



PV CLIMATE

PROJECT IDEA NOTE

Climate Smart Macadamia Agroforestry Malawi

Version 1.3
May 2025

Developed by:

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Highland Macadamia Cooperative Union Ltd. (HIMACUL), Malawi.

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Overview

Project Title:	Climate Smart Macadamia Agroforestry
Location:	<p>The project is based in Malawi in the following areas:</p> <p><u>Current areas (2024):</u> Ntchisi, Dowa, Neno, Mwanza</p> <p><u>Areas planned for expansion:</u> Ntchisi, Dowa, Neno, Mwanza, Rumphi, Mzuzu, Mchinji</p> <p><u>Further areas 'Yet to be approved':</u> Lilongwe (Horizon Farms), Mzimba (Sable), Dikarani (CDI), Thyolo (Sable)</p> <p><u>History</u></p> <p><u>Initial assessment of potential to develop the Plan Vivo project (2006-07)</u> Neno Macadamia Trust (NMT) were approached by the Clinton Development Initiative (CDI) as they were developing their 'Trees of Hope' project. At that stage, the number of farmers and macadamia trees planted in the Neno district were considered insufficient to merit the costs involved in establishing a PV project.</p> <p><u>Where the project started (2013):</u> Two large paper-based surveys were carried out with 1500 farmers in 2013 & 2016. These surveys included all farmers registered by the Malawi Ministry of Agriculture as district level coop members under the Highlands Macadamia Cooperative Union Ltd (HIMACUL).</p> <p><u>Where the pilot started (2017):</u> NMT began using phone-based methodology developed for the pilot. Only 64 farmers were surveyed as a subset of the 2013-16 base. At that point we were unable to secure finance to manage large-scale surveys and there was no certainty of access to carbon markets. A very conservative approach was taken to manage these and other risks such as tree deaths. We initially selected farmers who were paid-up members of HIMACUL who had traded for at least 2 years in the following districts:</p> <ul style="list-style-type: none"> • Ntchisi, Dowa, Neno, Mwanza
Project Coordinator:	<p>Enter name and contact details for the project coordinator.</p> <p>NMT/HIMACUL</p> <p>NMT Contact Steven Goodman steve.w.goodman@outlook.com HIMACUL Contact Ken Mkengala kenmkengala@gmail.com</p> <p>HIMACUL Office (Ntchisi) – Highlands Macadamia Cooperative Union Ltd., Ntchisi PO Box 8, Malawi</p>

Project Area:	<p>State the extent of the total proposed project area (in hectares) at the start of the project and any plans for expansion.</p> <p>The CDMC pilot surveyed 8,825 trees (ca. 57ha in 2017) with 64 farmers, rising to ca. 16,140 trees (ca. 103ha) with 305 farmers holding an average of 53 trees per farmer in 2022.</p> <p>The project aims to expand from the CDMC pilot area from 103ha to >1125 ha.</p>
Project Participants:	<p>Provide a summary of the proposed project participants including number of individuals/households included initially, and any plans for expansion.</p> <p>The CDMC pilot built from 64 farmers to 305 farmers between 2017 and 2022 (circa 1,500 individuals in total including family members).</p> <p>The proposed project will expand across all HIMACUL cooperatives to reach 2,500 farmers or circa 12,000 individuals.</p>
Project Intervention(s):	<p>List the proposed project interventions and specify whether they are Protection, Restoration or Improved Management.</p> <p>Improved Land Management through the establishment of macadamia agroforestry systems. Farmers are supported in interplanting Macadamia trees amongst their conventional annual crops at an 8x8m spacing.</p>
Expected Benefits:	<p>Summarise the expected carbon, ecosystem and livelihood benefits of the project.</p> <p>Carbon benefits:</p> <p>Carbon sequestration in tree biomass and soil carbon - Brandreth (2016):</p> <p>97.6 tCO2e/hectare without buffer over the 25-year life.</p> <p>78.1 tCO2e/hectare with 20% buffer over the 25-year life.</p> <p>Total carbon sequestered for the life of the project is therefore 8,044 te. CO2 for the current area surveyed in 2022 (103 Ha) rising to 87,860 te for the future area once scaled up (1125 Ha) to be confirmed at PDD stage.</p> <p>Note: The estimated carbon benefit shown is a per hectare calculation based on a typical 156 trees per hectare using PM001. Carbon is calculated on a per tree basis. In 2023 the average number of trees per farmer was 53.</p>

<p><u>Livelihood benefits</u></p> <p>Food security, livelihood support and poverty alleviation, income diversification: Smallholder farmers in Malawi are among the poorest in the world with limited resource to transition from a maize-based farming system to macadamia agroforestry. Harvesting of macadamia nuts takes place from December to March when there is no income from other crops evening out farmers income and enhancing food security. Not only is the crop sold into export markets, but it has become an integral part of the diet of the farming families that grow the crop. This highly nutritious food supplements a maize-based diet with the potential for significant impacts that need more detailed analysis. This flexibility removes the poor farmers' dilemma of food vs money providing essential calories and nutrients to poor communities battling with malnutrition especially among children. Carbon credits provide an additional source of income. Many farmers farm maize and tobacco, however world tobacco prices are reducing due to reduced demand. Macadamia is a good alternative to tobacco as it provides a high income with relatively low-cost inputs (e.g. labour, fertilizers, herbicides and tools) and is drought-resistant which is increasingly important due to climate change. It is also the only alternative crop which is a tree offering other benefits.</p> <p>Reduced risk/adaptation to climate change: Macadamia trees are drought-resistant hence when the maize crop fails due to drought, there is still likely to be food and income from macadamia. They also buffer other crops from rising temperatures and extreme weather, improving agricultural resilience and preventing large yield declines.</p> <p><u>Ecosystem benefits</u></p> <p>Improvements in soil quality: This is achieved by the trees' excellent proteoid root systems and shade which reduces ground temperatures from 50°C to 27°C. Organic matter originating from tree vegetation contributes to heightened nutrient absorption and microbial diversity which improves soil health.</p> <p>Water Co-benefits: Water retention and reduced soil erosion - tree root networks and canopies improve the soil's water retention capacity, decreasing stormwater run-off volumes, and subsequent soil loss, and increasing groundwater reserves. This in turn mitigates landscape and farmer vulnerabilities to drought, landslides, and wind erosion.</p> <p>Habitat creation for bird and insect species: macadamia trees provide a habitat for birds, bats and insects which help to provide natural pest control for the macadamia & the intercrops ultimately boosting yields and resilience.</p> <p>Reduced deforestation (improved land productivity, firewood provision): Nut shells can be burnt in portable stoves for cooking rather than felling trees to provide firewood. The income per hectare is greater than farming maize alone.</p>
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Methodology:	<p>State the methodology that will be applied to estimate climate benefits, or describe plans for development.</p> <p>The methodology currently used is PM001 developed by Brandreth (2016) based on V4 documentation, following methodologies developed by Berry (2008).</p> <p>Plan Vivo V5 methodology (PM001) will be used for this project.</p>
PIN Version:	1.3
Date Approved:	23/06/2025

1 General Information

1.1 Project Interventions

Complete Table 1.1. to describe why each project intervention is expected to provide long-term increases in carbon storage or reductions in greenhouse gas emissions and have positive impacts on local livelihoods and ecosystems. Add a row for each project intervention.

Table 1.1 – Project Interventions

Intervention Type	Project Intervention	Expected Benefits
Enter the type of intervention i.e. Protection, Restoration or Improved Management	Enter a brief description of the project intervention.	Provide a summary of the climate, livelihood and ecosystem benefits expected.
Improved Management	<p>Establishment of macadamia agroforestry systems. Farmers are supported in interplanting Macadamia trees amongst their conventional annual crops at a typical spacing of 8x8m.</p> <p>At farm level, Macadamia trees (<i>Macadamia Integrifolia</i>) are interplanted with conventional annual crops, leaving space for conventional crop cultivation in between the trees. Once they have registered interest and understood the project, participants are supported in the following processes:</p> <ul style="list-style-type: none"> - Land management planning; - Soil preparation (advice on digging, spacing, compost-manure mix); - Tree planting (timing, irrigation, maintenance); - Mulching - Monitoring of tree growth - Annual carbon credit payments including payments in the early years providing an income before nut crop (c5 years from planting). - Providing access to market at fairtrade price to guarantee long-term returns on tree products. 	<p><u>Carbon benefits:</u></p> <p>Carbon sequestration in tree biomass and soil carbon.</p> <p>Based on Brandreth (2016):</p> <p>97.6 tCO2e/hectare without buffer.</p> <p>78.1 tCO2e/hectare with 20% buffer.</p> <p><u>Livelihood benefits:</u></p> <ul style="list-style-type: none"> - Food security - Livelihood support and poverty alleviation - Income diversification - Climate change adaptation <p><u>Ecosystem benefits:</u></p> <ul style="list-style-type: none"> - Improvements in soil quality - Improved soil water retention - Reduced soil erosion - Habitat creation for bird and insect species - Reduced deforestation (improved land

	<p>Farmers already registered to the project have been surveyed on an annual basis.</p> <p>See Annex 6 - Extract from a draft Plan Vivo v4 PIN (Part 1 – Community Led Design Plan), developed after receiving a Letter of No Objection from Malawi Government in 2015 (Annex 5). The extract from the PIN describes consultation with farmers and training from Imperial College prior to the start of the project.</p> <p>Together, these activities fit into a holistic approach to overcoming the barriers to entry faced by farmers, simultaneously tackling financial, technical, and infrastructure challenges. Once trees are planted, technical support is provided through training by HIMACUL and peer support in business centres to grow trees to maturity. The financial burden, comprised mainly of large upfront costs without return in the initial years, is alleviated by fPVC payments, adding a tangible financial value to the trees before they bear fruit. After trees start bearing fruit, 5-6 years after planting, access to the Fairtrade market through the cooperatives provides farmers with a reliable source of income that exceeds the returns of conventional annual crops. At this stage, returns from the trees are sufficient for farmers to maintain them until the end of their lives, ensuring that the carbon benefits are achieved.</p> <p>The project engages with several actors in the macadamia value chain:</p> <p>HIMACUL: a second-tier cooperative union comprised of district-level primary cooperative members located in all three regions of Malawi. It provides smallholders with training and planning assistance, runs tree nurseries, develops industry relationships, and provides a route to market for the crop.</p> <p>District-level primary coops: These are located</p>	<p>productivity, firewood provision)</p>
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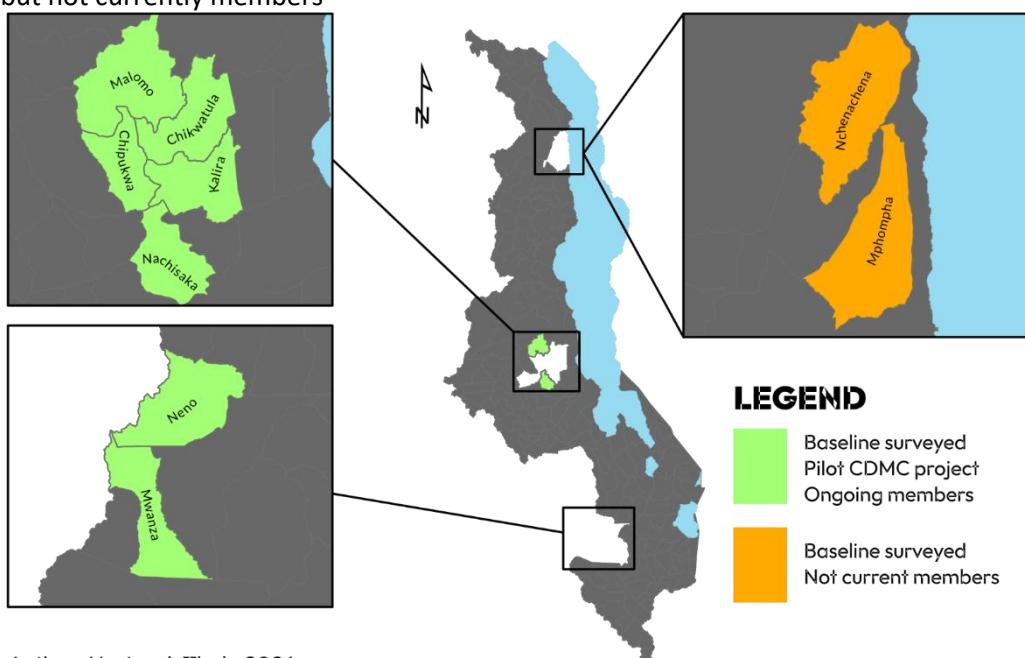
	<p>within Agricultural Development Division (ADD) Extension Planning Areas (EPAs). The boards of these primary cooperatives are composed of lead farmers elected from village-level business centres. The primary cooperatives coordinate the activities of farmers in the district.</p> <p>Village-level business centres: Groups of farmers in their geographical areas. Farmers come together through business centre meetings. Each village business centre is composed of circa 5-10 farmers and is led by a lead farmer (farm size agnostic). Lead farmers work closely with a group of farmers, passing on technical messages, securing markets, and providing oversight to the business centres to discuss matters relating to their farms, seek technical advice and access phones to reach HIMACUL.</p>	
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1.2 Project Boundaries

Provide map(s) showing the boundaries of the proposed project region(s), project area(s), and protected areas within or adjacent to the project region(s). Include geospatial data files for project region and project area boundaries in Annex 1 (optional).

Complete Table 1.2 to provide a summary of the location and extent of the proposed project region(s) and project area(s).

EPA Map1 – Initial members of the Carbon Damage Mitigation Certificate project and Baseline surveyed, but not currently members



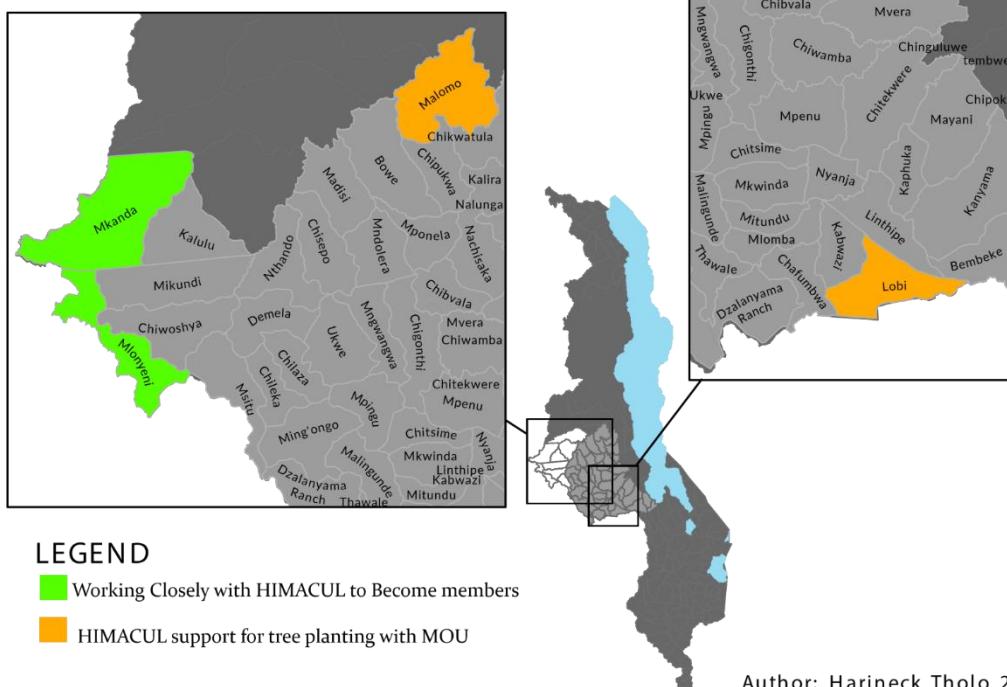
Map No.	Coop Code	ADD	District	EPA	Primary	Secondary
1	DO1	Kasungu	Dowa	Nachisaka	Nachisaka	HIMACUL
2	NT1	Kasungu	Ntchisi	Chipuka	Mphaza	HIMACUL
3	NT2	Kasungu	Ntchisi	Kalira	Tithandizai	HIMACUL
4	NT3	Kasungu	Ntchisi	Chikwatula	Chikwatula	HIMACUL
5	NT4	Kasungu	Ntchisi	Malomo	Malomo	HIMACUL
6	NE1	Blantyre	Neno	Neno	NESMACSI	HIMACUL
7	MW1	Blantyre	Mwanza	Mwanza	Mwanza M	HIMACUL
8	RU1	Mzuzu	Rumphi	Nchenach	Nchenach	HIMACUL
9	RU2	Mzuzu	Rumphi	Mphomph	Mphomph	HIMACUL

