

# Forest Landscape Restoration in Kenya

## Addressing Gender Equality

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RESEARCH  
PROGRAM ON  
Forests, Trees and  
Agroforestry

# BACKGROUND

- As part of the Bonn Challenge, the Kenyan government has pledged to restore 5.1m ha by 2030
- To move from pledge to implementation, the Kenyan government decided to develop a National FLR Strategy
  - Process led by Kenyan Government and WRI; CIFOR asked to support by conducting 'gender assessment'
  - Based on pre-defined landscapes (forest, cropland, rangeland)
  - Prioritization of restoration options in different landscapes to be informed by cost-benefit analysis



# COST-BENEFIT ANALYSES AND WHY THEY MATTER

- Different agendas, objectives, priorities and approaches: synergies and trade-offs between different landscape functions, as well as environmental and socioeconomic objectives
- Key steps: 1) define restoration transition (e.g. degraded cropland => agroforestry); 2) identify impacts to stakeholders (costs and benefits); 3) monetize and aggregate all impacts, discount long-term impacts; 4) make policy recommendation (option with largest net present value) (Verdone et al 2015)
- “Accounting for the impacts of restoration activities provides an opportunity to determine if their current designs warrant investments ... [and] offers an opportunity to adjust restoration models so that investors see restoration as an investible opportunity.” (Verdone 2015, 4)

**Table 9.** Discounted benefit flow analysis for eucalyptus woodlot

<b>Description of benefits and costs</b>	<b>Aggregate Discounted Values 2018 to 2042 @7%</b>
<b>Benefits flow</b>	
Revenue from wood (stumpage value)	1,351,107
Benefit from sale of poles (thinning)	1,129,443
Carbon sequestration	348,354
Avoided costs of soil loss	124
<b>Discounted benefit value</b>	<b>2,829,028</b>
<b>Costs</b>	
Purchases of eucalyptus seedlings	20,935
transportation of seeds/seedlings	5,607
Planting	24,469
Beating up labour	6,988
Beating up seedlings	4,891
Weeding	27,701
Maintenance and security	55,937
Harvesting	3,666
Chemicals (Termiticides)	7,710
Fencing	116,344
Manure	16,159
Fertilizer	1,939
<b>Discounted cost value</b>	<b>292,347</b>
<b>NPV</b>	<b>2,536,681</b>

IUCN (forthcoming)

# THEORETICAL FRAMEWORK

Sijapati Basnett, B., Elias, M., Ihalainen, M., Paez-Valencia, A. M. (2017): *Gender matters in Forest Landscape Restoration. A framework for design and evaluation*. CIFOR, Indonesia.

- Gender roles and inequalities influence women and men's restoration priorities, contributions as well as the distribution of costs and benefits
  - Who incurs what costs, who has access to what benefits?
- Equitable participation and benefits can be critical to effective and sustainable restoration

Research questions:

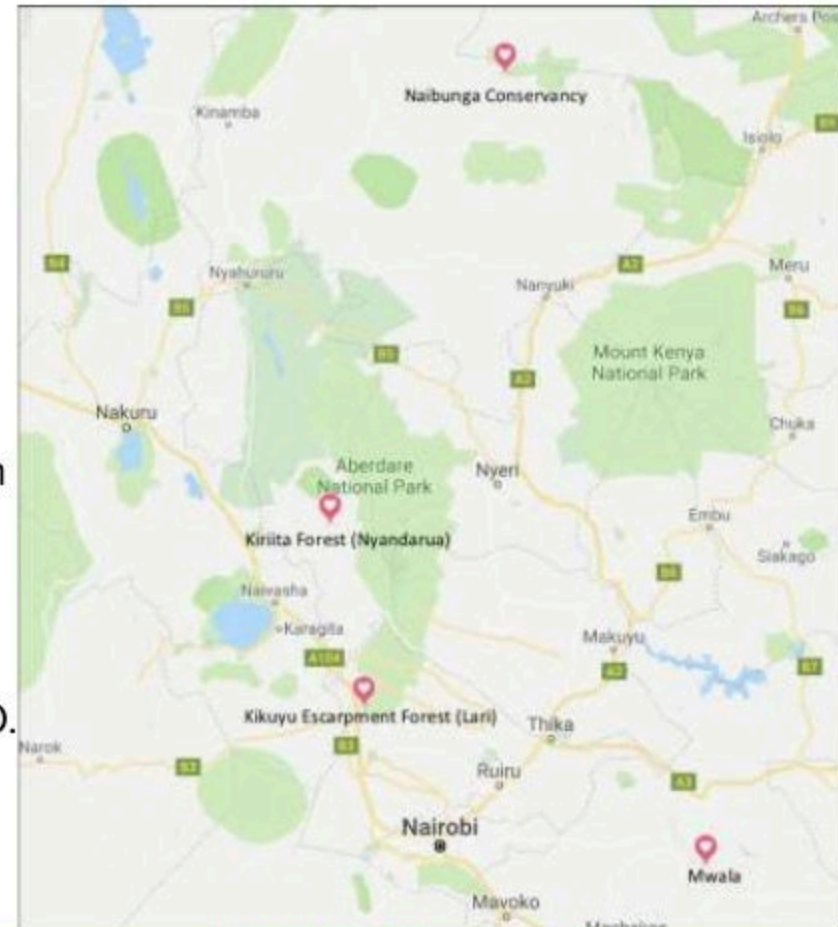
- How and to what extent are women and men participating in and benefiting from FLR initiatives?
- How do different types of FLR initiatives across different landscapes (forests, rangelands, croplands) impact women and men's rights and wellbeing?
- What are some of the key mechanisms and underlying factors causing differentiated and/or unequal participation, benefits and impacts between and among women and men?



