

5 The Working Group Sessions



This chapter summarises the outcomes of the five working groups conducted on days four and five of the workshop.

The first working group consisted of a presentation by Dr. Ahmed Sidahmed from the International Fund for Agricultural Development, which highlighted IFAD's Livestock and Rangeland Knowledgebase. Participants were then asked to evaluate the CD and offer constructive criticism for its improvement.

The second working group focused on the outcomes of the Agri-Karakorum project and used this research as the basis for evaluating the advantages and challenges of system research in agro-pastoral regions. Suggestions are made to help streamline such research in the future to make it more applicable to the Hindu Kush-Himalayan condition.

The third working group began with three presentations regarding conservation initiatives on the Tibetan plateau. Dawa Tsering from WWF-China presented their work in the Chang Tang and eastern Tibet. Ingela Flatin from the Norway Tibet Network presented results of wildlife research conducted by staff and students of the University of Tromsø, Norway, in the Chang Tang, and proposed follow-up conservation actions. Nandita Jain from The Mountain Institute highlighted the approaches and outcomes of the Peak Enterprise "One Yak Two Cranes" project in central Tibet. Participants then discussed major conservation issues and formulated broad strategies for project implementation on the Tibetan plateau.

The fourth group began with a presentation by Camille Richard and Tan Jingzheng which disclosed hypothetical models for rangeland tenure as a basis for collaborative management on the Tibetan plateau, using examples from research. The group then discussed these outcomes and identified conditions that favour community-based management of rangeland resources in different regions of the HKH, South Asia and Central Asia.

The last group discussed the values and pitfalls of participatory development in pastoral regions, following up on the plenary presentation by Wolfgang Bayer on participatory monitoring and evaluation. The participants came up with a list of suggestions for when such approaches are valuable. In general it was agreed that this approach is key to success and should be incorporated into development plans whenever possible.

Working Group #1: Demonstration of IFAD's Livestock and Rangeland Knowledgebase

Located at International Cooperation and Training Center, TAAAS

Group Leader: Ahmed Sidahmed¹

Presentation of IFAD's Livestock and Rangeland Knowledgebase (LRKB)

Ahmed Sidahmed¹

This CD-ROM and the web site it parallels represent the first stage in IFAD's initiative to make available to the development community all of its accumulated experience in pursuing options for society's poorest. To date, 26 IFAD projects have been included in the Knowledgebase, but within a few months, this will increase to 50. Thereafter, the site will continue to develop until all of IFAD's experience enters the public domain.

Project information is accessible through the following headings.

Themes

These are broad headings that provide the most convenient entry point for most readers. Each theme is sub-divided into a number of Activities.

Projects

These represent another starting point for the reader. They are arranged by geographical region and can be accessed either from a list or through a geographical interface.

One of the most innovative and courageous parts of the Knowledgebase is its inclusion for each project of a section titled Lessons Learned. Within these sections, IFAD staff are quite candid about the successes, limitations, and difficulties of each project. This provides a clear set of footsteps for others to follow or eschew.

Articles on the disk are cross-referenced with hyperlinks to allow the user to follow a chosen theme. If the computer is connected to the Internet, these cross-links can lead to other related web sites. In addition, there are links from the Home Page both to other areas of IFAD's web site (www.ifad.org) and to the sites of related organisations.

The site contains a glossary, which will be particularly useful to those not completely familiar with all of the specific current vocabulary in the world of development workers.

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Working Group Exercise: evaluation of the LRKB

Process

A working group was formed of workshop participants to individually evaluate the disk and its usefulness. Evaluation sheets were completed, and from these, a general impression emerged. Working group participants worked to envision ways in which the Knowledgebase could assist them.

Outcomes

Reaction to the disk, to its underlying philosophy and the way in which it was compiled, was extremely appreciative. There was a general feeling of gratitude toward IFAD for all its efforts to provide a powerful tool for development workers in many related fields.

As requested, working groups produced a series of suggestions as to how the Knowledgebase could provide more information and ways in which it might be made more 'user friendly'. These suggestions formed the basis for a series of constructive criticisms and recommendations to be presented during the plenary session of the workshop.

Comments from the evaluation

Contents

- The themes are not self-explanatory.
- Some activities are beyond the scope of the themes.
- Themes and activities may need reorganisation.
- A new theme of 'credit support' should be considered.
- More cross-referencing to sectoral themes should be considered.
- The overall treatment of 'lessons learned' was uneven.
- 'Lessons learned' should be stronger on positive, as well as negative, lessons.

Technical aspects

- A powerful search engine is needed for the disk and the site.
- The glossary should be available at all times as a 'pop-up'.
- Updates should be freely available as either further CD-ROMs or downloads.

Further information on IFAD's Livestock and Rangeland Knowledgebase can be found at www.ifad.org.

Working Group #2: What Can We Learn from a Systems Research Approach to Integrated Mountain Development?