KEY

1-7 baseline surveyed - pilot CDMC project - ongoing members

8-9 baseline surveyed - not current members

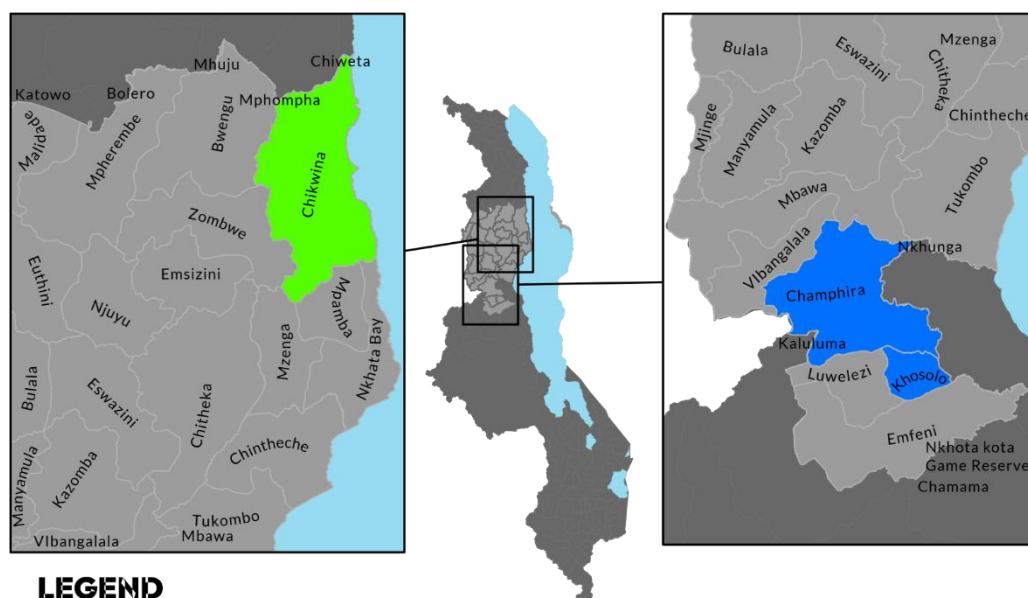
EPA Map 2.1 – Working Closely with HIMACUL to become members. HIMACUL support for tree planting with MOU



(Other areas included under 'HIMACUL support for tree planting with MOU' but without EPA mapping including cooperatives within Lilongwe, Dowa, Mchinji, Dedza).

Map No.	Coop Code	ADD	District	EPA	Primary	Secondary
10	NB1	Mzuzu	Nkhata Bay	Chakwina	Chakwere	HIMACUL
11	MC1	Kasungu	Mchinje	Mulonyeni		HIMACUL
12	MC2	Kasungu	Mchinje	Mkanda		HIMACUL
13	LI1	Lilongwe	Lilongwe	Lobi		Dikarani
14	DO2	Kasungu	Dowa			Dikarani
15	NT5	Kasungu	Ntchisi	Malomo		Dikarani
16	MC3	Lilongwe	Mchinje			Dikarani
17	DE2	Lilongwe	Dedza			Dikarani

EPA Map 2.2 – Working Closely with HIMACUL to become members and No MOU but potential partners



LEGEND

Map No.	Coop Code	ADD	District	EPA	Primary	Secondary
18	LI2	Lilongwe	Lilongwe		Horizon	
19	MZ1	Mzuzu	Mzimba	Njenda	Sable	
20	MZ2	Mzuzu	Mzimba	Khosolo	Sable	

KEY

18 MOU under development
19-20 No MOU but potential partners

Table 1.2 Project Boundaries

Location:	Districts of Ntchisi, Dowa, Mwanza, Neno and Rumphi in Malawi.																		
Project Region(s):	<p>Enter the number and total extent (in hectares) of the proposed project region(s).</p> <p>The proposed project will be in all three regions of Malawi –</p> <p>The total area of land suitable for smallholder macadamia production is as follows:</p> <p>Central (3,408ha), Southern (773ha) and Northern Region (1,368ha)</p> <p>Source: Malawi Ministry of Agriculture.</p> <p>Within this the total area for the project is articulated below.</p>																		
Project Area(s):	<p>Enter the number and total extent (in hectares) of the proposed project area(s).</p> <p><u>Current areas (2023): (125 ha)</u> Central region: Ntchisi (66.5 ha), Dowa (30.2ha) Southern region: Neno (21.8 ha), Mwanza (6.8 ha)</p> <p><u>Total area after expansion (1074 ha):</u> Ntchisi (620 ha), Dowa (155 ha), Neno (68 ha), Mwanza (60 ha), Rumphi (170 ha)</p> <p><u>Further areas 'Yet to be approved' (area to be defined):</u> Lilongwe (Horizon Farm Coops), Lilongwe, Dowa, Ntchisi, Mchinji, Dedza (Dikarani Coops), Mzimba and Thyolo Coops, Mzuzu</p> <p>Annex 10 contains 3 maps showing the areas described.</p>																		
Protected Areas:	Identify any legally designated protected areas within or adjacent to the project region(s).																		
	<table> <tbody> <tr> <td>Dowa Hills Forest Reserve</td> <td>3,142 ha</td> </tr> <tr> <td>Dedza Mountain forest reserve</td> <td>2,917 ha</td> </tr> <tr> <td>Bunda Forest reserve</td> <td>93,500 ha</td> </tr> <tr> <td>Chongoni Forest Reserve</td> <td>12,353 ha</td> </tr> <tr> <td>Ntchisi Forest Reserve</td> <td>7,500 ha</td> </tr> <tr> <td>Nkhotakota game reserve</td> <td>180,000 ha</td> </tr> <tr> <td>Mchinji Forest Reserve</td> <td>2,200 ha</td> </tr> <tr> <td>Tsamba Forest Reserve</td> <td>4,200 ha</td> </tr> <tr> <td>Nyika National Park</td> <td>320,000 ha</td> </tr> </tbody> </table>	Dowa Hills Forest Reserve	3,142 ha	Dedza Mountain forest reserve	2,917 ha	Bunda Forest reserve	93,500 ha	Chongoni Forest Reserve	12,353 ha	Ntchisi Forest Reserve	7,500 ha	Nkhotakota game reserve	180,000 ha	Mchinji Forest Reserve	2,200 ha	Tsamba Forest Reserve	4,200 ha	Nyika National Park	320,000 ha
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Mchinji Forest Reserve	2,200 ha																		
Tsamba Forest Reserve	4,200 ha																		
Nyika National Park	320,000 ha																		

	Thuma Forest Reserve	19,700 ha
	Uzumara Forest Reserve	29,000 ha
	 <p>Malawi Map Project Areas and Reserves.p See map attached.</p>	

1.3 Land and Carbon Rights

Describe the ownership, tenure, user rights or management rights of the project area(s), and how these relate to the carbon rights of project participants.

The project will work primarily with smallholder farmers who operate under the customary land system. Smallholder land holding size in Malawi is typically small, averaging between 0.7 and 0.8 hectares per household. Each farmer has a right to land which the chief allocates and which he or she owns based on customary land laws, mainly relying on family ancestry. Farmers are entitled to the land which they cultivate for as long as they are cultivating it. Each farmer therefore has access to carbon rights for the macadamia trees planted on their land.

Customary land tenure is the most common system of land tenure in Malawi and is recognised under the Malawi Government Customary Land Act 2016. This legislation encourages all those under customary land tenure system to have their land leased to formalise ownership.

There are only 5 farmers with land over 10ha. These are typically on leased land and hold certificates of registration.

2 Stakeholder Engagement

2.1 Stakeholder Identification

Identify and describe the main stakeholder groups that could influence or be affected by the project. Describe the relationship of each stakeholder group to the project and state whether they are considered local stakeholders or secondary stakeholders (see Plan Vivo Glossary for definitions). Identify any Indigenous Peoples or local communities that have statutory or customary rights to land or resources in the project area(s).

Stakeholder Group	Category	Relationship with the project
Individual farmers	Local	<p>The landowner, referred to as the individual farmer, voluntarily participates in the project after free, prior, and informed consent and will plant macadamia on their land.</p> <p>Some of the larger farmers employ casual labour which includes some of the more marginalised farmers who have limited land to farm themselves (typically less than half a hectare) and who need to secure employment to meet their basic needs.</p> <p>They can engage in activities such as land preparation, plantation, post-plantation management, monitoring, and the construction of water conservation structures on the community lands. By participating in these activities, landless farmers can contribute to the project's objectives while also improving their livelihoods and economic well-being.</p> <p>There will be opportunities for younger farmers to engage with running their primary coops as board members.</p>
Female farmers	Local	<p>As above. In addition, female farmers face their own challenges which can be broken down depending on whether they're married or the head of the household (majority widowed).</p> <p>Female-headed farming households comprise 34% of the project. Macadamia agroforestry provides female-headed farming households with opportunities that they might not have. As macadamia is perennial crop it is less labour-intense, freeing up time for other activities). The project should also reduce the time spent collecting firewood, a task mainly undertaken by women and may also free up time in the long run for the entire farming household. The project seeks to engage with the entirety of households at the design phase, including women and youth.</p> <p>As a general rule, female farmers attend training less (particularly if they're married) because of cultural norms and the project attempts to ensure that training messages reach all farmers. A new project has been initiated, "Women School Leadership" with support from Fairtrade Germany in Central Region targeting 3 producer organisations, including HIMACUL.</p>

		<p>Overall Objective: Empowering women and youth for them to be able to take up leadership roles in their cooperatives.</p> <p>Workstreams:</p> <ol style="list-style-type: none"> 1. Women School of Leadership 2. Gender Mainstreaming and Strengthening 3. Advocacy. <p>Targets:</p> <ol style="list-style-type: none"> 1. Farmers/community members 2. POS Management 3. Board 4. Gender
Lead farmers	Local	<p>Lead farmers are elected to represent the farmers in a village business centre on the board of a primary cooperative. They work closely with a group of farmers within a business centre passing on technical messages to farmer communities, secure markets for farmers and provide oversight to the business centres.</p> <p>The lead farmer is often a person of influence within the village (e.g. a village headman/group village headman/retired businessperson). There could be more than one lead farmer per business centre. They do not necessarily hold more land than other farmers. They generally have customary land tenure as any other farmer.</p>
Landless poor	Local	<p>The project will create opportunities for employment in nurseries, post-harvest aggregation/processing, and technical support (surveys, best practice training, support technicians).</p>
Village	Local	<p>Village-level business centres group farmers in their geographical areas (usually a village). Farmers come together through business centre meetings to discuss matters relating to their farms, seek technical advice and access phones to reach HIMACUL.</p>
Primary coops	Local	<p>District-level primary coops are located within Agricultural Development Division (ADD) Extension Planning Areas (EPAs). The EPAs have a distinct agroecology, and the Ministry of Agriculture's staff provide agricultural extension support and training to farmers for suitable crops to grow in those areas. Farmers are only advised to grow macadamia trees in EPAs that are suited to the crop.</p> <p>Farmers are members of primary cooperatives, and some are elected to be representatives of the primary's board.</p> <p>The district-level primary coops are members of the second-tier cooperative union HIMACUL with representation on the board.</p> <p>Three of the primary cooperatives have Village Savings & Loans Associations (VSLAs).</p>

HIMACUL	Local	<p>HIMACUL provides market access for Fairtrade smallholder cooperative farmer macadamia nuts and voluntary tree carbon.</p> <p>HIMACUL purchases the crop from the farmers and aggregates the crop for delivery to the processor. HIMACUL staff provide technical support to the farmers and manage macadamia tree nurseries for expansion of the crop.</p> <p>HIMACUL plans to develop district-level aggregation centres and post-harvest processing with value-addition for Grade B nuts for local markets.</p> <p>HIMACUL is a second-tier cooperative union that is comprised of primary cooperative members who are located in all three regions of Malawi. The board is made up of representatives from the primary cooperatives and the management of HIMACUL provide a secretariate role for HIMACUL, the primary cooperatives, and the farmer members.</p> <p>HIMACUL distributes farmer payments and plans to extend VSLAs into most active business centres.</p> <p>HIMACUL is the project coordinator for the Plan Vivo carbon project in Malawi in partnership with NMT.</p>
NMT	Secondary	<p>NMT has a longstanding partnership with HIMACUL focused on supporting the coops with tree planting and since 2013 has been working towards establishing a voluntary carbon project with HIMACUL. Since 2016-17, partners have piloted a carbon damage mitigation system, linking farmers to individual and corporate carbon customers in the UK.</p> <p>NMT's aim is to improve the farmers' resilience to climate, nutrition and economic shocks with support from internationally recognised experts in land-use change management and smallholder value chains. By working with HIMACUL, the aim is to incentivise more farmers to participate in macadamia climate smart macadamia agroforestry and to build rural economies that support these farming communities.</p> <p>NMT is the project coordinator in partnership with HIMACUL.</p>
Government of Malawi	Secondary	<p>HIMACUL works closely with the Ministry of Agriculture at ADD, district, and EPA levels. HIMACUL, the primary coops and farmers receive advice and support from district level staff and extension staff on crop production. As HIMACUL develops its post-harvest processing capacity, it has received technical support such as for developing environmental impact assessments, which is provided by district-level environmental officers.</p> <p>NMT liaise closely with Malawi Government through regular contact with the Malawi High Commission, UK.</p>

Macadamia nut traders	Secondary	<p>Nutcellars is an impact-driven, macadamia nut product exporter and brand retailer. Privately incorporated in 2019, based in the UK, Nutcellars coordinates a macadamia value chain (initiated in 2008 by Twin Trading), sourcing macadamia from Malawian cooperative producers. Currently Nutcellars, through HIMACUL, is trading with ca. 400 farmers. Nutcellars have launched a range of macadamia products in support of smallholder cooperatives with UK "Central Co-op" an ethical products retailer who have established a 5-year 'Our Malawi Partnership' project, committing at least £85k pa to co-op support including HIMACUL.</p> <p>There is an informal trade of macadamia nut in shell to local markets and export markets.</p>
Universities	Secondary	<ul style="list-style-type: none"> • OU Research – PhD studentships focused on smallholder macadamia in Malawi. New OU Societal Challenges funded project working with lead HIMACUL farmers in Ntchisi & Dowa districts to better understand and improve CSMA. • Imperial College Students – environmental sciences MSc projects providing manual opportunity to do in-depth studies e.g.: (2023) Thomas Di Paola assessment NMT HIMACUL Carbon Pilot in preparation for Plan Vivo PIN/PDD. William Brandreth undertaking PhD with plans to publish papers on the link between carbon finance and nut value chain developed by the partnership. • North Carolina State University (NCSU) – transfer of expertise in transitioning an economy from a predominantly tobacco-based farming system to a future that is outlined in Malawi's 2063 vision / first ten-year plan. Working closely with ministry of agriculture / extension / university and within the megafarm initiative, NCSU aim to help reconnect farmers to best farming practice by rebuilding extension services. • Royal Agricultural University (RAU)/OU/Imperial College/Welcome Trust – follow up to Emmanuel Zuza's PhD research to smallholder macadamia farming systems in Malawi. • Bunda College (LUANAR) – work closely with Horizon Farms and NCSU with the potential to engage with HIMACUL farmers too.
Charities	Secondary	<ul style="list-style-type: none"> • Themba Trust/Profs Who Fly Carbon – leading climate change academics endorsement/support of carbon pilot with supplier agreement to Imperial College. As NMT/HIMACUL develop Plan Vivo accreditation for carbon offsets there will be opportunity to expand across Imperial College/Welcome Trust for scope 3 emissions. • Malawi Orphan Fund (MOF), Bedford (UK) – MOF has a longstanding partnership/support program with Home of Hope Mchinje, including the establishment of a macadamia tree

		nursery and initial tree planting, in a newly-formed HIMACUL coop.
Partners	Secondary	<ul style="list-style-type: none"> • Growth Poles – USAID funded development program. NMT is seeking match funding support for various initiatives to extend the benefits to more farmers. • Foreign Commonwealth Development Office's (FCDO) Malawi Trade and Innovation Program (MTIP). Malawi Value Chains (MVC) is focused on mango and macadamia value chains with the aim of creating a support program for medium sized farmers – some of whom are members of HIMACUL and others who are interested in membership. • Horizon Farms – NMT is working on a Memorandum Of Understanding with Horizon Farms as it develops plans to work with ca. 3000 smallholder farmers. The intention is that HIMACUL will provide these farmers with an offtake agreement for nuts and carbon. HIMACUL will also provide Horizon Farms and their farmer cooperatives with technical support. • Clinton Development Initiative (CDI) – NMT has had a long-term relationship with CDI to support tree planting among the Dikarani cooperatives. HIMACUL has an offtake agreement with the Dikarani cooperatives for macadamia nuts, with the intention that those farmers would become part of the NMT-HIMACUL carbon project. HIMACUL will provide Dikarani Cooperatives and their farmer cooperatives with technical support.

