



PLATFORM PRESENTATION: MANAGEMENT OF COMMUNAL RANGELANDS - THE DIALOGUE BETWEEN SCIENCE AND INDIGENOUS KNOWLEDGE: THE CASE OF THE EASTERN CAPE

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Communal area rangeland resource users are an important part of the rangeland ecosystem; rangeland management policies and practice should, therefore, accommodate their socio-cultural practices and knowledge. Indigenous knowledge (IK) is often overlooked in range management research and policy. IK is linked with the livelihoods, always produced in dynamic interactions among humans and nature. Current rangeland management systems are products of scientific research with minimal IK input. Scientific findings are important in informing policy but implementation of such findings can be hampered by the cultural and political frames around them. These frames include perceptions, which form the appropriate context in which to analyse people's actions and decision-making. Incorporating resource users in research and formulation of policies will provide opportunities to capture their perceptions and aspirations, and thus to develop shared policies, improving implementation. The communal areas of South Africa have been governed by numerous pieces of legislation namely, Native Land Act No. 27 (1913), Native Trust and Land Act 18 (1936), Bantu Authorities Act (1951) and the more recent Communal Land Rights Act 11 (2004).

A communal range management project was started in 2006 to examine the role of different stakeholders in the development of strategies for the management of rangelands in the communal areas of the Eastern Cape. This case study identifies the different ways in which scientists and resource users perceive communal rangelands with the view of developing guidelines for the management of grazing areas in the Eastern Cape Province and to inform the process of national policy refinement. The research question was how much interaction exists between the perceptions of resource users and scientists. The underlying assumption is that the success of any intervention lies in the harmonisation of these perceptions.

Socio-economic data were collected using participatory rural appraisals and questionnaire-based surveys in 553 households and 33 focus groups in 11 villages of Amatole, Chris Hani and Ukhahlamba districts of the Eastern Cape Province of South Africa. Scientific methods such as the step-point method were used to gather data on rangeland condition.

Most of the respondents were females, while males headed most of the households. The average age of respondents was 53 years and average household size was seven. Social grants provide a stable source of income compared to natural resources. This has implications for the management of resources: for most of the grantees there are limited incentives to manage the resources. The limited education of the resource users affects their analysis of the complex interactions in the ecosystem, as well as their comprehension of the plethora of regulations governing natural resource use.

Institutions controlling access to rangelands varied from village to village. Generally a high percentage of respondents were not aware of institutions in their villages. Most of the resource users were not aware of the national policies on rangeland management, particularly the Conservation of Agricultural Resources Act 43 of 1983. Generally, there were rules in areas governed by traditional authorities but none in areas governed by political institutions.

Perceptions of resource users and scientific investigation of rangeland condition through basal cover were compared. In all the communities, respondents considered their rangelands to be in good condition (49%) and large enough to support livestock. The level of soil erosion was perceived to be high (51%) by most respondents. The perceptions agree with scientific basal cover estimates, suggesting that respondents use the evidence of bare ground and erosion to assess range condition. Scientific indicators of range condition, basal cover and soil erosion revealed that cover was significantly lower in sweetveld areas than in sourveld areas. The high rainfall in the sourveld favours vegetation growth, thus explaining higher basal cover. Scientific evidence and resource users agree that the rangelands are generally in fair to good condition.

It is clear from the findings of the study that perceptions of grazing rules and of the condition of grazing areas differ among stakeholders; this was the source of initial differences in the perceived condition of rangelands. Policies should incorporate resource users' knowledge and



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scientific findings and promote community participation in rangeland management and monitoring. Indigenous knowledge related to the rules on the access and use of rangelands need to be considered during policy formulation for easy uptake of such policies. It is important for government to recognise the local institutions in communities, and work on strengthening them to improve management of communal rangelands. Farmers' associations are better equipped to guide rangeland resource users to understand and apply the policies and techniques designed by policymakers, since they were found to be the most organised civic institution in most villages. There is a need to improve coordination between traditional leaders and councillors, as conflicts which are prevalent between the two institutions curtail their effort towards improving communal range management. The proposed act on traditional leaders should aim at complementing the mandate of councillors, rather than creating much conflict.

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