

Managing Chinese Grasslands

Adversities of individual lease.

By Suman K. Rai

ndividual leases of large parcels of resources, like grasslands, can adversely impact the livelihoods of traditional pastoral groups. A typical example is the Chinese policy of parceling grasslands into individual leases. The rationale offered for leasing to individuals is that communal management of grasslands in China has led to their haphazard exploitation. The policy makers argue that this has resulted in the degradation of grasslands. The lease policy assumes that individuals will introduce effective management practices to counter grassland degradation.

A Brief History of Chinese Grassland Management Policy

The Communist Party's victory in 1949 was a key turning point in the overall history of China. Following this, grazing areas became more restricted as grasslands were increasingly the target of development for crop agriculture. In 1956, with the introduction of the People's Communes, there was a radical change in the management of grasslands. All grassland was nationalized as collective property. The ownership of grasslands was brought under the production teams (equivalent to the current natural village) of the communes (equivalent to the current township level of administration which comprises many natural villages).

During the years following the introduction of communes, livestock numbers dramatically increased. This was mainly because communal policy encouraged production teams to increase livestock through reward systems. For instance, in Aksai County in Gansu Province, research conducted by Bedunah and Harris¹ reported that livestock numbers increased from 20,000 in 1953 to more than 120,000 in 1965. Increasing livestock numbers, combined with development of grassland into cropland, created an unprecedented pressure on the grasslands. The exploitation of grassland in this way was largely perceived to have adversely affected the capacity of grasslands to self-regenerate. There is little doubt that land use changes during this period resulted in the degradation of grasslands.

While grassland degradation continued, between 1950 and 1961 an estimated 30 million people died due to a large-



A persistent problem is that of farmers trying to convert arid grasslands into cropland. Photo courtesy of Michael R. Frisina, Xinjiang, 1990.



Pastoralism persists in many parts of China, as it does on these lush grasslands in northeast China near Russia. Photo courtesy of Michael R. Frisina, Chen Bar, 1993.

scale famine. This led the government to encourage smaller collectives, which lasted until the late 1970s. By 1978 a process of decollectivization had begun and by the mid-1980s China had introduced what is known as the Household Responsibility System, which allowed greater individual autonomy with respect to farm management. The early success of this rural reform soon found its way into the management of grasslands.

To start with, livestock held in the communes were distributed for ownership to households. However, a general attitude soon developed among policy makers that privately owned livestock grazing on public land was exacerbating grassland degradation. With the adoption of the Grassland Law of 1985 a significant turnaround took place in the future management of grasslands. The Grassland Law of 1985 stated "Grasslands under ownership of the whole people, those under collective ownership, and those under ownership by the whole people that are assigned to collectives for long-term use may be contracted by collectives or individuals...."

The De Facto Management of Chinese Grasslands Since 1985

According to official statistics, the contracting of grassland user rights to individual households is almost complete in most of the major pastoral provinces in China. Despite the claim by Chinese officials that contracting of grasslands has been widespread, there are several reports of the existence of communal pastures and the persistence of pastoral herding communities. What is evident is that the official data on the proportion of grassland contracted need to be treated with caution as the data may not be accurate.

Pastoralism persists in many parts of China, especially in Tibet and Inner Mongolia. According to Dan Miller,² who has worked for several years on Chinese grasslands, one reason Tibetan pastoralism has flourished is that they have not had to compete with farmers trying to convert grasslands into croplands. This is contrary to the understanding of the policy makers that grassland reclamation for cropland was a widespread phenomenon. Also, pastoralism has the tendency to persist in prairie and desert conditions where precipitation is low and productivity of pastures modest. Parceling of grasslands, especially in dry areas where precipitation is low, may not sustain livestock herds. This compels pastoral communities to continue with their traditional pastoral grazing practices.

Despite attempts to allocate grasslands through individual leases, collective and group tenure arrangements continue to persist across most of the region. In many parts of China de facto arrangements are such that summer pastures are used in common by the whole administrative village, whereas winter pastures are used in common by only the smaller natural village unit. Overall, the trend has been to allocate summer and summer–autumn pastures to groups whereas winter and winter–spring pastures are allocated to individual households. In some cases the later migrants are known to have been awarded the least-preferred grasslands whereas early migrants received the more prized spring ranges in the lowest elevations.

Impacts of the Household Responsibility System for Grasslands

The Household Responsibility System for grasslands means that grassland parcels are allocated on an individual basis. However, fair allocation on an individual basis is a complex process. Resource quality and productivity varies significantly across grasslands. The quality of a parceled patch may be very different than that of another patch of grassland. There have been disputes over resources and lease boundaries. Cases of breaking down fences meant to exclude other users are not uncommon. The contracts issued also do not specify the precise location of pasture land. Because of such ambiguities, herder communities are reluctant to parcel out grasslands into individual leases.



Poor livestock management practices are responsible for the degradation of the grassland resource over large areas. Photo courtesy of Michael R. Frisina, Inner Mongolia, 1990.



Some grasslands are deferred from grazing until late summer, when the current year's growth is harvested as hay for winter livestock feed. Photo courtesy of Michael R. Frisina, Chen Bar, 1990.