Group Leader: Iain Wright¹

Facilitator: Iain Gordon¹

Process

The working group members were asked to answer two questions, around which a facilitated discussion ensued. These questions were:

- 1) How can the outcomes of the project best be implemented and what further research be conducted?
- 2) What is the value of a systems research approach for integrated development in agro-pastoral regions?

The questions were posed in relation to recommendations made by the Agri-Karakoram Project, which are summarised in the first four summarised papers in Chapter 2 of this volume.

Outcomes

Recommended actions for follow-up of the Agri-Karakoram Project

The group came up with the following issues and recommendations regarding how the outcomes of the project could best be implemented and what further research would be required.

Recommendations of the Agri-Karakoram Project	Comments by Group Members
Increase winter fodder availability	Agreement. Already being implemented, although financing is a limitation. Need to consider implications for rangeland degradation.
Pastures – shift timing of use	Some disagreement. Some feel that “the farmers know best”. Other issues may dictate timing, such as season of cropping or marketing, and need to be considered when making recommendations.
Pastures – increase use of winter <i>Artemisia</i> rangeland types	General agreement, but concern about short time-scale of data. Also, there is danger of overuse, requiring a fine balance. Distribution of animals needs to be researched.
Reduce animal numbers	General agreement, but already happening. Animals have multiple purposes. Can't dictate on this – should deal with cause rather than effect.
Marketing	General agreement. Good potential due to well-organised communities. Provision of market information should be emphasised. Need for more research on current status of animal trade. Need to define role of government, NGOs, communities in implementation of marketing strategies. The issue of pricing structure was raised and whether it should be based on livestock number or individual animal quality.

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Overall, the working group members agreed that government and NGOs in the Northern Areas are effectively helping farmers with grain, fruit, horticulture, and cash crop improvements, but also that the livestock/pasture system has been neglected. Therefore, the project needs to refine its recommendations to give specific action points that allow government and NGOs to carry them forward. This must happen before finances can be allocated for proposed recommendations.

Advantages and disadvantages of a systems approach to agro-pastoral research

Group members gave the following responses when asked to identify the values of a systems research approach to integrated mountain development in agro-pastoral areas.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Better understanding of components and linkages • More objective information • Repeatable methods • Testable 	<ul style="list-style-type: none"> • High Cost • Time-consuming • Broader applicability beyond site specific locations questioned

Major points summarising the discussion

- A systems approach should include wildlife issues, which have tended to be ignored in livestock research.
- A systems approach should incorporate both indigenous knowledge and scientific approaches. This has been a problem in previous work.
- A systems approach is not restricted to scientific research methods but also prominent in rapid rural appraisal (RRA) or participatory rural appraisal (PRA) approaches.
- Donors compartmentalise funding into development and research. This leads to a lack of integration and lack of research in many development projects.
- A systems approach helps to minimise conflicting messages from different actors.
- Faced with immediate poverty issues, research becomes a cost that is left out. Development agencies are under pressure to show results quickly, while systems research is too long-term. Need to consider involving other players to conduct research for the long-term.
- Institutional memory is short, and there is a need to build on the findings of research rather than continually reinventing the wheel.

Working Group #3: Rangeland Conservation on the Tibetan Plateau

Group Leader: Ganesan Balachander¹

Facilitator and Translator: Li Bo²

Conservation in the Chang Tang - WWF's Conservation Activities

Dawa Tsering³

Background information

The Chang Tang is a vast area of mountains and high desert steppe covering over half of the Tibet Autonomous Region (TAR). According to traditional understanding, the Chang Tang includes the northern areas of Shigatse, eastern Ngari, and western Naqchu prefectures, but its boundaries are unclear. Despite the harsh conditions of the region, thousands of Tibetan nomads have lived there in harmony with nature for centuries, using their indigenous knowledge to make a living from the available natural resources. However, this balance is currently being threatened by increasing human population, development activities, illegal hunting, destructive mining, and construction projects.

The Chang Tang National Nature Reserve (CTNR), established in 1988 and since upgraded to national reserve status in 1993, is located in the northern part of Tibet and is the highest and second largest nature reserve in the world. This largely intact region is home to many rare and endemic wildlife species; including wild yak, Tibetan antelope (chiru), and snow leopard. Shenzha Nature Reserve (SNR) is located just south of CTNR and was established in 1993 with particular focus on the black-necked crane and its summer habitat – wetlands and alpine grasslands. SNR is also home to numerous other species of wildlife. Over 16,000 local nomads and their livestock live in this 40,000 sq.km reserve. Key features shared by these two reserves are geographical representativeness, intactness, biological diversity, rarity, and fragility.

