Acorn

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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NABCONS Acorn Design Document

India | Karnataka

Date of Submission: February – 2025

Part A: Project Summary

Question	General Information	Answer
1	**Local partner contact** (name, position, email, address, and website link)	NABCONS (NABARD, - National Bank for Agriculture and Rural Development - Consultancy Services)
2	**Project location(s) - country, region & district** (attach map in Annex 1)	The project area takes place in four districts of the state of Karnataka, south-west India, including: - District of Kolar (pilot region)[1] - District of Ramanagara - District of Bengaluru Rural - District of Chikkaballapura All districts are rural and surround the city of Bengaluru. A map of the project location is attached in Annex 1.
3	**If multiple project areas exist, please explain how these locations/farmers differ from each other**	**Farmer characteristics**: *the farmers are Kannadigas (native language is Kannada), not particularly distinguished by ethnicity, who practice agriculture as the main source of income.*
		Productivity level: *the project area's productivity is low due to low soil fertility and poor water availability. In addition, excessive heat, as a result of climate change, brings about more regular occurrences of droughts and pest infestation events.*
		Ecosystem conditions: *the project area is located in a dry and semi-arid zone of Karnataka. Climate change brings extreme temperatures and erratic rainfall (floods during July-September and droughts during May-August). The groundwater in the area is also depleted at a faster rate. Pest infestation*

[1] At the time of eligibility approval, the project targeted only the Kolar district in Karnataka as it presented a good starting point for the project (see Additionality Assessment – Part C). Before the ADD completion, NABCONS was able to scale the project to three other districts located next to each other in the south of the state. Therefore, the socioeconomic and environmental contexts are very similar to each other. District-specific information is included in the Baseline Assessment (Part H).

		events have become more frequent with the rise in temperature and the increase in mango hoppers. Consequently, farmers are being forced to shift to other less profitable crops (ex., from mango to millet), which also affects the agroforestry system in place, as it would mean a shift from perennial trees to annual crops. Wildlife is present in the region (boars, antelopes, birds) as well as domesticated animals (cows, sheep, and goats).
4	**Ecoregion(s)**	• Deccan Thorn Scrub Forests • South Deccan Plateau Dry Deciduous Forests
5	**Since what year has the local partner been active in the project area(s)?**	Since 2004 (for 19 years).
6	**Partnering NGOs, farmer cooperatives or sub-contractors** (if project activities are carried out by a sub-contractor/implementing party, please complete and attach a sub-contractor assessment in Annex 2)	**Department of Horticulture**, acting as the Single Point of Contact (SPOC) in Karnataka – the department will be responsible for the preparatory phase of the project, including: • Identifying eligible farmers (that meet Acorn's requirements); • Engaging with the farmers by spreading the message of the carbon credit project; • Supporting NABCONS on relevant data from the department at government level, including GPS co-ordinates, Land Tenure documentation. **Yali Infoventures Pvt.Ltd:** will be responsible for the implementation of the following activities: • Field survey and farmers' data collection; • Supporting NABCONS in the onboarding process including farmer's contract signing; **Local NABCONS** (district's representatives) will carry out monitoring, training and reporting activities, after the implementation phase.
7	**Main cash crop(s)** (if multiple project areas exist, describe for each project area)	The main cash crop is mango, along with annual intercrop food crops such as ragi, tomato and chili.
8	**Number of existing farmer participants**	2,560 farmers

	(if multiple project areas exist, estimate the number of farmers in each)	
9	**Potential number of additional participants** (if multiple project areas exist, estimate the number of farmers in each)	Between 5,000 and 8,000 smallholder farmers in the state of Karnataka
10	**Estimated average plot size per existing farmer (ha)**	0.6 ha
11	**Total size of the project area(s) (ha)**	2,075.33 ha
12	**Native language(s) spoken in the project area** (if multiple project areas exist, list the language in each area)	Kannada
13	**Is this project based on communal land or individual smallholder farmer land? If communal, describe the community.**	Individual smallholder farmer land
14	**Describe how smallholder farmers/communities were involved and not only informed during the design of the agroforestry project** (provide evidence of participation in Annex 3. For example, photos or minutes taken in workshops, meetings)	Initial dialogue with farmers, overview of the project to the farmers, conducted stakeholder consultation with the farmers in association with Department of Horticulture initiated by the NABCONS at Centre of Excellence for Mango in Kolar district. Later, awareness programmes will be carried out in association with the Department with Horticulture to reach and inform more farmers about this carbon project. See evidence of participation on Annex 5.
15	**List the topics that have been raised with farmers/communities to seek their input on the project**	The Acorn project was introduced, and the following topics were discussed in depth: • Climate change impact on smallholders' lands; • Carbon financing; • Agroforestry as means of climate resilience and carbon finance; • Agronomical practices.
16	**Provide a general description of current socioeconomic conditions in the project area(s)** (including marginalised/minority groups,	The farmers of the Kolar region are small to medium-holder farmers, of which most are male (approx. 90%). The income level of average farmers is above the country's poverty

	income, poverty level, remoteness, education, transport, gender balance, migration, population growth, typical assets, and other livelihood activities, access to and main uses of land and natural resources etc.)	level but not enough for them to have a good livelihood (per capita income of farmers in Kolar is approx. 1,42,114 INR, which equates to 1,736.81 $/year). The farmers are educated (literacy % in the region is 75%, for which male is 82% and females 67%) and well informed. They are in direct contact with the Department of Horticulture due to the various activities it promotes, such as implementing various government schemes at the village/ district level through the Centre of Excellence of Mango and other representatives of the department and promotion of different training and awareness programmes at the farmer level. Transportation is available for almost all the farmers due to their need to travel to reach their plots. Few farmers also migrate to the city (30- 40% of the households) for higher income and better livelihood. The population is ever-growing in India, also in the project area. The same profile of farmers, with slight variations, are also applicable in the other three districts
17	**Describe any known local (natural or human-caused) land degradation/deforestation processes or trends, and drivers of these** (For example, population increase, fire, conversion for agriculture)	The pilot project area is a semi-arid region, characterized by dissected hillocks and scanty forestry. The red soil is less fertile, and the region suffers from forest fires (both natural and human-induced, for social conflict reasons). The ground water of the area is also depleting at a faster rate which renders a large area unproductive. The district at present is plagued with many environmental problems such as soil erosion, deforestation, water scarcity, tank siltation, climate change, energy scarcity, etc. Forests are also degraded due to high firewood collection. Land degradation is also extensive due to mineral extraction.
18	**Describe the type of land use that best represents the project area before intervention** (For example, existing agroforestry/fallow/tree plantation/monoculture perennial crop/monoculture annual crop/mixed crops /marginal land)	Existing agroforestry: intercropping of horticulture crops, bushes/shrubs, and fodder with timber and fruit trees, such as mahogany, mango, sapote, and guava.

19	**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) Please attach 1 copy of each type of land tenure document in Annex 4.	Farmer's own their lands, and land tenure is therefore demonstrated through formal tilting (Pattar Passbooks). See Annex 2 for evidence of land tenure documentation.
20	**Describe your experience in, or plan for requesting a letter of approval / letter of no objection from the government for the operations of the Acorn project.** Please attach evidence of communication with and from the government in Annex 5.	An MoA has been signed between NABCONS and the Department of Horticulture (Government of Karnataka) to implement the Carbon Credit Framework (CCF) in Karnataka. The projects that NABCONS implements in partnership with ACORN are named the CCF projects. As the MoA does not explicitly mention Acorn, an additional Letter of Notification will be sent on behalf of Acorn, informing the Department regarding t the project. No issues are expected due to numerous engagements that have already taken place between NABCONS, the Department, and representatives of Acorn, both online as well as during physical meetings in Bengaluru
	Theory of Change (see Annex 6)	
21	**Describe the target community of this project** (e.g. gender, age, marginalised groups, location, other stakeholders)	The project targets both male and female farmers, aged between 25-55 years, and with a land size between 0.4 to 10 ha inthe districts adjacent to Bengaluru city, state of Karnataka. Marginalised groups in the region consist of female farmers, as they work on the field but do not have the land registered in their name. The land is almost always registered under the male member of the family. NGOs, FPOs, FPCs (Farmer-Producer Companies) and the Department of Horticulture will also be integrated in this project.
22	**What are the biggest agricultural challenges faced by farmers and their families, and the 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.)	• Low productivity as a consequence of low soil fertility and poor water availability (low ground water table and lack of irrigation facility). In addition, excessive heat brought by climate change, brings about more regular occurrence of drought and pest infestation events. • Human-wildlife conflict as a consequence of wildlife interference during the fruiting stage of the plant causing lower productivity. Wild

		animals like boars, antelopes, birds and domesticated animals like cows, sheep, and goats, damage the plantation in the early stage of the growth resulting in low survival rate of the seedlings.
23	**Describe the project's aims and objectives** (e.g. the desired change the local partner wants to achieve)	By promoting long-lived and sustainable agroforestry systems in the smallholders' land, this project aims at: 1. Mitigating the impact of climate change; 2. Strengthening the income of smallholder farmers; 3. Improving the quality of life of the targeted communities. In line with these aims, this project intends to serve as a starting point to reach other states and districts in India, through NABCONS' presence throughout the country. This pilot project was chosen to take place in Kolar, for the strategic benefits it has to enable scaling. These benefits include the receptiveness of both the farmers and governmental bodies (Department of Horticulture), and the availability of strong digital data.
24	**Describe how the project expects to achieve the desired change(s) described in the row above** (e.g. project interventions and activities undertaken)	1. **Improve food security and nutritional intake**: The project provides additional income from carbon finance. This will enable farmers to achieve additional revenue without any additional investment. The participants will use the additional revenue to offer better nutritional value to their families, especially their children. The community has traditionally practised intercropping of annual crops but has been restricted to only one or two locally cultivated crop varieties. Through the project interventions, especially the training imparted through the project councils and stakeholder awareness sessions; the target population will be educated on cultivating a good mix of suitable inter-crops to make more varieties of nutritious foods readily available to the participants' families. By rotating the appropriate annual inter-crops according to the season, the households consume a portion of the produce. This, in turn, improves the quality and variety of their intake, thereby

		improving the nutritional security of the project area population. 2. **Provide the beneficiary farmers with seedlings and saplings**: As a stakeholder in the government scope, NABCONS can and will use their network and knowledge of procedures to leverage governmental schemes, programs to provide the beneficiaries with seedlings and saplings to more plant additional boundary trees, annual crops and provide farmers with better access to more variety of nutritional foods.
25	**Describe the conditions/resources necessary to undertake each expected activity (see row above) to achieve the desired outcome** (these are not always under the control of the local partner e.g. war, wildfire, secure funding, human resource capacity, communication methods, established nursery)	1. **Improve food security and nutritional intake:** a. Generating CRUs out of the onboarded farmers; b. Selling the CRUs successfully to a buyer; c. A payment structure to transfer 80% of the CRUs to the farmer; d. Successful interaction with all stakeholders to hold practical project councils & training sessions. 2. **Provide the beneficiary farmers with seedlings and saplings**: a. Availability of Government schemes; b. Successful interactions with stakeholders in the governmental scope.
26	**Describe how and why the project intervention proposed is expected to positively/negatively impact the following livelihood and ecosystem conditions;** (Provide examples or reasons)	**Food security/nutritional intake**: Most of the targeted participants are not under the BPL limit of the country, nevertheless they still struggle to have a decent livelihood for themselves and their families, in a context of increasing productivity loss. Therefore, project intervention is expected to improve food security and nutritional intake as the additional income from carbon finance will enable farmers to achieve the same revenue without any additional investment from their end. The participants will use the additional revenue to provide better nutritional value to their families, and especially to their children.
		Farmer financial state: This project will help the participating farmers get a steady income on a regular basis for years to come, therefore ensuring financial stability to the farmer

		without highly investing additional cost to the already standing plantation. In addition, carbon income may be used to get more land under cultivation or encourage the farmers to invest in their lands by using better variety of plant which will in turn provide better return in terms of crop yield. Finally, the training that will be imparted during the project period will help farmers to best-manage their standing plantation for improved yields, while maintaining the carbon stock for a longer duration of time which together, will positively impact farmers' income generation. As a result, this project will also increase the chances of better educational value, especially in the region were quality education is available and farmers are also well informed and educated.
		Gender equality: As part of the project's area reality, female farmers are almost negligible due to social norms of male landholding system although women play a major role in the farming activities. Through project intervention, awareness and training programmes will be promoted and will address social inclusion for women and other marginalised groups (if any), and inclusion of women in these trainings will also be promoted.
		Farmer access to resources: The project area is highly prone to pest infestation, and, as a consequence, low yield productivity is also a common occurrence. Therefore, through project intervention, farmers will earn additional income from carbon finance which will enable them to be in a better position to access high quality planting material, such as hybrid crop varieties, organic fertilizers, biopesticides and access to irrigation facilities. As a result, the overall productivity of the farmers' land will be improved.
		Biodiversity on farms: As the project focuses on crop diversity in the farm land, farmers will be encouraged to take up inter-cropping and more border plantations. Usage of bio-fertilizers will also increase which will, in turn attracts pollinators and improvement in soil organic matter content (OMC).

