

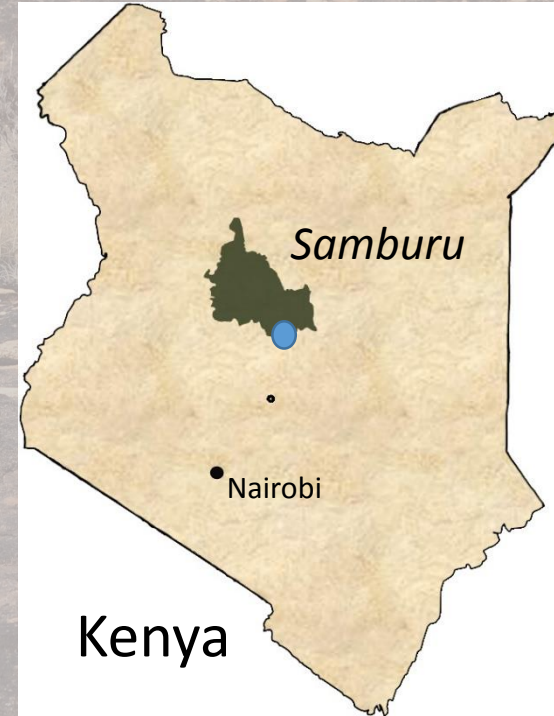
Revitalizing Culture and Ecosystems through Environmental Education in Samburu, Kenya.




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Background

- Hot
- Dry
- Acacia bushland with intermittent forested highlands
- Populated with semi-nomadic pastoralists





A man in traditional Maasai attire, including a red shuka and a beaded necklace, is sitting on a grassy hillside. He is looking out over a vast, hazy savanna landscape with rolling hills in the distance. The sky is filled with large, white, fluffy clouds. The overall scene conveys a sense of contemplation and connection to nature.

Times are 'a changin'

Traditional Ecological Knowledge

Traditional Ecological Knowledge (TEK): “a **cumulative** body of knowledge and beliefs, handed down through generations by **cultural transmission**, about the relationship [between people and their] environment.” (Berkes, 1993)

- Practical
- Dynamic
- Holistic
- Quasi-spiritual



Importance of TEK for Samburu

An intimate knowledge of the environment has been vital for surviving as nomadic pastoralists.

- Food
- Livestock fodder
- Medicine
- Construction and materials
- Medicine for livestock
- Land management/movements



Importance of TEK for Samburu

As modernization sets in people are inclined to turn away from TEK in favor of western trappings.

-When it comes to sustainable land management, this may be a huge mistake...



A little about our Research

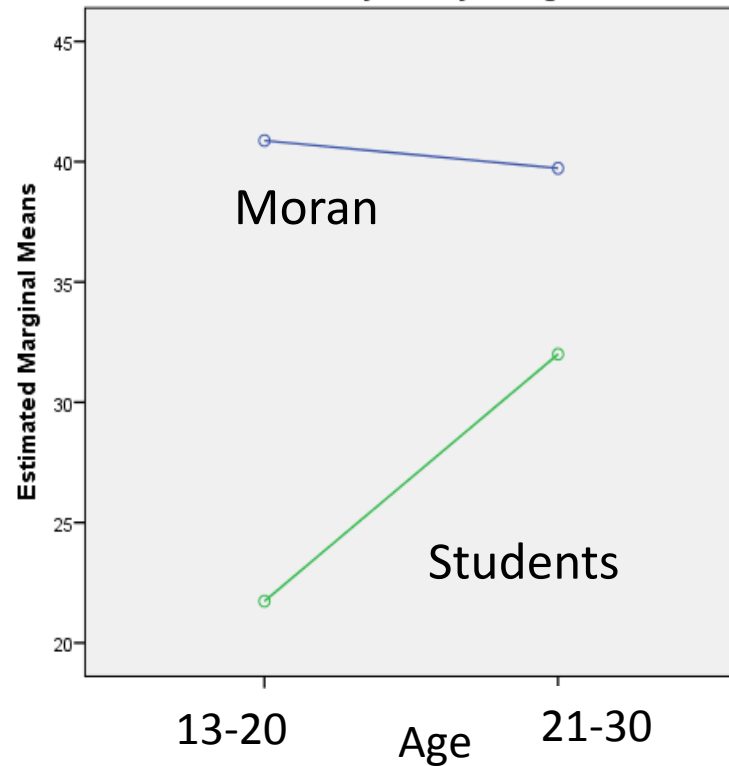


Results

Students can ID fewer plants than herders.