WWF activities, achievements, and challenges

Since 1998, the Worldwide Fund for Nature (WWF) has collaborated with the TAR government and its offices relevant to conservation activities in the Tibet Steppe Ecoregion. WWF's Tibet Programme aims to develop an effective natural resource management system for biodiversity conservation and sustainable development in the region. It also seeks to cultivate harmony between human needs and natural resources by conserving TAR's unique ecosystems and rich biodiversity. Activities of WWF in the region have focused on a few main goals – building basic reserve management and anti-poaching capacities, strengthening communication and publicity, constructing a better nature reserve information and data system, understanding the current situation, and developing future action plans.

The WWF programme has had several notable achievements. It has helped government and local organisations control wildlife poaching more effectively by providing transportation and communication equipment to those working on wildlife

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monitoring and anti-poaching in the field. It has improved the skills of regional and local wildlife conservation staff in areas such as reserve management, GIS, and wildlife monitoring. It has raised conservation awareness in TAR through strategic communication in Tibetan, Chinese, and English. And, it has helped reduce illegal hunting of Tibetan antelope and trade in its fine hair, called 'shahtoosh', through support for anti-poaching work, international cooperation on trade enforcement, and increased public awareness in countries where demand for shahtoosh is high.

The programme has also experienced some challenges. Among these are general lack of conservation awareness among local people, including some government officials; continuation of market demand for illegal wildlife products, particularly shahtoosh; growing human and livestock populations and resulting pressure on natural resources; and difficult transportation and communication conditions.

During the next few years, WWF plans to strengthen their work in the Chang Tang region by deepening their understanding of key conservation issues, strengthening local conservation organisations, building partnerships, and developing community-based activities. Planned future activities include research, capacity building, strengthening management of natural resources and nature reserves, communication and awareness, and policy advocacy.

Recommendations

WWF has developed recommendations pertaining to several aspects of development. They include improvement of reserve organisation, personnel, and equipment; determination of solutions for conflicts among local residents over grassland and wildlife issues (including brown bear issues, grassland damage, and degeneration of livestock due to resource degradation); improvement of public awareness and communication; encouragement of collaboration; and support of policy. The latter – as the principle and foundation of action – can have tremendous positive or negative impacts on conservation. Policy development and practice must take conservation into consideration.

Public awareness and communication is another especially important component of conservation programmes. Public awareness, communication, and conservation education systems must be established or reinforced; in the next few years, communication systems, information, and methods should be developed. Current communications and publicity methods are simple and repetitive. It is necessary to develop new methods and to adopt suitable international experiences. The content of current communications and publicity is not only superficial, but also limited to information on conservation laws and regulations. This must be remedied.

Lastly, health and education are two major issues in the Chang Tang on which collaboration is required. Due to size of land area and difficulty of transportation, it is difficult for local governments to deliver certain social services at the village level. They should thus form joint projects with non-government organisations to improve health and education in the region. Among the most important topics for these project would be family planning, primary education, and skills training.



Pastoralism and Wildlife Conservation In the Chang Tang Nature Preserve

Joseph L. Fox¹, Drolma Yangzom², and Ingela Flatin³

Background

The ca. 300,000 sq.km Chang Tang Nature Reserve (CTNR) – a nomadic pastoralist area of the north-western Tibetan plateau and the world's second largest protected area – was established in 1993 by the Tibet Autonomous Region (TAR), China to protect endangered Tibetan antelope (chiru), wild yak, and other steppe and alpine species. The chiru population in particular has been decimated by hunting to fulfil a rapid increase in international demand for its fine wool (shahtoosh). In late 1997, leaders of TAR visited Europe and extended a request for international assistance to address conservation issues and develop suitable management and development initiatives for this large nature reserve. Norway responded to this request with an initiative through the University of Tromsø for baseline research in ecology and social anthropology, to lead later to development initiatives, with support from the Network for University Co-operation Tibet – Norway (Fox et al. 2004).

The remote 2,200 sq.km Aru basin in the north-western portion of the reserve, reportedly one of the best areas for wildlife in the entire reserve (Schaller and Gu 1994), was selected as the primary study site to investigate the interaction between wildlife and pastoralism. This basin, at about 5,000 masl, is home to nomadic pastoralists at the northern limit of inhabitation in the Chang Tang. Nomad communities use grazing areas in the Aru basin for sheep, goats, and yaks – some on a year-round basis, others only seasonally.

To date, field research has included four 2-6 week excursions within and around the basin during the years 2000 to 2002. Large mammal population estimates, distribution in relation to livestock, and initial habitat mapping and vegetation characterisation have begun. Information on pastoralist activities and livelihood decision-making criteria has been gathered primarily through informal interviews with all households present in the basin and in-depth interviews with a subset of nomadic households. Interviews with local leaders and TAR Forestry Bureau (TARFB) officials have also been conducted (Næss et al. in press). In addition to the TARFB partnership, fieldwork has also been in cooperation with the Tibet University Biology Department, Tibet Academy of Social Sciences, and Tibet Agriculture and Animal Husbandry College.

