



New Zealand Nature Institute · Initiative for People Centered

Community Organization

A policy level study of “community organization” as a grass-root institution that contributes to strengthen co-management of sustainable pastoralism and nature conservation

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Overview

The initial formation of community organization is dated back to 1999 and now there are approximately 2,000 community organization and groups among the pastoral common in Mongolia. Strengthening community organizations as grass-root pastoral institution is presumed to be the strategy to develop sustainable livelihood of pastoral commons as well as successful practices of co-management of nature conservation. Therefore, a critical assessment of the impacts by community organizations is vital and timely at present.

This paper analyzes the impacts of the community organization on pastoralists' livelihood and biodiversity conservation in Mongolia. In particular, the study focused on highlighting its positive impacts on mobility and appropriate pasture land management.

The impacts by community organizations largely extend to the positive sides. Certain challenges are apparent due to the structural and economic failures, which are in front to maintain the positive impacts in the future. In fact, the positive impacts resulted in shaping the legal status of community organization and groups to possess natural resources.

The initial practice applied was to strengthen pastoralists' property status granting the rights of group possession of forest resource. However, the concept of 'Community managed area' entails more concerns by pastoralists, practitioners and advocates when it would be regulated by the legislation of group possession of natural resources. Further critical discussions are on the path and at legislative level regarding the feasibility of natural resources possession by community organizations and 'pastoralists' groups'.

CMA	Community Management Area
GTZ	German Technical Cooperation
UNDP	United Nations Development Program
GP	Gobi Component
WED	Women, Environment and Development
NGO	Non-governmental organization

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The ideas and comments do not reflect the policy of NZNI. It is solely the responsibility of the researcher.

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Introduction

This study aims to examine the concept of “community organization” as a positive policy outcome that contributes to change perceptions towards pastoralists, both within their countries and internationally. In particular, the study will examine positive impacts of this policy that re-enabled mobility and that has allowed pastoralists to manage resources sustainably in partnership with rest of the stakeholders in protected area.

The main study question is “Can community organization perform as a grass-root institution, which contributes to strengthen co-management of sustainable pastoralism and nature conservation?”

The aim of the study will be reached when accomplishing the following objectives;

- Clarify the formation and management of “community organization”
- Understand the concept of “community managed area”
- Explore the challenges to maintain the positive environmental impacts of community organization
- Identify the main challenges to the pastoralism in Gobi region

This study is divided into four case studies reflecting the contents in above objectives. The initial chapter of case study I explored the whole concept of community organization. It mainly highlighted the positive impacts by community organizations. Meanwhile, it also discussed the formation processes; the factors that led to this processes, and the main bodies, approach and tools that influenced to result in positive impacts by community organizations.

The next chapter on case study II sought to understand the concept of ‘Community Managed Areas’ (CMA) and unveil the existing types of CMA. Through the data analyses, it also exposed CMA advantages and disadvantages regarding the different local contexts. In further, CMA is studied in terms of its flexibility; to what extent it impacts on pastoralists’ mobility, whether it is inclusive or exclusive of pastoralists’ to get access to natural resources, the extent it deals with existing power relations among pastoralists.

The following chapter on case study III focused on unveiling the challenges to maintain the positive impacts by community organizations and the CMA. It also examined the feasibility of CMA possession by community organizations and groups concerning the challenges to community organization and CMA.

The last chapter, case study IV identified the prevailing challenges to pastoralism/pastoralists in Mongolia. In general, this chapter discusses about the current pasture use condition and the existing disputes over the pasture use among pastoralists. While exposing the disputes over pasture use, the level of pastoralists’ satisfaction over pasture land management and their involvement in policy dialogue were analysed. This chapter is followed by a segment of recommendations as well as the conclusion chapter to the overall report.

Mongolia

Mongolia whose vast plateau inhabits 2,791,272² has one of the lowest population densities in the world at 1.5 people per sq km (UNDP 2000). 1,464,200 people reside in three major cities with the rest in rural area (NSOM 2004). The ethnic composition is fairly homogenous; Mongols 94.9%, Kazakh 5%, others (including Chinese and Russian) 0.1% (CIA 2000). The state language is Mongolian. Buddhism is the leading religion alongside that of Muslim Khazakhs and other religions imported to the country whose constitution allows citizen's right to any religion.

Nomadic pastoralism has been the main lifestyle throughout history, despite the growth of urbanization under the socialist regime. Pastoralists are a strong national identity and carry cultural value of Mongolia. While pastoral tradition and practice is still strong in the national and cultural identity, views of pastoralism, particularly mobile pastoralism as out-dated are growing. For livelihood security and as safety net, pastoral strategies remain crucial.

GDP 29,5% GDP is contributed by the agriculture. Within the agriculture sector 82,2% comes from livestock husbandry. Mining is a growing sector and generates approximately the same portion of total GDP. This was the year that counted the highest number of livestock around with the increase of 13, 4%*.

Pastoralists make up 40 % of the productive population. The vast majority of pastoralists is mobile or semi-nomadic. Pastoralists enjoy equal legal rights and status, and equal benefits of social services, as other citizens. They are entitled to pensions if they worked as employees of collectives during the socialist time, or pay voluntary insurance now. 256,800 of 585,600 households are mobile pastoral households residing in 80% of the total territory.

However, more than 75 percent of its territory is classified as degraded, caused largely by wind and water erosion following the removal of thin top soil through a combination of human action (mining, deforestation, overgrazing, collapse of socialist time pasture irrigation) and natural causes (eg Brandt's vole, grasshoppers, bushfires). Mongolia experiences extreme weather contrasts with low annual rainfalls and there is evidence that the volumes of lakes and rivers has been diminishing drastically in recent years (Mau and Chantsalkham 2006).

During the dzud and draught period, 12,400 herding households lost their livestock. 60% of the total herding households own less than 200 livestock, which is considered as poor. Basically, livestock herding is limited only as survival strategy, but not as a production. Climate change is considered to have two influences; negative causing draught, which reduces rain and pasture plants and positive resulting in warm weather condition, which helps less death of livestock in winter. The government mission is to develop a policy that adjust livestock husbandry in warm weather through the increase in water resources and development of more fodder funds*.

² 2005 CIA

* Eagle TV interview with Ganbaatar, officials from Ministry of Agriculture, December 26, 2006.



Methodology

Approach: The key focus of this policy study is to understand the 'emerging' concepts such as 'community organization' and 'community managed area'(CMA) in local context. This study, therefore, employed qualitative approach because of its wide spectrum of techniques such as observation, interviewing and documentary analysis to produce detailed reasoning knowledge. However, it was not only limited by the qualitative methodologies. Both quantitative and qualitative methodologies were used to gather data.

Methods & tools: From qualitative methods, the study utilized semi-structured interviews, focus groups discussion and the literature & documentary analysis. The semi-structured interviews were given to key informants of local officials. The focus group discussion was pursued with members from the community organizations. The other literatures covered the existing data from recent collection and analysis by the partner organization of impacts of community organization (participatory monitoring and evaluation system) in CMAs and control studies in pastoral non-CMA areas, as well as on reports by government, non-government donor organizations.

From quantitative methods, the household survey was given to a herding household. The documentary analysis relied on existing data from recent collation and analysis by the partner organization of impacts of community organization (participatory monitoring and evaluation system) in CMAs and control studies in pastoral non-CMA areas as well as on reports by government, non-government donor organizations. The questionnaire was tested on a couple of herding households in non-study area and reviewed prior to the field work.

Research design: The study selected 12 communities active in the project areas to highlight the positive impacts of those community organizations. The selection was based on the well credited indicators of these communities in the participatory monitoring and evaluation system reports and control studies in pastoral non-CMA areas. The research design was developed by the whole team of NZNI.

Key activities for the field study included:

- Questionnaire surveys with 72 pastoral households within and outside community organizations (sampling see below)
- Semi-structured interviews with 6 key informants
 - district land officer
 - bag governor (bag is the smallest administrative unit in rural areas)
 - district governor or vice governor
- Group discussions with 12 community organization member households

The study took account of the contextual differences of herding management into consideration in order to avoid generalization and produce comprehensive knowledge of pasture land use. Selection/Sampling of study areas will be based on the following principles taking the:

Study areas represented land areas under different management regimes:

- A. Inside protected areas
- B. In bufferzone of protected area, and outside protected areas

Study areas represented land areas of different ecological conditions and different pasture type (therefore different livestock predominance):

1. saxaul and bushes areas – camel pasture
2. grasslands – sheep and goat pasture
3. mountain areas – yak and horse pasture

Altogether, field studies therefore conducted in 6 different areas (A1, A2, A3, B1, B2, B3).

Target groups: In each of the 6 areas, 2 community organizations (and their CMA) with the apparently best environmental outcomes were selected (based on findings of the participatory monitoring and evaluation system).

From each community (their well-being groups have been identified by pastoralists themselves), 2 poor, 2 average, 2 better-off households were randomly selected for questionnaire surveys. The better highlight of positive impacts of community organizations needed comparative analysis, thus, another 2 poor, 2 average, 2 better-off households were selected from the neighbouring non-community groups of these two community organizations in each place. Altogether, the questionnaire was proposed to conduct with 72 households; 12 households from each area.

With each community group (not necessarily all member households), altogether with $6 \times 2 = 12$ groups, semi-structured interviewing/participatory analysis were conducted.

In each area, key informants for semi-structured interviews were: district land officer bag governor (bag is the smallest administrative unit in rural areas), district governor or vice governor, and leader of community organization.

Analysis: The content analysis was employed for qualitative data from semi-structured interviews and the focus groups discussions. All data was categorized according to the pre-defined categories from the questionnaire and the interview guidelines. Analysis from the questionnaire was assisted by Excel to produce comparative data from the two groups of communities, their livelihood levels and geographical zones.

Participation: In Bayandalai and Bulgan soum area, the households from non-community groups did not exist because all households in those areas established their own community organizations. Overall, the questionnaire was completed with 62 households.



Community Organization

The chapter explored the whole concept of community organization as a grass-root institution and its social and environmental improvements in comparison to the conditions prior to the community organization. The positive impacts by community organizations are mainly highlighted in comparison to the non-community households. It also discusses formation processes; the factors that led to this processes, and the main bodies, approach and tools that influenced to result in positive impacts by community organizations.

Environmental condition prior to the community organization

Highlighting the positive impacts of community organization on environmental protection directly related to the question of comparative manner; what the pre-existing environmental situation was immediately prior to the community organization. Majority of the participants highlighted that the environmental situation was different prior to the community organization (Chart 1). The choice 'no' attributed to the understanding that environmental condition was not changed from what it was before, regardless of bad or good conditions.

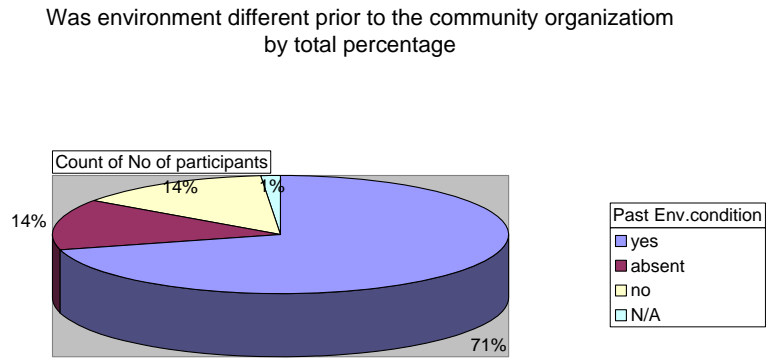


Chart 1 Difference in environmental condition prior to the community organization by total participants

Reasons to the differences in environmental condition identified by participants were disaggregated by groups and zones. Majority of non-community households, especially in the desert area, attribute the reasons to the climate change due to the draught and ddzud³ occurred in 2000-2001. A half of the community households related the change to the community actions. Prior to the community organizations, households did not use to have proper management of pasture land and lacked infrastructure development such as road building and well making. The lack of infrastructure was exposed mostly in mountain zone where as chaos over pasture land management occurred in all three zones in similar extent (Table 1).

The good rain-falls nurtured pasture plants and contributed to the increase in pastoral households and excessive number of livestock. Gradually, it has lead to sedentary herding when households crowded closely around the limited pasture and water resources. However, desertification and the overgrazing deteriorated the available pasture plants and water

³ Heavy winter storm and pasture inaccessibility. There are two types of ddzud; white ddzud from heavy snow storm and black ddzud rom heavy wind and dust storm that wipes the snow and the grasses available. Black ddzud is common in Gobi area

resources in desert area, especially. Due to the climate change, the manner of rain falls was changed from smooth permanent falls to sudden heavy falls. It caused strong floods that damaged the roots of the bushes, saxauls and broke the shallow waterholes and wells as well. The small pasture areas with excessive number of livestock were degenerated by the draught and dzud (black) in 2000-2001.

Table 1 Reasons to the difference in environmental condition prior to the community organization by groups & zones

Reasons	Chaos	Climate change	Infrastructure
Groups			
1. Community	12	14	3
2. Non-community	0	25	0
Zone			
1. Desert area	5	16	0
2. Grassland area	3	13	0
3. Mountain area	4	10	3

Nevertheless, community households elaborated that most difference in environmental condition was related to the chaos; unregulated use of the pasture and water resources. Overgrazing became more apparent as pastoralists managed their herding independently with increasing number of small livestock (usually goats). "At the same times cashmere cost reached higher, 40,000tug. The livelihood was improving at certain level" (Interview).

Consequently, the number of campsites was increased shortcutting the distance between campsites, which lead to the crowds around the fewer water resources. The availability of pasture land was special enough, but not of the water resources. The open pasture areas were unavailable for grazing because of the broken engineering wells, bad road access and lack of organized collaboration between pastoral households to repair roads and mend wells.

Un-regulated pattern of limited resource uses resulted in pastoralists' competition over available resources, especially in winter and spring campsite areas. The traditional seasonal (rotational) mobility became less practiced as pastoralists in different living condition gradually stopped leaving their winter campsites (Fernandez-Gimenez and Batbuyan 2004). "Before, it was like that people always said 'my neighbour came and stayed in his winter campsite, thus I have to go back to my winter campsite soon. Otherwise, he will use all the winter pasture for his livestock". And then they all move to their winter campsite too early in autumn" (Interview). This competition ended up in disputes among the neighbours.

Under the concept 'freedom of private ownership' of livestock since 1991, dispute over pasture use became complex for the local governments to resolve. Local officials leave the problem aside among the pastoralists to negotiate each other. However, the negotiating tradition has changed. It has regulated by emerging power relations following the change traditional pasture use. The power relation stands for the relationship between ones, who do or do not own the social and economic power within local community(Undargaa 2006). The better-off, who is socially and economically empowered by the market economy, claims over the pasture with water access, which is closer to the poorer. In response, the poorer is forced to adopt this condition since they own fewer numbers of livestock and less able to be mobile.

Pastoralists had less care for preserving pasture and protecting their surrounding environment. A respect for traditional pasture use and the environment was lost after the settlement of new comers from semi-urban centres. Human caused environmental damages become more visible; the growing rubbishes near the campsites and mineral resources, more burning of bushes and saxauls, illegal poaching of wildlife and harvesting of endangered plants as well. In general, lack of ecological awareness, as community households emphasized, was the key to these chaos oriented environmental impacts.

Pastoralists eventually witnessed the deteriorating changes in quality of their lifestyle and their surrounding environment. The changes environmental conditions driven by climate change and unregulated use of pasture, lead to the less quality livestock products. "The lack of rain and climate change has even changed the livestock dung. We used to have very thick buuts⁴. Now it is getting faded and becoming thinner. Even milk is getting watery..." (Questionnaire).

A rich numbers of pasture plants were reduced leaving only on crude pasture plants for grazing. During the 2000 dzud, many pastoralists', especially the poor ones, lost their livestock. Somehow, as pastoralists highlighted, the loss of livestock resulted in release of pastureland from overgrazing. In other words, it contributed to an expanded pastures, available to the rest of the pastoralists. Nevertheless, it affected the well-being of many pastoral households, whose main living was directly contingent on the natural resources.

The environmental condition prior to the community organization was relevant to understand the reasons to the formation of these 12 community organizations.

Inception of the community organization

To understand the implication of existing policy and highlighting its positive impacts, the study focused on examining the nature of the formation. The target 12 communities are all formed in different time regarding the need to improve their livelihood, restore mobility and protect the surrounding environment. The main concept of community organization is to alleviate poverty through improving environmental conditions.

Pastoralists lacked the access to information and necessary supports from the local administration and other institutions. Also, pastoralists lacked in own grass-root organization that assembles their collaboration and initiatives towards problems solution. Analysing participants' statement, the formation of community organizations can be classified into two categories; induced by project support induced & induced by the impacts of the community organizations.

Induced by the project support

33% of the community participants stated that their community organization induced by the Nature Conservation and Bufferzone Development Project supported by German Technical Cooperation (GTZ) during 1998-2000(Chart 2). "Germany, GTZ had already gained experience with herder groups in its 'Issyk-Kul Biosphere Reserve Project' in Kyrgyzstan and lessons learned in that project seem to have influenced the early design for the Gobi component of the GTZ-funded 'Nature Conservation and Sustainable Management of Natural Resources Project'"(Mau and Chantsalkham 2006: 8).

The project supporting team approached pastoralists, personally assembling households closer to each other. Participatory rural appraisal (PRA) was the main tool to help pastoralists analyse their social and environmental conditions. The PRA meetings included pastoralists of all livelihood levels and household members regardless of their age and gender. At this stage, the project supporting team, as outsiders, took on the role of facilitator, not implementers, of the processes self-determined by the local communities with the focus of mobilizing local potential. Thus, as it is concluded, "The attitudes and behaviours of project staffs, of recognizing local knowledge and traditional management systems were important to achieve results presented"(NZNI 2006:2).

PRA activities were the factors that promoted those, who were involved in no such appraisal since de-collectivization and triggered pastoralists' initiatives on collaboration. "...participatory analysis with local herder communities revealed that they perceived a lack of formal

⁴ Layers of livestock dung that keeps warmth the in livestock shelter

institutions to regulate pasture management, and a need for collective action to fill this vacuum”(Schmidt 2004:7).