2.2 Project Coordination and Management

Identify the project coordinator organisation that will take overall responsibility for the project, and any other organisations that will play a role in project coordination and management. Identify the parties responsible for each of the project coordination and management functions listed in Table 2.2.

Provide a summary of relevant experience that demonstrates proficiency in the assigned function(s) for the project coordinator and any other organisations listed in Table 2.2. Include details of skills and experience to allow for appropriate engagement with any indigenous vulnerable or disadvantaged peoples in the project region.

Provide a copy of the project coordinator's registration certificate in Annex 2.

If the applicant organisation identifies another organisation to act as the project coordinator, include a statement signed by the project coordinator acknowledging that the PIN was submitted with their full consent in Annex 2.

The Applicant Organisation is the Neno Macadamia Trust (NMT).

NMT is registered as a Charitable Incorporated Organisation (CIO) under the UK Charities Commission. The organisation has been actively involved in supporting sustainable

macadamia agroforestry in Malawi since 2004 and in helping develop a carbon financing project for smallholder macadamia farmers since 2013.

Long-term objectives of the organisation:

The long-term objective of NMT is to promote sustainable agriculture through macadamia tree planting in partnership with smallholder farmers. NMT and HIMACUL aim to improve the livelihoods of local communities by providing economic opportunities through carbon finance, while simultaneously addressing climate change through carbon sequestration.

Brief history of projects and current projects:

NMT has been working in Malawi for over 20 years, with a specific focus on building and supporting smallholder macadamia farming systems. Key past projects include the establishment of macadamia tree nurseries, soil conservation initiatives, and a pilot carbon finance project in partnership with HIMACUL. The current focus is aligning the proprietary project to the Plan Vivo standard (V5).

Key achievements in the last 25 years:

- Developed macadamia tree nurseries that have distributed tens of thousands of trees to smallholder farmers and have deliberately targeted the more vulnerable farmers including women and youth.
- Piloted the first carbon finance project in Malawi linked to smallholder macadamia production.
- Partnered with HIMACUL to build farmer cooperatives and business centres, providing technical support to cooperative members.
- Generated income for farmers through socially beneficial carbon credits, successfully offsetting carbon emissions for UK institutions like Imperial College, in partnership with leading climate change academics.

Personnel to be involved in the project:

Key personnel from NMT include:

1. **Andrew Emmott, Trust Chairman** – Andrew brings extensive experience in climate finance, agroforestry, and carbon markets, having led NMT for over 15 years.
2. **Steven Goodman, Project Coordinator** – With expertise in project management, Steven leads the efforts to coordinate NMT's activities with HIMACUL's pilot project.
3. **Dr William Rawes, Software Specialist** – Has led the carbon damage mitigation pilot, mobile phone surveys, data management and carbon registry. Expertise includes development of NMT's carbon calculator for domestic & corporate customers.
4. **Martin Hamilton, Database Support** – Operates within the data management team led by Dr William Rawes, managing receipt and processing of survey data and issuance of CDMC certificates.

5. **Richard Lindley, Project Finance** – as NMT's treasurer, Richard is responsible for NMT's financial management including carbon payment receipts and allocation of payments to HIMACUL and HIMACUL farmers.
6. **Technical Consultants** – A team of specialists in agroforestry and climate change mitigation supports NMT in project development, monitoring, and reporting.

Roles and Responsibilities

NMT:

Technical:

- Develop carbon financing mechanisms under the Plan Vivo standard (V5).
- Provide technical guidance on macadamia agroforestry practices, including soil conservation, land management, and tree planting strategies.
- Oversee monitoring, reporting, and verification (MRV) of carbon benefits, ensuring compliance with international standards.

Administrative:

- Manage project finances, ensuring the distribution of carbon revenues and grants by HIMACUL to cooperatives and farmers.
- Ensure compliance with UK charity regulations and Plan Vivo carbon standards.
- Coordinate with HIMACUL and local partners to maintain accurate records of farmer participation and project outcomes.

Social:

- Support HIMACUL develop their participatory design processes to engage with local communities, ensuring that farmers are actively involved in decision-making.
- Facilitate capacity building workshops for farmers, with a focus on empowering women and young farmers.
- Promote equitable benefit-sharing among farmers, business centres, and cooperatives, ensuring that all participants receive a fair share of income from carbon credits.

Highland Macadamia Cooperative Union Ltd (HIMACUL):

HIMACUL is registered as a Limited Company under the Government of Malawi's Ministry of Industry and Trade. It serves as the cooperative union for primary cooperatives involved in macadamia farming throughout Malawi.

Vision:

To create a sustainable and equitable macadamia farming industry in Malawi that provides long-term economic and environmental benefits to smallholder farmers and their communities.

Mission:

To support smallholder farmers in Malawi by providing them with the necessary training, resources, and market access to grow macadamia trees sustainably. HIMACUL seeks to improve livelihoods and enhance climate resilience through climate smart macadamia agroforestry.

Approach:

HIMACUL operates by working closely with farmer cooperatives, providing training on sustainable farming practices, establishing tree nurseries, and linking farmers to international markets for macadamia nuts and carbon credits. The organisation adopts a participatory approach through the cooperative governance structure, ensuring that local farmers are involved in decision-making processes.

Personnel to be involved in the project with details of relevant skills and experience:

1. **Ken Mkengala, HIMACUL Manager and Lead Agronomist** – Ken has 20 years of experience in overseeing macadamia farming systems in Malawi and managing cooperative structures. Ken has led the pilot carbon project in Malawi, liaising with NMT on project design and development and managing annual farmer tree surveys.
2. **Mwai Moses, HIMACUL Secretariate/Administrator** – Administering the NMT / HIMACUL projects including distribution of carbon payments to farmers. As part of the CDMC pilot team, Mwai has more than 8 years of experience in developing the first carbon project with smallholder macadamia farmers in Malawi.
3. **HIMACUL Board** – Coordinating the direction of the project within HIMACUL and securing agreement for expansion with new cooperatives and other smallholder farmer organisations. As representatives of the different farming cooperatives, the board will take a leading role in ensuring farmer participation as the project develops.
4. **Primary Coop Boards & Lead Farmers** – Experienced farmers who provide on-the-ground training and technical support to farmer cooperatives. These lead farmers have engaged their community in the development of the carbon pilot and will facilitate farmer participation in the development of the Plan Vivo project.
5. **HIMACUL Technical Officers** – These staff are involved in the annual tree surveys, working closely with lead farmers.
6. **HIMACUL Tree Nursery Staff** – A team of nursery staff responsible for day-to-day operations, including coordinating tree planting and managing nursery sites.

HIMACUL Roles and Responsibilities:

Technical:

- Manage day-to-day project implementation, including the distribution of seedlings, technical support for tree planting, and ongoing training in sustainable macadamia farming.

- Conduct regular monitoring of tree growth and soil health, providing feedback to NMT on project progress.

Administrative:

- Handle the registration of new farmers and cooperatives within the project.
- Coordinate with NMT on financial management and the distribution of funds, including carbon credit payments to farmers.
- Maintain records of all project activities, including farmer participation, training sessions, and sales data.

Social:

- Promote inclusive participation by ensuring that all farmers, regardless of gender or age, have access to training and resources.
- Engage in community mobilisation to raise awareness of the benefits of macadamia farming and carbon credits.
- Strengthen the capacity of local business centres to provide ongoing support to farmers and ensure the sustainability of the project.

Table 2.2 Responsibility for Project Coordination and Management Functions

Project Coordination and Management Function	Responsible Party/Parties
Stakeholder engagement during project development and implementation	HIMACUL
Ensuring conformance with the Plan Vivo Carbon Standard (PV Climate) and compliance with applicable policies, laws and regulations	NMT
Developing technical specifications, land management plans and project agreements with project participants	NMT & HIMACUL
Ensuring that the PDD is updated with any changes to the project	NMT
Registration and recording of land management plans, project agreements, monitoring results, and sales agreements	NMT & HIMACUL
Managing project finances and dispersal of income to project participants as described by the benefit sharing mechanism	NMT & HIMACUL
Managing Plan Vivo Certificates in the Plan Vivo Registry	NMT
Preparing annual reports and coordinating validation and verification events	NMT

Securing certificate sales and other means of funding the project	NMT
Assisting Project Participants to secure any legal or regulatory permissions required to carry out the project	NMT & HIMACUL
Providing technical assistance and capacity building required for project participants to implement project interventions	HIMACUL & business centres
Monitoring progress indicators, livelihood indicators and ecosystem indicators and providing ongoing support to project participants	NMT & HIMACUL
Measurement, reporting and verification of carbon benefits	HIMACUL & NMT

2.3 Project Participants

For each project intervention, identify the potential project participants and describe their location in relation to the project area(s) and project region.

Identify any potential project participants that are not resident within the project area, who do not manage land or natural resources within the project area for small-scale production, or who are structurally dependent on year-round hired labour for their land or natural resource management activities; and describe what measures are in place to ensure that the project areas they manage: i) Collectively make up less than 30% of the total Project Area at all times; ii) Were not acquired from smallholders or community groups for the purpose of inclusion in the Project; and iii) Have clear benefits to the Project, for example by increasing connectivity or benefits to local communities.

The project works mainly with smallholder farmers (generally smaller than 3 hectares, between 0.7 and 0.8 hectares on average) who cultivate their land allocated by chiefs. Smallholder farmers typically live in small villages, on or next to their land.

There are 5 farmers with land over 10ha (10-20ha). These larger farmers hire labour; they also reside on their land within the project area. They are key to the success of the project as they bring material resources and technical advice.

Farmers who were included in the pilot in the following areas

Ntchisi, Dowa, Neno, Mwanza

Farmers in HIMACUL Coops who were surveyed from 2013 to 2016 but not included in the pilot in the following areas

Ntchisi, Dowa, Neno, Mwanza

Rumphi, Mzuzu, Mchinji

Further areas – agreement to be formalised:

Lilongwe (Horizon Farm Coops)

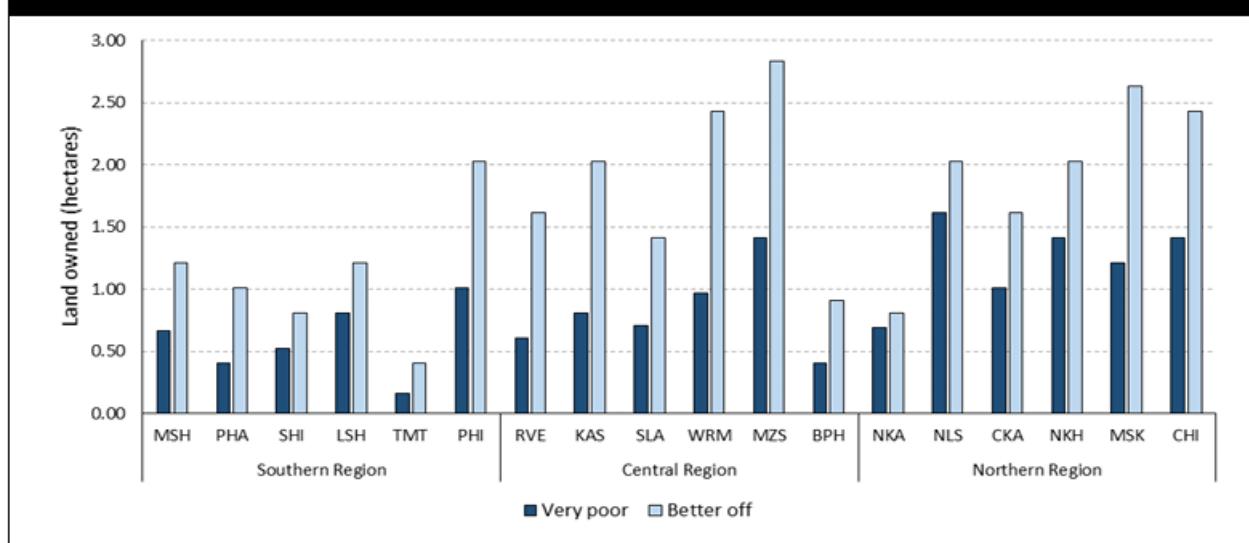
Lilongwe, Dowa, Ntchisi, Mchinji, Dedza (Dikarani Coops)

Thyolo and Mzimba Coops

The project seeks to engage with the entirety of households at the design phase, including women and youth. Female-headed farming households comprise 34% of the project. There are 71 young farmers registered as members of HIMACUL. Macadamia agroforestry provides female-headed farming households and youth with opportunities that they might not have. As macadamia is a perennial crop it is less labour-intensive, freeing up time for other activities. The project should also reduce the time spent collecting firewood, a task mainly undertaken by women and may also free up time in the long run for the entire farming household.

Differences in farmers way of life by region can be characterised as follows: Smallholder farmers growing macadamia in Malawi have been advised to plant in specific agroecological zones with similar characteristics in terms of rainfall and altitude. The farmers in Mwanza, Neno (Southern), Dowa, Ntchisi (Central), and Rumphi (Northern) farm in the highlands of the rift valley and have similar ways of life. The key difference between regions in Malawi is the amount of land available, with the southern, central, and northern regions having the smallest to largest holdings respectively. The table below is from Famine Early Warning Systems Network – Livelihood Baseline March 2016.

Figure 10: Differences in land holdings for very poor and better-off households across livelihood zones



2.4 Participatory Design

Describe the participatory process that will be followed to develop project interventions and define the project logic involving representatives of potential project participants and other local stakeholders. Include details of any measures to ensure the inclusion of those that may normally be excluded or marginalized because of gender, age, ethnicity, religion, or social status and to ensure that their concerns and aspirations were consistently understood and considered.

The participatory process followed to develop project interventions and define the project logic involved representatives of the farmers who were members of the macadamia Coops. The Coop structure was designed to ensure that more marginalised small and women farmers make up a significant proportion of the Coop membership, circa 34% women and the vast majority of farmers with land of less than 1 ha. This structure facilitates close cooperation between HIMACUL governance at all levels of the coop, with oversight from District Office through to Extension Planning Office agricultural extension staff. As the project expands inclusion of women and marginalised farmers will continue to be a key requirement, for example HIMACUL is keen to ensure that the smaller farmers are provided with trees at subsidised rates to increase to between 50 and 100 trees per farmers.

The community that the project works with is farmers who are members of HIMACUL (the district level coop) and primary coops. The structure for decision-making is defined by the coop governance documents. Farmers in each EPA are elected onto the boards of the primary coops and from these members are elected onto the Cooperative Union board of HIMACUL. The day-to-day management of HIMACUL and the secretariat function for HIMACUL and the primary cooperatives are directed by the boards and managed by Ken Mkengala. HIMACUL's strategic direction is governed by 5-years business plans and annual budgets are developed by the management and approved by the boards. Within the primary coops farmers are grouped into business centres which deal with matters pertinent to their local needs.

Decentralised district level governance in Malawi also involves traditional authorities – chiefs and village headmen who are responsible for customary land allocation.