Wildlife conservation and nomadic pastoralism in the north-western Chang Tang

Populations of large mammals present in the Aru basin appear to be similar to initial estimates made about 10 years ago by Schaller and Gu (1994), except in the case of chiru and wild yak. Although the overall population of chiru in the western Chang Tang is still substantial, it is clear, in contrast to reports by Schaller and Gu, that parts of the Aru basin itself comprise an important component of the chiru migratory route. Counts of chiru in the basin numbered ca. 1,500 males in summer,

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which is similar to earlier reports, but over 10,000 males and females were present in autumn, much more than that suggested by these authors. Wild yak in the Aru basin have apparently decreased in number from over 600 in 1990 (Schaller and Gu 1994) to less than 100 today. However, populations of Tibetan gazelle, Tibetan wild ass, blue sheep, and Tibetan argali appear to be similar to earlier estimates. Wolves are common in the basin, brown bears are present, and a few snow leopards occur in the mountains. These predators are considered pests by the nomads and are still hunted to some extent.

Following a 15-year absence, nomads returned to the Aru basin in the late 1980s and began permanent year-round use in 1991, with livelihoods based on a combination of pastoralism and hunting for meat and trade. In the meantime, local dependence on a more modern surplus-oriented system increased as the international cashmere and shahtoosh markets rapidly expanded. Many nomad families, especially those in the northern areas of habitation, made a substantial income from hunting. With prohibition of chiru hunting in full force by 1995 and recent confiscation of firearms, many of these northern nomads today feel that they are not able to maintain a good livelihood. Without hunting, and especially without the shahtoosh trade, they have few alternatives for maintaining desired living standards.

Although large-scale organised poaching of chiru is currently a major problem elsewhere, it has not yet become so in and around the Aru basin. Nevertheless, the decreasing chiru population throughout its distribution has made the few remaining chiru strongholds, such as the Aru basin and its vicinity, critical to conservation efforts. Resident Aru basin nomads do not appreciate this conservation imperative and simply feel discriminated against because the chiru are still abundant around them.

The apparent 75% reduction in wild yak numbers in the Aru basin over the past decade highlights the issue of their conservation and must be addressed. Wild yaks no longer use the Aru basin lowlands as they did a decade or more ago, and their apparent susceptibility to human disturbance requires close attention, especially in and around core areas of the reserve designed for their protection.

The pastoral development programmes to increase livestock production efficiency based on total forage availability that are currently prevalent in the eastern Tibetan plateau are not compatible with maintaining populations of wild ungulates, other herbivores, and their predators, which require lower livestock densities for effective conservation. Increases in human and livestock populations, as illustrated in the Aru basin, are problematic; such issues with their concomitant pastoral livelihood imperatives must be addressed in and around wildlife reserve core areas. Also, the poisoning of 'pest' rodents and pikas prevalent in other parts of the plateau are not appropriate within a nature preserve, especially given the potential ecological importance of the pika in maintaining biodiversity values.

Conservation – development actions

Changes in government policy at various levels, cash income swings associated with the shahtoosh trade, volatility in cashmere prices, and changing societal demands for the education of children have forced nomads to re-evaluate their livelihood strategies much more frequently than in the past. Such need for flexibility is inherent in

nomadic life, but in recent decades decisions about trade-offs have become much more complicated and difficult to calculate and anticipate. New outside-initiated livestock development and nature conservation initiatives have introduced concepts with which the nomads are unfamiliar. Hunting bans and other restrictions, without proper explanation and compensatory action, only serve to antagonise reserve residents. Therefore, if the protection of wildlife is to become a primary management goal in some reserve locations and one of several goals in others, provision of stable livelihoods for pastoralist communities throughout the reserve will be critical.

What development actions, then, are appropriate where wildlife conservation is a major goal? CTNR is an immense area to be devoted to nature conservation. If this reserve is to be successful, immediate wildlife conservation measures are required that are designed to recognise the livelihood and development needs of local nomads. Clearly, a careful designation of priority areas for wildlife is required, wherein natural biodiversity protection is the highest management priority, with substantial portions of the reserve designated to accommodate livelihood enhancement compatible with conservation. Alternatives to the common livestock development models used elsewhere on the plateau, such as fencing, winter forage development, and pika eradication, must be researched and subject to experimentation; the proper choice of these will be critical to maintaining a workable balance between pastoralism and wildlife conservation.

With such goals in mind, high-priority conservation initiatives include efforts to accomplish the following.