	The Agroforestry System	
27	**How would you define an agroforestry system?**	Growing of forest as well as agriculture crop species in same patch land in a symbiotic way.
28	**Is this project new or existing agroforestry or a combination?** (Please note: Acorn considers "new" as no trees ever planted under an agroforestry project)	Existing agroforestry.
29	**Type of trees that have/will be planted under agroforestry scheme** (shade, fruit-bearing, medicinal)	This project promotes both fruit-bearing trees, such as mango, coconut, jamun, custard apple, lime and timber species such as Mahogany, Teak, Melia Dubia and Silver Oak. The project also promotes other nitrogen fixing and pollination supporting varieties like Sheesham, Neem, Coral Tree.
30	**How will the project ensure the survival and health of both (1) trees that existed before the start of the Acorn project, and (2) trees that will be planted during the project?"**	The project will ensure the survival of existent trees through the training and application of best agronomical practices, including soil and water conservation, integrated pest management, and regular silvicultural practices.
31	**How do the agroforestry practices in this project differ to current farming practices in the region?**	Inclusion of more forest species as well as more crop diversity.
32	**Is planned (wood) harvesting part of the agroforestry design for this project?** (Please note: Acorn considers harvesting in this case as cutting down the entire tree)	Yes, planned harvesting is part of the agroforestry design due to rejuvenation of fruit trees and harvesting of timber species.
33	**If timber trees are part of the agroforestry design, is it likely that participants will cut them down within a 50 year period? If so, please state when farmers would cut down their trees** (e.g. 25-30 years)	Some fruit-bearing trees need to be rejuvenated, which consists of extensive pruning every 10-15 years. In addition, timber harvesting of various species is done in the following frequencies: • Teak – 20-25 years • Mahogany – 20-30 years • Silver Oak – 15-20 years Farmers are motivated and advised to keep the timber species for this relatively long span (more than 20) because in case of timber species like Teak, Mahogany and Silver Oak, the value of matured timber is quite high. The older the tree, the straighter and thicker it is,

		which results in a higher market value as compared to younger timber.	
	Project Additionality		
34	**Is the project incorporated by any other accounting program (For example, compliance, voluntary or national GHG program)? If yes, describe how project ensures no carbon credit is accounted for in in any other carbon program other than Acorn.**	No, this project is not incorporated by any other accounting program.	
35	**In what year, season and month(s) will/were the first trees planted?**	Winter of 2018.	
36	**Only if existing agroforestry, approx. how many farmers began their planting activities each year, before Acorn, over a maximum historical five-year period?**	Year 1	500
		Year 2	1,000
		Year 3	2,000
		Year 4	-
		Year 5	-
37	**Is this project mandatory under any national or local laws?** (List relevant forestry regulations, national climate change commitments etc.)	No, this project is not mandatory under any national or local laws.	
38	**What is the main driver encouraging farmers to transition to agroforestry?**	The main driver is diversification of income; monetizing available land to the maximum as a way to increase farmers' livelihoods.	
39	**Was the promise of carbon credits an enabling factor for farmers to transition to agroforestry?**	Carbon finance is an enabling factor to maintain the existent agroforestry.	
	High-over business case		
40	**If existing agroforestry, how has this project been funded to date?** (financed by the local partner, the farmers, grants/funding, or a combination)	The existing agroforestry was either paid by the farmers themselves, or through existing subsidies (approx. 10-15% of the farmers) to buy seedlings and pesticides from the local government (please refer to Part C - Financial and Technical Barriers, for more information).	
41	**Roughly estimated, what are the average farmer costs for the project per ha?** (this includes seedlings, transport, ground preparation, labour, fertilizer but excludes maintenance costs and irrigation systems)	Because this pilot consists of existing agroforestry, farmers won't bare any costs. Nevertheless, when scaling to new agroforestry, the costs will be shared between the farmers themselves and governmental subsidies, as follows:	

		• Seedling: Rs. 125/plant - 50% of the costs are subsidised by the government and the other 50% by the farmer; • Fertilizers and Pesticides: Rs. 10,000/acre - 80% is subsidised by the government; • Planting and Pruning: Rs 10,000 per day – costs fully covered by the farmer; • Training: Rs. 1,000/day and per farmer (3 years of training is required, for at least 3 days/semester) – fully covered by the government; • Transport: Rs. 8,000/day – fully covered by the farmer.
42	**Briefly describe the total costs for the local partner and/or the sub-contracting party to successfully complete this project.** (e.g. seedlings, onboarding, data collection, training, farmer engagement, planting materials, see Annex 7 for more examples). Note, if activities are outsourced, please roughly describe how the costs are split between you as local partner and the sub-contracting party.	Total cost of the Local Partners, for the first year of the pilot project in and around Kolar, ranges between INR 60 lakhs -1 Cr (70,000 – 120,000 $) which includes: on-boarding, data collection, training, co-ordination, seedling procurement for border planting etc. etc.
43	**What budget do you have available to (pre)finance (part of) Acorn implementation costs (either farmer or local partner costs).**	Acorn transferred a Technical Assistance Grant (TAG) for the Karnataka pilot project two times. Regarding Karnataka, the first Technical Assistance grant consisted of 58.196 EUR (excluding GST), and a second TAG consisted of 123.870 EUR (excluding GST). The second TA grant also included other Acorn projects with NABCONS, while the amount mentioned here only reflects the portion allocated for NABCONS' Acorn project in Karnataka.
44	**If there turns out to be a funding gap for the implementation of the project, what are your opportunities to secure funding externally? Please describe.**	NABCONS will try to cover all the project costs through the 10% revenue generated through CRU auctioning. Still, in the worst-case scenario, if the project costs supersede the revenue, NABCONS can request its parent body, NABARD, for internal funding for project implementation.
45	**If necessary, are you as an organization, allowed to take up a**	NABCONS is permitted to take loans domestically; however, as a wholly owned

	loan to cover costs of the Acorn project?	subsidiary of NABARD, it is subjected to internal restrictions and regulations governing domestic lending. For international lending, NABCONS must comply with the rules and guidelines set by the Reserve Bank of India (RBI) for any potential borrowing.
46	**Are you as an organization legally allowed to perform pay-outs to farmers (related to the farmer 80% share of CRU revenue)? What are the structures in place to do so?**	Yes, NABCONS is legally allowed to perform pay-outs to farmers.
	Farmer survey	
47	**In addition to the mandatory indicators of farmer income, biodiversity and nutrition, please choose at least 1 of the following additional indicators that you would like to monitor at least every 3 years through sampled farmer surveys;** • Agricultural productivity • Women empowerment • Youth inclusion	Agricultural land use productivity.

Part B: Eligibility Checklist

Acorn eligibility checklist			
Topic	Sub-topic	Requested information	Result
Organizational capacity	Organizational structure	Provide a description of your organizational structure and roles of each organization involved in the project. If possible, attach a diagram in Annex 8.	NABCONS is a company, a wholly subsidiary of NABARD (National Bank for Agriculture and Rural Development). The company is headed by the Managing Director (MD) followed by the Chief Operating Officer (COO). NABCONS have several sectoral work wings (verticals) headed by 5-6 vice president who report to the COO. Under each vertical a group of 15-20 sectoral consultants are appointed for handling and deliveries various projects. NABCONS has its local offices at all the states & district across the country & has a thorough and deep rooted intervention at ground-level. Also NABCONS has associations with empaneled NGOS and other survey agencies at district and village level.
	Organizational capacity	Provide a description of your "on the ground" capacity to undertake long-term community-led project(s) and support participants to implement agroforestry (e.g. number of years active in project area, experience collecting data and engaging with farmers).	NABCONS has country wide presence and offices in each state and district of the country with at least 200 NGOs and field level enumerator organizations empaneled with NABCONS. In Kolar district, local NABCONS has a team of 2-3 in-house consultant for overall management of the project and 10 sub-ordinates for field level works. NABCONS has associated with the Department of Horticulture, Govt. of Karnataka as the local partners for the project intervention, which increases the on the ground capacity.
	Inclusivity	The local partner has the capacity to undertake community engagement, promote social inclusion and ensure gender inequalities are not reinforced.	Yes
	Accessibility	The local partner is capable of providing all project documentation in the native language(s) of the project area.	Yes
	Sustainability	The local partner agrees with the Rabobank's sustainability policy.	Yes

	[*Publications - Rabobank*]. In addition, the local partner confirms that the Acorn project intervention is consistent with the SDG and net zero objectives of the country where the project is located.		
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 (e.g. farmer groups/clusters for training).	NABCONS would be using the already existing community groups of farmers (FPOs, FPCs, and Village Level Farmer Committees), previously formed in association with the Department of Horticulture/ Department of Agriculture. These groups/committees are in place to promote a systematic and sustainable supply chain of agri-products, as well as standardizing the market to ensure fair prices for farmers.	
Project effects	The project strives to avoid any environmental or biodiversity harm.		Yes
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		Yes

	country's policy allows individual CRUs to be sold. (Please attach in Annex 5 an evidence of a letter to the government to inform the existence of Acorn project).	
Youth employment	The local partner confirms they do not employ workers below the ILO minimal age convention on child labor.	Yes
Influence	Describe your experience collaborating with local groups, organizations, institutions and government agencies (both formal and traditional).	NABCONS has been working effectively with local groups and local partners like survey agencies, and different government offices such as the Department of Agriculture and the Department of Water for about 19 years. An example of this experience is through the Survey Agency- EWIS Solutions, where they were hired to collect ground level data from the field on the Impact of the Credit Guaranteed Scheme for the project titled "Impact Evaluation of Equity Grant Fund & Credit Guarantee Fund Scheme".
Resources	The local partner has the ability to mobilize the necessary resources to develop the project and support participants (i.e. providing access to seedlings and farm inputs, agronomic knowledge, and monitoring and technical support).	Yes
GDPR	The local partner's current data handling policies are compliant with GDPR or similar national regulations.	Yes
Exclusion List	The local partner confirms that this project does not include any of the criteria listed in Acorn's exclusion list. See Annex 9.	Yes
Data collection	The local partner confirms they have access	Yes

	to all farms, with permission of the land owners, to collect reliable data and provide this to Acorn (i.e. GPS polygons, phone numbers, other KYC data).	
Training	The local partner has the ability to mobilize and train participants, and implement and monitor project activities.	Yes
Voluntary participation	The local partner confirms that participants are aware their involvement in the project is entirely voluntary.	Yes
Participant payments	The local partner ensures that payments are made in a transparent and traceable manner and are agreed upon by participants.	Yes
Project Council	The local partner has the capacity to establish a project council that will meet at least twice a year to engage farmers in decision making throughout project design and implementation.	Yes
Contributions	The local partner does not draw more than 10% of CRU sales income for ongoing coordination, administration and monitoring costs.	Yes
Participant identity	The local partner is able to collect and provide proof of participant's identity.	Yes
Smallholder labour force	The local partner confirms that participants are not structurally dependent on permanent hired labor, and manage	Yes A few farmers do hire part-time labor for some activities such as weeding, cleaning and watch and ward. Nevertheless, farmers will still work on ground for other plantation

		their land mainly by themselves with the help of their families.	activities such as land preparation, planting, fertilizer management and harvesting.
Sustainable land use activity	Smallholder farm size	The local partner confirms that either (i) the participants land is under 10 hectares in size or (ii) only 10 hectares of the participants land will be monetized under the Acorn project.	Yes
	Carbon rights	The local partner recognizes that participants own the carbon benefits of the project intervention.	Yes
	Land-tenure	The project applies to land over which the participants/community have (formal/informal) ownership of land or long-term user rights.	Yes
	Project design	The project is/will be designed to promote sustainable land-use and has/will have a feasible business case underwritten by agronomist(s) and community representatives.	Yes
	Deforestation	The local partner confirms with all participants that no deforestation has taken place within five years before the start of the Acorn project intervention. If this cannot be confirmed, describe the cause of the deforestation and the measures that have been or will be taken to prevent deforestation from happening again.	Yes

Additionality	The local partner ensures project additionality.	Yes
Durability	The local partner and participants both confirm that they are aware of and commit to the mandatory durability period of 25 years.	Yes
Existing agroforestry (i)	The local partner and participants both confirm that agroforestry at the farm level has been implemented less than 5 years before the start of the Acorn project intervention.	Yes
Existing agroforestry (ii)	The local partner and participants both confirm that the plots proposed for Acorn have not been previously monetized for other carbon sequestration projects.	Yes
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, or naturalized where socio-economic and environmental benefits are expected.	Yes
Current habitat	Provide a description of the current ecosystem and flora and fauna species of the project area (e.g. type of landscape - hilly/forest, elevation, soil condition, water availability, and native plants, shrubs, trees and wildlife).	Kolar belongs to the semi-arid zone of Karnataka, where red soil and low water availability dominate. The region is mostly known for plantations of mango, guava, and sapota, as the major crops. Common flora species found in the area, include: • False Ashoka (*Monoon longifolium*); • Cherry Ashok (*Huberantha cerasoides*); • Snowberry tree (*Flueggea virosa*). Common fauna species, include:

- Carpenter bee (*Xylocopa tranquebarica*);
- Indian Black Turtle (*Melanochelys trijuga*);
- Indian Wolf Snake (*Lycodon aulicus*).

