

# Project Information Note

## Village Climate Solutions

### Summary

<b>Project Proponent</b>	Village Climate Solutions Ltd
<b>Project Type</b>	REDD+
<b>Country/location</b>	Tanzania, Lindi and Morogoro Regions
<b>Ecosystems</b>	East African Coastal Forest, Tropical Moist Montane Forest, Miombo Woodland
<b>Project Size (ha)</b>	223,829 + possible future expansions
<b>Project Crediting Length (years)</b>	30
<b>Average Annual ERs (tCO<sub>2</sub>e)</b>	324,000 (301,000 sellable)
<b>Total ERs (tCO<sub>2</sub>e)</b>	9,710,000 (9,028,000 sellable)
<b>Standard</b>	VCS + CCB
<b>Methodology</b>	VCS Consolidated REDD+ Methodology (currently under validation)
<b>Financing Source</b>	Startup funding to be provided through a service agreement with the Tanzania Forest Conservation Group, with funding received from the African Forest Carbon Catalyst.
<b>First credit delivery date</b>	3 <sup>rd</sup> quarter of 2024
<b>Number of forest-managing authorities</b>	58+ villages with village land forest reserves and at least 1 district with a local authority (district) forest reserve.
<b>Number of Beneficiaries</b>	120,000+
<b>Expected annual performance-based payments to managing authorities*</b>	USD 1.7 million (TSH 4.0 billion) + 82% of net carbon credit income for villages.
<b>Expected annual tax payments to district councils*</b>	10% of VCSL gross revenue

\*Tanzania passed Carbon Trading Regulations (GN 636) in 2022 which created new special taxes and fees on that add up to 18% of gross project proponent revenue. VCSL had planned to pay a starting base-price of \$4.70 per tCO<sub>2</sub>e of avoided emissions but can no longer afford that under the new regulations. Instead, VCSL will pay villages a starting base-price of \$4.08 per tCO<sub>2</sub>e. Part of the 18% of new taxes and fees is 10% of gross revenue as special taxes paid to district councils compared to 3% CESS payments prior to the regulations (VCSL assumes that CESS will no longer apply). If the taxes and fees in GN 636 are amended to something more reasonable, VCSL will increase the base price paid to villages accordingly.

## Introduction

Village Climate Solutions Limited is a new 100% Tanzanian-owned company with a mission to help as many villages as possible in Tanzania to participate in REDD+. The Tanzania Forest Conservation Group (TFCG) holds majority shares. The company's other shareholders include Dr Wilson Ancelm Mugasha, a leading expert in forest carbon measurement and the company's key employees. Reterra Ltd, a UK based company, will provide VCSL with a guaranteed market for carbon credits and technical assistance.

The company's first REDD+ project will focus on villages in 4 districts (Mtama, Ruangwa, and Nachingwea Districts and in Lindi Municipal Council) in Lindi Region and 3 districts (Morogoro Rural, Mvomero, and Kilosa) in Morogoro Region. The project will use the new VCS Consolidated REDD+ methodology developed by Verra which is currently under validation and expected to be approved by the third quarter of 2023. The project's baseline will either be nested within a national or multi-region level baseline depending on the availability of baseline data at the time of validation.

During the first two years of the project, the project aims to involve at least 30 villages in Lindi Region and 28 villages in Morogoro Region. The villages fall into 7 different districts. All these villages have Village Land Forest Reserves (VLFRs) that were established sometime in the past 15 years. The project will also involve a Local Authority Forest Reserve (LAFR) in under the authority of the Kilosa district council in Morogoro Region. By the end of 2023, the project expects a total project area of 223,829 ha. The project is expected to generate 9.71 million tons of emissions reductions over 30 years. It will be registered under VCS as a grouped project which will mean that other villages and districts with forest reserves may be eligible to join the project over time.

The project will help villages improve forest protection and agricultural yields and increase the percentage of young people completing education beyond primary school. Additionally, the project will help villages establish a system to pay cash dividends to villagers negatively impacted by forest protection and identified as poor by the Tanzanian Social Action Fund (TASAF). In addition to benefits for communities and the climate, improving forest protection will help conserve several plant and animal species listed as endangered or vulnerable under the IUCN Red List.

The project also builds upon previous REDD+ pilot projects in the regions. One of those pilots, became the first REDD+ project in Tanzania to be registered under the Verified Carbon Standard. The project covered 10 villages and 42,000 ha of forest in Lindi Region. It generated 36,000 tCO<sub>2</sub>e in verified emissions reductions in its first year. Unfortunately, the project could not sell credits at a price that would sustain the project and project activities ended in 2016. Additionally, almost all villages practicing community-based forest management in Lindi and Morogoro have had some awareness raising about REDD+ over the past 10 years.

With the international carbon market growing and poised to grow even more in the coming years, today is the perfect time to build upon previous experience and to relaunch and greatly expand REDD+ in Lindi and Morogoro Regions.

## Emissions reduction potential

Despite past conservation efforts, many villages in Lindi and Morogoro regions struggle to fully protect their village forest reserves. Many villages have not made significant income from sustainable harvesting in village forests, which has left them with insufficient resources and motivation for forest conservation and management. Meanwhile, improved transportation and population growth have

significantly increased pressure to convert village forests to agriculture throughout both regions. Small scale agriculture is the only livelihood option for most of the region's residents, and among those clearing forests to farm, there is almost no use of fertilizer or manure. Increased production in both regions comes almost entirely from expanding the area under cultivation. In a 2021 survey of Lindi farms cleared between 2017 and 2020, the two most reported crops were Maize (67% of farmers) and Sesame (42% of farmers). Village Climate Solutions plans a similar study in Morogoro for 2023.