Wildlife conservation and management

- Designate high priority wildlife management zones to protect important habitat
- Prevent organised outside poaching
- Evaluate where limits to livestock use within core areas such as the Aru basin might be placed; this would require maintaining sufficient grazing access for wild ungulates, including limiting disturbance to the remaining wild yaks caused by resident nomad communities

Livelihood enhancement

- Provide special livelihood enhancement opportunities, such as livestock product processing and marketing, to those reserve residents most affected by the hunting ban; this will require special micro-financing options that match local realities, combined with reciprocal agreements to limit livestock numbers in exchange for capital
- Conduct feasibility studies for the potential for eco-tourism in areas adjacent to key wildlife management areas
- If potential exists for eco-tourism, solicit government investment in eco-tourism and marketing infrastructure for these, but only where wildlife numbers are significant enough to attract visitors
- Improve social services (health and education) to communities residing in and near the reserve, with special conservation focused programmes offered to those most impacted by the hunting ban and adjacent to core wildlife areas
- Limit livestock losses due to weather and predation with such techniques as corral improvements, improved winter forage, and better veterinary care, but these actions must be coupled with improved marketing opportunities that

increase off-take of animals prior to the lean winter period; this integration will help to increase cash income and limit livestock densities, especially in areas adjacent to priority wildlife management zones

- Promote livestock mobility as a viable alternative to large-scale fencing, which can be detrimental to migrating yak and chiru; this will help disperse livestock herds and maintain rangeland forage for wild ungulates, however, it requires substantially more labour for herding and guarding
- Only promote fencing in non-core areas for the development of small-scale winter forage

Institutional strengthening

- Provide training in reserve management and wildlife monitoring to reserve staff
- Enhance reserve co-management efforts initiated by TARFB, including capacity building measures to improve management planning and implementation
- Train resident nomads in environmental education and reserve management and hire as reserve staff

These initiatives require enhanced reserve management and development programme implementation capabilities, and improved cooperation with reserve residents. Some can be addressed with pastoral development actions used elsewhere in TAR. Others will require additional research to address pasture productivity and allocation issues, in conjunction with close coordination with other government sectors regarding management follow-up. Improved education for residents of the reserve, from basic education to training appropriate for hire as reserve staff, can enhance all aspects of a conservation programme.

The TAR Forestry Bureau (TARFB) and WWF-China (Lhasa office) have already begun collaboration to develop a co-management system for the reserve. The TARFB, in co-operation with the University of Tromsø and WWF-China (Lhasa office), has applied for additional support from the Norwegian government to initiate some of these conservation initiatives, while incorporating a continued research agenda to inform the process. Co-operation with other governmental departments and international NGOs operating in the region is also a priority, so as to ensure the implementation of activities appropriate to conservation goals. Protection of the Chang Tang's environment lies in the balance, and we hope to see initiation of some of the above actions under this programme in the near future.

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One Yak, Two Cranes Project, Tibet Peak Enterprise Programme, TMI

Nandita Jain¹

Developed in late 1996, the The Mountain Institute's (TMI) Tibet-Peak Enterprise Programme supports the responsible creation and growth of Tibetan business enterprises by providing access to capital, training, and technical assistance. Working in partnership with the Federation of Industry and Commerce of the Tibet Autonomous Region of China, this new programme is developing local capacity to support the small but growing, private sector as an engine for indigenous development. The Peak Enterprise Programme is developing a model for a loan programme with associated business services, which incorporates environmental and social concerns. Once established, it will be a self-supporting financial and business services programme which will enable the local people to improve the quality of their lives and environment.

Objectives of the One Yak Two Cranes project are:

- to increase the incomes of local livestock farmers,
- to build entrepreneurship capacity in the dairy sector,
- and to contribute to conservation of the black-necked crane.

Issues identified during project planning phases included improving milk production methods, cultivation practices, and impacts on crane habits and habitat.

Results of project implementation included an increase in irrigation of fallow and winter wheat and establishment of conservation education measures. There has been no change in crane numbers as a result of intervention, but the project is still young.

Working Group Exercise: Identifying Issues and Strategies Regarding Conservation on the Tibetan Plateau

Process

After the three ongoing projects in Tibet had been presented, there was a group discussion and summary of outcomes. For the working group exercise, participants were presented with the following three requests.

- To identify the key issues and gaps in rangeland conservation and management
- To Prioritise these issues and gaps based on urgency, importance, and feasibility
- To propose key strategies for the above issues (broad groups of activities and actions)

Outcomes

The following extensive list of issues, broken into topical groups, was created by the working group participants.

Lack of research on rangeland degradation and livestock-wildlife interactions

- Land erosion, peat turf collection for fuel source (Shigatse), pika impact
- Better use of summer pasture

¹ TMI, Franklin, WV, USA

- Carrying capacity of pastures
- Urbanisation – roads and population
- Mining activities in western TAR
- Kiang (wildlife) impact on pastures
- Livestock - wildlife dynamics within different ecosystems (pastoral and agro-pastoral)

Rangeland policies and laws

- 'Middle path' for rangeland conservation
- Giving value to wildlife locally, use of indigenous knowledge
- Current policy focus on productivity, not on conservation
- Unique vegetation of the plateau lacks funding appeal due to lack of cranes or pandas, or other endangered fauna
- Co-management – extending decision-making beyond government to local groups
- Contracting rangelands to rangeland users
- Giving locals authority to manage
- Regulations needed for non-locals to use rangeland resources

Livelihoods and development

- Fuel sources for communities
- Other livelihood options – e.g. tourism
- Hazard management
- Lack of markets

Institutional capacity to manage

- Agencies not fully established
- Many agencies – no specific rangeland focus
- Little local capacity to manage rangeland

From this list, priority issues were identified and strategies formulated to address them. The table below lists these issues and strategies.

