

ETH

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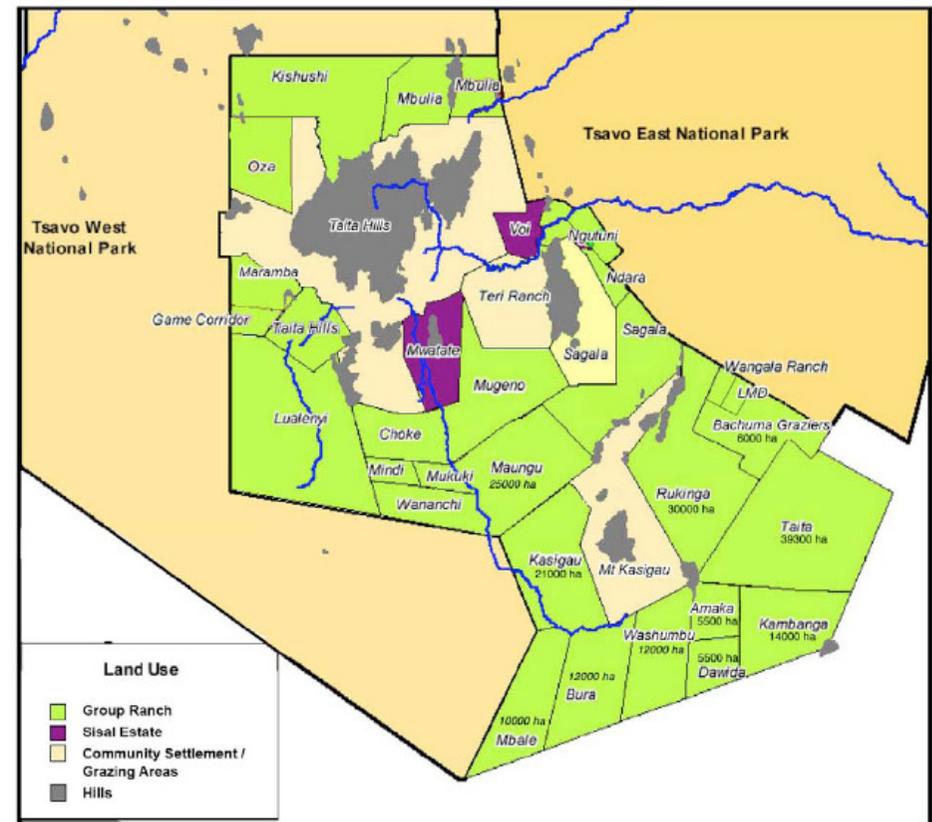
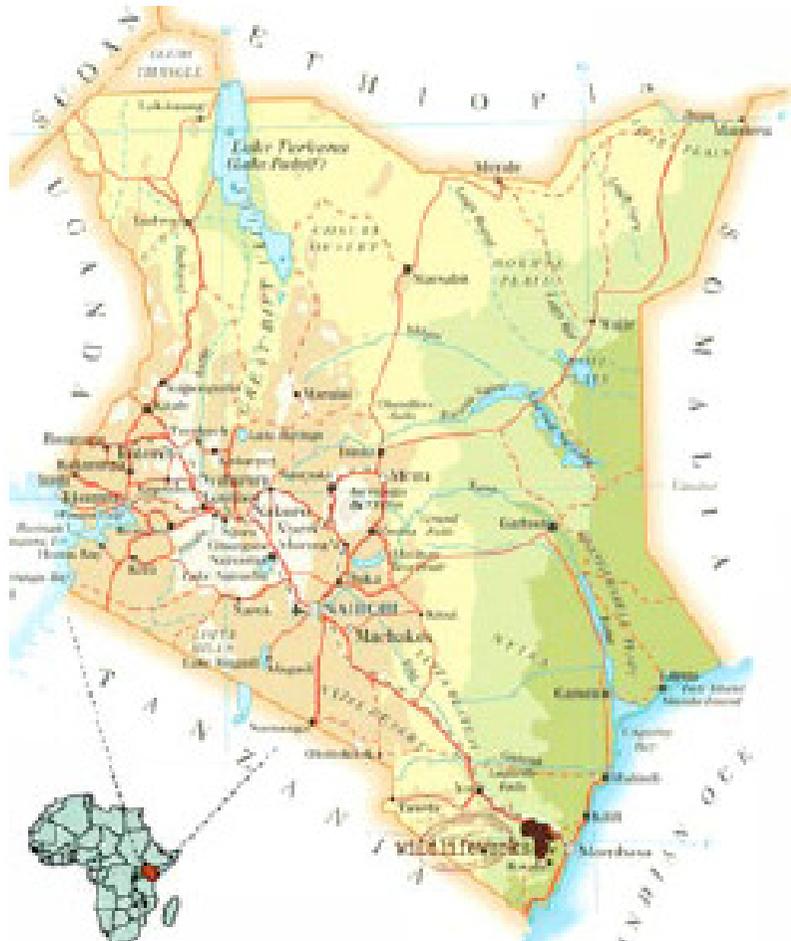