It has become common practice to illegally establish farms in VLFRs (see deforestation trends in Figure 1. By preventing this trend from continuing, the project will create emissions reductions that would not have occurred in the absence of the project. Experience in the MJUMITA REDD+ project suggests that this project should be able to reduce emissions by at least 75% compared to baseline. Based on regional deforestation risk models and emissions factors, the projected deforestation in the project area is equivalent to 1.61 tCO<sub>2</sub>e per ha of project area per year during the first 6-year baseline. The project area covers 223,829 ha of forest. The baseline would then decrease by 4 percent every 6 years because of the project's effect on jurisdictional level deforestation. Over the 30 years, the project can reduce GHG emissions by 9,710,000 tCO<sub>2</sub>e. Of that, 9,028,000 tCO<sub>2</sub>e would be eligible to be sold as verified carbon units (VCUs) after a 12% reduction for non-permeance risk.

Reductions could be higher if other villages and districts establish forest reserves and join the project. Successful REDD+ activities in initial project villages will likely draw in more donor funding for establishing new VLFRs in the area. This will make expanding the project more economical.

## Project activities

The project will reduce deforestation with the following activities:

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### **Free, prior, and informed consent (FPIC):**

Village Climate Solutions Limited (VCSL) must sign long-term agreements with participating villages. However, before signing the contracts, villages must go through a thorough process of free, prior, and informed consent (FPIC). The project will first meet with village councils to gauge interest and verify VLFRs details. If the village councils want the project, then the project will ask for village assembly meetings to present the risks and opportunities of joining the project. Villages that agree to join will be asked to sign consent letters that gives VCSL up to 1 year of exclusivity to continue to build REDD+ awareness in the village, develop project activities in the village, register the project with the designated national authority, and come to terms for a long-term contract. As of March 2023, VCSL had obtained consent letters from 19 villages. VCSL had also introduced the project to another 13 villages that are all ready to proceed to the consent letter stage.

The long-term contracts will be developed with input from village and district authorities and district lawyers and ultimately approved by village assemblies before signing. Contract payments to villages and districts will be based on how well each village or district reduces deforestation in their village or district forest reserve relative to the nested baseline prediction for those reserves. VCSL plans to pay forest owners a base-price of USD 4.08 (TSH 9,500) per tCO<sub>2</sub>e reduction. The fixed price paid to villages will inflate at 2% a year. Additionally, VCSL will pass on 82% of the company's net carbon credit income to villages, which will vary depending on the carbon

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price obtained by the project. The contracts will likely be for 30 years, but with the option for renegotiation after 12 years.

VCSL will create a grievance reporting system and meet with each village annually to review village performance and discuss and resolve any grievances.

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**Adjusting and remarking village forest reserve boundaries:**

Where there is significant encroachment into village forest reserves due to lack of enforcement/awareness or in some cases due to farms existing before a VLFR was established, VCSL will work with districts, supporting NGOs and villages to adjust and remark village forest reserve boundaries. VCSL will also identify areas where small adjustments to VLFR boundaries will align them with natural features on the ground or roads. VCSL will also look for opportunities to expand VLFR boundaries so that more forest edge is captured within the VLFRs thereby expanding the amount of threatened forest within the project area and increasing potential village earnings. All these steps, combined with enhanced forest patrols described below will make VLFRs easier to protect.

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**Funding for forest management:**

The project will work with supporting NGOs to reinvigorate village natural resource committees and forest patrol teams. Where needed, the project will finance review of forest management plans. The project will also pay for village patrol teams during the first stages of the project and then require that villages budget for patrol work each year from their REDD+ earnings, which may require support from district authorities.

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**Technical support for forest protection activities:**

For all participating villages, the project will provide forest patrol teams with Android smartphones and training on how to use them to navigate to specific locations and record patrol data. Reterra Ltd, has established a system to monitor village and district forest reserves monthly and share the location of any new deforestation with patrol teams via a cloud-based GIS platform. By syncing their smartphones when network access is available, patrol teams can see the new areas of deforestation and navigate to them. They record their patrol data on the phones and uploaded it back to the same cloud-based platform. The forest monitoring and patrol data will all feed into dashboards that allow managing authorities to monitor their performance in real-time and track offenders. Patrol data will also serve as one of the metrics for compensating patrol teams to encourage regular patrols.

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**Performance based payments:**

After initial test payments, annual REDD+ payments to villages will be based on village performance. The project will use a stock-flow accounting model whereby 70% of the credit income due to forest owners is divided depending on each owner's performance compared to a spatially explicit baseline less any leakage in the part of the leakage belt closest to that owner. Then, to discourage leakage between forest owners, the remaining 30% of credits will be divided based on the relative proportion of total project carbon stocks each owner holds less any emissions above the baseline emissions including emissions above baseline from the leakage belt for each owner.

This is a complicated system, but results in payments that villages in the previous Lindi REDD+ project felt were fair and provides a strong incentive to all participating villages to prevent deforestation. VCSL will present the

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basis for each village's payment in an assembly meeting with maps showing the location of ongoing deforestation in the village and calculations showing how much money the village lost as a result.