Part C: Additionality Assessment

Question	Answer
1. Would farmers generally plant all the trees in one year or in phases over multiple years? (e.g. planting in groups of farmers per year)? If so, explain why?	*When farmers plant on their plots, they generally plant in one year. Existing agroforestry farmers within the project scope did not all plant in one particular year or structurally in groups of farmers. They planted when that made economic sense for their farm.* *For border tree plantation drives, the plan is for farmers to plant all in one year (unless there are specific local feedback, by which they will plant in multiple years)*
2. If planted over multiple years, for how many years does the average farmers plant trees until they reach the planned maximum density per hectare?	*When a farmer plants their plot, they generally grow in one year. In the following years, there is planting only in the way of beating up (replacing the seedlings that did not survive with new seedlings).*
3. What barriers did farmers face that prevented them from transitioning to a successful and long-lived agroforestry system before intervention of the local partner and Acorn?	*See the table below, which elaborates upon the Financial/economic, Technical, Institutional/political, Ecological, Social, and Cultural barriers.*
4. Please provide a list of proposed project activities that you offer to help farmers transition to agroforestry (e.g. agronomist advice, agroforestry training, collaboration with seed banks, site visits to successful agroforestry farms, financial support), and describe those activities.	*See the table below, which elaborates upon the Financial/economic, Technical, Institutional/political, Ecological, Social, and Cultural barriers.*

Select below **<u>at least one</u>** of the following barriers that would have prevented farmers from successfully transitioning to agroforestry without your support, and describe **in detail** how project interventions and the expected carbon finance will overcome this barrier?

Barrier analysis	*Demonstrate that an agroforestry project would not have been feasible for farmers due to **at least one** of the following barriers, and describe how the Acorn project will overcome these barriers.*	
Type of barrier	*Main barriers*	*Activities to overcome barriers*
Financial/ economic barrier	*Farmers in the district of Kolar are facing crop failure as the region is resource-deficit (low water retention capability and depleting ground water, poor soil fertility, and no irrigation facility), in addition to more frequent events of pests infestations due to the rise in*	*Through NABCONS' governmental and non-governmental network, as well as their understanding of available schemes, farmers will be trained on financing to ultimately link them to appropriate subsidies, micro-financing institutions, and small-credit guarantee schemes. This*

	average annual temperature as a consequence of climate change. *The existing market in place is week and not in favour of smallholders. The middle men decreases farmers' revenues by buying from them at a very low price, to then sell at the city market at a high price, profiting, and leaving the producers without profit (ex.: mango is bought by middlemen at 60 Rupees and sold in the city market at more than 10 times its cost).* *Therefore, as a result, and in many cases, farmers might aren't able of generating revenue from crops at all in a year.* *In addition, these smallholders face overburden of financial debt, as they take out loans from banks to manage their lands (water and other resources), - are unaware of more beneficial schemes and subsidies, and refinancing facilities are not available, - but are unable to pay back, having to resort to selling of their lands.*	*will allow to reduce farmers' financial burdens.* *Some of the schemes promoted by the Government of Karnataka, include i) interest-free short-term loans, ii) subsidies for seeds and fertilizer purchase under the "Bhoo Siri" scheme, iii) compensation to families of farmers who committed suicide at a rate of Rs.5.00 lakh per family, and iv) hybrid and high-yielding seeds, as well as certified seeds of major crops distributed to farmers at subsidized rates of 50% for general farmers and 75% for SC/SIT[2] farmers, under the "Supply of Seed" program. The Department of Horticulture is responsible for making the farmers aware of the schemes and helping them avail the benefits of the schemes.* *Finally, through annual CRU revenues, farmers will have a more diversified income, which can act as back-up for crop failure, therefore, also reducing their financial burdens.*
Technical barrier	*The agricultural practices farmers undertake are very labour intensive as they lack helpful mechanizations (removal of residues, and water conservation) to better manage their lands, and as a consequence, have to depend on hired labour throughout the year, which increases their financial burden.* *Most of the project area is rain-fed as it is very costly to implement irrigation systems (less than 20% of farmers have irrigation systems). In addition, farmers also lack post-harvest storage facilities which contributes to loss in marketable products, therefore, loss in income.*	*By linking farmers to governmental schemes, and with the additional revenue of carbon credits, the agricultural practices will become less labor intensive, and with the expected increased yield from a sustainable agroforestry system in place, farmers might have the opportunity and motivation to take more land and plant more trees.* *Few Governmental schemes available for providing subsidy to overcome the technical barriers include i) distribution of farm machineries, under the Farm Mechanization scheme at 50% subsidy to general category farmers and 90% subsidy to SC/SIT category farmers. Agro-processing units and tarpaulins are distributed at 90% subsidy to SC/ST farmers and at 50% subsidy to general farmers. And, ii) under " Krishi Bhagya" scheme, farm ponds, polythene*

[2] SCs - Scheduled Castes, and SITs - Scheduled Indian Tribes

		lining/alternate lining models, diesel pump sets, micro-irrigation systems (drip/sprinkler), and shad net around the farm ponds are provided to farmers at subsidized rates.
Institutional/ political barrier	*The national government of India has promoted measures in the agriculture sector, but which sometimes fails to bring benefits to smallholder farmers. An example of this was the Farm Law Bill, of November of 2020. This bill promoted the privatization of the market and a minimum price for cash crops, leaving farmers to be at the mercy of big corporates, and excluding them from the minimum prices as they do not grow cash crops. This was protested, causing social unrest, and eventually the bill was withdrawn. Nevertheless, there is still the risk of governmental measures that harm smallholders being pushed forward.*	*Through this project, smallholder farmers will become more empowered and therefore protected from possible harmful governmental measures. This will be possible through training, awareness and capacity building of CBOs and FPOs.* *NABCONS will form partnerships with NGOs, which will act as the field level operators for data collection and interim execution of the programs. The Centre of Excellence of Mango (Part of the local Department of Horticulture) will provide training and awareness programs for the farmers.* *Finally, carbon finance will provide additional revenue to farmers which will help them in the face of issues.*
Ecological barrier	*The types of soils distributed in the Kolar district range from red loamy soil to red sandy soil and lateritic soil[3], which all share the same characteristics of low hummus and nutrient content, in addition to low humidity content, thus contributing to poor soil fertility. In addition, extreme temperatures and erratic rainfall (floods during July-September and droughts during May-August) brought by climate change, impacts the crops productivity. Pest infestation events have become more frequent with the rise in temperature, as it's the case with the mango hoppers. As a consequence, farmers are being forced to shift to other less*	*To overcome such ecological barrier, farmers need knowledge and capital.* *To provide knowledge to farmers, NABCONS will take on a top-to-bottom approach with the Centre of Excellence of Mango and other NGOs (to be established), to ensure that training and information is provided to farmers, such as practices of biofertilizers and biopesticides, mulching, crop diversification and construction of farm ponds. Capital will be provided through the additional revenues from carbon credits. Because farmers depend on their lands for their livelihoods, with the necessary financial means, they will reinvest in their fields with more long-term sustainable practices.*

[3] *Groundwater Information, Kolar*

	profitable crops (ex.: from mango to millets) which also affects the agroforestry system in place, as it would mean a shift from perennial trees to annual crops.	
Social barrier	*There is still a trend of lack of inclusion of marginalized groups in the project area. These include indigenous farmers and female-led households (ex.: widows). These groups are discouraged from participating in trainings and dialogues. Another existing social conflict is burning of neighbouring lands due to jealously over agricultural productivity.*	*Through the additional revenue of carbon credits, farmers won't have to completely depend on their harvest (which has been declining – see Ecological Barrier) as they will have a more diverse source of income which will allow to alleviate the existent social conflicts.* *Because this carbon project will focus on inclusiveness, it will strive to integrate all marginalized groups by creating awareness through a door-to-door approach, done by CBOs and NGOs (to be defined).*

Conclusion:

NABCONS teamed up with Acorn in early 2023 to develop its first pilot carbon project in India, to scale throughout the country to improve the livelihoods of smallholder farmers through agroforestry and carbon finance.

Smallholder farmers in India depend on successful harvests for their livelihood. Their yields also help feed other families in their community as well. Evermore, these farmers face unpredictable weather brought about by climate change, weeds competing with their crops for resources, and evolving insects and diseases targeting their crops. To address these challenges, smallholders have limited resources and information to guide their decisions. And yet, they are the backbone of the country's food security, as smallholders account for 86% of the total farmers in India, and 70% of the rural households still depend primarily on agriculture for their livelihood[4]. Nevertheless, these farmers are economically impoverished and cannot capture commensurate value for their produce.

In addition to the main financial, technical and climate-related barriers farmers face, there is also a lot of resistance from governmental bodies in India regarding onboarding projects that promise revenue. Therefore, this pilot will act as an example of a successful project by focusing first on existing agroforestry to enable scaling in other states of India and, later, scaling to new agroforestry through NABCONS' network. The region of Kolar, in Karnataka state, is the ideal place to initiate such a pilot project for three main reasons, i) farmers are very receptive, ii) there is enough digital data available on the farmers, and iii) the government in Kolar is more receptive and willing to participate when compared to other states.

Therefore, this project will first start with existing agroforestry (trees planted between 2018 and 2019) and will be led (acting as the technical agency) by NABCONS, a wholly-owned subsidiary of the National Bank for Agriculture and Rural Development (NABARD) in India, who has a country-wide presence. For this pilot, NABCONS will work with the Department of Horticulture and the Centre of Excellence for Mango, as these two will be the point of contact for the farmers and will

[4] *FAO*

be facilitating the project arrangements. Partnering NGOs will also have an active role in the project. However, these will be identified later by NABCONS after the same region of the pilot is selected, and therefore the NGOs can be selected accordingly.

NABCONS, through the Department of Horticulture and Centre of Excellence for Mango, will provide farmers with awareness and capacity building through the conduction of various training programs wherein the farmers will be sensitized about various government schemes that they can avail for their benefit and understanding regarding carbon finance will be done via meetings and distribution of flyers and pamphlets to educate farmers about the additional benefits that they can avail from this project.

The existent agroforestry is losing production due to a lack of appropriate inputs and technical knowledge, which will only worsen with the effects of climate change. As a response, this project will enable farmers to overcome this loss. NABCONS will promote technical knowledge and inputs through diverse training activities and connect farmers with various subsidies. Acorn will connect farmers to the volunteering carbon market, providing a more diversified income at the farmer level, which will alleviate financial burdens and incentivise them to invest in their lands with more climate-smart agriculture methods, contributing to the agroforestry system's sustainability and resilience. In addition, the 10% of carbon credits flowing back to NABCONS and its implementing partners will guarantee the continuous allocation of resources and efforts to carry out the project in the long term. Therefore, by overcoming these barriers, the project will ensure durability.

Part D: Livelihood and Ecosystem Indicators

Table 1. Summary of the selected indicators in the farmer survey.

Toral number of participants surveyed		Number of female participants surveyed	Number of male participants surveyed		
100		**23**	**77**		
Area	**Indicator**	**Metric**	**Source**	**SDG**	**Result**
Environmental improvement	**Agricultural biodiversity**	**Calculation of crops, livestock, natural vegetation, and pollinators. Presence wild animals.**	**Farmer survey and Gini-Simpson Index**	**15**	*48% (unsustainable)*
Local livelihood	**Farmer income**	**Annual farmer revenue (income + CRU revenue – expenses)**	**Farmer survey**	**1, 8**	*15,630 Indian Rupees*
	Household Nutrition	**Number of food groups consumed in the household in the past 24 hours.**	**Household Dietary Diversity Score (HDDS) index survey[5]**	**2**	*4.6 food groups*
	Agricultural productivity	Average yield of main cash crop(s) (kg/ha/year) and total farm yield (kg/ha/year)	Farmer survey	2, 8, 12	*Mango = 8,304.20 kg/ha/year*

1. Agricultural Biodiversity

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

The project intervention is expected to positively impact the state of biodiversity in the area. Encouraging the switch from the traditional plantation approach, which mainly focuses on mango production as the main cash crop, to a more robust agroforestry design comprising multiple species planted in the project area will increase the biodiversity in the ecoregion. The border tree plantation drive and the presence of more native tree species will, in turn, ensure an increase in the biodiversity in the region, increasing the area's soil moisture, attraction of more pollinator species, and resilience towards climate change's effects.

II.) How many farmers perform beekeeping?

[5] *Swindale & Bilinsky, 2006*

No mass beekeeping activities have been observed in the project area; only a small percentage (1-2%) actively participate in the beekeeping activities.