Permanence in REDD+ Schemes

A case study on one of the world's first REDD projects



The Kasigau Corridor REDD project



The Kasigau Corridor REDD project

- Privately Managed REDD Project, by Wildlife Works Carbon Ltd.
- Kenya's first Carbon Easement Agreement
- First project world wide to issue carbon credits under an internationally accepted standard



The Kasigau Corridor REDD project

- Land Owners \neq Land Users
- Main driver of deforestation: Subsistence Agriculture



- Main driver of degradation: Charcoaling

Degradation: Charcoal



Degradation: Charcoal

- Cities use huge amounts, also local demand
- Inefficient, traditional charcoal production
- De Jure illegal, but very common and basis of many livelihoods
- Not only an issue in Kenya, but all over Africa
- Energy source and export good, therefore virtually unlimited demand

Wildlife Works Eco Charcoal Project

- Replace charcoal at the bottom of the chain of producers, transporters and traders
- Equivalent, but environmentally friendly product
- Pilot up and running, two more production sites on the way
- Funded through income from REDD credit sale

Eco-Charcoal – What's that all about?



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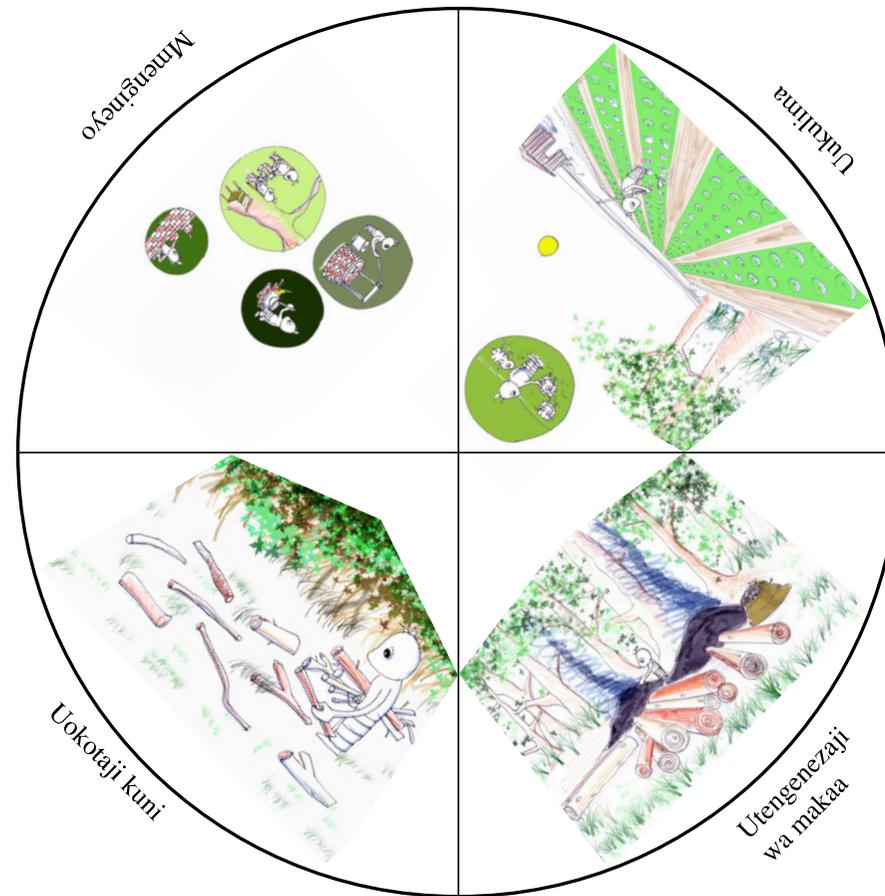
Research Questions

- Can Eco-Charcoal be a permanent solution to avoid degradation?
- What happens if the charcoal price goes up and down?
- Can an Eco-Charcoal factory provide effective incentives to stop conventional charcoaling?
- How does Eco-Charcoal compare to conventional agricultural policies?

