



SAMBURU WATER PROJECT FOR AGROFORESTRY KENYA – shift4Water

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WHY KENYA?

WATER FOR NAIBORKEJU

Climate change is omnipresent, and its effects are evident even in Europe. However, for the Samburu, an indigenous tribe in northern Kenya, the impacts are far more severe. The irregular rainy season has led to an acute water shortage in the region. The aim of shift4Water is to provide the village of Naiborkeju with a reliable water source to advance agroforestry practices. Agroforestry, which thrives on the symbiosis of cultivated plants with deep-rooted trees and is particularly suitable for warm, dry regions. Until now, the villagers of Naiborkeju, especially Peninah Lesorogol, have been financing the water supply for their plants themselves, a cost-intensive process involving truck deliveries. shift4Water aims to revolutionize the Status Quo by integrating innovative methods such as air humidity condensation, expanded water storage, and more efficient irrigation strategies. In July 2024, our team is set to roll out these strategies in Naiborkeju. With the following slides, we'll be providing a brief overview of the system's implementation and spotlighting key milestones in the process.



OUR SOLUTIONS

- Drip irrigation for the efficient use of water.
- Enhancing water storage solutions to bridge the gap between the wet and dry seasons.
- Condensation of humidity to provide additional water.
- Strategically designed landscaping to facilitate water infiltration and enhancing ground water level.
- Utilizing photovoltaic for powering the drip irrigation system and enhance overall living standards.



OUR IMPACT

- Increased independence from water supplies and food security.
- Increased economic independence for the village, especially for the women managing the project.
- Establishment of a model project serving as a template for regional development.



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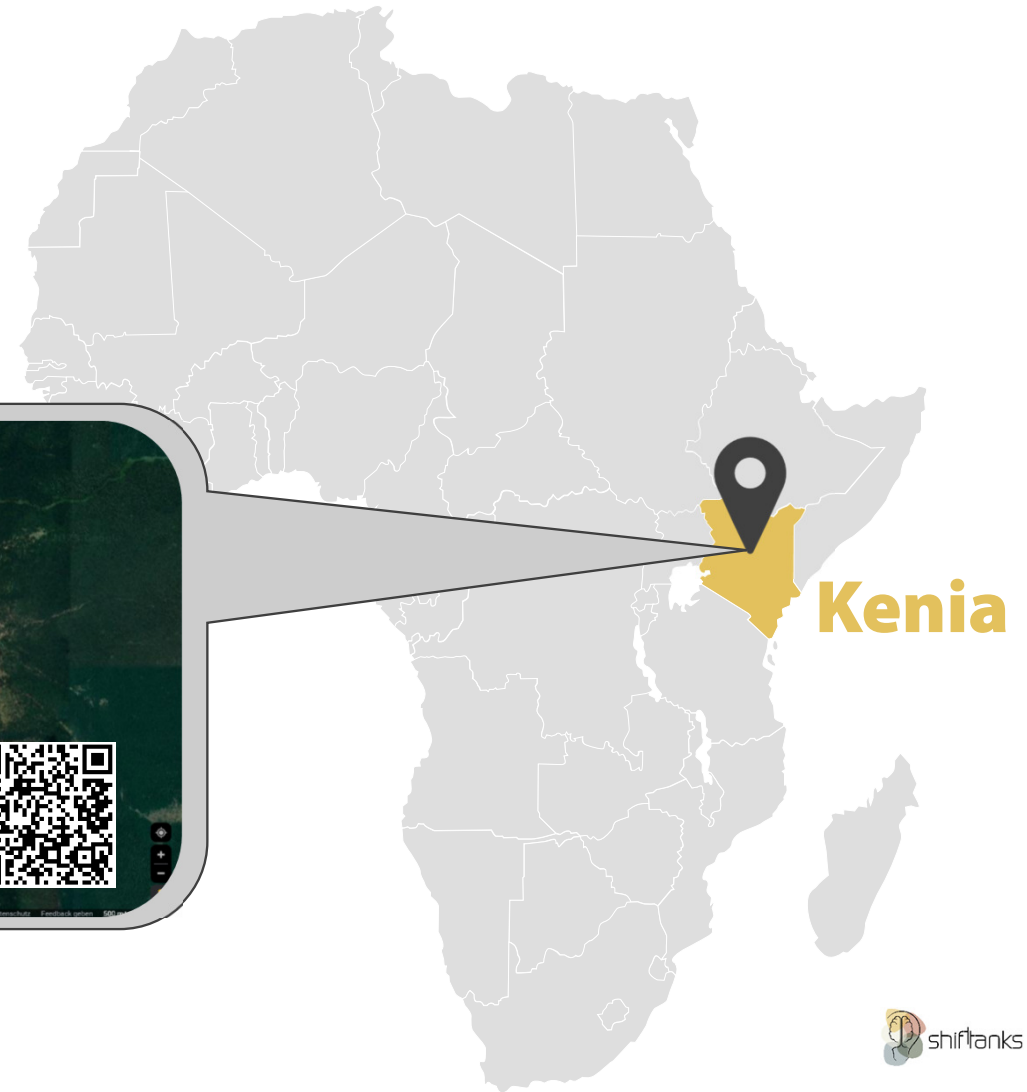
WHERE ARE WE TRYING TO MAKE A DIFFERENCE?