Students cannot relay as many important facts as Moran

Estimated Marginal Means of Total ID: How many plants did the participant correctly identify during the transect



Part 1: Westerners and TEK

There are three different 'hats' that western researchers/practitioners can wear while interacting with TEK.

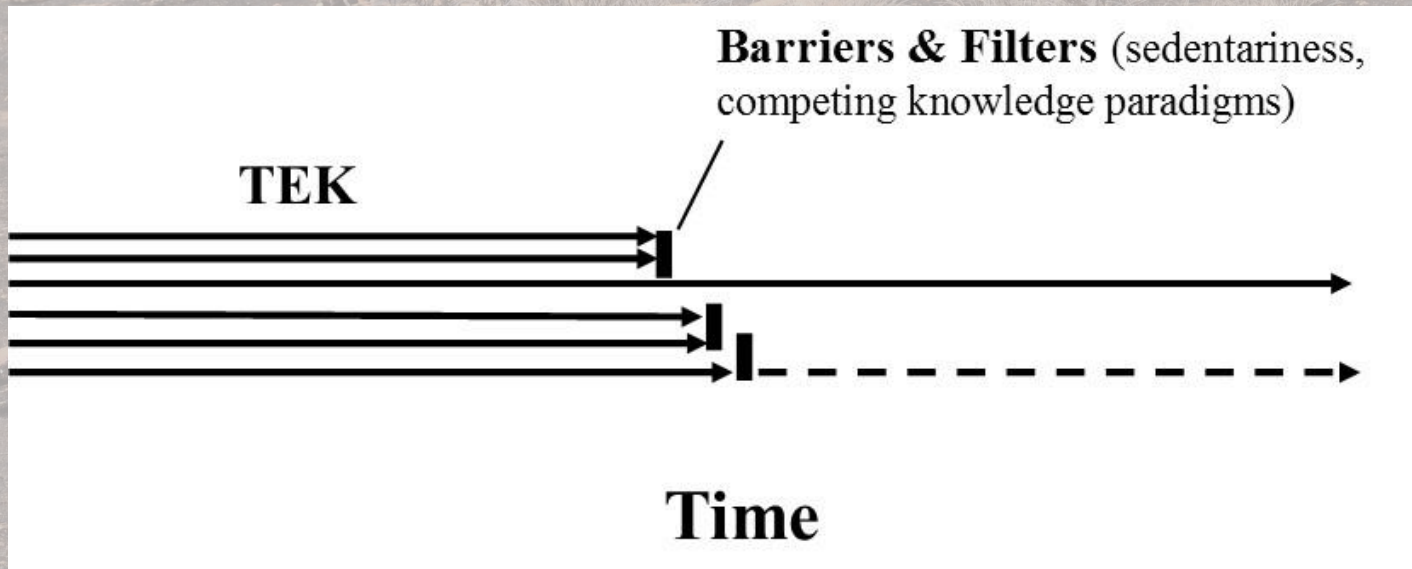
1. Pharmacologist

2. Triage Archivist

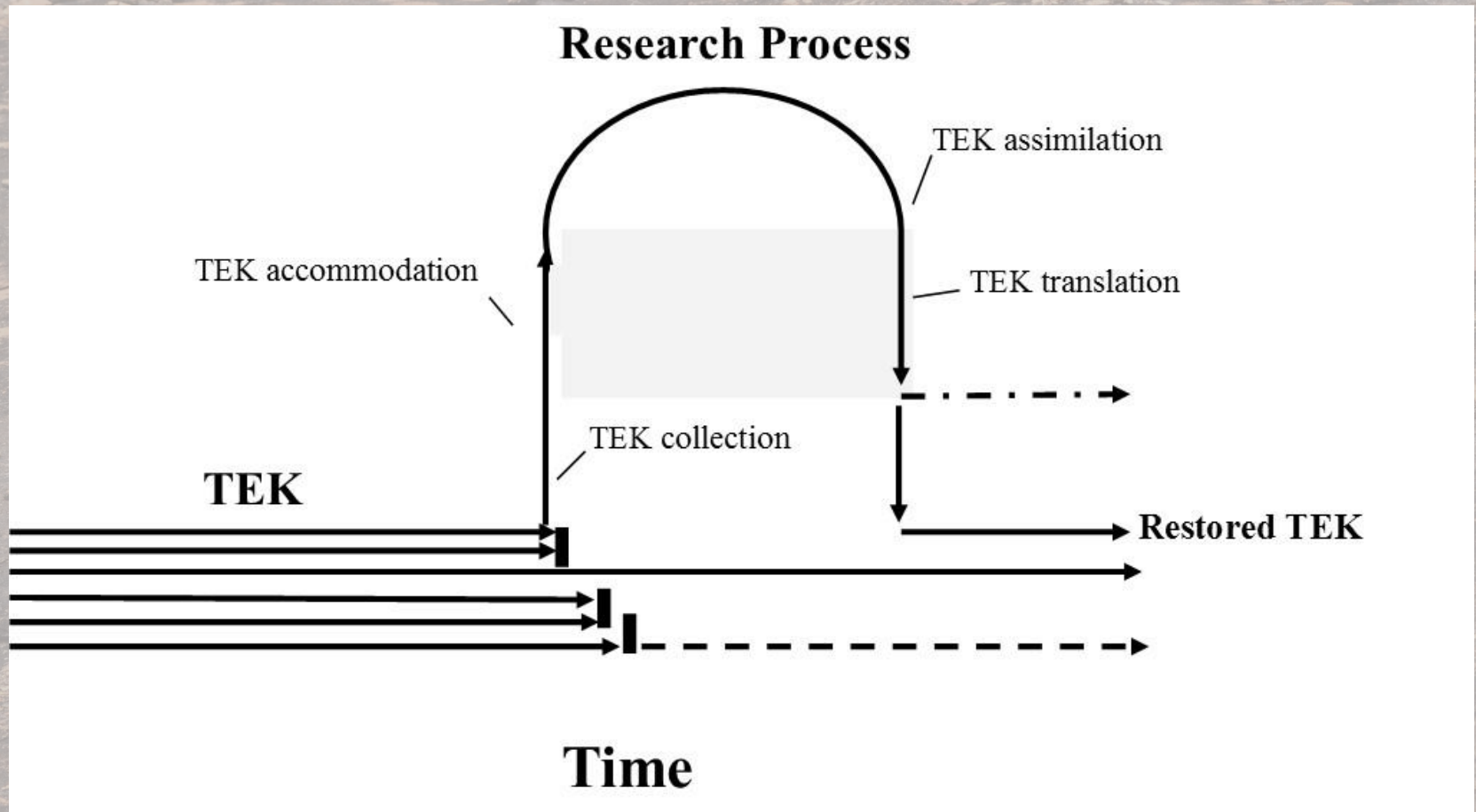
3. Collaborator



The Horseshoe Model

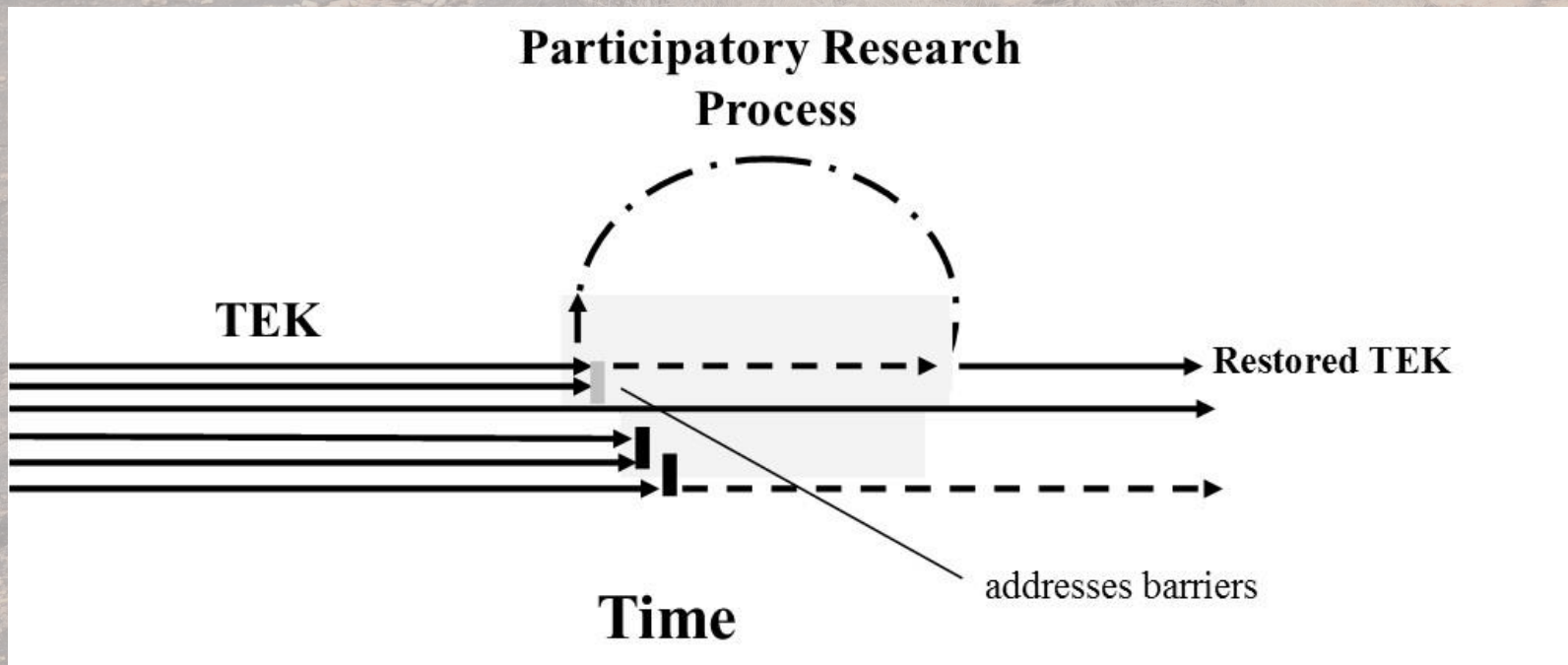


The Horseshoe Model





The Horseshoe Model