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**Flexible village benefit sharing:** The exact payment details will be worked out with villages, but the project will encourage villages to use an improved version of the previous Lindi REDD+ project's benefit sharing system. That system was based around treating all villagers as an equal owner of the village forest reserve and as such entitled to equal dividends. Each year, villages would compile households lists against residence eligibility criteria specified in their bylaws. Then they would divide the amount of money they received from REDD+ projects by that number to calculate a per person dividend. Then they would discuss in a village assembly meeting how much they wanted to cut from those dividends to spend on previously discussed village development projects and forest protection. The remainder would be paid out as dividends with each resident coming to collect and sign for their dividend in front of their sub-village. The system was efficient and effective at both delivering monies and creating a community wide incentive for conservation. It had near universal support from villages.

The project will rework the system in consultation with communities, NGO partners, and local government. One objective will be to come up with a per ha figure or per threatened ha figure of funds that villages will set aside for forest protection activities as a priority. This would be used principally to pay for regular forest patrols. Additionally, the project will work to make more targeted dividends to those most likely to be impacted negatively by REDD+. This could be done using the same household ranking that are already in place nationally for the Tanzania Social Action Fund (TASAF) conditional cash transfers program. That way, dividends, or a larger portion of dividends could be targeted to the land poor that will be most affected by forest conservation.

Then, the project would also look for the system to encourage villagers to fund village development activities that will have the greatest chance of creating long term change that favors forest conservation. VCSL believes increasing secondary school attendance and completion is particularly important. The opportunity cost study showed that cutting forests for farming is primarily driven by growth in the older and less educated population in the region. Small holder farming isn't something that young people want to do. They would much prefer to be engaged in business or be employed. Higher rates of secondary school attendance would help more of them do that.

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**Farm extension officers:** The project will employ roughly 1 extension agent per every 12 project villages and provide them with a motorcycle and fuel to provide extension services. The officers will provide advice to farmers on farm inputs, and conservation agriculture techniques that work in the area. They will also teach farmers about techniques and technologies to reduce crop losses to wild animals, which is a major challenge for many villagers in Lindi. The extension agents will also help farmers organize to be eligible for finance from CRDB bank's Green Climate Fund supported loan fund targeted at promoting climate adaption for small-holder farmers in Tanzania. Increasing

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village yields by as little as 1% annually will make up for the agricultural production forgone for forest conservation and prevent any market leakage.

**Establishing new village forest reserves:** The project will work with partner NGOs and districts to help create new or expanded village forest reserves covering at least 20,000 ha. This will help prevent leakage from the existing reserves and increase credit generation potential.

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## Location

In Lindi Region, the project will be implemented on village lands in Mtama, Ruangwa, and Nachingwea Districts and in Lindi Municipal Council. A map of the Lindi region and participating village land forest reserves (VLFRs) is shown in Figure 1.

Most of the project area is dominated by miombo woodland. There is also at least 30,000 ha of East African Coastal Forest in Lindi and 2250 ha of East African Moist Montane Forest in Morogoro that are part of globally recognized Biodiversity hotspots.

In Morogoro Region, the project will be implemented on village lands in Kilosa, Mvomero, and Morogoro Rural Districts. The second map in Figure 1 shows these districts and participating VLFRs. The project will also work with the Kilosa district council to protect a local authority forest reserve under their authority.