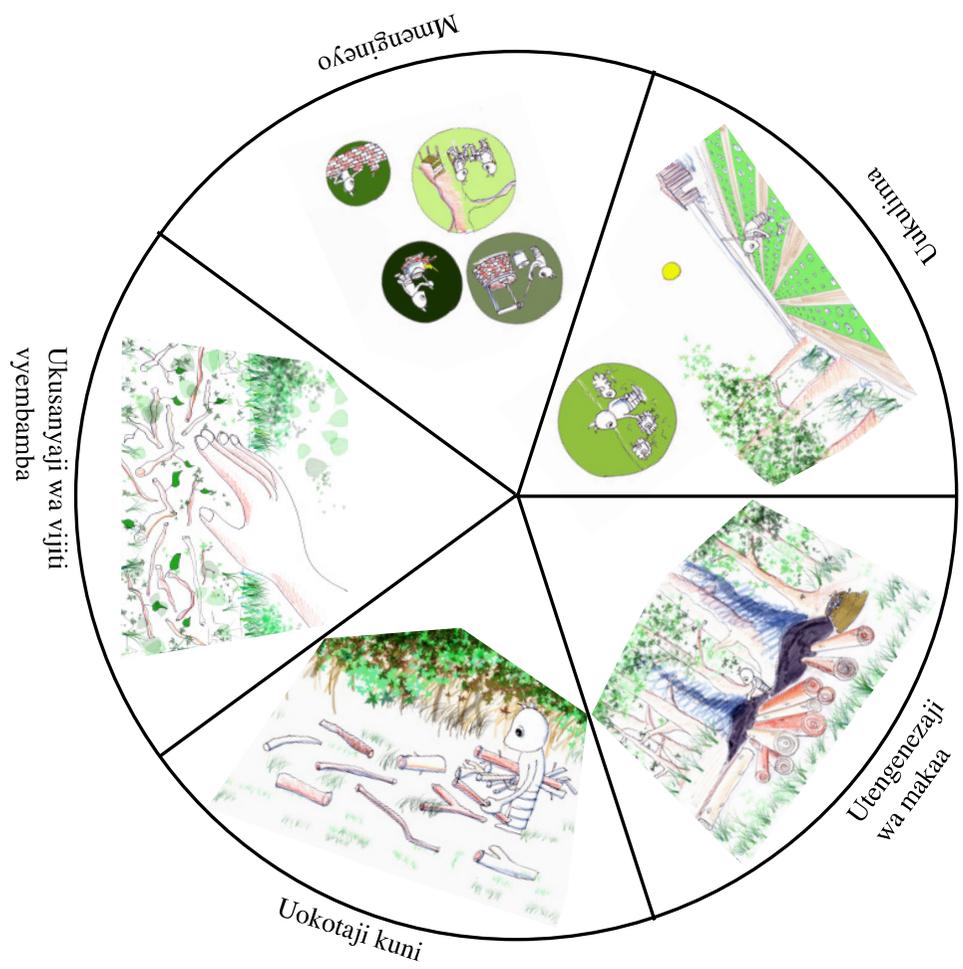
Methods

- Household survey, N=1095
- Stated time allocation experiment for status quo and two of 40 different scenarios with varying prices for charcoal, eco-charcoal raw material and additional provision of cash crops.
- Household head states time allocation for all absent members of the household

