Pastoral system and herders communities

Professor D.Dorligsuren Programme Coordinator
“Green Gold” Pasture Ecosystem Management Programme
Swiss Agency for Cooperation and Development, Mongolia

1. Introduction
2. Setting up of resource boundaries
3. Resource User Groups
4. Property right and organizations
5. Economic mechanisms of Self-governing Organizations

Contribution of Livestock Husbandry:
✓ Total number of livestock - 40.3 mln. head
✓ About 20 % of GDP
✓ 87.0 % of Total Agricultural Products
✓ 36.2% of employees
✓ Basis of Mongolian traditional nomadic culture and civilization

Climate
For last 65 years
Precipitation decreased by 8.7-12.5%
Average air temperature increased by 1.9-2.1%

Herder
About 110
About 180
# of livestock
per 1 herder
172 000
70 000
# of herders
366 000
130 000
# of herder households

Livestock
In 2007
24-26 mln
Before 90s

Pasture
70% of pastureland degraded
Decreased by 2 folds
Species composition
Decreased by 20-30%
Pasture yield
Exceeded by 27%
Carrying capacity
In comparison with 1980s
Increased by 269%

Improvement of livelihood
Improvement of pasture management
Increase of livestock number and productivity

“Herder – Herd – Pasture” Ratio

<table>
<thead>
<tr>
<th>Items</th>
<th>Herder (thous. head)</th>
<th>Pasture carrying capacity (’000 head in sheep unit)</th>
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<tbody>
<tr>
<td>In 2007</td>
<td>366200</td>
<td>63037.5</td>
</tr>
<tr>
<td>Optimal ratio</td>
<td>136000</td>
<td>50654.9</td>
</tr>
<tr>
<td>Ratio between 2007 data and Optimal (%)</td>
<td>269.3</td>
<td>167.8</td>
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Optimal ratio between the basic elements of pastoral system and its sustainability are collapsed
Negative consequences:
A) low resilience of pasture ecology; deterioration of pastureland leading to increased desertification process;
B) May affect economic and social resilience and further sustainable socio-economic development of the country;

Set up organizational structures (herders communities) capable to maintain optimal relationship and ratio between elements of pastoral system and providing normal activities and sustainability of the system
Herders communities are the formal and informal, self-governing NGOs established on the voluntary basis, guided by the principles of democracy, honesty and publicity, combining tradition with renovation, undertaking activities to defend interest and right of their members, improve livelihoods, increase production efficiency, capable to pursue a policy in accordance with the tendency towards sustainable development of Mongolia and to adapt to the changing conditions.

Community Development Processes in Mongolia

- Before 1960
  - Common access pasture, private animal
  - Khot ail, neg gol, neg nutag, neg usniihan (traditional)

- 1960-1990
  - Both pasture and animal – state property
  - Suerl, hexeg, bag, negdel (state-owned and strictly regulated by top)

- 1990 up to now
  - Common access pasture and private animal
  - Khot ail, neg gol, neg nutag, neg usniihan (initiatives to support herders’ communities)

Why to establish self-governing, local communities (organizations):
1. To organize collectively activities for the appropriate use of pastures under common use and for overcoming natural and climatic disasters
2. Users of resources and direct beneficiaries are herders who only should have interest to use and protect pastures appropriately.
3. For insuring their safety life herders should have flexibility and ability to adapt to the natural and climatic changes through joint efforts. There is no room for incorrect decision.
4. Establishing and strengthening of local, self-governing, herders’ organizations allow to save much waste of management.
5. Self-governing herders organizations would create favorable conditions for real democracy. Western election democracy would be introduced into life of Mongolian nomads when herders have established their self-governing organizations to work together and make decisions themselves.
6. A demand for shifting power to citizens and their voluntary organizations is increasing much more if consider the long term tendency toward maintaining corruption, disorder and governance shortage at all level of state governing bodies. Establishment of good governance and weakening of centralization does not mean to strengthen local governments and to shift all power to them. It should be understood as increased mobilization of citizens’ (herders’) participation and initiatives for decision making and development of rural area.