The project was piloted in the district of Ntchisi in 2016 with an initial group of farmers and was supported by district level Ministry of Agriculture extension staff. The farmer meetings were used as sensitisation meetings to explain the project concept, to field questions and to generate discussion with the farmers. The main concerns raised were over the equitable distribution of funds, and access for farmers who were not currently growing macadamia. This led NMT and HIMACUL to structure a straightforward payment system that initially allocated 20% of the carbon payments to each party involved. In 2019, based on feedback from stakeholders on the ground, this evolved into the current distribution model: 20% of payments are allocated directly to farmers, 40% are used to cover project administrative costs shared between NMT and HIMACUL (including surveys, audits, and reporting, with approximately half going to HIMACUL annually), and the remaining 40% are allocated to community projects as agreed upon by NMT, HIMACUL, and the primary cooperatives and their members. Annually the primary societies make proposals for next years' fund allocations which are then considered by the project coordinators (HIMACUL and NMT); a balanced budget is then formulated for agreement by the primary societies. Some funds will be ring-fenced for tree subsidy especially for marginalised farmers. The distribution will always comply with Plan Vivo's condition that 60% of revenue remains in-country. This system is more equitable: smaller farmers benefit from scaling of the business centres and larger farmers in their communities. The money therefore stays in the community/system and builds long-term value for local communities, both small and large farmers alike.

Community interaction with the project coordinators is conducted mainly through regular farmers' village-level business centre meetings, which HIMACUL members attend. Due to their bottom- up/local structure, business centres (typically 5-10 farmers plus a representative from HIMACUL) are inherently a space for dialogue and inclusion. Upon attendance, HIMACUL has the opportunity to present the project to potential new participants. New farmers can register interest through these. HIMACUL then furthers engagement with farmers with a site visit when they wish to begin the project. The meetings are also a place for existing members to raise issues, concerns or to provide feedback. The Ministry of Agriculture EPA officers provide an independent point of contact for farmers to share and resolve grievances. Please see Annex 7 HIMACUL Board meeting minutes 07/24 – attended in Malawi in person by Andrew Nick & Tim Emmott. The HIMACUL Board is comprised of 25% female-headed household farmers. (See Board Minutes). Obtain primary board minutes & evidence of communication with business centres to show participation.

Positions on the primary coop board and by extension the HIMACUL board are limited to 3 years, although it is possible to extend to a second term.

This way of working has been in place for the Climate Smart Macadamia Agroforestry pilot from 2016 to 2024.

Any new members are incorporated into existing village business centres once they have registered; these meet regularly to discuss a wide range of agricultural issues. Key to ensuring equity is the participation of farmers large and small farmers, with and without existing macadamia activities. In this way, smaller farms benefit from the technical knowledge, route to market, tools and other resources developed by "lead farmers".

Local village chiefs are involved during the sensitisation process to the project introducing macadamia and carbon credits to farmers in their area. This ensures consultation of relevant local authorities is undertaken.

2.5 FPIC Process

Describe the FPIC process that will be followed to enable a collective decision by Indigenous Peoples and local communities with statutory or customary rights to land or resources in the initial project area(s) to negotiate the conditions under which the project is designed, implemented, monitored and evaluated and grant or withhold consent to: i) consider the proposed project; ii) engage in the project design process; and iii) implement the project.

Project Overview:

Free and Prior Informed Consent to membership of a primary coop (and to HIMACUL) requires that a new farmer consents to paying a membership fee for the services that HIMACUL offers, including the carbon project.

Prior to joining a coop a farmer is given

- Detailed information on the Climate Smart Macadamia Agroforestry project, including its goals, benefits, and potential impacts on land, resources, and communities.
- Information on climate-smart practices, agroforestry techniques, and sustainable macadamia cultivation.

There is also a discussion on the environmental, social, and economic aspects of the project and alternatives. All project-related materials are translated into local languages.

There are at least three scenarios relating to the incorporation of new farmers/coops. The first two scenarios are for coops that become fully paid-up members of HIMACUL:

1. Existing primary coops that were surveyed during the baseline in 2013 and 2016 e.g: Mphompha and Nchenachena, HIMACUL subscription fee lapsed.
2. a new primary coop is formed and secures consent from the members to join HIMACUL e.g: Mchinji (membership 120 farmers) and Chakwere, Chakwina (Nkhata Bay) formed 2017, not yet contributed HIMACUL subscription fee.

The third scenario is for cooperatives which HIMACUL develops offtake partnership agreements for Nut In Shell (NIS) and carbon.

3. HIMACUL secures an offtake agreement with other primary or secondary coops for the sale of NIS through HIMACUL with a separate agreement to join the carbon project, e.g: Horizon Farm coops (Lilongwe) and Mzimba coops.

As part of the Plan Vivo PDD process meetings will be held with lead farmers from two district cooperatives to obtain feedback on all aspects of the proposed Plan Vivo project including proposals for a revised payment system which will incentivise new farmers to plant macadamia by allowing FPVCs during the first five years (before nuts are produced); up until now only trees producing nuts were counted for carbon credits. The meetings will also be used to explain the concept of land management plans and project agreements and then to create and agree them. This process will then be rolled out to all village business centres. Two meetings will be held with each cooperative. At the first meeting:

- Feedback will be requested on the pilot – what is going well, what is not going so well,

suggestions for improvement

- The farmers will be provided with full information on the Plan Vivo project, including its goals, activities, potential risks, and benefits, in a way that is easy to understand.
- The Project Agreement and Land Mapping exercise will be explained; the farmers will be asked to come to the second meeting (at least a week after the first) having fully read the Project Agreement and having drawn a Land Map using an example shown at the session.
- The farmers will be prompted for questions about the project, any concerns will be noted and answered either at the meeting or afterwards. It will be made clear that they could approach the HIMACUL representative with any questions in between the meetings.

At the second meeting:

- Questions will be requested on any aspect of the project.
- Farmers will then be asked to sign their Project Agreements voluntarily and free of any coercion or undue pressure.

A similar process will be used when expanding the project into new areas, however more explanation will clearly be required on macadamia agroforestry itself. In this case a sensitisation meeting will be required ahead of the two meetings described above followed by a site visit to each farm to conduct a feasibility assessment for the site including land tenure, risks of failure, size of plot/tree numbers and agronomic experience. As part of this assessment the farmers will be given familiarisation training on the requirements of macadamia agroforestry to ensure that they are fully aware of what will be required of them to ensure a successful outcome. Any suggestions for improvements in the process will be considered and the outcome feedback to participants.

3 Project Design

3.1 Baseline Scenario

Describe the expected future land use and land management of the project areas(s) in the absence of project intervention(s).

The baseline scenario expected for future land use is the continuation of pre-project land use.

Baseline conditions in the project area are characterised by annual cropping systems. While a range of annual cropping systems are found in the baseline, maize is the most common found amongst smallholders in the project areas. Other crops include tobacco, groundnuts, beans, potatoes, and sunflowers. This is the same for all project areas. On farms tree cover is sparse, typically limited to occasional acacia and fruit trees such as mango.

Farms typically have limited above-ground carbon stocks due to minimal tree cover and a common practice of clearing fields of residual crop biomass. This intense cultivation has had significant detrimental impacts on soil health, through erosion and loss of fertility, which in turn impacts yields. In addition, there is a loss of soil carbon through erosion and oxidation of soil, and low return of organic matter. Soil fertility is poor, due to historically poor agronomic practices and soil mineralogy (Zuza, 2023). At the landscape scale, low tree cover impacts upon watershed services such as flood regulation and water cleaning, that a healthy high carbon landscape can provide.

3.2 Livelihood Baseline

For each of the local stakeholder groups identified in Section 2.1, provide descriptions of livelihood status prior to the start of the project and how livelihood status is expected to change under the baseline scenario. Include details of access to and main uses of land and natural resources, typical assets, income levels and sources, livelihood activities, and other factors important in the context of the project region.

In 2019, 70 percent of the Malawi population lived below the international poverty line of \$2.65 a day, poverty rates having increased over the course of the decade. In relation to the human development index, Malawi was the 15th lowest rated country in 2019.

The climate of Malawi is tropical, with two main seasons: the dry season from May to October and a hot, wet season from November to April. The average temperature ranges from 21 to 28° Celsius (70–82° Fahrenheit) in the cool season and from 23 to 31° Celsius in the hot season. Agriculture forms the back-bone of the economy and society of Malawi. Nearly 85 % of the country's households depend on agricultural activities for their livelihoods. The agricultural sector comprises two distinct sub-sectors: smallholder farmers and commercial estates sub-sectors. Smallholder production accounts for 90 % of the country's food. Despite the contributions of the smallholder subsector to Malawi's food security, most smallholders are food insecure annually during the "lean" season. The "lean" season refers to the period between December and March in Malawi when there is increased hunger due to depleted food reserves among smallholders. Vulnerability to food insecurity among smallholder farmers is due to their reliance on rainfed agriculture and the unpredictability of the climate.

With less than 1 hectare (0.7 ha) to farm on average, the bulk of farmers engage in low-productivity agriculture and have virtually no access to markets. Most rely on outdated technologies and lack the means to upgrade their operations, utilize inputs sub optimally, have limited farming knowledge or access to data-driven advice, have limited water control (irrigation and drainage infrastructure), face the realities of land degradation, climate change, and weak rural infrastructure. For their households, farming provides too little food and too little cash to satisfy their basic needs. Short of opportunities to do better outside the farm sector, many of these households stand to benefit from investments in farm productivity and market access.

Malawi's farm sector is also characterized by very low levels of diversification, which is strongly associated with food system vulnerability and hidden hunger. Maize is the dominant crop in Malawi. In 2021–2022, it was grown by about 92 percent of all farming households and accounted for 38 percent of Malawi's harvested area (FAO 2022). This preponderance of maize at both the farm and sector levels contributes to both the likelihood of and vulnerability to environmental shocks. An added risk factor is that maize is often cultivated in monocrop systems, a practice that is damaging to soils and ecosystems, increases the risk of armyworm and other pest attacks, and increases the probability of losses during droughts and dry spells. Malawi's strong reliance on maize has made the agricultural sector particularly vulnerable to the adverse effects of climate change. From a health perspective, the predominance of maize has translated into limited dietary diversification and associated nutrient deficiencies. Stunting, a sign of hidden hunger, affected an estimated 37 percent of children under five in 2020.

3.3 Ecosystem Baseline

For each project region, describe the ecological conditions prior to the start of the project and how ecological conditions are expected to change under the baseline scenario. Include details of the main ecosystems and habitat types present, and any species of conservation concern known or thought to be present.

- The Malawi National Ecosystem Assessment (NEA) (Annex 8) is an expert evaluation of knowledge on drivers, impacts and responses to changes in biodiversity and ecosystem services and provides a baseline for our project. See Figure 6: The spatial distribution of different types of ecosystems and associated biodiversity in Malawi including lakes, forest reserves, national parks and wildlife reserves.
- In existing project districts Ntchisi, Dowa, Mwanza and Neno the predominant farming systems comprise of a maize-based rotation with tobacco, ground nuts, soya. Soils in Malawi have been significantly degraded over the years with loss of soil organic matter due to poor farming practices. High levels of soil erosion and land degradation are typical and likely to worsen with increasing effects of climate change.
- The Neno Macadamia Trust and HIMACUL provided support to Emmanuel Zuza's PhD which produced the Climate suitability predictions for the cultivation of macadamia (*Macadamia integrifolia*) in Malawi using climate change scenarios (Annex 9). This informs future areas within which the project will expand. In districts where the project plans to expand, the agroecology is similar to existing project areas.

3.4 Project Logic

Complete Table 3.4 to provide an initial summary of the expected project outputs and outcomes and identify key assumptions and risks. Add rows for additional outputs as required.

Table 3.4 Initial Project Logic

Aim		
Describe the problems the project aims to address. NMT's aim is to improve the farmers' resilience to climate, nutrition and economic shocks with support from internationally recognised experts in land-use change management and smallholder value chains. By working with HIMACUL, the aim is to incentivise more farmers to participate in macadamia climate smart macadamia agroforestry and to build rural economies that support these farming communities.		
Description		
Assumptions/Risks		
Outcomes – Intended overall project aim		
Carbon Benefit	97.23tCO2e/h over 25 years, based on 156 trees planted at 8X8m spacing and assuming 4.4tCO2 baseline stocks (as per Trees of Hope). Based on Will Brandreth's calculations (note, 20% buffer not included at this stage).	<ul style="list-style-type: none"> - Trees remain alive and growing for 25 years after planting. - Actual carbon sequestration rates follow expectations

Livelihood Benefit	<ul style="list-style-type: none"> - Food security - Increased and diversified income - Improved climate resilience 	<ul style="list-style-type: none"> - Trees are taken care of and reach maturity to bear fruit - A route to market is available at a good farm-gate price.
Ecosystem Benefit	<ul style="list-style-type: none"> - Habitat creation - Soil carbon and nutrient content improvement - Improvement in soil water retention 	<ul style="list-style-type: none"> - Trees reach maturity - Litter is left to decompose/or organic matter is reapplied to the soil - Good soil management practices are adopted.
Outputs		
Output 1	<p>New macadamia systems are planted:</p> <p>Tree planting at 8x8m spacing by farmers intercropping macadamia with their annual crops</p>	<ul style="list-style-type: none"> - Upfront financial support is sufficient - Tree nurseries are able to meet demand - Planning and planting are carried out following appropriate guidelines.
Output 2	<p>Macadamia systems are maintained:</p> <p>Trees grow to maturity and are looked-after.</p>	<ul style="list-style-type: none"> - Farmers have access to the right equipment and knowledge to maintain trees - Farmers willingly follow the guidance and have the money to do so.
Output 3	<p>Farmers generate longstanding income from macadamia:</p> <p>Farmers have a route to market and are able</p>	<ul style="list-style-type: none"> - Farmer understands the long-term commitment to tree maintenance

	to sell their tree products.	<ul style="list-style-type: none"> - Farmers decide to sell their nuts
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3.5 Additionality

Complete Table 3.5 providing a description of the current barriers to implementing the proposed project (e.g. lack of finances, lack of technical expertise) and an explanation of how the project will overcome these barriers. Include Financial/Economic, Technical, Institutional, Social/Cultural, and Other barriers where relevant. Add a row for each project intervention.

Table 3.5 Initial Barrier Analysis

Project Intervention	Main Barriers	Activities to Overcome Barriers
Enter the name of the project intervention. This must correspond to the title of a technical specification to be included in the PDD.	Enter a summary of the main barriers project participants face to implementing the project intervention in the absence of the project.	Describe how the project will enable project participants to overcome the barriers identified.
Macadamia Agroforestry	<p>Financial:</p> <p>Upfront costs of tree purchase, maintenance and opportunity costs are too high for cash-poor smallholders.</p> <p>Little to no access to credit that could help overcome these costs.</p> <p>Total costs in year 0 are estimated at around \$1200 per hectare and \$900 per hectare subsequently (Thomas Di Paolo thesis).</p>	<p>FPVC payments to help overcome high initial costs of planting trees and maintenance. Grant funding to support setup of the infrastructure needed (tree nurseries, initial staff training).</p>
	<p>Technical:</p> <p>Lack of widespread knowledge of how to successfully maintain & grow the trees.</p>	<p>Farmer support in initial land planning. Annual visits to support operations.</p> <p>Development of peer support networks through business centres.</p>
	Infrastructural/technological:	Tree nurseries run by HIMACUL with trees sold at

	Lack of tree nurseries supplying trees at affordable rates. Lack of appropriate maintenance equipment. No established purchase network for the crop.	cost. Sourcing and supply of maintenance equipment. Processing facilities development. Purchase agreements with the cooperatives to ensure farmers have a long-term route to market.
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3.6 Exclusion List

Indicate whether the project could include any activities listed in the Plan Vivo Exclusion List (see Annex 3). Provide a complete Exclusion List in Annex 3.

Tobacco production exists in the baseline scenario for northern regions of the project. When it occurs, tobacco plantation is reduced by the project as farmers make space for macadamia. However, some project participants may decide to keep tobacco on their farms while intercropping with macadamia.

The project doesn't support, incentivise, or recommend the production of tobacco, and any occurrence within project boundaries is purely based on farmer preferences.

3.7 Environmental and Social Screening

Add project coordinator responses to the social screening report in Annex 4.

Complete Table 3.7 to provide a summary of potential environmental and social risks. For each risk area, add a brief summary of potential risks, or explain why there are no risks.

