



This document represents the basic layout and describes the required input for an ADD
(Acorn Design Document).

Of each project within Acorn an ADD should be provided. The ADD should be stored and made available on the Acorn platform for the stakeholders concerned. This report is drawn up in close collaboration between the local partner and Acorn staff members. The local partner is responsible for providing all required information and performing the assessments. Acorn is responsible for the quality and continuously updating of the ADD. The ADD can be requested by validation and verification bodies and certifiers for third party oversight or quality checks at any given time.

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Solidaridad Kenya Acorn Design Document

Kenya | Bungoma, Kericho, Nandi & Transzoia

Date of submission: 27-09-2023

Part A: Project Summary

Question	General Information	Answer
1	Project location - country, region & district (attach map if possible)	<i>The project area takes place in Kenya, in the counties of Bungoma, Kericho, Nandi, Transzoia (see Annex 1).</i>
2	Local partner contact (name, position, email, address, and website link)	<i>Concealed for data protection purposes.</i>
3	Ecoregions	<i>East African montane forest Victoria basin forest savanna mosaic Southern Acacia-Commiphora bushlands and thickets (see Annex 1).</i>
4	Since what year has the local partner been active in the project area?	<i>2017</i>
5	Partnering NGOs, farmer cooperatives or sub-contractors (name & role in project)	<i>The following Farmer Cooperative Societies (FCS) will be responsible for the extension and mobilization of farmers:</i> - Techgaa FCS - Chepkitar FCS - Sorwot FCS - Kamachungwa FCS - Kabunyeria FCS - Kibukwo FCS - Kapkiyai FCS - Kaabirer MCS - Seiyot FCS - Oasis Koiyet FCS - Kibisi FCS - New Chesikaki FCS - Kimama FCS - Chepkube FC <i>Some of the extension services are ensuring availability of farm inputs, information and knowledge sharing through training, financial and marketing services. When it comes to mobilisation, this is enhanced by the grouping of farmers , which does not only enhances engagement with farmers but also reduces costs making it more affordable.</i>

6	Main cash crop(s)	<i>Coffee</i>
7	Number of existing participants	<i>6,773 participants</i>
8	Potential number of additional participants	<i>10,000 farmers</i>
9	Estimated average plot size per existing farmer (ha)	<i>0.59 ha</i>
10	Native language(s) spoken in the project area	<i>Swahili, Luhya, and Kalenjin Swahili is the dominant language and the one in which project documentation will be provided.</i>
11	Describe how smallholder farmers/communities were involved and not only informed during the design of the agroforestry project (Provide evidence of participation, e.g. photos or minutes taken in workshops, meetings)	<i>Through existing projects, communities were occasionally sensitized on adoption of trees on farm due to multiple benefits that include among others carbon sequestration. For example, such one was the “Practice for change coffee project” which aimed at improving production productivity of smallholder farmers in Eastern Africa. As part of it, farmer needs were assessed on trees species preference and species to site matching was done through interactions with farmers. This reached approximately 3000 farmers and after 3 months of trainings, routine checks and follow ups were set in place with the help of lead farmers. See Annex 4 for evidence of the engagement with communities and farmers.</i>
12	List the topics that have been raised with farmers/communities to seek their input on the project	<i>Level of participation and requirements for farmer’s eligibility and possible CRU generation through Acorn. Access to tree seedlings, more precisely how can seedlings be guaranteed and how and where can we access them. Trainings on agroforestry and carbon farming. Transfer of carbon credits to individuals</i>
13	Provide a general description of current socioeconomic conditions in the project area (including marginalised/minority groups, income, poverty level, remoteness, education, transport, gender balance, migration, population growth etc.)	<i>Poverty: Moderate poverty levels. Within the project area, the poverty levels is within national averages. Education level: Medium-Secondary school. However, there is a difference between the length at which girls and boys go to school. As girls usually drop out earlier due to stigmas such as lack of sanitary pads during menstruation or early pregnancy. Remoteness: remote area, which can translate into lack of electricity, information, internet, phone network, safe drinking water, etc. As well as little access to roads, health care and schools. Population growth: Gradual increase. Consequentially, demand for food and natural resources increase, which in turn threatens livelihoods. Income: Average incomes from farm and other sources such as small businesses do not allow to meet all</i>

		nutritional requirements. In some cases, medium scale farmers can be able to access all meals in a day, provide education to children, build a semi-permanent house and have an income source. Gender: When it comes to gender roles, the division is present. Men usually take up farm roles that involve spraying, marketing of coffee, purchase of inputs, planning etc. They also make decisions on what the money earned will be used for either on the farm or at household level, this is because land ownership is largely patriarchal and men are the ones who mostly inherit land from their parents. Women on the other hand are involved in tending to the farms, from weeding to canopy management, harvesting of coffee as well as other household roles.
14	Describe any known local land degradation/deforestation processes or trends, and drivers of these (e.g. population increase, fire, conversion for agriculture)	Gradual increase in population in the region is causing land degradation and utilisation of trees products such as wood due to increasing demand for energy resources without alternatives. When it comes to land degradation specifically, it is triggered by an intensification of farming, as the farmed area is not increasing equally to the demand for resources. However, communities have been trained on climate smart agriculture practices-CSA and therefore are cognizant of the impacts of climate change and are eager to overcome and reverse these trends.
15	Please describe the following type of land use that best represents the project area before intervention (e.g. Existing agroforestry/fallow/tree plantation/monoculture perennial crop/monoculture annual crop/mixed crops /marginal land)	Existing coffee agroforestry farming settings: agrisilvicultural systems are mostly adopted with mainly practices such as scattered trees on farm, boundary planting and home gardens. Cropping systems include mostly perennial crops such as coffee and annual such as beans.
16	How is land tenure organised among participants and in what form is this evidenced (formal titling, informal titling or land mapping – See 5.1.3 Acorn Framework)	In Kenya, land ownership is primarily governed by the constitution, the Lands Act, and the Land Registration Act. Land ownership can be either freehold, leasehold or communal. The project's participants have a mixture of informal and formal tenure, of which majority have informal titling; a result of in-heritance with local agreements. While the formal titling implies the possession of an official governmental property document, informal titling occurs when land is given by a father to a son. Then, a local council leader signs this with witnesses. The area needs to be demarcated and agreed upon prior to the land transfer. In general, more farmers have informal land for farming ratio maybe 20% formal and 80% informal (see Annex 2).

	Theory of Change	
17	Describe the target community of this project (e.g. gender, age, marginalised groups, location, other stakeholders)	Gender: Female -40% and Male – 60%. Stakeholders: Coffee cooperatives, county leadership. It is important to note that 90% of farmers are under cooperatives. These are more organised social structures which Solidaridad chooses to work with. On a few scenarios, Solidaridad may also work with individual farmers. Regarding county leadership, these are specific lead farmers that have ties with the county's government. This is important, as it allows for project buy in at lower governmental levels and also helps to build the trust of the community. Age: Average Between 35-55. Important to note that, this is the age groups which has access to lands or have ownership over them. Nonetheless, Solidaridad targets younger groups to engage in service provision, such as data collection , social enterprises and farm skilling. Location: Western Kenya
18	What are the biggest challenges faced by farmers/community in the project area? (climate change, volatility in commodity prices, low productivity, access to resources, financial security, crop damage from wildlife, human conflict etc.)	• Poor agricultural practices; • Pests and diseases for coffee, such as twig borer and leaf rust. However, other coffee pests and diseases also exist; • Low coffee prices and low yield. These get low due to mostly quality of coffee produced. Need to build capacity of farmers in effective post-harvest handling techniques; • Erosion and leaching of minerals, resulting from poor conservation agricultural practices and poor climate smart agriculture practices.
19	Describe the project's aims and objectives (e.g. the desired change the local partner wants to achieve)	1. To improve livelihood and incomes of smallholder coffee farmers; 2. To increase adoption of CSA- climate smart agricultural practices; 3. To reduce the carbon footprint along the coffee value chain in Kenya.
20	Describe how and why the project intervention proposed is expected to positively/negatively impact the following; (Provide examples or reasons)	Food security/nutritional intake: Increased and diversified food sources through consumption of fruits from fruit trees planted and other tree-based products such as nuts. The increase in revenue from coffee yield and carbon credits will allow more money to be spent on nutritious food for the family. Farmer financial state: Enhanced and diversified incomes generated from carbon credits that will trigger improved livelihoods of participants, allowing them to afford maintenance of the farm, education, food and to have stability in times of financial/economic struggles. Gender equality: Enhanced women participation along the agroforestry and coffee value chain. Increased shared decision making among women and men in

		utilization of revenues accrued from non-timber forest products and carbon credits. To achieve this, we shall integrate our gender interventions such as EASE model, GALs methodology, SASA trainings, empowering women in participation and decision making on farm. Farmer access to resources: The project shall spur ease of access to prefinancing, extension services, farm inputs in a more robust manner. For this, Acorn and the CRU's generated would be instrumental. We are currently undertaking financing options assessment but the overarching idea is to provide cooperatives with the revolving funds and the power to recover from fly crop. We also looking at options of recovering these from CRUs generated. When it comes to the offer of extension services, Solidaridad is planning on providing trainings on CSA, access to finance, capacity building on financial literacy, group dynamics, facilitating group formation and strengthening, establishing local community hubs, marketing of farm products. Finally, to improve farmer's access to inputs, Solidaridad will also provide prefinancing to organic inputs youth enterprises and connect farmers to these. Biodiversity on farms: Enhanced biodiversity as a result of diversifying tree species. More specifically, the inclusion of 9 key tree species (see Part F) that are coffee friendly. Of these 9 species, approximately half are native/indigenous and the other half are naturalized and provide fruits. Adoption of conservation agriculture will increase the fertility, health and life within soil. This increase in soil biodiversity will ensure the trees planted can grow in optimal conditions (less disease and pests). The increased trees on the farm will increase bird species population that is currently on the decline due to habitat loss. Other: The project will generally improve the tree cover thus contributing to climate change mitigation and providing a suitable microclimate for the farm and community to thrive. The capacity of communities on financial management, group dynamics, and climate smart agriculture shall be enhanced which broadly contribute to livelihood improvement. To do this, Solidaridad will be working with institutions such as Agricultural Development Centre and also leverage on internal capacity to facilitate capacity building of farmers in financial literacy, village savings and loans associations model, etc.
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	The Agroforestry System	
21	Is this project new or existing agroforestry or a combination?	<i>It's a combination of new and existing agroforestry. Initially, farmers who recently transitioned to agroforestry in the last 5 years will be onboarded and the land they use for agroforestry expanded. At scale. The project expects to start onboarding farmers who are new to agroforestry.</i>
22	Type of trees that have/will be planted under agroforestry scheme (shade, fruit-bearing, medicinal)	<i>A mix of shade, fruit, nuts, medicinal, and fodder trees. These will be done with a mix of native and naturalised species.</i>
23	How do you ensure that any existing trees already in the project area do not perish or become damaged due to competition with the trees to be planted during this project?	<i>Since agroforestry is already being practiced in the region, it is not a significant difference. The main difference is in terms of the training provided to participants in this project ensuring practices are optimal and will prevail long-term, the trees species are chosen also for livelihood benefits such as fruit, nut or medicine provision and are not being used for timber, which is a common practice in other agroforestry systems. In addition the time for rotation will be higher within the project. This means that, farmers will likely retain trees for other uses than timber, such as medicine or shade for coffee. In terms of pre-existing trees, through training and an appropriate agroforestry system design, possible negative effects on the trees will be diminished, ensuring that pre-existent trees remain and do not perish.</i>
24	Is planned tree (wood) harvesting part of the agroforestry design for this project?	<i>No, planned harvesting is not part of the project's agroforestry design.</i>
	Project Additionality	
25	Is this project mandatory under any national or local laws? (List relevant forestry regulations, national climate change commitments etc.)	<i>No, for evidence of this please refer to:</i> <i>Draft Forest Policy 2020.</i> <i>The Kenya constitution and the economic blueprint Vision 2030.</i> <i>The Environmental Management and Co-ordination Act (EMCA) of 1999.</i> <i>The Local Government Act, Cap 265.</i>
26	In what year, season and month(s) will/were the first trees planted? (Year 1)	<i>2017, specifically between March and June, as this is the start of the rainy season. However, the project expects farmer to plant trees for three years in a row as they are onboarded.</i>
27		Year 1 200

	If existing agroforestry, approx. how many farmers were onboarded each year over a five-year period	Year 2	300
		Year 3	300
		Year 4	100
		Year 5	200
28	What is the main driver encouraging farmers to transition to agroforestry?	• <i>Provision of shade to coffee to increase yield;</i> • <i>The facilitated access to tree germplasm they receive through NGO's and governmental projects;</i> • <i>Carbon credit generation to increase and diversify income;</i> • <i>Non-timber forest products (Medicine, fruits, nuts).</i>	
29	Was the promise of carbon credits an enabling factor for farmers to transition to agroforestry?	<i>Yes, the possibility of carbon credits was a reason behind the motivation of farmers to transition to agroforestry, as they allow them to generate extra income. Farmers are encouraged to adopt trees on farm and would be willing to retain them for as long as CRUs will be generated from them and for at least 20 years as part of this project.</i> <i>The price of carbon however is small to trigger significant incomes but it keeps motivation high. At the same time, the extra revenue derived from CRU sales is an enabling factor as it makes it possible to overcome other barriers For example, the difficulties faced by farmers and the local partner to access and guarantee the availability of planting materials, such as inputs and fertilizers. With the additional income, it will be possible to subsidize the price at which farmers can purchase these inputs as well as setting up local nurseries to provide the necessary seedlings. Next to this, the local partner will support the local capacity development through training provided to farmer groups. Once again, this mobilization is possible through the implementation of the project and its costs will be faced with the income from CRU sale.</i>	
	High-over business case		
30	If existing agroforestry, how has this project been funded to date? (financed by the local partner, the farmers, grants/funding, or a combination)	<i>Through grants, mostly from the Ministry of Foreign affairs of the Netherlands. These grants are not permanent, as they are dependent upon donor requirements.</i>	
31	Briefly describe the costs for the farmer in this project	<i>Per farmer costs:</i> • <i>Tree seedlings x 100 at 0.25 euros = 25 euros. Please note, this is the average cost, while</i>	

	(e.g. seedlings, fertilisers, labour)	<i>Solidaridad will discount 0,1 euros for each by using prefinancing;</i> • <i>Fertilizer = 50 Euros;</i> • <i>Labour = 10 Euros. Please note, prices per season, with 2 seasons per year.</i>
32	Briefly describe the costs for the local partner in this project (e.g. seedlings, onboarding, data collection, training, farmer engagement, planting materials etc.)	<i>Onboarding = 20 Euros per farmer</i> <i>Data collection = 20 Euros per farmer</i> <i>Training = 40 Euros per farmer</i> <i>Planting material = 25 Euros per farmer (if not pre-financed)</i> <i>In total, Solidaridad could afford these costs for 11000 farmers.</i>
33	How will this project be financed and by whom during the design and implementation stage (e.g. financed by the local partner, the farmers, grants/funding, or a combination)	<i>The project design was funded by Solidaridad – Kenya and the implementation (from 2017 onwards) is funded by a combination of Solidaridad Kenya (with support of carbon finance) and grants. More specifically, we currently have the dream fund grant running from 2022 to 2026.</i>

Part B: Eligibility Checklists

Local partner eligibility checklist			
Topic	Sub-topic	Requested information	Result
Organizational capacity			<i>Solidaridad operates across East and Central Africa in agricultural, industry and mining supply chains. Headquartered in Nairobi, Kenya, Solidaridad East, and Central Africa has country offices and programs in Kenya, Ethiopia, Tanzania, and Uganda and outreaches in Burundi, Rwanda, Cameroon, Gabon, and Chad. We support producers – farmers, workers, and miners – across these countries to promote sustainable production of specific commodities.</i>
	Organizational structure	Provide a description of your organizational structure and roles of each organization involved for the project (attach diagram/table).	<i>The organization consists of seven regional centres throughout the world with a Network Secretariat connecting the regions. The network secretariat (officially Solidaridad Network Foundation, founded in 2011) is located in Utrecht, the Netherlands, in the same office building as Solidaridad Europe, one of the regional centers. The Network Secretariat consists of the Executive Director with a small staff surrounding him and delivering tasks that support the whole network.</i>
			<i>The Executive Board of Directors is the main policy-making body, ensuring coherence between international commodity strategies and regional programs.</i>
			<i>The Executive Board of Directors is also responsible for the overall implementation of the international policy and commodity strategy. It consists of the managing directors from each region. The chair of the Executive Board of Directors is the Executive Director of Solidaridad Network.</i>
			<i>See organizational diagram in Annex 3.</i>
	Organizational capacity	Provide a description of your “on the ground” capacity to undertake long-term community-led	<i>Solidaridad is an international civil society organization with over 50 years of experience in developing solutions to make communities more resilient — by supporting repressed communities through fostering</i>

project(s) and implement agroforestry

more sustainable supply chains. While Solidaridad as a whole counts with 50 years of experience, we have been actively working in East Africa Kenya since 2008. We work closely community CBOs, farmer groups, local government structures and innovation platforms to foster on ground adoption of interventions. We also use the village savings and loan association scheme to increase financial household security. We employ our community based approaches in providing tree seedling germplasm and agroforestry extension services to farmers. In order to ensure survival and performance of trees on farm, we use our tree preference assessment, tree seedling distribution tool and tree seedling performance assessment tool in which our field assistants and lead farmers are trained to use these tools. Additionally, our past experiences are also a proof of our on ground capacity. For example, we do interventions on various commodities value chains by creating share value along the value chains. For example, in coffee farming in East Africa, traditional coffee varieties have become very vulnerable and susceptible to pests and diseases prompting farmers to use excessive chemicals which are hazardous and pollute environment. The cost of running these varieties as sustainable enterprise is proving futile due to high costs and heavy investment on chemical acquisition and application. Therefore, we are actively working on helping smallholder farmers transition to agroforestry and climate smart agricultural practices. In this way, crop quality and resilience increases, helping to reduce the dependency on expensive inputs while also enhancing coffee's quality. Some example of our previous practices are: soil health amelioration, through the analysis of soil samples to later analyze and allow Solidaridad to give farmers specific advice based on their soil needs and available inputs. Secondly, Solidaridad has developed program for water harvesting which allow to save water in dedicated cheap compartments. This allows for the water to be later used domestically. Alongside this, we have supported farmers to develop drip

irrigation to enhance water efficiency in drought periods.

