

(George Duns)

Mongolian Community based Pasture Land Management

(Abstract)

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Mongolia occupies 156411.6 hectors area of which 8.3 percent is covered by forest,80 percent is pasture and 1 percent is only for cultivated farm land. About 90 percent of the total area is desertification potencial and 41.3 percent of it is considered as desert and desert steppe zone.

Main courses of the desertification are climate change, global warming, drying and antropogenic impacts. These two factors are however interrelated. Sometimes they effect each others positively or negatively. Human activities as a factor of desertification occure in frame of natural dryness causing negative impacts. Among antropogenic impacts the most decisive is animal husbandry which degradate pasture using it around a year without leave. Therefore main efforts to protect pasture and to combat desertification and land degredation must be directed to maintain appropriate management of pasture land use. Pasture land management is classified into 2 systems:

- Traditional management
- Modern management

1. *The traditional management* method is based on nomadic life of herdsman who in order to preserve his/ her pasture which leaves for the next season.

Pastural animal husbandry's "nomadic" management method was a measure for reduction of natural disaster loss, combating of desertification, prevention of land degradation of certain area. Except the above herdsman move from season to season changing their pastures and their pastures are allocated for each scason as winter, spring, summer and autumn sites traditionally.

During some of these seasons, herdsman also move in short distances that prevents land degredation too. Mongolians traditionally use pastures not by one but by a group of family which is called "hot ail" which means a group of 2-4 families of herdsman live at one place using the same pasture. This "hot ail" means community-based approach of animal husbandry which has more than 4000 years tradition. In average each "hot ail" or group of herdsman has 800-1000 heads of sheeps and goats and 100-400 heads of cattle (cow, horse and camel) and each has about 10-400 square km² area in a whole.

Exchange of information between herdsman directly start with their greetings when they meet each other with the traditional change of words of their area's pasture and weather conditions and grass growth etc. So this kind of information on weather condition and fatness of animals spread all over the area and exchanged between neighbouring regions. These informations become main sources for short and long term pasture land management.

Well organized pasture land management would help herdsman to overcome severe winter with heavy snow cover till spring and summer come. Some years in Gobi and Steppe zone of the country we observe so called "Gan"(severe drought) It is a really drought no grass growth due to absence of precipitation in result of which many loss of animals take place.

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INTERESTING — 8

INFORMATIVE — 8

PRACTICAL
REALISTIC
UTILITY/USEFUL } — 7

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2. *Modern management*; organization of half stationary settlement for herdsmen to facilitate distribution of fodder and hay to herdsmen in case of Gan-(drought) and Zud-(heavy snow) cover, blizzard, dust storm etc., to make initial processing of animal productions to market products, to bring informations to herdsmen.

For combating desertification and prevention of and degradation we should pay more attention to integrate the traditional and modern pasture management. We will try to support the Decision support system (DSS) for pastoral land management and will make oral presentation on results of progress made in this direction. DSS for pasture land management have used remote sensing data, data in- site measurement and geographical information system GIS).