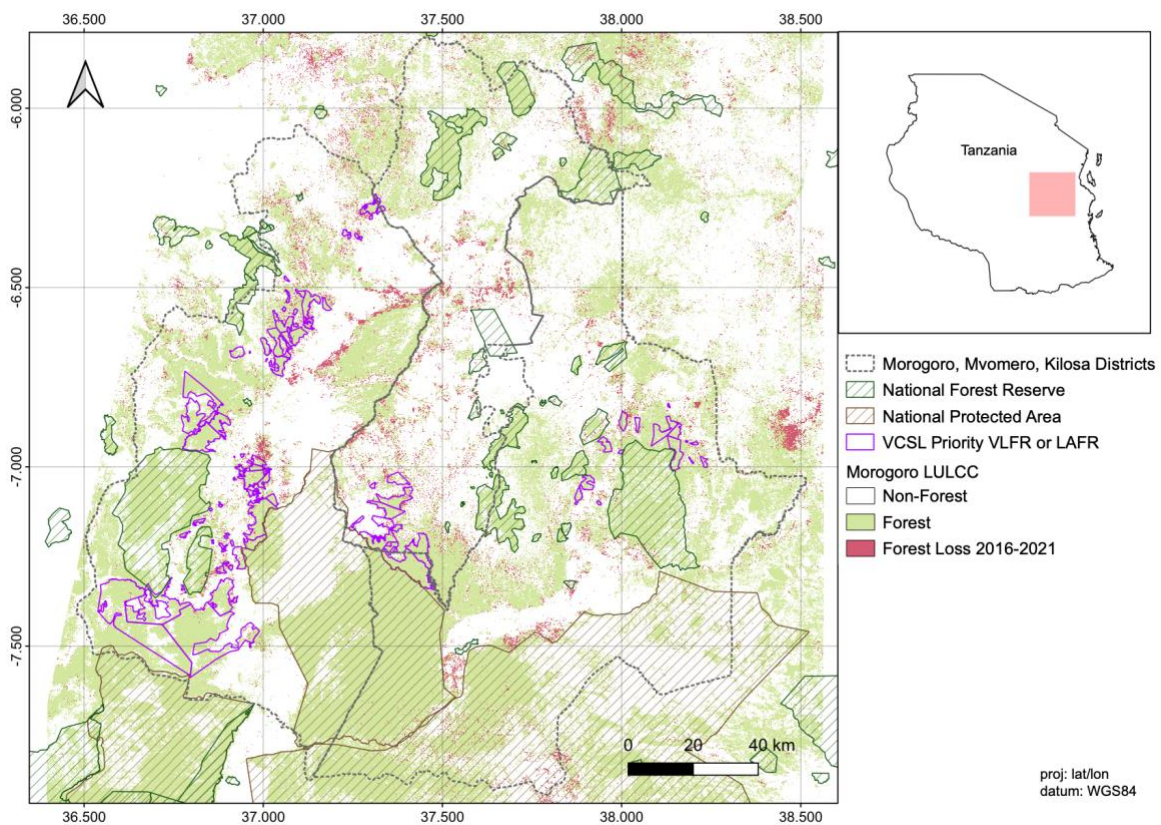
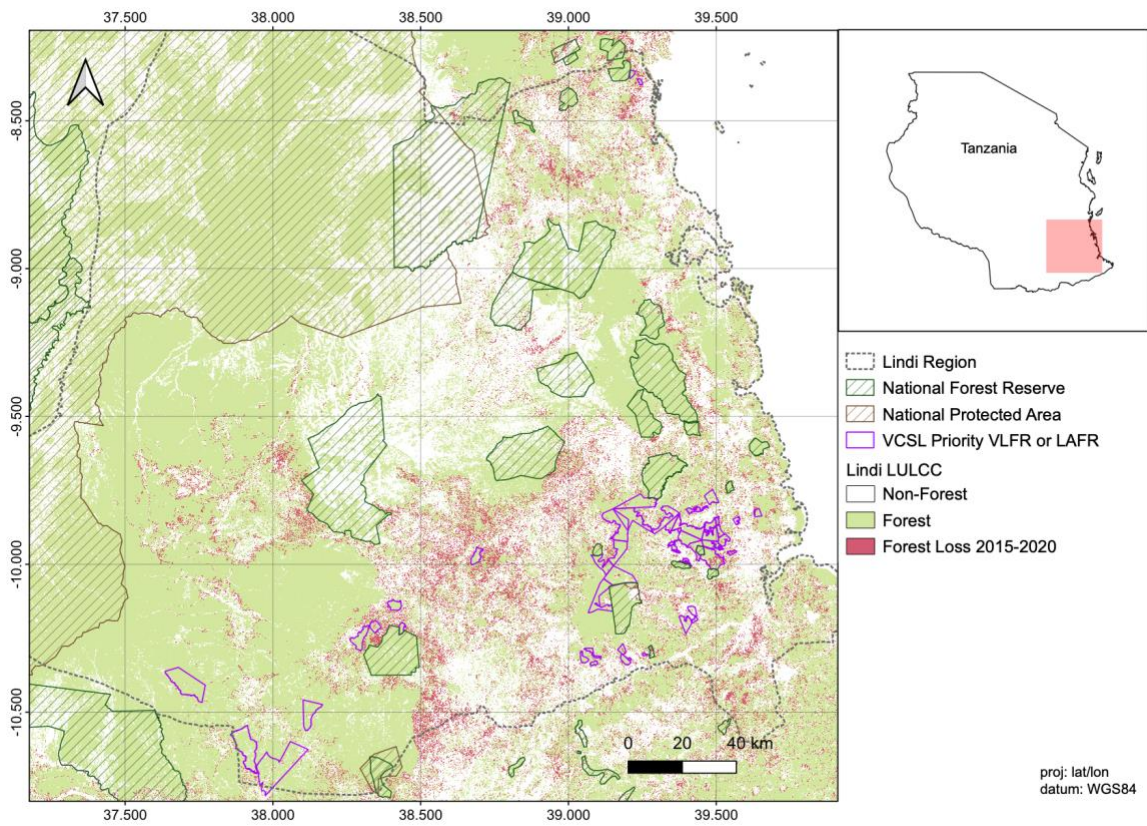


Figure 1 Potential REDD+ Project Village Land Forest Reserves in Lindi and Morogoro

## Non-Carbon Benefits

### Community Development

The proposed VER price paid to the villages is based on a comprehensive study of opportunity costs conducted in 2021. Project financial projections show that over the first 10 years of carbon credit issuance, participating villages would be paid approximately USD 1.361 million (TSH 3.17 billion) annually<sup>1</sup>, equivalent to 67% of the cost of credit production. Villages would also receive 82% of net income earned from carbon credit sales by Village Climate Solutions Ltd, but under the carbon trading regulations in GN 636, net carbon credit income will be limited or zero. Hopefully, the regulations will be revised in 2023 to set more reasonable fees so the project can afford to pay communities more.

The dividend system described in the project activities section will help villagers adopt more forest-friendly livelihoods and funding for village development projects. Improved access to education above primary school will increase opportunities for young people to move away from the expansion of shifting cultivation, which is laborious and unreliable. Improvements in agricultural practices and technology will ensure that agricultural production is uninterrupted and more reliable, despite restrictions in clearing more forest. Thus, villages will realize substantial economic and social benefits by participating in the project.

### Local Government Revenue

The project originally planned to pay districts 5% of village earnings, which was the CESS rate on forest products at the time.