Basic principles for establishing herders communities

1. Establishment of resource boundary
   - First step. The first step of organizing joint activities is the establishment of boundaries of common resources and empowering the right for using this part of pastureland
   - Establishing of boundaries depends on the aim of use of the resource.
   - Two types of use of pastures: Mobile and stationary; According to this Pastoral Livestock Husbandry and Intensified livestock husbandry are kept. Establishing of pasture boundaries is different for these two forms of farming.
Stationary pasture use practices or intensified husbandry are possible in areas with relatively favorable climatic conditions and where pasturage improved by human labor (cultivation, fencing, irrigation, reseeding). A sector with higher investment, productivity and effectiveness suffers usually less from natural and climatic risks. In such condition, the size of land needed for production activities depends on many factors including amount of investment, input of production factors, price etc. Possibility to keep production in a large area is limited.

Mobile use of pasturage is dependent not only on the natural factors such as climatic conditions, geography, water supply, plant productivity and quality but also on the socio-economic and cultural factors like social and infrastructure development, distance from market, tradition, cooperation etc. In order to increase self resilience of socio-ecological system in a particular area, it is necessary to establish resource boundaries concerning the factors such as flexibility, possibility of moves, ability to overcome risk and vulnerability, adaptation capability etc.

The focus of the group is to ensure equitable access to a given pasture or a set of pastures based on traditional arrangements or a set of new rules mutually developed by the group.

Depending on the natural features of a particular area, possibility of joint use, tradition, possibility of mutual agreements, three forms of establishing pasturage boundaries involving herders are available: 1) herders of some soums divide pastures by building their winter-spring camps; 2) herders of some soums establish boundaries for both winter-spring and summer-autumn camps; 3) herders of some soums divide pastures considering two possibilities mentioned above; Some soums establish boundaries of pastures within the fixed bagh boundaries but the others do not consider bagh boundary.

Defining of PUG boundaries by using seasonal pastures

- By four seasons pasture
- By winter and spring pastures
- By summer and autumn pastures
Defining of PUG boundaries by using administration unit

- After the boundaries of pastures being established the second critical issue is to determine carrying capacity of pastures.
- The third important issue is to limit, regulate the number of livestock according to the carrying capacity of a pasture. For that 3 possibilities are existed:
  1. Regulation by Nature and Climate
  2. Regulation by the State
  3. Regulation by members of Herders’ Communities

Limiting of livestock number by size of winter and spring pastures may serve as the most suitable option. In this case, winter survival of livestock would be an important criteria. Considering the (1) productivity and sufficiency of pastures near winter and spring camps, (2) amount of hay and fodder prepared for winter feeding and (3) ability to move to other reserve pasture in case of severe winter, the herders living within the defined boundaries can jointly come to an agreement to fix the number of livestock per herder household and control over its implementation themselves.

Regulation of livestock number is one of the complicated issues to solve in the transition period toward market economy.

- Before Revolution of 1921 herders used to keep few livestock to maintain every day life as their consumption level was very low. There was no possibility to keep more animals as they have had insufficient material basis such as fences, shelters, water supply etc.
- In 1960-1990 the State regulated the number of livestock.
- Since 1990 when Mongolia shifted to market economy no legal and organizational framework was created to solve this problem. It affects sustainable development of livestock sector.
- (1) income of herders would be decreased; 2. Price for goods and services increased; no network of marketing livestock products established; collection and transport costs of products would be increased due to sparsely distributed herders’ households with small amount of products produced.

Pasture area of a PUG of Green Gold Programme, ha

2. Resource User Groups and Sub-Groups

Group
- PUG with fixed boundaries of “Groups”
- Sub-Groups
  - Khot ail
  - Herder group
  - Cooperative
  - Comradeship
  - Others
PUG should be organized within the fixed boundaries. Herders living within the boundaries they defined themselves are to become members of a community (groups, sub-groups or comradeship) not depending on they want to or not. This is not top down decision but inevitable necessity to accept the principle of community-based resource utilization. Only on these basis freedom and interest of an individual are realized.