Part 1: take away points

- Westerners should engage with TEK on the *community's terms*
- What is needed?
- What skills and resources does the community already possess? Why are they not being used?
- What skills/resources can we offer that the community is lacking?

Part 2: TEK and Environmental Education

- Special programs:
Bush Camp!
- Extracurricular
Elders in schools













It really *is* all about collaboration









Part 3: Landscape Rejuvenation with TEK

- Started with a question:
How do you get a large community to collectively manage their rangelands?



Part 3: 'Three Spears' curriculum



Spear 1: *Pastoralist* Managed Natural Regeneration

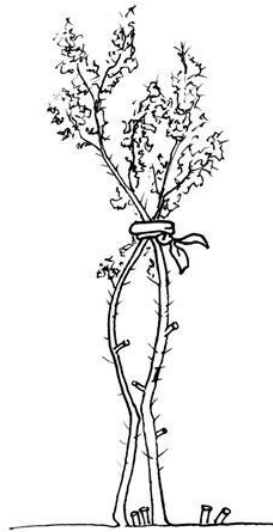


Tony Rinaudo, World Vision

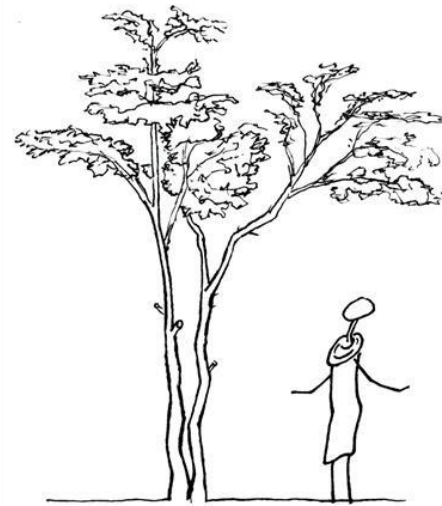




Choose 1 - 3 of the healthiest, straightest branches to prune into trunks. Cut away other branches with a sharp tool. Cut from the bottom of the branch to prevent too much damage to the plant.



Prop or tie trunks so they grow straight up. You can use the removed branches as a protective boma and mulch for the tree. Prune bottom 1/2 of twigs.