Naiborkeju, Samburu

0°57'16.7"N 36°49'07.5"E

1827 m

[Convince yourself with the linked overview...](#)



004

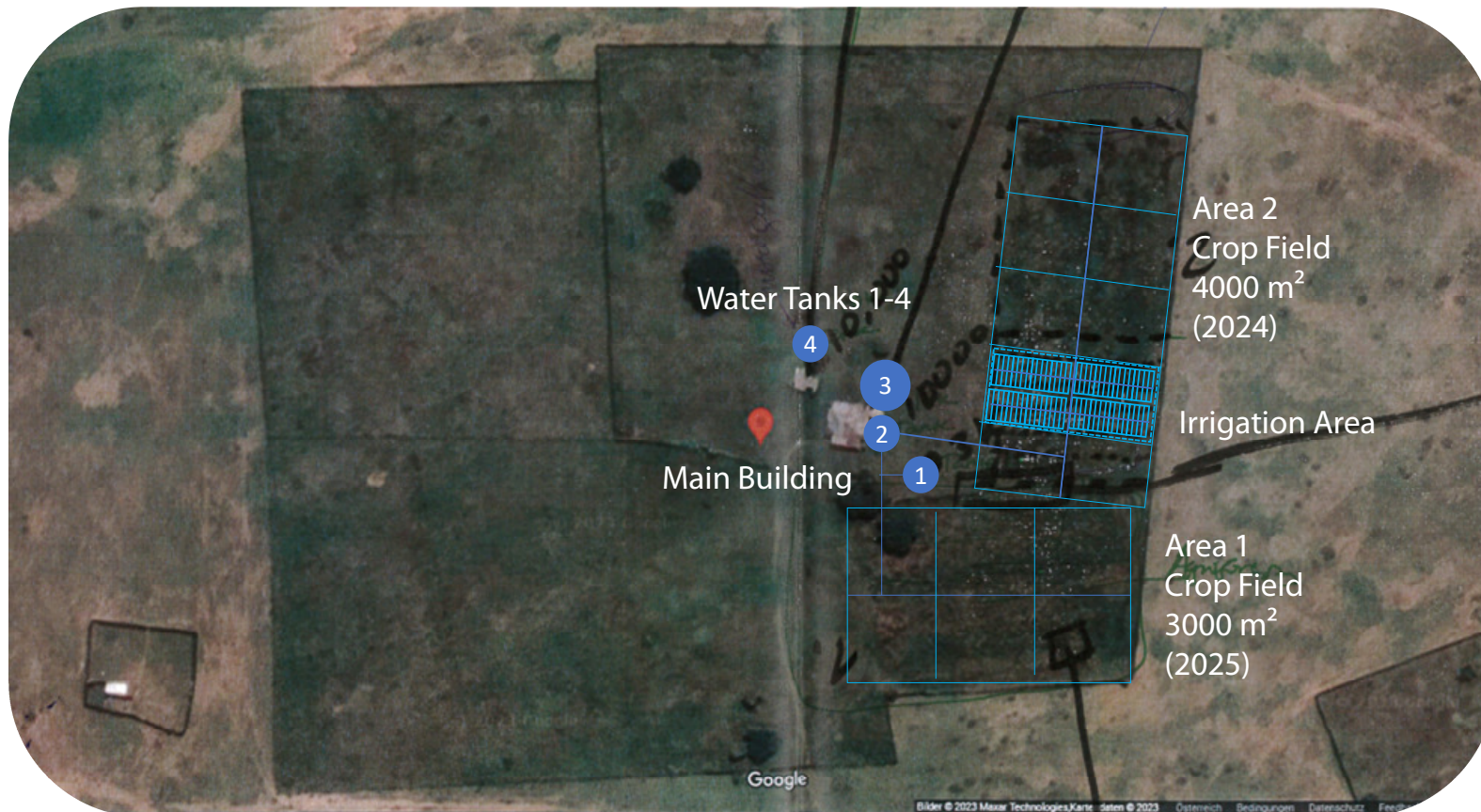
WHERE ARE WE TRYING TO MAKE A DIFFERENCE?