Sustainability	The local partner agrees with the Rabobank's sustainability policy.	Yes
GDPR	The local partner's current data handling policies are compliant with GDPR regulations.	Yes
Participant organization	Describe how the project is organized, or in the process of being organized, into cooperatives, associations, community-based organizations or other organizational forms able to contribute to the social and economic development of the participants and their communities, and which is democratically controlled by the participants.	<i>The project stems from the management of the Project Lead who coordinates field implementation and provides feedback to the Project Supervisor. Solidaridad then works with Cooperatives unions and coffee companies in providing extension services and onboarding farmers through a robust quality based verification system as required by Rabobank. Farmers are grouped according to location and will be represented at the project council in decision making through their identified and trusted lead farmers of each farmer group. These lead farmers are chosen initially based on their exemplary performance on their farms. This also causes other farmers to look up to them. Ultimately, at the initial meeting or inception phase of projects, the lead farmers are presented and a discussion is held regarding expectation of participants and roles. Furthermore, when new participants join ongoing projects, they are introduced to the lead farmers. It is important to note that, lead farmers are chosen ultimately by a voting system applied in each cooperative. Through this system, farmers registered at a cooperative are able to annually vote for the lead farmers. This is done in an annual meeting in which besides the voting, the cooperative presents the results of last year and plans for the coming period. Even though the attendance of these annual meetings is considerably high, Acorn participants can also comment on the election of lead farmers and project council representatives as a voting instance independent from the elections at their respective cooperatives.</i>
Project effects	The project strives to not contribute, or does its utmost to avoid, environmental or	Yes

	(agricultural) biodiversity harm.	
Entity	The local partner is an established legal entity that takes responsibility for the project and for meeting the requirements of the Acorn Framework for the duration of the project.	Yes
Local presence	The local partner has a strong in-country presence and the respect and experience required to work effectively with local participants and their communities.	Yes
Local policies	The local partner has a solid understanding of local policies and can confirm that the country's policy allows individual CRUs to be sold.	Yes
Influence	The local partner is capable of negotiating and dealing with government, local organizations and institutions.	Yes
Resources	The local partner is focused and has the organizational capability and ability to mobilize the necessary resources to develop the project (e.g. including access to seedlings, inputs, agronomic knowledge, monitoring and technical support).	Yes
Data collection	The local partner can provide reliable data (i.e. GPS polygons, phone numbers, other KYC data).	Yes
Training	The local partner has the ability to mobilize and train participants, and implement and monitor project activities.	Yes
Condition (i)	The local partner recognizes that the participant's involvement in the project is entirely voluntary.	Yes

	Condition (ii)	The local partner recognizes that participants own the carbon benefits of the project intervention.	Yes
	Participant payments (i)	The project coordinator ensures that payments are made in a transparent and traceable manner.	Yes
	Participant payments (ii)	The project coordinator ensures that mobile payments to participants are either already possible or there are no foreseeable obstacles for this in the near future.	Yes
	Contributions	The local partner does not draw more than 10% of sales income for ongoing coordination, administration and monitoring costs. Exceeding this percentage is only possible in exceptional circumstances where justification is provided and Acorn formally approves a waiver.	Yes
	Participant identity	The local partner is able to collect and provide proof of participant's identity.	Yes
Land-tenure and carbon rights	Land-tenure and carbon rights (i)	Provide a description of how land tenure is organized amongst the target project participants.	<i>land is owned by individual farmers rather than community ownership. The most common ownership type is by inheritance and purchase. A farmer owns the sole decision on use and sale of land although if it's inherited the decisions can be influenced by clan members (see Annex 2).</i>
	Land-tenure and carbon rights (ii)	The project applies to land over which the participant/community has (formal/informal) ownership or long-term user rights.	Yes
Sustainable land use activity	Land use	Provide a description of the current land use activities, before the start of the project intervention, within the project.	<i>Land is used mainly for agriculture where perennial and annual crops are grown seasonally. Besides coffee, there are three crops that stand out as the most frequently grown and these are maize, beans and tea.</i>
	Project design	The project is/will be designed to promote sustainable land-use and	Yes

	has/will have a feasible business case underwritten by agronomist(s) and community representatives.	
	The local partner confirms that no deforestation has taken place five years before the start of the project intervention (project baseline).	Yes
Deforestation	If this cannot be confirmed, please describe the cause of the deforestation, including the measures that have been taken to prevent deforestation from happening again.	<i>Very few farmers cut a few trees on farm to provide timber but this is not significant since they have trained to retain shade trees in coffee systems due to the attached benefits. Additionally, Solidaridad has sensitised farmers on retaining of trees for carbon benefits and other ecological benefits. Next to this, provision of tree germplasm and efficient cook stoves will help to facilitate tree planting and reducing the requirement for wood for own consumption. Together, these measure aim to decrease and counter balance the harvesting and need for wood.</i>
Additionality	The local partner ensures project additionality and ensures a durability period of 20 years.	Yes
Existing agroforestry (i)	Agroforestry at the farm level has been implemented less than 5 years before the start of the project intervention.	Yes
Existing agroforestry (ii)	Participants and local partners confirm that previously sequestered CO ₂ on the land has not yet been monetized.	Yes
Existing agroforestry (iii)	Existing agroforestry has been funded largely by donors/grants.	<i>Yes, through grants of the Dutch ministry of foreign affairs.</i>
New agroforestry	There is sufficient supply of seedlings, inputs, water and other required resources.	Yes
Naturalized species	The local partner promotes the use of native species. The use of naturalized species is acceptable under	Yes

the conditions outlined in the Framework.

Current habitat	Provide a description of the current ecosystem and flora and fauna species of the project area.	<i>Fragile tropical ecosystem endowed with fertile loam soils harbouring an array of species diversity from lower to high plant resources. Subsistence farming on small holder holdings is common while coffee stands as the most grown crop in the region integrated with beans, maize and bananas. Highland areas also grow Irish potatoes, onions and carrots. The most common species include, meosopsis eminii, cordia spp, Albizia spp, Ficus spp, Markamia lutea, Melia spp, etc. In terms of animals, the most prevalent species are chickens, goats, pigs and to a lesser extent cows, as these are part of the farmers practices and livelihoods.</i>
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Participant eligibility checklist			
Topic	Sub-topic	Requested information	Result
Organizational capacity	Smallholder labor force	The participants are not structurally dependent on permanent hired labor, and manage their land mainly by themselves with the help of their families.	Yes
	Smallholder farm size	The cultivated land of participants does not exceed 10 ha.	Yes
	Resources	The participants, with the support of the local partner, have the ability to mobilize the necessary resources to implement the project.	Yes
	Data collection	The participants can allow reliable data to be collected for the project (i.e. GPS polygons, phone numbers, other KYC data).	Yes
	Condition (i)	The participants are aware that their decision to participate in the project is entirely voluntary.	Yes

	Participant identity	The participants are able to provide proof of their identity.	Yes
Land-tenure and carbon rights	Land-tenure and carbon rights (i)	Provide a description of how land tenure is organized.	<i>land is owned by individual farmers rather than community ownership. The most common ownership type is by inheritance and purchase. A farmer owns the sole decision on use and sale of land although if its inherited the decisions can be influenced by clan members (see Annex 2).</i>
	Land-tenure and carbon rights (ii)	The project applies to land over which the participants/community has (formal/informal) ownership or long-term user rights.	Yes
	Land use	A description of the current land use activities within the project.	<i>Land is used mainly for agriculture where perennial and annual crops are grown seasonally. Coffee farming is the predominant practice.</i>
Sustainable land use activity	Deforestation	The participants confirm that no deforestation has taken place five years before the start of the project intervention (project baseline). If this cannot be confirmed, please describe the cause of the deforestation, including the measures that have been taken to prevent deforestation from happening again.	Yes
	Additionality	The participants ensure project additionality and is aware that the project has a durability period of 20 years.	Yes
	Existing agroforestry (i)	Participants confirm agroforestry at the farm level has been implemented less than 5 years ago.	Yes
	Existing agroforestry (ii)	The participants confirm that previously sequestered CO ₂ on the land has not yet been monetized.	Yes

Current habitat

Provide a description of the current ecosystem and flora and fauna species of the project area

Fragile tropical ecosystem endowed with fertile loam soils harbouring an array of species diversity from lower to high plant resources. Subsistence farming on small holder holdings is common while coffee stands as the most grown crop in the region integrated with beans, maize and bananas. Highland areas also grown Irish potatoes, onions and carrots. The most common species include,: meosopsis eminii, cordia spp, Albizia spp, Ficus spp, Markamia lutea, Melia spp.

Part C: Additionality Assessment

Positive list	Demonstrate that the project meets requirements (a) and (b) and at least one of the requirements (c) and (d).	
	(a) The project area is located in a country or region with a recent UNDP Human Development Indicator ¹ below or equal to 0.8.	<i>Yes, Kenya's HDI was 0.601 in 2022.²</i>
		<i>Yes, the project is not mandatory under national laws nor is part of Kenya's NDC's. See the UNFCCC nationally determined contribution of Kenya, National Climate Change Action Plan (NCCAP) 2018 – 2022³ and the Forest Conservation and Management Act, 2016.⁴</i>
	(b) The project shall not be mandatory by any law or regulation, or if mandatory, the local partner shall demonstrate that these laws and regulations are systematically not enforced.	<i>Voluntary carbon market projects in Kenya are not mandatory under Kenyan law. These projects operate in a market where parties voluntarily buy and sell carbon credits.</i>
		<i>However, Kenya has established regulations in 2024 to ensure these projects are properly managed and contribute to reducing greenhouse gas emissions. Solidaridad Kenya is currently in the process of receiving proof of adhering to these regulations.⁵⁶</i>
	(c) The project is located in a region with a mean annual precipitation of less than 600 mm.	<i>No, average annual precipitation is 2108 mm/year⁷</i>
	(d) The project area is (predominantly) located in a country or region with a recent UNDP Human Development Indicator below 0.6.	<i>No, Kenya's HDI was 0.601 in 2022.</i>
Barrier analysis	Demonstrate that the project intervention would not have taken place due to <u>a least one</u> of the following barriers.	
Type of barrier	Situation without project	Situation with project

² [Kenya - Human Development Index - HDI 2022 | countryeconomy.com](https://countryeconomy.com/country/kenya/human-development-index/)

³ [Kenya First NDC \(Updated submission\) | UNFCCC](#)

⁴ [ForestConservationandManagementAct34of2016.pdf](#)

⁵ [Microsoft Word - LN 84-CLIMATE CHANGE \(CARBON MARKETS\) REGULATIONS, 2024 formatted.doc](#)

⁶ [The Climate Change \(Carbon Markets\) Regulations, 2024 - Kenya Law](#)

⁷ [POWER | DAV](#)

Financial/ economic barrier	<i>Before project intervention, there was no payment system for ecosystem services in place which led to farmers harvesting any trees they planted for timber. This was due to the high cost that a farmer may incur during transition period of changing from conventional to climate smart farming such as seedlings, inputs, training, labour. Without an additional financial reward, this is too much investment to continue planting or optimising their agroforestry systems with the intention of keeping the trees in the ground long-term.</i>	<i>Due to project intervention farmers will receive a financial incentive to plant trees and maintain them in the long term due to the carbon revenue generated. In addition to the carbon revenue, trees species that provide marketable products such as fruit and nuts are included in the agroforestry design, diversifying the income of farmers further. Additionally, the ecological benefits that the trees will provide for the soil and crop (i.e. shade and nitrogen fixing) will increase crop yield. As a result, farmers will have increased financial income and security and no need to cut down trees for timber.</i>
Technical barrier	<i>Before intervention there was a lack of infrastructure for implementation of the agroforestry in the project area such as lack of access to planting materials (seedlings, fertilisers etc.). This came as both a result of the poor financial state of farmers and costly inputs due to a lack of local nurseries with agroforestry tree species available.</i>	<i>As part of the Acorn project, Solidaridad will provide tree seedling germplasm to farmers at a subsidized rate. In line with the Business Case, the subsidized rate is €0,08 for the suggested tree species, with the exception of Macadamia and Persia Americana, for which the subsidized rate is €0,41. Providing a subsidized rate is possible thanks to available pre-financing.</i> <i>Solidaridad will also provide capacity development and sensitization covering topics such as sustainable land management, agroforestry, climate smart agriculture, and coffee production and management. To make this possible, Solidaridad will make use of farmer groups and Farmer Field Schools. Additionally, we will provide visual aiding material and practical skilling.</i> <i>Support for local institutional development for scaling out and up agroforestry will also be provided through developing capacity, social capital and cohesiveness of farmer groups/innovation platforms to collectively adopt and scale up agroforestry.</i>

		<i>Last of all, Solidaridad will promote awareness and sensitization of farmers for knowledge sharing in the community on agroforestry. This will be achieved by instituting simple community governance structures that help to mainstream the common call of agroforestry.</i>
Social and cultural barrier	<i>Before project intervention, there was poor mobilization of local communities due to remoteness of farmers and poor outreach techniques. More specifically, ineffective extension services by current government structures. As a result, they are not able to provide farmers access to community based service delivery. Communities were also struggling with a lack of organisation within and among themselves. This was especially evident in terms of the poor awareness of climate change effects and mitigation measures in the community, although all farmers are experiencing it, knowledge sharing was not common in this area.</i>	<i>During this Acorn project, Solidaridad will create a cascading structure with seamless flow of information on both top down and bottom up approach with active participation by all players. This is done by facilitating information and strengthening social farmer groups at a bottom level while also building capacity regarding group dynamics. From here, lead farmers will be identified to ensure representativeness. These would later be introduced to district level platforms.</i> <i>At the same time, social enterprise groups will be registered in the same district level platforms. In the end, stakeholders at district and local level are represented and share information in a 2 way flow.</i> <i>Solidaridad will promote participation by nominating women for the project council and also rewarding the active participation through Solidaridad's platform Zwardy. Note: the farmer representation will also discuss grievances as required by project councils in ACORN.</i> <i>This project will build capacity on organization development and sensitize the community on the why and the how to deal with the menace of climate change effect. Such as involving the community in policy formulation and implementation on reclaiming sustainability of the ecosystem.</i>

		<i>Carbon Financing may not necessarily build organizational capacity, however it will be instrumental for Solidaridad to be able to use existing human resource to extend the capacity of farmers in carbon farming through the Training of Trainers Approach.</i> • <i>These trainings are conducted through farmer groups and Farmer Field Schools</i> • <i>Use of training content co developed by Solidaridad, local universities and any other service providers.</i> <i>When it comes to sensitization of farmers, Solidaridad plans on doing this through a. Demo farms, b. lead farmers and c. provision of supporting visual material and visual aids development as well as content customization for it.</i>
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Overall conclusion:

Solidaridad Kenya is currently implementing an Acorn project which begins with a small amount of pre-existing agroforestry farmers, who transitioned to agroforestry gradually over the last 5 years, and aims to scale up to 11,000 in the coming years. The project is located and distributed around four districts in Kenya, Bungoma, Kericho, Nandi and Transzoia. As part of this project, Solidaridad aims to develop capacity at a farmer and community level. In this way, it is expected to enhance and secure the permanence of trees and sequestered carbon by promoting good practices and sensitization among the communities.

