



UDZUNGWA CORRIDOR LTD

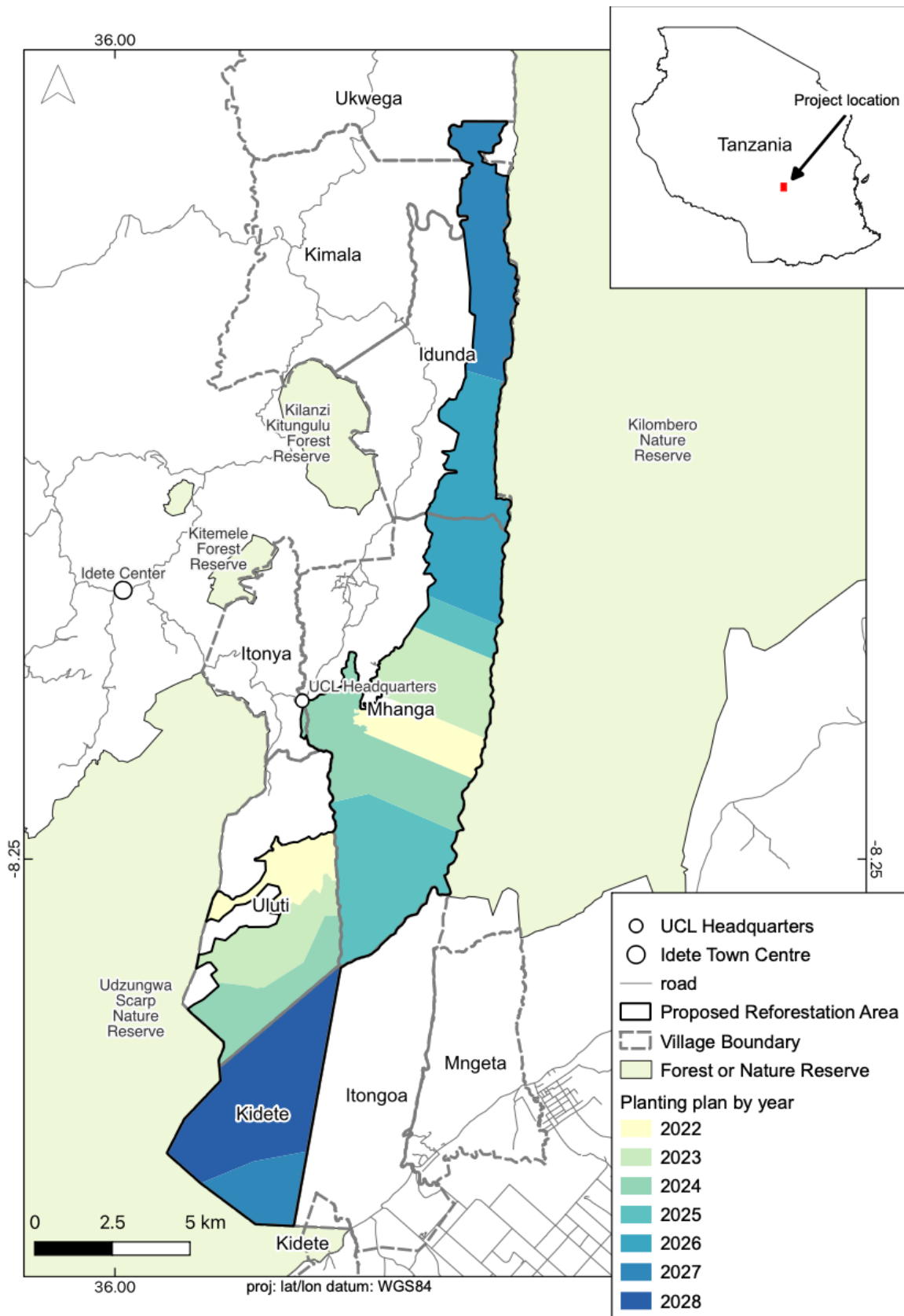
Kilolo, Iringa & Mlimba, Morogoro

PROJECT PROGRESS, MARCH 2023



YEAR 1 FARMER FAMILIES PARTICIPATING IN THE PROJECT RECEIVING 25 HIGH-QUALITY AVOCADOS FOR THEIR FARMS OUTSIDE THE CORRIDOR, 23 FEBRUARY 2022

Project Area



The Corridor falls on the land of 4 villages: Idunda, Mhanga & Uluti in Kilolo and Kidete, Mlimba District. A total of 7,500 ha out of 10,666 ha in the red polygon, proposed to be planted over 7 years, starting with 750 ha in January 2022. A further 1000 ha started in January 2023.