After a while, the inception visits of project supporting team were followed by the offer of technical and financial support to pastoralists’ initiatives to collaboratively solve their social and problems. “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”(Schmidt 2004:10).

Community group: The establishment of community organization by total percentage

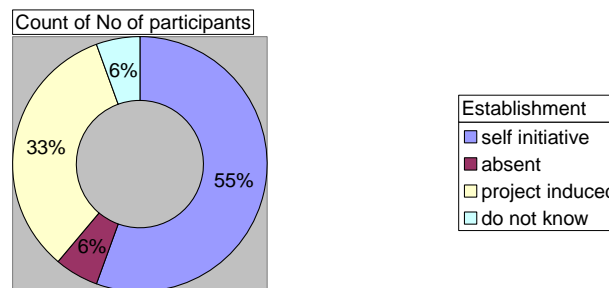


Chart 2 The manner of formation of community organizations

The formation of community organization mainly initiated and guided by the Kamal Kar, a consultant for social and participatory development, based on his extensive experience in rural development (Upton 2003; Schmidt 2004). The main implication was to strengthen co-management of nature conservation. The community organization would be a grass-root pastoral institution, core to the co-management approach as they were knowledgeable of local conditions and issues.

The Upton (2003) further noted that the genesis of the community organization came up by the recommendation of Kar in 1999 to empower local people/institutions as a strategy to facilitate joint park management, replacing the institutional gap created after the de-collectivization. The main assumption underlined was ‘there may not be one single formula for formation and functioning of such groups, but different location specific mechanisms might evolve through the process, so it is extremely important to approach the issues with much greater flexibility and openness’ (Kar 1999 cited in Upton 2003).

A project document concluded that project approach “sought to address immediate survival needs of people and livestock while developing sustainable mechanisms for the long term. However, 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” (Schmidt 2004: 9).

The inception period of community organization begun with a smaller scale focused on developing a model for a good governance practice (Interview). Later community organizations scaled up to influence on pastoralists from other areas as a result of the impacts by the pioneering community organizations.

Induced by the impacts of community organizations

55% of the community households replied that the formation of their community organizations was virtually based on their self initiatives (Chart 2). These bottom-up community organizations were mainly formed after 2000-2001 dzud, when pastoralists were found to be vulnerable to the natural disaster. "Our soum used to have 151,000 livestock and this number reduced down to 37,000, which means one from every five livestock survived that winter. This time, individual household each valley faced with lack of labour support to prepare and fix their winter shelters and pass over the winter. They stayed in very lonely situation" (Interview).

After learning about the successful stories of community organizations, pastoralists began to consider the collaboration as a way out to ease the loss they had faced established. They approached the project supporting team to enable their collaborative actions through participatory meetings. The team represented by its local extension officers accompanied by the representatives from local administration, protected area administration and Buffer Zone Council helped analysing their social and environmental situations using PRA. The involvement of other stakeholders especially the local administration was a part of a project policy to develop a good governance model based on the co-management approach (Schmidt 2004).

The establishment of community organization also possesses a manner, a response to tangible donor incentives (Mau and Chantsalkham 2006). However, it also seemed to be triggered by the successes of other community organizations, which had effective utilization of donor supports. The intention of these community organizations should be carefully understood concerning respective donor's initial approach, attitude towards pastoralists and extent of their collaboration with those groups of pastoralists. Nevertheless, this was not the cases for the target 12 communities of this study.

Majority of members from successful community organizations found to come from the bottom-up community organizations. The formation of community organizations has begun with smaller scale with limited budget of the project support. The project bottom-up approach with the use of participatory tools inspired the local pastoralists and the stakeholders. That's why community organizations were able to improve pastoralists' social statuses and living as well as their impacts on the nature environment. "The project objectives of 'nature conservation' were not at all perceived by pastoralists as contradictory to their own objectives. Only, the pastoralists' views directed programming towards a focus on collective action as a means to an end: mobility"(Schmidt 2004:8). The positive impacts begun to spread to the other neighbouring bags⁵, soums⁶ and aimags⁷ throughout Mongolia.

The formation of community organizations was more rapidly scaled up last half decade. Almost 80 community organizations have established under the framework of Nature Conservation and Bufferzone Development Project/(GC). More pastoral groups were formed in other areas of Mongolia with the support of other donors. As local officials underlined, the community organization was considered to be an effective mechanism to channel donor supports. Mau and Chantsalkham (2006) also noted that the support to community organization is consistent with Mongolia's Millennium Development Goals to deliver supports on range of activities such as pasture management, environmental protection and rural poverty alleviation. They elaborated, that donors were not responsible for establishing pastoralists' groups, but utilized and strengthened existing rural community structure (Mau and Chantsalkham 2006).

As of May 2006, Gunther Mau and Chantsalsaikhan (Mau and Chantsalkham 2006) reported, approximately 16,000 rural households collaborate in 2000 herder's groups and community organizations (6,2% of total all 256,800 livestock holding households (NSOM 2004). These

⁵ Bag-subdistrict/the smallest state territorial administrative division

⁶ Soum-District/the second state territorial administrative division

⁷ Aimag-Province/the largest state territorial administration in the country

community organizations and pastoral groups have got the support of 12 donor organizations under 14 rural development projects worth of 77,47million⁸ in 19 aimags.

Impacts in different levels

Participants underlined that the impacts of community organizations and its collaborative actions are more apparent in local level. The local level impacts are classified into the three levels; intra-household, community/bag and soum levels.

The impacts on intra-household level are more visible in improved livelihood and enhanced access to information and training. The community level impacts are reflected in improving social status of local pastoralists, especially women's, enhancing their voices of expression, awareness on prospective rights to resource management. The impacts in soum levels are exposed by pastoralists' contribution to co-management. Through their collaborative actions, community organizations resulted in lessening the loads of responsibility of local administration in soum social and economic development.

The impacts of community organizations on intra-household level

The impacts of community organizations begun when a group of households begun to support each other on their heavier herding tasks, which an individual household could not afford before. The organized collaborative action was missing as pastoralists tended to work individually/independently and were reluctant to support each other due to the emerging attitude that the livestock is private property. The analysis on their social situation and the environmental condition proved that the collaboration was the only solution to save time of and ease the load of tough pastoral labours such as fixing shelters, making hand wells if necessary, slaughtering for winter food and shearing livestock wool etc.

The community organization was especially helpful to alleviate feminized poverty. During the formation of first community organizations, the poor households, especially poor female headed household were attracted to the collaborative actions as they always lacked support on heavier works.

The collaborative actions required pastoral households a certain community rules and mechanism to run the community organization. In other words, the community management was a key to the successful collaborative actions. The selection of community leader and committee members all took place at a community meeting based on the community consensus. Community households agreed to work together under one rule of a community management after. Initially, the design of community rules and regulation were all developed with the advice of project supporting team. Eventually, this model of rules was likely to be applied from one group to another with their own version developed through subsequent skill sharing trips.

The leader and committee members and the rest of the community members are all obligated to a respective role and responsibility within a community organization. In response, each community member benefits in a certain way from the community collaborative action. A type of donor support was to deliver varieties of livelihood improvement training to community organizations in order to create an access to information and different work positions.

The training was offered to a whole community members or a couple of members from each community to share the knowledge with the rest of the community members. These training extended from vegetable growing, felt making and livestock product processing with advanced technology to any other livelihood support training that pastoralists could utilize for

⁸ This is the total budget of these projects. The disaggregated amount for support on community organization is unavailable.

generating additional income sources. For instance, Goviin Naran community shared their experience: "Lady Zandarmaa was from the soum centre, where she was unemployed with many children. She came and joined the community and begun growing vegetables. A first year, she bought a two year old goat kid after selling her vegetable. Next year, the kid was grown to become three. Now she owns 30 goats" (Focus group).

The vegetable growing seems to have a great impact on poor households, who lost their livestock during the dzud time. Its benefit was elaborated in a way that "households who herd livestock begun to grow vegetable and those, who grow vegetable were able to buy livestock"(Questionnaire). It is also reported that community organization and collective action are an important strategies for the poor, and particularly the very poor households to improve their living, because community organization addresses the issues of various dimensions of poverty such as social exclusion, lack of access to information, services and other resource agencies (NZNI 2006).

According to the control study, 101 households gained income of 2,723,000tug from vegetable growing in 2002. In 2003, the number of vegetable growing households was increased up to 168 gaining income of 13,717,000tug. In contrast, the increase in number of non-community households, who grow vegetables and the income they gained had only a slight change/improvement from 2002 to 2005 (NZNI 2006).

The other training that applies advanced technology of processing livestock products enabled pastoralists to add certain values to their products made of good quality livestock products. It included dairy product processing, felt making, wool spinning and making handcrafts from felt and bones as well as pickling the vegetables for local and international markets. For instance, community households, who own camels, spin camel wool and sell it for US market. As participants highlighted, unprocessed wool costs 1,000tug⁹ at local market where as the spinning wool-thread costs 30USD in international market. Pastoral men and women learned to produce 30 varieties of dairy products as a result of training that teaches dairy products processing with advanced technology.

Community households had certain examples they were proud to share in terms of community impacts in improved quality of pastoral lifestyle. These various income generation activities resulted in pastoralists affording a purchase of trucks, which enables their seasonal/rotational mobility as well as solar & wind energy panel, which provides electricity for TV and radio news.

The livelihood of community households has improved a lot more than non-community households. For instance, income from value addition of livestock of 72 community households was 1,863,000tug in 2002. Subsequently, it was increased up to 3,754,000tug in 2003, where as the income of that kind was slightly changed for non-community households (NZNI 2006).

The number of better-off households increased almost twice, where as the number of poor households were reduced twice from 2002 to 2005. The non-community households do not have much change in their livelihood levels (NZNI 2006). Overall, the livelihood of community households was comparatively improved according to the control study.

Community funding is one of the tool that ensures the sustainable or independent operation of a community organization. It is formed regarding a community household consensus. As it is noted "all communities' organizations were advised to set up their own funding to which all members should contribute" (Upton 2003:258). The project supporting team also focused on strengthening community organizations through their independent funding mechanism. Some community organizations are not necessarily committed to raise community regarding their needs and conditions. "Our community agreed not to have a community funding. If necessary, we agreed to raise funding for specific purpose of action."(Questionnaire). It indicates that the project advices are not compulsory to apply, and the structure and operation mechanism of community organizations can be as flexible as it needed.

⁹ 1USD equals with approximately 1140tug by 2006 rate.

Community households contribute certain amount of tugrug¹⁰, livestock or cashmere. Poor households, who do not afford these means of contribution, can contribute through an optional job tasks such as taking care of vegetable plot etc. Funding for communities was not often supplied directly by the project.

The benefits of the community funding is wide-ranging from helping the poor to enabling the purchases of community assets such as drum cards and spinning wheel with the support of the project. "Access to micro credits through community funds has also been particularly important for the poor" (NZNI 2006:5). Community funding also enable community households, especially the poor, to get access to get low-interest credit for their emerging needs such as hospital, school or tuition fee for the students from community household. Community funding is increased by different sources. Households contribute with their income from marketing of hand-crafts and felts. Or, loan interests paid by community members go to the community funding.

Moreover, the Buffer Zone council is at operation to strengthen and support community funding and community collaborative actions. "The project support has developed the skills and financial capacity of Buffer Zone Council and enabled them to perform their roles as bodies for collaborative management of natural resources, to develop Buffer Zone plans and support local projects in community development and conservation" (NZNI 2006:9). Buffer Zone Council supports pastoralists on developing and implementing projects on conservation and livelihood improvement. It also acts as a bridging institution, which connects community organizations with other professional institutions.

Factors that trigger successful collaborative management of community organization were a range of social activities that were missing since de-collectivization. Organizing social and cultural gatherings such as celebrating holidays or organizing different competitions and races among the member households virtually motivate community households regardless of the geographical distance between them.

Another factor that triggers a good community management is a common feature a group of households possesses. Community households join each other based on their age, same interest or closer geographical locations. The common feature enables them working together on additional income generating activities such as tourism, haymaking or briquette production etc.

Different training and workshops improved pastoralists' awareness and enthusiasm to contribute to their collaborative actions. Pastoralists' refer to it as "intellectual investment". Although the investment is channelled through donor's support, community organization had an advantage of being collaborative to consume it effectively. Therefore, it should be understood that the common understanding and collaborative manner of community households is vital to the effective use of donor support rather than the assumption that a community organization itself is an effective mechanism. The key to the successful community organization is effectively applied participatory tool and approach that result in common understanding and the collaboration.

The impacts of community organization in community/bag level

Community collaboration is not entirely a new concept introduced to mobile pastoralists. Rather, it can be understood as practices based on traditional pastoral lifestyle. Pastoral management has always been relied on the collaborative action within and between pastoral households. "Actually, Mongols have always been working together on their heavier works like making felts and shearing livestock etc. This is more traditional and had no direction from the top. Now, it [community organization] is more organized with certain aim of the collaboration on pasture reservation and management" (Interview).

¹⁰ Tugrug-Mongolian currency note

The factor that distinguishes community organization from traditional collaboration is its informal grass-root institutional structure, which has its own aim, procedure and action planning towards solving problems they encountered at present. Pastoral households join each other and form a community organization under a correlated common goal; livelihood improvement and the nature conservation. The main activities they pursue to achieve their goals are;

- Through different training, dairy processing and felt making with advanced technology and handcraft marketing for livelihood improvement
- Monitoring, pasture management (protection of winter pasture, rehabilitate the pasture through rotational use), collaborate on heavier pastoral tasks, planting trees to avoid desertification, protect saxauls and bushes as camel pasture for conservation.
- Each community organization has its own specialized activities and operation feature, which contribute to improve their livelihood as well as conservation.

One of the initial but successful collaborative achievements was community information centre, where community members held community meeting, learning and sharing of information and experiences. "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" (Schmidt 2004:11).

Community organizations utilize two different venues to accommodate information centres with the support of the different donor projects. One is mobile ger¹¹ that pastoralists can change the location following their seasonal movement. Pastoralists made their contribution to set up a proper ger by traditionally made felt, roof cover as well as ropes. The old bag centre house is also utilized to accommodate information centre for those who camp around the bag centre. The information centre is the place, where they organize their training, workshops and social gatherings. That's why, a community organization, which has an information centre, is able to manage a lot collaboratively.

The community collaboration also impacted greatly on reducing the number of children, who dropped out of school. According to the data from control study, the amount of school children of community households, who dropped out of school, were reduced dramatically within 2002 to 2004, where as those of non-community households had a slight change within 2002-2004. As a result of pastoralists' improved awareness on advantage of education, they certainly concern about their children's education. Pastoralists collaboration on heavier works enabled them to release children from herding tasks and send them back to school, or at least to the distance learning program (NZNI 2006). The mobile distance learning is truly effective, especially for female headed households.

During the field work, it is observed that growing awareness on importance of education divided the intra-household to camp separately during the school time. One parent takes care of livestock and the other takes cares of school children in soum centres. It bears an interesting question to what extent this division of household structure impact on household living and the mobility. It can be a investigated in further researches.

The main advantage of the community collaboration is that pastoralists were able to attend different competitions and fares, marketing their value added livestock products. Majority of those 80 community organizations share their experiences at fairs and festivals in other aimags and cities. Official found pastoralists' collaboration valuable. Pastoralists at least collaborating on their heavier works, in further, becoming able to access to information or markets and various fairs to sell out their livestock products. The participants also appreciate the community collaboration. "It is effective, because we address to the project people. It is that we do not need to pass through many hierarchies and bureaucracies" (Questionnaire). The control study confirms that within 2002-2005, the community organizations were involved

¹¹ ger-pastoralists' mobile accommodation made of complex wooden frame and felt coverage

twice more trainings, workshop and experience sharing actions than non-community households.

In contrast to the non-community households, community households are efficient in generating additional income as a result of their organized manner and the collaboration with other stakeholders. "A big difference is emerging between community and non-community households. The community pastoralists, who have got the support from the project, received awareness and the information, which becomes an important asset like natural resources such as water and pasture"(Interview).

Moreover, community organization is effective on women's empowerment. It is exposed clearly in community level than intra-household level (Undargaa 2006). As a result of their involvement in project implementation, women from community households were much more dynamic than those, who were from non-community households in terms of mobility and expressing their voices of expression (Undargaa 2006).

The participants emphasized that women were less dynamic prior to formation of community organizations. Women in general maintained secondary social status that they were not able to go to the public/bag meeting or there was no means to express their voices. WED approach argues that women were the closer manager of natural resources, because of the gendered labour division. They fetch water and pick up fuel trees as well as bushes.

Women are found to be an important decision maker of natural resource use in western part of Mongolia (Bayarjargal 2004). Although the role of man and woman within agricultural household is gendered, women's works are more undervalued according to WED. That's why, WED argues that development should focus on women and consider their relationship to the environment towards effective conservation (Braidotti, Charkiewicz et al. 1997).

Under this hypothesis, women's increasing role and responsibility was captured and reflected in the project implementing approach, thus, encouraged women's involvement to strengthen participatory actions. Upton 2003 observed that women were usually advised to be appointed as community leaders because they were considered possess more dynamic and effective characteristic over the older males. It is also observed that a factor to successful community organization is led by the leadership of younger people/women with the wisdom and knowledge of elders and men as repositories for community history and traditional resource management practices (Schmidt 2004; Mau and Chantsallkham 2006).

Women's closer contact to natural resources as well as their effective and dynamic characteristics may also be related to their increasing role and responsibility within an intra-household level. In market economy time, the gendered labour division within households is blurring (Robinson and Solongo 1999). The blurring gendered labour division implies that women's workload is increasing as women become in charge of not only household management, but the herding management (Undargaa 2006). A small livestock of their own and a small asset or income of an average pastoral households requires both husband and wife to be involved in decision making at this difficult time in market economy. Thus, it can be concluded that gendered labour division within intra-household is blurring, but increasing women's workload due to the demand of market economy.

Women's attention is brought into a concern of both livelihood and the nature environment. Undargaa (2006) observed that poor non-community households, especially poor household leading women, were much less dynamic than poor women and men in the community organizations in terms of getting access to information, training, micro-credit and livelihood support.

