

CHAIRS' SUMMARY PAPER: Communal Grazing

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In their theme paper, Deb Roy and Roy note a number of communal grazing issues in India and other Asian countries. Dual pressure of increased livestock numbers and reduced area available for grazing severely challenge management, renovation and improvement of grasslands in order to sustain their contribution to rural communities. Supplementary theme session presentations from other regions including Africa, Canada, Pakistan, Australia and South America noted respective communal grazing commonalities and divergences.

A significant degree of commonality and severity of resource management difficulty was noted between the African and Indian communal grazing situations. Common concerns included:

- severe paucity of information on communal grazing lands,
- continuing importance and role of grazing-based livestock production in the rural economy,
- particular communal land use challenges regarding restoration, improvement, protection and management,
- the need to reduce livestock numbers to match available forage,
- lack of integration of village livestock forage needs into programs for wasteland development and afforestation, and
- need for formation of village grazing management committees (similar to the village forest protection committees in participatory forestry initiatives).

In North America, western Canadian community pastures also play fundamental roles in ensuring the significant and continuing contribution of marginal land bases to the economic viability of rural communities. In contrast to many other areas, Canadian land tenure control is far more stringent. Nonetheless, competing demands by non-agricultural interests for wildlife habitat and biodiversity also constitute a major challenge to land managers. Sustainable grazing regimes must be developed that still optimize economic returns to rural communities.

KEY FINDINGS FROM POSTER PRESENTATIONS

Open access grazing presents a problem to restoration and management of communal lands. Otsyina et al. note that without security of tenure, permanent investment on the land is deterred.

To a large extent, widespread increased pressure by humans and their livestock are responsible for land deterioration. Breakdown in traditional authority over communal property is also a contributing factor.

The Waters-Bayer and Bayer poster on participatory planning in the West African Savanna show how farmer participation in range management planning and improvement schemes is necessary for adoption of sustainable technologies. Good examples of sustainable grazing management have been demonstrated in various parts of the world, as have the role of management incentives.

Successful legume seeding of degraded range in Syria by feeding of

legumes to sheep and subsequent passage of seed through faeces was demonstrated by Ghassali et al.

The value of deferred grazing as a tool in communal grazing land rehabilitation was noted in the papers by Otsyina et al. and Osman et al. This poster, together with the report by Tukul et al., further examined deferred grazing as a management technique in combination with fertilizer application.

Shcheshyuk et al. emphasized the importance to optimal forage production of proper identification and understanding of native plant associations in Ukrainian grazing collectives. Lecomte et al. assessed integration of GIS, plant and field indicators in the monitoring of Guinean savannah range and development of management plans. Indigenous knowledge on communal range management and improvement should also be considered as an element in implementation of range improvement technologies.

GENERAL DISCUSSION

Sustainable grasslands management must respect the general criterion of sustainable development - namely, an achievable dynamic balance between environmental, economic and social factors. Environmental objectives must embody both agricultural and non-agricultural priorities. Economic aspects should reflect the general need for rural development. While the posters and general discussion alluded to this value, little quantitative or rigorous research was presented on this topic. Similarly, the importance of social factors associated with communal grazing were noted. Some studies did examine this latter dimension, particularly as related to resource management decision making.

With respect to management of communal grazing lands, a participatory approach was judged as most desirable. Deficiencies in sustainable grazing land management might then be addressed adequately without outside intervention. However, the success of consensus methodologies, such as Participatory Rural Appraisal (PRA), may require supportive training and expertise in conflict resolution.

Ingenious local creativity has been demonstrated in various regions in the successful management of communal grazing. On the other hand, degradation of African rangelands was attributed to factors such as breakdown of traditional authority in the community.

The Indonesian example of problems with open access grazing on communal land were addressed through bans on communal grazing with requisite adjustments in livestock numbers and subsequent improvement of communal land quality. Other methods suggested by participants included use of economic incentives to encourage proper management practices. The Australian Land Care Program demonstrated how a small amount of "seed money" from government could stimulate improved resource conservation and grazing land management practices.

Resource management technology was mentioned as a priority. For example, allowing for adequate plant rest is a basic universal range management principle. A month rest period under West African conditions resulted in a significant positive impact on range condition.

Some posters did address evaluation and use of newer technologies such as GIS in range management planning. However, a Scottish discussant cautioned that “indicator definition” was critical to the ultimate success of evaluation. For example, single value carrying capacity for communal lands may not provide measurement techniques conducive to creation of benchmarks for sustainable grazing.

LOOKING TO THE FUTURE

In summary, areas of future study in communal grazing should include the following:

- land policy research to study ownership patterns as related to sustainability of land use,
- the role and use of fire in range management,
- identification and use of indicator plants in range monitoring,
- standardization of forage data collection to distinguish between harvestable and total annual yield,
- refinement of participatory approaches for pastoralists,
- definitions of communal grazing and open access land to determine management systems appropriate for each,
- studies into traditional management systems and their contribution to sustainability of communal grazing lands,
- examination of gender considerations in communal land management, and
- transformation of traditional community sociology and their impacts upon grazing approaches and management considerations.

A major challenge is to deal with future increases in livestock numbers which will demand enhancement of carrying capacity of communally grazed lands (without further deforestation) and integration of their use with that of other agricultural lands.