The revenue and income from carbon credits represents an important input for the project, as it will be instrumental to not only motivate the farmers and support their livelihoods, but also to ensure the local capacity building activities around the project can run in the long term. The reason behind this, is the regular and long term revenue stream that carbon finance represents, representing an added value as compared to initial funding or grants. The planting of trees is spread over multiple years for both pre-existing and new agroforestry plots. The first 3 years will be used to plant the largest amount of trees. From then onwards, planting will be carried out as required and specifically to replace dead trees, should it be necessary.

The relevance of this Acorn project can be seen at both farmer and project level. For example, while carbon finance provides farmers with specific benefits and opportunities that allows them to transition to agroforestry, it is also instrumental to build and develop capacity at a community level to ensure long term benefits and set the basis for further scaling and spreading of agroforestry in the region.

At a farmer level , the project allows to overcome specific economic and social bottlenecks faced by farmers who would opt to practice agroforestry. For example, without the project there would be no access to payments for ecosystem services in place. Consequentially, this would imply the absence of any kind of motivation for farmers not to cut down their trees. Additionally, the income generated through carbon finance would not only imply a diversification of farmers revenue streams, but is also instrumental for them to face certain costs that arise when practicing agroforestry such as seedlings, inputs and training. When it comes to these costs, Solidaridad will also subsidize the price of seedlings and germplasm to ensure farmers can access and afford it. Next to this, the project will also provide farmers with soft skills and knowledge to ensure agroforestry is successful in the long term. As an example, Solidaridad will work on farmer sensitization to highlight the benefits of keeping trees alive in the long term. To do this, it will make use of its platform Zwardy which rewards farmers carrying out good practices at their plots, as well as demo farms and lead farmers structures which are explained later in this document.

Given the activities carried out by Solidaridad that surround this project, the access to carbon finance represent a valuable input to face the inquired costs. It is important to note that these activities are not only necessary to enhance the outcomes of the project when it comes to carbon sequestration but also benefit the farmers through education and capacity building at an individual and community level. All of these benefits are additional to the direct income that carbon finance represents to farmers. As part of the project, Solidaridad Kenya will provide farmers with specific agroforestry training based on content and material developed by Solidaridad. This will be done based on a “Training of Trainers approach” which will have 35 farmers trained per trainer. To bring this to fruition , trainings will be conducted around farmer groups and on dedicated farmer schools. When it comes to periodicity of the trainings, this will count with follow up trainings and checks every three months. Next to this, Solidaridad will set up 2 Rural Resources Centres per sub region, which will act as local knowledge hubs to share and spread agroforestry dedicated knowledge. These local community hubs will be operated on a voluntary basis by lead farmers. It will be at these hubs where co-learning will be promoted by setting up mini demos. Next to the activities supported by the community, Solidaridad will bring in expertise knowledge through agroforestry extension experts with the help of the Carbon Farming Academy and other universities. With their help, Solidaridad will develop the teaching material and content to be used for the farmers and lead farmers trainings. Finally, similarly to the aforementioned knowledge hubs, Solidaridad will set up demo farms, which will act as co- learning spaces. What distinguishes this demo farms, will be the good practices exemplified through them. Therefore, Solidaridad will prioritize strong gender role sharing and community role model in climate smart agricultural practices.

In short, carbon finance itself does not build social and local capacity necessary for farmers to implement successful agroforestry systems. However it is certainly instrumental to allow Solidaridad and farmers to overcome their financial barriers and access the necessary resources and expertise required.

Part D: Farmer Survey

Number of participants surveyed		Total number of project participants	Percentage of total participants included in baseline		
100		1,302 (at the moment of survey completion)	7,68 %		
Area	Indicator	Metric	Source	SDG	Result
Local livelihood	Farmer income from carbon finance	Revenue from CRU sales	Survey (information collected on the Acorn platform)	1, 2, 8	36,784.44 Euros.
	Nutritional variety	Number of food groups in the diet (see Appendix 7.9)	Household Dietary Diversity Score (HDDS) index survey ⁸	1, 2	The average farmer consumes 7 groups of food per day.
Environmental improvement	Agricultural biodiversity	Crop/animal/pollinators count	Gini-Simpson Index survey ⁹	2, 15	35% (unsustainable)
Farm productivity	Agricultural land use productivity	Farm output value per hectare per crop type [kg/ha/year]	Survey (information collected on the Acorn platform), FAO TAPE Tool ¹⁰	1, 2, 8	Coffee yield = 377kg/ha/year Total farm yield = 9290 kg/year

1. Farmer income from carbon finance

- I.) Describe the current financial state of farmers and how project intervention is expected to positively/negatively impact these.

Participants of the project live under the poverty line and many of them have difficulties accessing education and a varied diet. Furthermore, they all live in a region where the HDI is 0,58 or less. Besides this context, current environmental trends such as extreme events (droughts and rains) have a direct negative impact in their livelihood, as all of them depend on the productivity of their crops. Along this line, many indicate specific challenges affecting their land productivity and consequently, their livelihood. Most of them indicate a lack of sufficient income to afford inputs such as fertilizers and hire workmanship. Next to this, the high value of required inputs worsens the possibilities to improve the yields of their crops.

Departing from this context, in which weather conditions and requirement for inputs affect their livelihoods, the impact of the project is likely to trigger a positive change. To begin with,

⁸ [Swindale & Bilinsky, 2006](#)

⁹ [Izsák & Papp, 2000](#)

¹⁰ [Swindale & Bilinsky, 2006](#)

the agroforestry system will provide benefits to their crops such as protection from direct sun and wind, improve soil health and water retention. This alone can be expected to increase their current yields. Additionally, the income generated by the sale of carbon removal units will allow them to access inputs such as a fertilizers as pesticides. Nonetheless, due to the improved agricultural practices the need to make use of these inputs is likely to be reduced as well.

II.) Fill in the table below based on the carbon credits received by farmers.

Number of credits received	Time period credits were received	Total income from carbon credits
1,327	December 2023	36,784.44 Euros

2. Nutritional Variety

I.) Describe farmer nutritional intake currently and how project intervention is expected to positively/negatively impact this.

The baseline survey of farmers shows a rather limited nutritional variety, with the average indicated number of food groups consumed per day at 5 (see table below). These commonly consumed food groups include cereals, tubers, and vegetables. The reason for this can be two-fold. Firstly, the surveyed farmers have indicated to have a low income and face difficulties to access resources. Furthermore, only a few farmers have indicated to have sufficient resources but at the same time, these are limited and sufficient for their own household. All these cases coincide in indicating that their main source of income comes from the selling of coffee and farm products. Logically, this leads to the second reason for the low nutritional variety. As previously mentioned, farmers rely on their farms to support their livelihood. However, their current agroforestry systems have shown to lack variety (seen in the Gini-Simpson score below).

II.) HDDS Index Survey Results.

Food group number	Food group type	Amount of farmers consuming each food group (%)
1	Cereals	97%
2	Root and tubers	64%
3	Vegetables	93%
4	Fruits	70%
5	Meat, poultry, offal	72%
6	Eggs	65%
7	Fish and seafood	57%
8	Pulses, legumes, nuts and seeds	57%
9	Milk and milk products	77%
10	Oils and fats	52%
11	Sweets	0%
12	Spices, condiments and beverages	0%
Average number of food groups consumed: 5		

3. Agricultural Biodiversity

- I.) Describe the current state of biodiversity and how project intervention is expected to positively/negatively impact this.

The current biodiversity cannot be considered to be high, but rather low. The reason for this is that in those areas in which there is currently an agroforestry system in place, they have a very limited number of tree species and crops, with the dominant crop species seen below as coffee. This can be reflected in the unsustainable score of 36% for the Gini-Simpson index in question III.) below. Departing from this, the agroforestry system can be expected to have a positive impact on the biodiversity, as the various tree species either for shade or crop will already represent an improvement of species variety. For example, species such as citrus and avocado besides coffee are planned to be planted in the project area. At the same time, the planted trees will serve as shelter and food source for different animal species, especially birds. Furthermore, when farmers were asked how they would define the current variety of animal and plant species on their farm, most of them considered it to be on a moderate level, followed by a second group that consider biodiversity be low. Remarkably, only 5% of the farmers surveyed defined biodiversity as high.

- II.) How many farmers perform beekeeping?

Out of 100 surveyed farmers, 56 perform beekeeping. From these, 36 do wild beekeeping while the remaining 20 make use of beehives (raised beekeeping).

- III.) Gini-Simpson Index Results.

Crops	Area	pi	p2	Livestock	number	equivalent	pi	p2
Coffee	227	0.9116	0.83	Cows	447	1*477 = 447	0.8199	0.6722
Sugarcane	16	0.0642	0.004	Chickens	2011	0.014*2011 = 28,154	0.0516	0.0027
Maize	2	0.008	0.000064	Pigs	102	0.3*102 = 30.6	0.0516	0.0031
Banana	2	0.008	0.000064	Rabbits	173	0.02*360 = 3,46	0.0063	0.0000
Sweet potatoes	2	0.008	0.000064	Goats/sheep	360	0.1*360 = 36	0.0660	0.0044
Total	249		0.83(17%)	Total	3093	545.214		0.68(32%)
Average of crop/livestock indices				24.5				
Natural vegetation, trees and pollinators								
Description								Value
Productive area with natural vegetation			On average, farmers indicated that their productive area is moderately covered with natural vegetation. More specifically, 33 out of 100 farmers have indicated such a cover of natural vegetation. Similarly, but to a lesser extent, 20 farmers have a very small area covered by natural vegetation. While the majority of the sample is a significant amount of vegetation as indicated by 41 farmers, this number is considerably close to the number					0.5

	<i>of farmers with moderate cover. The rest of the farmers indicated to have none of their productive area covered at all by natural vegetation.</i>	
Pollinator Presence	<i>The presence of pollinators is mostly defined as moderate by the surveyed farmers. The reason being that 45 out of 100 farmers have indicated this. Contrary to this, 23 farmers consider the presence of pollinators to be rare. Fortunately, the rest of the farmers see pollinators in their farms either sometimes or regularly. Therefore, the presence of pollinators can be considered significant on average.</i>	0.66
Beekeeping	<i>Majority of farmers perform beekeeping, 56 out of a 100. Of these, 20 make use of beehives, while the majority does it without them (wild).</i>	0.5
Total average		0.55 (55%)
Agricultural Biodiversity Score		34.7% (unsustainable)

IV.) List pollinator species in the project area.

Present in project area	Pollinator type
Regularly	<i>Bees, Butterflies</i>
Moderately	<i>Ants</i>
Sometimes	<i>Bats, Flies , Mosquitoes , Beetles</i>
Rarely	<i>Moths , Sunbirds, Monkeys , Hummingbirds</i>

V.) List wild animal species in the project area.

Species (latin name)	Prevalence (Regularly/Sometimes/Rarely)
<i>Rabbit (Leporidae)</i>	<i>Sometimes</i>
<i>Mongoose (Herpestidae)</i>	<i>Regularly</i>
<i>Snakes (Serpentes)</i>	<i>Sometimes</i>
<i>Wild dogs (Lycaon pictus)</i>	<i>Sometimes</i>
<i>Rats (Mus musculus)</i>	<i>Sometimes</i>
<i>Quinea fowl (Numididae)</i>	<i>Regularly</i>
<i>Hare (Lepus)</i>	<i>Rarely</i>
<i>Foxes (Vulpes chama)</i>	<i>Regularly</i>
<i>Wild cat (Feliz Lybica)</i>	<i>Sometimes</i>
<i>Monkey (Papio)</i>	<i>Rarely</i>
<i>Lizard (Lacertilia)</i>	<i>Rarely</i>
<i>Chamaleon (Chamaeleonidae)</i>	<i>Rarely</i>
<i>Hyena (Hyaenidae)</i>	<i>Sometimes</i>

VI.) List species with a high local environmental and social conservation value in the project area, and if influenced by project intervention, describe relevant monitoring objectives/plan.

Solidaridad has indicated that the presence of wild animals with conservation value is not common in the project area due to the history of ongoing agricultural activities. Biodiversity will continue to be monitored through the farmer survey at least every 3 years which looks as agricultural biodiversity such as crops, livestock, pollinators etc. Nevertheless, there are

several species of conservation value that exist around the project area, and, as a result of increasing the biodiversity, human-wildlife conflict (i.e., eating crops) might occur. To note that, the project area is also under other certification schemes, such as Rainforest Alliance, that prohibits the poaching and hunting of wild animals. Therefore, mitigation strategies involve mostly sensitization and monitoring.

Species (Latin name)	Threat Classification (Culturally Significant/ Vulnerable/Endangered/ Critically Endangered)	Project Influence (Positive /Negative)	Justification for influence	Monitoring Objectives/Plan
Elephants (<i>Loxodonta africana</i>)	Endangered on the IUCN Red List	Positive for the animal species, and negative for the farmers.	One of the main reasons for a threatened classification includes habitat loss. By planting more trees, and further increasing the canopy, the overall biodiversity is expected to increase, therefore, contributing to a re- balance of the food chain. With this, human- wildlife conflicts might increase (i.e., damage of crops).	Various strategies to mitigate risks of human-wildlife conflict: 1. Involving communities in conservation and jointly addressing the underlying causes of conflict; 2. Conflict reduction measures such as implementing strategies like physical barriers, detering methods, and alternative livelihoods to reduce the frequency and severity of conflicts. 3. Compensation schemes to communities for losses caused by wildlife can help to alleviate some of the economic impacts of conflict; 4. Raising awareness about importance of wild life; 5. Policy and legal reform which is done by strengthening
Baboons (<i>Papio anubis</i>)	Least concern on the IUCN Red List Vital seed disperses for their ecosystem.			
Lions (<i>panthera leo</i>)	Vulnerable on the IUCN Red List			
Hyenas (<i>Crocota crocota</i>)	Least concern on the IUCN Red List			
Leopards (<i>Panthera pardus</i>)	Vulnerable on the IUCN Red List			
Several species of snakes				
Moles (<i>Tachyoryctes ibeanus</i>)	Least concern on the IUCN Red List Endemic to Kenya			
Rabbits (<i>Oryctolagus cuniculus</i>)	Near Threatened on the IUCN Red List			
Squirrels (<i>Xerus rutilus</i>)	Least concern on the IUCN Red List			

				land-use planning and wildlife management policies can help to reduce conflict by preventing the encroachment of human activities into wildlife habitats.
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4. Agricultural land use productivity

1. Please describe your current productivity level, challenges around productivity and yield from farm outputs.

Most of the farmers surveyed have indicated to have a low productivity level and face different challenges. Out of 100 surveyed farmers, only 38 achieved a moderate productivity level in their farms while the rest face either low or very low productivity level. In regard to the reasons behind the current productivity levels, the high cost of inputs and specifically fertilizers is the most frequent answer. Next to this, the high cost of labour and unpredictable weather conditions are the second and third mostly cited reasons for low productivity.

It is expected that the project intervention (planting trees that offer shade and improve soil health) will lead to an average productivity increase of 15%, on a yearly basis for their main cash crop, coffee. This is already evidenced, as seen in Figure 1 below. Throughout the project's lifetime, it is hoped for a significant increase of productivity, as some studies have shown an increase of 100% after a 20 year period¹¹ as a result of improved microclimatic conditions, reduced evapotranspiration, and enhanced soil fertility, leading to more resilient coffee plants under a shaded/agroforestry system. These benefits are especially pronounced in older coffee trees and in areas experiencing rising temperatures and erratic rainfall, where shade trees buffer environmental extremes and support ecosystem services critical to sustained productivity. As a result of the increased productivity, the need for the use of inputs such as fertilizers will reduce. Agroforestry coffee systems promote increased soil organic matter, microbial biomass, and nitrogen retention, leading to more efficient nutrient use by coffee plants. In this case, the changes become tangible after 4 years of the project being implemented with a decrease of 5% and later on a yearly 10% decrease on inputs utilization¹². Furthermore, the tree products (e.g. mangos and avocados) that will be produced by farmers in this project can be sold on the market and increase their total farm productivity further.