Table 3.7 Environmental and Social Risks

Risk Area	Potential Risks
Vulnerable Groups	<p>Yes - women and young farmers.</p> <p>Their livelihood conditions are well understood as they are part of HIMACUL which has designed special programmes for the disadvantaged e.g.: supporting women and young farmers to increase the number of trees that they can plant.</p>
Gender Equality	<p>Highly unlikely with ca. 34% of the farmers being female-headed households.</p>
Human Rights	<p>No, the coop structure and the project specifically enable better fulfilment of these rights.</p>

Community, Health, Safety & Security	Macadamia farming contributes to alleviating the root causes of violence by providing income and a nutritious food during the hunger months.
Labour and Working Conditions	No, the coop and the project are committed to providing fair and equal opportunities for good employment.
Resource Efficiency, Pollution, Wastes, Chemicals and GHG emissions	Smallholder farmers tend to use low intensive farming practices with low levels of fertiliser and agrochemicals. The farmers are taught composting, mulching and other soil conservation techniques.
Access Restrictions and Livelihoods	Barriers to forest clearing are implemented as part of participant applicability, which is a form of restriction. However, the FPIC process ensures that participants are well informed and freely agree to take these restrictions on board.
Cultural Heritage	The Project Area is not designated or proposed as such but being governed by chiefs, there are cultures that are promoted and are protected all the time.
Indigenous Peoples	All of the land within the Project Area is customary land.
Biodiversity and Sustainable Use of Natural Resources	The project utilises agricultural land and thus doesn't disturb the natural habitat. The agroforestry system being developed improves biodiversity as a form of regenerative farming.
Land Tenure Conflicts	Project participants follow a customary land system.
Risk of Not Accounting for Climate Change	A detailed study of the suitability of macadamia for the project area has been carried out by E. Zuza as part of his PhD.
Other – e.g. Cumulative Impacts	Whilst intercropping with macadamia results in less land available for other crops such as maize the high value of macadamia nuts means that overall farmers are significantly better off.

	With part of the arable land foregone to macadamia, farmers are likely to forego some yield of their conventional crop.
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3.8 Double Counting

Identify any greenhouse gas emission reduction projects, programmes or initiatives that overlap with the proposed project region(s) and explain why there is no potential for generating transferable emission reduction or removal credits from carbon pools or emission sources included in the project. Include any national, jurisdictional, or sub-national program or project that emission reductions or removals achieved by the project will contribute to (including Nationally Determined Contributions under the Paris Agreement) and explain why carbon benefits achieved by the project will not be included in any other form of greenhouse gas emissions trading.

Complete Table 3.8 to describe the status of relevant legislation policies and instruments in the host country. Provide details of how these could affect the project.

Table 3.8 National Level Legislation, Policies and Instruments

	Yes/No/Unsure	Details
Is there a national registry for land-based carbon projects?	No	As of July 2023, Malawi Government announced it will launch a Carbon Markets Initiative (2023). No further detail is thus far available online.
Are carbon rights defined in national legislation?	Unsure	No documentation found online.
Are there any carbon pricing regulations existing or in development (e.g. emissions trading scheme or carbon tax)	Yes	A carbon tax for motorists was introduced in 2019.
Does the country receive or plan to receive results-based climate finance through bilateral or multilateral programs?	Unsure.	No documentation found. Further consultation with Malawi government required.
Are there any other relevant regulations, policies or instruments?	Yes.	Customary Land (Development) Act of 2016 and the Environmental Management Act of 2017

4 Governance and Administration

4.1 Governance Structure

Describe the project's governance structure and decision-making process with details of how input from project participants is managed and how project participant and other local stakeholder representatives will be selected. Where possible, provide an organigram to demonstrate how the project coordinator, project participants and other stakeholders will be involved in the project.

- **Steering Committee:**

A steering committee will be established, composed of representatives from Neno Macadamia Trust (NMT), HIMACUL, and key partner organisations. This committee will be responsible for setting the high-level strategic direction of the project, addressing both technical and financial aspects, and guiding long-term planning, including certification and carbon credit verification.

- **Project Strategy Committee:**

A strategy committee consisting of NMT's core leadership and HIMACUL's board will work in close communication with the steering committee. This committee will focus on defining the implementation strategies and growth plans for the macadamia agroforestry initiative, managing financial resources, and determining expansion and scaling approaches.

- **Project Implementation Team:**

The on-ground project implementation will be led by HIMACUL's operational team, with NMT providing oversight and technical expertise. The implementation team will include managers overseeing finance, risk management, technical operations, and fieldwork.

Frequent interactions between these managers will ensure coordination and knowledge sharing.

- **Project Financials and Risk Management:**

NMT, with its experience managing international grants, will handle the financial management of the project, ensuring funds are distributed in line with Plan Vivo requirements. Audited NMT & HIMACUL accounts will ensure transparency and accountability in fund usage. Clear processes are in place for distributing carbon credit revenues to farmers and cooperatives.

- **Project Technical Coordination:**

NMT and HIMACUL will jointly lead the project's technical coordination. This will involve overseeing the technical aspects of macadamia agroforestry, carbon measurement methodologies, and ensuring that the implementation aligns with Plan Vivo standards. The technical team will ensure the timely delivery of project milestones, including monitoring tree growth, carbon sequestration, and



compliance with international best practice in sustainable land management.

- Project Management:

NMT, in partnership with HIMACUL, will handle the day-to-day management of the project. This includes overseeing budgeting, resource allocation, stakeholder engagement, and the coordination of the various teams involved. The project manager will supervise the overall execution of the project, ensuring that timelines are met, risks are managed, and financial accountability is maintained.

- Tree Surveying Teams:

Dedicated tree surveying teams, composed of trained staff from HIMACUL and supported by external specialists, will conduct regular surveys to monitor tree growth, survival rates, and carbon sequestration levels. The teams will gather data on soil health, tree vitality, and agroforestry outcomes, feeding this information back to the project's technical and management teams to ensure that targets are being met and adjustments can be made where necessary.

- Nursery and Planting Field Technicians:

Field technicians based in the project areas will manage nursery operations, macadamia planting, and ongoing farmer engagement. They will be responsible for monitoring tree growth and ensuring the smooth execution of project activities at the local level. Technicians will reside in the project regions to address both technical and community-related challenges.

- Relevant Government of Malawi & Local Authorities:

NMT and HIMACUL will collaborate with local, regional, and national government authorities to secure necessary approvals and endorsements for project activities. This includes ensuring that land tenure issues are addressed, and there are no disputes regarding land ownership or project boundaries.

- Community Liaison:

The implementation team will maintain ongoing communication with farmers, cooperatives, and village representatives. When decisions affecting communities are required, meetings will be organised with the village committee, local farmers, and cooperative leaders. The team will ensure transparency and inclusivity, allowing local stakeholders to contribute to decision-making processes.

- External Experts and Advisors:

When necessary, the project will bring in external specialists, such as agroforestry experts, carbon market academics, and land use change professionals, to provide technical support.

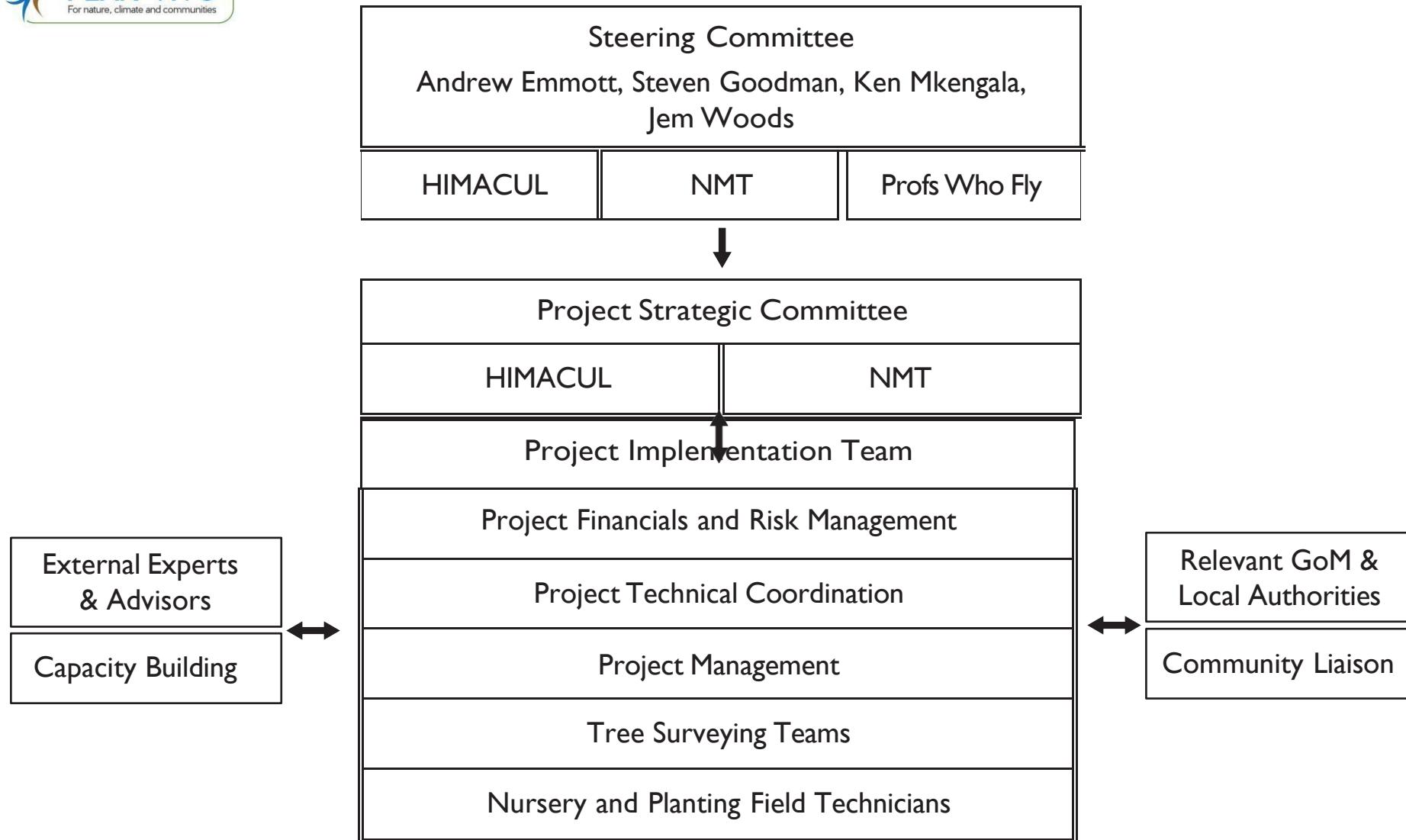


provide support for research on the social and economic aspects of macadamia farming along with identification of farming best practices.

Will Brandreth from Imperial College will take the lead on updating of the allometric model which underpins the technical work relating to the macadamia carbon sequestration model.

- Capacity Building:

The project will include long-term partnerships focused on building financial management skills at the household and community levels. Farmers and cooperative members will receive training on managing funds generated from carbon credits and macadamia sales, ensuring they can make sustainable financial decisions.



4.2 Legal and Regulatory Compliance

Identify the authorities with overall responsibility for land management and greenhouse gas emissions assessment within the project region. Include evidence that they have been informed of the project in Annex 5 and explain how they will be engaged during project development..

Provide a statement that the project will operate in full compliance with all national and international policies, laws and regulations.

The Malawi government Ministry of Agriculture has been consulted through a designated PIN process of the project and has provided a Letter of no-objection.

The project is committed to working in collaboration with the Malawi Government and operating in full compliance with all applicable policies, laws and regulations.

HIMACUL works closely with the Ministry of Agriculture at ADD, district, and EPA levels. HIMACUL, the primary coops and farmers receive advice and support from district level staff and extension staff on crop production. As HIMACUL develops its post-harvest processing capacity, it has received technical support such as for developing environmental impact assessments, which is provided by district-level environmental officers.

NMT liaise closely with Malawi Government through regular contact with the Malawi High Commission, UK.

The project is subject to Customary Land Development Act (2016) Environmental Management Act 2017.

4.3 Financial Plan

Describe how the finance required to fund project development will be obtained.

NMT has recently partnered with Imperial College Business School to offset carbon emissions for student flights – this adds circa £13,500 p.a. to current income of circa £21,000 from donations and current sales of Carbon Damage Mitigation Certificates.

NMT has also secured a grant of £8,500 from Candriam in 2024 which it is hoped will be repeated in 2025 and 2026. Hence an additional £22,000 p.a. for 3 years is available to

- Expand production from existing nurseries. It is estimated that this could add 30% to tree production
- Set up new nurseries or redevelop disused ones.
- Expand payments to farmers, HIMACUL, primary cooperatives and village business centres

Once approved by Plan Vivo NMT expects to be able to sell more carbon credits to Imperial College and Wellcome Trust to fund further expansion.

Annexes



Annex 1 – Project Boundaries

Provide geospatial data files for project region and project area boundaries.

[Annex 2 –Registration Certificate](#)

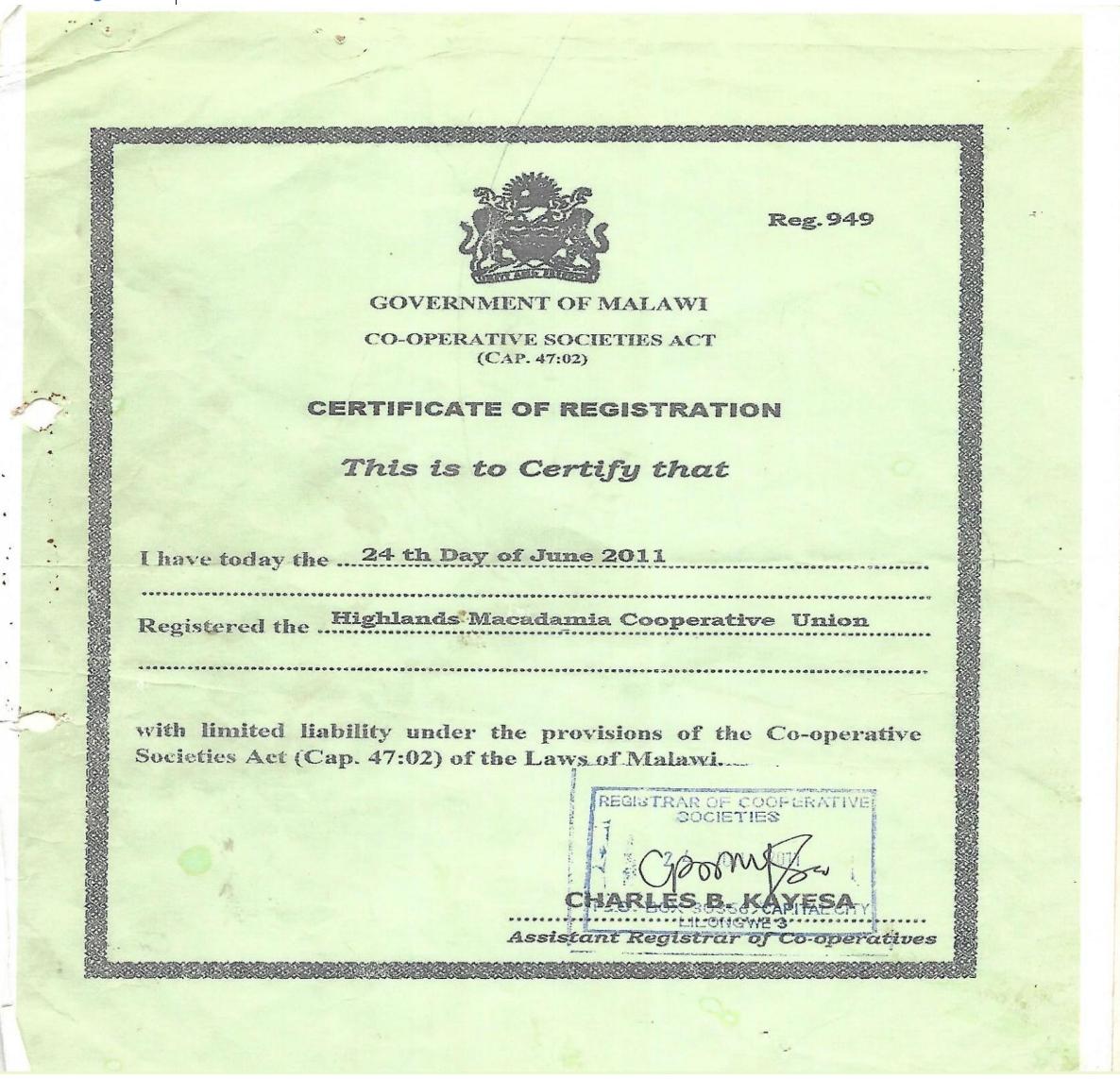


THE NENO MACADAMIA TRUST (MALAWI)

Charity number: 1184696



Charity reporting is up to date (on time)

[Charity overview](#)**Registration history:** 31 July 2019: CIO registration[What, who, how, where](#)**Organisation type:** CIO[Governance](#)**Other names:** NMT (Working name)[Trustees](#)**Gift aid:** Recognised by HMRC for gift aid[Financial history](#)**Other regulators:** No information available[Accounts and annual returns](#)**Policies:** Risk management[Governing](#)



HIMACUL -Acknowledgement of PIN Submission

Highland Macadamia Cooperative Union Ltd. (HIMACUL) (tier cooperative)

Dear Neno Macadamia Trust,

We, the undersigned, hereby acknowledge that the Project Idea Note (PIN) for the Neno Macadamia Agroforestry Project has been submitted with the full consent of Highland Macadamia Cooperative Union Ltd (HIMACUL).