Try to protect the tree from animals until it grows out of their reach. Prune the bottom branches 2-3 times a year so it keeps growing upward.

Use any of these sharp tools:



Best



Good



Ok

Prunings 1/4



Ltepes (*Acacia tortilis*)













Spear 2: *Soil and water catchment*

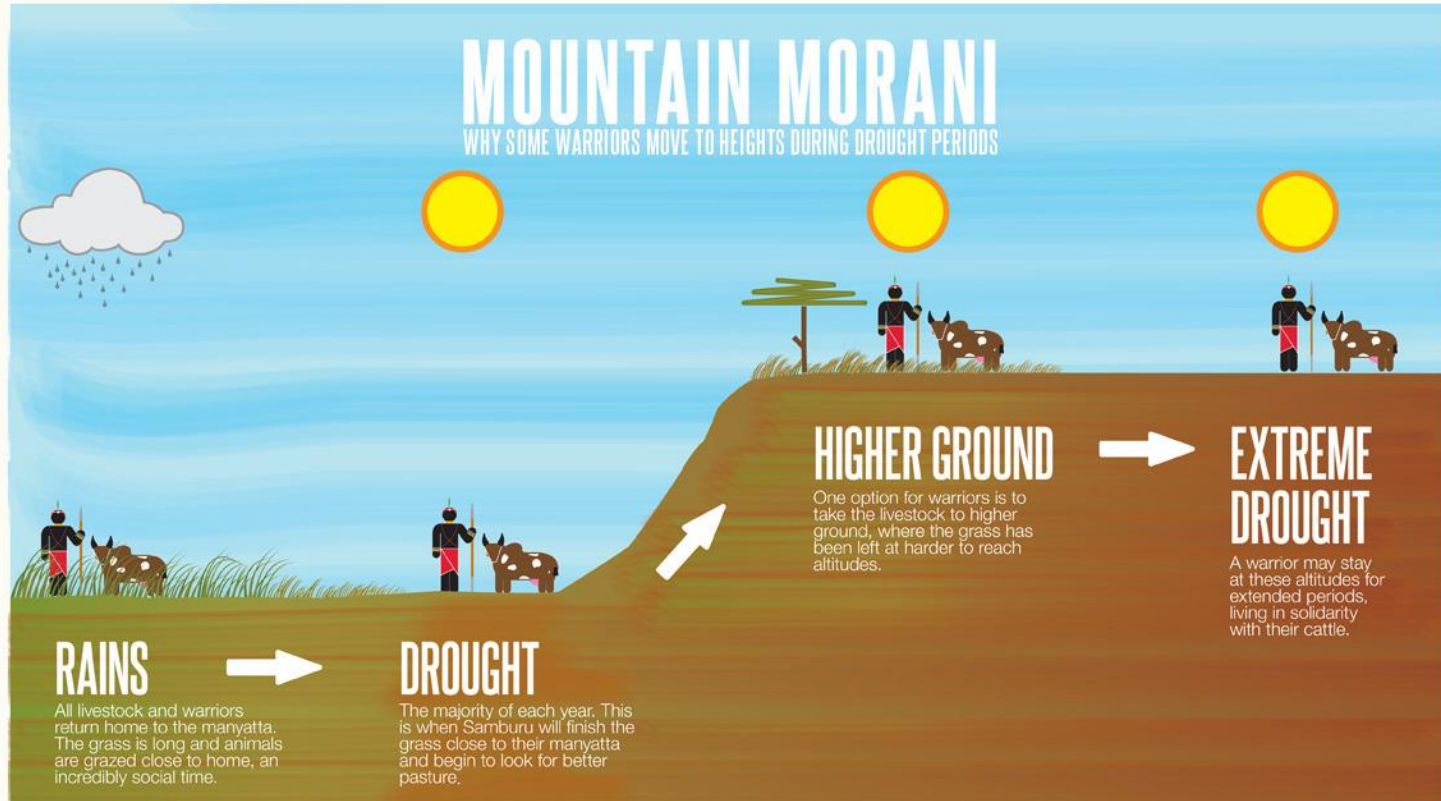
Yacouba Sawadogo



https://www.youtube.com/watch?v=Dm_qlyvdZ_A



Spear 3: Coordinated Grazing Plan





Questions?