The impacts of community organization in soum level

The impacts of community organization on intra-household and community level were reflected in soum development. Two ways of impacts are exposed in soum level;

- Contribution to soum development through assisting soum administrative tasks and improving the infrastructural conditions
- Improving local environmental condition through waste management, pasture mobility and conservation actions

“Herder groups are ideally place to assist government implementing rural policies and programs” (Mau and Chantsalkham 2006:10). Community organizations begun sharing the responsibility of soum administrations and helped to reduce the load of administrative tasks. All local officials appreciated the achievements of community organizations. The collaboration between pastoralists and local administration set an example of good governance development and the practices. The main contributing factor was the participatory approach, which brought the role of both pastoralists and local officials in even level to participate in co-management of nature conservation.

Pastoralists begun to work together on heavier jobs that individual households cannot afford in terms of labour poor for making and maintaining well, making hays and marketing their livestock products, shearing livestock and making and maintaining livestock shelters as well as cleaning their environment....Soum administration is responsible for organizing all these labour intensive activities. However, the responsibility of local administration is more easily guided, organized and managed through the community organization and pastoralists' own initiatives. Soum administration does not have to urge them time to time (Interview).

The community organization is also considered economically and structurally effective tool for running administrative tasks. The local administration has to spend much petrol to travel for executing administrative tasks. Since community organizations are formed, bag governors do not need to visit every single household anymore. Rather he/she communicates with community leaders to deliver information, service and an important announcement from the local administration.

The access to information becomes more hopeful than it was. The radio communication devices supported by the project embeds an advantage to re-maintain the tradition of communication between pastoralists and local officials, which had been lost since the de-collectivization.

Moreover, community organizations contribute to local infrastructural development. “They [community organization] began to work on maintaining broken backcountry road, shortcutting the distance by 15 kms. Economically, it was very effective” (Interview). The local public service is also improved by a step forward. Attendance in various training enabled community households to begin private businesses on different public services; hair-dressing, bakery, carpentry and water supplies.

Community food production fulfils the need of soum households. Benefit of community vegetable growing is not only restricted to intra-household level, but to the soum level. For instance, ‘Zuung Bogdiign Uguuj’ community harvest 8-9 ton vegetables every year from 1 he area. They consume a certain amount for their own need and sell the rest to local school and the dormitory (Focus group).

Local administration is responsible for winter preparation of local pastoralists. Prior to the community organizations, it was a complicated task for local administration. However, community funding enables the accomplishment in winter preparation. Pastoralists prepare hays together, plant fodder plants or buy foddors getting a low-rate credit from community funding.

In general, community organizations contribute to improve the level of social welfare in soums. The poor households join to community organizations because of its benefits. The impacts of community organization in intra-household levels resulted in reducing the number of poor and the very poor households in each soum.

Impacts of community organizations on environmental change/improvement

Community organizations have a certain level of achievement in environmental change/improvements, which are more apparent from the analysis. 66% of the community households admitted that there is change in environmental condition since the formation of community organizations.

6% stated that efforts of community collaboration on environmental protection were hindered due to the chaos oriented factors. 14% argued that community environmental effort was contingent on improved weather situation. "Now, weather is good. We make efforts to rotate as much as possible. However, weather has greater effects. We as a community tries to rotate, protect and reserve the winter pasture" (Questionnaire).

More than a half of community households (52%) admitted that the community collaborative action contributed to improved environmental condition (Chart 3). The collaborative actions were the key to the development of community based waste management, pasture management and conservation.

Community organization: Reasons to environmental improvement since the community organization

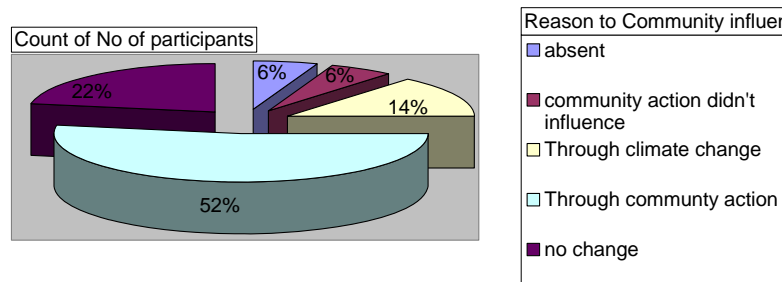


Chart 3 Reasons to the environmental improvement after the formation of community organizations by community group

Waste management

Cleaning the local environment was the first collaborative action by community organizations (clean off the rubbish around campsites, near rivers, springs and clean the animal corpses from the river or pasture area, which are considered bad for the livestock health). "Everybody started cleaning their winter campsite area, which helped the pasture use, because livestock gets scared away from the rubbish"(Questionnaire).

Soum administration was also able to utilize community organizations on administrative tasks. The waste collection points were established and maintained by community organizations. A project report illustrated that the waste collection points were increased from 199 up to 641 from 2002 to 2005. 226 toilets were improved in terms of sanitation. This number was increased up to 676 in 2005(NZNI 2006).

Pasture management

The majority of community households agreed that the community collaborative action has certain impacts on improved pasture management and mobility. "Since the community organization formed, we all attended pasture management training and begun to protect the environment. We stopped using the bushes and trees. Also, we begun patrolling the wildlife quite often"(Questionnaire).

Community organizations attended pasture management training with the project support. The training was proposed to promote the collaborative pasture management. The implication was "One person cannot do pasture management if others say 'no', they would not obey. Regarding the advantage of institutional structure, the community collaboration was effective tool to improve pasture management and prevention of desertification, rather than the attempt by a single household"(Interview). It resulted in improved pasture management at certain level through rotating, protecting winter pasture area and cleaning the pasture areas from rubbish and livestock corpses as well.

Table 2 Change in rotational mobility by groups

Change in rotation Group	Increase		Reduction		No Change %
	%	Rotation No/%	%	Rotation No/%	
1. Community	40%	4 times-6.5% 4< times-11.5%	11%	2 times-11% 3 times-3%	39%
2. Non-community	28%	4 times-17%	11%	3 times-5% 4< times-3% Do not move at all-3%	28%

Table 3 Change in mobility distance by groups

Change in distance Groups	Increase %	Reduction %	No change %
1. Community	38%	19%	31%
2. Non-community	34%	19%	17%

Mobility Community households have increasing trend of mobility regarding the number of the rotational movements and the distances of seasonal movement in comparison to the non-community households. 40% of the community households increased their rotational movement of four and more than four times, where as only 28 % of non-community households increased the rotational mobility of four times only. 38% of community households extended their seasonal movement distances, which is little higher than the figure of non-community households.

The choice 'no change' indicates there was no change occurred in distance or rotational movement of households (Table 2 & 3). It does not imply that these households had less rotational movement and shorter distances before. This choice included the households, who rotated quite often and moved longer distance every year as their mobility habit.

According to the geographical zones, the community households' rotational movement and the mobility distance has increased more in mountain area due to the increasing number of campsites and households in limited mountain pasture.

The increasing trend of mobility by community households was a result of community pasture management. "Pasture is rehabilitated and improved due to the rotational use of pasture in summer and autumn time as a community" (Q-?). The major pasture management practices were community pasture use procedure, scheduled seasonal movement, improved roads and mended wells in order to create access to un-used pasture and enable rotational pasture use.

Table 4 Change in rotational mobility by zones

Change Zones	Increase		Reduction		No Change %
	%	Rotation No	%	Rotation No	
1. Saxual & bush area	34	3 times-10%, 4< times-17%	16	2 times-16%	34
2. Grassland area	34	4< times-8%	8	2 times	50
3. Mountain area	50	4 times-26%, 4< times-9%	8	2 times/disappear- 8%, 3 times-16%	33

Table 5 Change in mobility distance by zones

Change Zone	Increase %	Reduction %	No change %
1. Saxual & bush area	42	25	16
2. Grassland area	25	16	50

Community pasture use rule Community organizations have a basic rule of pasture management that households agreed on leave and return to winter pasture at specific dates. For instance, community households all leave their winter pasture by May 25 to October 10th in order to reserve the winter pasture for cold winter and spring time. This rule is essentially based on the pasture use procedure decreed by soum government. "We protect our winter, spring and autumn otor area. Also, the non-community households tend to practice the same protection strategy"(Questionnaire).The involvement of soum government in pasture regulation and management is vital to the collaborative pasture management. Since forming community organizations, pastoralists began to discuss the issue related to pasture management with local government.

52% of the community households stated that they comply with this rule. The level of pasture rule compliance was fairly consistent among the households in different livelihood levels (Chart 4). Pastoralists began to pay more attention of each others' pasture use practices and demand more responsibility from the same community households. This greatly impacted on the consistent compliance of pasture use rule.

Moreover, the community pasture use schedule is considered one of the effective tools to enforce the decree by local governments. It was observed during the field work in several target areas that community pasture use practice has impacted not only community households, but the non-community households. "If one of the community households leaves the winter pasture, the others just follow... However, we do discuss before moving to the summer and autumn pastures in order to protect our winter pasture" (Questionnaire). In the area with existence of community organizations, the non-community households, who are

mixed in between and share the pasture and water resources, are likely to follow the pasture use practice of community households.

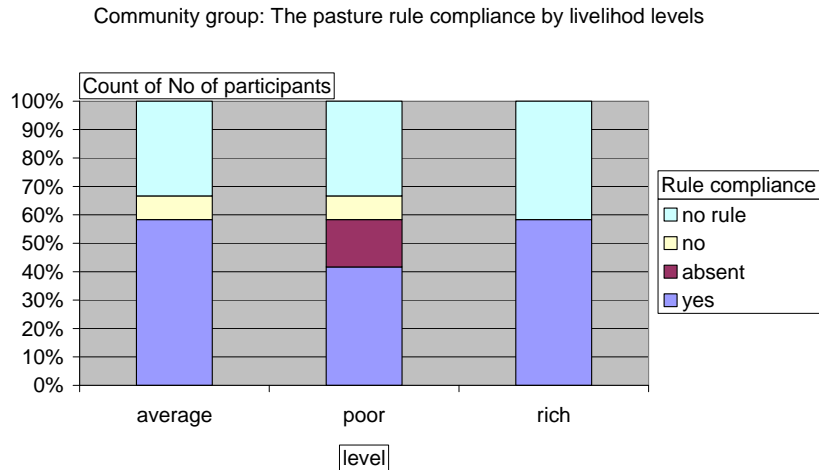


Chart 4 Community households' pasture rule compliance

This practice may indicate that the climate change and the overgrazing is not only the concern of community households. Although non-community households do not join any community organizations for some reasons, they admit that the community action is appropriate strategy to enforce pasture use rule in consistent level among pastoralists regardless of group difference.

Local households organize otor¹² movement with the support of soum government in order to protect winter pasture. A fairly new responsibility schedule is practiced within some community organizations. Households with a fewer number of livestock take care of vegetable growing as well as keep an eye on the winter pasture area. Meanwhile, other households go on otor herding their own and other's livestock. This is an effective practice to enable mobility by all households within a community organization.

Community pastoralists described the chaos oriented pasture use prior to the community organization (page 14). The pasture use pattern prior to the formation of community organizations was mainly shaped by the pastoralists from the transition period. Approximately more than 30% of both community and non-community groups are transition pastoralists¹³ (Chart 5). One transition herder shared his experience on pasture use. "We didn't use to know about protecting one side of pasture for reserve. Now we always reserve the pasture for winter. We see pasture has got improve since we start rotating" (Questionnaire). Community collaborative actions have attracted more of the collective time pastoralists (58%). It enabled the new and young pastoralists learn from the experienced collective pastoralists.

Infrastructure development Pastoralists expanded available pasture areas, which were not accessible due to the blocked road or lack of water resources. As a result of the organized collaboration, community households take responsibility over the water resources. They helped each other on mending hand wells and contributed to repair engineering wells as well. "People didn't use to leave their winter campsite. However, now with the project support, people mend wells and repair roads to expand pasture area"(Questionnaire).

More of the abandoned wells were repaired and maintained by community organizations. For instance, '9-Erdende community' made a tunnel to allow water flows a mountain spring 7km

¹² Otor stands for long or short distance rotational movement different to regular seasonal movement. This instances they moved for long distance otor Khangai region.

¹³ Transition pastoralists are new pastoralists from urban or semi-urban areas and were occupied in herding since de-collectivization in 1990

away with the project support. The soum administration provided technical advices on the process of accomplishment (Interview). Moreover, 'Zuun Bogdiin Uguuj' community made a new engineering well on unused pasture area with the support of local administration. This enabled their otor movement during autumn time for the preparation of winter.

'Saikhan Dush' community improved the road access and repaired a well in the mountain. It enabled them re-use the pasture that was not in use since the earthquake in 1957. "We opened a new pasture we never used before through making a well"(Questionnaire). Pastoralists began to take responsibility over the water resources as a community under individual or community protection. At several cases, pastoralists informed the local police and aimag court about the strangers' robbery of parts of from engineering well in their areas.

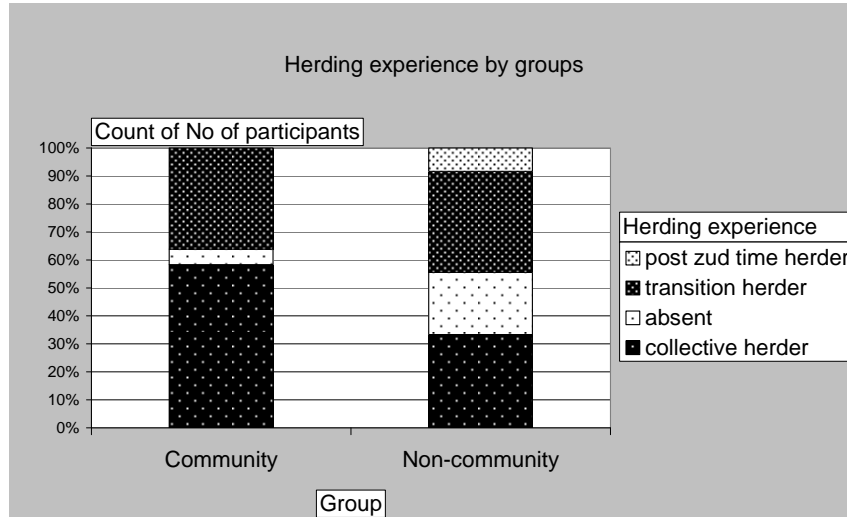


Chart 5 Participants' pastoral experience by groups

Community Managed Area Alternative pasture management strategy is that several soum government decreed to allow community possession of pastoral area. Ideally, it enables the effective pastureland management by a group of households, whose seasonal pastures mobility reside in the area. This is the concept, which the project assumes as community management area (CMA). The CMA practice is one of the factors that influences on not only the improved pasture management, but the conservation outcomes (Schmidt 2004; NZNI 2006).

The understanding the concept of CMA promotes community households agree on and comply with community pasture use rule. The target soums concluded triple contract with several pastoral organizations. Three community organizations concluded such contracts. The details on CMA will be discussed in the next chapter.

Another method practiced alternative to the CMA was to fence off small pastoral area in winter pasture. "As fencing the pasture, we see that different plants are start growing again. It is very good for the livestock"(Questionnaire). The fenced area is effective, as pastoralists elaborated, as a reserve pasture for younger livestock to pass over harsh winter and spring. The project granted certain amount of support on fencing materials.

Others Pasture management training resulted in improving pastoralists' awareness. Pastoralists began to prefer livestock quality over the quantity. Many numbers of livestock were considered less beneficial in terms of its economic and environmental benefits. Rather, pastoralists focus on the breeding of herd species in order to improve the quality. "In the future, our community will focus on improving the breeding quality of the livestock. We have brought best livestock breeding samples from other aimags"(Focus group). More households began to consider livestock quality as the only choice towards improving grazing capacity and saving pastoral labour.

According to the control study, the participating nine community households purchased nine breeding livestock in 2002. However, both the number of households (33) and the number of purchased livestock (36) were increased dramatically in 2003. Community pastoralists are likely to focus on improving not only the quality of livestock, but the quality of livestock products through effective veterinary services. The community funding is effective in terms of paying the veterinary services. In contrast, the non-community households have less awareness on the quality of livestock thus are likely to focus on increasing the number of livestock.

Conservation actions

Desertification is an issue that increases the concern of pastoralists, experts as well as academics worldwide. Gobi pastoralists are taking an action towards tackling the impacts from the desertification on their natural resources. Each community organization has a major focus on conservation through specific actions. Some are involved in wildlife patrolling, monitoring and surveys, some are in the protection of bush and saxaul trees. Others protect streams and springs.

Protection of bushes and saxaul forests Some community households in countryside agreed on stopping the use of bush or saxaul trees¹⁴, or at least to reduce the amount of the use. "We use to see bushes and saxaul trees being piled outside of every single pastoral household. Now, as began using fuel efficient dung stove¹⁵, we could stop the use of these bushes and tress" (Questionnaire).

The other community organizations, usually from soum centres, are not directly involved in but contribute through the use of fuel efficient stoves and the gaz stove. For instance, in 2002 only 92 households were using fuel efficient dung stove. The regular dung stove burns 25 bags of dung a day, where as a fuel efficient dung burns 2 containers¹⁶ of dung (can be wet) a day. After the introduction of the stove, the number of community households, who use fuel efficient dung stove is increased up to 170 in 2005. 166 community households participated in control study, utilized 132 ton bushes and saxauls in 2002. However, this amount was reduced twice in 2005 (NZNI 2006).

Community households stopped picking on the green saxauls, but utilize the old dead bushes and saxauls instead. Besides, introducing gaz stove in soum centre and imposing fuel tax¹⁷ on saxaul uses, contributed to reduce the amount of saxauls loaded in track from soum centres.

The use of improved technology of stove was followed by the briquette making campaign to replace the use of natural resources for burning. "People from soum centre used to come here and collect saxauls for burning, especially in winter. Now, it has reduced. People began talking about saxaul protection in greater extent. And we tend to use fuel efficient briquettes quite often. Thus, we stopped using saxauls, especially in summer and winter. We make fuel efficient briquettes, which is made of camel dung"(Questionnaire). It is recorded that only four community households were involved in briquette production in 2002. This number was increased up to 189 community households in 2005 (NZNI 2006).