¹¹ [Effects of shade trees on robusta coffee growth, yield and quality. A meta-analysis | Agronomy for Sustainable Development](#)

¹² [Soil nitrogen dynamics affected by coffee \(coffea arabica\) canopy and fertilizer management in coffee-based agroforestry | Agroforestry Systems](#)

MUROKI FARMERS COOPERATIVE SOCIETY LIMITED

[REDACTED]



MUROKI THREE YEARS CHERRY PRODUCTION AND RATE OF PAYMENT

YEAR	CHERRY INTAKE/PRODUCTION IN KGS	RATE/KG KSHS.
2022/2023	107,614	72 00
2023/2024	150,475	80 00
2024/2025	190,320	90 00

Designation: C.E.O

Date: 11/5/2025 SIGN:  Rubber stamp

Figure 1. Coffee productivity monitoring for Muroki Farmers' Cooperative, showcasing an yearly increase of 15%.

- Please fill in the survey in Table 10 depending on the yield of your cash crop and total farm yield, including the percentage of productivity that accounts for crops other than the cash crop.

Average yield of cash crop (kg/ha/year)	Average total farm yield (kg/year)	Other crops contributing to productivity and their average amount (%)
377 kg/ha/year of coffee	9290 kg/year	Other crops, such as maize, sugarcane, banana and sweet potatoes, contribute approximately 20% of the total farm's productivity on average.

Part E: Carbon Baseline Assessment

- Local Partner: Solidaridad Kenya
- Name of Local Partner Representative: *Local Partner representative: Rachel Wanyoike, Managing Director*
- Project Location: *The project area takes place in Kenya, in the counties of Bungoma, Kericho, Nandi, Transzoia*
- Date of Assessment: 20/12/2022

Carbon Baseline	
Requested information	Answer
Describe potential land tenure issues and measures taken to mitigate these	<i>Internal boundaries resulting in a dispute of land plots. This potential issue is likely in cases for which for which informal land title is present. Therefore, Solidaridad will encourage farmers to obtain formal titling this in place as much as possible. For this, Solidaridad can assist in the demarcation of the land's boundaries, after which, an official land surveyor comes to check the marks as to process a formal land title. In other cases, disputes can be solved by means of an agreement between the different land owners and the local leadership. This last approach is also applicable for possible inheritance disputes.</i>
Description of current land use	<i>In the project area, the main cash crop produced by farmers is coffee, with other alternatives to a lesser extent such as maize and bananas. It is now common to see farmers beginning to produce different tree crops such as avocado, macadamia and mango through agroforestry. All of these are both sold for income generation, as well as consumed locally by farmers.</i> <i>The current land use in the area is predominantly agricultural. Naturally, this poses a high pressure on forests and natural resources. Furthermore, this is enhanced by local population relying on wood products for own consumption. So far, productivity has faced some challenges due to climatic conditions and the use of pesticides has been indicated by surveyed farmers.</i> <i>Consequently, this scenario would lead to a situation in the next ten years, without the Acorn project, in which deforestation rates surely do not diminish and is likely to increase. The impact on the environment would be further worsen due to the dependency on fertilizer, as indicated by surveyed farmers.</i> <i>Without project intervention, farmers would not have the financial resources to afford education and skills to transition to an agroforestry system and undertake sustainable agricultural practices such as tree planting, mulching, composting and crop rotation. Instead, farmers would continue practising subsistence farming with few trees on their farms that further degrades soil.</i> <i>As a reaction to this, the agroforestry project aims to decrease pressure on wood resources through sensitization of the population as well as the implementation of more efficient cooking stoves. On top of this, the impact on biodiversity and soil health is expected to</i>

	<i>be positive through the implementation of agroforestry and climate smart practices. In the end, this should decrease the use of fertilizer and pesticides by farmers.</i>
Description of current habitat species	<i>The current habitat is a fragile tropical ecosystem endowed with fertile loam soils harbouring an array of species diversity from low growing plants to species reaching higher heights. The most common species include, Maesopsis eminii, Cordia africana, Albizia spp, Ficus spp, Markhamia lutea, Melia spp, etc.</i> <i>Given the current expansion of agricultural activities, in the next ten years, without the Acorn project, it is expected for current rate of deforestation to remain unaltered. As a consequence of this, biodiversity would also decrease. Therefore, the implementation of agroforestry and shade trees could represent an opportunity for animals and specifically bird species to find resources and shelter in the planted species.</i> <i>Without Acorn project intervention, the degradation of soil and risk of bushfires would increase as the land faces a rapid and significant loss of top and fertile soil in addition to more predominant dry conditions as a result of climate change. This change will threaten both fauna and flora biodiversity, causing it to decrease in the project area. In addition to this, farmers would be incentivized to continue cutting down trees as a source of income from timber and fuelwood to cater basic needs such as food and education, leading, therefore, to a higher biodiversity loss.</i> <i>In terms of fauna present in the project area, the presence of different species have been confirmed by surveyed participants. Some of these include large species like foxes, wild dogs, wild cats, hyenas and monkeys. Next to this, the presence of lizards, chameleons and snakes has also been confirmed by project participants.</i>
Description of deforestation potential	<i>Outside the project area, many farmers rely on wood products for own consumption. However, through sensitization, Solidaridad has decreased this trend among farmers. Therefore, very few cut trees on farm to provide timber. Overall, this is not significant since they have been trained to retain shade trees in coffee systems due to the generated benefits. Furthermore, the local partner has indicated that no deforestation has taken place within the project area in the last 5 years.</i>
Description of tree/crop species <2m and their distribution	<i>The number of tree/crop species smaller than 2 meters is not as abundant as those higher than 2 meters. The main species under 2 meters are: Phaseolus vulgaris (bean crop), Zea mays (maize crop), Saccharum sp. (grass), Arachis hypogaea (peanut crop), Chloris gayana (grass) and coffee arabica (coffee crop). See question 1 below for all plants under 2 meters in height.</i>

Number of existing trees $\geq 2\text{m}$	41,312 trees (see question 2 below).
Number of existing trees/crops older than 5 years	37,318 out of 59,912
Coverage percentage of existing trees/crops older than 5 years	62% of the pre-existing trees/crops are older than 5 years.

1. Existing tree species list $< 2\text{m}$.

Species $< 2\text{m}$ (Latin name)	Number
<i>Allium cepa</i>	2
<i>Arachis hypogaea</i>	400
<i>Brassica oleracea</i>	2
<i>Camellia sinensis</i>	163
<i>Chloris gayana</i>	500
<i>Citrus sinensis</i>	1
<i>Coffea arabica</i>	2348
<i>Cordia africana</i>	1
<i>Croton macrostachyus</i>	11
<i>Cupressus sp.</i>	52
<i>Elaeis guineensis</i>	2
<i>Eriobotrya japonica</i>	1
<i>Erythrina abyssinica</i>	1
<i>Eucalyptus sp.</i>	36
<i>Grevillea robusta</i>	278
<i>Grevillea sp.</i>	10
<i>Ipomea batatas</i>	3
<i>Mangifera indica</i>	2
<i>Manihot esculenta</i>	15
<i>Maranta arundinacea</i>	3
<i>Markhamia lutea</i>	1
<i>Medicago sativa</i>	100
<i>Paulownia tomentosa</i>	1
<i>Pennisetum purpureum</i>	2
<i>Persea americana</i>	2
<i>Phaseolus vulgaris</i>	2009
<i>Phytolacca dioica</i>	1
<i>Pinus sp.</i>	1
<i>Saccharum officinarum</i>	6
<i>Saccharum sp.</i>	2200
<i>Senna marilandica</i>	2
<i>Spinacia oleracea</i>	1
<i>Zea mays</i>	2300

2. Existing tree species list ($\geq 2\text{m}$).

Species $\geq 2m$ (Latin name)	Number	Species $\geq 2m$ (Latin name)	Number
<i>Acacia hockii</i>	11	<i>Grevillea robusta</i>	3382
<i>Acacia sieberiana</i>	9	<i>Grevillea sp.</i>	2042
<i>Acacia sp.</i>	1579	<i>Grewia bicolor</i>	80
<i>Acer sp.</i>	5	<i>Harungana sp.</i>	2
<i>Acokanthera schimperi</i>	12	<i>Hedera helix</i>	5
<i>Acrocarpus sp.</i>	3	<i>Ilex mitis</i>	1
<i>Ailanthus altissima</i>	3	<i>Jacaranda mimosifolia</i>	31
<i>Albizia amara</i>	5	<i>Jacaranda sp.</i>	29
<i>Albizia chinensis</i>	12	<i>Macadamia sp.</i>	7
<i>Albizia coriaria</i>	1	<i>Macaranga tanarius</i>	4
<i>Albizia gummifera</i>	15	<i>Maesopsis eminii</i>	1
<i>Allophyllus sp.</i>	1	<i>Malus domestica</i>	2
<i>Alnus acuminata</i>	10	<i>Malus sp.</i>	2
<i>Anacardium occidentale</i>	7	<i>Mangifera indica</i>	214
<i>Annona muricata</i>	3	<i>Markhamia lutea</i>	907
<i>Annona reticulata</i>	1	<i>Menispermaceae sp.</i>	2
<i>Annona senegalensis</i>	2	<i>Milicia excelsa</i>	4
<i>Artocarpus heterophyllus</i>	1	<i>Moringa oleifera</i>	26
<i>Azadirachta indica</i>	1	<i>Morus sp.</i>	3
<i>Bamboo</i>	50	<i>Musa acuminata</i>	11
<i>Bambuseae</i>	14	<i>Musa sp.</i>	1326
<i>Bougainvillea sp.</i>	3	<i>Olea capensis</i>	11
<i>Bougainvillea spectabilis</i>	1	<i>Olea europaea</i>	1
<i>Bridelia micrantha</i>	50	<i>Olea welwitschii</i>	15
<i>Calliandra sp.</i>	153	<i>Olinia rochetiana</i>	17
<i>Callistemon citrinus</i>	21	<i>Ormocarpum kirkii</i>	4
<i>Callistemon sp.</i>	1	<i>Parkia filicoidea</i>	2
<i>Calpurnia aurea</i>	4	<i>Passiflora edulis</i>	1
<i>Carica papaya</i>	37	<i>Paulownia tomentosa</i>	39
<i>Carissa spinarum</i>	5	<i>Persea americana</i>	2060
<i>Casimiroa edulis</i>	3	<i>Phoenix reclinata</i>	29
<i>Casuarina sp.</i>	18	<i>Piloselloides hirsuta</i>	4
<i>Cedrus sp.</i>	56	<i>Pinus sp.</i>	279
<i>Ceiba speciosa</i>	1	<i>Pistacia aethiopica</i>	2
<i>Celtis africana</i>	11	<i>Platanus occidentalis</i>	6
<i>Celtis sinensis</i>	4	<i>Podocarpus falcatus</i>	2
<i>Cinchona sp.</i>	8	<i>Podocarpus latifolius</i>	42
<i>Citrus limon</i>	1	<i>Polyscias fulva</i>	44
<i>Citrus sinensis</i>	23	<i>Polyscias sp.</i>	1
<i>Coffea arabica</i>	10821	<i>Populus deltoides</i>	1
<i>Combretum collinum</i>	22	<i>Pouteria sp.</i>	1
<i>Combretum molle</i>	67	<i>Prunus africana</i>	150
<i>Combretum sp.</i>	10	<i>Prunus laurocerasus</i>	4
<i>Cordia abyssinica</i>	1	<i>Prunus lusitanica</i>	1
<i>Cordia africana</i>	376	<i>Pseuderanthemum carruthersii</i>	23
<i>Cordia alliodora</i>	213	<i>Psidium guajava</i>	216

<i>Cordia sp.</i>	37	<i>Quassia indica</i>	5
<i>Cornus volkensii</i>	4	<i>Quercus sp.</i>	12
<i>Croton macrostachyus</i>	694	<i>Rauvolfia caffra</i>	28
<i>Croton megalocarpus</i>	99	<i>Rhus natalensis</i>	4
<i>Croton sp.</i>	46	<i>Rhus vulgaris</i>	1
<i>Cupressus sp.</i>	2379	<i>Ricinus communis</i>	19
<i>Cynometra hankei</i>	77	<i>Saccharum officinarum</i>	13
<i>Cyphomandra hartwegii</i>	5	<i>Saccharum sp.</i>	165
<i>Diospyros abyssinica</i>	36	<i>Schefflera macrophylla</i>	11
<i>Dombeya sp.</i>	3	<i>Sesbania sesban</i>	35
<i>Dombeya wallichii</i>	1	<i>Sesbania sp.</i>	5
<i>Ehretia cymosa</i>	11	<i>Solanecio mannii</i>	2
<i>Ekebergia capensis</i>	1	<i>Solanum betaceum</i>	2
<i>Elaeis guineensis</i>	8	<i>Spathodea campanulata</i>	52
<i>Elaeodendron buchananii</i>	25	<i>Spathodea sp.</i>	4
<i>Eriobotrya japonica</i>	75	<i>Sterculia quinqueloba</i>	20
<i>Eriobotrya sp.</i>	12	<i>Stereospermum sp.</i>	30
<i>Erythrina abyssinica</i>	57	<i>Stereospermum tetragonum</i>	33
<i>Erythrina sp.</i>	4	<i>Swietenia mahagoni</i>	5
<i>Eucalyptus aggregata</i>	97	<i>Syzygium cordatum</i>	17
<i>Eucalyptus globulus</i>	1614	<i>Syzygium cumini</i>	2
<i>Eucalyptus saligna</i>	5	<i>Syzygium guineense</i>	7
<i>Eucalyptus sp.</i>	5870	<i>Tarenna graveolens</i>	1
<i>Euclea divinorum</i>	3	<i>Teclea unifoliata</i>	6
<i>Euphorbia candelabrum</i>	7	<i>Terminalia prunioides</i>	4
<i>Euphorbia ingens</i>	50	<i>Vachellia tortilis</i>	7
<i>Euphorbia sp.</i>	106	<i>Vachellia xanthophloea</i>	1
<i>Ficus aurea</i>	4	<i>Vangueria infausta</i>	27
<i>Ficus carica</i>	28	<i>Vangueria sp.</i>	109
<i>Ficus religiosa</i>	10	<i>Vernonia auriculifera</i>	84
<i>Ficus sp.</i>	44	<i>Vitex doniana</i>	10
<i>Ficus sur</i>	3	<i>Vitex keniensis</i>	3
<i>Ficus sycomorus</i>	198	<i>Vitis sp.</i>	2
<i>Ficus thonningii</i>	46	<i>Warburgia ugandensis</i>	61
<i>Flacourtia indica</i>	11	Unknown	4151
<i>Fraxinus excelsior</i>	2		
<i>Gardenia ternifolia</i>	1		
<i>Gmelina arborea</i>	10		

3. Provide a description of the ecoregion(s).

This Acorn project is distributed among three different eco regions in Kenya. These are, Victoria Basin Forest-Savanna, the East African Montane Forests and the Southern Acacia Commiphora Bushland.

The Victoria Basin Forest- Savanna

The ecoregion covers an area of 165,800 km². It lies in the upper basin of the Nile River, between 800 and 1500 meters elevation. Lake Victoria is at the centre of this ecoregion. Lake Victoria is the largest freshwater lake in Africa and the second largest in the world in terms of surface area. It supports

approximately 30 million people's livelihoods including irrigated agriculture and fishing. The basin supports a mixture of forest and savanna habitats, important assemblages of savanna mammals, such as the chimpanzees which are found in many of the forested areas of the western parts of the ecoregion. Centred on Lake Victoria, the ecoregion encompasses most of south-central Uganda, the eastern half of Rwanda and extends into Tanzania, Burundi, Democratic Republic of Congo, and Kenya. The ecoregion's climate is tropical. Annual maximum mean temperatures range from 24° to 27°, and mean minimum temperatures range from 15 °C to 18 °C. Rainfall generally ranges from 1000 to 1400 mm annually. Most rain falls in the two rainy seasons, from March to May and from August to November. The Vitoria Basin forest – savanna mosaic is classified with a biome named Tropical and subtropical grasslands, savannas and shrublands. Its conservation status is considered critical.