SHIFT4WATER

 shifttanks

HOW ARE WE CREATING AN IMPACT?



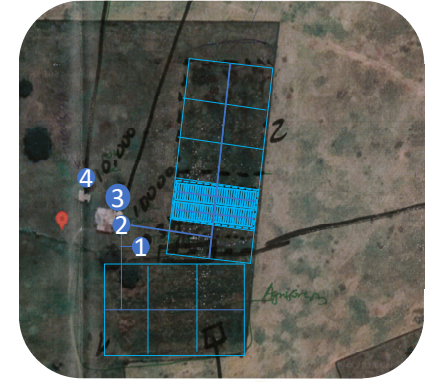
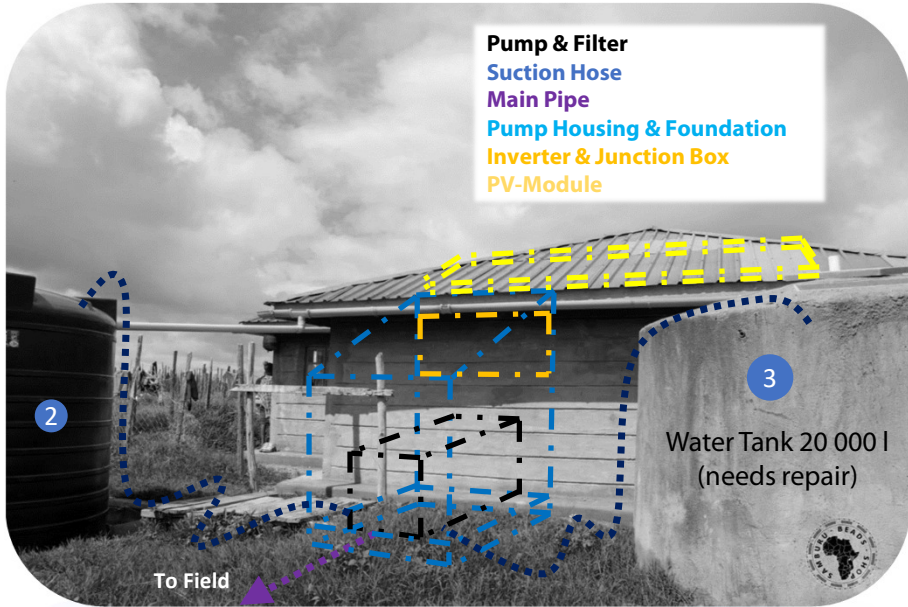
BENCHMARKS:

