Rainwater harvesting from Roads For Indigenous Pasture production and improved rural livelihoods in semi-arid Kitui, Kenya (ROFIP)

Roads for Improved Pasture Production in African Drylands

DREAM II – Learning Event

The Rangeland Fodder Nexus

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Introduction

Grass and Forage Science
The Journal of the British Grassland Society | The Official Journal of the European Grassland Federation

The choice of grass species to combat desertification in semi-arid Kenyan rangelands is greatly influenced by their forage value for livestock

K. Z. Mganga*, N. K. R. Musimba*, D. M. Nyariki*, M. M. Nyangito† and A. W. Mwang'ombe‡

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The Rangeland Journal, 2015, **37**, 489–495
http://dx.doi.org/10.1071/RJ15023

Competition indices of three perennial grasses used to rehabilitate degraded semi-arid rangelands in Kenya

K. Z. Mganga[A,C], N. K. R. Musimba[A] and D. M. Nyariki[B]

frontiers in Ecology and Evolution

Plant Morphoecological Traits, Grass-Weed Interactions and Water Use Efficiencies of Grasses Used for Restoration of African Rangelands

Kevin Z. Mganga[1,2], Eric Kaindi[1], Aphaxard J. N. Ndathi[1], Luwieke Bosma[3], Theophilus Kioko[3], Nancy Kadenyi[3], Gilbert K. Musyoki[1], Stephen Wambua[1], Frank van Steenbergen[3] and Nashon K. R. Musimba[1]*

Rainwater harvesting from roads for indigenous pasture production & improved rural livelihoods in Kenya (ROFIP)

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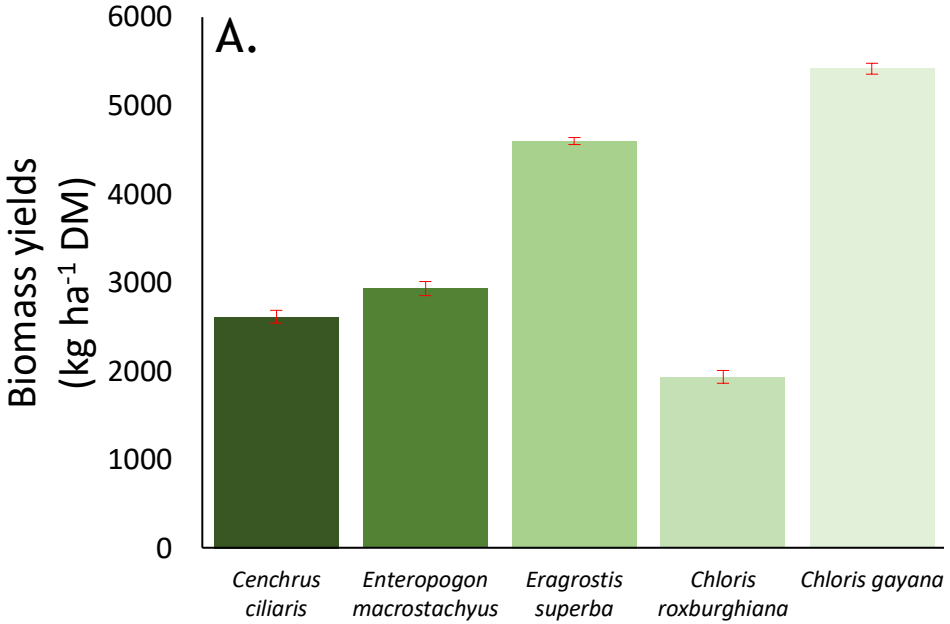
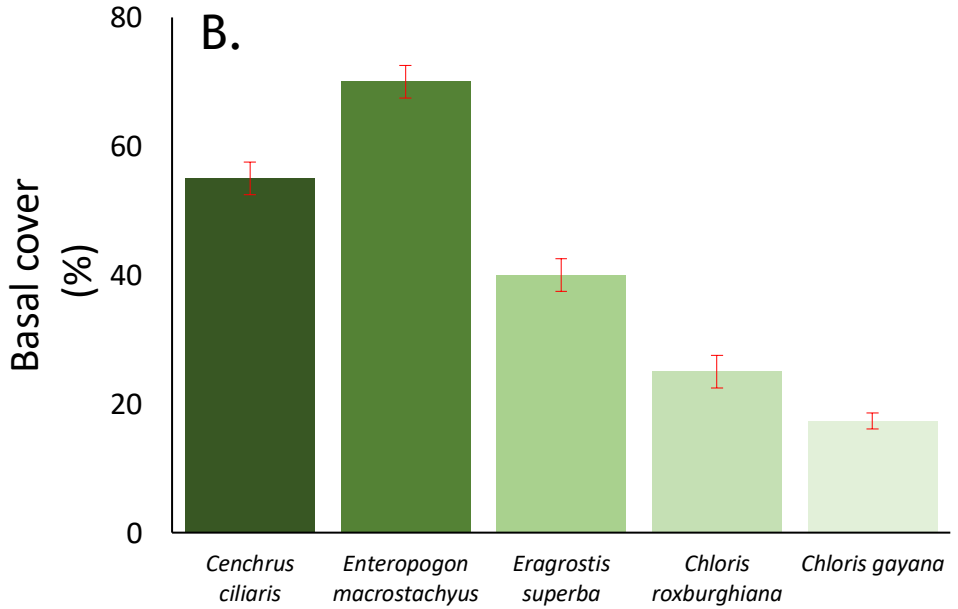
Selected results and lessons learned



