## Involvement of Maasai pastoralists in participatory rangeland management planning and implementation

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**Introduction** The pastoral Maasai lifestyle was and still is traditionally based on subsistence dairy and meat production. But with population increase, the rangelands can no longer sustainably support livestock production systems. Most of the rangelands which are used for grazing have been subdivided and partially cleared to pave way for cultivation, because of increased population pressure (Ego *et al*., 1999). This has led to a tendency to overgraze, thus impacting negatively on secondary production from the range. In order to effectively reverse this trend, the users of the rangeland resources were brought together to analyse constraints and opportunities for sustainable use, so that they could develop action plans for the improvement of the rangelands.

**Materials and methods** With the help of local leaders, several community workshops were organised and held in six sub-locations of Mashuru division, Kajiado district. These workshops brought together all stakeholders who were willing to share ideas and learn from each other.

**Results** Priority grass and tree species for forage/fodder were identified through a pair-wise matrix ranking exercise. Five priority grasses identified were; *Digitaria melanjianus, Cynodon dactylon, Themada triachadra, Dactyloctenium aegyptiam* and *Cenchrus ciliaris*. Problems analysed by participants and opportunities are presented in Table 1. Each sub-location drew it's own community action plan. Tasks and responsibilities spelled out in the action plans were shared out amongst key stakeholder groups. Re-seeding of priority grasses, bush management, protection of valuable tree species and soil conservation are among technologies that were set up in on-farm demonstration plots in representative farms selected by the community so that others could learn from them. On -station trials were also undertaken concurrently to assess the performance of the prioritised grass species. Monitoring of the activities has been a joint venture between the communities, government extension staff and researchers. One way of monitoring and evaluation has been through field days and exchange tours.

**Table 1** Problem analysis for rangelands in the Kajido District

| Problems | Causes | Copping strategies | Opportunities |
|---|---|---|---|
| Shortage of forage/fodder | -Drought<br>-Overgrazing<br>-Trampling<br>-Cutting of trees for charcoal and cultivation<br>-Bush encroachment<br>-Overstocking<br>-Wildlife menace | -Nomadism<br>-Destocking<br>-Paddocking (Use of *olopololi/olale*<br>-Bush management | -Planting and protecting useful fodder trees and shrubs, de-stocking<br>-KWS to confine wildlife in game reserves/parks, paddocking/*olopololis*<br>-Fencing to keep off wild animals<br>-Awareness creation<br>-Training (seminars, tours and field days)<br>-Reseeding of important grass species |
| Bush encroachment | -Inadequate knowledge on bush management<br>-Lack of labour | -Clear bush | - Bush Control<br>-Training in bush management |
| Soil erosion | -Overstocking | -De-stocking | -Terracing, planting of grass, de-stocking |

**Conclusions** Technologies developed through this approach stand a high chance of being successful because they address immediate needs and problems of the community as spelled out in the action plans. The fact that the community was involved in project planning and implementation using their own knowledge gave them confidence and motivation to succeed.

**Reference**

Ego, W.K, E.C. Kiptot, A.M. Mohammed & D. Ochieng (1999). Community Action Plan for the Management of the Natural Rangelands in Kajiado and Makueni Districts. The case of Mashuru, Kibwezi and Kanthonzweni Divisions. Research Report. Agroforestry Research for Intergrated Development in Arid and Semi arid lands of Kenya. KEFRI/BADC Nairobi , Kenya.