Methods – The Bean Game



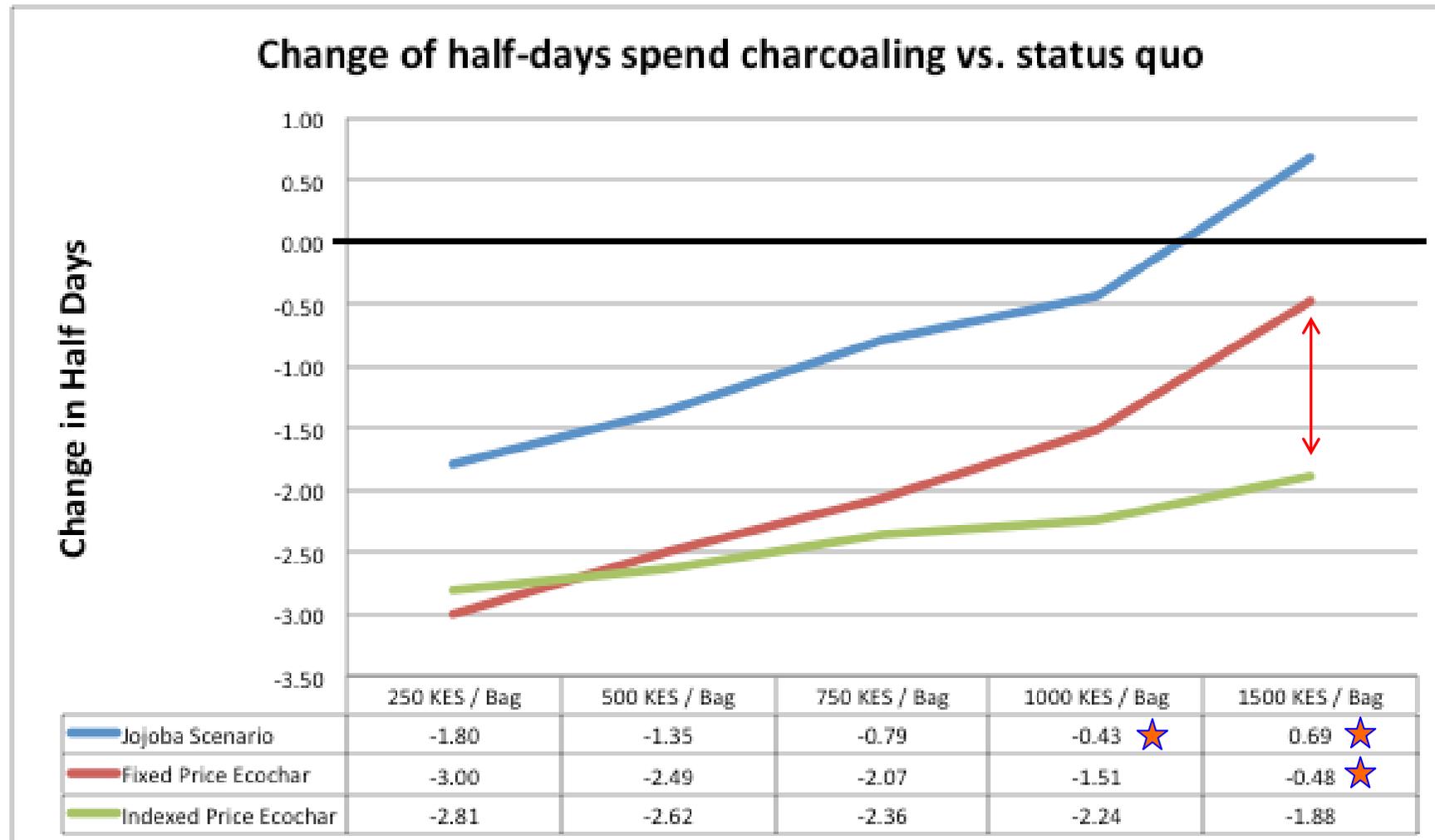
Methods – The Bean Game



Scenarios

- Prices of charcoal vary from 250 – 1500 Ksh per bag (current price 500 Ksh, 1500 Ksh in 200 km)
- Proposed prices per bag of scrap wood:
 - 200 Ksh fixed price
 - Indexed price, 13.3% of charcoal price (per kg)
 - Indexed with premium, 10% + 5% premium
- Cash crop introduction (Jojoba): 150'000 Ksh/acre or 250'000 Ksh/acre - roughly today's

Results



★ - Insignificant

Results

- Eco-Charcoal is in all cases more effective in reducing charcoaling than introduction of a drought resistant cash crop
- Eco-Charcoaling will be picked up by most people, not only by charcoalers.
- Key Result: Fixed payments for eco-charcoal raw material will not be a sufficient incentive to reduce charcoaling if charcoal prices increase.

Interpretation

- Factories controlled by the principle should offer an indexed price to suppliers of raw material.
- It may be of limited use to invest into eco-charcoal factories not controlled by the principal, as they cannot be expected to pay an indexed price.
- At a hypothetical CO₂ price of 5 USD / ton, it should pay for the principle to invest up to 500k USD/year into subsidies for eco-charcoal factories.

Future Questions (under investigation)

- What will be the effects of a market for eco-charcoal raw material on gender work distribution?
- What will be the effects on child labor?
- What are the ecological limits to shrub utilization?

Discussion

- ...?

A blue-tinted photograph of a large, classical-style building with a prominent dome and arched windows, set against a landscape with hills and mountains.

Thank You

Methodological Limitations

- Time allocation to scrap wood collection likely to be overstated as responses indicate an underestimation of the workload involved
- No consideration of ecological limitations to scrap wood regeneration
- Time allocation in half days => low resolution
- Order effect observed (but controlled for)
- Assumption that 200 Ksh fixed price scenario is equivalent to hired, permanent workers
- Potentially difficult to control eco-char inputs

Conditionality Issues

- Total amount of cash available to the principle is conditional on actual forest condition due to the MRV requirements set by the carbon standard
- Payments for Eco-Charcoal production are not inherently conditional
- Punishment Scenario as an option to introduce conditionality => design not ideal... Low social acceptance
- Alternative Idea (too late): Eco-Charcoal payments conditional on “charcoal spots” found in the surrounding forest.