On the other hand, according to the reallocation grassland policy, 40% of the grassland was reallocated to households according to their number of animals. The policy actually helped the households with large animal holdings get more grassland than the poorer households with smaller animal holdings. Richer households with large animal holdings have appropriated larger pastures and there is no provision to compensate poorer households whose animal holdings are smaller.

The parceling of grasslands has not only meant unfair distribution of grasslands but has also affected access to and distribution of other types of resources. One of the important changes is access to water. In mountainous areas water is generally found either at the extreme top (in the form of snow and glaciers) or in deep valley bottoms, while most settlements are in between the mountain tops and valleys and have no regular water supply systems. The grasslands of China are no different, and water is often scarce and poorly distributed. Water that was available to grassland pastures previously under communes fell into privately



In mountainous areas, animal husbandry is a significant part of local economies. Photo courtesy of Michael R. Frisina, Tian Shan, 1990.

leased holdings and thus restricted access to other community members.

In mountainous areas, especially in highlands, animal husbandry is a significant part of local economies. The dependence on natural resources like grasslands is generally high and the implications of grassland degradation are more severe on poorer households. Further, the curtailment of access is more serious in the case of grasslands because they have, by nature, relatively low productivity per unit of area. Changes in management of grasslands are more likely to adversely impact the poorer members of the community.

Contrary to the expectation that individual leases would improve grassland quality in China there is evidence that the opposite might be true. Bedunah and Harris, during their research in 2002, found that Aksai County officials and herders in Gansu Province believe that grassland conditions have actually deteriorated under the individual lease policy. This feeling prevailed despite the fact that in the Jianshe Township of Aksai County, where Bedunah and Harris conducted their fieldwork, out-migration had taken place because the majority of the Kazakh herders migrated back to Kazakhstan following its independence in 1991. Further, researchers like Elinor Ostrom³ from the Indian University have convincingly argued that both government ownership and privatization of large blocks of natural resources, like grasslands, can be associated with greater degradation compared to their management by communities together as common property.

The Grassland Law of 2003

The new Grassland Law of 2003 went into effect in March 2003. One of the key lessons from the past which the new law has dealt with is the ambiguity of contracted grassland boundaries. Article 14 states that contracted grassland "shall include both parties' rights and duties, the exact area and the boundary lines, grade of grassland...." In the past, boundary problems were a major source of conflict. Additionally, the new law places more emphasis on water resource planning and improved access to water. The grassland administrative department is also charged with assessing grassland quality and making scientifically based allocations. Further, a Grassland Statistical Data System will be developed to provide data concerning the size, grades of grasslands, grass production, grazing capacity, and number of livestock on a regular basis to improve management of grasslands.

On the whole the Grassland Law of 2003 continues to maintain a socialist market approach to contracting grasslands, as did the 1985 law. Although fences are a costly option, when necessary they will be used to prevent trespass onto individual leases. Government officials have indicated that due to lack of funds it is not possible to continue fencing the individually contracted grasslands. Article 28 of the new law states that "The people's government of the county level shall support and advocate and guide the farmers to fence grassland, store forage grass, confine livestock, and build other living and production facilities for settlement of herders." The law further advocates for private or organizational investment to develop the grasslands. It clearly bases the policy on the perspective that "those who make investments shall enjoy benefits."

Conclusion

China's policy perspective in the management of grassland is based on the premise that private ownership leads to improvement of the quality of grassland. While on the one hand grassland degradation continues, on the other, the complexity of fair allocation of grassland has introduced several factors that have adversely affected the livelihoods of pastoral communities. There is a need to understand existing traditional practices of managing grasslands so as to strengthen and build on them. Where changes have already taken place through individual lease, adaptations will need to be made to introduce aspects of group management practices. While doing this, the participation of minority groups like Mongols, Kazakhs, and Tibetans (who are the traditional pastoral communities) in policy making forums will need to be ensured. The perspectives of policy makers assume that sociocultural systems are separate from natural ecosystems, and clearly the latter has received more attention than the former. There is an urgent need to strongly integrate sociocultural systems into the perspectives guiding the management of China's grasslands.

Author is Regional Director of Ashoka Trust for Research in Ecology and the Environment, The Eastern Himalaya Office, India, E-Mail: suman@atree.org. He has worked in the Hindu Kush Himalayas for more than 10 years. His current work is related to equity issues in the management of common property resources.

References

- 1. BEDUNAH, D. J., AND R.B. HARRIS. 2002. Past, present & future: rangelands in China. *Rangelands* 24(4):17–22.
- 2. MILLER, D. J. 1998. Nomads of the Tibetan plateau rangelands in western China part two: pastoral production practices. *Rangelands* 21(1):16–18.
- OSTROM, E., J. BURGER, C. B. FIELD, R. B. NORGAARD, AND D. POLICANSKY. 1999. Revisiting the commons: local lessons, global challenges. *Science* 284:278–282.

Additional Reading

- BANKS, T., C. RICHARD, P. LI, AND Z. YAN. 2003. Communitybased grassland management in eastern China: rationale, pilot project experience, and policy implications. *Mountain Research* and Development 23:132–140.
- Ho, P. 2000. The clash over state and collective property: the making of the rangeland law. *China Quarterly* 161:240–263.