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Introduction

- In Kenya, *Prosopis juliflora* was introduced between mid-1970 to 1980s to dryland areas to minimize deforestation, desertification and fuelwood shortages
- However, this aggressive species invades about 500-1300ha per year causing land use and land cover (LULC) losses of grasslands, woodlands, cropland and settlements¹
- On the other hand, *Prosopis* presents an opportunity for sustainable charcoal from the estimated 40 million tonnes of utilizable biomass that would fill the 55% deficit faced in the country²



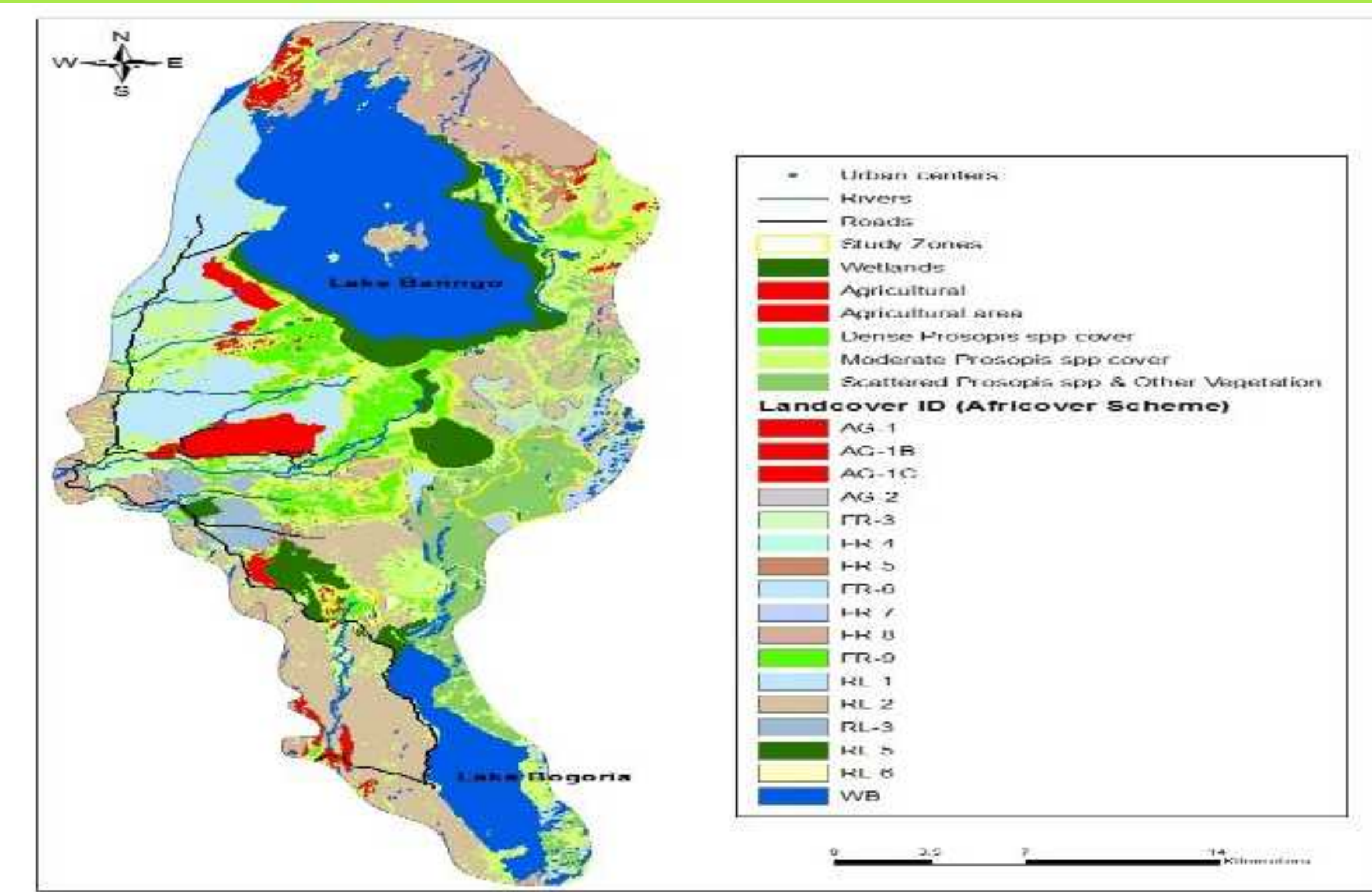
Results