Describe the current fertilizer use and pest control techniques applied in the project area. *All surveyed farmers (100%) perform pest control in their farms. The only control method employed is chemical (100%). The main type of pesticides used in the project area is herbicide (74%), and to a lesser extent, insecticide (23%) and fungicide (3%).*

It is a common practice in the project area to apply fertilizer. 99% of surveyed farmers apply fertilizer in their farms in the form of waste (99%).

III.) Gini-Simpson Index Results.

Table 2. Gini-Simpson Index Results.

Crops	Area	pi	p2	Livestock	number	equivalent	pi	p2
Beetroot	*1*	*0.01031*	*0.00011*	Cows	*112*	*1*	*0.8022*	*0.6436*
Carrot	*2*	*0.02062*	*0.00043*	Goats/sheep	*261*	*0.1*	*0.1869*	*0.0349*
Flowers	*9*	*0.09278*	*0.00861*	Chickens	*88*	*0.014*	*0.0088*	*0.0001*
Jola (Sorghum)	*11*	*0.11340*	*0.01286*	Pigs	*14*	*0.02*	*0.0020*	*0.0000*
Kothambire(Coriander)	*6*	*0.06186*	*0.00383*	Deer	*0*	*0*	*0.0000*	*0.0000*
Mirchi (Chili Pepper)	*9*	*0.09278*	*0.00861*	Buffalo	*41*	*1*	*0.2937*	*0.0862*
Malabar (Malabar Pepper)	*16*	*0.16495*	*0.02721*					
Ragi (Finger Millet)	*29*	*0.29897*	*0.08938*					
Total	*97*		*0.172*	Total				*0.765*
Total			*82.8%*	**Total**				*23.5%*

Natural vegetation, trees and pollinators	Description	Value
Productive area with natural vegetation	*Most farmers (98%) report having an area with natural vegetation between 25% and 50% on their farm. The rest of them (1%), report having a productive area between 50% and 75%.*	*0.5*
Pollinator Presence	*Most surveyed farmers (>50%) report seeing, on average sometimes, the presence of bees and butterflies in their farms. To a lesser extent, (<50%), farmers have also reported seeing moths, beetles, ants, bats and monkeys.*	*0.66*
Beekeeping	*62% of the surveyed farmers don't perform beekeeping; those that do, mainly perform wild beekeeping (37%).*	*0*

Average natural vegetation, trees and pollinators		*39%*
Agricultural Biodiversity Score	***48% (unsustainable)***	

IV.) List wild animals in the project area.

Table 3. Wild animal species and their prevalence in the project area.

Animal type	**Prevalence (*Regularly/Sometimes/Rarely)***
Birds	*Sometimes*
Deer	*Sometimes*
Monkeys	*Rarely*
Peacock	*Sometimes*
Rabbit	*Sometimes*
Snake	*Sometimes*

2. Famer Income

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

The financial condition of the farmers in the targeted region is above the country's poverty level, but it is insufficient for the community to sustain a decent standard of living. With no steady source of income and the increasing impact of climate change, in addition to changes in the monsoon and temperature patterns and the volatility in the market prices for their produce, the farmers cannot earn a steady source of income if they rely only on the plantation. Furthermore, the women farmers' overall incomes are 20-30% lower than male farmers, as they are paid a lower wage for other work they do (e.g., casual/seasonal farm labour on nearby annual crop farms). Being relatively close to an urban centre like Bengaluru, the youth of the project area are also considering moving to the city in search of better economic activities; however, more challenging economic and living conditions in the city often await them (e.g., higher food prices and smaller/unhygienic living spaces). Through project intervention, namely the Project Council, women and youth representation will be ensured, promoting their participation in decision-making.

Per the farmer survey results, it was demonstrated that, most farmers (93%) are able to invest, while the rest (7%) has just enough to get by. Most farmers (94%) can provide their families with some education, while a 3% of them can partially do so. Full education remains accessible to only 2% of the farmers. Lastly, 1% of them still cannot provide any education.

Overall, due to these contracted incomes, the consumption basket of the families of all farmers gets affected and, in turn, becomes quite limited.

This project will help the participating farmers earn a steadier source of income regularly for years to come by supplementing their agricultural income with steady CRU revenues. This will support augmenting their financial stability without investing significant additional resources in the existing plantation. In addition, the incentivisation of agroforestry will lead to an overall increase in productivity and farm sustainability in the long term as the farmers will reap the medium to long-term effects of improved soil health and water-retention capacity. This will, in turn, provide better medium to long-term returns in terms of crop yield. The boundary tree plantation drive will also ensure an addition to the income basket of the farmers in the long run.

Further, both the yield and productivity benefits of agroforestry and the carbon income will counter tendencies of urban migration and urban real estate development in the area (especially given the proximity to Bengaluru city). Finally, the training imparted during the project period on agroforestry and agronomical cultivation practices will help farmers maintain and enhance their existing plantations for improved yields. The techniques and advice on keeping the carbon stock longer will further positively impact farmers' income generation.

As a result, this project can increase the chances of pursuing higher education among the farmer community, given that access is already available in reasonable proximity to the project area. This will perpetuate increased awareness and better absorption of good agriculture practices by the community.

II.) Fill in Table 4 depending on the type and amount of income and expenses you have on the farm each year.

Table 4. Annual average farmer revenue and expenses.

Annual farmer revenue	**Description of revenue sources** (crops for market, livestock products, selling fruit from trees, CRU income)	**Annual farmer operating expenses**	**Description of Expenses** (food, seeds, fertilisers, feed, pesticides, livestock purchases, veterinary costs, labour, fuel, transport, taxes, loan interest, rent)	**Average farmer income** (revenue – expenses)
27,850.00 Indian Rupees	• Sale of cash crops (i.e., mango); Livestock products	12,220.00 Indian Rupees	• Fertilisers • Labour • Seeds and seedlings • Fuel • Pesticides • Feed • Transport	15,630 Indian Rupees

3. Household Nutrition

I.) Describe the current diet/nutritional intake of the household and how project intervention is expected to positively/negatively impact this.

Most of the targeted participants are not under the country's BPL (below the poverty line) limit; nevertheless, they still struggle to have a decent livelihood for themselves and their families in the context of increasing productivity loss. Hence, their sources of income and, in turn, the consumption basket decline with every passing year. Some farmers of the target region might have access to nutritious food. Still, most of the target population has no purchasing power to acquire these items for daily consumption. Being close to an urban centre like Bengaluru further aggravates the inflation situation, reducing participants' purchasing power to afford a healthy consumption basket.

Project intervention is expected to improve food security and nutritional intake as the additional income from carbon finance will enable farmers to achieve the additional revenue without additional investment. The participants can use the additional revenue to provide better nutritional value to their families, especially their children. The community has traditionally practised intercropping of annual crops but has been restricted to only one or two varieties of locally cultivated crops; through the project interventions, especially the training imparted through the project councils and stakeholder awareness

sessions, the target population will be educated on introducing the cultivation of good mix of suitable inter-crops will make more varieties of nutritious foods readily available to the participants' families. By rotating the appropriate annual inter-crops according to the season, the households consume a portion of the produce. This, in turn, improves the quality and variety of their intake, thereby improving the nutritional security of the project area population.

The project intervention will also aim to leverage governmental schemes to provide the beneficiaries with seedlings and saplings through nutri-garden schemes to cultivate more annual crops and provide farmers with better access to nutritional food. Further, future examples of government programmes will also be followed to amplify the intercropping of new onboarded farmers.

II.) HDDS Index Survey Results.

Table 5. Summary of food groups consumed in the farmer's household in the past 24 hours.

Food group type	Average amount of households consuming each food group (%)
Cereals	*92*
Root and tubers	*50*
Vegetables	*23*
Fruits	*47*
Meat, poultry, offal	*2*
Eggs	*23*
Fish and seafood	*4*
Pulses, legumes, nuts and seeds	*2*
Milk and milk products	*78*
Oils and fats	*12*
Sweets	*12*
Spices, condiments and beverages	*5*
Average number of food groups consumed per household: *4.6*	

4. Agricultural Productivity

I.) Describe your current productivity level, challenges around productivity and yield from farm outputs, and how project intervention is expected to positively/negatively impact this.

The current agricultural productivity state is low, as it has been declining in the last 5-7 years, with extreme temperatures during the summer months. The farmers have been facing extreme water scarcity for the previous 2 years, making it challenging for them to cultivate a good variation of crops. Due to limited credit linkage opportunities, the farmers depend heavily on local institutions that do not provide the best quality seedlings, insecticides, or pesticides. Hence, the overall productivity is on a declining trend.

The agricultural productivity in some parts of the project area is occasionally challenged by man-animal conflict. In recent years, approximately 4-5% of incidents involving elephant attacks have been reported. To mitigate the risk of man-animal conflicts in these areas, farmers have proactively invested in solar electric fencing. This measure aims to create a barrier that deters elephants from entering plantation areas, thereby reducing the frequency of such conflicts and enhancing the safety of both human and animal population (see Risk Assessment section).

NABCONS will work in convergence with the state department to organise trainings for the farmers, In addition to the existing schemes imparting the training programs, NABCONS will complement the existing training programs and will hold capacity building sessions during the Project Councils on agroforestry designs and border cropping. A train-the-trainer model will be applied, so that the lead farmers (present in the Project Council) can spread the information to their follower farmers. During the project's monitoring, the efficiency and effectiveness of this set up will be monitored so that improvements can be made if needed. The farmers will be trained on agronomical practices like sustainable plantations, using better and more efficient technologies like forest buffer, alley cropping, Silvopasture, implementing agronomical cultivation practices, improving agroforestry designs through cultivation of native species etc., etc. Through its engagement with the farmers, the project will inform and educate them on the availability of government schemes that can enhance their agroforestry practices and irrigation facilities. The farmer engagement sessions and project councils will spread relevant information on the available government schemes, thereby improving farmers' access and awareness. For instance, these could be schemes promoting access to credit, opportunities to obtain better-quality seedlings and saplings, or imparting training, as mentioned above.

Through border plantation drives, the farmers will be encouraged to cultivate Non-Timber Forest Products (NTFP), which will increase agricultural productivity in the long run. In addition, NABCONS will connect the participants to governmental programs that produce better quality seedlings through its research and agricultural extension facilities.

II.) Fill in the survey in Table 6 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.

Table 6. Agricultural productivity survey results.

Cash crop type	Average yield of cash crop (kg/ha/year)	Average total yield of cash crop (kg/ha/year)
Mango	591,500	591,500

Part E: Stakeholder Identification

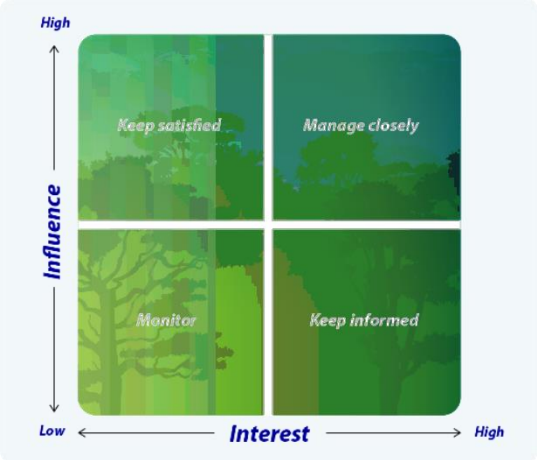


Figure 1. Stakeholder map.

1. How has the authorities responsible for land management and/or greenhouse gas emissions been informed about the project and its intention to generate and trade CRUs on the voluntary carbon market? Acorn must be supplied with this proof of communication and should also supply an acknowledgment from the responsible authorities (Annex 5).

   An MoA has been signed between NABCONS and the Department of Horticulture, and the Government of Karnataka has approved NABCONS' Carbon Credit Framework (CCF). The projects that NABCONS implements in partnership with ACORN are named as the CCF projects. The MoA is provided separately in Annex 5.

2. For this activity, the local partner, together with influential community member/farmer(s), should brainstorm and identify different secondary stakeholders (i.e., government, authorities, nurseries, etc.) that may impact or be impacted by project intervention. The interest (those who have a stake in the project) and the influence (those who have the ability/power to impact project intervention) of each secondary stakeholder in the project should then be determined and justified in Table 9 based on Figure 1 above.

   Example: the government is of high influence, as they can stop the project activities due to laws they create, prohibiting generation of carbon credits in agroforestry, and the interest could also be high, if the government wants to claim the CRUs generated by the project towards their NDC.

   All secondary stakeholders that are identified in Table 9 **must** be informed of the project (e.g. newsletters) and their views/approval sought where necessary. *Add rows for additional stakeholders as necessary.*

Table 7. Secondary stakeholder groups of the project.