Forage and livestock production



Restoration of degraded African rangelands

- Great potential of **rainwater harvesting from 'green' roads** to enhance pasture production in African rangelands.
- Investment in local and **native pasture seed systems in Africa**.
- Utilize the valuable 'wealth' of existing Indigenous Technical Knowledge (ITK) – **community involvement**
- Incorporation of **environmental and social needs** to address inherent societal challenges e.g. livelihood diversification
- Careful **selection native grasses** to maximize on their unique strengths.

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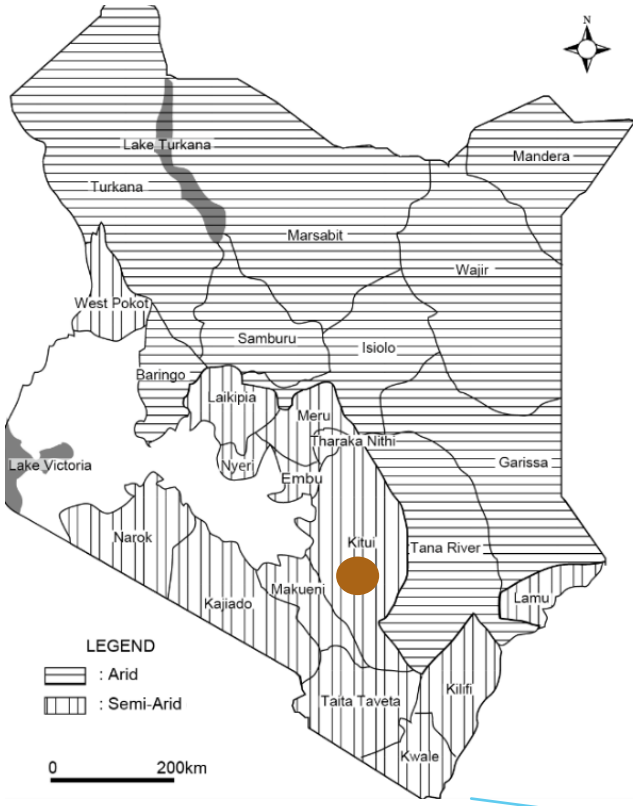
Flood-Based Livelihoods Network Foundation

Up-scaling?