- Participatory visioning mapping and action planning identified the priority interventions to improve the landscape
- The participants also mapped the future map for 2030 that indicated an improved landscape where some portions of the *Prosopis* stands are cleared and enrichment with native species carried out.

Table 4: Option prioritization by communities in *P. juliflora* areas, Marigat Sub-county.

Materials and methods

Study site



Map showing Marigat sub-county, Baringo county Kenya

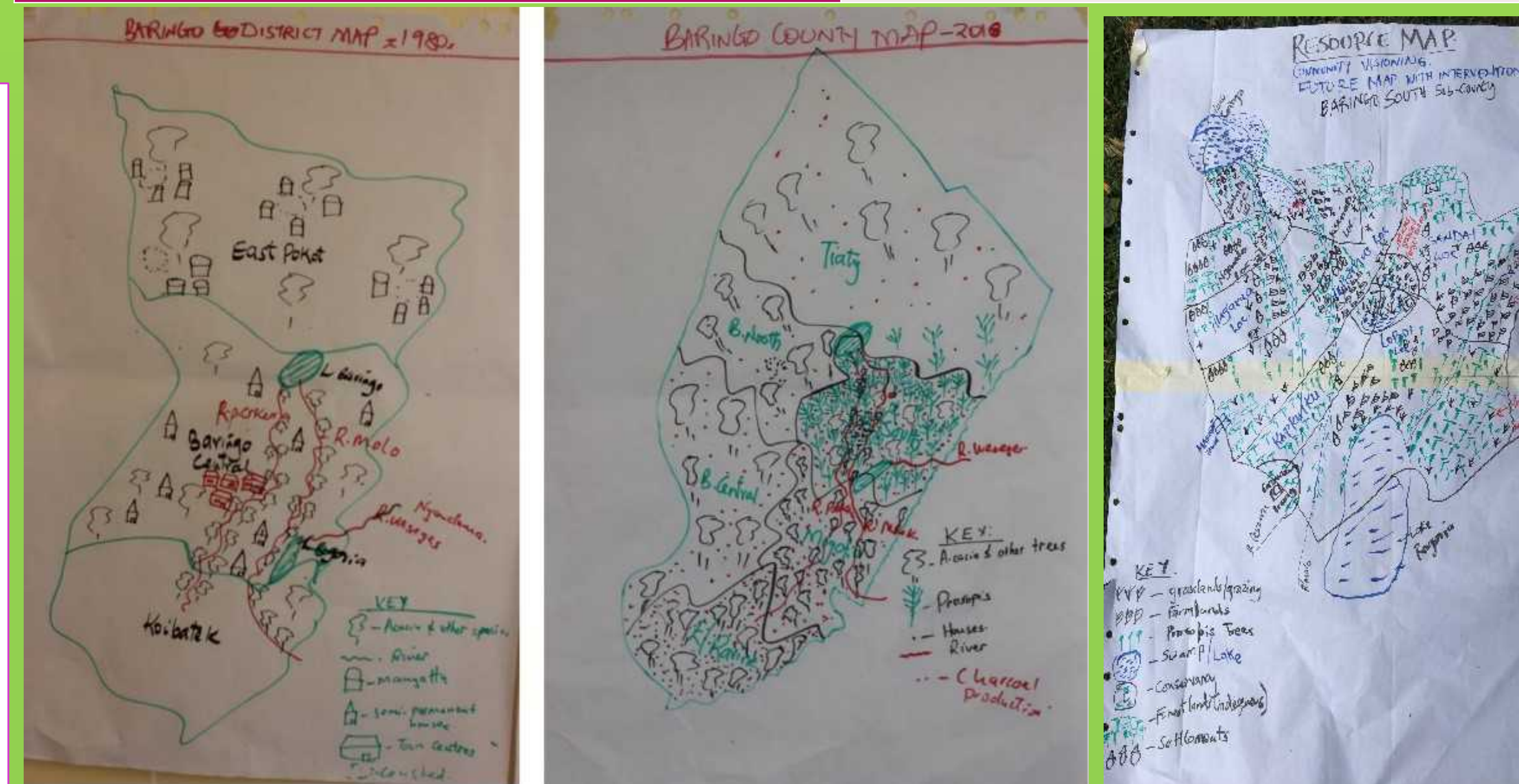
Focused Group Discussions participatory visioning and action planning. 32 participants representatives of charcoal producer associations in Baringo, Ministry of Agriculture, Schools and Local artisans.