Area 2
5x Irrigation Areas
B = 40m
L = 100m
A = 4000m²

Area 1
B = 60m
L = 50m
A = 3000m²

Irrigation Area
B = 40m
L = 20m
A = 800 m²

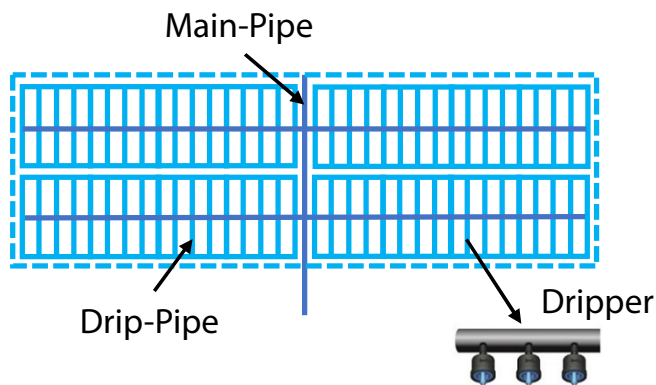
HOW ARE WE CREATING AN IMPACT?



TECHNICAL BENCHMARKS

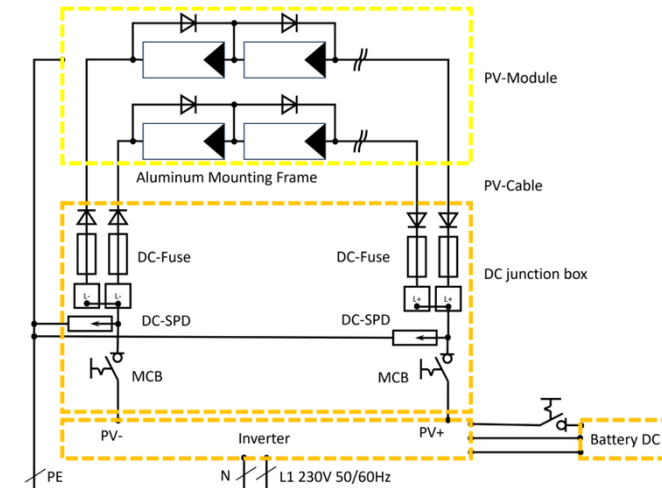
DRIP IRRIGATION SYSTEM:

- Pump 890W
- Filter
- Water storage 30 000 l
- Pressure (max) 1,8 bar
- Volume Flow (max) 6m³/h
- 3000 m Drip-Pipe
- 400 m Main-Pipe
- 7500 Dripper (Plants)
- Approx. 1000 Small Parts



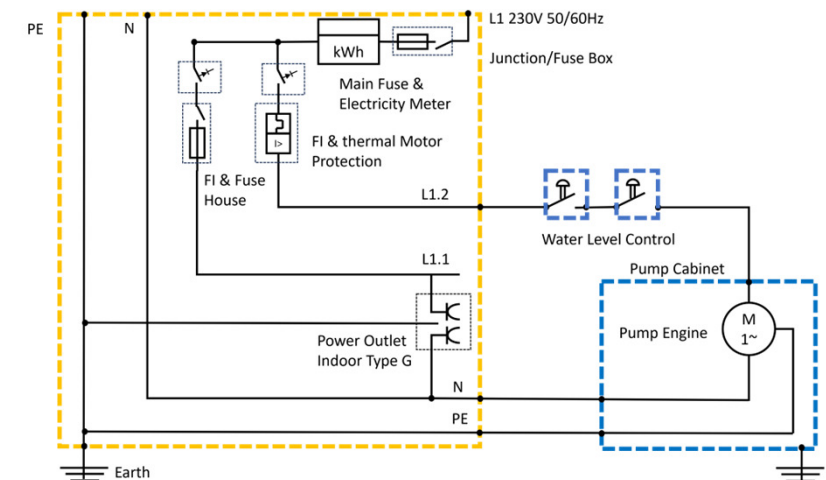
PV & ELECTRICAL SYSTEM:

- 1,5 kWp PV
- Inverter Single Phase AC 50 Hz
- Battery Storage DC
- Junction Box DC
- Switches and Fuses