Stakeholder	Interest	Influence	Justification	Outcome	How were they informed?
Authorities responsible for land	*High*	*High*	*NABCONS has signed a MoA with the Department of*	*Manage closely*	*NABCONS signed an MoA*

management and/or greenhouse gas emissions/ National Government			*Horticulture, Government of Karnataka. In this regard, the department has been designated as the local implementing institution which will be present in the project area for the next 30-50 years. The department is an equal stakeholder and has a very high interest in the implementation of the project, starting from the selection of areas to the facilitation of the project councils; the department would be advising the Local Partner on how to advance with the project in suitable areas to ensure the empowerment of the smallholder farmers. The department has different levels of governance, starting from the state level to the district, block and panchayat levels. With the MoA signed, mandates and information regarding the project are percolated down to the panchayat level and the farmer associate level to support, facilitate and collaborate for the project implementation.*		*with the Department of Horticulture, Government of Karnataka. A consultative workshop (6th of August, 2024), was held to at the state level, brief about the project designs and implementation structure, in line departments (State Pollution Control Board, Agriculture Department, Forestry Department, Department of Land Revenue, etc.). The lead scientists, director, additional director, horticulture specialists, officers, and principal secretary have been given technical orientation about the project. Clarification letters with the project's design and different aspects of the project have been sent to the department multiple times,*
Local government	*High*	*High*			
Local authorities	*High*	*High*			

					and communication has been exchanged via mail, video conferencing, and letters with the department officials. In-person meetings with the department officials have also taken place. Finally, the government cabinet has also aligned to this project's objectives. Within the government, following the MoA, A Single Point of Contact (SPOC) has been assigned as the general contact person for the project
Donors	*Not applicable*	*Not applicable*	*The project does have any donors financing the project.*	*Not applicable*	*Not applicable*
Financial partners/ institutions	*Not applicable*	*Not applicable*	*For the time being, the project doesn't partner with financial institutions. NABCONS has developed a plan to plant additional border species. This plan is signed off by the higher management of NABCONS and includes the option, if needed, to reach out*	*Manage closely*	*If necessary, NABCONS will apply for SAF.*

			for SAF to pre-finance the border species. Please refer to Annex 10, document titled "Annex 10_Approved Boundary Plan"		
NGOs	*High*	*High*	*This project collaborates with a survey agency/data collection company called Yali Infoventures Pvt.Ltd to onboard the farmers to the project. They also conduct awareness sessions before onboarding the farmers onto the project, which entail gathering of prospective farmers at village or block level to inform and educate them on the long-term benefits of the program, as well as addressing all their queries. The Department of Horticulture officers are connected to the farmers in their respective jurisdictions and they pass on the formal invite to the farmers through the relevant communication channels.*	*Manage closely*	*NABCONS is working with a survey agency to onboard the farmers onto the project. The NABCONS' consultants train the enumerators of this agency on different aspects (farmer communication, farmer awareness generation, and data collection) before they are deployed to onboard the farmers.*
Technical/ agronomical partners	*Not applicable*	*Not applicable*	*The project does not partner or outsource technical partners. The Department of Horticulture, as the subcontractor provides this input. Part of developing a plan for planting of border species, the department is invited*	*Not applicable*	*Not applicable*

			to propose a list of tree species that are available in nurseries and could grow successfully. Acorn's Agroforestry Hub is working together with the Local Partner to determine the best species for the design and propose these to the participants during the first Project Council (scheduled for December 2024).		
Procurement services	*Low*	*High*	*The project will source planting materials from local commercial nurseries for the implementation of the proposed border plantation drive.* *The specific nurseries will be identified after i) the Department provides a list of available seedling species, ii) together with Acorn's Agroforestry Hub, a list of applicable species is made, and iii) the species are proposed to participants during the project Council and agreement on the demands are made.*	*Keep satisfied*	*As the projects start to implement the border plantation drive, the saplings will be procured from these local commercial nurseries; at the time of procurement, these stakeholders will be informed about the CCF project.*
Value chain actors (i.e., traders, manufacturers, and processors)	*Low*	*Low*	*The project's cash crop is procured by the Farmer Producer Organisation or local traders, depending upon the geographical locations, who then sell it in the market.*	*Monitor*	*The lead farmers and the Horticultural assistant officers will inform the value chain actors during the harvest season.* *As the FPOs and the local*

					traders have a good network in the project area, they can be utilized as agents of information dissemination. The lead farmers will communicate about the project to the traders during the harvest period, the lead farmers will be instructed during the Project Councils and stakeholder awareness sessions to disseminate the information.

3. Identify, together with representative farmers/community members, the local stakeholders groups in the project region (i.e., either participants or non-participants that are different types of farmers, community members and indigenous groups) that may be impacted by the project and determine their interest and influence, in Table 10.
   Those that have high interest and do not have a high influence, are often the most disadvantaged groups.

Table 8. Local stakeholder groups of the project.

Identified local stakeholders that are involved in or impacted by the project	Do they have high interest in the project and expected impacts?	Do they have high influence and power in the project?
Women	*Yes*	*Yes*
Small land	*Yes*	*Yes*
Illiterate	*Yes*	*Yes*
Youth	*Yes*	*Yes*
Elderly	*Yes*	*Yes*
Non-native language	*No*	*No*
Low income	*No*	*No*
Fire risk	*Yes*	*Yes*
Low status	*No*	*No*

Religion	*No*	*No*
Ethnicity	*No*	*No*
Low educated	*Yes*	*Yes*
Remote	*No*	*No*
Disabled	*No*	*No*
Migrants	*No*	*No*
Other	*No*	*No*

4. Describe your strategy for engaging with and informing the stakeholders identified in Table 9 and 10.

At the onset of project implementation, before onboarding of farmers, farmer awareness sessions are held by the Local Partner in collaboration with the government officials from the Department of Horticulture and representatives from the sub-contractor agency (Yali Infoventures Pvt.Ltd), held at block level and village level. All the farmers both male and female are informed about the particulars of the project in the local language, infographics are used and distributed amongst the farmers which are already translated in the native language for the ease of communication. The particulars about the participant agreement are also explained to the stakeholders in details and all the queries regarding the project are addressed during the session. The farmers are informed about the requirements/eligibility as well as the procedure to exit from the project. The different aspects of climate change resilience is also targeted, and the benefits of increased biodiversity are explained to the farmers. Further, they are informed on how to communicate with the NABCONS' representatives in case of any natural disasters and emergencies through the awareness sessions which they are on boarded onto the project. The agricultural assistant officers inform the key stakeholders in the village prior to the sessions being held.

Regarding the secondary stakeholders in the table above:

i) Authorities responsible for land management and/or greenhouse gas emissions/National Government, local government, and local authorities: NABCONS has signed an MoA with the to the Department of Horticulture of Karnataka. They have been engaged with via the formal government system that links NABCONS (as subsidiary of NABARD, the agricultural development bank) to the government system. Via multiple meetings there has been regular interaction with the other departments during the Karnataka state cabinet approval of the project which in turn led to the of signing the MoA between NABCONS and the horticulture department, Government of Karnataka. Through the cabinet approval notes and meetings the other departments have been informed about the project specifics, the target area and the project mechanism.

ii) Data collection agency: This agency is onboarded at the inception of the project. The partners and the representatives of the data collection company have been trained regarding the project mechanism, the project specifics since the beginning of the project implementation, the enumerators of the agency have been trained about the app, the farmer communication and how to conduct the farmer engagement sessions and stakeholder awareness sessions.

Part F: Project Council

Background information on the governmental structure in India (from top-down):

- ***State level**: the country is organized in 28 states. The project's target state is Karnataka;*
- ***District level**: each state is further divided into districts. In this case, Karnataka state has 31 districts, of which four comprise the project area – Kolar, Ramanagara, Bengaluru Rural and Chikkaballapura;*
- ***Block or Taluk level**[6]: each district is organized in multiple blocks of Taluks;*
- ***Village level**: each block or Taluk comprises multiple villages (30-50 villages in one block). The number of villages in a block or Taluk is not fixed, and the changes are based on geographical and demographic features. Kolar comprises six blocks, The Ramanagara district comprises five taluks, Bengaluru Rural comprises four blocks, and Chikkaballapur comprises six.*
- ***Panchayat level**: each village is governed by a body called panchayat. Sometimes, 1-2 villages and their hamlets (very small group of houses slightly away from the village, but part of the social and economic area of the village) come together to form a panchayat, and 30-45 panchayats form a block.*

1. How will the Project Council members gather input (feedback and grievances) from the local stakeholders before the Project Council meetings? *Example: the project council member contacts by phone their local stakeholder group, or sends a reminder message of the Project Council meeting to collect input.*

In Karnataka, the Project Council will be established at the district level. From each block, at least 20 representatives will be participating to form the Project Council of the particular district. At the block level, representatives will be selected from the already existing village level committees. These selected representatives could be Lead farmers, respected senior members of the community, Panchayati members or SHG (Self-help group) members. Usually at the village levels, gram sabhas (Village level meetings) take place, the project council members will be advised to capitalize on this and collect data/information from the framers to be put forth in front of the project council. The roles and responsibilities of the project council members will be explained by the regional NABCONS and NABARD staff along with the local government officials.

2. What is the method for keeping local stakeholders informed on the outcomes of the project council meetings? *Examples: each Project Council member shares the Project Council Report in a WhatsApp group for the stakeholder group that they represent. The Local Partner posts the Project Council Report in a bulletin board of a community center*.

Each Project Council member shares the Project Council Report in a WhatsApp group (to be created during the first Project Council meeting) for the stakeholder group that they represent. The Local

[6] To be precise, Block and Taluk are closely related administrative sub-units in a federal system of governance, like in India. While Blocks are specifically designed to address the developmental needs of rural populations, including infrastructure, education, and health services, Taluks deal with slightly broader administrative responsibilities. These responsibilities often include legal adjudication in land disputes, registration of property, and implementation of various central and state government schemes across rural and urban settings. Hence, they are closely related and sometimes overlapping administrative federal sub-divisions. For our project, they can be considered to mean the same thing.

Partner posts the Project Council Report/minutes in a bulletin board of the panchayat office. The WhatsApp group will be created during the first project council.

3. Describe the project council governance structure based on the following topics:

    a. Timing, i.e., during the evening so all can attend; before CRU payment is expected;
    b. Location, i.e., Local Partner office, community/village center;
    c. Number of Project Councils, in case of different regions, significant amount of participants, and different agroforestry designs;
    d. Number of Project Council meetings per year and per Project Council (minimum of 2 each);
    e. Project Council meeting facilitator, i.e., Local Partner or subcontracting party.
    f. Decision-making process, e.g., unanimous decision, majority of vote, etc.

The Project Council for this project has been planned twice a year once before the CRU payments and once during the mid-year mark- to incorporate feedback and understand the challenges the farmers face from the ground level in the project design.

The Project Council will be planned preferably after the sowing season or before harvesting, especially during the weekends to ensure maximum participation of all relevant stakeholders. All stakeholders will be informed at least one week before the Project Council through the Horticulture assistant officers at the Panchayati level.

The Project Councils will be held at the district level, in the Agricultural or District Horticulture offices.

The number of Project Councils will depend upon the administrative boundary of the region. Each Project Council will be formed at the district level. Since the project area covers four districts in the same agro-ecoregion, four project councils will be established; each will comprise 150-200 representatives. These representatives will include 20-30 members from each of the blocks of the district and will belong to different village committees from the panchayat level.

As NABCONS has an MoA with the Department of Horticulture, government officials, officers from the Local partner and the sub-contracting agency will facilitate each project council meeting. The regional NABCONS and NABARD officers will work in synergy with the district and block-level horticulture officers to facilitate the implementation of the Project Council.

During the Project Council, it will be proposed that each decision is only passed through the open voting system and will be documented in the ledger. Each decision undertaken will be a collective consensus of all representatives.

4. How were the project council members elected by the Local Partner and local stakeholders to operate and make decisions on behalf of the project's participants? If the council members have not yet been elected, describe a plan to achieve this.

The Project Council representatives are selected at the district level, including Lead farmers, Panchayati members, and SHG members (see also answer in the previous question). The Horticulture assistant officer and the Local Partner representative will explain the concept of project council to the farmers at the Panchayat and block level, after which each representative will be selected from the existing village-level committees. All the representatives will be brought together under one roof at the district level to formulate the district-level project council group. These representatives will be responsible for

informing the farmers at the village level of all the key details about the project. They will also be the voice of the block at the district-level Project Council.

The Gram Panchayat is the lowest tier in the panchayat system and operates at the village level. It comprises elected members and a head called the Sarpanch and a deputy called Upsrapanch. Each ward in a village elects a representative, ensuring proportionate representation. The ward members and the Sarpanch, and the Upsarpanch, along with the ward members, come together to make decisions through an open voting system.

Every three years, new representative can be selected, which ensures more diversity in the inputs generated for the Project Council. Before selecting lead farmers, the local department officials and NABARD RO's consultants will once again reach out to local communities to hear their input on who best to represent them in the Project Council. This way, bottom up input will be included in selection of Project Council members.

5. How do you ensure that during the project council meetings all council members actively contribute to discussions (i.e. provide feedback) and decision-making on the project design and implementation? *Example: guaranteeing that votes from all project council members are collected; dividing the members into groups, such as male versus female; providing the meeting's agenda to all members.*

During the Project Council meetings, focus group discussions (FGDs) will be conducted to address each issue outlined in the agenda. All members are actively encouraged to participate in these discussions. Furthermore, decisions will be made through an open voting system, ensuring a democratic process.