East African Montane Forests

The East African montane forests covers 4 countries Uganda, Tanzania, Kenya, and South Sudan, and extend across a total of 65,500 square kilometres. The ecoregion occupies elevations above c. 1,500 m altitude, with the highest altitudes of some mountains separated into the East African montane moorlands ecoregion. The climate of these mountains is wetter than the surrounding lowlands, but has a pronounced rain shadow, with the eastern and southern faces being significantly wetter. The climate in this ecoregion is temperate and seasonal, with night temperatures falling below 10°C in the cold season and rising to above 30°C during the day in the warm season. At the higher elevations frosts are possible. Rainfall varies between 1,200 and <3,000 mm per annum, with a distinct wet (October–December and March–June) and dry (January–February and July–October) season. The biome of this ecoregion is classified as tropical and subtropical moist broadleaf forests. The threatened black rhinoceros and African bush elephant—some of the most charismatic and endangered megafauna in Africa—live amongst these montane forests in the Rift Valley of East Africa, created by the cracking of the African plate system and the volcanoes typical of this ecoregion—including Mount Kilimanjaro, Mount Kenya, and Mount Elgon. The conservation status of this ecoregion is considered critical/endangered.

Southern Acacia Commiphora Bushland

This ecoregion is distinctively different from the previous two due to its savannah like landscape. The ecoregion spans across southwestern Kenya and north-central Tanzania. In Kenya, it extends to the eastern margins of Lake Victoria. Notable areas within this ecoregion include parts of the Serengeti National Park and the Ngorongoro Conservation Area.

The climate is tropical with a bimodal rainfall pattern. The long rainy season is from March to May and the short rainy season from November to December. Annual rainfall ranges from 600 to 800 mm, with extremes of 500 mm in the dry southeastern plains and up to 1,200 mm in the northwestern portion in Kenya. During the long dry season from August to October, the region becomes extremely desiccated, with trees losing their leaves and grasslands drying out.

Temperatures in this ecoregion vary with elevation, with maximum temperatures between 24 and 30 °C, and minimum temperatures typically between 13 °C to 16 °C

This ecoregion is home to some of the world's most spectacular wildlife populations:

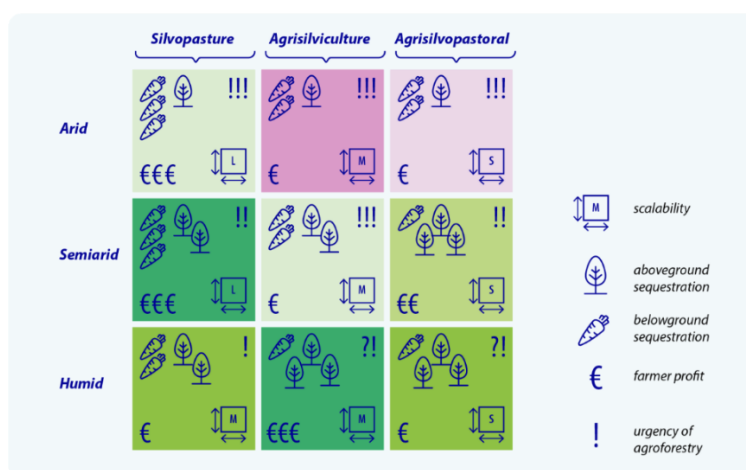
- Large mammals: Great herds of wildebeest, plains zebra, and Thomson's gazelles
- Predators: Lions, leopards, spotted hyenas, cheetahs, and African wild dog

The ecoregion supports parts of the annual Serengeti-Mara migration, involving approximately 1.3 million blue wildebeest, 200,000 Burchell's zebra, and 400,000 Thomson's gazelle. This migration is one of the largest and most impressive wildlife spectacles globally. The predominant vegetation types include Open grassland, Savanna, and Open-canopy woodland. Dominant tree species are Acacia, Commiphora, and Croton. Common grasses include Themeda triandra, Setaria incrassata, Panicum coloratum, Aristida adscensionis, Andropogon spp., and Eragrostis spp.

Part F: Project Activities

- Describe the agroforestry system to be implemented as part of the project using the figure below (silvopasture/agrisilviculture/agrisilvipastoral).

The agroforestry system of this project can be described as agrisilvicultural in a semi-arid environment. The main cash crop of the system is coffee, combined with species such as *Mangifera indica* and *Persea americana*, which provide mangoes and avocados respectively. To support these crops, including coffee, different tree species are planted to provide shade, reduce soil erosion and fix nitrogen.



- For each agroforestry system fill out Table 2 below (use additional tables if necessary):

Type	Species	Native, naturalised or invasive?	Species details	
			If naturalised, please describe its likely: <i>Livelihood benefits that make it preferable to any alternative native species</i>	<i>Impact on biodiversity or other provision of key ecosystem services in the project and surrounding areas</i>
Tree	<i>Cordia africana</i>	Native	Not applicable	Not applicable
Tree	<i>Mangifera indica</i>	Naturalised	<i>Mangifera indica</i> produces mangoes, which are an important input in farmers livelihood.	They improve soil health and reduce erosion.
Tree	<i>Persea americana</i>	Naturalised	<i>Persea americana</i> produces avocados. As such, the product is highly marketable and can also be consumed by the farmers.	In terms of ecological benefits, it provides protection against winds and soil erosion.
Tree	<i>Grevillea robusta</i>	Naturalised	The tree does not produce any fruit or food. The main added value can be found in its ecosystem services.	The main benefits of this tree are shade generation for other crops, and water filtration due to its deep root system.
Tree	<i>Albizia coriaria</i>	Native	Not applicable	Not applicable

Tree	<i>Ficus spp</i>	Naturalised	They can be used as a source of food for animals.	They provide shade, reduce erosion and also act as shelter for certain animals, which improves biodiversity in the agroforestry system.
Tree	<i>Macadamia integrifolia</i>	Naturalised	The nuts produced can represent an important source of income for farmers.	It can help to improve soil fertility and water retention, provide habitat for wildlife, and reduce erosion.
Tree	<i>Spathodea campanulata</i> ¹³	Naturalised	Source of food and medicine.	Soil conservation, biodiversity enhancement as the flowers' nectar attracts birds and other wildlife, and ability to hold rain and dew.
Tree	<i>Pavetta apiculata</i>	Native	Not applicable	Not applicable
Growth management				
Preparation and Planting		The first tasks to being the agroforestry system is preparing the site for planting. To do this, different holes are dug to later plant the different crops and shrubs. Once the holes are ready, manure is applied prior to the planting. For the planting phase, a spacing distance of 10 meters is used as well as a staggered pattern.		
Tree/Shrub Management		Maintenance tasks for shrubs begin when shade trees are 5 years old. At this stage, an annual pruning is done with the objectives of managing shading levels on the coffee. As a by-product, farmers are able to obtain firewood from the pruned sections. In this regard, it is important to remark that complete tree harvesting is discouraged. For the <i>Spathodea campanulata</i> species not to become invasive, it needs to be properly maintained and managed in terms of pruning. However, when this is done, it leads to nitrogen fixation.		
Crop Management		Crops in this project are grown under a shading system, in order to adapt to climate change and improve coffee quality. For this, as the main crop of the project, shading is extremely important during the ripening period. Therefore, the pruning activities for the management of the shading trees need to be done with the harvesting period of coffee in mind.		

- Describe the project's agroforestry design/implementation plan (taken from the business case), including:

The agroforestry system of this project began in 2017 with planting occurring between March and June. Since then, approximately 6,773 farmers were onboarded (with the goal of onboarding an additional 10,000 farmers), at that point the average farm area per farmer was 0,25 hectares. As part of the agroforestry system, there will be 9 different plant species planted. The decision to include these specific species vary per plant. However, among the main benefits are marketable crops, ecological benefits and medicinal use. To bring the system to fruition, 4 seedlings of each tree will be planted per hectare during the first 3 years. In this regard, it is important to note that a survival rate of 80% is expected for the trees. Therefore, the final number of trees per hectare per species will be 3. An important aspect of setting up the agroforestry system is the provision of seedlings for farmers. For

¹³ <https://tropical.theferns.info/viewtropical.php?id=spathodea+campanulata>

this, Solidaridad will secure seedlings from three different groups of existing nurseries, which will provide quality validated and audited seedlings. Additionally, Solidaridad will rely on accredited government nurseries and nurseries established by cooperative societies. It is important to highlight that these nurseries source their seeds from either private land or national forest reserves. When it comes to costs, Solidaridad will subsidize them to reduce the costs for farmers.

With the selected species to be used in the agroforestry system, it is expected that many ecological benefits will be generated. In this regard, some of the integrated tree species present flowers which are highly valuable for pollinators such as bees and birds. At the same time, beekeeping has been reported by several surveyed participants. Therefore, it can be expected for the agroforestry system to find synergies between its trees and the beekeeping activities carried out by the project participants. Another important aspect of this agroforestry system is the benefits of nitrogen fixation and water infiltration generated by the root systems of many of the involved tree species. In terms of pesticides and fertilizers, it can be expected a reduction in the use of them as consequence of the aforementioned benefits of the agroforestry system and the increased biodiversity that it will trigger, leading to a reduction of pests and negative impacts on the crops produced. However, this will be monitored in further stages and compared with the baselining results at the start of the project. To ensure tree species do not compete for resources or inhibit each other, indigenous native trees have been included and farmers will practice shade management techniques.

The lead farmers train groups of farmers using the Farmer Field School Model with each group averaging 20 farmers. Each lead farmer is in charge of 5 - 10 farmer groups depending on farmer population per cooperative.

The baseline crops are coffee, maize and sugar canes, of which coffee does better when intercropped with legumes and agroforestry. Some coffee farmers had already established agroforestry, though not adequately; while others did not implement agroforestry at all.

The project carried out sensitization on agroforestry and supplied seedlings through carbon pre-financing provision. There is also a gradual change of land use from seasonal crops to perennial crops and adaptation to CSA practices. The farmers are expected to continuously develop their agroforestry system every rain season, on a yearly basis, towards attaining optimal agroforestry design and accrue benefits associated with the practice. Seedlings established have to at least attain 3 years and above to sequester carbon that can be quantified into CRUs and then monetized

Part G: Project Council

1. Describe the project council governance structure, showing that participants or community groups collectively nominate project representatives who have the capacity to operate and make decisions on their behalf and determine a decision-making mechanism for the project council.

In Kenya, Solidaridad has already identified 14 cooperatives which will be represented by different farmers. Based on this, Solidaridad will use the established farmers structures on top of which governance will be developed to put in place both project council and lead farmers. In this way, it is expected for lead farmers to act as agent of change and also transfer information in both ways. At the same time, lead farmers will be key in applying the training of trainers approach to ensure capacitation and the project itself can be scalable.

The selection of lead farmers begins by these showing an outstanding performance at their farms and teaching centres. Once selected (see question 3 below), the project participants are informed who the lead farmers are, so they can reach out to them and communicate their question ,opinions or concerns.

To achieve an effective governance of this Acorn project, Solidaridad has supported the creation of four different project councils. One located in Trans Nzoia County, one in Nandi County, one in Kericho County, and another one in Bungoma County. The selection procedures was done by voting of the different lead farmers nominees. In both cases, roles were defined and people assigned to these. The respective reports detailing the selection process have been provided by Solidaridad.

2. Describe how project council allows participants to provide feedback on the project design and implementation.

The project council's structure will have lead farmers as the main contact point for other farmers to bring forward any questions or input they might have. While farmers can make use of this channel of communication, Solidaridad also carries out a pre- assessment in order to tailor the program and its implementation in a way that meets the farmers specific needs. More specifically, Solidaridad aims to reinforce training and operational aspects based on the knowledge gap of farmers as well as their preference. An example of this is Solidaridad considering farmer preferred crops and tree species, as well as those with which farmers show to have experience with, and integrating this into the agroforestry design.

To gather all this information, Solidaridad makes use of key informant interviews , training sessions with farmers, on-farm visits, focus groups discussions and local government interactions. As instances of communication, these are a good opportunity for farmers to provide input before the implementation of the project. Once the project is ongoing, farmers can provide feedback to lead farmers who then discuss this through the previously described project council meetings.

3. List the lead farmers that have been nominated by participants to represent project participants during project council meetings to voice concerns and needs, and actively engage in decision making.

To select project council representatives, Solidaridad will make use of the current governance structures in place at the cooperatives with which it works. In this regard, the cooperatives count with a democratic election every 1 year, through which associated farmers are able to

vote for a set of leaders who will also take part in the managing board for the coming years. Because of the relevance of these elections, the attendance of farmers is quite high, as other annual items are discussed, such as plans and sale forecast for the cooperative,. Solidaridad plans on relying on these instances to carry out the election of project council representatives. Please note, the farmers have not yet been selected but will be elected prior to the implementation of the first project council. This information will be updated in the following project's ADD update.

Tranzoia Project council:

First name	Gender	District	Years participating in council
<i>Farmer 1</i>	<i>Female</i>	<i>Muroki farmer group</i>	<i>1</i>
<i>Farmer 2</i>	<i>Male</i>	<i>Tranzoia</i>	<i>1</i>
<i>Farmer 3</i>	<i>Male</i>	<i>Tranzoia</i>	<i>1</i>
<i>Farmer 4</i>	<i>Male</i>	<i>Nasianda</i>	<i>1</i>
<i>Farmer 5</i>	<i>Female</i>	<i>Siboti</i>	<i>1</i>
<i>Farmer 6</i>	<i>Male</i>	<i>Coffee Union cooperative</i>	<i>1</i>
<i>Farmer 7</i>	<i>Male</i>	<i>Tranzoia</i>	<i>1</i>

Bungoma Project Council:

First name	Gender	District	Years participating in council
<i>Farmer 1</i>	<i>Male</i>	<i>Kamusinde</i>	<i>1</i>
<i>Farmer 2</i>	<i>Male</i>	<i>Mwaimwai</i>	<i>1</i>
<i>Farmer 3</i>	<i>Male</i>	<i>Cheriwet</i>	<i>1</i>
<i>Farmer 4</i>	<i>Female</i>	<i>Kamisimde</i>	<i>1</i>
<i>Farmer 5</i>	<i>Male</i>	<i>Kapicha</i>	<i>1</i>
<i>Farmer 6</i>	<i>Female</i>	<i>Khamulati</i>	<i>1</i>
<i>Farmer 7</i>	<i>Male</i>	<i>Khamulati</i>	<i>1</i>
<i>Farmer 8</i>	<i>Female</i>	<i>Kibingei</i>	<i>1</i>

Kericho Project Council:

First name	Gender	District	Years participating in council
<i>Farmer 1</i>	<i>Male</i>	<i>Kipkelion West</i>	<i>1</i>
<i>Farmer 2</i>	<i>Male</i>	<i>Kipkelion West</i>	<i>1</i>
<i>Farmer 3</i>	<i>Male</i>	<i>Kipkelion West</i>	<i>1</i>
<i>Farmer 4</i>	<i>Female</i>	<i>Kipkelion West</i>	<i>1</i>
<i>Farmer 5</i>	<i>Male</i>	<i>Kipkelion West</i>	<i>1</i>
<i>Farmer 6</i>	<i>Female</i>	<i>Kipkelion West</i>	<i>1</i>
<i>Farmer 7</i>	<i>Male</i>	<i>Kipkelion West</i>	<i>1</i>

Nandi Project Council:

First name	Gender	District	Years participating in council
<i>Farmer 1</i>	<i>Male</i>	<i>Tinderet</i>	<i>1</i>
<i>Farmer 2</i>	<i>Male</i>	<i>Tinderet</i>	<i>1</i>
<i>Farmer 3</i>	<i>Female</i>	<i>Tinderet</i>	<i>1</i>
<i>Farmer 4</i>	<i>Male</i>	<i>Tinderet</i>	<i>1</i>

Farmer 5	Female	Tinderet	1
Farmer 6	Male	Tinderet	1
Farmer 7	Male	Tinderet	1
Farmer 8	Female	Tinderet	1
Farmer 9	Female	Tinderet	1

4. Describe the grievance mechanism for this project, including;

- I.) The method for communicating grievances (WhatsApp/phone, email, Facebook, meeting, letters, anonymous box etc.).