Moreover, some community organizations are occupied in briquette production business as an optional income generation. For instance, Oroin Deed community is composed mostly of poor and very poor households. Although they are not involved in pasture management, they produce briquettes, which are made of livestock dung and ashes. They sell it at local market

¹⁴ Bushes serve as fodder plants. Saxaul (*Haloxylon* sp.) is an important resource for maintaining the underwater resources in Gobi region as well as pasture resource, in particular for camels.

¹⁵ Fuel efficient dung stove is advanced technology stove that burns all types of dung including wet sheep and goat dung as well as piled frozen dung

¹⁶ a container of eight liters

¹⁷ Impose a tax for utilizing natural resource as fuel

(Interview). Income gained from the marketing of briquettes by community organizations is increased from 44,800tug in 2003 to 1,117,070tug in 2005 (NZNI 2006). It is recorded that 1650km² saxaul and bush areas were rehabilitated through community efforts in limiting livestock grazing, using alternative fuels and fuel efficient stoves and improving monitoring and protection against illegal use of resources (NZNI 2006).

Some soum administration began to recognize the benefits of the community collaboration on bush and saxaul forest protection. "Although the natural resources were hit by 3-4 years of draught and dzud, the bushes and tress in the community area are being rehabilitated, where as the bushes and trees are not really rehabilitated in other bag area, where there is no community organization. This is the visible impacts" (Interview). The impression like this was popular among the official from six target soums.

As a response, a practice to release community households 100% from fuel tax has been applied. For instance, Byandalai soum has released "Ireedui community" from fuel tax for last three years' effort of community households in conservation actions. The local efforts saxaul and bush protection is also supported the professional NGOs. For instance, "Khunchiin Khiimori" company was involved in determining the amount of existing saxauls resources with the support of a community organization. Participants greatly appreciated this collaboration, which would contribute greatly to the further protection of saxauls, especially the newly grown saxauls.

Protection of water resources The protection of water resources seemed to be at a greater demand in Gobi region. Community households collaborated on cleaning the rubbishes away from the river and spring sources. They also repair hand wells and set up signage at the spring area of any water sources. As control study reported, community organizations protected 26 water source areas and set up 30 protection sign boards. This number was increased up to 32 water sources and 32 protection sign boards in 2005. The increase is not impressive, because of the reasons like climate change and human caused impacts. One of the causes, according to the pastoralists, is illegal mining of the mineral resources, which affects broadly on the rivers and springs to disappear.

The collaborative actions also enable community households to handle the impossible mission that local administration could not. For instance, the direction of a creek was changed due to the sand movement. "Zuun Bogd" community households re-corrected the flowing direction of the creek. "When the river stopped flowing due to the changing direction of a creek, we corrected it back to its original direction by building dams." (Questionnaire). As a result, water flow was re-enabled through the pastureland of 30-40he. The benefit of pastoralists' collaboration brings the community organization into the level that soum administration can rely on as a stakeholder.

Moreover, successful community organizations implement governmental programs of desertification prevention. For instance, "Zuun Bogdiin Uguuj" community is contracted to plant trees under the "Green Wall" program. 25 households of the community organization planted 10,000seedlings (Interview). The poor households are paid monthly salary for planting and taking care of the trees. This dynamic action of the community collaboration attracts many non-community households and increases their enthusiasm to join the community to share the benefits from the collaboration.

Biodiversity conservation Community organizations also take a part in wildlife conservation. During the dzud time, the inter-migration was common among Gobi endangered species such as wild asses, wild camels, black-tailed antelopes, wild sheep and ibexes. Since the formation of community organizations, pastoralists in the protected area began to keep an eye on these species and carry out ecological surveys and census. As a result, the wild life protection is considered to be improved at certain extent. "We have gazelles and black-tailed antelopes in our place. We haven't witness any illegal poaching lately" (Questionnaire).

In some community organizations, the community allocated rangers are granted monitoring and the patrolling rights/ID cards by relevant government organizations recognizing their contribution to the monitoring and law enforcement. Consequently, outsiders take notice of it

and began to respect community action that community households are taking a step forward to take care of their own areas (Interview).

The community collaboration with professional institutions also reflected in conservation actions. For instance, “Goviin naran” community households are trained in conducting ecological surveys. Now, they have been collaborating with several professionals and student in conducting surveys on wildlife census. “I know, some wild sheep and ibexes are seen around. So, I think all wildlife is re-habituated back” (Questionnaire). Pastoralists are involved in not only patrolling, but physically involved in surveys and monitoring. These practical actions contribute to enhance pastoralists’ ecological awareness to certain extent in comparison to the other community organizations.

Besides, pastoralists benefit from protecting a local river and spring area. For instance, “Saikhan Dush” community protected a resort “Khuren Khadnii Rashaan”, the area with mineral water. This area is rich in round 200 rare plants such as wild onion. The support of the local administration is necessary for the conservation. Under the decree by local government’s, the community set up a sign board, cleaned the area and run the business for visitors in rush time. In return, the community is able to market their livestock products and dairy products and harvest wild onions in permitted amount. They contribute 10% of the income to the local administration and the rest for their living. The advantage of fencing off the pasture area also contributes to protecting rare plants in Gobi area.

The community involvement in nature conservation and community based conservation actions are vital to the co-management of natural resource. Pastoralists’ involvement in conservation actions through organized community collaboration can be an effective tool to create ecological data source at the community information centre, which can be open to public. The future of community based conservation is seen as “The network of Community managed areas, linked with the Gobi Gurvan Saikhan National Parkm and other local protected areas, will greatly enhance conservation at the landscape scale and could be an appropriate strategy for Mongolia to manage grazing lands and conserve natural heritage while sustaining livelihoods on the pastoral commons” (NZNI 2006:15).



Community Managed Area

This chapter discusses CMA in general as a main strategy to deliver and produce positive environmental impacts described in previous section. The specific focus is given to the nature of CMA, pastoralists awareness on CMA, and its types and the extent these types shape pastoralists access to CMA.

The formation of CMA

In previous section, the possession of pasture by community organization is briefly discussed when unveiling the achievements of community organization on natural resource management. Here, the insights are given into the details of the nature of the community management area (CMA).

The concept of CMA was initially discussed by the stakeholders including project, protected area administration, local administration and the Buffer Zone Council to develop and strengthen the co-management with the involvement of local grass-root institution (Interview). Participants do not have a common knowledge on the origin of CMA, but asked to define it. "CMA is a beautiful rock area, which is allocated to our community. Do not know who organized this. We were told that we need to set up a border sign..."(Questionnaire).

The main implication was based on an hypothesis that a community organization is usually composed of a group of pastoral households geographically closer to each other. These households share similar use pattern of common property resources, thus they have taken responsibility over the protection of pasture lands and resources they share in common. This concept was triggered by the condition of, and assumed to solve the on-going dispute among pastoral households prior to the formation of community organization (Schmidt 2004: Interview).

'Pastoralists traditional and practical knowledge of local condition' was proposed to be utilized for further effective management of natural resources. A management plan for the possessed area was proposed to be developed by the community, protected area administration and the soum administration. The implication is noted elsewhere "This agreement transferred resource use rights and management responsibilities to the community for a particular area of pasture, including land within the core strictly protected zone and grazing areas for all four seasons...." (Upton 2003: 257).

This underlining implication may also have regarded the pastoralists' property rights status. The status of pastoralists rights to property was not considered at all in the initial law on land¹⁸, though pastoralists are the main custodians of natural resources. It was critically argued by Tumenbayar (2002) that the land law, for example, regulated pasture land 'is the government's property'. Pastoralists can be vulnerable to losing their lands to non-pastoral practices such as mining under the regulation of special use category (Tumenbayar 2000). That's why, the possession of pastureland by community organization may be a step forward to guaranteeing pastoralists' right to access, use and control of the resources, and to promoting their involvement in natural resource management.

CMA was first discussed and applied to practice in 1999-2000 at an experimental level. Its legal basis was rather vague, but did not contradict with the existing land law (Interview). Under the project framework, similar contract scheme was eventually applied to several other soums(Interview). As project summary reports, 26,721,780 sq.km area(Appendix 4) is given to the community possession under the contract between community organizations and local administrations (NZNI 2006).

¹⁸ The first passed out in 1994 allowing pastoralists' possession of campsite, and then in 2006 allowing group of pastoralists' possession of natural resources under a contract. 'The possession' does not imply the private ownership in this context

Important questions at discussions were to what extent CMA impacts on the mobility and whether it restricts pastoralists' mobility and (NZNI 2006). The CMA function is reported as;

“Community managed areas” do not restrict mobility of pastoralists. 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” (Schmidt 2004: 21).

The answers to these question can be contingent on how pastoralists understand CMA in their local context. The field work unveiled that pastoralists had different levels of knowledge and understanding about CMA.

Awareness of the CMA existence

The 75% of the community households stated that they were aware of CMA existence. Only 33% of the non-community households stated that they have heard of CMA in their areas. Disaggregation by the livelihood levels illustrated (Chart 6) that majority of community households in higher (75%) and average (67%) livelihood levels are aware of CMA existence in their areas. Only half of the poor households (50%) are aware of its existence.

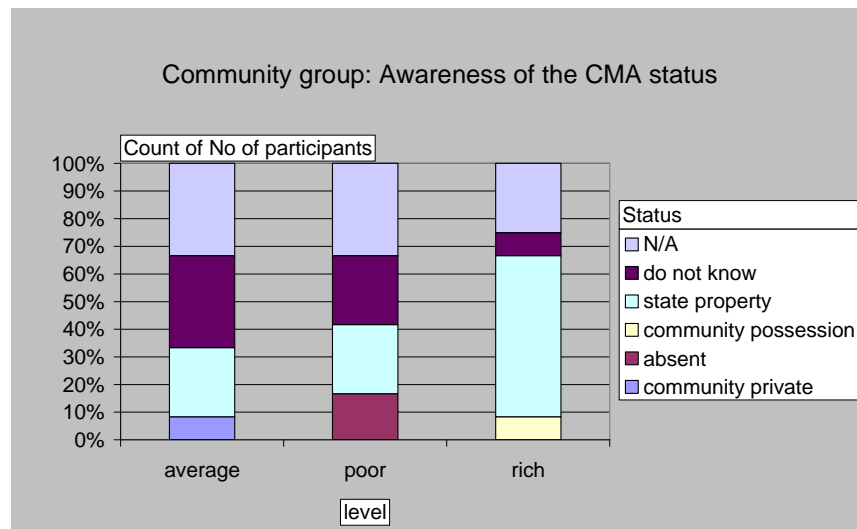


Chart 6 The level of awareness on CMA by community group

Understanding or the existence of CMA may not physically exist among the local households including non-community households, who usually mixed camping among the community households. It is apparent especially from the community poor households, because they are less aware of CMA they live in. “I assume that community households set up a CMA to protect the environment, but do not know where the area and the border” (Questionnaire. “CMA is the protected area with bushes and rare plants such as wild onions. I do not know about the borders and the sizes”(Questionnaire).

Another factor that indicated the irregular knowledge about CMA existence is the level of participants' awareness on CMA status. Community households had uneven awareness of the exact status of the CMA (Chart 7). Majority of the households in higher livelihood speculated that CMA was the property of the government. However, the households in

average and poor livelihood levels had much less awareness on CMA status. Some pastoralists even confused CMA with state protected area.

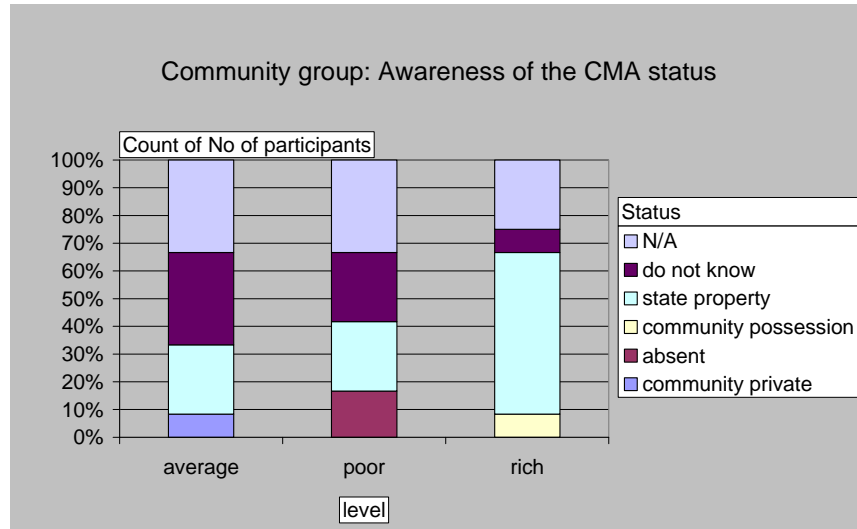


Chart 7 The level of community households' awareness on CMA status by livelihood levels

In general, these data may indicate that the poor households have less involvement in community pasture management. A reason to the low level awareness on CMA is partly due to the informal approach and recognition of CMA by some governments, which creates a rather vague understanding of CMA in project areas. In other angle, it is partially related to the weather condition and the collaboration level of community organizations. Pastoral households in some community organization need to leave CMA and separate, because of the lack of pasture in severe weather conditions. Thus, CMA management is complex with unstable pasture use practices.

Disaggregation by geographical zone indicated that the level of awareness on CMA existence is more higher in desert area (83%), where as it is comparatively lower in mountain (57%) and grassland areas (50%).

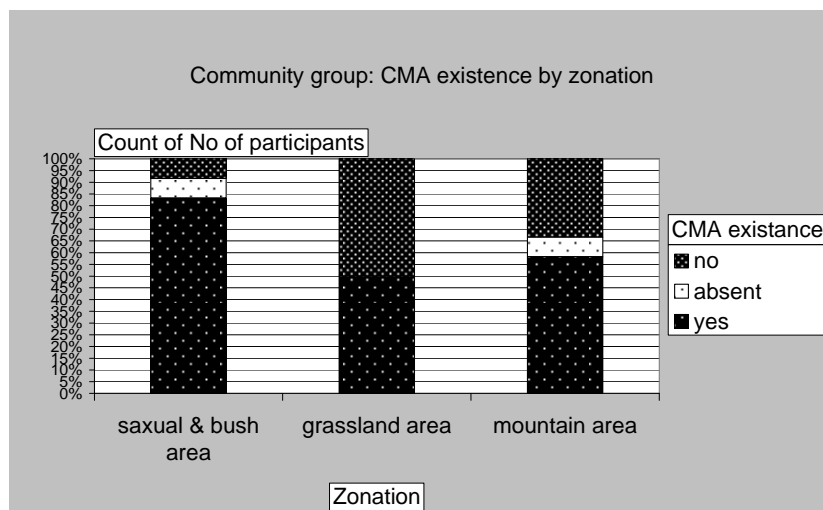


Chart 8 The level of awareness of community households on CMA existence by zones

CMA definition and use

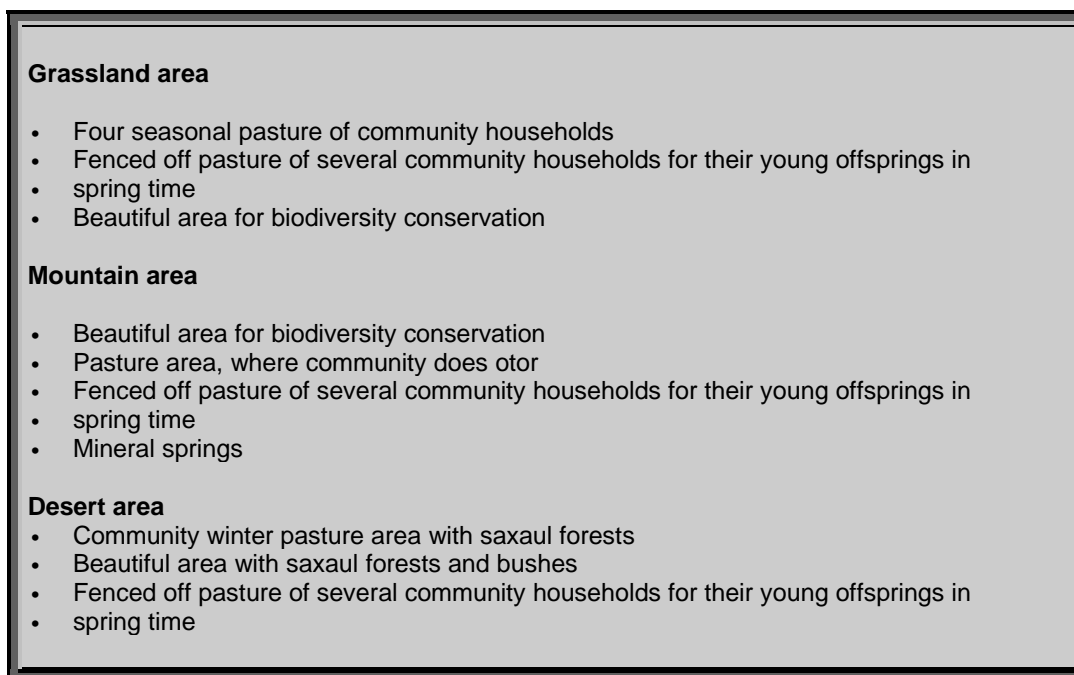
The feasibility of CMA existence and its management may be related to the types of CMA that pastoralists are managing. CMA is not only limited to all seasonal pasture areas of community households. It can be referred to various other types. Through the analysis of participants definition on CMA, CMA can be divided into main two types regarding its function; CMA that is used as pasture areas and CMA that is partially used as pasture areas, but dominantly focused on biodiversity conservation. The former includes the areas of four seasonal pasture, fenced off pastures and winter pasture areas with saxaul forests. The latter covers the areas such as mineral springs, resorts and beautiful areas for biodiversity conservation (Figure 1).

CMA as four seasonal pasture

CMA with four seasonal pastures exists in all three geographical zones. The first CMA was introduced in "Ireedui" community in Bayandalai soum. Community takes responsibility over the 243sq.km areas of four seasonal pastures of all 37 community households (Undargaa 2006). This area embeds certain ecological importance including mountain and grassland pastures as well as rare bushy plants.

The recognition of the group possession is validated by the triple contract, which is concluded for 15 years between community organization, local administration and the Buffer Zone council (Interview; Upton 2003). The possession was registered on the name of the community organization. Community organization had to be a legal body for group possession of natural resources. Thus, informal community organization was registered as an NGO (Interview).