Under the new carbon trading regulations, the district governments would be received 10% of the project proponent's gross revenue. This is substantially more than under previous examples associated with sustainable timber, charcoal harvesting, or REDD+ where districts typically received 5 to 10% of the village earnings. For instance, if the village was to receive 60% of the project's total revenue, then at 10% of the village's earnings, the district would receive the equivalent of 6% of the total project revenue. Ten percent of gross revenue is a 66% increase in district related taxes on REDD+.

Therefore, for VCSL project to be financially feasible under the new regulations, districts will need to agree to support the projects using some of the 10% they receive rather than expecting the project to pay for all district support.

### Biodiversity

The original Lindi REDD+ project area was centered around the Chitoo and Noto plateaus, which held one of the last unprotected forest fragments in the East African Coastal Forest biodiversity hotspot. This mosaic of forest, woodland and thicket is considered of exceptional importance due to the high concentrations of endemic species. The Noto and Chitoo plateaus are home to a critically endangered primate – the Rondo Dwarf Galago and are used seasonally by up to 100 endangered African Savannah Elephants. The area is also home to at least three endangered and 12 endemic plant species.

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<sup>1</sup> The USD 1.7 million figure listed at the beginning of the document is the average annual base-price payments over 30 years. It is higher than the figure listed here because the base-price paid to communities will inflate at 2% per year.

The project areas in Morogoro region are largely miombo woodland. However, three project villages protect an isolated 2250 ha forest patch that is part of the Eastern Arc Mountains Biodiversity hotspot. It is home to 6 species listed as endangered or vulnerable on the IUCN Red List including the endangered Abbot's Duiker. At least 4 new vertebrate species have been discovered there and are still waiting to be described. Given the tiny size of the forest, once described, these species would likely be considered critically endangered under the IUCN Red List system.

While the Miombo woodland portions of the Morogoro project villages may be less biologically unique, 4 village forest reserves function as buffer areas for national government forest reserves that protect moist forests that are part of the Eastern Arc Mountain Biodiversity Hotspot. Additionally, 5 village forest reserves serve as buffer areas for Mikumi National Park, which is home to endangered African Savannah elephants and endangered African Wild Dogs. Some village forest reserves also function as elephant corridors for movement in and out of Mikumi National Park.

## Ownership

The project proponent will be Village Climate Solutions Ltd (VCSL), a 100% Tanzanian owned company. The company is majority owned by the Tanzania Forest Conservation Group, a leading forest conservation NGO in Tanzania. Other shareholders include Dr. Wilson Ancelm Mugasha, a leading forest biomass measurement expert, and key employees who contributed to starting the company.

Most project land will be village land under the authority of village councils. VCSL will also work with district councils to protect local authority forest reserves under their authority. VCSL will sign contracts with each of these managing authorities to secure the rights to carbon credits generated through REDD+.

For villages, the contracts will include payments based on individual village or district performance starting at USD 4.08 (TSH 9,500) a ton in 2023 with 2% annual inflation. In addition to the base price, the contract will stipulate that VCSL shares 82% of net carbon credit income to villages. The distribution of net carbon credit income shares will also be based on each village's relative contribution to credit generation. As per the new carbon trading regulations, the contract will stipulate that if the base-price paid to communities plus 82% of net carbon credit income is less than 51% of VCSL revenue, then VCSL will pay 51% of revenue to villages instead. However, mathematically, the base-price plus 82% of net carbon credit income should always be more than 51% of VCSL revenue.

For contracts with districts that have local authority (district) forest reserves (LAFRs) in the project, the contracts will stipulate that VCSL pay the equivalent of 61% of the carbon credit revenue generated from those reserves to the districts as per the carbon trading regulations. As stipulated by the carbon trading regulations, districts will in turn be responsible for giving approximately 10% of their carbon credit revenue for development projects in villages bordering the LAFRs.

## Management

The VCSL board of directors will consist of Charles Meshack, the executive director of the Tanzania Forest Conservation Group (TFCG), who has 27 years of experience supporting community forest management in Tanzania and Dr. Wilson Ancelm Mugasha, a Senior Lecturer and Researcher at the Sokoine University of Agriculture and Tanzania's leading expert on forest biomass measurement. Aklei Albert, who has worked for the Tanzania Community Forest Network (MJUMITA), a sister NGO to TFCG, for 11 years will serve as director of operations for VCSL. He will be supported by the VCSL



director of finance, Emmanuel Walala, a certified accountant with 15 years of experience in commercial operations.

## Participants

### Village Climate Solutions Ltd

The project proponent will be Village Climate Solutions Ltd (VCSL), a 100% Tanzanian owned company. See the Ownership and Management sections for more details. VCSL will sign contracts with participating forest managing authorities, primarily village councils, for the rights to carbon credits generated from REDD+ activities. VCSL will present the basis for and make performance-based payments to forest managing authorities as per the contracts and follow up with villages to make sure that income is used according to village REDD+ revenue sharing bylaws. As the project proponent, VCSL will also be responsible for registering the project with the National Carbon Monitoring Centre, paying all the fees and taxes to national and district authorities under the carbon trading regulations, and submitting an annual report to the National Carbon Monitoring Centre.

### TFCG

The Tanzania Forest Conservation Group (TFCG) has been working to conserve Tanzania's high biodiversity forests and promote community-based forest management since 1991. TFCG helped found MJUMITA in 2007. TFCG was the lead partner in developing the MJUMITA community forest project, the first VCS REDD+ validated and verified in Tanzania.