For forming groups the following items are important:
- Size, clearly defined boundaries, shared norms, past successful experiences, social capital, appropriate leadership, independence among group members, heterogeneity of endowments, homogeneity of identities and interests, levels of poverty, honesty etc.
- (Agrawal, the drama of the Commons, pp-62)

Within the general regulations of User Groups, individuals and sub-groups are organized and get possibility to undertake activities. Such kinds of herders’ organizations are inevitably needed from the view of cooperative work, every day relationship, saving time and transport costs, and flexible decision making. These groups and sub-groups are usually formed through the links of relatives and friends, and also due to the necessity to work as one team (willingness of herders with few animals to look after livestock of wealthy herders, willingness of non-experienced herders be supported by experienced ones, to join the individuals with higher organizational and managerial skills, to keep business contacts, joining of individuals who trust each other on the voluntary basis for short and long term activities).

### PUG size, by households statements

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<th>Statements</th>
<th>Tsagan</th>
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<th>Ulaan</th>
<th>Average of 5 soums</th>
</tr>
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<tbody>
<tr>
<td>1. Total number of herding households</td>
<td>421</td>
<td>1350</td>
<td>317</td>
<td>324</td>
<td>318</td>
<td>369</td>
</tr>
<tr>
<td>2. PUG with highest number of households</td>
<td>45</td>
<td>86</td>
<td>105</td>
<td>53</td>
<td>41</td>
<td>67</td>
</tr>
<tr>
<td>3. PUG with average number of households</td>
<td>42</td>
<td>46</td>
<td>67</td>
<td>34</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>4. PUG with lowest number of households</td>
<td>15</td>
<td>20</td>
<td>43</td>
<td>18</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>5. Pasture land per household by hectare</td>
<td>321</td>
<td>2141</td>
<td>254</td>
<td>757</td>
<td>2044</td>
<td>1229</td>
</tr>
<tr>
<td>6. Number of animals per household</td>
<td>244</td>
<td>140</td>
<td>327</td>
<td>283</td>
<td>295</td>
<td></td>
</tr>
<tr>
<td>7. Number of animals per 100 hectares by sheep</td>
<td>35</td>
<td>24</td>
<td>34</td>
<td>15</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>8. Stocking rate per 100 hectares by sheep unit</td>
<td>54</td>
<td>46</td>
<td>62</td>
<td>45</td>
<td>37</td>
<td>49</td>
</tr>
</tbody>
</table>

3. Property rights and Organizations

It is necessary to secure defined boundaries of pastures and organizations of users of these resources by legislative acts. The right is a norm for resource use and if establishes rights, responsibilities and norms raised from the relationship of individuals and enforces their implementation in every day activities. Who empowers these rights and responsibilities? Who enforces their implementation? On the one hand, state organizations of any level develop Laws, Resolutions, Regulations and Orders through the Citizens’ Representative Organizations, and State, State Organizations and officials engaged in these organizations bear the responsibilities for their implementation and control over. On the other hand, citizens (herders) establish self-governing organizations, take direct participation (not through representatives) in their activities and discuss jointly about the regulations and their maintenance. The size of these organizations may vary significantly. Some of them follow the traditions, customs, monas or manners accumulated for hundreds years in a particular area but others follow bylaws or rules they have just developed jointly.
Pasture Co-management

Economic mechanisms

Eradicate conflict

assessing and monitoring

Type of Governance

Coordination norms

Organization

Management

Withdrawal

Not have right to sell, rent and give for loan mortgage

They do have right to use pasture and exclude others' animals; do not have right to sell, rent and give for loan mortgage

This group must have only rights written on utilization contract (i.e., certain time. This would be decided by PUG all members meeting.

Certain parcel of pasture land can be used by contract basis for sub-groups, households, khot ails and cooperatives within PUG in certain time. This would be decided by PUG all members meeting.