The working group came up with more specific strategies and activities to address specific gaps in rangeland conservation and management.

For example, there is a gap between policy-makers' goals (protection) and the interests of local people. Development of alternative livelihoods can be a tool to address this gap. This can include capacity building, decentralisation, and improved two-way and horizontal communication.

To address the issue of rangeland carrying capacity and grazing impact, family planning should be initiated to control human population growth, and accurate livestock population numbers should be determined. Also, development of non-pastoral livelihoods can help bring rangeland use within carrying capacity. To monitor the success of these measures, a centrally coordinated grassland monitoring system should be established and comprehensive rangeland monitoring conducted.

To address the lack of capacity at various levels, existing capacities and resources should be identified; regular stakeholder meetings, workshops, trainings, and study

Issues	Strategies
Policies/laws	
Lack of conservation vision	Visioning the status of rangelands in the next decade. Striking a balance (the middle path) between conservation and development
Management	Integrated planning
No rangeland focus	Establish rangeland management units based on carrying capacity and conservation values
Insecure tenure	Contracting of grassland to households or groups of households
Cross-boundary land use and trade	Greater cooperation across borders; consistency in international laws; coordination and cooperation; building on traditional values; involvement of local people
Interdisciplinary research	
Ecological	Research coordination and cooperation at multi-stakeholder levels
Socioeconomic	
Improved and diversified livelihoods	
Markets	Marketing research and cooperative development
Income generation	Medicinal plants, milk, handicrafts, eco-tourism, regulated hunting; coordination and cooperation
Rangeland degradation	
Mining	Setting livestock numbers and controlling incentives; coordination and cooperation; greater investment in technical options
Overgrazing	
Invasive species	
Loss of biodiversity	
People-wildlife interactions	
Lack of awareness	Use participatory approaches at local levels to change perspectives at community, NGO and government levels
Reciprocity	Local communities must be the first beneficiaries through alternative income generating schemes such as eco-tourism
Government effectiveness in implementing conservation plans	
Lack of government coordination	Coordination and cooperation; development of co-management plans; authentic involvement of local people
Lack of management capacity	Training in participatory approaches, management skills

tours should be organised; and intergovernmental scholarships should be established. During this process, local knowledge should be appreciated and utilised. A Tibetan plateau web site would provide a valuable source of information for these activities.

To address the lack of collaboration between governments and other institutions, a committee should be formed based on this workshop. Further, more workshops like this should be held. Government involvement at the beginning of projects can help ensure their cooperation.

To address the lack of comprehensive and multi-disciplinary research, multi-stakeholder groups should be organised to conduct participatory research at the local and protected area levels.

To address the lack of awareness at various levels, face-to-face communication among levels is important. Also helpful would be television programmes in local languages and training for both policy-makers and local community members.

Working Group #4: Appropriate Institutional Arrangements and Policies for Community-based Rangeland Management

Group Leader: Tony Banks¹

Facilitator and Translator: Tan Jingzheng²

Resource Tenure Models for Rangeland Improvements

Camille Richard³ and Tan Jingzheng²

Background

Given the rapidly changing socioeconomic context in which pastoral communities find themselves, there is certainly a need for improved rangeland management to meet the growing demand for forage in an increasingly commercial livestock economy. However, rangeland improvement schemes rely on continued capital investment and maintenance by livestock owners, which is only possible with secure access to pasture, water, credit, and labour. Resource tenure thus becomes a fundamental aspect of effective rangeland management. Tenure is not merely ownership, as is commonly believed – it involves rights to control and access resources. Tenure can be legal or informal, public or private, common or individual. It involves those entities that make decisions and those that get the benefits from the resources, and thus implies a dynamic process of negotiation.

Eastern Tibetan plateau case study

Given the potential complexity of resource tenurial arrangements, the question is raised as to whether individual tenure and fencing is the sole answer for improving rangelands of the Tibetan plateau – heterogeneous in water and forage availability, naturally low in productivity, and home to a population still dependent on diverse subsistence livelihood strategies. In the mid-1980s, the government of China formulated the Grassland Law, based on the implementation of the Individual Household Responsibility System in agricultural areas, and has since been implementing it throughout western China. However, implementation is proving difficult on non-arable lands in remote, socially and environmentally marginal landscapes such as the Tibetan plateau.

The Chinese government felt that settlement and fencing could help provide reserve pastures during critical periods, such as winter storms, and thus decrease livestock losses. Problems with implementation of such standardised policies include spatial and temporal heterogeneity of pasture resources, lack of local input, and unsuitability of allocation in terms of fair distribution of resources to households. These factors become more pronounced as the environment becomes more marginal, rendering such policies ineffective at the local level.