TFCG will provide the project with the expertise to plan and monitor the protection of the high biodiversity portions of the project area. It will provide one director to Village Climate Solutions Ltd's board. TFCG will have 51% ownership of Village Climate Solutions Ltd.

### Other VCSL Shareholders

Other VCSL shareholders will include Dr. Wilson Ancelm Mugasha, Aklei Albert, and Emmanuel Walala whose rolls are described under the Management section. Collectively, they will own 49% of VCSL.

### MJUMITA

*Mtandao wa Jamii wa Misitu wa Tanzania* (MJUMITA), also known as the Tanzania Community Forest Network, has been working with communities to improve forest governance since 2007. MJUMITA's board comprises community members from the villages it operates in. MJUMITA was the first entity in Tanzania to register a VCS-validated and verified REDD+ project for 10 villages in Lindi Region. Due to a lack of sales, the project could not continue, but the participating villages have joined the VCSL project and are resuming REDD+ activities.

MJUMITA developed the popular benefit-sharing guidelines that will be used in the project. MJUMITA will not be a direct participant in Village Climate Solutions Ltd but will have a revenue sharing agreement with TFCG so that a portion of the profits that flow to TFCG will go to MJUMITA.

### Reterra Limited

Reterra Ltd is a company registered in the UK in 2021 whose mission is to develop nature-based solutions for climate change mitigation. The company's first venture is Udzungwa Corridor limited, a

joint venture with TFCG, which has secured 30 years of funding to reforest 7500 ha of village land in the Udzungwa Mountains of Tanzania with native species.

Reterra will provide VCSL technical support for MRV and a guaranteed market for the carbon credits it produces. The Reterra director, Theron Morgan-Brown, is a REDD+ MRV expert with 13 years of experience. Theron was formally the Technical Advisor for the MJUMITA, where he wrote the first VCS REDD+ project document to be validated in Tanzania and steered the project through its first successful verification. He also worked as a carbon manager for Biocarbon Partners, helping them achieve validation and verification for their Luangwa REDD+ project, which is one of the largest REDD+ projects in the world, covering 1 million hectares of Miombo woodland in Zambia. In addition to Tanzania and Zambia, Theron has worked on REDD+ MRV in Angola, Kenya, Liberia, and Vietnam.

## **Village Governments**

The principal project participants and implementors will be the village governments of at least 58 villages that own the land and village forest reserves where the project will be implemented. They will manage and protect their village forest reserves and distribute REDD+ payments according to their bylaws and the wishes of village residents.

## **District Councils**

The Lindi districts councils (Mtama, Ruangwa, Kilwa, Nachingwea, and Liwale), Lindi Municipal Council, and Morogoro district councils (Kilosa, Morogoro Rural, and Mvomero) will provide skilled staff members for land-use and forest management planning, agricultural extension services and overseeing community development projects. They will also provide additional enforcement support if villages request their help. Districts must approve all village land-use and forest management plans and review village by-laws. District lawyers will represent the villages in negotiations regarding the contract with Village Climate Solution Ltd. The project will negotiate with districts to provide at least some of these services free of charge since the project will be paying 10% of gross revenue to the district under the new carbon trading regulations.

Kilosa District will also be responsible for protecting the Magubike Local Authority Reserve, which is included in the VCSL project area.

## **Policy Environmental**

### **Land and Forest Tenure**

Most of the project area is defined as village land per the Land Act (1999) and Village Land Act (1999) definitions of Land. Section 8 of the Village Land Act empowers the village council to manage all village land and refers explicitly to managing natural resources and the environment. As per section 4 of the Forest Act (2002), the project area is defined as “(c) village forests which consist of: (i) village land forest reserves; and (ii) forests which are not reserved which are on village land and of which the management is vested in the village council”. The participating project villages, under law, have the right to use 100% of the land where the GHG emissions reductions will be produced and thus meet the VCS requirements for the right of use, which they will then contract to Village Climate Solutions Ltd.

The project will also work with districts and potentially municipalities to protect “Local Authority Forest Reserves”, which are also defined in the Forest Act (2002):

(4) A local authority forest reserve shall be an area of land covered by forest reserved or used principally for purposes of the - (a) sustainable production of timber and other forest produce; (b) protection of watersheds, soil conservation and the protection of wild plants, known as a local authority protection of forest reserve; or (c) an area of land covered by forest reserved for the local authority.

## REDD+

The National REDD+ Strategy considers nesting a hybrid approach to structuring REDD+ that includes elements of both sub-national and national approaches. It allows for site-level project development and scaling up to the national level over time and requires consistent emission accounting between project-based, sub-national, and national levels.

## Carbon Trading

The 2022 Carbon Trading Regulations (GN 636) establish a system for carbon trading project proponents to register with the designated national authority, now defined as the National Carbon Monitoring Centre. The regulations recognize the difference between carbon credits which count towards the country’s national determined contribution (NDC) and credits which do not, and the export of credits is permitted. However, the regulations do not include provisions related to “corresponding adjustments” required under the Paris Agreement for carbon credits generated in one country to be counted in the NDC of another country. Thus, credits generated by VCSL will be the same as most carbon credits in the voluntary carbon market, which are not counted in any country’s commitments and represent voluntary action by the buyers of the credits above and beyond any binding limits to which they are subject.

