soum* Citizens' Representative Khural (SCRKh) and implemented from 2012.

D. Long-term impacts, sustainability, and lessons learned

Pasture maps, reference materials, and meteorological data processing software were integral in *soum* land management planning. The rights, obligations and responsibilities of herder groups,

local government, land and environmental officers were determined upon the agreed consensus on GMP for 2012 to carry out activities related to pasture rest, seasonal rotation schedules, improving water availability and access, fencing for reserve area and production of forage plants.

The GMP will be annually updated on the basis of dialogue and consensus building with engagement of all stakeholders, particularly herder groups. The newly developed GMP covers not only important resource utilization plans, including reserve pasture, water points, etc. but also seasonal/inter-annual movement patterns of the herders, but also income generation potentials of herder families.

The management team for GMP implementation will ensure it is updated on an annual basis and monitor its implementation on a sustainable basis. The reconstruction and installation of water wells made it possible to utilize 62.8 hectares of pastureland that was previously underutilized. With the improvement of an early warning system, local authorities and herder groups have become better prepared to reduce impacts caused by extreme weather events.

Lessons learned from this pilot intervention – including recommended follow up actions which will have a direct impact on the scope for sustainability – can be summarized as follows:

- An innovative attempt to regulate pasture possession and user right for herder groups through participatory GMP was fundamental, as there was no efficient institutional arrangement and practices in Bayanjargalan Soum for herder participation in decision-making on pastoral resource use.
- Regular capacity strengthening activities for local communities led by *soum* and bag governors and professionals was important to provide herder groups with knowledge, awareness and skills to access control and effectively manage grassland by developing, planning, discussing and acting together for GMP implementation.
- During the interview and meetings, herders raised their complaints about mining incursion to grassland area that are curtailed by mining activities with no discussion or offer for compensation. Due to absence of regulatory background to the pasture possession, illegal artisanal miners or licensed mining companies carry out mining activities in pasture areas, posing serious threats to pastoral resources the “common-owned” grassland. Therefore, local level grievance redress mechanisms shall be put in place, so that mining operations are conducted with the agreement of local community and that mechanisms are set to facilitate conflict management over natural resource use in the community.
- There is no financial mechanism for supporting further implementation of community based GMP. As the next step, in parallel with allocating certain fund from the local budget, herders groups have to agree to create a Community Revolving Fund (CRF), with contributions from community members. The CRF will be used by the communities to carry out pasture improvement activities.
- Strengthening capacity and awareness on GMP implementation needs more time and effort to achieve overall project objective. In order to increase the willingness of herders to join GMP implementation. The project team had to undertake more field works in project sites, in particular, visiting herder families, disseminating information on environmental and social aspects of GMP.

- It will be efficient to introduce integrated on-line tools (website) for donor-funded projects that implement participatory approaches for natural resource management, as well as encouraging contract-based community cooperation in order to disseminate project findings, outcomes, and project deliverables such as reports, training manuals, and maps.
- A continuous follow up on strengthening actions and interactive learning are required to maintain sustainable grassland management in the project area, so that GMP issues are resolved at the local level.
- Experience sharing and interactive learning with other *soums* and *aimags* (provinces) is optimal for further scaling-up community-based grassland management.
- Further implementation of community-based GMP can be constrained by lack of financial resources. To scale up the implementation of participatory GMP in the project *soum*, it is recommended to set up a community-based and *soum*-based fund to sustain GMP as a follow up action on the GMP implementation.
- To strengthen the position of herder groups, there is a need to provide a stronger legal background. This would include: a) legal recognition in a new pasture legislation; b) definition of criteria for establishment and legal status; c) definition of rights, obligations and responsibilities in terms of negotiating territorial boundaries, movements across these boundaries, seasonal pasture use, setting aside of pasture rest areas, allocation of winter encampment areas, controlling of animal numbers; and d) specifying the relationship with *soum* and *aimag* authorities and their user rights.