Three broad scenarios of land allocation and management arrangements are present under current implementation of the Grassland Law: local autonomous control; strict enforcement of Individual Household Responsibility; and co-management (bringing

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² Sichuan Agricultural University, Sichuan, PRC

³ ICIMOD

together indigenous and scientific strategies and allowing for more flexible policy interpretations and adjustments). Brief discussions of these three simplified models are provided below, details are given in the full paper in Volume 2 of these proceedings.

Strict enforcement model – A pilot programme was established by the Sichuan Animal Husbandry Bureau in Hongyuan County, Sichuan Province, as a livestock and pasture development demonstration site. Here, families were encouraged to settle on individual allotments for year-round use and household management. The advantages of this approach have included reduced overall labour demand on households and increased survivability of herds in the winter. Disadvantages have included prohibitive fencing costs per household, restricted access to water sources, reduced access to schooling for children, increasing conflicts due to poor pasture allocation, a widening gender gap, and dramatic impacts on herd distribution. The latter is due to Hongyuan County's designation as a milk producing area, which causes families to keep their lactating herds near the road and milk collection sites, leading to severe overgrazing of these areas.

Co-management model – In Maqu County, south-western Gansu Province, many families have also been legally allocated individual winter pastures and manage at an individual level. However, this county has also allowed groups of up to ten households to pool their pastures and fence the outer boundary. The number of livestock that each household can graze is calculated primarily based on the number of people in the household. Households that own fewer livestock than the number they are entitled to graze are compensated by households that own more. The benefits of this system have included lower fencing costs, economies of size with respect to herding, and equitability (poor households are guaranteed access to and compensation for forage equivalent to that produced by their share of pasture). Because Maqu County was declared a meat and butter-producing zone, herds are more evenly distributed across the landscape than those in Hongyuan County, as meat and butter are more durable than milk and do not require livestock concentration near product collection points.

Another example of co-management is in Nagchu County in the northern Tibet Autonomous Region (TAR), where resource rights are legally appropriated by villages, and management is collective. Here, the government has contracted fattening pastures to villages, feedlot locations were selected through consultation with communities, and fences were constructed where appropriate. Rules for use of collective pastures are set by village governments and address household labour contribution and number of livestock per household. Households in Nagchu may choose to take individual winter allotments or to combine land access rights.

Local autonomous control model – The vast majority of pastoral communities on the Tibetan plateau still access their pastures with legal rights given to administrative villages but not officially contracted under current law. Most communities within these administrative villages have chosen to retain autonomous control and have set their own rules for pasture access and management, using 'social fencing', or collective herding and border patrol, as means to enforce boundaries. Some county governments, such as Maqu, refuse to provide government subsidies to such groups if they fail to allocate grasslands according to policy. The advantage to this approach is that fencing costs are nil. Disadvantages include higher labour requirements and greater potential for encroachment by outside communities without effective legal recourse.

Conclusions

The above examples show that when communities are given the choice, they often choose collective arrangements, which are more affordable and in keeping with customary practice. Even in cases where allotments have legally been granted, actual use and management practice follows a more customary pattern of group tenure and management. Herders will continue to engage in common property arrangements until the socioeconomic environment is such that household members can engage in alternative forms of livelihood, and those remaining can access capital and pasture sufficient to maintain economically viable herds.

Recent revisions of pasture allocation legislation in China allow flexibility in interpretation. The newly revised Rural Land Contracting Law allows for some degree of collective tenure and management, such as contracting to groups of herding households, giving households the security to access resources, while allowing them to engage in collective management arrangements. As long as future policy guidelines retain this flexibility, arrangements may range from individual household contracts where land is individually managed to large-scale collective arrangements for protection and management of landscape amenities.

Working Group Exercise: Defining An Enabling Environment for Co-management Arrangements

Process

The working group was divided into two groups based on regional interest: South Asia (India, Nepal and Pakistan) and Central Asia-Tibetan plateau (Mongolia and China). A series of questions were posed to each group, which they were to answer and present back to the larger group later in the session. The combined questions and outcomes of these two sub-groups were then presented in the plenary session at the end of the Lhasa workshop.

Outcomes

The outcomes are summarised below.

1. When we say 'community-based management', what does 'community' mean?
 - Community groups can be joined by kinship or religion
 - They are groups using/managing the same grazing/water resource
 - They can be village based or tribe based
2. What would be the ideal 'community' (in terms of size, kinship, ethnicity, wealth, etc.) to manage a rangeland area in your particular region (within an administrative area)?
 - There is no ideal size - it depends on the specific socioeconomic or ecological setting.
 - It would sometimes be based on kinship, sometimes not.
 - It needs flexible kinship/ethnicity links.
 - Members have shared interests.