Village Climate Solutions Ltd (VCSL) will follow the registration steps starting with the submission of an idea note and consent letters from managing authorities that wish to participate in the project. After this step, the project will submit a full concept note and pay a registration fee expected to be equal to about USD 30,000. The regulations include high taxes and fees on proponent carbon credit revenue (10% to districts and 8% to national authorities) and a mandatory minimum share of 51% of gross carbon credit revenue to villages. VCSL has built these requirements into the project financial model by lowering the price paid to villages and accepting little to no profits. VCSL will continue to advocate for more reasonable district and national level taxes and fees.

## MRV

Carbon Credit Standards	VCS and CCB
Project Type	REDD+
Methodology	VCS Consolidated REDD+ Methodology (currently under validation)
Baseline	The new VCS consolidated REDD+ methodology is currently under validation, which is expected to be complete by the 3 <sup>rd</sup> quarter of 2023. The methodology requires nested jurisdictional level baselines based on a 6-year historical reference period which will be used to calculate historical average annual deforestation and used to develop a deforestation risk map for jurisdictions where projects are located.

	<p>Individual project or village baselines can be calculated by multiplying the number of ha in each deforestation risk class by the historical deforestation rate for the risk class and the appropriate emissions factors.</p> <p>Under the new consolidated methodology, deforestation rates and risk maps will not be generated by projects directly, but rather by qualified third parties potentially contracted by Verra. In Tanzania, large scale mapping work is underway supported by The Nature Conservancy. However, the work is not entirely in line with the consolidated methodology (it used a 10-year reference period) and the National Carbon Monitoring Center (NMC) is reluctant to endorse the work of third parties that did not directly involve them in the mapping process. Therefore, Reterra is considering supporting NMC with free technical advice to develop a national or potentially sub-national baseline covering Eastern Tanzania. Verra would accept a high-quality jurisdictional baseline endorsed by national authorities.</p> <p>For now, to determine the likely baseline for this project before the national or multi-region maps are ready, Reterra Ltd has mapped deforestation in Lindi region from 2015-2020 and in three districts in Morogoro Region from 2016-2021. In Lindi, Reterra determined the historical deforestation rate to +/- 8.55% error using the map and a random sample of accuracy points. The same approach in Morogoro estimated the deforestation rate to within +/- 25%, though the estimated rate for a smaller portion of the map was within 11% of rates determined from hand digitizing of high-resolution imagery suggesting that the potential error is less. Then using the VCS draft risk mapping module, Reterra created a risk map for each region (Figure 2). Finally, the project area baseline was determined by overlaying the project area boundaries on the risk map and applying the historical deforestation rates for each risk class.</p>
Start Date	VCSL began training and funding village forest patrol teams in January 2023, which will be the start date for the project crediting. VCSL will ramp up enforcement support so that by July 2023, nearly all project villages immediately send patrol teams to new deforestation detected by Reterra's monthly monitoring. Thus, the project expects to reduce deforestation by at least 50% compared to baseline
Crediting Period	30 years
Carbon pools	Above and below ground tree biomass and potentially soil organic carbon.
Emissions Reduction Estimation	<p>The total sellable VCUs generated over a crediting period of 30 years are estimated to be 9,028,000 tCO<sub>2</sub>e, which is an average of 301,000 tCO<sub>2</sub>e per year.</p> <p>The emissions factor applied, 161.5 tCO<sub>2</sub>e/ha, is an average of the low and high carbon forest strata from the former Lindi based MJUMITA Community Forest Project less an average post deforestation stock of 15 tCO<sub>2</sub>e. It is also very similar to emissions factors from other Miombo based REDD+ projects.</p> <p>The project conservatively assumes being able to reduce deforestation by 85% compared to baseline, that there will be 10% leakage and 12% of credits will be deposited in the risk buffer.</p>