6. List in Table 11, the Project Council members elected to represent the each local stakeholder group during the project council meetings to voice concerns and needs, and actively engage in decision making. If this information cannot be determined before the completion of the ADD, refer to Question 6 below.

T*he first project council meeting took place in January 2025 with the aim of disseminating information about the project and initiate the election of project council representatives. The meeting assembled farmers, both participants and to be participants. At the meeting, the potential project council representatives belonging to different stakeholder groups like FPO members, FIG (Farmer Interest Groups) and community leaders came together. The way forward on the election of representatives was taken based on consensus of the different stakeholder groups. The process to identify the representatives is now underway and hence the final list is yet to be determined.*

Table 9. Project Council members and their respective local stakeholder group.

Project Council number (applicable if multiple councils)	**Project Council member** (local partner, farmer co-op, participant, community member, Acorn employee, government representative, etc.)	**Participant or non-participant in the project**	**Gender** (M/F)	**District**	**Local stakeholder group** (who/what group of participants does the farmer attendee represent)

Part G: Grievance Mechanism

1. Describe the grievance mechanism for this project, including how, when and by who it was created.

NABCONS has signed an MoA with the Horticulture Department of the Government of Karnataka. As a part of this MoA, a monitoring steering committee has been created at the state level, where all the key stakeholders are the body's member secretaries. This body will meet at least twice a year to check on the project's progress and discuss the challenges faced. This steering committee is constituted under the chairmanship of the Secretary of Horticulture, Government of Karnataka, Chief Operating Officer of NABCONS as its member Secretary and Additional Director of Horticulture (fruits) as the Joint Member Secretary. Other relevant stakeholders like the Deputy Director of the particular districts of the project area will also be a part of the Steering Committee. All of the farmers' grievances will be reported during the Project Councils (NABCONS' Regional Office (RO) will be present to facilitate the meeting and resolve any grievances), which in turn will be reported at the district level for settlement of the issues, any issues which could not be resolves at the district level will be taken up at the state level by the department officials and the committee members.

2. How has the project communicated and made the local stakeholders aware of the grievance mechanism?

The grievance mechanism will be informed to the farmers during the first project council meeting, expected to take place in December of 2024.

3. Describe the method in which local stakeholders (participants and non-participants) are expected to communicate grievances to the Local Partner (e.g. WhatsApp group with the Lead Farmer, email, Facebook, meeting, letters, anonymous box/complaint box in a community center, online forums, etc.).

The farmers can communicate their grievances to the project council representative or directly communicate their issues to the department officials at the panchayat or block level through a direct meeting or a phonetic conversation/WhatsApp. The non-participating farmers can share or address their issues by directly reporting them to the district-level horticulture office.

During the Project Council, flyers and brochures containing the contact information of NABCONS' RO representatives and departmental officials will be distributed. Farmers will be instructed to utilize these communication channels for inquiries and concerns. Additionally, during the Project Council, they will be informed to escalate their grievances directly to the Assistant Horticulture Officers (AHOs), as the department's representatives at the ground or panchayat level, who are well-informed about the project and maintain strong connections with the farming community.

Unresolved issues at the panchayat level will be escalated to block-level officers and addressed accordingly. Flyers and brochures will also be prominently displayed on notice boards at Block, Panchayat, and District offices, ensuring easy accessibility for the public. These materials will include the contact details of RO officials and AHOs to facilitate seamless communication with the farmers.

4. Describe the chain of escalation; what are the roles and responsibilities of each person involved in reporting and resolving grievances, from the moment an affected party reports a grievance to the moment its resolved and communicated back to them.

Please refer to Question 1 above.

5. Describe the actions the project will take in the event that the affected parties are unable to successfully resolve grievances (e.g. involvement of an independent mediator that will be responsible for facilitating resolution).

Any district level issues which could not be successfully resolved at the district level will be put in front of the steering committee for resolvement.

Part H: Baseline Assessment

1. Baseline Scenario

I. Describe in Table 12 potential land tenure issues in the project region, and measures in place to mitigate these.

Table 10. Land tenure issues and mitigation actions baseline.

Land tenure/use disputes	Mitigation action
Land tenure is not updated with the current owner for inheritance reasons (still belonging to the passed away father or grandfather). Approximately 60-65% of farmers have updated their land records. The remaining farmers are updating their records, as the most recent beneficiary list is essential for accessing government schemes. The local government bodies are making efforts to facilitate the update process, ensuring all farmers can align their land records with the latest beneficiary requirements.	*In India, it has been observed that gathering land details from the local block development officer can help verify ownership. In some cases, heirship is declared mutually among family members to inherit the land. When onboarding the participants, the enumerator cross-checks with the farmers and village panchayat leaders to get evidence of heirship.* *In Karnataka, land records are updated through the Sub-Registrar Office, a government entity responsible for registering legal documents related to property, such as sale deeds, property agreements, and wills. The Tehsildar, acting as the land records officer, oversees changes to these records. The timeframe for updating land records depends on the complexity of the case and the administrative workload within the district.* *Before onboarding, NABCONS conducts a thorough review of the details of the land record. Utilizing a data collection agency, NABCONS aims to avoid onboarding cases with unclear land records, ensure due diligence, and minimize the likelihood of such occurrences. In other words, for the remaining 40% of participants without land tenure documentation, proof of hereditary/lineage to showcase connection between the beneficiary and land ownership, needs to be provided. These measures reflect NABCONS' commitment to maintaining transparency and accountability.*

II. Describe in Table 13 the current land use, land cover, and agricultural management activities, and how these are expected to change, over a period of 10 years, without the Acorn project intervention.

Table 11. Land use, land cover and agricultural management baseline.

Topic	Description of the current situation in the project region prior to the Acorn project intervention	How is this expected to change, over a period of 10 years, if the Acorn project intervention were to never take place?
Land use	*The farmers in the project area currently utilize the majority of the land cover to grow mango plantations, which are the region's primary cash crop, in addition to a few annual crops.*	*The farmland is expected to convert into a developmental landscape as the district is near a growing urban area, Bengaluru. This would be if the Acorn program is not there, as the income generated off the land is lower;*

		younger people would be less inclined to take over the farmland but move to cities themselves to pursue other economic opportunities and sell the land for real estate might be economically attractive for a farmer
Land cover	*There is a mix of horticulture land cover and annual cropland, and a small portion of degraded land is also available.*	*If partially converted to urban real estate, some land cover could be converted to artificial cover due to land transformations.*
Agricultural management activities	*Agricultural management activities include tree plantation, pruning, crop harvesting, fertilizer application, pest control, and irrigation (per the crop type and water source availability).* *Most farmers rely on the monsoon season and practice rain-fed irrigation, with less than 10% accessing reliable irrigation infrastructure. For those with access, irrigation is typically carried out using borewells, water tanks (jal kund), or nearby ponds. However, only a small fraction of farmers have adopted advanced techniques such as drip irrigation.*	*Given the semi-arid conditions and relatively less fertile soils, farmers would increase the use of synthetic fertilizers and pesticides due to soil degradation over time to sustain the same horticulture activities.* *If the project is implemented soundly, the* well-maintained agroforestry system and additional border trees, due to increased biodiversity, counter soil degradation and decrease the need for fertilizer.

2. Carbon Baseline

I. In addition to the current land use and land cover situation referred in Table 13 above, display the top 10 species composition at the start of the project intervention. *This information is based on ground truth data, and not measured biomass*.

1) *Mangifera indica*
2) *Cocos nucifera*
3) *Azadirachta indica*
4) *Tectona grandis*
5) *Eucalyptus nilgiriensis*
6) *Manilkara zapota*
7) *Swietenia sp.*
8) *Tamarindus indica*
9) *Citrus limetta*
10) *Syzygium cumini*

3. Livelihood Baseline

I. Describe in Table 14 the livelihood conditions (including marginalised/minority groups, income, poverty level, remoteness, education, transport, gender balance, migration, population growth, typical assets, and other livelihood activities, etc.) within the project

region, and how these are likely to change over a period of at least 10 years in the absence of the Acorn project intervention.

Table 12. Baseline livelihood conditions.

Requested information	Description of the current situation in the project region prior to the Acorn project intervention	How is this expected to change, over a period of 10 years, if the Acorn project intervention were to never take place?
Livelihood conditions	***Poverty Levels**: In the project area, the average income of the farmers is above the poverty line. According to a World Bank study conducted in 2017, the poverty level ranges from 0-16% in Kolar, 0-10% in Chikballapura, and 10-16% in Ramnaggara and Bangalore rural.* ***Average Income**: According to the economic survey (2022-2023) conducted by the Department of Planning, Programme Monitoring and Statistics of the Government of Karnataka, Karnataka's per capita average income is 3,04,474₹. The average per capita income for the project districts is 291,083₹ for Bengaluru Rural, 187,284₹ for Kolar, 200,424₹ for Chickballapur, and 249,998₹ for Ramnagara.* ***Income sources**: In Karnataka, it has been observed that the agricultural sector accounts for nearly 57% of the workforce, whereas horticulture accounts for 40% of the total income generated. Following the general state trend, agriculture is the primary income source of the project area.* *In Kolar, the primary income sources include agriculture, followed by sericulture. Animal husbandry and daily wage labour usually complement the primary income sources. Some households also engage in small-scale businesses. In Chikkaballapura, agriculture, including horticulture (especially flowers and vegetables), dominates income sources, along with some involvement in local industries. In*	*As the target group belongs to the marginalized section of society, any disruptions due to climate change will only render them more vulnerable, as the region is already drought-prone. A decreasing trend in agriculture productivity is observed; if the project intervention is not introduced, then there is a possibility that the inhabitants might switch from agriculture and horticulture production to tertiary industries.*

	Ramnagara, agriculture and sericulture are the main sources of income, and the Bidadi industrial area provides employment opportunities. In Bengaluru Rural, agriculture, especially high-value crops (i.e., mulberry and dairy production), is the primary source of income, along with remittances from family members working in Bengaluru city. ***Food and education**: According to the last population Census, Kolar has a literacy rate of 74.39%, Chikkaballapur recorded 69.76%, Bengaluru rural 77.93%, and Ramnagara 69.22%. Food security has observed a general deprivation in rural areas.* ***Gender Equality**: The majority of the land ownership belongs to the male members of the society, even though women play a significant role in farming activities; hence, a high level of gender inequality is observed in the project area.*	

4. Ecosystem Baseline

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

The project area is located in two ecoregions (according to the WWF's classification[7]). These are:

Deccan Thorn Scrub Forests: found in south India and northern Sri Lanka, this ecoregion is characterized by their xeric shrubland environment. These forests, which were once tropical dry deciduous forests, now predominantly consist of thorny trees, spiny shrubs, and dry grasslands. The climate here is quite harsh, with temperatures often exceeding 40 °C during the hotter months. Rainfall is sparse, with annual precipitation less than 750 mm, mostly occurring during a brief rainy season. The region experiences a prolonged dry period from November to April.

South Deccan Plateau Dry Deciduous Forests: located in the southernmost part of the Deccan Plateau, including the southern Eastern Ghats, the South Deccan Plateau dry deciduous forests are known for their tall trees that shed leaves during the dry winter and spring. The climate is influenced by the rain shadow effect of the Western Ghats, leading to high summer temperatures that can rise above 40 °C. Most of the rainfall occurs during the southwest monsoon from June to September, providing much-needed moisture to the region.

[7] https://www.worldwildlife.org/publications/terrestrial-ecoregions-of-the-world

II. Describe in Table 15 the current ecological conditions within the project area and how it is expected to change over a period of at least 10 years in the absence of the Acorn project intervention.

Table 13. Ecosystem baseline conditions.