- Resources are equitably distributed and accessible.
 - It has ethnic homogeneity but good relations with other groups.
 - It should have a political voice.
 - It should have decision-making rights.
3. What skills (both individual and organisational) would these communities need to effectively manage rangeland resources if working under a co-management arrangement?
- good leadership (literacy, experience, etc.) that can link the community with state governmental bodies
 - social structures and mechanisms that favour decision-making and responsible actions
 - shared norms (informal) and formal legal rights
 - capacity to adapt to changing environments
 - good understanding of the resource base
 - good community decision-making skills
 - ability to resolve conflicts within the community
 - ability to assess their own needs
 - knowledge of markets and entrepreneurship
 - negotiation skills with government, NGOs, other communities
 - indigenous and other technical knowledge
4. What are the skills necessary for the organisations that are mandated to work with these communities, particularly the field staff?
- understanding of multi-sectoral aspects of pastoral areas
 - knowledge of the area and people (must be culture and gender sensitive)
 - skills in participatory planning and implementation (ability to listen and learn)
 - respect for local knowledge about rangeland resources
 - change working approach and attitude
 - skills to accommodate the under-privileged
 - skills to resolve local disputes
 - advocacy skills
 - organisations must switch from top-down to bottom-up planning (with a mandate to serve rather than to dictate)
 - two-way interaction between staff and people is required
5. What type of external technical, financial, institutional and policy support is necessary to increase the capacities of communities and field staff to implement a co-management project?
- support for effective local assessments (needs, priorities, skills, capacity building)
 - mainstream assessment and planning process
 - tenure and decentralisation policies must be clear at various levels

- legal recognition of various resource management user groups (primary and secondary) as mutually agreed
- better stakeholder involvement
- decentralisation of planning and implementation at community level
- external legal conflict resolution mechanisms
- appropriate education infrastructure
- advocacy networks to protect rights at national level

6. Regional differences (between Central Asia and South Asia)

- The role of kinship is not as important in Mongolia as in China – there is a more neighbourhood aspect to communities.
- ‘Community’ in the South Asian context is more diverse and tends to be more ‘closed’ (such as tribal communities in Pakistan).
- The South Asian group emphasised the role of education and government commitment to co-management to break the cycle of inequitable tribal decision-making (especially in the case of Pakistan).
- For more ‘open’ communities, the south Asian group prioritised legal rights and frameworks to support mutually agreed plans.

Working Group #5: Integrated Research and Extension Needs for Participatory Rangeland Management and Pastoral Development

Group Leader: Wolfgang Bayer¹

Facilitator and Translator: Li Bo²

Process

Presentation of issues related to participatory research and extension in pastoral regions (see Wolfgang Bayer summary in Chapter 3)

- 1) Facilitated discussion among the group regarding presentation
- 2) Summary of discussion presented in plenary

Discussion

Use of participatory approaches is very important in systems appraisal, and it is important that communities, non-government organisations (NGOs), and government share in these approaches. However, participation is not a panacea. There is much to be learned both from science and from indigenous knowledge. The following questions were raised and points addressed during this working group discussion.

Can participatory approaches be used in government to prevent different departments – such as the Animal Husbandry Bureau, Environmental Protection Bureau, and

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Rangeland Department – from having conflicting policies that farmers must follow? This problem is made worse by the fact that governments have little to do with management. Local people attempting to manage according to many disparate regulations become confused and frustrated.

There is a need for further in-depth research to address threats to pastoral systems. This research should be conducted in a participatory way.

Frequently, foreign consultants and local counterparts have different agendas and are not of similar standing. Also, continuity is difficult when consultants leave a project after a certain time period, such as one year. Two ways to address these problems are to ensure that the local counterpart is of similar seniority to the foreign consultant and to employ the local counterpart on the project full-time.

Participatory approaches are very good for small numbers of communities but are difficult to implement on a larger scale.

Farmers have short-term perspectives, whereas governments have longer views. One good way to reconcile these is to stimulate the interest of the community in the long-term sustainability of the grassland. This often involves tenure.

Although communities, foreign experts, and NGOs all play a role, the real decisions are made by politicians. How can we influence them?

Results of participatory evaluations affect future funding – this can influence the outcomes of such evaluations.

Rather than beneficiaries, local people involved in a participatory project should be seen as partners.

How should we continue activities begun by a project after the project is finished? (Most projects only last about five years.) Projects should work to prevent 'project dependency syndrome'. The State has a responsibility to continue necessary components of a project after the project is finished.

Summary of discussion on participatory development, research, and extension

- Nobody questioned the need and usefulness of participatory approaches.
- Government agencies need to be involved; otherwise, they may be reluctant to accept the results of participatory research and extension.
- Long-term development is clearly the responsibility of government, local, and community authorities.
- Foreign experts, funds, and interventions should act upon demand and give special contributions to responsible authorities.
- Political support for participatory approaches is essential.
- Participation in research must balance advanced scientific findings and rapidly disappearing indigenous knowledge.