The project aims to establish climate-smart macadamia agroforestry systems, empowering smallholder farmers, improving livelihoods, and contributing to global carbon sequestration efforts.

The submission outlines the objectives, activities, governance structure, and anticipated impacts of the project.

Kind regards

Ken

Signed: Ken Mkengala

Ken Mkengala

Manager, HIMACUL

Annex 3 – Exclusion List

Complete the exclusion list by responding 'Yes' if the activity is included in the project and 'No' if the project does not include the activity.

Activities	Included in Project ('Yes' or 'No')
Any project activities leading to or requiring the destruction [1] of critical habitat [2] or any forestry project which does not implement a plan for improvement and/or sustainable management.	No
Any activity which could be associated with the significant impairment of areas particularly worthy of protection of cultural heritage (without adequate compensation in accordance with international standards).	No
Trade in animals, plants or any natural products not complying with the provisions of the CITES/Washington convention [3].	No
Illegal, harvesting or trading in any wildlife resources.	No
Destructive fishing methods or drift net fishing with a net more than 2.5 km in length, explosives and/or poison.	No
Large-scale commercial logging operations for use in primary tropical moist forest.	No
Production or trade in wood or other forestry products other than from sustainably managed forests [4].	No
Exploitation of diamond mines and marketing of diamonds where the host country has not adhered to the Kimberley Process, and exploitation of other conflict minerals [5]	No
Activities involving harmful or exploitative forms of forced labour, [6] harmful child labour [7], modern slavery and human trafficking [8].	No
Projects that include involuntary physical displacement and/or forced eviction.	No
Production or activities that encroach on lands owned, or claimed or occupied by Indigenous Peoples, without full documented Free, Prior and	No

Informed Consent (FPIC) of such peoples [9].	
Harmful and unsafe production, use, sale or trade of pharmaceuticals, ozone layer depleting substances [10], and other toxic [11] or dangerous materials such as asbestos or products containing PCB's [12], wildlife or products regulated under CITES, including all products that are banned or are being progressively phased out internationally	No
Production or trade of arms, ammunition, weaponry, controversial weapons, or components thereof (e.g., nuclear weapons and radioactive ammunition, biological and chemical weapons of mass destruction, cluster bombs, anti -personnel mines, enriched uranium).	No
Procurement and use of firearms.	No
Provision of finances to military institutions involved in conservation or security activities.	No
Production or trade of strong alcohol intended for human consumption or other alcoholic beverages (excluding beer and wine).	No
Production or trade of tobacco and other drugs	Yes and No (Tobacco production exists in the baseline scenario and is reduced by the project. However, some project participants may decide to keep tobacco on their farms while intercropping with Macadamia.)
Gambling, gaming establishments, casinos or any equivalent enterprises and undertaking [13].	No
Any trade related to pornography, prostitution or sexual exploitation of any form.	No
Production or trade in radioactive material. This does not apply to the procurement of medical equipment, quality control equipment or other application for which the radioactive source is insignificant and/or adequately shielded	No
Production or trade in unbound asbestos. This does not apply to the purchase or use of cement linings with bound asbestos and an asbestos	No

content of less than 20%.	
Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals. Hazardous chemicals include gasoline, kerosene, and other petroleum products.	No
Transboundary trade in wastes, except for those accepted by the Basel Convention and its underlying regulations [14].	No
Any activity leading to an irreversible modification or significant displacement of an element of culturally critical heritage [15].	No
Production and distribution, or investment in, media that are racist, antidemocratic or that advocate discrimination against a part of the population.	No
Projects involving the planting or introduction of invasive species	No
Projects that increase the dependency of primary participants and other stakeholders on fossil fuels.	No

Notes:

[1] Destruction means (1) the elimination or severe reduction in the integrity of a habitat/area caused by a major and long-term/prolonged change in land-use or water resources or (2) the modification of a habitat such that this habitat's ability to fulfil its function/ role is lost.

[2] The term critical habitat encompasses natural and modified habitats that deserve particular attention. This term includes (1) spaces with high biodiversity value as defined in the IUCN's classification criteria, including, in particular, habitats required for the survival of endangered species as defined by the IUCN's red list of threatened species or by any national legislation; (2) spaces with a particular importance for endemic species or whose geographical range is limited; (3) critical sites for the survival of migratory species; (4) spaces welcoming a significant number of individuals from congregatory species; (5) spaces presenting unique assemblages of species or containing species which are associated according to key evolution processes or which fulfil key ecosystem services; (6) and territories with socially, economically or culturally significant biodiversity for local communities. Primary forests or high conservation value forests must also be considered as critical habitats

[3] <https://cites.org/eng/disc/text.php>

[4] Sustainably managed forests are forests managed in a way that balances ecological, economic and socio-cultural needs.

[5] Conflict minerals, including tin, tungsten, tantalum and gold, can be used to finance armed groups, fuel forced labour and other human rights abuses, and support corruption and money laundering. See the EU Regulation on conflict minerals:

https://policy.trade.ec.europa.eu/development-and-sustainability/conflict-minerals-regulation/regulation-explained_en

[6] Forced labour means all work or service, not voluntarily performed, that is extracted from an



individual under threat of force or penalty.

[7] Harmful child labour means the employment of children that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health, or physical, mental, spiritual, moral, or social development. Employees must be at least 14 years of age, as defined in the ILO's Declaration on the Fundamental Principles and Rights at Work (C138 – Minimum Age Convention, Article 2), unless local laws require compulsory school attendance or a minimum working age. In such circumstances, the highest age requirement must be used.

[8] Modern slavery is comprised two key components: forced labour and forced marriage. These refer to situations of exploitation that a person cannot leave or refuse due to threats, violence, deception or coercion. (https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---ipec/documents/publication/wcms_854733.pdf)

[9] <https://www.fao.org/indigenous-peoples/our-pillars/fpic/en/>

[10] Any chemical component which reacts with, and destroys, the stratospheric ozone layer leading to the formation of holes in this layer. The Montreal Protocol lists Ozone Depleting Substances (ODS), their reduction targets and deadlines for phasing them out.

[11] Including substances included under the Rotterdam Convention, Stockholm Convention and WHO "Pharmaceuticals: Restrictions in Use and Availability".

[12] PCBs (polychlorinated biphenyls) are a group of highly toxic chemical products that may be found in oil-filled electrical transformers, capacitors and switchgear dating from 1950 to 1985.

[13] Any direct financing of these projects or activities involving them (for example, a hotel including a casino). Urban improvement plans which could subsequently incorporate such projects are not affected.

[14] Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal (1989).

[15] "Critical cultural heritage" is considered as any heritage element recognised internationally or nationally as being of historical, social and/or cultural interest.

Annex 4 - Environmental and Social Screening

Complete the table below by answering each risk question. Where relevant include details of any activities that will be carried out to better understand or mitigate potential risks.

Topic	Risk Questions	Project Coordinator Response
Environmental and Social Risks		
Vulnerable Groups	Are there vulnerable or disadvantaged groups or individuals, including people with disabilities (consider also landless groups, lower income groups less able to cope with livelihood shocks/stresses) in the project area, and are	Yes - women and young farmers. Their livelihood conditions are well understood as they are part of HIMACUL which has designed special programmes for the disadvantaged

	<p>their livelihood conditions well understood by the project?</p>	e.g.: supporting women and young farmers to increase the number of trees that they can plant.
	<p>Is there a risk that project activities disproportionately affect vulnerable groups, due to their vulnerability status?</p>	The risks are mitigated as described above - all groups are involved during planning.
	<p>Is there a risk that the project discriminates against vulnerable groups, for example regarding access to project services or benefits and decision-making?</p>	As above.
Gender equality	<p>Is there a risk of adverse gender impacts due to the project/ project activities, including for example discrimination or creation/exacerbation or perpetuation of gender-related inequalities?</p>	<p>Highly unlikely with 34% of the farmers being female-headed households. The project may reduce slightly time spent collecting firewood, a task mainly undertaken by women. May also free up time in the long run for the entire farming household. The project also seeks to engage with the entirety of households at the design phase, including women and youth.</p> <p>Aside from this, the project has little impact on gender dynamics.</p> <p>Should the project implement a cookstove program in future, the specific impact on women will be further analysed.</p>
	<p>Is there a risk that project activities will result in adverse impacts on the situation of women or girls, including their rights and livelihoods? Consider for example where access restrictions disproportionately affect women and girls due to their roles and positions in accessing environmental goods and services?</p>	The project doesn't include any restrictions aside from the prohibition of land clearing to undertake the project. This should not affect girls and women on any significant level.
	<p>Is there a risk that project activities could cause or contribute to gender-based violence, including risks of sexual exploitation, sexual abuse or</p>	No, HIMACUL has policies and is a fairtrade certified organization - all forms of discrimination are not allowed.

	sexual harassment (SEAH)? Consider partner and collaborating partner organizations and policies they have in place. Please describe.	The project strictly condemns any form of sexual exploitation, abuse, or harassment. There is no foreseeable reason why the project would exacerbate gender-based violence.
Human Rights	Is there a risk that the project prevents peoples from fulfilling their economic or social rights, such as the right to life, the right to self-determination, cultural survival, health, work, water and adequate standard of living?	No, HIMACUL's coop structure and the project specifically enable better fulfilment of these rights.
	Is there a risk that the project prevents peoples from enjoying their procedural rights, for example through exclusion of individuals or groups from participating in decisions affecting them?	The project seeks to engage all relevant stakeholders, with no exclusion or discrimination. The project does not impose new governance mechanisms, it embraces the communities' existing structures.
	Are you aware of any severe human rights violations linked to project partners in the last 5 years?	No, we are not aware of any.
Community, Health, Safety & Security	Is there a risk of exacerbating existing social and stakeholder conflicts through the implementation of project activities? Consider for example existing conflicts over land or natural resources, between communities and the state.	With poverty and famine at times driving selfish behaviour, crop theft has been reported from macadamia farmers. While macadamia farming is at times a victim of scarcity-induced conflict, it contributes to alleviating the root causes of violence by providing income and a nutritious food during the hunger months.
	Does the project provide support (technical, material, financial) to law enforcement activities? Consider support to government agencies and to Community Rangers or members conducting monitoring and patrolling. If so, is there a risk that these activities will harm communities or personnel involved in monitoring and patrolling?	HIMACUL has extension staff who are provided with all necessary equipment to carry out their duties efficiently. Each community engages its own community policing agents to curb lawlessness.
	Are there any other activities that could adversely affect community	Activities such as bee-keeping can be dangerous if done without standards

	health and safety? Consider for example exacerbating human-wildlife conflict, affecting provisioning ecosystem services, and transmission of diseases.	and proper training.
Labour and working conditions	Is there a risk that the project, including project partners, would lead to working conditions for project workers ¹ that are not aligned with national labour laws or the International Labor Organization's (ILO) Declaration on the Fundamental Principles and Rights at Work (discriminatory working conditions, lack of equal opportunity, lack of clear employment terms, failure to prevent harassment or exploitation, failure to ensure freedom of association etc.)?	No, the coop and the project are committed to providing fair and equal opportunities for good employment.
	Is there an occupational health and safety risk to project workers while completing project activities?	Farming, being an inherently physical activity, presents occupational hazards. Macadamia farming, while somewhat strenuous in planting stages is regarded as relatively safe. The crop is collected off the ground when the nuts fall. Simple farming tools are used, no heavy or dangerous machinery is used. There are the normal risks associated with farming when handling fertilisers and agrochemicals. Training mitigates these risks.
	Is there a risk that the project support or be linked to forced labour, harmful child labour, or any other damaging forms of labour?	No. It is very common amongst smallholders for family members to work on the farm, including women and children. Macadamia farming doesn't present any particular risk of harm or damaging forms of labour.
Resource	Is there a risk that project activities	Commercial macadamia farms use

¹Project workers include project coordinator staff, staff of other project partners, third party groups fulfilling core functions of the project, and community volunteers or contracted workers.

efficiency, pollution, wastes, chemicals and GHG emissions	might lead to releasing pollutants to the environment, cause significant amounts of waste or hazardous waste or materials?	integrated pest management controls with tightly regulated agrochemicals based on scouting. Smallholder farmers tend to use low intensive farming practices with low levels of fertiliser and agrochemicals. The farmers are taught composting, mulching and other soil conservation techniques. The project research partners are developing best practice demonstration and extension systems.
	Is there a risk that the project will lead to significant consumption of energy, water or other resources, or lead to significant increases of greenhouse gases?	Macadamia trees are more productive with irrigation; however, smallholder farmers have limited resources to utilise irrigation. Opportunities for irrigation will be explored as more funds become available.
Access restrictions and livelihoods	Will the project include activities that could restrict peoples' access to land or natural resources where they have recognised rights (customary, and legal). Consider projects that introduce new access restrictions (eg. creation of a community forest), reinforce existing access restrictions (eg. improve management effectiveness and patrolling of a community forest) , or alter the way that land and natural resource access restrictions are decided (eg. through introducing formal management such as co-management).	Barriers to forest clearing are implemented as part of participant applicability, which is a form of restriction. However, the FPIC process ensures that participants are well informed and freely agree to take these restrictions on board.
	Is there a risk that the access restrictions introduced /reinforced/ altered by the project will negatively affect peoples' livelihoods?	Although an applicability condition for participation is not to deforest, the aim of the project is to improve livelihoods reducing the risk of deforestation.
	Have strategies to avoid, minimise and compensate for these negative impacts been identified and planned?	Intercropping with a wide tree spacing mitigates the loss of arable land. Once mature, the trees provide income and food security.

Cultural heritage	Is the Project Area officially designated or proposed as a cultural site, including international and national designations?	No.
	Does the project site potentially include important physical cultural resources, including burial sites and monuments, or natural features or resources of cultural significance (eg. sacred sites and species, ceremonial areas) and is there risk that the project will negatively impact this cultural heritage?	There are burial sites within the communities but these are avoided for farming purposes.
	Is there a risk that the project will negatively impact intangible cultural heritage? Consider for example cultural practices, social and cultural norms in relation to land and natural resources.	There is no risk that the project will negatively impact intangible cultural heritage because all things will be taken care of at the planning stage with the involvement of traditional leaders.
Indigenous Peoples	Are there Indigenous Peoples ² living within the Project Area, using the land or natural resources within the project area, or with claims to land or territory within the Project Area?	All of the land within the Project Area is customary land.
	Is there a risk that the project negatively affects Indigenous Peoples through economic displacement, negatively affects their rights (including right to FPIC), their self-determination, or any other social or cultural impacts?	There is no risk due to the project.
	Is there a risk that there is inadequate consultation of Indigenous Peoples, and/or that the project does not seek the FPIC of Indigenous Peoples, for example leading to lack of benefits or inappropriate activities?	There is no risk. All matters are considered before implementation with the traditional authorities.