Figure 1 CMA definition



According to a local official, the triple contract stipulated that the community organization is responsible for managing the pasture land, water and resources, not allowing any households

from other areas. The contract would illustrate the clear size and the boundary of the CMA (Interview). Community households explained that they are responsible for maintaining rotational mobility, clean the surrounding area and protect the local natural resources in CMA (Focus group).

The data analysis indicated that there was little or almost no involvement from the local administration in CMA management. The main involvement, according to soum officials, was that bag governors demand households to leave and come back to the winter pasture at certain time defined under the pasture rule decree by the soum administration. A reason that local administration barely involved in CMA can be related to the complexity in mobile pastoralism that requires flexible approach to CMA management.

The extent of the flexibility of CMA management can be based on a traditional saying on pasture use pattern "camp as many as the land affords to bear and graze as many as all herds fit in the area". Although there is a certain extent of exaggeration in the saying, it insists on the flexibility of pasture land use.

Practically, a community organization, who manages the CMA with four seasonal pasture, allows households from other areas to camp in and share their pasture. This case, pastoralists from other areas should approach and negotiate with hosting community households. The permission is granted when outsiders agreed to comply with the rule from Ireedui community. This includes a certain date that outsiders should leave and the procedure that outsiders should not cause any pollution or damage in the area. Most cases, outsiders accept the conditional pasture use.

The main concern of hosting community organization is to take account of the availability of pasture and water resources in their area regarding the weather condition (Undargaa 2006). This has been the practice of "Ireedui" community by 2005.

The similar practices are applied to the other community organizations, which are contracted to the possession of four seasonal pasture areas. Nevertheless, households leave and come back to the winter pasture area at certain time or date was the most commonly practiced rule from the community pasture use rule.

In some areas, CMAs were not formalized in accordance with the triple contract, but are solely based on the assumption that a community households were responsible for a certain areas they camp. There is no size or boundaries defined and fixed. The recognition of CMA is validated by the community itself and they knows the boundary and size. (Interview). "We haven't concluded any contract with the local administration. During the harsh weather situation, we come back and forth between our CMA and other areas. We negotiate with other households and share the pasture anywhere we move"(Questionnaire). At certain level the local administration avoids giving importance on the fixed boundaries and sizes of CMA.

The reason can be related to the officials' concern over and the pastoralists' practice of flexibility in pasture use. The flexibility in pasture use and the fuzziness in the boundary has certain advantages in mobile pastoralism. "Exclusive boundaries are seen to be a problem rather than a solution to rangeland management in highly variable environments because they create immobility and inflexibility whereas the opposite required" (Banks 2001: 737).

CMA as fenced off pasture

Community households fence off a certain area as a reserve pasture for weaker livestock grazing in spring time. This type of CMA can also be used for haymaking in autumn time. Besides, it is helpful for pasture rehabilitation and the protection of rare plants. For instance, 'Zuun Bogdiin Uguuj' community fenced off 140he pasture. This area is rich in sweet grasses. The community took responsibility over the pasture management. It resulted in reduction of illegal confiscation of sweet grass in local area and the sweet grasses were rehabilitated (Interview).

These fenced areas are common among the community organizations in mountain and grassland areas. This type of CMA does not seem to guarantee the equal access by all community households. Its usage can be limited by only several/few numbers of community households. "We have fenced 300sq.m area for younger and weaker livestock grazing during harsh winter and spring times. The only two households around that area use it for their younger livestock. One of the households is now responsible for taking care of it, because their winter campsites are located right next to it. Otherwise, there is no CMA" (Questionnaire). Usually, these households are likely to be those, who are better-off and are able to cover the fencing costs with the support of the project.

Beautiful areas for biodiversity protection

This type of CMA embeds beautiful natural scenery, wildlife and rare plants as well as mineral springs. Its location can be mixed with community seasonal pasture or can be distinctive area where no one camps in any season. These areas are mostly fragile and proposed to be protected from any negative impacts caused by human and nature. "We protect our beautiful spring 'Khuren Rashaan', which was hidden and buried by flood and rubbish after the earthquake. Now it is becoming nicer and our community households stay around it in summer. We do not stay right next to it, but 7-8 km away from its border"(Questionnaire).

Pasture areas with saxaul forests This is saxaul forest areas and functions as grazing area for camels. Households usually camp here in winter time. "We protected the area because it is our camping area. This area is rich in saxauls and attracts many outsiders. Saxaul resources have got reduced, thus we protected it, because it is the main food for camels" (Questionnaire). Water is a big concern in Gobi region, especially in the area with camel herding. That's why, some areas with saxaul forests are not used at all, because there is limited or no water resources for households to camp.

Overall, CMA possesses different nature, definitions and functions. It is rather unsettled in terms of size and boundaries because of the pasture use pattern in different geographical and weather conditions. The types of CMA are not always distinctive. Some instances these are mixed, ie. each covers some features of others. For instance, there can be winter pasture area with wildlife in mountain areas. The next section will discuss CMA use by pastoralists to in order to elaborate more on different types of CMA.

CMA use

An important question whether CMA restricts the mobility households' is always attached to CMA regarding its impacts not only on nature conservation, but on the livelihood improvement of community households. Majority of community households elaborated that the existence and use practice of the CMA is contingent on good weather situation. Use pattern of community households is only analysed because community households were the major users (75%). According to the analysis, CMA that contains all four seasonal pasture is mostly used by better-off households (35%). Households with average livelihood (25%) use CMA usually for one seasons (Chart 10). Interestingly, poor households use CMA for all around a year.

It is also observed that types of CMA shapes pastoralists' use pattern of CMA. For instance, 25% of better-off households and 18% of average living households stated that they do not use CMA, because they live outside of the CMA (Table 6). Some CMA locates 30km away from community households. This would usually be the mineral spring area or scenic area with saxaul forest.

8% of average living and 8% of poor households stated that they do not use CMA because of the other reasons. For instance, some CMA do not have enough water or pasture resource for households to go and camp. If there is a water resources, then it will be too closer to the

winter pasture areas of other households. Most reasons are attributed to the poor households. They lack;

- labour power
- transport
- cannot afford petrol price
- or assume that their few numbers of livestock do not demand rotational pasture grazing

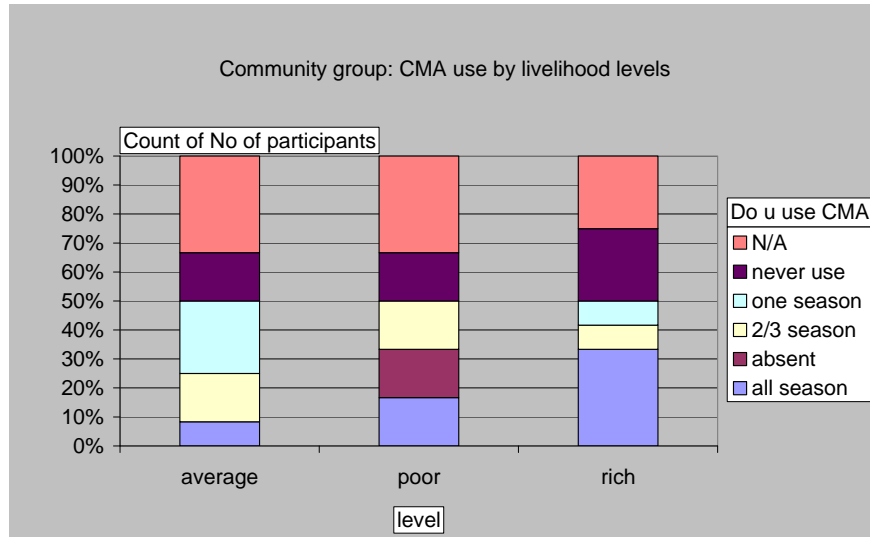


Chart 9 The level of CMA use of community households by livelihood level

These reasons are also reflected in their ability to manage rotational mobility within CMA. CMA use is more complicated for poor households though they are the members of community organizations. “We are old, and own few numbers of livestock. We do not have our own vehicle. And our few livestock adopts well in this pasture condition. Thus, there is no reason to move up there” (Questionnaire).

Table 6 Reasons why participants do not use CMA by livelihood levels

Zone	Answer	Lives outside of CMA	Other
1. Higher		25%	0%
2. Average		8%	8%
3. Lower		18%	0%

The analysis of reason not to use CMA also included the CMA use pattern of non-community households. We analysed the replies given by those, who do not or can not use CMA, regardless of group difference. Households possibility to use or not to use CMA depends on which type of CMA they leave nearby.

It was discussed above that it is barely possible to stay in CMA with four seasonal pastures during the harsh weather condition. Whereas CMA for wildlife protection and mineral spring areas or saxauls forest, can be used as a preserve pasture area. Both groups of households stated that they can use it during the difficult weather situation (Table-7). However, certain conditions are applied to the households regarding their group differences. Non-community or community households, who do not/cannot use CMA stated that they can use CMA if they negotiate with the local households, who camp in or near the CMA.

Some community and non-community households stated that they cannot go and use CMA, because there is no water. Others have a concern that households moving to CMA may drive the wildlife in CMA away, thus try not to camp there if possible. If these problems are solved, both community and non-community households can move to the CMA like mineral springs or reserved area during the harsh weather situation.

Table 7: Can you as a member/non member of community go and move to the CMA by groups

Answer Groups	Yes %	No %
1. Community	12%	5%
2. Non-community	14%	5%

Table 8: Can you as a member/non member of community go and move to the CMA by livelihoods

Change Livelihood levels	Yes %	No %
1. Higher	17%	8%
2. Average	13%	4%
3. Lower	9%	4%

However, those, who can manage to move to CMA, would mostly be the better-off households (Table 8). The poor households are less able to move, though the above mentioned problems were solved or even in harsh weather conditions. It indicates that poor households, especially non-community poor households have almost no opportunity to use CMA, because they lack support from community organizations or local administration to enable their mobility.

Another question raised was whether households are aware of the rule that is attributed to CMA use. 50% of community households, who is aware of and able to use CMA, stated that they know the rule where as only 8 % of non-community households stated that they are aware of it. In CMA for four seasonal pasture, the main rule is to protect winter pasture area leaving and coming back certain times. For non-community households, this rule applies evenly, but may need to stay in limited time period under the negotiation with community households. Ecologically valuable areas such as mineral spring, beautiful area with endangered wildlife and rare plants, the main rule is to avoid causing mess, overuse the natural resources or avoid driving the wildlife away.

Community households in desert area were more aware of rule of CMA use rule than the other two zones (Chart 9). Regarding the level of awareness on CMA existence, status and the rule of CMA (page 34), it can be concluded that CMA is more recognized in desert area, because of the spatiality in desert area. The desert area embeds usually saxaul forest, the pasture for camels and households camp quite in a distance from each other following the available water resources. Grassland and mountain areas are more crowded of campsites regarding the available pasture. Pastoralists share pasture everyday basis in common regardless of group differences. Thus, CMA existence can be less feasible because in mountain and grassland areas.

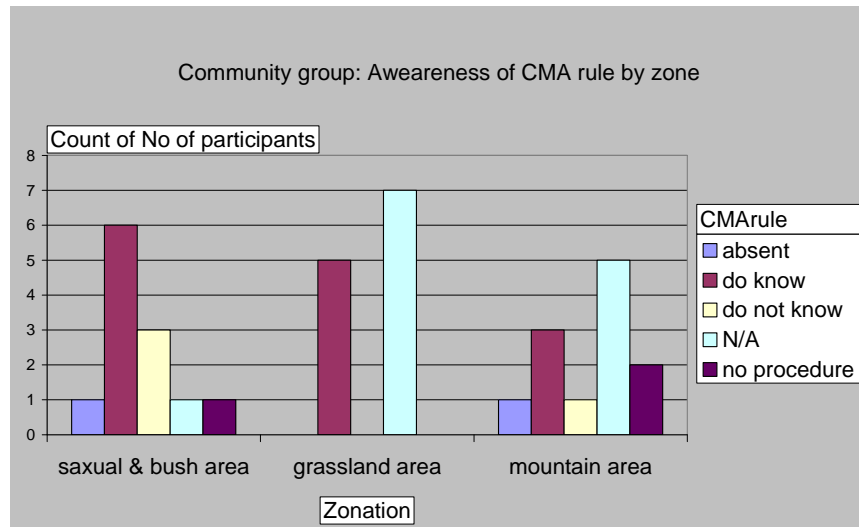


Chart 10 The level of awareness of community households on CMA rule by zone

No distinctive reasons of using and not using CMA is attributed to the different geographical zones. All zones are subject to similar conditions and difficulties that community and non-community households encounter. In general, CMA function does not restrict pastoralists' mobility. However, the different types of CMA shapes the pastoralists' access to CMA regarding its location, nature and the available resources in there and does not always ensure the access of poor households.

Challenges to maintain the positive impacts by community organizations

The previous chapters mainly encountered through the positive impacts by community organizations. This chapter explores the main factors that hinder community organizations to maintain their positive impacts in livelihood improvement and the nature conservation exposing the research participants' point of views.

Community Organization

Participants identified the challenges to maintain positive impacts of community organizations (Figure 2). These do not possess a distinctive character, but set up a chain of impacts. In other words, each factor causes to the emergence of another one. These factors will be discussed with the focus on the following three sections; management of community organization, CMA and group possession of CMA.

It was obvious that the positive impacts are all contingent on the successful management of a community organization. Mau and Chantsalkham (2006) argued that the main factors to the successful community organization is a high degree of motivation and interest, leadership, availability of resource for implementation and follow-up, incentives that respond to local needs and circumstances, hands-on learning resources.

As discussed in other literature, the factors to successful community organization is related to the good governance including transparency, joint-decision making, and accountability for use of funds (Schmidt 2004). Community operation is based on the consensus of all community members, at least their involvement in discussion and selection of community leadership, assistance committee members and the funding, which enables their activities. The former can be seen as factors that is analysed in macro-level, where as the latter focused on the micro-level community effective management. In other words, the key to the successful community organizations is the level of community collaboration.

From the 12 target community organizations, several samples were exposed to be a model to successful in leadership. Also, there were samples of community organizations, which confronted ineffective community management due to the lack of capacities and collaborations they were ought to commit.

Figure 2 Challenges to community organization

The factors that hinder to maintain the positive impacts by community organizations

- Community weak management
- Less value of livestock & livestock products
- Isolation from market
- Lack of funding to implement community developed project
- High-rate of micro-credit
- Difficulty to strengthen community funding
- Weather and geographical condition
- Lack of water(drinking and livestock)
- Poor households with fewer livestock

The weak management was a main factor that hinders to maintain community positive impacts at micro level analysis. It is a result of lack of common understanding among community households. Lack of community consensus on decision-making and selection of community leaders is resulted in less motivation and interests by members. They are reluctant to express their point of views or to be involved in decision making.

According to the lesson's learned by local officials "The most important thing is to understand each other. To work as a community, pastoralists need to have a common understanding. The community households are joined through its labour and financial efforts, thus they have to understand each other" (Interview). However, it is not that simplistic for participants to analyse the reason why it is hard for people to understand.

One reason can be the instability of community organization; change in structure and community members. For instance change in leaders or in-collaborative decision on selecting leaders may affect the level of collaboration. "Community people who are initiative or hardworking tend to leave for the central areas. Thus, firstly we are not able to collaborate. Secondly, we have lack of awareness and skills to lead people and assemble them for discussion" (Questionnaire).

Regarding the participants' points on weak management, the study analyzed the collaboration level of community households. The operation level of 80 community organizations are all comparatively different because of the different levels of collaboration they possess. Most successful communities have already gained legal statuses such as khorshoo and NGO. Some are just at the beginning level or still operating as informal institutions.

Similarly, the target 12 communities are in different levels of operation. The level of awareness on the status of their community organizations helped to expose the extent of community households' involvement in community discussion and decision making. The majority of better-off households were aware of their community status, where as average and poor households had less knowledge on this issue (Chart 11).

Community group: Awareness of the status by livelihood levels

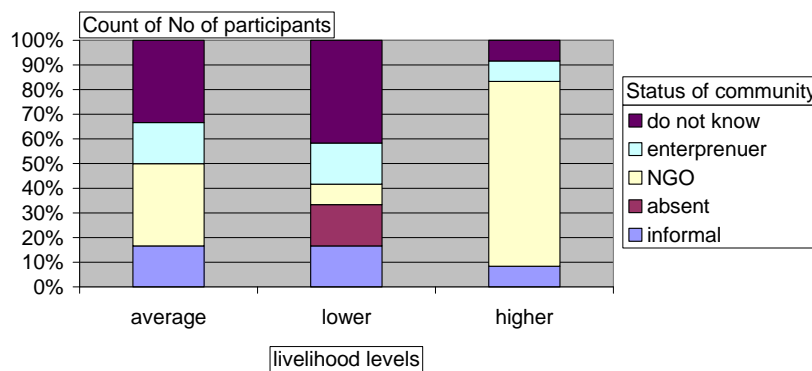


Chart 11 The level of community households' awareness on the status of community organization by livelihood levels

The collaboration level of community organizations was also analyzed affirmative to the findings above. Majority of better-off (100%) and average (92%) community households collaborate each other. However, the poor households had the least (84%) level of the collaboration with their community households.

Moreover, the collaborative manner of some community organizations can be fragile. 8% of the average level of households stated that they used to collaborate, but do not any more for

last two years because of separation for long distance movements or because of the weakening community management.

Table 9 Community group; who do you collaborate by livelihood?

Who helps Livelihood levels	Neighbours %	Neighbours & Relatives%	Relatives	Either as a group
1. Higher	8%	0%	8%	84%
2. Average	25%	9%	8%	58%
3. Lower	0%	8%	17%	58%

Regarding the mobile manner of pastoral households, it was interesting to analyse whom they collaborate closely within community households (Table 9). The findings indicated that the collaboration of community households was inconsistent when disaggregated by livelihood levels. The majority (84%) of better off households usually collaborate with all community households within a community organization, which is composed of both neighbours and relatives.