Any grievances will be communicated during project council meetings and can also be reported at any moment through WhatsApp groups. In terms of communication, mobile networks are the most ideal technology to use, even for payments, as it is widely used and accepted in the project area. Opposite to this, radio frequencies are too expensive and not every farmer is able to make use of them.

- II.) How you ensure that complaints and/or recommendations can be done at any time and can be identified or be anonymous.

To facilitate communication, farmers are clustered based on the cooperatives in which they are active. Based on this, Solidaridad will ensure that there is one lead farmer per cooperative, ensuring representation of the different farmers groups. At the same time, by having one lead farmer per cooperative it will be possible to establish a channel of communication with each group. Furthermore, grievances can be communicated at any time through WhatsApp groups, set up specifically for the project. Finally, it is also possible for farmers to report grievances anonymously. They can do so by making use of suggestion boxes set up during project council meetings or by reporting them to their lead farmer, who will then communicate them.

- III.) The process in place to ensure grievances raised are dealt with in a transparent, fair and timely manner (e.g. chain of escalation).

The chain of action for grievance communication begins with the participants reporting to a functional cluster of project council leads affiliated to the coffee cooperative. It is important to note that the cooperatives are required by certain certification to have their own grievance mechanism and committee in place. Within cooperatives, grievances are addressed and the committee reaches out to the affected person. Additionally, to cooperatives own grievance procedures, they will inform and communicate any points raised to Solidaridad and Acorn within 35 days, as there is always one representative of the organization in the councils. Outside of the cooperatives, lead farmers also have communication channels with their following farmers (i.e., WhatsApp groups) where grievances can be raised. As a result of having several grievance-raising channels, Solidaridad Kenya developed a report template to compile all grievances with the aim to bring them during the Project Council meeting and discuss how to resolve them.

- IV.) Describe how the grievance mechanism is communicated to participants.

The grievance mechanisms is clearly explained and communicated in several instances. First and foremost, they are communicated at the start of the project council meetings to lead farmers. Secondly, this is also done through memos (a statement issued by the cooperative society in writing) and during trainings to individual participants. As a final resource, every lead

farmer can communicate and explain the mechanism to other participants with whom he or she has direct contact.

5. List any grievances that have been raised outside of project council meetings and the actions taken to resolve them.

No grievances have been reported by participants, the community or employees of Solidaridad to date.

Grievance reported	Action taken	Responsible party
<i>Farmers were not satisfied with the first payment being made after two years and are raising questions on the timelines and amount to be received.</i>	<i>During the Project Council meetings, the Solidaridad team has explained to participants that the payments for both year one and year two will be combined and be paid at once, after a verification assessment on the project is completed.</i>	<i>Solidaridad Kenya and Acorn</i>
<i>Some farmers have not been properly onboarded as the polygons were not properly taken by data collectors.</i>	<i>Both Solidaridad Kenya and Acorn are performing quality checks on the invalid polygons. The Local Partner has recently started using the DCT app which is expected to improve the onboarding process in the future. The invalid polygons will be sent back to the data collectors for recollection.</i>	<i>Solidaridad Kenya and Acorn</i>
<i>Some beneficiaries did not receive their first payment of CRUs although they were qualified for it</i>	<i>As part of the payment process, Solidaridad Kenya has one year, from the time they receive the funds from Rabobank, to distribute to all qualified beneficiaries. This process involves a verification of phone details (associated with mobile wallets).</i>	<i>Solidaridad Kenya</i>
<i>Some farmers raised that it's important to have information about their next of kin in the project documentation so that CRU payments can be made in case of the main beneficiary passing away.</i>	<i>During new onboardings and recollection of polygons, Solidaridad Kenya will use the Acorn DCT app which has a field for this information. In addition, as Acorn moves to a Framework v2.0, participants will have to resign an agreement, and next of kin can be included if the participant wishes to.</i>	<i>Solidaridad Kenya and Acorn</i>

6. All project council reports that have been produced after the first year (minimum of 2) are stored by the local partner and can be requested upon validation. These reports must be completed based on the Project Council Report template provided by Acorn (including what

decisions were made, how they were made, any feedback given and how it is been acted upon, grievances reported and how they are dealt with, satisfaction with grievance mechanism, proof of meeting (minutes and attendee list).

So far, seven project councils have taken place:

Tranzoia county: 11th of August of 2023, 21st of March of 2024, and 24th of August of 2024;

- *Kericho county: 28th of November of 2023, 30th of April of 2024, and 14th of October of 2024;*
- *Nandi county: 29th of November of 2023, 2nd of May of 2024, and 15th of October of 2024;*

Bungoma county: 21st of August of 2023, 22nd of March of 2024, and 25th of August of 2024.

Part H: Organisational Capacity

1. Describe your legal status as a local partner and attach certificate of registration (e.g. NGO, local co-op or trader).
Solidaridad has been established globally, adding up to over 50 years of experience. However, in Central Africa Solidaridad has been active since 2008. See Annex 10 for a copy of their certificate of registration as an NGO in Kenya.
2. Describe your in-country presence and relationship with participants and communities in the project area.
Solidaridad ECA has been working in Kenya with farmers for 14 years building their capacity to produce sustainably in respect of nature. Working directly with small and medium-scale farmers in collaboration with the local county governments, private sector players and other CSO/NGO's in the same space.
3. Briefly describe how you contribute to the social and economic development of the participants and their communities.
The project is expected to improve smallholder farmers livelihoods and thereof supporting the social and economic development of the communities. For example, by implementing a diverse agroforestry system the crop yield is likely to improve and result in an increased income for the farmer. At the same time, the system will not only increase biodiversity but also require less inputs, which makes the farmers financially more resilient. Socially, the Acorn project will have an impact at stakeholder levels. By participating in the project, farmers will be trained on agroforestry practices and sensitized on the importance of retaining trees in the long term. Furthermore, Solidaridad aims to support gender equality by promoting women participation in the agricultural activities.
4. What is the experience of the local partner working with farmers and in the project location (organising land tenure, implementing agroforestry, providing training etc.).
Training to improve capacity of farmers to produce more and better quality commodities for better prices and increased incomes, linking farmers to service providers and novel markets, and encouraging better organisation of farmers for engagement with different stakeholders. Solidaridad has also experience assessing needs of farmers to develop tailored made programs to improve those areas in which they lack knowledge or expertise. For example, it has made use of interviews, training session interactions and on-farm visits.
5. Describe how the project will securely store project information, including project designs, business case details, proof of payment, record of participants events and monitoring results.
Records to be uploaded to PLAZA and reports compiled for documentation. This system allows to store and monitor data. It is important to note that the system is compliant with GDPR regulations.
6. List relevant local, national and international policies, laws and regulations and demonstrate how the project is aligning project activities to comply.
There are two national policies that relate closely to this agroforestry project. the Kenya Climate Smart Agriculture Strategy, to be applied between 2017 and 2026, and b. the Kenya National Agroforestry Strategy, coming into effect from 2021 to 20230 (see Annex 11). Both

strategies set as objective the sequestration of 4 Million tons of CO₂ by the end of the 2030. In this regard, agroforestry and forestry are indicated as the preferred paths in terms of land use to achieve the objective. Other highlighted benefits and objectives of these policies are climate adaptation, enhancing the resilience of agriculture in Kenya, and supporting the livelihood of farmers. More importantly, the NDC of Kenya (see Annex 11) does indicate a reduction of 32% of its GHG but does not make agroforestry an obligatory approach. Therefore, there is no risk of double counting between the national determined contributions and this Acorn project.

7. Describe project's mechanisms to identify and address barriers to participation for groups that could be excluded based on the basis of gender, age, income or social status, ethnicity or religion, or any other discriminatory basis.

A deliberate mobilization approach is adopted to ensure the participants represent both women and men as well as the youth. Solidaridad will undertake a stakeholder holder analysis before the first project council to identify the different local stakeholders, including disadvantaged groups with the goal to include members of these groups in the project council and understand the challenges they face.

8. Describe process for onboarding participants (e.g. selection criteria).

Participants are selected based on their size of land on which the project intervention can take place, in order to meet Acorns eligibility requirements (0.1 ha minimum and 10 ha maximum) as well as the date they first start planting trees as part of an agroforestry project. These two actions seek compliance with Acorns eligibility requirements. Apart from these requirements, Solidaridad seeks to onboard all farmers equally that are members of a cooperative and show interest in transitioning to agroforestry.

9. Describe project employment policies regarding employment of youths, women, and disadvantaged groups.

As per the labor laws in Kenya, child labor is not permitted and Solidaridad aligns with this by not hiring anyone under the age of 18 years and there is no discrimination. Solidaridad have a strict no discrimination policy and the gender 1/3 rule is recommended for inclusion of women, so they also have equal opportunity of getting employment.

10. Describe how women are involved in the project but NOT as farmers (i.e. partnering nurseries, training).

Women are involved In the ToT model (training of trainers approach) as trainers and lead farmers to help in training farmers as well as participation in activities along the value chain like value addition, bulking etc.

11. Describe how the project will promote knowledge sharing among participants and the community.

The ToT model promotes learning and knowledge sharing from one farmers to another and community sharing even in the absence of Solidaridad. Lead/promoter farmers continue to be ambassadors of good agricultural practices as they are part of the communities.

The Training of Trainers (ToT) model involves the identification and training of individuals from the community who are passionate and have some level of academic competence (these can also be lead farmers). The ToTs are given specialized and intensive training on the subjects that need to be rolled out to the rest of the smallholder farmers. This is a sustainable model since the individuals trained are always from the same farming communities. There are desirable qualities that the ToTs must have; knowledgeable, ability to transfer knowledge and skill, passionate and socially reputable. In total, Solidaridad Kenya has trained 1,038 trainers.

Part I: Financial Feasibility

1. Provide a detailed business case for the project, including:
 - the expected annual income from agricultural production and carbon sequestration
 - the expected costs associated with the transition to agroforestry and the generation and trading of CRUs (e.g. planting materials, fertilizer costs, temporary labor cost)
 - The expected productivity changes that will result from project interventions

*This Acorn project has developed a business case (see Annex 5) which highlights the different source of income at a project and farmer level, as well as their respective costs. Please note that for the forthcoming calculations, an average of 1,27 hectares per farmers was used as average plot size before the exact plot size average was calculated. To begin with, the main cash crop for the participating farmers is coffee, more specifically the arabica species. It is expected that the average productivity increase for this crop alone to be 135% after a 20 year period. This increase becomes visible 2 years after implementation and it increases a 15% yearly, on average. On top of this, the increased productivity results in a reduced need for the use of different inputs, such as fertilizers. In this case, the changes become tangible after 4 years of the project being implemented with a decrease of 5% and later on a yearly 10% decrease on inputs utilization (fertilizer). It is important to note that the aforementioned ciphers apply to the specific case of coffee as the main cash crop. For the rest of the crops, it is hard to generalize as it is highly dependent upon each individual farmer. However, some specific tree species are used as part of the agroforestry design and provide farmers with specific products. Such is the case for the species of *Mangifera indica* and *Macadamia integrifolia*. Taking into account all the required inputs, the average impact on the baseline income at a farm level is 86317 euros. Naturally, this results of the "transition costs" and the expected additional income due to increased crop productivity and CRU sale. Furthermore, the transition costs include seedling, inputs and labor. In total, the transitions costs account for 208 euros for the first years and decreases to a 190 euros per year from the 4th year of the project onwards. When revenue from CRU generation is included, the expected impact of the agroforestry implementation is a benefit of 44% compared to the baseline output values at a farmer level.*

2. What measures are in place to ensure that you do not draw 10% of sales income for ongoing coordination, administration and monitoring costs? (e.g. earmarked funds or separate account for farmer payments).

The organization seeks to onboard as many farmers and the 10% is necessary to take care of these costs at scale. In order to ensure no more than 10% is used for this, Solidaridad will open a specific account with the cooperatives to ensure that the CRU money goes directly to each farmer. Furthermore, it will also prevent the CRU revenue from mixing with money generated through the sale of coffee.

Part J: Payments and Benefit Sharing

1. Describe how CRU payments will be disbursed to participants and equate to at least 80% of proceeds.

Solidaridad has agreed with Acorn and the project participants to secure 80% of the CRU revenue to the participating farmers. In order to ensure that proceeds from CRU sales are distributed as previously mentioned, Solidaridad will make use of a specific bank account in which the corresponding share will be deposited to be later paid out to farmers. Payment to farmers will be done in a digital manner as much as possible. For this, mobile money operators will be used as it is a common practice in the region.

For every CRU batch that is sold per project, a Payment Verification Report and a Benefit Distribution Overview (BDO) is created that clearly indicates the number of CRUs generated per farmer, the CRU price and the total payment amount that needs to be distributed per farmer and how the payment will be distributed, which is in line with the decision made during the Project Council.

2. Describe what proportion of cash payments will be disbursed to farmers.

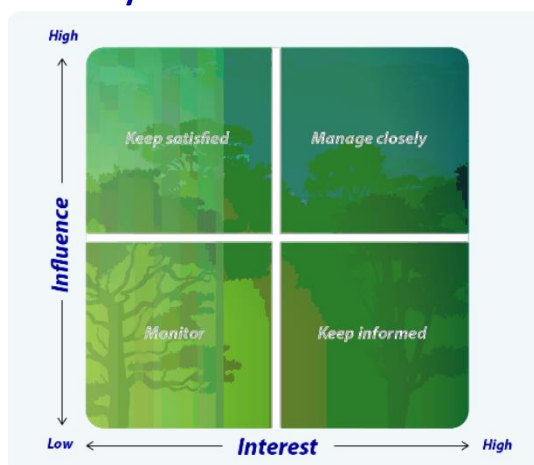
No in-kind payments will be done and all CRU revenue (the full 80%) will be paid through money transfer or in cash when necessary. The project council could change the distribution of the benefits, but have not decided on this so far.

3. Describe what proportion and type of in-kind benefits will be provided to farmers.

Not applicable

Benefit	Examples	Description
Inputs	- Seedling costs - Sapling costs - Fertilizer	N/A
Education	- Training costs - Agonomist consultation costs	N/A
Operation	- Mobile communication costs - Mobile payment costs - Fencing	N/A
Livelihood	Land tenure consultation costs	N/A

Part K: Stakeholder Analysis



- Referring to the stakeholder analysis figure above, describe the interest and influence each stakeholder has in the project and justify the reason for this in the table below. All stakeholders that receive outcomes other than “Monitoring” must be informed of the project (e.g. newsletters) and their views/approval sought where necessary. Please add rows for additional stakeholders as necessary.