Udzungwa Corridor Ltd

- Location:** Udzungwa Mountains, Kilolo District, Iringa and Mlimba District, Morogoro
- Size:** 7,500 hectares
Estimated 4.5 million Verified Emission Reductions over 30 years
- Developer:** Udzungwa Corridor Ltd (UCL), Tanzania company owned by the NGO Tanzania Forest Conservation Group and Reterra Limited, UK
- Credit Ownership:** UCL Tanzania, 100% with 50% profit share with local communities; credits to be registered in and sold from Tanzania
- Land Tenure:** 30-year-lease of Village Council and individual's land
- Finance:** \$33 million, primarily forward sales of VERs produced in the future
- Action:** A mixture of 100 native trees species are being planted on abandoned and under-utilized village land to reconnect the Kilombero Nature Reserve and the Udzungwa Scarp Nature Reserve, creating a biodiversity corridor and a "natural" carbon sink. This initiative is one of the world's first to plant native trees at scale.

National Importance

The reforestation of the corridor, restoring the watershed of the Mngeta River, will also have a large positive impact on the water resources of Tanzania, increasing the dry season river flows of the Mngeta which flows into the larger Kilombero River and ultimately feeds the Rufiji River where the 2.1 gigawatt Nyerere Hydropower Project is currently under construction.

Benefits from 2021 to 2052:

- TZS 19.7 billion rent paid to farmers with surveyed plots and Village Councils for unallocated land. On remote steep terrain without roads, mostly farmland abandoned 5 or more years ago, UCL has begun to lease land from individual farmers and Village Councils for 30 years. The annual rent is based on the calculated "opportunity cost" of not cultivating a hectare of land for maize—the profit a farmer might have on a hectare maize crop in the corridor. Starting at TZS 55,000/hectare, the rent rises 3% per year to TZS 130,000. 10% WHT tax is topped up on rent to individual farmers.
- TZS 89 million in high-quality avocado seedlings for farmers to plant around their home farms
- TZS 2.4 billion paid to 8 Village Councils as Payments for Ecosystem Services (PES) to protect 5,047 ha of Village Land Forest Reserves
- TZS 14.9 billion in seasonal labour planting and weeding and fire protection
- TZS 9 billion in full-time new jobs for Tanzanians
- TZS 1.1 billion 5% CESS topped up on rent and PES payments paid to the Districts
- TZS 6.7 billion in PAYE, SDL, WCF, NSSF and WHT plus
- 30% corporate tax on profits

Benefits beyond 2052

TZS 8 billion per year potential revenue to the communities from 1% sustainable harvest of the rare tropical hardwoods planted by the project. The communities remain the owners of timber asset planted.

Project Plan Overview

7 Year Planting Plan

	1	2	3	4	5	6	7	8	9	10
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Hectares Planted	750	1,000	1,000	1,000	1,250	1,250	1,250			
Seasonal Peak Jobs	355	830	830	830	1,000	1,000	1,000	100	75	35

The table above shows the hectare target to be planted each year and estimated seasonal peak jobs.



The corridor is primarily abandoned or long-fallow under-utilized land hours walk from the nearest roads.

Covered in bracken, the corridor hasn't regenerated naturally due to runway fires in the dry season.



Each year the project establishes new nurseries in the remote corridor situated inside the area to be planted in the coming year.

Often the nurseries are hours' walk from the nearest road.

The nurseries are terraced on the steep slopes.



Each year, the project builds planting camps to house and feed the seasonal workers engaged for clearing, planting and weeding in the area to be planted in the coming year.

Situated by the nurseries, they are often hours' walk from the nearest road.



In an area with no jobs, where our socio-economic survey shows the per capita income is about TZS 162/day, in the first year, the project created 33 fulltime jobs in the nurseries and 322 seasonal jobs.

The average daily wage for the seasonal workers on clearing, planting and weeding teams was TZS 11,104/day.

The employment has enabled the villagers to pay school fees and buy, many for the first time, mobile phones, home solar systems, and foam mattresses instead of cardboard and leaves.

Project Based on 30-Year Leases

Carbon Credit Project Life

30 years is the standard project life of reforestation to produce carbon credits. The carbon captured by reforesting the Corridor is estimated to produce 4.5 million tons of Verified Emission Reductions, VERs, although this will be determined by measuring biomass in plots and may vary.

There are three buyers of the VERs: The Skoll Foundation (skoll.org), which supports entrepreneurs and public health around the world, and two investment companies owned by the first president of eBay, Jeff Skoll—Sequoia Holdings and The Skoll Fund. All three will use the VERs to offset their own carbon footprints.