However, only half of average and poor households collaborate with all community households. A quarter of the average level households collaborate only with their neighbouring households, where as 17% of poor households rely on their relatives to get any support or collaboration. The reasons to these inconsistencies were poor households;

- Own fewer livestock
- Lack in labour pool
- Are mostly female headed households
- Are isolated from other community households
- Are Less dynamic
- Have uncertain conditions they joined to a community organization

Knowledge on 'whether environmental condition improved and in what way' was another affirmative question to the above findings. Almost half of the community poor households stated that the environmental condition has improved as a result of community collaborative actions (Table 10). Interestingly, only 8% referred it to the climate change. However, these figures are comparatively lower than those of average and better-off households.

Table 10 Community group: Reasons to improved environmental conditions

Livelihood level	Lower	Average	Higher
Reasons			
The environmental condition improved	50%	67%	75%
Through community actions	42%	50%	66%
Through weather condition	8%	17%	17%
Community action didn't influence	0%	8%	8%
The environmental condition didn't improve	34%	33%	25%

The factors, which affected the collaboration level of poor households, further impacts on the mobility. It is certainly a progress that 25% of poor households increased their four times rotational mobility, since the formation of community organizations (Table 11). 34% of poor

households increased the distance of their seasonal movements. However, these figures are not even close to what average and better-off households achieved.

It indicates that poor households are less mobile and their involvement in community pasture management is somewhat limited. In general, these findings indicated that the better-off households are more dynamic and actively involved in community actions, where average; especially the poor households have limited access to information and discussion on community action.

Table 11 Rotational mobility change of community households from past to present by livelihood level

Livelihood levels \ Change	Increase		Reduction		No change %
	%	Rotation No	%	Rotation No	
1. Higher	59	4 times-15%, 4< times-26%	17	2 times-17%, 3 times-24%	26
2. Average	25	3 times-17%, 4< times-9%	8	2 times-17% 4 times-9%	67
3. Lower	23	4 times-8%	8	2 times 2%	25

Table 12 Distance mobility change of community households from past to present by livelihood

Livelihood levels \ Change	Increase %	Reduction %	No change %
1. Higher	41	25	34
2. Average	42	16	42
3. Lower	34	17	17

The role of better-off households is important in pasture management and environmental protection. They possess more social and economic power that enables them to be dynamic and mobile. It is apparent that poor households are not always mobile because of their living condition and geographical isolation. However, it does not only imply that poor households are less important in pasture management. It should be understood that their roles and positions are vanished not due to the less pastoral asset they own, but due to the marginalization and social exclusion, which still existed among the community households.

A certain approach is still at existence, restricting an appropriate approach towards supporting poor households. A stereotypical ideology 'the very poor are lazy', 'poor herders are bad herders' or 'the very poor are the typical social phenomena and are always in a society' is common in different local contexts. Local officials, some better-off pastoralists and even some donor representatives lack an attitude mindful to work with very poor households in their areas.

This ideology is not always intentional. Obviously, it is not that simplistic to assume that the poor households are all optimistic and motivated towards livelihood improvement in this complex economic condition. However, it is crucial to understand that the reasons they are not is more socially related than naturally emerged. Development perspective is broad, thus the development practices need to focus on mitigating any impacts from a misleading social ideology like the one above. Their less mobility becomes a concern in CMA management,

which indicates the importance of the role of poor pastoral households. The more details will be discussed in next section.

The next main difficulty is to raise community funding, which enables community collaborative actions. The market price of livestock and livestock product are much cheaper than that of household products they purchase. Besides, pastoralists, especially the poor ones are always isolated from the better market. Lack of community funding disabled the households' opportunity to collaborate; meet each other or assemble community households for meeting appeared to be costly, or at least to implement the projects they developed to improve their livelihood would be complicated.

The high-rate bank credit is considered another challenge for community organizations. Inability to raise and strengthen community funding restricts the options only to the bank credits. However, funding request is not that successful. "We develop projects, but those are usually unsuccessful. We try to get little funding from the bank as a loan to implement our projects. However, bank does not allow it because we do not have enough collateral" (Q-?). Mau & Chantsalkham's (2006) reported that pastoralists cannot raise enough collateral to satisfy bank requirement and the repayment time is too short (6-12months).

Moreover, community households are less aware of how to get credit or even have doubt whether credit is beneficial (Mau and Chantsalkham 2006; Undargaa 2006). The lack of collaboration within a community organization may affect the community households to raise collateral or enthusiasm to raise community collateral assets.

These findings indicated that community organizations cannot always be stable in mobile condition, especially when they need to separate for long distance movement during the drastic weather conditions. The community management is always conditional as pastoralists' life are contingent on weather situation.

Pastoralists began to consider weather and their geographical isolation/mobility as main barriers to carry out collaborative actions. Eventually, pastoralists are likely to reach a conclusion that community organization is more effective for sedentary people in urban and semi-urban areas. However, a certain approach to community management, to highlight the participatory management, is lacked to strengthen these community organizations.

Community collaboration on poverty alleviation and its positive impacts on poor households were detailed in chapter one. Since the formation of community organization, the number of poor households in local area is dramatically reduced. The level of poor households was shifted up to average living condition. The findings from the field research also discovered several examples of community organizations, which had successful collaborations with positive attitude and actions towards helping their poor. For instance, the poor households in communities "Zuun Bogdiin Uguuj" and "9-Erdene" in Bulgan soum and "Gobiin Naran" in Bayandalai soum, were greatly appreciated the positive impacts of community organizations in improving their livelihood.

Community Managed Area

Community households confronted several challenges to maintain positive impacts by CMA (Figure 3). The first major difficulty identified was the the level of respect on CMA by outsiders.

Although there was no information on specific disputes exposed, community households had common complaint that outsiders disregard community pasture management and CMA rule. "The community has its own area. However, non-community households come and stay around here. Also, outsiders come and poach wildlife"(Questionnaire).

Some of the complaints not only attributed to the non-community households, but to the households from other community organizations. "Also, one community protects its winter area and use other's community winter area for grazing. Usually, households with many

livestock tend to do so. If they come and talk in advance about coming to our area, then that's ok. However, they do not. They just come and stay. When we try to talk to them, they argue that the pasture is the state property and we should obey the law" (Questionnaire).

Figure 3 Challenges to CMA

The factors that hinder to maintain CMA

- Community & non-community households do not respect community pasture management practice
- Outsiders do not respect community conservation actions
- It is hard to comply with community pasture rule because to the campsites too closer to each other
- Local administration is weak to support community conservation actions
- Lack of support from other stakeholders
- Lack of water (drinking & livestock) resources is the obstacle to vegetable growing, tree planting

However, it is insufficient to credit the blame only to those, who disregard the CMA rule. Rather it is related to the lack of information exchange and collaboration between community organizations. Several reasons exist. Firstly, the existence of CMA is only strong among the respective community households. General understanding on CMA is very vague in local context, especially to the non-community households and households from other community organizations.

Some of the CMA, its rule and sign were even found to have existed once before, but not anymore. This vague nature of CMA does not help other households recognize and respect it. Households from two different CMA do not have information and awareness on each others' practices. This indicates that some community organizations lack information exchange or skill sharing as a part of collaboration. It contributes to weakening the understanding of nearby local households not only on CMA, but on the existence of a certain community organization.

A couple of elaborations can be done. Firstly, what happens in the ground does not attributed to the CMA rule specifically, but more to the traditional pasture use rule. Before, one using others' winter pasture area were typical pattern, which caused disputes. Although powerless, the pasture use rule decreed by the local administration existed identifying the certain time period to leave winter pasture area.

Now, a group of households agreed to comply with this decree to reserve their winter pasture area. They are responsible for their winter pastures and keep watching over the use pattern of other households. The CMA rule, which community households comply, is the rule that is decreed by the local government. What makes community pasture rule different from government rule is community households all leave the winter campsites as a group at the same time. Thus, what can be done effectively is these community and non-community households work closely with local government in order to enforce these specific pasture rules.

Secondly, those who use other's pasture have different reasons. Some pastoralists strongly highlighted that they have always used that certain area for autumn. Now they confront with the complaints by community households. Community households chase their livestock away from their autumn pasture area. This is partially related to the increasing number of winter and

spring campsites. This creates crowds in the pasture with water and other resources, which have once been used for otor in autumn time.

Besides, those who trespass CMA, used to have salts and water resource in their own area. However, these resources are not available any more because of the chaos after the de-collectivization and the natural disasters. Now, they tend to search for these resources from the autumn pasture area. However, some community households formed their CMA in the same. As a result, some pastoralists' mobility over different seasonal pasture is restricted. That's why, CMA is not only about complying the CMA rule, but to consider the extent it might disadvantage other's access to the resources.

The power relation existed among pastoralists also disadvantage those, who are poor and less mobile. Community households identified that the less mobility situation of community poor households are the challenge to CMA(page 44). "It is really difficult to protect it, because our community is mostly composed of very poor or poor households"(Q-?). However, the less mobility of poor households is not the only factor that challenges CMA.

Other typical pattern exposed was that some better-off households take advantage of less mobile condition of poor households. Richer households claim more than two winter or spring campsites and locate one in the winter pasture area of other CMA households. They specifically locate it near the campsites of poor households with the assumption that poor households do not need bigger pasture. This enables better off-households leave its own winter pasture to be protected and use other's winter pasture area in summer.

Overall, it is apparent that CMA may not be the only solution to resolve these chaotic pasture use conditions. Instead, its vague nature of existance may lead to disputes among pastoral households. In other angle, the matter of respecting CMA is not only contingent on compying with its rule. It is somewhat ascribed to the matter of complying with the traditional pasture use rule with the collaboration between not only community households, but all pastoral households and local governments.

Another challenge identified to maintain community positive impacts in conservation is community households are helpless to face the matter when outsiders come into their areas. "People from other areas come and scare the wildlife away. It should be stopped, but do not know how it should be done" (Questionnaire). "We actually do not use the saxauls, but the people from the central area come and use it. We cannot tell them to stop using it. People have fewer thoughts about others. They do not think about pastoralists and their livestock"(Questionnaire).

Community households do patrol while herding livestock, but they do not have power and any means to stop outsider's negative impacts on their environment. They cannot call it as illegal actions as community households do not have a legal right to stop or issue fine. Outsiders take advantage of this situation and neglect any notice given by community households.

Solution to this complex situation is not simplistic. The above two issues are both related to the lack of collaboration with and support from the local administration and the protected area administration.

"The households from other area come and stay on CMA. We have talked to some households and made them leave. However, households come and stay near the pasture again. This way, we try to solve the issues ourselves. It sounds like local administration has a right to fine those who do not leave the winter pasture area. Bag and soum are not involved in regulating pasture use. None of those households were given this fine. They think this is the issue that pastoralists have to solve" (Questionnaire).

Community households are not happy with the collaboration with the protected area administration. "PAA do not work with us. They might only with illegal miners. If PAA works with us, there can be an extensive achievement on conservation. However, we are carrying out some conservation action voluntarily"(Questionnaire).

Local officials strongly highlighted the benefits of community organizations. They realize the need of collaboration between stakeholders. "If nobody cares about the community collaborative actions, community organizations are likely to weaken their interest in community action. They think 'oh community is not really useful' when they are not supported by the other stakeholders" (Interview). However, local administrations have little incentives to enable and promote the collaboration and co-management. They identify the financial difficulty as main barrier to support to and advise for community organizations (Interview).

Local administration have its own reason to be powerless to practice the power granted by the law on land. The demand by the local administration confronts with the pastoralists perception of freedom of private livestock ownership. Pastoralists are persistent that a certain area used to be theirs before; or they know when they need to move and how to arrange the daily pasture uses.

Although local administration have a power to issue a fine, they do not really enforce. The officials admit that pasture use pattern depends on pastoralists own management, because it is not only about leaving the winter place. It is also about being able to move or being able to find a place to move in next seasonal pasture or in otor area. That's why, local officials leave the flexibility of management to the pastoralists own hand. However, in the ground it is rather regulated by the power relation; who is powerful can be dynamic and be more mobile.

Group possession of natural resources

Recently, group possession of natural resources is legally accepted for conservation purpose in accordance with the decree by the Minister of Nature & Environment of Mongolia (MoN&E 2006). The possession of forest resource is the initial step and is at the consideration to enforce the decree, mostly in mountain and steppe areas. A certain area with fixed boundaries and the sizes will be granted for a group of households. Internationally, this policy is heavily based on the achievements of community possession of forests in Nepal, India and other Asian countries. Locally, the possibility might have been considered regarding the achievements of community organizations.

Community organization, its legally recognized status is a great achievement and efforts of many, who dedicated all their knowledge, experiences and life commitment into strengthening grass-root pastoral institutions. In Gobi region, CMA can be considered as one resource option to be possessed by group of local households (Workshop note). Participants were found to be divided into two fronts on the issue of a group possession of natural resources and pastureland.

Some assume, CMA should be legally protected and community organization should be fully responsible for its management and utilization, as it is proposed by the project hypothesis (Chapter one, page 18). These were some representatives from community organizations, who protected saxaul forest or who fenced off a reserve pasture with the support of project. The implication is to maintain the efforts and the funding the project and local pastoralists' dedicated (Workshop note). "It will be wise, if the government allow group possession of pasture under 40-50 year contract. People have no responsibility when it is common. If there is someone is responsible for it, then people would change their attitude towards using that [CMA] area"(Questionnaire). However, participants did not have any specific ideas of how these rules and regulations should be stipulated in the law. Under this procedure, a group possession can be applicable in the Gobi region through the possession contract with local administration.

However, majority of the participants from community organizations were doubtful about group possession of pastureland. "It is not necessary to allow CMA possession to groups. If we confront with draught and dzud in our CMA, then we have to leave, but cannot move to other's area. If pasture was allocated with detailed sizes and boundaries, it may cause the beginning on unsolvable disputes among pastoralists" (Questionnaire). "Many community households are not aware of CMA. CMA possession requires very thorough and careful

consideration from everybody”(Questionnaire). This point of view comes especially from those, who have CMA of four seasonal pastures.

“Pastoralists move following the rain and water resources.... The groups possession is complicated because it depends on weather condition”(Questionnaire).

Advantages of group possession of pasture land are discussed in the research of work of Banks (2001). However, his analysis was based on the comparison of group possession to individual land management. The local situation of pasture use (the nature of CMA existence as well as the collaboration between households and other stakeholders) is not convincing enough to regulate CMA as a dispute resolution and better pasture land management. Instead, it may disadvantage many. Poor non-community households or even poor community households have witnessed fewer facts that are promising to improve their pasture use pattern. The group pasture land management has certain flaws when the institutional arrangement is not strengthened. Therefore it cannot ensure pastoralists’ rights to get access to natural resources.

The group possession especially requires a greater deal when a high speed of duplication of community organization occur in Mongolia with the support of other donors (Chapter 1, page 6). The procedure of groups possession of natural resource does not appear that promising in terms of promoting the formation of or strengthening the existing community organizations. The opportunity to form successful community organizations may not fit within the rigid legislative procedure on community organizations and its possession of natural resources. The least examples reported was, “Other points of interest were that respondents found the registration process for a herder group to be difficult (in terms of collecting necessary paperwork) and that government and donor work for herder groups need to be better coordinated (83%)”(Mau and Chantsalkham 2006). It may also serve only for the advantage of those who possess power.

Overlooking the importance of community structure and management, the flexible approach to the formation of community organization, the level of collaboration between and within the stakeholders, the duplication of community organization in imitative manner may only lead to blanket policy instead of solving and improving the pasture land management in Mongolia.

Challenges to Pastoralism

This chapter discusses the challenges to pastoralists/pastoralism in general. In order to identify the prevailing challenges, the study focused on exploring pastoralists satisfaction on pasture use condition.

Pasture use condition

30% of the participants are satisfied with the current pasture use condition in Gobi, because weather has been better with rain falls since the dzud in 2000-2001. 56% of them were neutral and 5% were not satisfied at all with the pasture use condition. The pastoralists, who worked collective once before, were unhappier than the post collective and post dzud pastoralists (Chart 12). It may be because of the less available pasture and water resource.

Pastoralists statement of neutral satisfaction was rather the matter of being lethargic that there was no better solution by any one to improve the pasture use condition. "This is a historic issue that goes back to the privatisation process; it is also the area in which pastoralists themselves had least participation in devising the rules by which they now live, and for which there is seen to be no effective means of addressing and resolving perceived unfairness" (Weal 2004: 142). That's why, the neutrality in satisfaction implies that pastoralists are rather unhappy with the current situation. The outsiders, especially new couples, find it difficult to claim the pasture and campsites they need. It is difficult to possess new campsites because of the lack of appropriate location, which is accessible to good pasture and water resources.

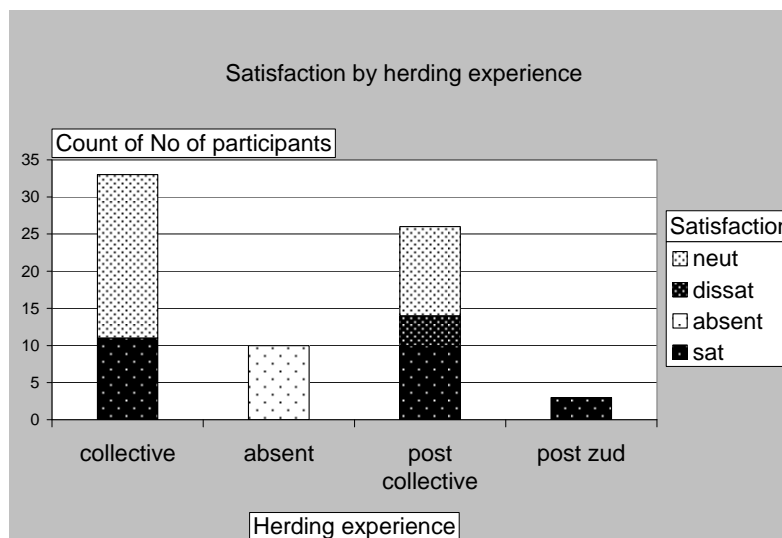


Chart 12 Pastoralists' satisfaction in pasture use by pastoral experiences

Majority of pastoralists appreciated the campsite possession regarding its the following two benefits. Firstly, it was a step forward to ensuring pastoralists' right to private property ownership. "Campsite possession is ok. There is no fixed border that's why it is ok. Actually, campsite possession is good, because others cannot come and stay on my campsite"(Questionnaire). Secondly, although the land is not given to the private ownership, it granted individual possession for 60 years. That's why, it was helpful that others' cannot stay there without any permission during this period of time. Also, it enabled pasture protection as households claim pastures around their campsites (Undargaa 2006).