# STUDY SITES AND METHODOLOGY

## Case studies:

- Rangeland: Naibunga Conservancy (Laikipia County), implemented by Northern Rangeland Trust and community.
  - Rehabilitation (zoning, reseeding, conservation)
- Cropland: Mwala (Machakos County), implemented by WorldVision
  - Agroforestry, silviculture
- Forestland: Geta forest (Nyandarua County), PELIS program implemented by KFS
  - Reforestation (plantations)
- Forestland: Kikuyu escarpment forest (Lari county), PELIS + conservation and livelihood projects implemented by KENVO.
  - Conservation, reforestation (plantations)



## Methods

- Literature and policy review
- FGDs and key informant interviews

Site	Project staff	Key informant	FGDs
Naibunga	Project Officer (NRT)	Chairman of Naibunga Conservancy, male	8 men; 10 women
Lari	Project Officer (KENVO)	CFA chairperson, male	4 men; 4 women
Nyandarua	District Forest Officer (KFS)	CFA chairperson, male	9 men; 6 women
Mwala	Project Officer (WorldVision)	WRUA chairperson, male	5 men; 6 women

# DIFFERENTIATED COSTS AND BENEFITS

Location	Option	Context	Costs	Benefits	Approach
Mwala	Agroforestry	Women provide most agricultural labor; men control land; male out-migration	Financial (M/w); Labor (W)	Timber (M); fruits (m/w); income from crop sales (m/w); labor (w)	Engage women's group; market support; technical and financial assistance
Naibunga	Rangeland rehabilitation (zoning, opuntia-removal, grass reseeding, protection of Acacia)	Pastoralist community: men raise livestock, women produce charcoal; decision-making vested in male leaders.	Livelihood loss (w); labor (W/m)	Better grazing, improved cattle income (M); casual salaries (W/m); alternative livelihood (W); firewood (w)	Cattle payments paid to household head; women prioritized in casual labor; cash payments for casual work; support to women's group
Nyandarua	Afforestation	Public land; men own majority of private farmland around forest; gender-equitable CFA (1/3 gender quota)	Labor (esp tree planting) (W/m); financial (m/w)	Income from crop sales (W/m); cooler climate (m/w); timber (KFS)	Allow community-members to plant short-rotation crops on forest land while tending for trees; priority to disadvantaged groups
Lari	Afforestation; conservation	Public and private land; men control land while women do most farming; male-controlled CFA	Labor (male out-migration; tree planting and farming) (W/m); financial	Tree nurseries (m); crop sales (M/w); income from alt. livelihood initiatives (m); food security (all); timber (M/KFS)	Allow community-members to plant short-rotation crops on forest land while tending for trees; small-scale livelihood initiatives



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<u>Naibunga</u>	Rangeland rehabilitation (zoning, opuntia-removal, grass reseeding, protection of Acacia)	Pastoralist community: men raise livestock, women produce charcoal; decision-making vested in male leaders.	Livelihood loss (w); labor (W/m)	Better grazing, improved cattle income (M); casual salaries (W/m); alternative livelihood (W); firewood (w)	Cattle payments paid to household head; women prioritized in casual labor; cash payments for casual work; support to women's group
<u>Nyandarua</u>	Afforestation	Public land; men own majority of private farmland around forest	Labor (esp tree planting) (W/m); financial (m/w)	Income from crop sales (W/m); food security (all); cooler climate (m/w); timber (KFS)	Allow community-members to plant short-rotation crops on forest land while tending for trees; priority to disadvantaged groups
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<u>Mwala</u>	Agroforestry	Women provide most agricultural labor; men control land; male out-migration	Financial (M/w); Labor (W)	Timber (M); food security (m/w); trainings (W); income from crop sales (m/w); labor-saving technology (W)	Engage women's group; market support; technical and financial assistance
<u>Naibunga</u>	Rangeland rehabilitation (zoning, opuntia-removal, grass reseeding, protection of Acacia)	Pastoralist community: men raise livestock, women produce charcoal; decision-making vested in male leaders.	Livelihood loss (w); labor (W/m)	Better grazing, improved cattle income (M); firewood (w); casual salaries (W/m); alternative livelihood (W);	Cattle payments paid to household head; women prioritized in casual labor; cash payments for casual work; support to women's group
<u>Nyandarua</u>	Afforestation (plantation establishment)	Public land; men own majority of private farmland around forest	Labor (esp tree planting) (W/m); financial (m/w)	Income from crop sales (W/m); food security (all); cooler climate (all); timber (KFS)	Allow community-members to plant short-rotation crops on forest land while tending for trees; priority to disadvantaged groups
<u>Lari</u>	Afforestation (plantation establishment, private woodlots); conservation	Public and private land; men control land while women do most farming; male-controlled CFA	Labor (tree planting and farming) (W/m); financial (m/w)	Tree nurseries (m); crop sales (M/w); income from alt. livelihood initiatives (m); food security (all); timber (M/KFS)	Allow community-members to plant short-rotation crops on forest land while tending for trees; small-scale livelihood initiatives



# KEY TAKE-AWAYS

- Implementation of restoration activities is heavily dependent on local people's labor
- Gender division of labor in restoration reflects pre-existing relations, norms and perceptions about women and men's labor
- Access to long-term benefits influenced by gender relations in terms of land ownership and decision-making power, often biased against women and youth
- Prioritization of restoration options, CBAs need to be informed by gender analysis and inclusive consultations, recognize women as stakeholders
- Various forms of short-term benefits play an important role in incentivizing and compensating for participation in restoration activities, calling attention to project/program design and delivery
- Access to immediate benefits (esp. financial) can have transformational potential
  - However, weak monitoring of socioeconomic impacts

Thank you!



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