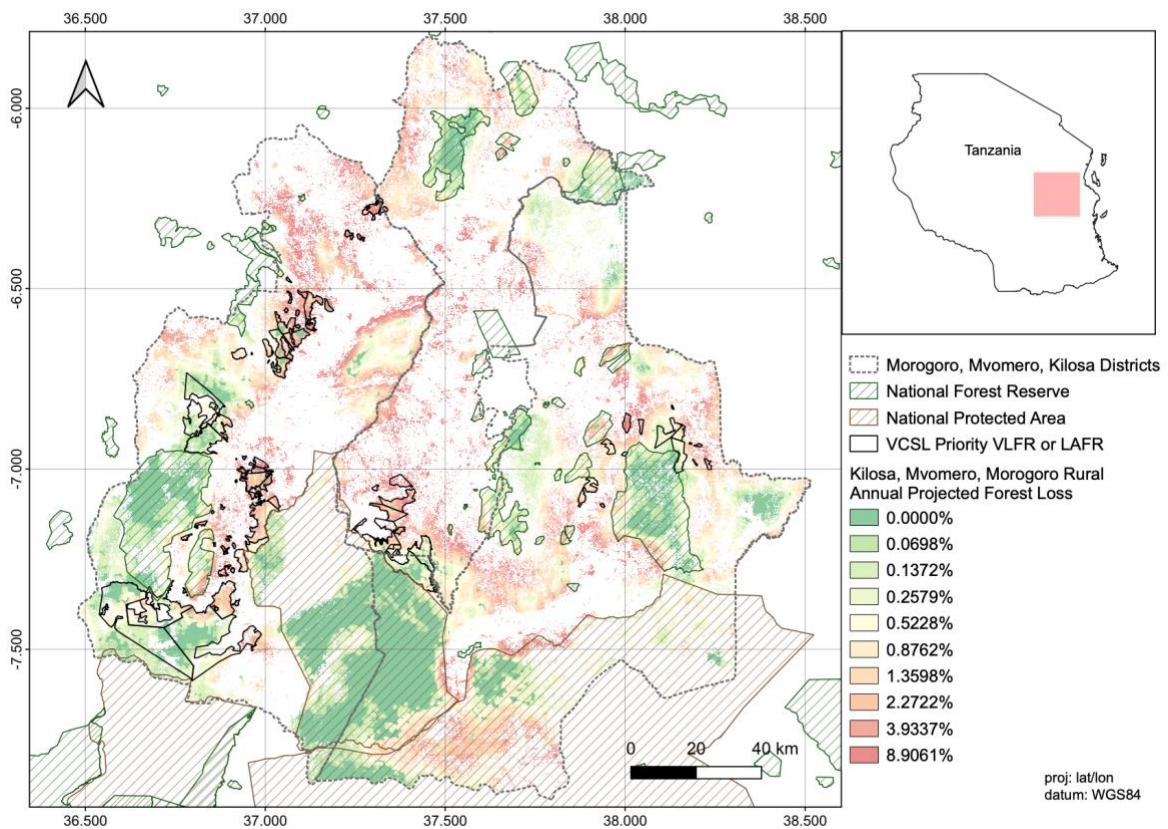
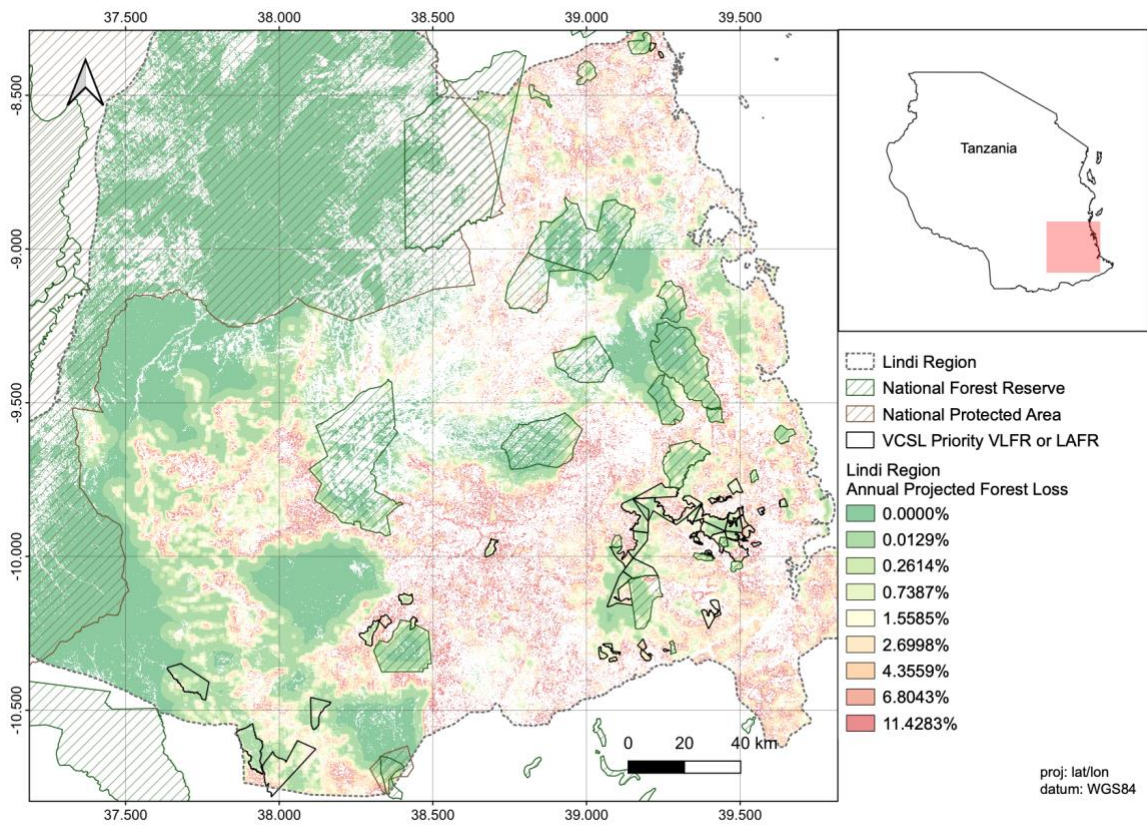


Figure 2 Projected deforestation risk for Lindi Region and Morogoro, Mvomero, and Kilosa Districts

## Funding

Village Climate Solutions Ltd (VCSL) is expected to issue its first credits by the end of the second quarter of 2024. Project startup and running costs until the first issuance are expected to be covered by the African Forest Carbon Catalyst, which has committed to funding the project through a mixture of service agreements and recoverable loans. The project startup is expected to require approximately USD 1.1 million (TSH 2.6 billion) over the first 2 years of the project. Reterra Ltd, will be responsible for the loan and finance project startup through a VCU pre-purchase agreement with VCSL. Reterra will then repay the loan from profits it makes on the sale of carbon credits over the first project's first 3 to 6 years depending on market prices.

After the second quarter of 2025, VCSL will be entirely funded by the sale of carbon credits. To guarantee a market for these credits, VCSL will sign an off-take agreement with Reterra Ltd ensuring the purchase of all the project's credits at competitive prices with net carbon credit income sharing from 2025-2036. Reterra Ltd has already secured markets for the project's credits. The deal is potentially renewable after 2036.