Requested information	Description of the current situation in the project region prior to the Acorn project intervention	How is this expected to change, over a period of 10 years, if the Acorn project intervention were to never take place?
Description of current ecological conditions within the project area	**Topography**: *Kolar,* Chikkaballapura, Bengaluru Rural and Ramanagara *lie between 12'30''N to 13'30''N and 77'00''E to 78' 30''E'. The four districts have elevations ranging between 680-890 metres above sea level. The entire region belongs to a semi-arid zone with hilly terrain. The area has plateau tops that are interrupted by hills.* ***Climate:*** *The project region belongs to Karnataka's dry and semi-arid zone, wherein red, loamy and lateritic soils are present. The project area is one of the most drought-prone areas; the region faces a severe water crisis, and water scarcity is observed in the region. The region receives an annual rainfall of 679 mm to 888.9 mm and the rainy season (monsoon) is from June to September. The water table is relatively low throughout the project area, with the groundwater table declining sharply over the years.*	*The project region extends to 14,037 square km. Since these districts lie in reasonable proximity to Bengaluru city, there is a possibility that with the rapid expansion and development plan underway, the local community might sell off their lands. The continuing demographic and unplanned economic growth are the major threats to the ecological security of the region. If the Acorn project is introduced, then the added incentive from the CRUs will motivate the farmers to retain the agroforestry practices and support the integrated land management plans of the area.*
Description of the fauna and flora in the project area	*The main flora species are:* • False Ashoka (*Monoon longifolium*); • Cherry Ashok (*Huberantha cerasoides*); • Snowberry tree (*Flueggea virosa*). • Acacia Catechu	*Due to the proximity to the city's capital and developmental plans, there is a possibility that the native species might get cleared or disrupted, which in turn leads to the local fauna also losing their habitat. If the land stays as farmland, the probability of fauna being retained will be*

	• *Neem (Azadirachta Indica)* *The main fauna species are:* • Carpenter bee (*Xylocopa tranquebarica*); • Indian Black Turtle (*Melanochelys trijuga*); • Indian Wolf Snake (*Lycodon aulicus*).	*higher since these trees are retained spontaneously on the border.*
Description of deforestation potential	*The overall project region does face threats of natural habitat loss due to overexploitation and rapid urbanisation threats.* ***Kolar:*** *Wildlife populations are under pressure due to habitat loss and human encroachment. While some species, such as small mammals and birds, persist, overall biodiversity is limited and lower compared to the other districts.* ***Chikkaballapura:*** *Biodiversity is relatively rich, with several species of birds, small mammals, and reptiles. The area serves as a corridor for wildlife.* ***Ramanagara:*** *This region is known for its rich biodiversity, including larger mammals like leopards and deer. The area is also significant for birdlife, with many species of raptors.* ***Bengaluru Rural:*** *The wildlife diversity is varied, with several mammal species and a rich avian population.*	*If project intervention does not occur, the potential for carbon sequestration in the project area could be hampered, and unsustainable land use will prevail. Part of the project area (Kolar and Ramanagara) might see an intensification of sericulture practices. Being relatively close to an expanding urban area (Bengaluru), part of the project area could further lose biodiversity due to urbanisation.* *Against the area's urbanisation background, the project intervention is expected to encourage farmland retention by supplementing farm income with CRU revenues. Farmers will promote and aim to reverse or slow down biodiversity loss. Additionally, planting native border species through planned plantation drives is directed towards fostering biodiversity loss.*

Part I: Agroforestry System Design

1. Describe the agroforestry system(s), attached on Annex 10, to be implemented as part of the project in Table 16 below. Add additional rows, if multiple agroforestry designs exist.

Table 14. Summary of agroforestry system(s) implemented as part of the project.

Agroforestry Name (*based on the main cash crop*)	**Agroforestry Type** (*silvopasture/ agrisilviculture/ agrisilvipastoral*)	**Location**	**Harvesting**	**Agroforestry density (trees/ha)**	**Involvement of local stakeholders**	**Expected positive/negative impact on the ecosystem**
Mango with border species	*Agrisilviculture*	*In the four project area districts - Kolar (pilot region), Ramanagara, Bengaluru Rural, and Chikkaballapura*	No, for the cash crop; mango trees have been recently planted and have a lifecycle of 50 years. Yes, for some of the proposed border species with timber properties.	100 (to be planted) border trees/ha	The Department of Horticulture provided a first list of species suitable for border planting. Through the Project Council in January of 2025 and field visits in December of 2024, input on the preference of species was gathered.	Cultivating mango instead of annual crops is good for the soil fertility, as the trees hold on to water via their roots & provide shade for the soil. This in comparison to cultivating annual crops, where the soil during some time of the year will be left baren and unprotected against the sun. The addition of border species is expected to have a positive impact on the ecosystem through biodiversity and resilience increase.

2. For each agroforestry system described in Table 16 above, fill out Table 17 below (use additional tables if necessary) to describe the agroforestry species promoted:

Table 15. Agroforestry species promoted under each agroforestry system.

Agroforestry Name	Agroforestry tree species	Native, naturalised or invasive?	If naturalised, describe its likely: Livelihood benefits that make it preferable to any alternative native species	If naturalised, describe its likely: Impact on biodiversity or other provision of key ecosystem services in the project and surrounding areas
Mango with border species	***Cash crop***			
	Mango (Mangifera indica)	*Native*		
	Suggested border species, Timber			
	Mahogany / Swietenia	*Naturalized*	*This tree species has strong commercial value*	*Provides more diversity amongst the timber species and thus has a positive on biodiversity.*
	Silver Oak (Grevillea robusta)	*Naturalised*	*Strong commercial value*	*Apart from good erosion control potential, ability to thrive in areas where water availability is low (drought tolerant)*
	Teak (Tectona grandis)	*Native*		
	Melia (Melia dubia)	*Native*		
	Red Sanders (Pterocarpus santalinus)	*Native*		
	Suggested border species, c: Fruit / trees			
	Coconut (Cocus nucifera)	*Naturalized*	*Coconut provides economic value for the farmer. Coconut is economically more interesting that some native fruit species, while compared to some other native species this is not the case. Also when the economic value is not higher than a native species, still it can be beneficial for a farmer's livelihood to plant coconut, instead of the native species, to diversity their income streams*	*A valued part of an integrated agroforestry design where multiple layers are beneficial. By introducing this as additional species, potentially next to native ones, in total the biodiversity is increased.*

	Jackfruit (Artocarpus)	*Native*		
	Jamun (Syzygium cumini)	*Native*		
	Lime/grapefruit (Citrus aurantifolia/Citrus paradisi)	*Naturalised*	*Good consistent market demand*	*Habitat provision for insects, birds and hence pollination services*
	Custard apple (Annona reticulata)	*Naturalised*	*Commercial value is improving in recent years*	*Habitat provision for insects, birds and hence pollination services*
	Tamarind (Tamarindus indica)	*Native*		
	Suggested border species, : Nitrogen-fixing / pollination trees			
	Coral tree (Erythrina)	*Native*		
	Sheesham (Dalbergia Sissoo)	*Native*		
	Drumstick (Moringa oleifera)	*Native*		
	Neem (Azadirachta indica)	*Native*		

Part J: Organisational Capacity

1. Describe your legal status as a local partner and attach certificate of registration in Annex 11 (e.g. NGO, local co-op or trader).

NABCONS (private limited) is a wholly subsidiary of NABARD (National Bank for Agriculture and Rural Development). The company was registered under the Companies Act of 1956 on the 17th of November 2003. An independent board of directors, a full-time managing director, and a chief operating officer manage it. It is supported by a professionally competent, multi-disciplinary team of consultants who oversee client services and various support functions. Chairman NABARD is the ex-officio Chairman of NABCONS. NABCONS has a countrywide presence and offices in each state and district of the country, with at least 200 NGOs and field-level enumerator organizations empanelled with NABCONS.

2. Describe how you ensure participants are capable of implementing and managing the Acorn project intervention throughout the crediting period (e.g., participants sign agreements at the start of the project and are visited at least every five years by the project's staff to confirm their interest and ability to undertake the project).

As NABCONS has signed an MoA with the Department of Horticulture, a state-level steering committee will be constituted under the chairmanship of the secretary, horticulture, Government of Karnataka with the participation of Chief operating officer NABCONS as its member secretary and Additional Director of Horticulture (fruits) as Joint Member Secretary. This committee will meet at least twice yearly to check the project's progress. To ensure the yearly progress, monitoring checks (i.e., farm visits and phone calls by the AHO's) will be done by the block level, district level and panchayat level, and these monitoring checks will be done both by the Panchayat and block level officers of the Department of Horticulture as well as the NABCONS and NABARD consultants available at the district level.

3. Describe how you contribute to the social and economic development of the participants and their communities (e.g. the project promotes local nurseries and provides employment for the women and youth of the community; the project creates a market by selling the agroforestry produce; the project mitigates social conflicts by reducing the need for additional farm inputs and land that is limited).

The additional income from carbon revenue will incentivise the farmers to expand their plantations, maintain the existing plantations or invest in the plantation of more diverse species on their farmland through the boundary plantation. The added income will also contribute positively to the standard of living of the farmers in terms of better access to nutritional food, education, etc. Through the Project Councils, the project will ensure women and youth representation, ensuring parity in decision-making and gender equality in the project area. The project will also assist small and marginal farmers in being connected to government schemes and subsidies (provision of saplings, labour, subsidy for solar irrigation, etc.), which will help increase the production of small and marginal farmers.

4. What is the experience of the local partner working with farmers and communities in other projects, and where did this take place (e.g., establishing nurseries, community mobilization, awareness campaigns, providing training, linking farmers to subsidies from the government, acquiring land tenure for farmers, etc.).

NABCONS has been working with private entities and government offices across PAN India, such as the Department of Agriculture and Department of Horticulture, for various impact evaluation studies,

disbursement of funds, capacity-building sessions, etc. NABCONS is also responsible for independently verifying projects wherein all stakeholders must be audited.

Examples of projects are:

i. *Impact evaluation of equity grant fund and credit guarantee fund scheme, in which farmers and other stakeholders were surveyed to collect data for the study.*
ii. *NABCONS has also distributed funds for government projects like the Agriculture Infrastructure Fund (AIF).*
iii. *Capacity building sessions of the Tribal Development Fund (TDF) farmers, monitoring and evaluation of the Tribal development projects of NABARD, and carbon sequestration evaluation of the TDF projects of NABARD are also done by NABCONS. The TDF programme, NABARD's flagship programme, focuses on implementing agroforestry plantations in tribal communities.*

5. Describe how you provide information in a culturally appropriate way, in a timely manner, and in an applicable language and/or format that suits all participants and avoids discrimination against illiterate groups (e.g., providing brochures with infographics for illiterate groups, all farmer documentation available in native languages, Lead Farmers communicating in native languages, etc.)

NABCONS has conducted the pilot project of onboarding approx. 3,000 farmers in Karnataka, wherein all the infographics, participant agreement, and farmer communication were translated into Kannada (local language) before being shared with farmers and onboarding them onto the project. Through the monitoring visits, the farmers verified whether the communication provided to them was in their native language or not. The participant agreements get cross-checked for local language authentication.

6. Describe how the project will securely store project information, including project designs, participant agreements, proof of payment, record of participants events and monitoring results.

The project information gets uploaded, i.e., the project designs, proof of payments, etc., to the Cloud server managed by Nabcons/Nabard or in the ERP system that NABCONS utilises. The hard copies of the participant agreements are safely stored in the Bangalore regional office.

7. List relevant local, national and international policies, laws and regulations and demonstrate how the project is aligning project activities to comply (e.g., forestry policies preventing deforestation aligns with the projects' agroforestry design where no trees are harvested and instead more trees are planted).

The government plans to develop the Indian Carbon Market (ICM), where a national framework will be established to decarbonise the Indian economy by pricing the Green House Gas (GHG) emissions through trading of the Carbon Credit Certificates. Bureau of Energy Efficiency, Ministry of Power, and Ministry of Environment, Forest & Climate Change are developing the Carbon Credit Trading Scheme. The Indian carbon markets are also exploring opportunities to connect nature-based solutions to the international carbon market.

8. Based on the groups identified from the local stakeholder analysis that could be discriminated against (e.g., gender, age, income or social status, ethnicity or religion, etc.), what actions has the project taken, or will take, to ensure these groups are not excluded over the entire project's period?

The farmer survey (Part D) showed that women's participation in land ownership is less in the project area, and the percentage of women is lower. The project, through its project councils, will ensure the participation of women as one of its primary stakeholders; these efforts will, in turn, aim to bridge the gap of gender equality. The project area is heterogeneous; all four districts have around 80-85% of the population belonging to the Hindu community, and the rest is covered by the Muslim, Christian and other communities.

9. Every time the project onboards a new batch of farmers, what selection criteria do you use to determine how many farmers can be onboarded at that moment (e.g. farm size, willingness to commit to the project's period, by alphabetic order, from a list of farmers from existing governmental programs, randomness, etc.)?

NABCONS, in collaboration with Rabobank Acorn and the Department of Horticulture, will decide on the yearly targets for farmer onboarding. While framing the targets, the project's locale and eligibility criteria are kept in mind and cross-verified with the ground data. The new targets for farmer onboarding will also depend on the business case developed as a part of the Acorn Design Document, the size of the farm, the availability of the number of trees in a particular plot along with the number of eligible farmers present in the project area will be considered to determine the financial feasibility of the project and in turn determine the new targets. Expansion to new areas and development of new projects are done based on the availability of suitable existing agroforestry in the region with the scope for further expansion for additional plantations.

10. Describe the policies you have in place, as the Local Partner, regarding employment of youths, women, and disadvantaged groups (e.g., Labor Code, Ethics Policy, Sexual Harassment Policy, Gender Equality Policy, Youth Employment Policy, etc.)? Attach these policies, or other relevant evidence in Annex 12.

Policies in place include the Sexual Harassment Policy of NABCONS.

11. Describe how women are involved in the project but NOT as participant farmers (e.g., women employed in leadership positions within the organization, women-led nurseries providing seedlings, Women Self Help Groups and other cooperatives/associations providing training, etc.).