Stakeholder	Interest	Influence	Justification	Outcome	Informed
Participants/ Farmers	High	High	Project participants <u>have</u> been informed and engaged in a participatory manner such as sensitization meetings, farmer needs assessments and farmer trainings (see Annex 4).	Manage closely	Yes
Local communities	High	High	Local communities have been engaged in village meetings where the agroforestry project was raised for open discussion and feedback. Furthermore, Solidaridad Kenya collaborates with several farmer associations (Farmer Cooperative Societies – FCS, as listed in question 5 of the Project Summary).	Manage closely	Yes
National Government	High	High	Kenya has gazetted the Carbon regulations in June 2024. All project proponents of carbon projects need to register at national level at the NEMA office, the designated body. A first step to the registration process is to conduct an ESIA (Environmental and Social	Manage closely	Yes

			<i>Impact Report) per county, and submit these reports to the county government with a request to provide them with a letter of no objection. Once obtained, the formal registration process can start.</i> <i>Only NEMA approved consultants are allowed to write up these reports. All Acorn Local Partners in Kenya teamed up with the same consultant to draft these ESIA reports. All reports have been submitted to the county governments early 2025. (see Annex 6).</i>		
Local government and authorities	High	High	<i>Solidaridad Kenya regularly engages with local authorities, creating a direct link with the local government. They inform the county office of the projects in the region and which cooperatives they collaborate with. The local authorities are also informed about the project outcomes through meetings with the county committees, explaining what the beneficiary farmers have gained through the project. They are involved in the Project Council meetings, as they play an essential role in monitoring changes in land ownership. Solidaridad Kenya has also organized a payment ceremony, and the local authorities were present.</i>	Manage closely	Yes
Donors	High	High	<i>Grant funding received from the Dutch Postcode Lottery to implement agroforestry, and from the Dutch Ministry of Foreign Affairs to support</i>	Manage closely	Yes

			<i>farmers in organic coffee farming.</i>		
NGOs	NA	NA	<i>Solidaridad Kenya does not collaborate with NGOs for the scope of the Acorn project.</i>	NA	NA
Technical/ agronomical partners	<i>High</i>	<i>High</i>	<i>Solidaridad Kenya partners with the Coffee Research Institute (KARLO) for support in the development of training materials and training activities with the farmers.</i>	<i>Manage closely</i>	<i>Yes</i>
Financial partners/ institutions	NA	NA	<i>No financiers are involved; farmers pre-financed themselves, others applied for the package with seedlings and will pay back Solid Kenya through their CRU revenues.</i>	NA	NA
Procurement services (nurseries)	<i>High</i>	<i>High</i>	<i>Planting materials from local nurseries, established by the cooperatives that Solidaridad Kenya works with (Farmer Cooperative Societies – FCS, as listed in question 5 of the Project Summary).</i>	<i>Manage closely</i>	<i>Yes</i>

Part L: Reversal Risk Assessment

Project phase	Drivers behind reversal risk	Risk level	Potential mitigating measures	Justification
Project adoption/start	Limited education or inadequate understanding of agroforestry	Low	• Build on local culture, traditions and markets¹⁴ • Ensure accessible training • Secure agronomist assistance	<i>Solidaridad has been active in Kenya for 14 years already. Besides the agroforestry specific knowledge gathered during these years, it has also developed an extensive network of cooperatives and NGO's. Through these, Solidaridad is able to reach a vast amount farmers and train them as required. On top of this, through the training a trainer method, it is able to enhance even more its outreach potential. However, Solidaridad has identified they want to place more effort in engaging with agronomical experts to enhance climate smart practices.</i>
	Marginal community support or low community involvement	Low	• Explore farmer needs • Promote program • Demonstrate positive impact on social and economic well-being	<i>Smallholder farmers were engage even before the start of the project. This way, they were sensitized on the benefits and relevance of adopting agroforestry practices and certain tree species. As an example, as part of the program "practice for change coffee project" 3000 farmers were engaged. Besides this example, Solidaridad presence in the region has allowed them to develop an extensive network to carry out farmer and community engagement and conduct a needs assessment to determine what is important to farmers. Farmers will</i>

				<i>promote the program among themselves and in their cooperatives due to the ToT approach and example farms in the project area.</i>
	Inadequate operational capacity (limited experience, no local presence)	Low	• <i>Use the train-the-trainer principle</i>	<i>Solidaridad has experience working with farmers for 50 years (see Part H), especially lead farmers and applying the “training of trainers” approach, through which they are able to scale up the training of farmers. Furthermore, the ToT model promotes learning even in the absence of Solidaridad, as the knowledge is already owned by lead farmers and their communities.</i>
	Insufficient (local) nurseries	Low	• <i>Make upfront arrangements</i> • <i>Negotiate purchasing power</i>	<i>The access to nurseries is guaranteed from three different groups of existing nurseries. These are where we procure quality validated and audited seedlings. Also through accredited government nurseries and finally, nurseries established by cooperative societies. Furthermore, these nurseries source their seeds from either private land or national forest reserves.</i> <i>Solidaridad outsources through suppliers who are identified in the procurement process. Solidaridad has transacted with two suppliers so far (i.e., Hemma Environ Enterprise, and Mt Elgon Ecosystem Conservatory).</i> <i>Out of the 6000 profiled farmers, almost 2,000 benefitted from seedlings. The 4000 remaining farmers, with an average of 30 seedlings per farmer,</i>

				<i>results in 120,000 seedlings that are still to be supplied.</i> <i>Solidaridad assesses the quality, quantity and the type of species that these nurseries have and offer them supply contracts to distribute quality certified seedlings to the farmers. Because of this, there are no risks associated with quality and availability of seedlings to farmers.</i>
	Animal or human interference	Medium	• Erect fencing (natural, etc.) • Help mediate disagreements between perceived land boundaries	<i>The risk of human interference comes mainly from the communities relying on forest products such as timber. To address this, besides sensitization approaches, it is also possible to provide alternative sources of non-timber forest products. When it comes to animal inference, the source of this is likely to be free range grazing. In this case, there are specific government laws which can be enforced to prevent this. There are community by-laws and county ordinances that stipulate how the stray animals that affect the community agriculture are handled. These laws are implemented by the local authorities and have penalties that are deterrent to the perpetrators.</i> <i>In addition, farmers can call the Kenya Wildlife services if necessary and applicable. Some farmers implement scarecrows, others place poison to keep animals away, and few are able to have electric fences.</i>

Project progress	Negative project cash flow	Low	• Ensure adequate financial planning • Ensure local financing for unforeseen events	<i>Besides the initial grant funding by the Dutch Ministry of Foreign Affairs, Solidaridad aims to develop financial and economic robustness through development of social capital. For example, by promoting different governance structures such as farmer groups, and cooperatives. Furthermore, specific economic actions are also encouraged such as incurring in village savings and setting up commercial community nurseries.</i>
	Poor agroforestry schemes	Low	• Encourage species and genetic diversity • Secure agronomist assistance	<i>To achieve a higher level of support for the agroforestry scheme, the project incorporates socio and cultural aspects by getting farmer interactions and perceptions towards certain species and the kind of traditional attachments farmers have to certain tree species. With this information included, Solidaridad will assist farmers through knowledge dissemination and training. to reach as many farmers as possible, it will make use of the ToT (training of trainers) approach as well as setting up example farms. The agroforestry design (outline in Part F) is to be implemented over multiple years to ensure farmers have the time to adapt to the new practices.</i>
	Change of land ownership and coverage	Low	• Involve one entity to manage/track rights status	<i>Besides previously mentioned approaches to avoid land use conflicts (like land delimitation) at a community level, Solidaridad works with local government agencies such</i>

				<i>as county assistants and secretaries, in order to do a proper monitoring of any possible changes. With lead farmers engaging with farmers in their cooperatives they will easily be made aware of any land tenure disputes or change for land ownership</i>
	Political instability (e.g. war, economic crisis)	High	Keep up-to-date on local and national political conditions	<i>In the area both TV and radio are used to be up to date with national and local events and conditions. Next to that, Solidaridad's relationship with local authorities provide an additional source of information to monitor any developments at a political level.</i>
	Natural risks: - Fires - Pests & disease - Extreme weathers - Other events	Low	- Perform historical risk analysis and apply applicable preventive measures - Training in effectively containing natural risks	<i>Specific training to farmers on prevention and contention of natural risks will be set up by Solidaridad. For this, the existent lead farmer and ToT structures can be of use. Furthermore, there have already been trainings on climate adaptation and mitigation, which allows the foreseeing and management of natural risks. These trainings, have been specifically developed after a climate risk score assessment for coffee farmers, based on Solidaridad's climate-adaptation index.</i>
Project maturity	Logging risk	High	- Ensure alternative fuel for wood - Ensure food productivity of trees	<i>Logging risk is high in the project region due to land expansion for agriculture and demand for wood products. However, both of them can be prevented through sensitization and capacity development as</i>

				<i>well as provision of tree seedling germplasm.</i>
	Waning or short-lived local partner commitment	Low	- Facilitate continuous dialogue and evaluation - Sign commitment agreements	<i>Agreements are signed as part of this project with Acorn, the local partner and the farmer, demonstrating their commitment to the longevity of this project. The ACORN supply team will keep communication open with the local partner and evaluate their commitment to the project.</i>

1. List any reversal risks in Part M that are high-risk, provide appropriate mitigation actions, and describe how often these risks will be monitored.

Risk	Mitigation action	Monitoring method and Frequency	Responsible party
<i>Political instability</i>	<i>Having someone appointed for ensuring the project is aware of developing instability in the country and keeping the government and authorities aware of the project to keep a method of communication open in this regard.</i>	<i>Project Officers are based in the specific counties, this allows for regular weekly visits to the cooperatives. Any looming instability is therefore communicated immediately to the beneficiaries and stakeholders.</i>	<i>Solidaridad ECA</i>
<i>Logging</i>	<i>Providing sensitization of farmers and capacity development as well as provision of tree seedling germplasm. Next to this, through the implementation of efficient cook stoves the project aims to reduce even further the requirements and use of timber for fire wood.</i>	<i>Regular sensitisation forums are planned within the project implementation plans. Tree logging is also being monitored closely by the government as there are restrictions that are being implemented.</i>	<i>Solidaridad ECA</i>

Part M: Technical Specifications

1. Applicability Conditions

In the table below, explain how this project meets the applicability conditions of the Acorn Methodology:

	Applicability Condition	Met	Reasoning
A	The Project Interventions meet the Agroforestry definition (see Section 3 of Acorn methodology v1.0) and any trees planted are Native or Naturalized species.	Yes	As elaborated in part F Project Activities and business case.
B	The Project Area must not have been cleared of native vegetation within 5 years of the start of the Project Intervention.	Yes	Initially, a verbal check was performed with the local partner who confirmed this and t-5 checks from remote sensing measurements confirmed it as well
C	Individual plots within the Project Area are between 0.1 and 10 ha and are not on wetlands.	Yes	Confirmed through polygon checks
D	All land within the Project Area is either cropland or degraded land under the Baseline Scenario	Yes	Initial verbal explanation in carbon baseline by local partner and land cover check performed confirmed
E	The project interventions must not include activities that increase the total number, weight or number of grazing days for any livestock type, relative to the baseline scenario.	Yes	Explained to participants and to be confirmed by sample-based agricultural biodiversity check over the coming years
F	The project intervention must not include the planned harvesting of planted trees during or after the crediting period.	Yes	Covered in local partner contract
G	Heavy machinery must not be used for site preparation or management.	Yes	Not applicable for these smallholder farmers and covered in the local partner contract
H	The project intervention must not increase the use of synthetic (nitrogen-containing) fertilizers relative to the baseline scenario.	Yes	Covered in local partner contract
I	Soil disturbance attributable to the project intervention must not occur on more than 10% of a plot that is under any of the following types of land: - Land containing organic soils; - Land which, in the baseline, is subjected to land-use and management practices and receives inputs listed in Annex 4 of Acorn Methodology	Yes	The SoilGrid confirmed that project is not on high organic soils, with the following results thickness detail >200cm, SOC content less than 20%, but 1,2% and clay of 52%

2. Adjustment Factors

This table below gives an overview of the adjustment factors applied for this specific project.

AdjF	Factor (%)	Reasoning
Leakage	0%	See reasoning below in the leakage assessment.
Uncertainty	41 %	Model 20241007_v1
Pre-project	25%	For calculation details see source: <i>AdjFs_KE_Solidaridad</i>

Leakage Assessment

Estimated reduction in project productivity (%)	Cash crop(s) contributing most to project productivity	Proportion of project land used to grow cash crop (%)	Type of land production will be shifted to
0%	Coffee	80%	Crop land to agroforestry

I.)

Describe the potential leakage situation of the project over its lifetime.

With the implementation of the agroforestry system, both the productivity of the cash crop coffee and the total farmer productivity are expected to, over the life of the project, increase by 135% and 17% respectively. These increase are expected due to the different soil benefits (e.g. health, fertility, structure) and protection of crops that the agroforestry trees will provide in combination with the conservative agricultural practices implemented by farmers. It is to be expected that neighbouring farmers would want to join Acorn once they see trees being planted and the benefits that these bring to small holder farmers in terms of productivity. Furthermore, the farmers are already permanently settled on their farms and even have the land titles. The clear land demarcation should prevent the displacement of productive activities to new lands. As farmer productivity increases and they gain financial security, they will not feel the need to cut down trees outside of the project area in times of financial hardship in the region. Although the utilisation of trees products such as wood due to increasing demand for energy resources without alternatives is common in the project region, it is not expected to negatively impact the participants in the project area as the provision efficient cook stoves by Solidaridad will reduce the requirement for wood for own consumption.

II.) Determine the land between farms and a maximum of 5 km outside of the project area (i.e. crop land, degraded land, forest).

Shrub land	Grass land	Crop land	Built-up	Bare/Spars e vegetation	Permanent water bodies	Herbaceous wetland	Tree cover <60%	Tree cover >60%
21.98	7.64	38.57	1.80	0.03	0.02	0.02	26.86	3.10

III.) List farmer activities (performed before project implementation) that will be displaced from project interventions and lead to an increase in emissions outside of the project area, if any.

Displaced farmer activity	Area activity displaced to
N/A	N/A

IV.) If leakage is like to be significant, outline the leakage mitigation and monitoring plan below

Source of leakage	Mitigation action	Monitoring Frequency	Responsible party
N/A	N/A	N/A	N/A

3. Root-Shoot

Ratio	Reasoning
0.32	<i>Applied the default value for the calculations as alternative literature is very limited to no existing and IPCC values could not yet be sufficiently matched</i>

Part N: Monitoring plan

1. Indicators

1.1 Describe the monitoring objectives for any expected impacts on farmer livelihood and the environment from project intervention. If there are any negative impacts expected, describe the relevant mitigation actions.

Livelihood / environmental indicator	Impact description	Mitigation action (if <u>negative impact expected</u>)	Monitoring frequency and method	Responsible party
Nutritional Variety	<i>Improved access to fruits and nuts through diversified agroforestry trees planted. Additionally, the increase in coffee yield and revenue from tree based products and CRUs will ensure households have more income to spend on food.</i>	Anticipated risk of food insecurity, as farmers would focus more on planting trees to generate CRUs. This was addressed in the Project Council meetings through encouragement to use food crops as cover crops in the agroforestry systems.	All indicators will be monitored by technical officers and field staff with the support of a sample of farmers at least every 3 years in accordance with the Acorn Framework using surveys, photos, etc.	Solidaridad Kenya
Agricultural biodiversity	<i>Increased biodiversity on farm from a variety of crops and plant species (approx. 10 – 15) used in the agroforestry system. At the same time, these agroforestry trees, many of which are indigenous, can act as food and shelter for other animal species, especially bird species that are rapidly declining due to loss of habitat. Farmers will be trained in conservation agriculture which will further increase soil health and life within soil. An increase in biodiversity within soil will help the growth of the trees.</i>	No negative impacts are expected from project intervention		
Farmer financial state	<i>Improved financial income (increased and diversified) by means of better agricultural</i>			

	<i>practices (agroforestry) and the sale of carbon credits This increase financial security will lead to enhanced farmer livelihood and the ability to afford farm maintenance, education, food and act a safeguard during times of financial hardship in the project area. Solidaridad will also increase the capacity of farmers in terms of management of and access to finances through capacity building of farmers in financial literacy, Village savings and loans Associations model, etc.</i>			
Agricultural land use productivity	<i>After applying the agroforestry design and climate smart practices, it is expected that the farmers will see a significant increase in their productivity of their cash crop (coffee) of up to 135% in addition to an increase in total farm productivity due to the products that the agroforestry trees offer (e.g. mangos and avocados).</i>			

2. Grievances

2.1 List all grievances that have been raised (both inside and outside of project council meetings) and the actions taken to resolve them.

Grievance reported	Mitigation action	Monitoring (frequency and method)	Responsible party
Timeline and amount of CRU payment for each farmer; farmers are not satisfied with CRU	The Solidaridad team, during the Project Council meetings, has	Farmer messaging to manage the participant's expectations	Acorn and Solidaridad Kenya

payments only being made after two years.	explained to participants that the payments for both year one and year two will be combined and be paid at once. As it is also a process of sequestering carbon from the atmosphere. After the first verification is complete (January of 2024), new payments can be made.		
Some participants' farm have not been onboarded correctly (i.e., data collectors mistakes) and therefore, they are not active participants of the project.	Both Solidaridad Kenya and Acorn are performing quality checks on the invalid polygons. The Local Partner has recently started using the DCT app which is expected to improve the onboarding process in the future. The invalid polygons will be sent back to the data collectors for recollection.	Data quality checks.	Acorn and Solidaridad Kenya
Some farmers raised that it's important to have information about their next of kin in the project documentation so that CRU payments can be made in case of the main beneficiary passing away.	During new onboardings and recollection of polygons, Solidaridad Kenya will use the Acorn DCT app which has a field for this information. In addition, as Acorn moves to a Framework v2.0, participants will have to resign an agreement, and next of kin can be included if the participant wishes	Polygon re-collection after data quality checks.	Acorn and Solidaridad Kenya

	to.		
Some beneficiaries did not receive their first payment of CRUs although they were qualified for it.	When this grievance was raised, Solidaridad Kenya had not completed all of the farmery payment.	Payment verification (95% check).	Acorn and Solidaridad Kenya

3. Risks

3.1 List all risks identified in the risk assessment table in Part M and for each risk provide appropriate mitigation actions monitoring objectives.

