

SOME RESULTS OF IMPLEMENTATION OF PASTURE-LAND MANAGEMENT

Erdenebat.G, Gerlee.Sh

School of Agroecology

gerlee_otb@yahoo.com

INTRODUCTION

The territory of any state and nation is the backbone of its independence. When the people's interest to improve their livelihood level by putting land into economic circulation, an appropriate use of land resources is becoming the crucial issue that to be resolved foremost.

In today's globalized socio-economic system it is very important for further development of Mongolia, not destroying the traditional nomadic livestock husbandry practices, to develop and implement a concept of pasture management adapted to these practices based on the territory and communities that would be economically efficient, environment friendly and supportive to social progress. Therefore, developing a policy on pastureland use in accordance with this concept and implementing the future policy on development of the country as a whole, aimags and rural areas through planning of pastureland and taking efficient and complex measures for pastureland issues tend to be one of the urgent problems.

In this connection, there is a need to determine policy on and take measures for appropriate pasture management to make efficient pasture use plan adapted to ecosystem management.

The research on these herders's usage of pasture land, management of pasture land, cooperative organization, pastoral legislative, cattle breeding and service of cattle breeding and its results as well as economy and social status of herders within the research has held in 5 provinces such as Arkhangai, Bulgan, Gobi-Altai, Khuvsgul and Khentii, 15 sub-provinces are included.

As a result of this research pasture land is getting worse due to arbitrary and unplanned usage of pasture land, to move nearer to the rivers, overusage of grazing capacity because of human faulty activities.

METHODOLOGY

The study was conducted by analyzing and reviewing information on knowledge and experience of local citizens and specialists,

collecting survey through questionnaire and using methods of summarizing and comparison.

OBJECTS OF THE STUDY

Result of herders Socio-economic survey, which was taken within the frame of "Market and development of pasture management" project of the selected 15 soums (Battsengel, Ulziit, Ogiinuur, Dashinchilen, Gurvanbulag, Rashaant, Tseel, Tsogt, Altai, Tsetserleg, Tsagaan-Uul, Burentogtokh Tsenkhermandal,

Delgerkhaan and Darkhan) of the five aimags (Arkhangai, Bulgan, Govi-Altai, Kuvsgul, Khentii), is introducing. The survey was taken by random method on pasture use and management, community, pasture legislation, animal husbandry and its service and result.

Totally 222 herders were involved of project 15 soums in the survey. Herders have different background of education and are working as herder for various terms.

RESULT

Totally 222 herders, who are the HG member of the “Market and development of pasture management” project, involved of project 15 soums in the survey.

Pasture, hay and water supply ; Mongolian pastoral livestock husbandry is a foundation of providing population with food, industry with raw materials and people with job. It also increases export income and serves as a base for Mongolian national traditional civilization and culture.

Livestock sector alone comprises 21 percent of GDP, 80 percent of total agricultural production and provides one thirds of total working forces. If we include all the value adding stages like from raw material sales, its transportation, storages and processing then livestock sector provides job place for the almost half of Mongolian population and its certainly major source of livelihood. The pasture land is the basis of this pastoral livestock husbandry. Annually we use freely forage of natural pasture land valued at 3.5 – 4 billion MNT. Proper use of this rich, renewable resources will serve as a basis for sustainable socio-economic development of Mongolia.

However, we still have not yet solved the two, interrelated key issues like secure of rangelands and herders’ self-governing institution. As a result, appropriate relations between pasture land, livestock and herders as the main components of pastoral livestock husbandry have been lost. In 1960-1990, 130 thousand herders took care for 24-26 million head of livestock on 125-130 million ha of pasture land. However, as of 2008, 360 thousand herders look after 43.3 million head of livestock on 113 million ha of pasture land. For the last 40 years area of pasture land decreased by 15 per cent, pasture yield by about 30 per cent (L.Natsagdorj, 2006) and species composition – by two folds (D.Avaadorj, 2006). However, for the last 20 years number of livestock increased by 1.7

The survey was conducted by following 5 mainstreams. Therein: 1.) General information of herder 2.) Pasture, hay and water supply 3.) Animal husbandry 4.) Income and expenditure of a herder family 5.) Herder organization.

times and that of herders by 2.7 times. It leads to ecological deterioration, degradation of pasture land and desertification. It is clear that the decrease of annual precipitation for the last 60 years by 8.7-12.5 per cent compared to the multi-years’ average and increase of annual air temperature by 2.1 per cent also influenced on this process (Institute of Hydrology and Meteorology).

