

**CONVENTIONAL AND INDIGENOUS KNOWLEDGE INTEGRATION
FOR THE RESTORATION OF DEGRADED RANGELANDS IN
NORTHERN KENYA**

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Background

- Rangelands **support** a large portion of global human pop. and its diversity, but loss of vegetation, degradation and the continuous spread of alien and indigenous invasive species **threaten** these landscapes.
- Restoration of rangelands relied upon scientific approaches **exclusively** but yielded **little successes**.
- **Adaptive collaborative research** took the approach of combining science + indigenous knowledge to restore degraded rangelands in Garissa and Marsabit counties, Kenya
- **Data Collection:** Participatory research methods: key informant interviews, focus group discussions, observations, and transect walks.
- The target groups included pastoralists and agro-pastoralists of either gender who were **randomly** selected from different households.
- **Age:** Young, middle aged and old persons

Key Findings

- **Finding 1**

- **27** priority indigenous trees, shrubs and **18** grasses were identified in the vernacular cushitic languages of Somali and Borana.

- Main trees/Shrubs are: ***Acacia tortilis*, *Grewia tenax*, *Cordia sinensis***

- **Main grass species are: *Dareema*-(*Chrysopogon aucheri* (Critically endangered) *Bilaa*-(*Aristida spp*), *Jarbi*- (*Cynodont plectostachyus*)**

- Preference for species different among communities- due to the plant need difference and fodder & forage preference by type of livestock kept

- **Neem** found in every household

Findings 2, 3 & 4

Pastoral conservation/management approach

- Pastoralists preferred **conserving and managing naturally** growing plants in rangelands rather than planting
- **Marking of plants-** Prohibiting cutting them and enhanced natural regeneration



Socio-cultural practices & fencing

- **socio-cultural practices** of the Muslim communities- (extended family lifestyle + prayers)
- **Fencing-** trees planted within homesteads to prevent livestock from destruction and grazing on it.



Scientific knowledge

- **Zai-pits and water retention ditches** in the farms along the river to enhance vegetation growth and recovery process.



- **Conclusion:** Knowledge integration **demonstrated success** in restoring rangelands in Northern Kenya and recommend the **combination and use of the two knowledge systems** in ensuring successful participatory rangeland restoration in the drylands.