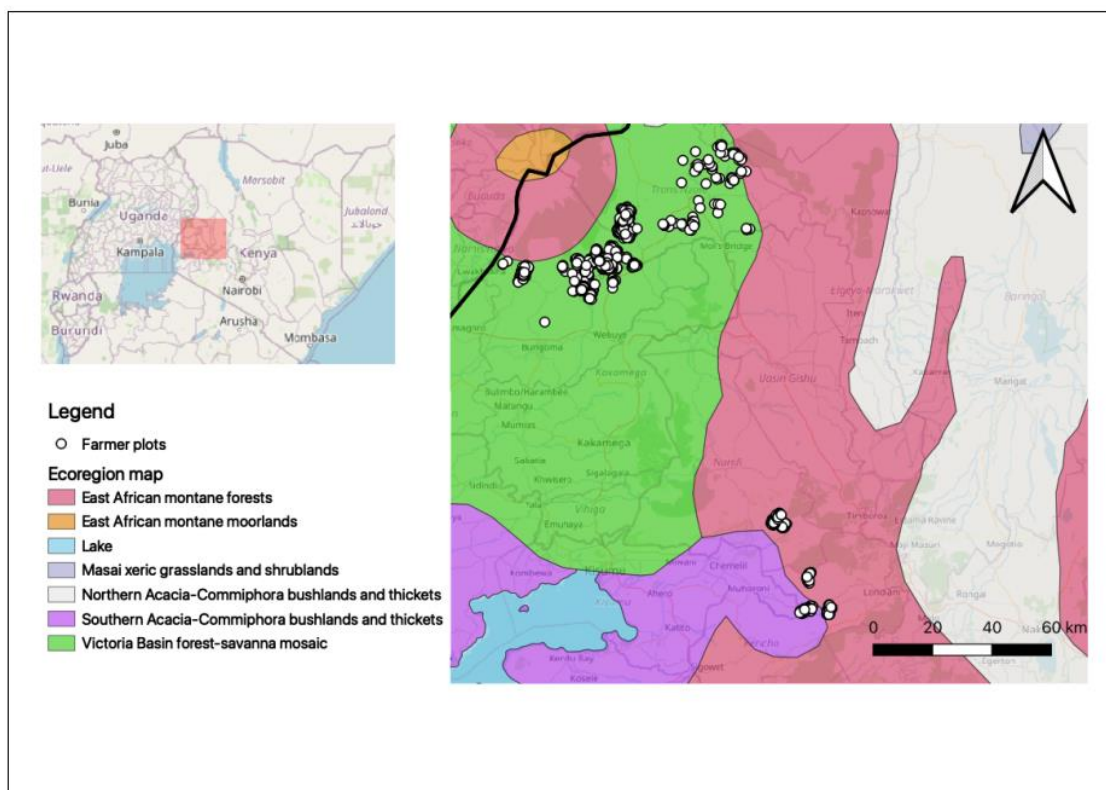
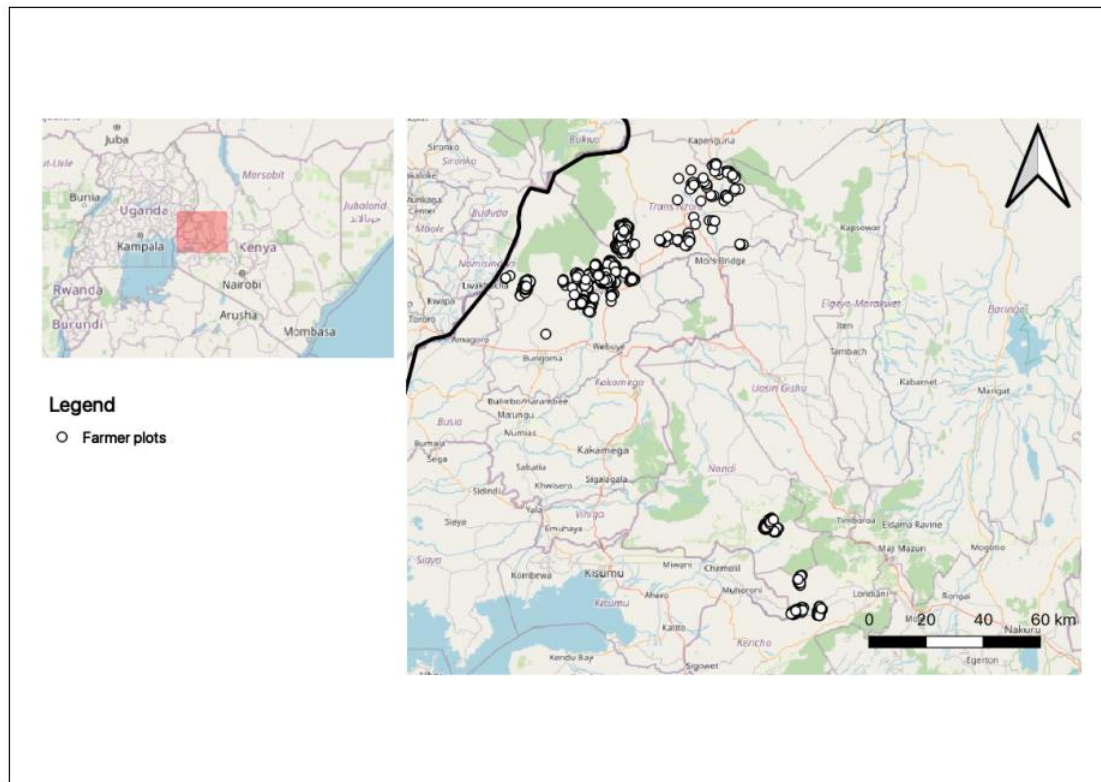
Risk	Mitigation action	Monitoring (frequency and method)	Responsible party
No identified high risks	NA	NA	NA

4. Leakage

4.1 If leakage is like to be significant, outline the leakage mitigation and monitoring plan below.

Source of leakage	Mitigation action	Monitoring (frequency and method)	Responsible party
No significant sources of leakage	NA	NA	NA

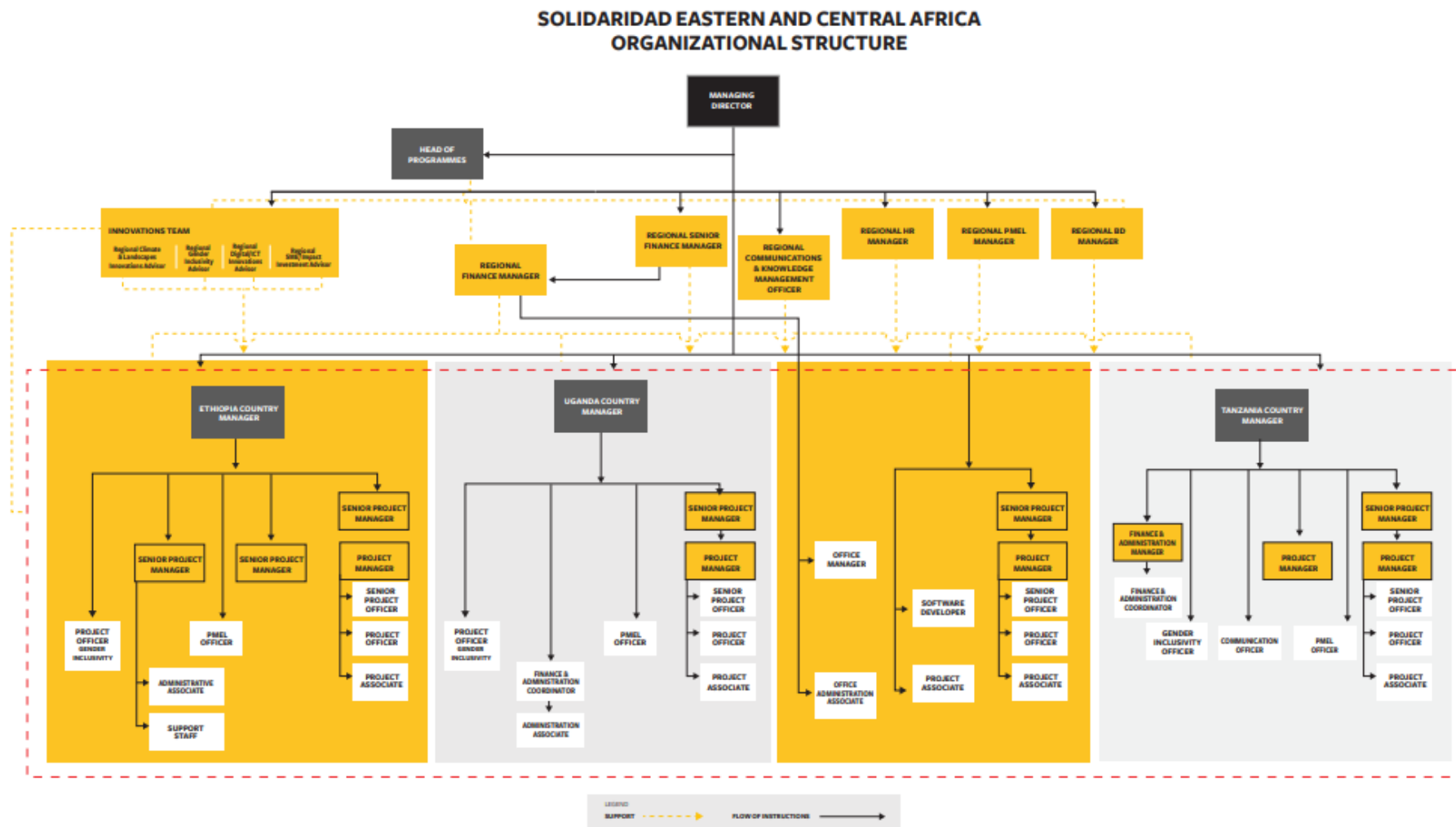
Annex 1: Map of project location & ecoregion(s)



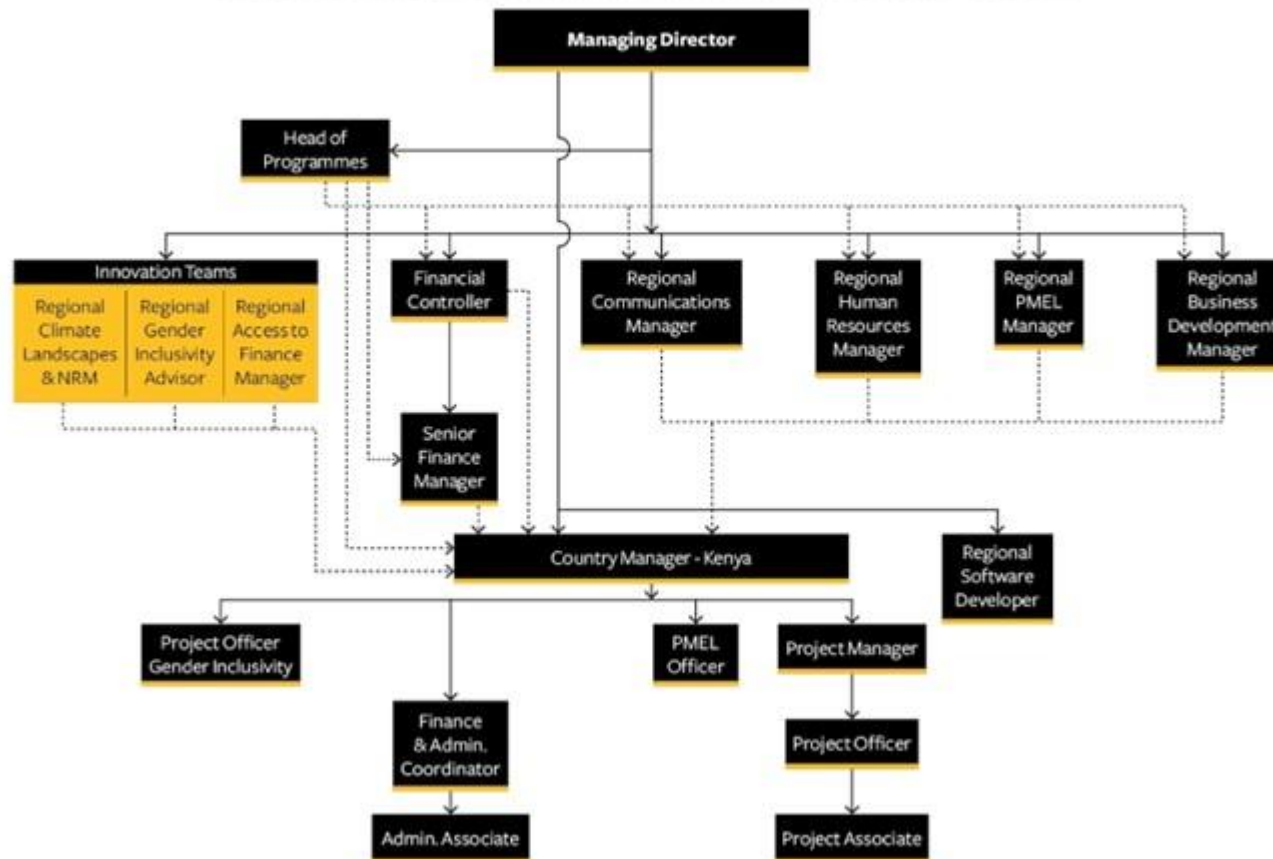
Annex 2: Land Tenure Documentation

Provided. Concealed for data protection purposes.

Annex 3: Organisation structure



ACORN PROJECT MANAGEMENT STRUCTURE- KENYA



Acorn Project Management Structure Kenya – Roles:

- **Head of Programmes** – Oversees program design, implementation, and strategic direction to ensure project objectives align with organizational goals.
- **Financial Controller** – Manages financial planning, reporting, and compliance to ensure fiscal responsibility and accountability.
- **Senior Finance Manager** – Supports financial operations, budgeting, and financial analysis to maintain effective project funding.

- **Country Manager - Kenya** – Leads the country office, ensuring project success, stakeholder engagement, and operational efficiency.
- **Project Officer (Gender Inclusivity)** – Focuses on integrating gender perspectives into project activities and ensuring inclusivity.
- **Regional Software Developer** – Develops and maintains digital tools and platforms to support project implementation.
- **PMEL Officer** – Handles Planning, Monitoring, Evaluation, and Learning (PMEL) to track project performance and impact.
- **Finance & Admin Coordinator** – Manages financial administration, procurement, and logistics to support project activities.
- **Project Manager** – Leads the project team, ensures deliverables are met, and coordinates stakeholders.
- **Project Officer** – Implements project activities, liaises with stakeholders, and ensures timely execution of tasks.
- **Project Associate** – Supports project execution through data collection, reporting, and administrative tasks.
- **Admin Associate** – Handles office administration, logistics, and document management.
- **Regional Communications Manager** – Oversees project communication strategies, branding, and stakeholder engagement.
- **Regional Business Development Manager** – Identifies funding opportunities and partnerships to support project sustainability.
- **Regional Human Resources Manager** – Responsible for talent acquisition, capacity building, and performance management for all positions associated with the ACORN project implementation team.
- **Regional PMEL Manager** – Provides strategic oversight for monitoring, evaluation, and learning activities at the regional level.
- **Innovation Teams** – Work on research and innovative approaches to improve project outcomes.
- **Regional Climate Landscapes & NRM (Natural Resource Management) Lead** – Leads initiatives on climate adaptation and sustainable land use.
- **Regional Gender Inclusivity Advisor** – Provides guidance on gender mainstreaming and inclusivity in projects.
- **Regional Access to Finance Manager** – Develops financial inclusion strategies and facilitates access to funding for beneficiaries.
- **Managing Director** – Provides overall leadership, governance, and strategic direction for the project.

Annex 4 Evidence of farmer/community engagement

Provided. Concealed for data protection purposes.

Annex 5: Local partner and farmer business case

Provided. Concealed for data protection purposes.

Annex 6: Letter to national government

Provided. Concealed for data protection purposes.

Annex 7: Project Council Reports

Provided. Concealed for data protection purposes.

Annex 8: Farmer contract

Provided. Concealed for data protection purposes.

Annex 9: Local partner contract

Provided. Concealed for data protection purposes.

Provided. Concealed for data protection purposes.

Annex 11: National policies

Provided. Concealed for data protection purposes.

Annex 12: Subcontractor assessments

Provided. Concealed for data protection purposes.