²As per the IUCN Environmental and Social Management System, Indigenous Peoples include: "(i) peoples who identify themselves as "indigenous" in strict sense; (ii) tribal peoples whose social, cultural, and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations; and (iii) traditional peoples not necessarily called indigenous or tribal but who share the same characteristics of social, cultural, and economic conditions that distinguish them from other sections of the national community, whose status is regulated wholly or partially by their own customs or traditions, and whose livelihoods are closely connected to ecosystems and their goods and services" (IUCN 2016).

Biodiversity and sustainable use of natural resources	Is there a risk that project activities will cause adverse impacts on biodiversity (both in areas of high biodiversity value, and outside of these areas) or the functioning of ecosystems? Consider issues such as use of pesticides, construction, fencing, disturbance etc.	The project utilises agricultural land and thus doesn't disturb the natural habitat. The agroforestry system being developed improves biodiversity as a form of regenerative farming.
	Is there a risk that the project will introduce non-native species or invasive species?	Macadamia is non-native to Malawi. However, extensive research has found it to be a good agroecological fit for Malawi. There is no risk that it would become invasive, as it is hard to grow and, if needed, easily cut down.
	Is there a risk that the project will lead to the unsustainable use of natural resources? Consider for example projects promoting value chains and natural resource-based livelihoods.	No. On the contrary soil and water conservation measures form part of the macadamia agroforestry system.
Land tenure and conflicts	Has the land tenure and use rights in the project area been assessed and understood?	Yes, project participants follow a customary land system. Further details explained in the Land Tenure Section of the PDD.
Risk of not accounting for climate change	Is there a risk that project activities will exacerbate any existing land tenure conflicts, or lead to land tenure or use right conflicts?	Project activities will have to be implemented in line with existing land tenure systems to minimise this risk.
	Have trends in climate variability in the project areas been assessed and understood?	A detailed study of the suitability of macadamia for the project area has been carried out by E. Zuza as part of his PhD.
	Is there a risk that climate variability and changes might influence the effectiveness of project activities (eg.	As above. Drought-resistant macadamia helps to reduce soil erosion and the risk of climate and

	undermine project-supported livelihood activities) or increase community exposure to climate variation and hazards? Consider floods, droughts, wildfires, landslides, cyclones, etc.	economic shocks. In the past 4 years Malawi has seen 2 droughts and 3 cyclones – the macadamia trees have been largely unaffected.
Other – eg. cumulative impacts	<p>Is there a risk that the project will contribute cumulatively to existing environmental or social risks or impacts, for example through introducing new access restrictions in a landscape with existing restrictions and limited land availability?</p>	<p>Whilst intercropping with macadamia results in less land available for other crops such as maize the high value of macadamia nuts means that overall farmers are significantly better off.</p> <p>With part of the arable land foregone to macadamia, farmers are likely to forego some yield of their conventional crop.</p> <p>Firstly, the maximum amount of space that macadamia would take up once fully mature is roughly half of the land under the 8x8m spacing, leaving space for conventional crop cultivation in between trees. A connected canopy does not form.</p> <p>Secondly, before trees are mature, intercrops can be planted closer to the tree than when fully grown; meaning a significant portion of conventional crop yield can still be achieved in initial years.</p> <p>Thirdly, the fPVC payment system is designed to help farmers in early stages when farmers are likely to have to forego some planting space. This should help mitigate against the forgone yield and income until trees start generating returns</p>
	Are there any other environmental and social risks worthy of note that are not covered by the topics and questions above?	No.
Safeguard Provisions		

Stakeholder engagement	Has a stakeholder analysis been conducted that has identified all stakeholders that could influence or be affected by the project, or is this still to be completed? Please describe.	Yes – see section on Stakeholder Identification
	Are the local community and indigenous peoples statutory or customary rights to land or resources within the project area already clear and documented, or is further assessment required? Please describe.	Customary rights are clear as stated earlier and understood for all projects areas. Further detail in PDD draft.
	Are local governance structures and decision-making processes described and understood (including details of the involvement of women and marginalized or vulnerable groups), or is further assessment required? Please describe.	Yes, local governance structures within the project are understood and embraced by the project. The coop encourages the involvement of women and young farmers. See section 2.4.
	Are past or ongoing disputes over land or resources in the project area known and documented, or is there need for further assessment? Please describe.	No further assessment required – see answers above. Any disputes are resolved by the traditional authorities (chiefs).
Stakeholder consultation	Does the project have a Stakeholder Engagement Plan with clear measures to engage Vulnerable Groups, or is this plan still to be developed? Please describe.	Stakeholder engagement is carried out at various levels of the coop – notably through regular community engagement and business centre meetings attended by HIMACUL and farmers.
	Has the Project Coordinator informed all stakeholders of the project, through providing relevant project information in an accessible format, or does this still need to be completed? Please describe.	Yes, all important parties described in the project summary are actively engaged and informed. Malawi government, the Ministry of Agriculture and environmental district offices are kept engaged. Village chiefs are kept informed of any land management plan.
Free, Prior and Informed Consent	Has the project analysed and understood national and international requirements for Free Prior and Informed Consent (FPIC)? Please	Yes, the main Malawi laws around FPIC applicable to the project are the Customary Land (Development) Act of 2016 and the Environmental

	describe.	Management Act of 2017.
	Has the project identified potential FPIC rightsholders and potential representatives in local communities and among indigenous peoples, or is this still to be completed? Please describe.	Yes. Farmers hold the FPIC right for any project on their customary land. Village chiefs are kept informed.
	Has the project worked with rightsholders and representatives of local communities and indigenous peoples to understand the local decision-making process and timeline (ensuring involvement of women and vulnerable groups), or is this still to be completed? Please describe.	Yes, village-level business centres, farmer families and all stakeholders have been involved during the pilot phase and embedded in processes.
	Has the project sought consent from communities to 'consider the proposed Project', and if so, where is this in principle consent documented? Please describe.	The project is presented in village-level business centre meetings. Communities attend the meeting on a voluntary basis and express interest without any form of coercion.
Grievance Mechanism	Does the project already have a Grievance Mechanism, or is this still to be established? Please describe.	The project grievance mechanism is active through the business centres, that can reach coordinators quickly via phone call, or through business centre meetings. It has already been used successfully during the pilot period.
	For projects with a GRM, is this accessible to project affected people? Please describe.	Yes – as above

Annex 5 – Notification of Relevant Authorities

Provide a copy of any correspondence addressed to the authorities with overall responsibility for land management and greenhouse gas assessment within the project region informing them of the project.

Telephone: +265 1 771111
Tele fax No: +265 1 773379

Our Reference No: EAD/99/06/04
Your Reference No:

Communications should be addressed to:
The Director of Environmental Affairs



ENVIRONMENTAL AFFAIRS DEPARTMENT
LINGADZI HOUSE
CITY CENTRE
PRIVATE BAG 394
LILONGWE 3
MALAWI

February, 2017.

The Project Coordinator
Highland Macadamia Cooperative Union
P.O. Box 8 Ntchisi

ATTENTION: Ken Mkengela

Dear Sir,

LETTER OF NO OBJECTION: CLIMATE SMART AGRICULTURE IN MALAWI

Reference is made to the Project Idea Note (PIN) that you submitted seeking initial screening of the above referenced carbon trading project under Plan vivo from the Designated National Authority (DNA) for Malawi.

The DNA has reviewed the PIN and it is pleased to issue a Letter of No Objection (LNO) for the proposed project, with some adjustments to be made in the Project Design Document (PDD) stage. Overall, the Project is in line with Malawi's principles of sustainable development. However, the DNA made the following recommendations:

- a) There is need for a clear indication on project sites whether the project will be implemented in the four mentioned Districts or the whole country.
- b) Come up with a clear Environment and Social Management Framework that will assess potential environmental and social implications of the project and their management options before a Letter of Approval can be issued. E.g. Clarify on land tenure issues considering that at some point the macadamia canopies may not allow for planting of crops and farmers may end up without arable land.
- c) Conduct consultations with key stakeholders including farmers and Environmental District Officers on feasibility of the project.



We look forward to working with you on this project so that Malawi achieves its development goals including mitigating effects of climate change in the country.

Yours faithfully: Shamiso Najira

**DESIGNATED NATIONAL AUTHORITY FOR CDM IN MALAWI
FOR: DIRECTOR OF ENVIRONMENTAL AFFAIRS**

The Project Coordinator,
Highland Macadamia Cooperative Union, P.O.Box 8, Ntchisi.

22nd March 2017.

Reply to the letter above from HIMACUL

Your reference No: EAD/99/06/04

Environmental Affairs Department,
Lingadzi House,
City Centre,
Private bag 394, Lilongwe 3,
Malawi.

ATTENTION: ShamisoNajira

Dear Sir,

We, the Highlands Macadamia Cooperative Union (HIMACUL), thank you for the Letter of No Objection (LNO) with reference to the Project Idea Note we submitted for initial screening by the Designated National Authority (DNA) for Malawi; for a voluntary carbon trading project under Plan Vivo.

We are pleased to have your confirmation that the PIN is in line with Malawi's principles of sustainable development. However, we have noted that the LNO for the proposed projects requires some adjustments to be made in the Project Design Document (PDD) stage.

We have had discussions with our project partners the Neno Macadamia Trust (NMT) about the DNA's three recommendations for us to incorporate into the PDD. NMT have communicated with Plan Vivo the stage we are now at and as such we are all ready to proceed with developing the PDD.

We look forward to working with you as this project develops so that Malawi achieves its development goals including mitigating effects of climate change in the country.

Yours sincerely. Ken Mkengala Project
Coordinator



Annex 6 – Extract from a draft Plan Vivo v4 PIN (Part 1 – Community Led Design Plan)

Part I: Community-Led Design Plan

Preparatory work has been undertaken since 2007 when NMT and the macadamia association in Neno district were contacted by the Clinton Development Initiative to provide information about macadamia for the Plan Vivo they were developing. Over the past 3 years the NMT has provided about £25K pa to HIMACUL to develop capacity with macadamia cooperatives in Malawi, which underpins the Plan Vivo application. NMT intend to continue to provide a similar level of support each year for the duration of project activities, bolstered by other funding avenues including recent support from Themba Trust, The Prince of Wales Foundation.

The development of activities is taking place with the simultaneous development of the HIMACUL 5 year business plan 2016-2021, which will look to expand macadamia agroforestry and other climate smart practices. The business plan is being developed with the support of the NMT, and capacity building of HIMACUL is an integral process of both Plan Vivo project development and wider support for HIMACUL.

In the field HIMACUL with support from NMT has developed a database of members and their existing macadamia tree plantings. The development of cooperatives and farmer clubs by HIMACUL provides a solid institutional framework for the project, allowing development of personal relations and communication flows between HIMACUL and farmers. Farmer club meetings, with the involvement of HIMACUL and researchers from Imperial College, have been used to communicate intended activities. These meetings have been met with a positive response from farmers.

During a field visit by Imperial College researchers to HIMACUL in Malawi training was provided. This included training in Plan Vivo methodologies for measuring tree growth and baseline carbon estimates. On-going work is currently looking at the option of training HIMACUL in the use of SHAMBA-Tool for the assessment of mitigation benefits from project activities. Project monitoring, verification and reporting capacity will be developed with the objective of passing technical responsibilities over to HIMACUL staff.



Annex 7 – HIMACUL Board Meeting Minutes June 2024

MINUTES OF 28th HIMACUL BOARD MEETING HELD AT HIMACUL OFFICE ON 19TH JUNE 2024

MEMBERS PRESENT:

no	Name of participant	Cooperative	Designation
1	Joseph Makono	HIMACUL	Chairperson
2	Ken Mkangala	HIMACUL	Secretary
3	Mrs Rose Kaphadzale	Chikwatula	Vice chairperson
4	Wellington Kapakasa	Chikwatula	Secretary
5	Alfred Chinsewo	Chikwatula	Chairperson
6	John Kanyangala	Tithandizane	Chairperson
7	Leonard Phiri	Nachisaka	Chairperson
8	Eliza Joshua	HIMACUL	Vice chairperson
9	Victoria Mpotachamba	Mphaza	Chairperson
10	Evans Mayiso	Malomo	Secretary
11	Mwai Moses	HIMACUL	Administrator
12	Henry Benjamin	HIMACUL	Extension officer

In attendance were:

1-Andrew Emmott-Chair of NMT, 2.Tim Emmott- Nutcellars, 3. Nick Emmott-Nutcellars

OPENING:

The chairperson asked one to open with a word of prayer at 10.20 am and Mrs Rose Kaphadzale prayed. The chairperson welcomed everybody to the meeting and asked to participate freely. He asked everyone to introduce himself/herself

READING OF PREVIOUS MINUTES



The chairperson asked the secretary to read minutes of the previous meeting till they were adopted as a true reflection of what was deliberated.

CONFIRMATION OF PREVIOUS MINUTES

Minutes were adopted as a true reflection

Chair Dowa proposed and Mr Chinsewo seconded

MINUTE 03109/2023

MATTERS ARISING

1) Tree-supply

Mr Joseph Makono and Mr Misopa are willing to increase trees planted in their fields through a programme initiated by Nick Evans last year where a farmer would get 206 trees for a hectare and he/she pays 20% of the value of the trees. The programme failed to take off last year as it was late but would be considered this year.

AGCOM 2

Members deliberated whether it was necessary or not to continue with AGCOM.

Since AGCOMI had phased out by end of December last year members became aware that any move forward would be with AGCOM2. Members agreed to proceed with AGCOM2.

MINUTE 01/06/2024- MVC/HIMACUL PARTNERSHIP

The delegates heard there was Malawi Value Chains Project. Malawi Value Chains is a project that is working in mining, macadamia and mango. MVC proposed a partnership agreement with HIMACUL. All delegates gave a nod to the proposal.

MINUTE 02/06/2024-GROUND NUT/MACADAMIA INTERCROPPING

The meeting was informed of the above demonstrations to take place in the 2024/25 agricultural season. 5 farmers per cooperative were chosen to carry out the demonstrations.

The demonstrations would only involve those farmers with macadamia trees. The names of the farmers are:

NO.	NAME OF FARMER	COOPERATIVE	VILLAGE	NATIONAL	EPA
1	Rose Kaphadzale	Chikwatula	Mkakaula		Chikwatula
2	Gloria Mapulanga		Market		

3	Victoria Daniel		Mjingi		
4	Chamba Kamalonda		Chidzaye		
5	Gerald Tsavu		Ziyenera		
6	John Kanyangala	Tithandizane			Kalira
7	Philimon Sandulizeni		Kanyama		
8	Jonas Mtawanji		Chawala		
9	Judith Majomeka		Kachilandozi		
10	Idiel Bezai		Chawala		
11	Mercy Makono	Malomo	Kanyulunyulu		Malomo
12	Rosaliya Mayiso				
13	Stella Paswell		Ngo ma		
14	Ezala Chisale				
15	Rabson Kamina				
16	Victoria Mpotachamba	Chipuka	Mjintha		Chipuka
17	Falesi Chinkhande		Chipokosa		
18	Ellen Mazoko		Bwanamali		
19	Felix Mazoko		Bwanamali		
20	Halmiton Halawa		Chipuka		
21	Chumachiyenda	Nachisaka	Nachisaka		Nachisaka
22	Goodson Mshanga				
23	Goodwin Ulemu				

24	Lezina Magidi				
25	Christopher Kajawa				

MINUTE 03/06/2024- CDMC PAYMENT

There was an item where members were to discuss whether it was right to pay full CDMC payment to side sellers. What it meant was that those side selling would receive half payment. Farmers spoke why they were side selling. Some said it was due to late payment while others spoke of lower prices than those of vendors. After a lengthy discussion, members resolved to apply the decision although it would AGM.

MINUTE 04/06/2024-MOU

MOU between HIMACUL and Ministry of Agriculture was initiated to ensure adequate availability of seedlings. In this MOU government nurseries in Dowa and Ntchisi would be capacitated technically and resource wise so that more seedlings of better quality are produced. The current draft has NMT as one of the parties but removal of NM T from the MOU was necessary as NMT would position itself as advisor and partner to HIMACUL,

MINUTE 05/06/2024- IMPLEMENTATION OF STRATEGIC PLAN

The board chairperson reminded everyone that the period to implement the strategic plan was almost over and yet very little has happened.

