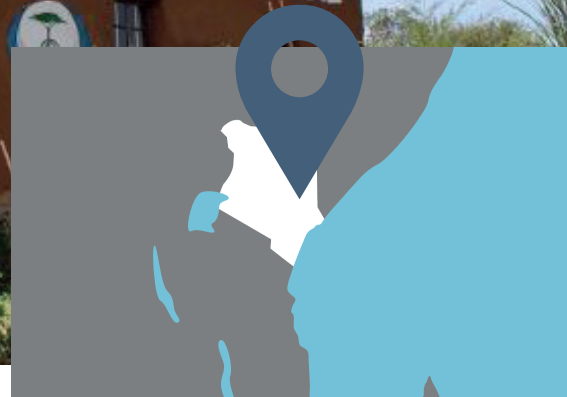
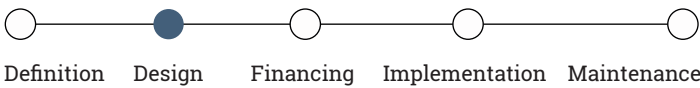




Laikipia Permaculture Nanyuki, Kenya



Development stage:



This project will tackle massive challenges encountered by Kenyan farmers and society. Vegetation, soil and people currently suffer from the detrimental impacts of overgrazing, deforestation and climate change in almost all counties of the country. To counteract these liabilities, the Laikipia Permaculture Trust and reNature are going to present an effective solution: Regenerative Agroforestry. With our Model Farm and Model School we will promote sustainable, climate-resilient production systems that regenerate land with the help of trees and climate-smart agriculture.

- Location:**
Laikipia County, Kenya
- Size of planted plot (ha):**
1 (5 ha could be purchased additionally)
- Size of potential area (ha):**
> 50 ha (tbd)
- Client:**
Laikipia Permaculture Centre
- Commodity:**
Aloe, Moringa, Cactus and more
- Industry:**
Food
- Goal:**
Creating and spreading an agroforestry system to adapt to climate change, regenerate soil, and increase farm resilience.
- Main Focus:**
Soil regeneration, climate resilience
- Partners:**
Naatum Women Group
Nabulu Women Group
Twala Women Group
Usugoroi Self-Help Group



Finance & Planning



Investment

30,000 \$ (Model Farm)
230,000 \$ (Model Farm + School)



Initiator

Joseph Lentunyoi



Assignment & Impact

Number of direct Beneficiaries

2000 farmers, families and community members

Development Challenge

More than 70% of Kenya's rural population work in agriculture. However, due to deforestation, mismanagement of livestock as well as climate change, soils are degrading and erosion is increasing. This affects the productivity of farms, the natural environment as well as the livelihoods of farmers who depend on their agricultural outputs.

Intervention

We will design and implement a Model Farm utilizing Regenerative Agroforestry to pilot, refine, and showcase different systems suitable for the local context. The focus lies on exemplifying the practice's benefits to farmers. Within the already existing Permaculture Centre, an educational programme (Model School) will be put in place to facilitate capacity-building and knowledge creation.

Objective

The goal is to inspire and facilitate farmers in adapting agroforestry to increase their farm's climate resilience, productivity, and fertility while regenerating degraded land.

Financial Details

reNature Model Farm: 30,000 \$ (Larger application for additional funds possible)

reNature Model School: 200,000 \$

Inspirational Impact

The Laikipia Permaculture Trust is comprised of four local women organisations consisting of 311 members. Through their wide network, they will reach a large number of farmers using the Model Farm to visualize the systems and the Model School as an educational center. The existing educational centre is already locally known and connected to more than 700 farmer.

Environmental Impact

The project will bring back indigenous tree species, increase local biodiversity and support plant and animal life. Trees will produce shade, whilst regulating the local micro-climate. Further, agroforestry systems will increase carbon sequestration levels, revive soil, and restore water cycles which have been increasingly drying out.

Economic Impact

Agroforestry will help farmers to secure precious yields. It will also increase their economic resilience by generating various income streams from different commodities cultivated on the same piece of land. Especially timber will face considerable demand on local markets. It will reduce costs for agrochemicals and often increases the farm's productivity.

Social Impact

Through increasing the farm's resilience, agroforestry will help farmers to secure their yields against climate change and degradation. It will therefore enhance food security. Further, farmer's will be able to source biomass from their own farms reducing the time needed to fetch firewood which specifically benefits women. Other social benefits include increased availability of drinking water and more diverse diets. The project will focus on species such as Moringa which also bring additional health benefits when consumed.



73% more
biodiversity



13% more
soil humidity



12 ton more
CO₂ sequestration
per ha/year

General impact of Agroforestry

Metrics

Outcome metrics:

- 1) Increase in yields
- 2) Increase in farmer's income
- 3) Agroforestry uptake of surrounding farmers
- 4) Increase in soil water content

Suggested evaluation methods:

- 1) Annual yield comparison of focus crops with 5-year baseline (kg/ha/year)
- 2) Farmer's annual income compared to 5-year baseline (kg/ha/year)
- 3) Number of farmers that have started the transition to agroforestry
- 4) (Amount after 3 years)
- 5) Annual comparison of soil water content (%/kg)