Because of unsustainable development of this pastoral herding system pasture resilience is deteriorating and its ability to overcome natural and climatic risks is weakening. Due to lack of appropriate system of marketing of livestock products, the price for livestock products is fluctuating and risk is increasing that serves as the main reasons for deterioration of livelihood, increasing of poverty and unemployment. All these have negative impact on socio-economic development of the country. Organizing of sparsely distributed herders’ households into an community based institutions will serve as a base for solving the difficult problems accumulated in nomadic livestock husbandry.

A survey was conducted on pasture, livestock and herders, which are the main component of the pastoral animal husbandry, for providing condition of sustainable development to pastoral animal husbandry in the soums, which the “Marketing and development of pasture management” project is starting to implement. **What is your main livelihood source?** The answers were: 69.1% answered livestock, 29.3% answered pasture. To see by aimags: 73.3% livestock, 26.67% pasture in Arkhangai aimag; 87.88% livestock, 12.12% pasture in Bulgan aimag; 72.5% livestock, 22.5% pasture in Govi-Altai aimag, 58.33% livestock, 41.67% pasture in Khuvsgul aimag, 52% pasture, 44% livestock in Khentii aimag. To see from the answer that most of herders are thinking that their source of livelihood is livestock, they giving less significance on a pasture. Herders were free to move anywhere,

and use the pasture freely, converting the herding system from a controlled pasture system to an open access system that led to overgrazing; a classical example of the tragedy of the commons (Hardin, 1968).

How is your pasture situation, which you are currently using? 64.3% answered pasture degraded certain level and this is consistent with scientists study result, that more than 70% of Mongolian pasture is degraded (D.Avaadorj, 2000; D.Dash et al, 2006; D.Erdenetuya, 2006).

What is reason for pasture degradation? 68.5% of herders are connecting the pasture degradation with animal number increase and many animals are concentrated at the same place; 31.5% is connecting with climate change. Survey result shows human factor such as chaotic, unorganized and planless use of pasture, move only close to river and exceeded carrying capacity influences on pasture degradation.

The traditional main method for maintaining pasture normal situation is rotational use, resting system. This connects to the herders' movement quantity.

What is reason for herders' movement? Answers were 91% pasture is insufficient for rational use, 9% is due to drought and dzud.

42% of total herders move 3-4 times within a year. This indicates they use the pasture with traditional method by resting. Families move from winter camp to spring camp 19.1km, from spring camp to summer place 18.0 km, from summer place to autumn place 14.4 km and from autumn place to winter camp 18.8 km distance in average. It is apparent the

more animals the more distance for movement. 74% of families with 0-100 livestock 1-4 times per year, 26% moves more than 5 times, average distance for annual movement is 15km; 36% of families more than 500-livestocks 1-4 times per year, 64% move 5-8 times, annual distance between movement is 21 km. Herders move in the forest steppe zone 14.4 km, In the high mountain region 17.7 km, In the Gobi region 23.3 km annually. The movement distances are various in different natural zones because of quantity of area, peculiarity of grass and plants. To see the survey result, herders are move but specially the poor herders with less animals settle down close to the Main Street and sedentary place, they reduce their movement frequency.

What is the main difficulty for movement? Answers were 28% is no vehicle and movement expenditure is high, 23.7% answered shortage of labor force. Average number of herder households is 2.1, and they are herding 4-5 kind of livestock and their labor force is insufficient for different kind of activities such as looking after animals and their product processing and marketing.

Main reasons for pasture degradation are concentrating of many animals at the same place, increasing animal numbers and reducing the amount of seasonal movements. It is necessary for improving the degraded pasture necessary to move and do encampment, to rest the pasture, to use the pasture rotationally, to establish herders organization, to use the pasture with a plan, to adjust the animal numbers in the pasture carrying capacity.

CONCLUSION

1. 64.3% of survey participants were answered pasture is somehow degraded, this is consisting with the scientists' research conclusion, which more than 70% of Mongolian pasture is degraded.
2. 68.5% of herders are connection the pasture degradation with animal number increase

and many animals are concentrated at the same place; 31.5% is connecting with climate change. Survey result says human factor such as chaotic, unorganized and planless use of pasture, move only close to river and exceeded carrying capacity influences on pasture degradation.

REFERENCES

1. Avaadorj D., Baasandorj Ya. (2006). Change of physical characteristics of pasture soil and ecological degradation. "Perfecting of pasture management"

Proceedings of theoretical and practical conference, Ulaanbaatar.

2. Dash, D., Mandakh, D., and Khualenbek, A. (2006). Desertification map of Mongolia. International rangeland Congress, Diverse Rangelands for a Sustainable Society. Rosario, Argentina,
3. D.Dorligsuren, (2011) Herders self-governing organizations in Mongolia. IX