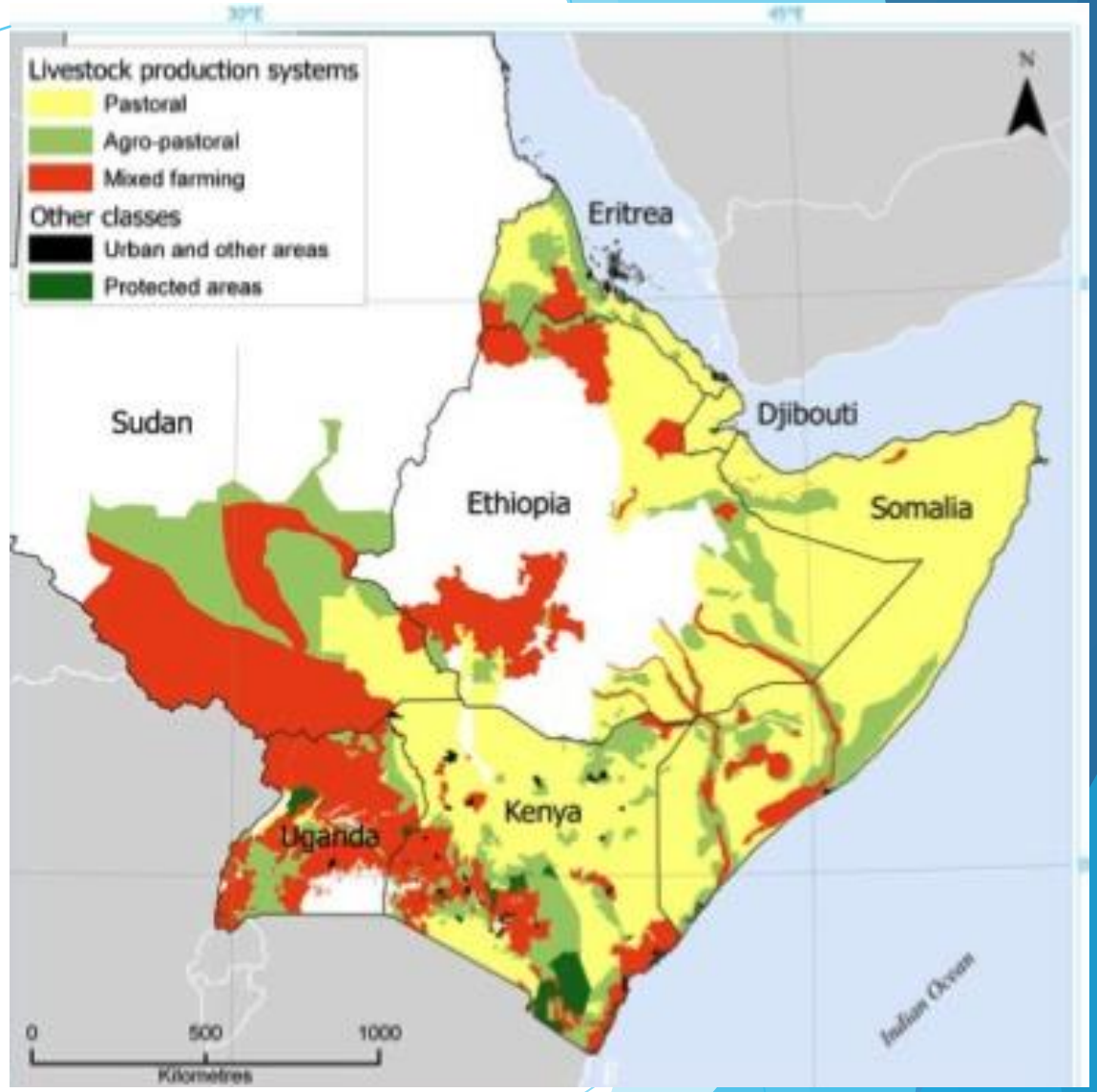


Map of Kenya highlighting (shaded region) the arid and semi-arid counties. These constitute 80% of the landmass and 23 out of the total 47 counties in Kenya. Brown spot = ROFIP Study Area, Kitui County

Eragrostis superba

Cenchrus ciliaris

Enteropogon macrostachyus



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Part of the DREAM for dry lowlands?

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