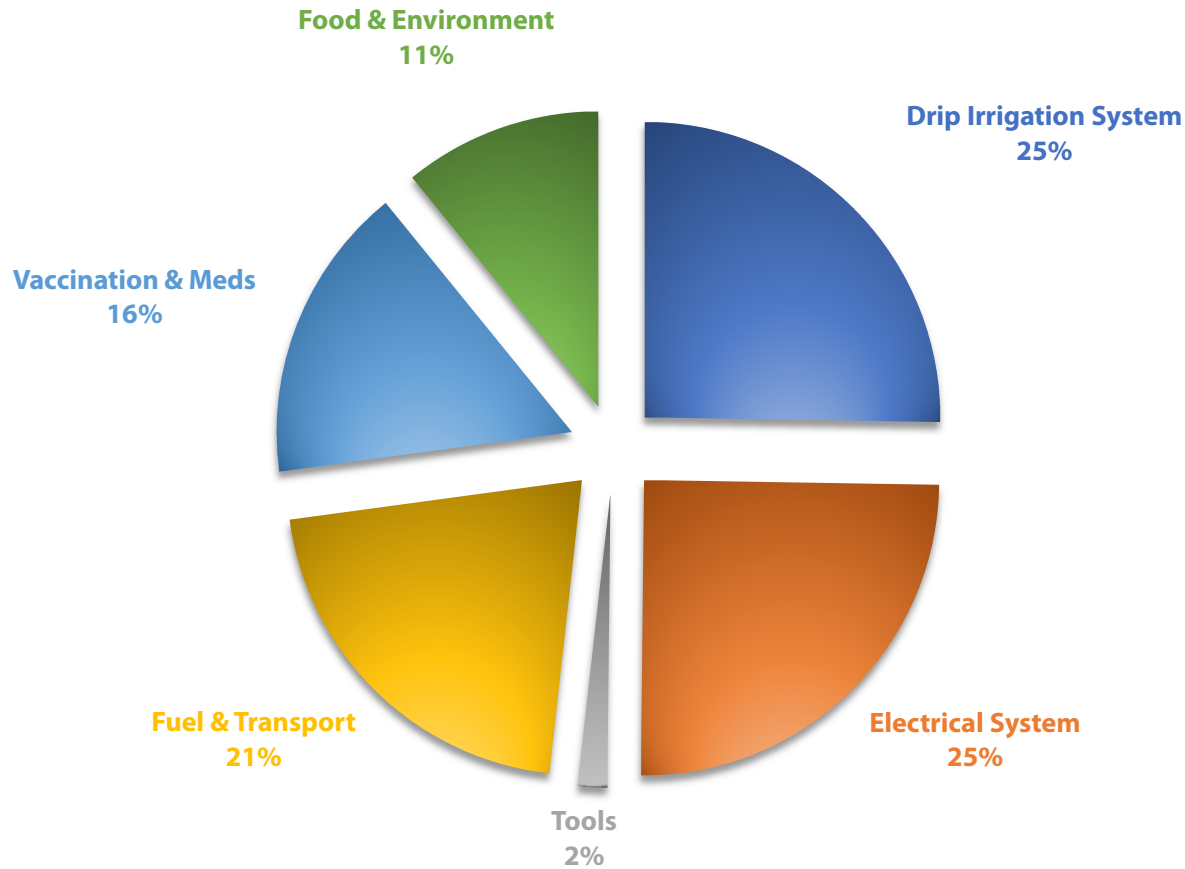


INDOOR INSTALLATION:

- Junction Box AC (Indoor)
- Fuses & FI
- Energy Meter
- Thermal Engine Protection
- Level Control for Water Tanks
- 3x Power Outlet for small Devices



COST BENCHMARKS



SHIFT4WATER PROJECT

30 300,-



TECHNICAL COMPONENTS

16100,-

IMPLEMENTATION

14200,-

PROJECT TEAM

THE FACES BEHIND THE PROJECT



YOUR SUPPORT!

Your contribution will directly fund critical equipment like water tanks, pipes, and solar panels — every donation makes a significant impact and is assured to reach the project directly!



shiftTanks

IBAN: AT31 2081 5000 4343 7730

BIC/SWIFT: STSPAT2GXXX