It is necessary to give long term user right or possession right for PUG or community in certain pasture/s. PUG will have certain rights in their parcel/s: a) to accept possession of winter and spring pasture/s for their member households and herders, and b) to define grazing time and intensity for common access pastures such as summer and autumn pasture, etor and reserve area/s; to regulate utilization methods within PUG, to decide whether or not to receive animals from outside PUG and to rent certain pasture based on PUG potential. PUG will not right to sell and give loan mortgage PUG land.

1. Pasture land legislation.

1.1. Legislation of seasonal pasture.

Seasonal pasture is possessed by communities, herders, herding households and household members.

Possession right of PUG:

It is necessary to give long term user right or possession right for PUG or community in certain pasture/s. PUG will have certain rights in their parcel/s: a) to accept possession of winter and spring pasture/s for their member households and herders, and b) to define grazing time and intensity for common access pastures such as summer and autumn pasture, etor and reserve area/s; to regulate utilization methods within PUG, to decide whether or not to receive animals from outside PUG and to rent certain pasture based on PUG potential. PUG will not right to sell and give loan mortgage PUG land.

PUGs established based on summer - autumn pasture will decide utilization of summer - autumn pasture.

Certain parcel of pasture land can be used by contract basis for sub-groups, households, khot ails and cooperatives within PUG in certain time. This would be decided by PUG all members meeting.

Herder and herding households will have limited possession rights fro their winter and spring pasture/s. In other words they have right to inherit, exclude others animals, lease and sell pasture/s within defined parcel. In this case pasture land can not be loan mortgage and leasing and trading will be regulated by PUG by law.
2. Legislation of otor and reserve pasture/s.
2.1. National level otor area would be State property and possession and user rights will be regulated by central state organization dealing with agricultural issues and its agency.
2.2. Local level otor area will be regulated by local governors.

3. Legislation of hay making area.
Herders and herding households can possess hay making area with limited rights. They have right to inherit, exclude others animals, lease and sell pasture/s within defined parcel. In this case pasture land can not be loan mortgage and leasing and trading will be regulated by PUG by law.

4. Corridors for tracking animals and otor movement.
Certain corridors would be under authority of soum governor who enforces rules approved by soum citizen’s representative meeting.
Within framework of these regulation rules that include providing of possession certificate and signing contract would be developed and implemented.

PUG is primary unit of herders communities in rural area. This is a group of people living within the defined boundaries and collectively using common pool resources that allow them to protect their pasture land as a source of livelihood, and regulate movements to adopt to natural and climate changes.

Groups and sub groups (households, hot ail, herders group, cooperative and comradeship etc.) may be formed within PUG involving households, kinships or friends staying close to each others that have more possibilities to cooperate. In order to keep social and ecological resilience the groups have not right to possess PUG pasture area by dividing it into parcels. The groups should be formed only to preserve integrity of PUG pasture land, and ensure flexible movements.

4. Economic mechanisms of self-governing organization for common pool resource users
Sustainability of any organizations depends on their self financing capacity. GG supports establishment of PUG fund in programme target soums. PUG fund is established on cost sharing basis. The programme provides 35.0 thousand tugrugs per household and household provides another 35.0 thousand tugrugs for their PUG fund. To some extend this is positively influencing on their cooperation and increase trust (social capital). Financial sources of herder’s community may be acquired by the following methods:

1. Pasture use taxation from each herders (recent herders income tax must be replaced by pasture use tax), at least 80 percent of collected tax must be left in PUG and pasture co-management committee.

2. Having certain rate of fee from outsiders who used their PUG pasture which decided by PUG themselves. Especially grazing fee for riding horses of rich people from city would be comparatively higher.

3. Income generated from PUG investments like profit, interest etc.

4) Income or past of the income earned by collaborative action.

5) Other donation and aids

Income distribution (it must be transparent and truthful based on members contribution)

Disbursement (pasture land improvement, animal herd improvement, investing to establishment of profitable SMEs that rely on local comparative advantages, and social activities etc.)

Thank you for your attention