However, these advantages are rather conditional. Firstly, the campsite possession is does not guarantee effective pasture management when it comes to the issue of climate change. Pastoralists need to leave their winter campsites for long distance movement. When weather is not pleasant, it is obvious, no one will go and stay on their campsites meanwhile they left the campsites behind. However, it indicates that campsite possession does not fully guarantee pastoralists' right to property ownership, because the possession type is rather regulated by weather condition.

Secondly, it indulged pastoralists' competition over good pasture. Pastoralists claim more campsites and pasture because of their increasing number of livestock. "Since the campsite possession, households tend to build a shelter and campsites closer to each other creating crowds. Many people are absentee pastoralists, but claiming more campsites in crowded areas and allow their relatives stay there"(Questionnaire). Campsite possession is the matter that related to power relation. Only better-off households, who own more pastoral assets, afford to build shelters and campsites with the support of their social and financial empowerment (Undargaa 2006).

The current pasture use condition is the main concern of majority of better-off and average living households(Chart 13). It indicates that pastoralists with more pastoral assets are unhappier with the current pasture use condition and majority of them are usually the pastoralists, who worked in collective before.

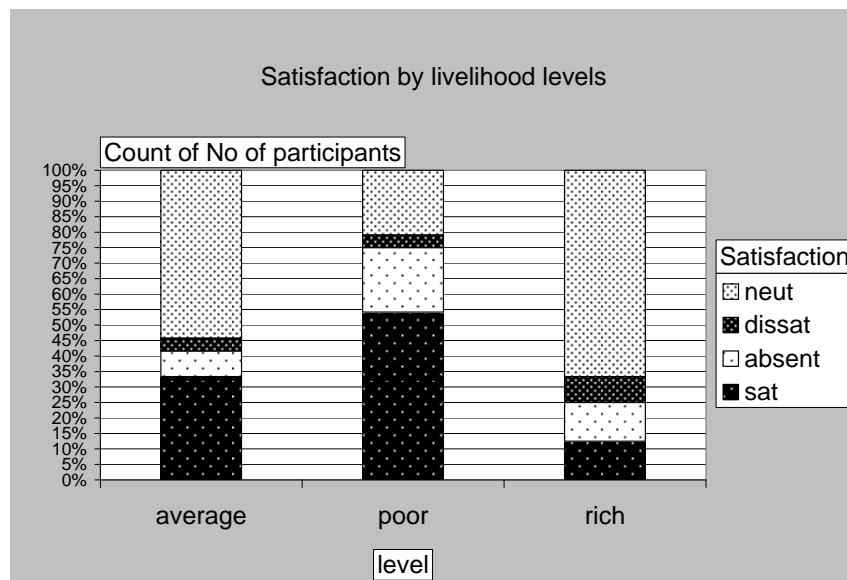


Chart 13 The level of participants' satisfaction by livelihood levels

Disputes

The physical dispute occurrence is barely common. Majority of the participants stated that there is actually no dispute. Rather, dissatisfaction of pasture use condition is common. Majority of community households were unhappy with CMA being trespassed by outsiders. It is even considered as a challenge to the community organizations and CMA (page 45).

During the field work, the study unveiled one specific dispute occurred between the households from two different soums competing over the pasture on border of two soums. Although it is a single dispute occurrence, it fully represent the general pasture use condition that pastoralists were unhappy.

The soum or aimag borders, which is more defined by fuzzy boundaries, was often used as otor area in socialist time. Nowadays, pastoralists compete over these pastures as their interests in campsite possession is increasing. Better-off pastoralists claims more pasture possessing several campsites for different seasonal purpose.

“People began establishing winter campsites in steppe areas on summer pasture. The bag meeting discussed about stopping it. It decreed to establish winter campsites only in winter pasture areas and free the summer pasture for summer use. When summer pasture is getting smaller, pastoralists camp closer to the winter pasture area though it is not good”(Questionnaire).

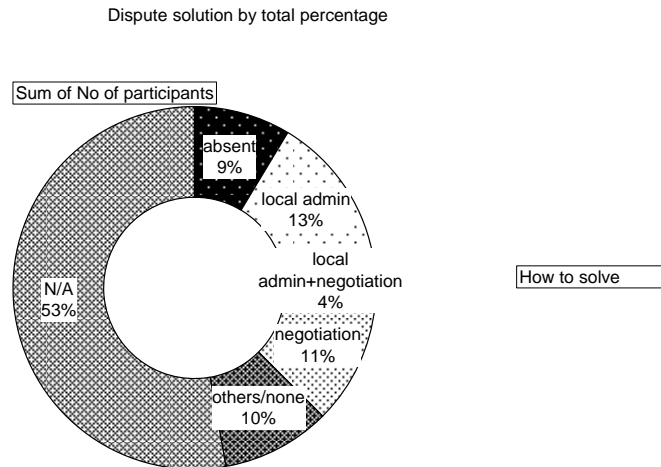


Chart 14 Solution to disputes by total participants

Another issue is related to the long distance movement. During the inconvenient weather situation, pastoralists need to go on otor¹⁹ and have to negotiate with the households in hosting areas. Otor issues is not at serious when it comes to arrange within the same aimag territory. However, it is more complex when crossing the aimag borders.

In accordance with the law on land, two aimag officials have a right to negotiate and agree to arrange otor movement from one aimag to another. However, hosting aimag pastoralists are not happy with their aimag decision to receive outsiders, because of the availability of pasture and water resource in the area. It obviously make things difficult for visiting pastoralists to find a location and local administration is helpless in this situation. Solution to this matter again is left on the shoulders of the visiting pastoralists. Visitors have to negotiate, which is to bargain through livestock or other valuable assets in exchange for a permission to stay near a hosting household. This is usually the matter of better-off pastoralists, who are able to deal and afford this bargaining arrangement.

Table 13 Dispute solution by groups

Answer Livelihood levels	Approach local administration	Approach local administration+ negotiation	Negotiation	Others/none
1. Higher	0%	17%	16%	16%
2. Average	8%	8%	8%	8%
3. Lower	0%	8%	8%	20%

¹⁹ Otor-short or long distance movement temporary for out of regular seasonal pastures to help fatten small livestock with fresher pasture, usually done in summer and autumn or can be done in spring.

Majority of pastoralists (13%) assumed that they approach soum administration (Chart 14). Although they have responsibility and power to solve these matters, pastoralists elaborated that soum administration is less helpful for making solutions that benefit both sides. Pastoralists are usually opted to negotiate each other. However, negotiation hardly solves the matters because of the power relations exist among pastoralists.

10% of the participants, who witnessed or personally encountered disputes, affirmed that there is really a no one to approach, but leave the dispute unresolved. The one, who got the power, decides the matter for own benefit or outsiders, who trespass, eventually leave the area when pasture gets worse or weather gets better in their own area. The poor households are the majority, who stays silent when confronts with the dispute (Table 13). The law on land stipulated several provisions on dispute resolution of pasture land use. However, the practices indicated that there is no effective dispute resolving mechanism that both local administration and the pastoralists satisfy and agree with.

Table 14 The most involved pastoral institution by groups

Answer Groups	Individuals	Community organization	Local administration
1. Community	38%	35%	20%
2. Non-community	58%	17%	2%
Total	49%	26%	11%

The level of local administration's involvement in pasture use regulation can be a reason to ineffective dispute resolution mechanism. Reflecting the findings on dispute solution, the study identified the most involved body in the pasture management. Disaggregation by the groups indicated that the community organization (35%) is the most involved institution in pasture use regulation (Table 14). Majority of non-community households(58%) that they individually arrange and regulate their daily pasture use and long distance movements.

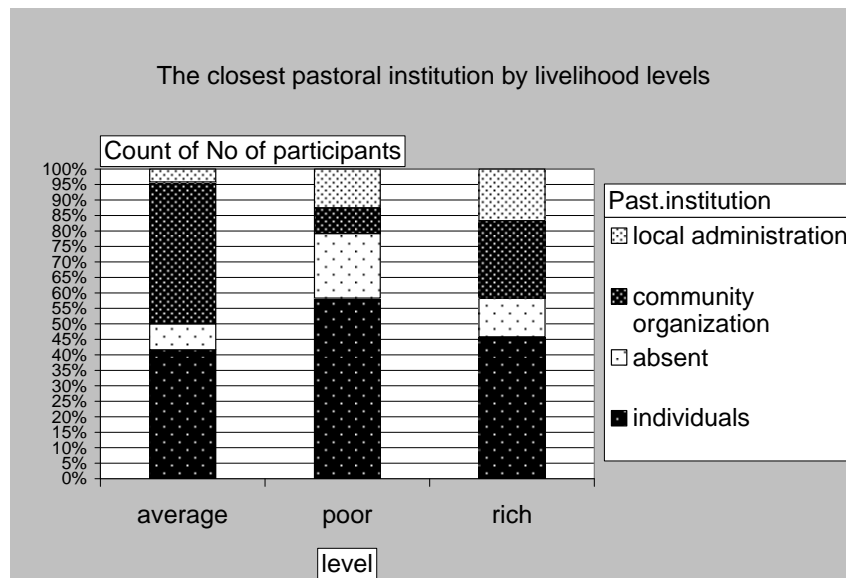


Chart 15 The institution most involved in pasture management by livelihood

This indicates that community organizations can be an effective pasture land management institution when community organizations is successful. However, almost same numbers of community households (38%) indicated that they arrange the pasture use individually as same as non-community households. These were usually poor community households. (Charts 15).

It affirms that at certain extents community organization is not strengthened enough to involve its poor households in the pasture management.

Challenges to pastoralism

The participants identified the challenges to pastoralism/pastoralists regarding their satisfactions on pasture use conditions, disputes over pasture use and the means to resolve these matters. Each participants identified several challenges. Thus, the following challenges are calculated in overlapped numbers (Table 15).

Climate change According to the majority of participants(70%), the climate change and inconvenient weather condition is the biggest challenge. It may also indicate that pastoralists lack in development of risk management. Although, some community organizations have a risk management funding, the risk management planning and implementation as well as effective use and allocation of funding is not well developed and practiced at all. The field data revealed that participants have two different points on inconvenient weather conditions.

Pastoralists, especially the post-collective ones, are likely to assume that it is not necessary to move often when weather is pleasant. "When weather is good, then we move fewer times. If weather is harsher, then we have to move quite often"(Questionnaire). They tend to practice closer distance movement based on their campsites in crowded pasture land. It may be related to the level of awareness of post-collective and post-dzud pastoralists on special needs of mobility in pastoralism.

However, several officials and pastoralists stated that inconvenient weather condition like dzud is not a major challenge at all. "The existence of mobility pastoralism is more related to the weather changes and weather related factors. If weather is stable and the pasture is always good, then pastoralists may become sedentary. Otherwise, pastoralists need to look for good pasture, when weather is not good"(Interview). "Weather change is ok, we should herd livestock any time in any conditions"(Questionnaire).

Table 15 Challenges to pastoralism

Challenges	Community	Non-community	Total
1. Climate change	78%	57%	70%
2. Wolf	45%	33%	37%
3. Lack of water	27%	16%	23%
4. Overgrazing	20%	13%	17%
5. Isolation	8%	8%	7%
6. Livestock thieve	8%	2%	6%
7. Others	11%	11%	9%
8. Chaos	7%	14%	21%

Moreover, weather can be seen as a factor that enabled the increasing mobility in expanded pasture after 2000 dzud. "We used to argue like this is your or my pasture etc when there were many livestock. And we used to negotiate each other. Now, we have fewer winter/spring campsites, thus the pasture". More pasture areas left available after 2000-20001 dzud time. Many pastoralists, who lost all their livestock, thus left their campsites for urban areas. This especially happened in mountain and grassland areas. Nevertheless, it can be concluded that the weather condition is one of the factors that defines the yield on the pasture land and the mobility of the pastoralists.

Wolf The change in the traditional pastoral practices may have affected some pastoralists' views on wolf. Wolves are seen as a threat to most of the participants, because they attack the livestock(37%). However, some experienced pastoralists does not fully agree with it. "Wolf is ok as long as you herd your livestock with great attention. A wolf is a part of nature and it is ready to hunt whatever is available for them in the nature"(Questionnaire). Lack of responsible herding practices allow wolves to consume the livestock as much as they can. However, this may have a reason. Especially, poor households are not able to afford distance herding, because they lost all their horses in 2000 dzud.

Water Lack of water was the main concern of the participants(23%). Major challenges are all partially related to the lack of water. It is main reason to the competition and disputes over pasture. Water may even define the term pastureland and determine the quality of it. The cause to the reduction in water resources are largely related to the level of precipitation and the extensive illegal mining, which takes place mostly on grazing lands. The exploration license is commonly used for illegal mining. The issueing process of both exploration and mining licenses do not include any involvement from local communities and the officials(Interview).

According to the recent media broadcasting(MNTV, 2006), multiple rivers and streams disappeared because of the wrong doing of mining operation by national and international mining companies. Moreover, the use of lethal and toxic chemical substances also poison water resources and gradually affected the quality of earth and pasture plants. This exposes a huge threat to the future of human population and biodiversity of Mongolia.

Pastoralists comments on effective pasture management were mainly to increase water resources and improve its quality for human and livestock. However, the important question was raised among pastoralists. 'Who should be responsible for taking care of what kind of water resources and in what circumstances?' This issue challenges the policy makers to make appropriate policy, thus requires further researches.

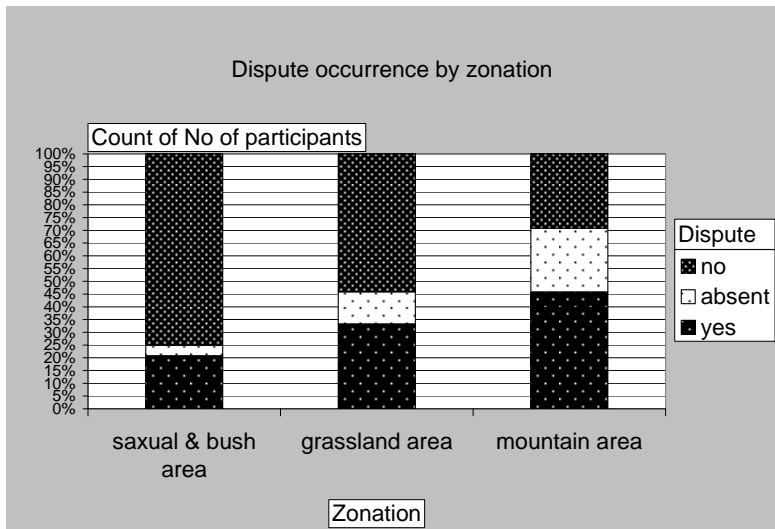


Chart 16 Dispute occurrence by zones

Overgrazing The overgrazing was apparent mostly in mountain and grassland areas. It caused largely by the irregular pasture use and lack of water resources. Mobility of pastoralists depends on water resources, thus, households are likely to get crowded surrounding the water resources. In mountain and grassland areas, local administrations attempt to disperse the crowds, imposing a legal distance of 5 km between campsites(Interview).

However, local pastoralists argued that this measure might be too late to re-arrange the campsite with such distance. Rather pastoralists assume that complying with rule to protect winter pastures and increase in water resources may improve the condition. This enables the mobility and ensures protection of winter pasture in the area where many households are concentrated.

The increase in water resources can also improve the pastoralists condition on going on otor. It is an effective way to preserve winter pasture for harsh winter and spring time. Regarding the issue of otor movement, participants strongly demanded the government's involvement in developing detailed regulations that improves the arrangement of otor movement between and within aimag territories.

Majority of these challenges indicated the pastoralists' level of herding practices. Those, who have less knowledge and the experiences, have totally different views on these challenges. However, those, who are experienced, do not see these factors as challenges, but rather critical about the lack of government's attention on legislation & regulation on pasture land use.

Other challenges Challenges to the pastoralists' livelihood in market economy is growing regarding their social issues. Pastoralists and their children lack an effective mechanism to get access to education, health & social services.

Pastoralists have a concern that the government has less attention over the issue of pastureland and pastoralists. This statement is based on the implication that pasture land is property of state and the livestock is under the protection of the state.

Pastoralists level of involvement in policy dialogues was explored (Table 16). 50% of the total participants stated that there is no means to express their voices on the law and regulation related to the pasture land. 28% of the community households indicated they express their interests through their community organizations. However, not every community households are able to be involved in sharing their opinions. 56% of non-community households thought there is no means to be involved in policy dialogue.

Bag meeting and the representatives from local administration is proposed to be the bridge between local communities and the government. However, bag meeting do not reach to every households, especially to the very poor households including female headed poor households (Undargaa 2006). The participants mentioned this field study as an alternative mean to express their voices, but the first time.

Table 16 Policy dialogue by groups

Answers Groups	Individual	Through local administration	Through community	None	Others
1. Community	3%	15%	28%	45%	5%
2. Non-community	0%	12%	2%	56%	8%
Total	1%	13%	15%	50%	7%

Isolation from the market and information was another difficulty for pastoralists for marketing of their livestock products. Moreover, the market price of livestock & livestock product is much less valued than the other products. Community households have an advantage to produce value added livestock products. However, their marketing option are limited due to the increasing cost of petrol. Mau and Chantsalkham (2006) also reported the marketing issue as one that was not satisfactorily resolved. They related the reason to the structural weaknesses.

Another miniature, but serious challenge is the living condition of poor households, especially the female headed households. They own few numbers of livestock, which only covers their

survival. Lack of proper campsites and livestock shelters as well as supply of forages is not the prosperous to increase the few numbers of livestock. Fodders are costly for poor households to afford.

The purchase of forages and fodders as well as bales of grass is is not only a difficulty for poor households, but for average living households. The local price of the bales of grass and forages much expensive than what it is in central areas²⁰. It indicates that lack of access to market indulge the growing trading business of forages in local areas.



²⁰ A bag of bran was around 1,000tug in the city and 5,700 in the countryside. A bale of grass was 1,500tug in the city and 4,000tug in the countryside.