	location		
	Ngambo	Ilchamus	Loboi
Technology and access of soft loan:	XX	XXX	XXX
Building and Strengthening institutional capacities of the CPAs	XXX	XXX	XXX
Sustainable management of <i>Prosopis</i> landscape	XXX	XXX	XXX
Land tenure and tree user rights advocacy to foster respect and peace among community members	XXX	XX	XXX
Lift ban on <i>Prosopis</i> Charcoal- as a way of controlling <i>Prosopis</i> spread on the landscape through charcoal production.	XXX	XXX	XXX
Infrastructure and markets:	XXX	XXX	XXX
Regulation and enforcement:	XXX	XXX	XXX
Promote <i>Prosopis</i> charcoal as an important source of energy	X		
Ranking: " XXX" High; " XX" Medium; " X" Low			

Results and Discussion

The perceptions have shifted from positive when it was first introduced in 1975 to negative after facing a myriad of challenges attributed to the species.

- Some of these challenges include
 - loss of crop and pastureland,
 - human physical injuries caused by *Prosopis* thorns,
 - loss of native tree species, flooding,
 - human settlements displacement,
 - increased malaria cases
- In the last decade, the community started to appreciate the value *Prosopis* mainly because of its provisioning of
 - wood for charcoal, firewood, timber and fencing materials for household use and income generation,
 - employment opportunities along charcoal value chain
 - ecosystem services such as reduced soil erosion, shade and wind breaking.



The community mapped the area before *Prosopis* invasion, current situation and the future scenario after implementation of management interventions Figure 2a-c

Table 1. *Prosopis juliflora* products harvested by communities in Marigat sub-county

Benefits	Nature of function/benefit	Women (N=7)		Men (N=10)	
		Score ^a	Rank	Score	Rank
Charcoal	Wood fuel	14	1	18	1
Firewood	Wood fuel	15	2	47	4
Fencing	Timber	16	3	18	1
Shade	Timber	29	4	73	6
Post	Timber	40	5	39	3
Roofing	Timber	56	6	89	8
Control soil Erosion	Ecological function	58	7	70	5
Furniture Making	Timber	63	8	93	10
Improve soil fertility	Ecological function	70	9	91	9
Medicine (roots, leaves, bark)	Medicinal value	71	10	112	13
Animal feeds	Food and Feed	73	11	98	11
Windbreak	Ecological function	76	12	77	7
Wound soothing	Medicinal value	78	13	115	14
Food	Food and Feed	81	14	110	12

Conclusions

The study recommends;

- management of *Prosopis* through sustainable production of charcoal and other wood and non-wood products
- clearing of some areas invaded by *Prosopis* and enriching them with other multipurpose trees for improved multifunctional landscapes and resilient livelihood systems.

References

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