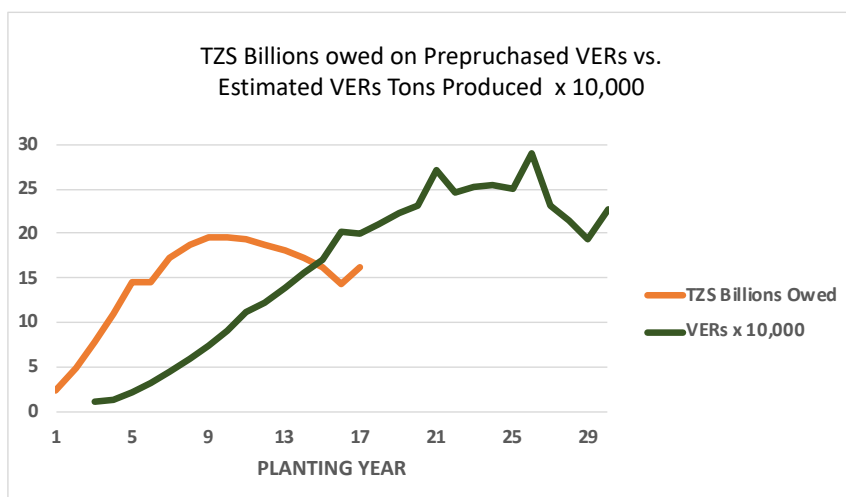
In a global market of \$1.3 billion, the 2021 world price for a “Forest & Land Use VER” was \$5.80/ton, although the economic crisis caused by the war in Ukraine has softened the price.

Global Sales of Forest & Land Use VERs			
Year	Price per VER Ton	Volume Million Tons	Total World Value
2019	\$4.33	37	\$159 million
2020	\$5.4	57.8	\$315 million
2021	\$5.8	227.7	\$1.3 billion

<https://www.ecosystemmarketplace.com/publications/state-of-the-voluntary-carbon-markets-2022/>

To enable the project to proceed and survive over 30 years, the off-takers for the Udzungwa project have guaranteed \$7.40/VER, the cost of production, 28% higher than the current market price for a forestry credit, for all VERs generated by the project over 30 years.

The chart below illustrates the funding through the prepurchase of VERs against the production of VERs:



Given the slow growth of a forest and the time it takes to capture CO2, TZS 41 billion are advanced through pre-purchases over the first 17 years before the project starts to sell the VERs as they are produced.

Funding the project by the pre-purchase of VERs that will not be fully delivered until Year 17 is an enormous risk for the buyers—can the project

successfully plant the remote, steep terrain and protect the young trees from fire in an area that *has dozens of fires today*? **Advancing TZS 41 billion until 2038, when VERs start to be sold as they are produced, is a high-risk social and ecological investment.**

The Emissions Reduction Purchase Agreement between UCL and the three off-takers contains a price adjustment mechanism; if the market value of the VERs delivered to the off-takers exceeds their total committed capital over the 30 years, all the funding they have promised through 2051, *at that point*, they will increase the VER price above \$7.40/ton.

In the case that UCL receives a higher price than \$7.40/VER and posts a profit for the year, UCL will share 50% of the profit with the local communities. This is unlikely to occur before Year 17.

Social Enterprise

Even at about 3 times today’s world prices, \$15/ton, UCL is not attractive to a commercial investor. No

Total Equity Investment @ \$15/ton	TZS 13 Billion
Project IRR	
10 Year	-13%
15 Year	15%
20 Year	20%
30 Year	21%

bank would lend to a company that loses 13% over the first 10 years for fear that the company would never make a profit.

Therefore, UCL is a “social enterprise,” funded by patient off-takers whose primary objective is the removal of 4.5

million tons of CO2 and positive impact for biodiversity and the local people.

UCL Shareholders

The shareholders in Udzungwa Corridor Limited are:



The Tanzania Forest Conservation Group was established in 1985. It helped pioneer Community Based Forest Management in Tanzania, assisting over 260 communities to protect 3,642 km² of forest and the creation of 115 Village Land Forest Reserves over 2,552 km². From fish ponds to environmental education in village schools, the TFCG works in an array of community development activities, including planting of over 16.7 million agroforestry trees. TFCG is the majority shareholder in Udzungwa Corridor Limited.



Reterra Ltd was established in London, UK in 2021 to develop and finance reforestation and restoration projects in East Africa. Reterra is responsible for raising the funding requirements for the Udzungwa Corridor project.