Worth focusing were the following targets:

- Tree planting- Bearing trees to increase from the current 133,000 to 300,000
- Share contribution- Share capital to increase from 160,000 MK to 13,760,000 MK
- HIMACUL membership- Membership to increase from the current 7 [cooperatives] to 12 with 600 (300 men, 250 women, 50 youths) as coop members
- Nut volumes- Nut Volumes (NIS) to increase from the current 25,000 kgs to 40,000 kgs

The current strategic plan is due to end by 2026 and significant progress in implementation is not yet in sight. Board members need to work hard to ensure tangible progress is made.



MINUTE 05/06/2024- LOAN REQUIREMENT

Loan requirement in HIMACUL was reportedly high as HIMACUL could not fund some of the major projects it intends to implement. Typical of such projects include crop purchase, input and equipment acquisition and infrastructure. The board made a decision to borrow money from financial institutions within the country.

MINUTE 06/06/2024-FAIRTRADE CERTIFICATION.

The meeting heard with a lot of happiness that HIMACUL got fairtrade certified on 24th February 2024. The certificate will be valid till 2026. This means HIMACUL can now sell macadamia at a fairtrade market thereby receiving stable prices and fairtrade premium. The news pleased everyone in the meeting. MINUTE 07/06/2024-AUDIT REPORT

The meeting heard that HIMACUL had its finances audited by Chaula and Associates, the audit went well and there were no serious issues. This means HIMACUL can now win the confidence of donors and its members.

MINUTE 08/06/2024-AOB

As there was no AOB, the chairman thanked all who attended the meeting.

CLOSING: After exhausting all points for discussion, the meeting was declared closed at 12.17pm and Mrs Kaphadzale offered a closing prayer.



Annex 7 – HIMACUL - Acknowledgement of Distribution Approach

Highland Macadamia Cooperative Union Ltd. (HIMACUL) (second-tier cooperative)

Dear Neno Macadamia Trust,

We, the undersigned, acknowledge and agree to the following distribution approach for the income generated from the Neno Macadamia Agroforestry Project:

- The first 20% is allocated directly to farmers based on their tree numbers.
- Then 40% is allocated to cover project administrative costs, shared between NMT and HIMACUL. This includes costs for surveys, audits, and reporting, with approximately half allocated to HIMACUL as agreed annually.
- The remaining 40% to be allocated on projects as agreed upon by NM T, HIMACUL, and primary societies (and their members).

The above distribution will always align with the Plan Vivo condition that 60% of income remains in-country, ensuring the project significantly benefits local communities and stakeholders.

Kind regards,

Ken

Signed: Ken

Ken Mkengala, Manager, HIMACUL

Annex 8 – Malawi National Ecosystems Assessment Approved 2024

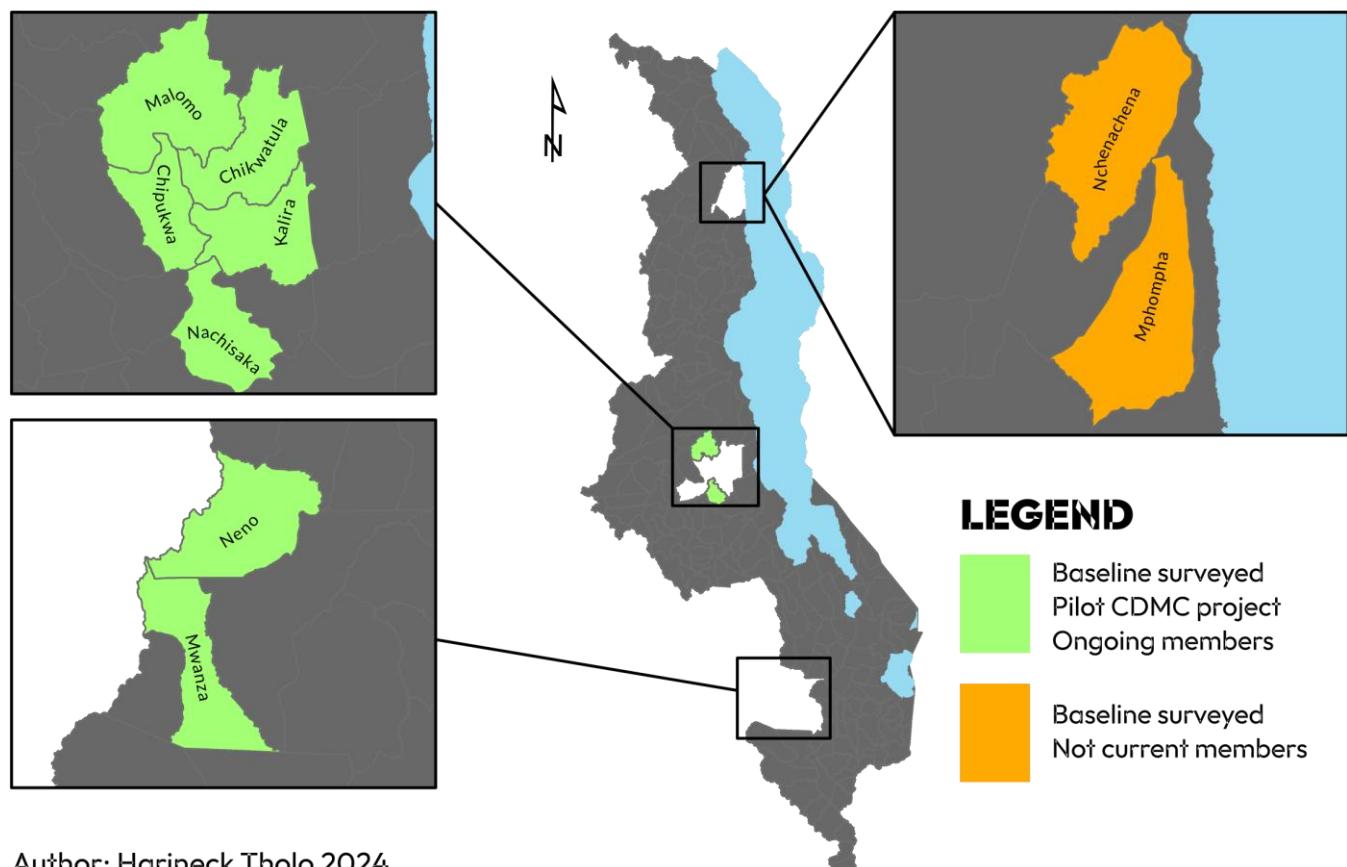
https://files.ipbes.net/ibpes-web-prod-public-files/webform/impact_tracking_database/74581/Malawi-Scoping-Report_Approved_20240228.pdf

Annex 9 – Climate suitability predictions for the cultivation of macadamia (Macadamia integrifolia) in Malawi using climate change scenarios

https://oro.open.ac.uk/78901/1/Zuza-et-al-2021_PLoS-ONE.pdf

Annex 10 – Project Area maps

EPA Map1 – Initial members of the Carbon Damage Mitigation Certificate project and Baseline surveyed, but not currently members

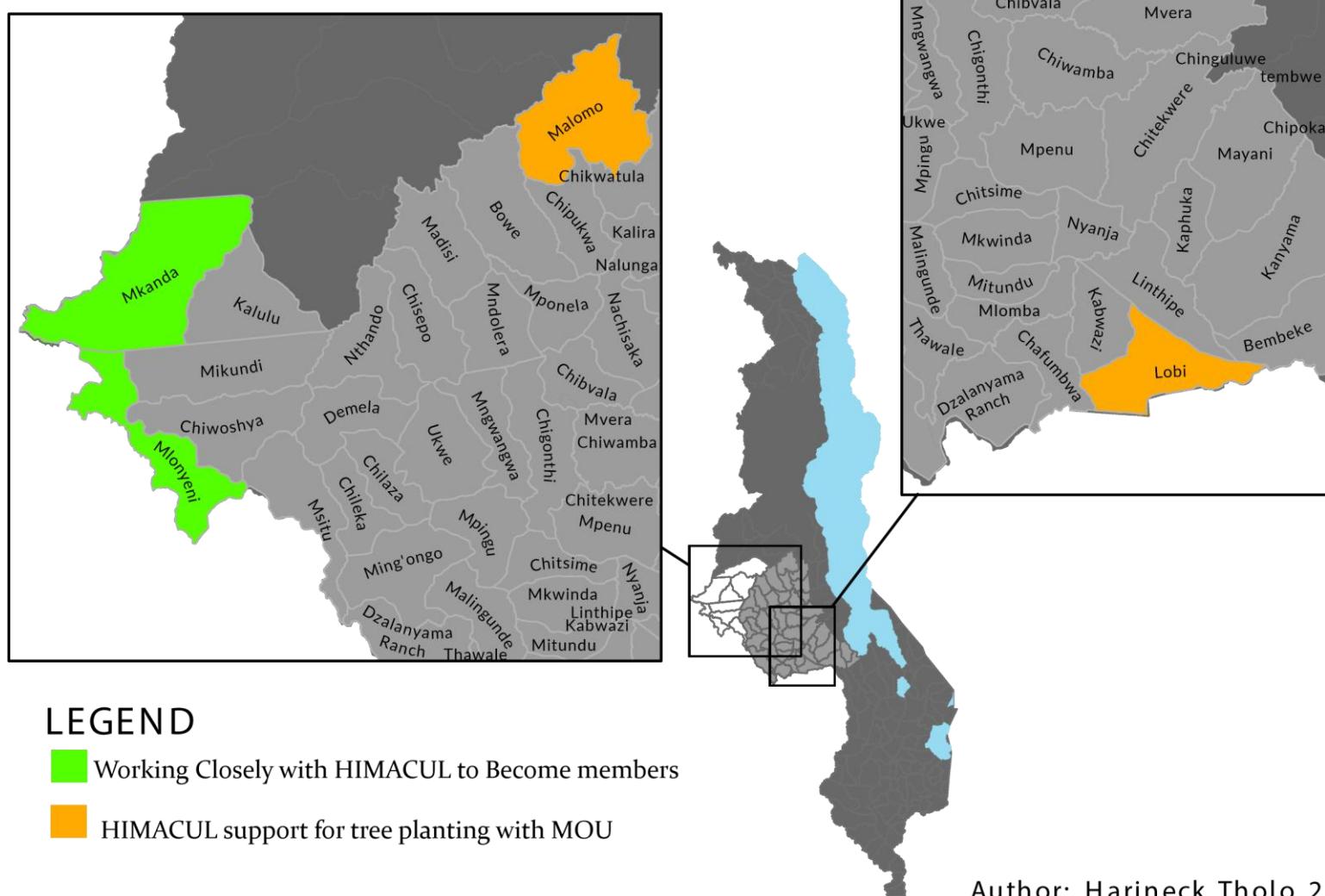


Author: Harineck Tholo 2024

Map No.	Coop Code	ADD	District	EPA	Primary	Secondary
1	DO1	Kasungu	Dowa	Nachisaka	Nachisaka	HIMACUL
2	NT1	Kasungu	Ntchisi	Chipuka	Mphaza	HIMACUL
3	NT2	Kasungu	Ntchisi	Kalira	Tithandiza	HIMACUL
4	NT3	Kasungu	Ntchisi	Chikwatula	Chikwatula	HIMACUL
5	NT4	Kasungu	Ntchisi	Malomo	Malomo	HIMACUL
6	NE1	Blantyre	Neno	Neno	NESMACSI	HIMACUL
7	MW1	Blantyre	Mwanza	Mwanza	Mwanza M	HIMACUL
8	RU1	Mzuzu	Rumphi	Nchenach	Nchenach	HIMACUL
9	RU2	Mzuzu	Rumphi	Mphomph	Mphomph	HIMACUL
KEY						
1-7 baseline surveyed - pilot CDMC project - ongoing members						
8-9 baseline surveyed - not current members						

EPA Map 2.1 – Working Closely with HIMACUL to become members. HIMACUL support for tree planting with MOU

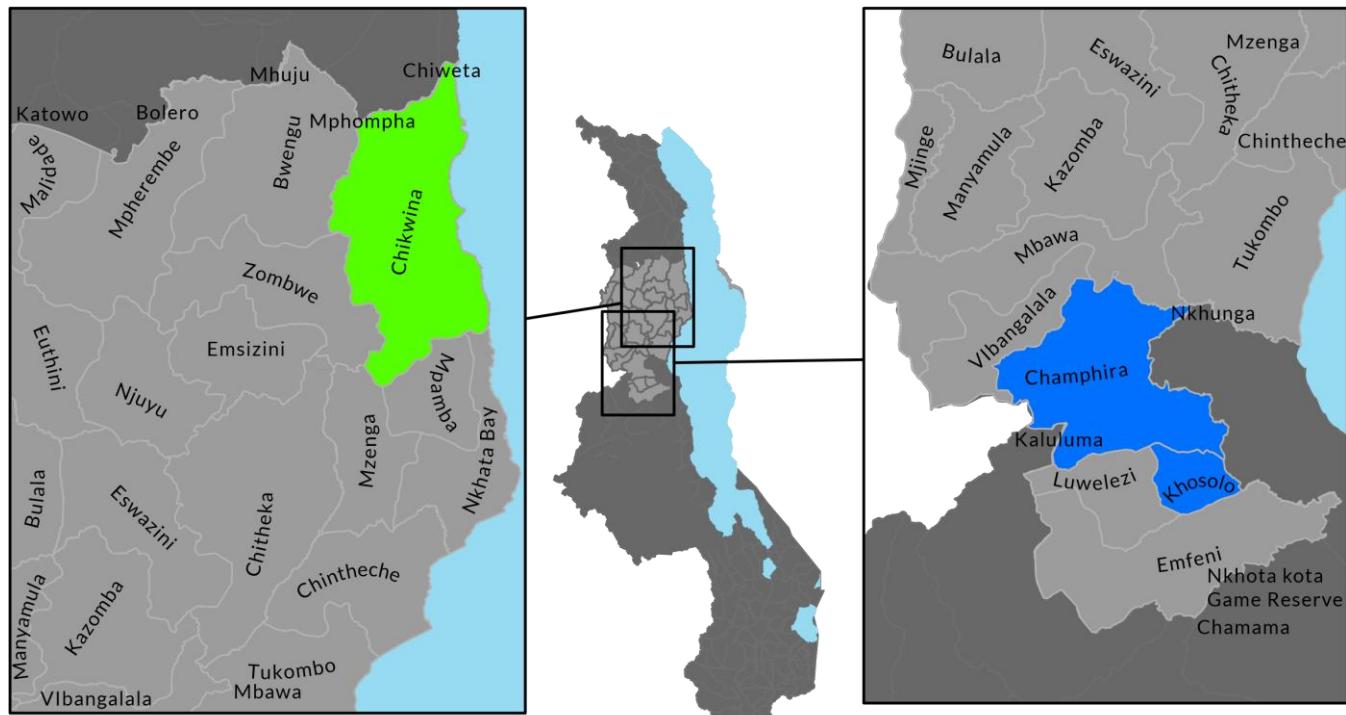
(Other areas included under ‘HIMACUL support for tree planting with MOU’ but without EPA mapping including cooperatives within Lilongwe, Dowa, Mchinji, Dedza).



Author: Harineck Tholo 2022

Map No.	Coop Code	ADD	District	EPA	Primary	Secondary
10	NB1	Mzuzu	Nkhata Bay	Chakwina	Chakwera	HIMACUL
11	MC1	Kasungu	Mchinje	Mulonyeni		HIMACUL
12	MC2	Kasungu	Mchinje	Mkanda		HIMACUL
13	LI1	Lilongwe	Lilongwe	Lobi		Dikarani
14	DO2	Kasungu	Dowa			Dikarani
15	NT5	Kasungu	Ntchisi	Malomo		Dikarani
16	MC3	Lilongwe	Mchinje			Dikarani
17	DE2	Lilongwe	Dedza			Dikarani

EPA Map 2.2 – Working Closely with HIMACUL to become members and No MOU but potential partners



LEGEND

Map No.	Coop Code	ADD	District	EPA	Primary	Secondary
18	LI2	Lilongwe	Lilongwe		Horizon	
19	MZ1	Mzuzu	Mzimba	Njenda	Sable	
20	MZ2	Mzuzu	Mzimba	Khosolo	Sable	

KEY

18 MOU under development

19-20 No MOU but potential partners