Recommendations

Based on the data analysis and pastoralists comments regarding the main challenges to the community organization and CMA, this report illustrates the following recommendations;

- The success of community organizations is tightly related to the concept of co-management and its practices. The stakeholders roles in co-management and their collaborations with community organization should be legally identified and enforced towards strengthening the co-management of nature conservation.
- Any project support should focus on improving the management of community organizations rather than scaling up with the numbers. Community organization should not be considered as only the responsibility of groups of pastoralists. Its formation should be considered within the frame of co-management approach.
- Water resources should be increased with the support of donor organizations and the national institutions. However, there should be certain mechanism developed on the responsible institution such as community organizations.
- Formalize CMA under the contract with soum administrations
- CMA regulation should be formed; if formed, it should focus on protection that is based on regulatory enforcement of mobility rather than the protection based on fixed sizes and boundaries
- Financial support is an important factor for community organization to maintain its positive impacts. That's why, the community access to micro-credit is ought to be more improved
- Association of Community Organization should be formed to protect and evaluate the community impacts on livelihood and the environment
- Community organizations in different areas broaden their skill sharing and develop a feed-back mechanism as a follow-up to improve their management
- Community organizations need extensive support and collaboration from the local administration and the protected area administration. Local administration should be enabled to work extensively with the local community organizations. This requires broader consideration and support from the government. The role and responsibility of local administration should be clarified under a certain terms of reference developed by the government. There should be a formal mechanism that evaluates the level of local administration's collaboration with community organizations.
- The role of the local administrations should be regulated more in detailed in order to be able to resolve disputes, arrange otor movements in other aimags as long as pasture land is state property and livestock stays under the protection of state.

Conclusion

This study on community organization explored the positive impacts of community organizations and community managed area. It also explored the challenges that community organizations confront to maintain their positive impacts. In further, it briefly discussed and identified the challenges to pastoralism/pastoralists in Mongolia.

The positive impacts of community organizations are immeasurable in terms of improving livelihood of rural communities and the surrounding environment. These were explored and identified in comparison to the environmental and social conditions prior to the formation of community organizations. Besides, these positive impacts were highlighted regarding the differences between community and non-community households.

- The positive impacts of community organization are closely related to the management of community organizations.
- The impacts and achievements of community organization are firmly contingent on co-management in local levels.
- It is apparent that successful community organizations are able to produce more positive impacts on pasture management and the nature environment.
- The government's involvement is critical in pastureland management and the actions of community organizations as long as pasture land stays as state property and the livestock under the state protection.

The climate change and the structural change in pastoral institutions heavily impact on pastoralists' livelihood and use pattern of natural resources. The project support with bottom-up approach and the introduction of co-management in conservation actions triggered the involvement and collaboration of local communities and stakeholders in livelihood improvement and conservation.

The main motivation was efficient use of participatory approach and the tools, and the attitude of the project supporting team that facilitated the whole participatory actions among pastoralists and rural communities. It inspired the participation of many, who had received no incentives or promotions on local development and livelihood improvement since the de-collectivization. Especially, younger couples and women are likely to become more dynamic in terms of discussing their problems and expressing their voices in front of other stakeholders.

Through the extensive training and public awareness activities, information gap between urban and rural areas have been re-filled. Rural communities and pastoralists are involved in additional income generation activities utilizing value-added livestock products.

The collaboration of groups of households resulted in enhanced social relationships. It contributes to improve social statuses of those including young people, women and elders, who were marginalized prior to the formation of community organizations. Moreover, they are provided with generous technical and financial supports and improving their capacity in coping to live in complex situation of market economy. Pastoralists moved several steps forward to strengthen their financial capacity. The successful community organizations learned in money management; raising community funding that enables pastoralists' collaborative actions.

Besides the livelihood improvement, pastoralists also began to be involved in conservation actions after analyzing their environmental conditions and use pattern of natural resources. They take responsibility over their surrounding areas as a group and contributed to improved pasture management through organized rotational mobility.

However, the level of community management determines a lot of community influences on livelihood and the environmental protection. In fact, the community management is contingent on effective use of participatory tools, attitude from not only stakeholders, but from other donors and the governmental organizations.

Lack of herding experience was found to be a contributing factor to shape pasture use pattern and is the cause to most of disputes occurred in the ground. Community organization is effective in terms of offering skill sharing opportunities to those, who lack herding experiences, through improved social relationship among pastoral households.

The concept of CMA is explored. The understanding of CMA and the awareness of CMA existence is not robust, especially among the poor households. The access to CMA differs among pastoralists, because of the different types and functions of CMA. The power relation is also a factor that defines the level of access to CMA.

CMA management requires a flexible approach from both pastoralists and local governments. CMA with fixed sizes and boundaries may not help resolving the dispute over the pasture use or environmental improvement. Although CMA does not restrict the pastoralists' mobility, it does not guarantee the access by all members, because of the power relation.

Governments' position on pasture land management is vague. The regulations are rather impractical to enforce on the ground and to resolve the disputes over pasture use. These factors are resulted in benefiting the better-off households, but disadvantaging the poor including poor female headed households.

In general, pastoral households are marginalized at certain extent. Their participation in policy dialogue is barely existed. The role of local government is rather nominal than effective and functional in terms of bridging the government with local communities. The government's involvement with clear focus is critical in pastureland management and in promoting community organizations, as long as pasture land is legislated as state property and the livestock under the state protection.



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Appendices

Appendix 1

Questionnaire for the pastoralists

level:

Date
Day
Time

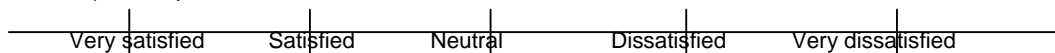
Questionnaire #
Location
Name /Group

Concept

1. How old are you?
2. Your education
3. Sex a. male b. female
4. How many people are there in your family?
5. How long have you been married/single/single female head?
6. What type of how many livestock do you have by approximate number?
 - a. Sheep
 - b. Goat
 - c. Cattle/yak
 - d. Horse
 - e. Camel
 - f. Total
7. How long have you been a herder?
 - a. More than 16 years (collective)
 - b. 10-16 years (transition herder)
 - c. 3-5 years (after dzud time)
8. Do you have a (certified) livestock shelter and campsite? If 'yes' how many campsites do you have? (Inclusive of all spring and winter campsites whether it is owned by a son, who is not separated yet)
 - a. Yes
 - b. No
9. How many times do you move within a normal year? (Rotational)
 - a. 2 times
 - b. 2-3 times
 - c. 3-4 times
 - d. more than 4 times (please explain)
 - e. do not move at all
10. How far do you move for each season except the long distance otor? (Seasonal)
 - a. Winter to Sp/Sm/km
 - b. Spring to Sm/km
 - c. Summer to Aut/Wnt/km
 - d. Autumn to Wnt/km
11. Are you a member of a community? If 'yes' how long have you been? If 'No' please answer the question 21.
 - a. Yes
 - b. No
12. What is the status of your community?
 - a. Informal
 - b. NGO
 - c. Enterprise
 - d. Do not know
 - e. Other (please specify)
13. Who influenced the process and why & how? (community organization)? Choices can be more than one
 - a. bottom-up
 - b. project induced
 - c. government induced
 - d. do not know
 - e. other (please specify)
14. Do you collaborate with other households? If 'No' answer the question 17.
 - a. Yes
 - b. No
15. What do you collaborate on? Choices can be more than one
 - a. shearing livestock

- b. preparing winter food
 - c. fixing/building shelter
 - d. maintaining well
 - e. marketing
 - f. pastoral
 - g. reserving/protecting pasture
 - h. making hays
 - i. helping to move
 - j. going on otor
 - k. growing vegetable
 - l. conservation
 - m. all
 - n. others (please specify)
16. Who do you collaborate? Answers can be more than one
- a. Neighbor
 - b. Relatives
 - c. As a group
 - d. Either
17. Do you have a community agreed scheduled seasonal movements? If 'Yes' please skip the next question.
- a. Yes
 - b. No
18. What are the reasons you cannot/do not follow the community consensus on seasonal movement? (What are the factors that hinder mobility supported by community organization? (Factors would be listed in the challenges including legal and others, social cohesion of groups and other groups' characteristics?))
19. Has nature environment/pasture changed/improved since the community organization? If 'No' please answer the question 21.
- a. Yes
 - b. No
20. How did you contribute to such positive environmental improvement/changes?
- a. stop burning bushes and trees
 - b. planting trees
 - c. patrolling wildlife
 - d. preserving pasture
 - e. maintaining seasonal/rotational movement
 - f. mending wells
 - g. others (please specify)
21. Was the environmental condition different prior to the community organization/before 1997(if not a member)? If 'Yes' can you please describe.
- a. Yes
 - b. No
22. How many times did you use to move within a normal year? (Rotational)
- a. 2 times
 - b. 2-3 times
 - c. 3-4 times
 - d. more than 4 times (please explain)
23. How far did you used to move for each season except the long distance otor?(Seasonal)
- a. Winter to Sp/Sm/km
 - b. Spring to Sm/km
 - c. Summer to Aut/Wnt/km
 - d. Autumn to Wnt/km
24. Do you have a CMA around your seasonal pastures?
- a. Yes
 - b. No
 - c. Never heard of it
25. Do you as a member/non-member of a community move within the CMA? If 'No' please answer the question 28.
- a. Yes, all rotational/seasonal movements including
 - b. Yes, but some rotational/seasonal movements including
 - c. Yes, but only once including
 - d. Not at all
26. Can you define what the CMA is?(size and the nature)
27. What is the status of your CMA? (property status)
- a. Private/com
 - b. possession/lease/com
 - c. state

- d. others (please specify)
 - e. do not know
28. Do you pay any fee for the CMA as a community member? Please explain.
- a. Yes
 - b. No
29. What are the reasons that you as a member/non-member of a community cannot/do not move in CMA? If 'a' please skip the following questions.
- a. because we do not have a CMA though we are in community group
 - b. because we live outside of the CMA
 - c. because I am a non-community member
 - d. others (please specify)
30. Can you as a member/non-member of a community go and move within the CMA? If 'no' please explain why? (whether the poor households will be excluded etc)
- a. Yes
 - b. No
31. What regulations/mechanisms do you as a member/non-member of a community have to follow to use the CMA? (and its non-pastoral resources)
32. Do pasture/water use disputes occur between/within community and non-community households? If 'yes' please explain?
- a. Yes
 - b. No
33. How do you solve it?
- a. Approach the soum governor/land officer
 - b. Approach the bag governor
 - c. Negotiate each other
 - d. Other (please specify)
34. How satisfied are you with the current pasture land use with respect to the campsites/pasture possession within/out CMA? Please choose one of the rating scales in the following and explain why?



35. Which institution is the most practically involved in regulating the pastureland use?(Which institution practically regulates it now, can you please describe it)
- a. individuals
 - b. community/group organization
 - c. bag
 - d. local government
 - e. others (please specify)
36. How do you think you would regulate the pasture land use if you were a regulating body? (or How do you think the pasture land management should be like? (What is your recommendation for pasture land regulations?))
37. What means do you use to express your point of views on pastureland use to the broader level/national policy dialogue? If 'c' please answer the question 34. (Could herder/community organization be an important tool to engage in policy dialogue and then how?)
- a. through individual contact
 - b. through bag
 - c. through community/group organization
 - d. none
 - e. others (please specify)
38. What are the challenges for you to pursue pastoral lifestyle?
- a. lack of water
 - b. overgrazing
 - c. isolation
 - d. livestock thief
 - e. others (please specify)
39. What legal rights of pastureland use does community/group organization should have? (How do you think that the government should act about the community organization?)
40. Is there anything that I haven't asked but you concern about community/group organization and its advantage? Yes/No. If "yes" please specify
- a. Yes
 - b. No
41. Thank you!☺ I appreciate your interest and time spent in this study.

Appendix 2

Interview guidelines for the focus group discussion

(5-6 members including the leader from the community organization)

Community organization: How community organization started?

- What and who influenced the process (community organization)? (tools, actors, events, lessons)?
- What led to this community organization?
- What do you do as a community?

Change: How much is the environment and pasture land/use (the environment and pasture land use has to be considered as separate themes) are changed since the communities are organized?

- What was the environmental and the pastureland/use condition like prior to the community organization?
- And do you witness any improved environmental and pastureland/use situation in your area after the community establishment? (What improved environmental situation did you witness do you notice due to the community organization? What is the nature of the positive environmental changes?)
- What was the contribution of the community organization to these environmental changes? (Answers can be community collaboration, or pasture management including scheduled seasonal movement or CMA (community managed area) itself etc, affirmative to the next section of questions)
- How do you benefit from this environmental change? (How this positive change is impacting in your livelihood?)
- What are the factors that hinder mobility supported by community organization?
- Who is most closely involved in regulating the pasture land use? (Pastoralists themselves, bag governor or the local government)

Community action: How did you do it?

- What was the most important factor to generate these positive environmental impacts?
- What were the lessons learned?
- What is the formal status of CMA? (Possession under the NGO or private?)
- What was the role of the CMA to generate these positive environmental changes? (How did it impact on environmental and pastureland/use?)
- Can all members benefit from these positive impacts on environment? In what way the poor households benefit from this change?
- Can you maintain these positive impacts? Then how?

Community recommendation: How should government act about the community organization?

- What should be done to maintain these positive impacts?
- What do you think that the government should do to strengthen the community?
- What institutions should collaborate with the community organization to strengthen the community organizations?
- What do you think how should your experiences be replicated in other areas? (or is it possible to replicate it in other areas, or what needs to be changed for the positive outcomes to be more widely realized or replicated?)
- What do you think how/in what means should pastoralists be involved in decision making of policy (engage in policy dialogue) Can pastoralists be empowered through being engaged in policy dialogue?
- What do you think how this campsite possession (Campsite possession impact on the different claims to get access to the pasture and other natural resources) works within the CMA? Is there any thread or?

Interview guidelines for the bag (micro-district) and soum (county) governor/vice/ or the land officer

Community organization: What and who influenced the process (community organization)? (tools, actors, events, lessons)

- What led to this community organization?
- What is the benefit of the community organization to the governmental work (How does the government collaborate with the community organization?)
- At what level did these impacts occur (local, national)?

Change: How much is the environment and pasture land/use (the environment and pasture land use has to be considered as separate themes) are changed since the communities are organized? (What policy led to these change?)

- What was the environmental and pastureland/use condition like prior to the community organization?
- And do you witness any improved environmental and pastureland/use situation in your area after the community organized? (What improved environmental situation supported by the community organization did you witness? What is the nature of the positive environmental changes?)
- What was the contribution of the community organization to these environmental changes? (Answers can be community collaboration, or pasture management including scheduled seasonal movement or CMA itself etc, affirmative to the next section of questions)
- What are the factors that hinder mobility supported by community organization?
- In what extend is the local government involved in regulating the pasture land use?
- What is the governmental mechanism that ensures the equal access to the natural resources by local pastoralists?

Community action: What was your involvement in supporting the community organization?

- What was the role of the community organization to the environmental protection? /Do they have any impacts on the positive environmental impacts?
- What is the formal status of CMA? (Possession under the NGO or private?)
- What was the role of the CMA to generate these positive environmental changes? How did it impact on environmental and pastureland/use?
- What were the lessons learned? What is the role of the local government to these positive impacts?
- How was the local government involved in maintaining these positive impacts? Then how?
- What do you think how this campsite possession works within the CMA? Is there any thread or?
- What is the role of the local government to regulate the use of CMA?
- What are the factors that hinder to strengthen the community organization and its impact on sustainable natural resource use? What is the role of the local government to solve those problems?

Community recommendation: How should government act about the community organization?

- What should be done to maintain these positive impacts from the government?
- What do you think that the government should do to strengthen the community?
- What institutions should collaborate with the community organization towards maintaining its impacts on positive environmental changes?
- What do you think how should your experiences be replicated in other areas? (or is it possible to replicate it in other areas, or what needs to be changed for the positive outcomes to be more widely realized or replicated?)
- What do you think how/in what means should pastoralists be involved in decision making of policy (engage in policy dialogue)
- What is the role of the local government to encourage pastoralists to be engaged in policy dialogue?

Appendix 3 Brief information target community organizations

#	Name of the community	Location	Date of formation	Main activities	Number of households	Leader and council members	Legal Status	Best indicators
1	Ireedui	Bayandalai	April 22, 1999	Pasture management	35	Gantuul, Uuganbayar	NGO	Pioneering community organization. Introduced model pasture management
2	Goviin Naran	Bayandalai	Jan 18, 2001	Wild life management	17	Togsmaa, Munkhtsetseg	Informal	Active involvement in wild life management, surveys. Livelihood improvement of poor, especially poor female headed households
3	Tumuulel	Bayandalai	2001	Nature conservation	14	Galindev, Bayasgalan,	Informal	
4	Bayan	Bulgan	May 2003	Pasture management, improve livelihood	9	Ulambayar, Enkhtuya	Informal	
5	Yoson Erdene	Bulgan	April 01, 2001	Pasture management	12	Budee, Enkhbayar	Informal	Improved rotational mobility through expanding pasture land. Created water resource through the tunnel from the spring using locally available technology
6	Ovoot	Bogd BKH	2002	Pasture management	16	Nergui, Jargal	Informal	
7	Munkhiin turuu	Bogd OVKH	2004	Nature conservation, pasture management	16		Informal	
8	Zuun Bogdiin Uguuj	Bogd OVKH	April 2002	Pasture management	21	Namkhai	NGO	Improved pasture management through rotational movement, well making and protection of river, tree planting, co-management, vegetable growing
9	Saikhan Dosh	BBU	July 2001	Protect the Khuren khad spring	35	Toiv, Batdorj	NGO	
10	Yoson Erdene	Bayanlig	Jan 2002	Pasture management	17	Nasanjargal		Processing of camel wool yarn and marketing
11	Zuun Khooloi	Bayanlig	Dec 2003	Improve livelihood, nature conservation	16	Toiv		Camel milk processing
12	Gun Bayan	Bayanlig	July 2002	Protect saxaul and bushy plants	17	Zulmaam		Camel wool yarn processing

Developed by: Narangerel.Ya

Appendix 4 Community Managed Areas