Through the Project Councils, the project will ensure the participation of women beneficiaries and stakeholders. The council formulation will ensure women's representation as lead farmers or from the Self-Help Groups. The project will also try to identify women-led nurseries to implement the border plantation drives in the area and promote them to the beneficiaries. Finally, around 40-45% of the total workforce of NABCONS comprises of women.

12. Describe how the project will promote knowledge sharing among participants and the community (e.g., demo farms, supporting farmers in forming working groups, placing flyers in community centers, including multiple community groups in the Project Council meetings, etc.).

The project utilizes farmer interactions, stakeholder awareness sessions, and capacity-building sessions to promote knowledge sharing amongst the farmers. The Acorn infographic are converted into the local language, and presented on these platforms and events. The project will also utilize the project councils to spread more awareness amongst the farmers regarding agronomical practices, sustainable farming, better irrigation techniques, etc.

13. Describe the training program offered by the project to participants, including:

a) Is training offered to all participant farmers?

Yes. With the MoA in place with the Department of Horticulture, Government of Karnataka, NABCONS will channel the already existing capacity-building programs and training programs the government is implementing in the target region. In addition to this, NABCONS will hold farmer awareness sessions throughout the farmer onboarding period. As part of the border plantation drive, additional training will be provided through farmer engagement sessions and Project Councils. The regional NABCONS and NABARD officers, external consultants, and the regional KVK (Krishi Vigyan Kendra)[8] officer will undertake this additional training.

b) What is the form of training? (e.g., through meetings with multiple farmer groups composed each of 20 farmers, either theory-based or practical; brochure or book provided with illustrations, practical demo farms, etc.).

Block-level and Panchayat-level training will be imparted to the farmers through farmer awareness generation. Moreover, the target group will be encouraged to participate in the training conducted by the Department of Horticulture. Training will occur in batches or group meetings (40-50 farmers are available per session). These beneficiaries will be trained using brochures, pamphlets, and training material from the Department of Horticulture. Refer to Annex 3, document titled "Annex 3_Training Material".

c) How often do farmers receive training? (e.g., annually, before the planting, pruning, and harvesting seasons, each time a new batch of farmers are onboarded, etc.).

The training will be conducted bi-annually.

d) Who conducts the training? (e.g., Local Partner's field officers, Lead Farmers, agronomist, collaborating NGO's or farmer cooperations, etc.).

NABCONS will conduct the training in convergence with the Department of Horticulture, and the staff appointed for this includes block-level officers and additional assistants from the Department of Horticulture, NABCONS officials, NABARD officers, and externally hired trainers from the local agricultural universities or Krishi Vigyan Kendras (KVKs).

e) What are the main training topics? (e.g., land preparation, maintenance of trees, harvesting and pruning, preparation and application of biopesticides and organic fertilizers, household financial management, women empowerment, etc.).

Regular training program to farmers is conducted on Integrated Nutrient Management (INM) and Integrated Pest Management (IPM), maintenance of trees, pruning by Krishi Vigyan Kendra, Department of Horticulture/Agriculture and Centre Excellence of Mango.

[8] A Krishi Vigyan Kendra (KVK) is an agricultural extension centre in India. The name means "Farm Science Centre".

Part K: Financial Feasibility

1. Provide a summary of the business case (attached as evidence in Annex 7) for the local partner and farmer, including:
    a. The proposed planting schedule and assumptions (e.g. average plot size, survival rate, average yield per tree if the species planted are producing);

The average plot size is 0.6 ha (~1.5 acre). In these plots, the current plantations include mango, some border forestry species (although very limited) and intercropping with annual crops.

Regarding the existing plantations:

I. Survival rate Mango: 90%. Beating up takes place, resulting in 100% coverage

II. Average yield and income of mango:

i. Produce: On average, depending on different factors including, but not limited to, climate condition, age of trees, soil quality, a tree is expected to produce an average of 100 kg per year;

ii. Price for produce: 35 Rupees/kg.

iii. Income per tree: 100 kg/year x 25 rupees/kg = 2500 rupees a year tree.

Regarding the plan to plant additional boundary species under Acorn:

III. . In November of 2024, Acorn and the Department of Horticulture (interaction organized by NABCONS) cooperated to create a list of species to propose to farmers. After farmer consultations in December 2024 – January 2025, a final list to plant was developed and based on that, a separate Business Case for the border species plan was prepared. The species listed are:

i. Timber species: Mahogany, Silver Oak, Teak, Melia Dubia, Red Sanders

ii. Fruit trees: Coconut, Jackfruit, Jamun, Lime/Grapefruit, Custard apple, Tamarind

iii. Nitrogen-fixing/pollinating trees: Coral tree, Sheesham, Drumstick, Neem

b. The expected costs associated with the transition to agroforestry, for both the local partners and participant farmers, and the generation and trading of CRUs (e.g. planting materials, fertilizer costs, temporary labour cost, training cost, monitoring cost);

I. The project's scope includes farmers with existing mango agroforestry (mango intercropped with annual crops), therefore no additional costs for transitioning to agroforestry are borne by farmers.

i. *When farmers plant mango plantations, the costs are estimated on 34,125 INR/ha (7,875 INR/ha for distribution and logistics; 26,250 INR/ha for fertilizer and manure)*

II. In the current phase of the project, the costs associated with planting additional border species have been estimated based on consultations with stakeholders. When farmers plant border trees, the costs are estimated on 3,300 INR/ha while no costs are associated with distribution and logistics, fertilizer and manure. The latter two components are to be leveraged from government schemes and farmer contributions. The above costs could also be brought further down by leveraging relationships with govt departments who can further subsidise the costs.

c. The expected annual income from agricultural production and carbon sequestration;

   I. *Income increases over time; when fruit production and carbon sequestration increases.*
   II. *Carbon sequestration: on average, 1.8 CRU is expected per farmer (~0.6 ha), per year, over 30 years. Assuming 40 EUR/CRU, this is an average of 72 EUR/farmer.*
   III. *Agricultural production: baseline- on average, 3028 EUR in yield is expected over 30 years, per farmer (0.6 ha).*

d. The expected productivity changes that will result from project interventions;

   Regarding the existing plantations:
   I. *Plots onboarded have max 5-year- old mango plantations. They either replaced annual crops (baseline described in the Business Case) or replaced unproductive old mango plantations (called: rejuvenation). Both options where accepted during the eligibility phase of the project.*
   II. *Productivity change compared to baseline of annual crops: on average over 30 years, annually a farmers is expected to earn 3.741 EUR more per year. Please note the income increase is only expected to be substantial from the 4th year onwards as before that mango is not fruiting*
   III. *Productivity change compared to baseline of unproductive plantations: Production of old economically non-viable trees decline to 40 kg/tree or lower. Over a period of 30 years, the average production is 85 kg/tree. Assuming: 1) an annual difference of 35 kg/tree compared to the baseline, 2) 35 INR income per kg mango fruits, and 3) 90 mango trees/farmer (225/ha, 0.4 ha per farmer) There is a price increase of 110.250 INR; 1238 EUR*

   Regarding the plan to plant additional boundary species under Acorn: Including intervention of fruit yielding border trees: additional 16,218 EUR per farmer in fruit yield is expected over 30 years.

e. The potential financial solution to financing the farmer package and project implementation/managing cost for a local partner (if funding from SAF is required).
   I. *Plantations onboarded: Existing AF, financed in the past. No finance needed*
   II. *Farmer package border plantations: When the business case of the additional border species is developed, options to look into financing are: 1) SAF, 2) Department of Horticulture of Karnataka, 3) NABARD, 4) Rabo Foundation*
   III. *Project implementation: Acorn provided a TA grant to NABCONS to finance their costs of implementing Acorn in Karnataka, to bridge a finance gap between start of project implementation & generating CRU income that is supposed to cover running partner costs*

2. Describe the accounting system in place to record the local partner's and/or sub-contracting party's income and expenses, including the distribution of participant CRU revenues, for the Acorn project intervention. (e.g., having an accounting software such as SAP or Oracle, or a

system that is part of Enterprise Resource Planning tool or a comprehensive Excel tool).

The double-entry accounting system is prepared following India's generally accepted accounting principles (Indian GAAP) using the IFS-Enterprise Resource Planning software. NABCONS is a wholly-owned subsidiary of NABARD (India's most significant agriculture and rural development bank) with ~400 employees on its payroll. Therefore, it has correspondingly advanced internal accounting and payroll systems and internal and external audit functions.

3. What information will you administrate in this accounting system? Provide a complete overview (e.g., farmer payments, transportation costs, seedlings costs, establishment of nurseries, etc.).

   Farmer CRU payments will be administered in this accounting system. If financing for the border plantation drive is utilised, this system will also administer deductions towards loan repayments.

4. How will you ensure the 80% will go directly to the farmers, and not be used for project and local partner costs instead? (e.g., having a separate account for farmer payments only, having a robust accounting system, having regular external financial audits, having the farmer CRU payments earmarked, etc.)

   NABCONS will follow the guidelines mentioned in the partnership agreement to ensure 80% income transfer to the farmers.

   NABARD, the parent entity, has experience channelling foreign funds from various international development projects to the end farmer-beneficiaries in India. NABCONS will leverage this experience to administer the payments to farmers in this program.

   Distribution of CRU Revenues is planned in either of the two following ways:

   I. Setting up a separate bank account at NABCONS CO level – NABCONS will open an individual account with their corporate bank to receive 80% of funds that need to be transferred to the farmer-beneficiaries separately. Using CMS (Cash management system) services offered by the corporate banker of NABCONS, the CRU revenue amount due to each farmer (can be done for 1000s of farmer bank accounts) will be transferred to their bank accounts using electronic wire transfer methods such as NEFT or IMPS.

   II. Split the 80% share of CRU revenue due to the farmer at the General Ledger accounting level of NABCONS -This will then be recorded as a separate account in the internal accounting books of NABCONS. The debit entries on this account (i.e., the individual farmer payments) can be tracked and recorded.

   In both cases, the traceability and verification of every transaction is possible.

   As mentioned in question 2 above, the earmarking and activity of the farmer CRU revenues account will be monitored and audited by both internal and external audit functions of NABCONS.

Part L: Benefit Sharing Mechanism

1. Provide a summary of the benefit sharing mechanism (attached as evidence in Annex 13), including:
    a. The proportion of cash payments versus in-kind payments that are disbursed to farmers and how this equates to 80%. If, in-kind payments will be disbursed, complete Table 18 below. Please only refer to in-kind payments that will come from the 80% farmer revenue and not general benefits from the project (e.g., the farmers have identified in the benefit sharing mechanism that they would like to receive 40% of their payment as fertilizers, therefore 40% should be indicated in Table 18, under the fertilizer section).
    For the first year of payments, at least half (i.e. 50% of farmer revenue - which corresponds to 80% of the CRU Revenues) will be in cash. The possibility of having the remaining 50% of farmer revenues, to be distributed in-kind in the form of border tree saplings was put forth. However, the consensus was to wait for the first CRU revenue amounts to be realized, in order to make the decision on the exact proportion of cash vs in-kind. This will be discussed in the subsequent project council meetings after CRU auction has been done and a corresponding price has been realized.

    b. Describe the payment method (e.g., cash, mobile money, bank transfer, etc.)
    Payment method will be DBT or Direct Bank Transfer using CMS (Cash Management Systems). This is method familiar in India due to the strong penetration of digital payment technologies and government drive to mass mobilize digital banking.

    c. Describe by whom the payment is distributed by? (e.g., by the Local Partner or by a third party)
    The payment will be distributed by the Local Partner – NABCONS.

    d. What is the ideal timing and frequency of payments? (e.g., twice a year between harvesting seasons, when farmers are not receiving additional income; once a year, before the schooling year begins, etc.)
    As of now, this is expected to be once a year. After CRU realization and project council feedback, this can be reconsidered, and frequency can be altered.

Table 16. In-kind provisions

In-kind provisions	In-kind types
*Seedling/sapling costs	*The cost of nursery seedlings or cuttings (as may be available for the chosen species). No transport costs are involved as farmer will be picking up from nursery.*
*Fertilizers	*Not applicable*
*Farm infrastructure costs	*Not applicable*
*Agroforestry training costs	*Not applicable*

**Possible pre-financing options, depending on the financial capability of the Local Partner.*

2. Describe the deductible costs, if any, described in the benefit-sharing mechanism

Table 19. Deductible cost

Deductible cost	Deductible cost types
Taxes (e.g., carbon tax)	*No tax is applicable on the share distributed to farmers. The share due to the Local Partner is taxed with Goods and Service Tax.*

Part M: Risk Assessment

Table 17. Risk assessment.

Category	Risk screening question	Local partner response (Risks Identified)	Likelihood	Magnitude	Risk rating
Labor & Working Conditions (IFC PS#2)					
Labor and working conditions & Child / Forced Labor	Describe whether the project could lead to working conditions for employees, participants and collaborating organizations that are not aligned with national labour laws or the International Labor Organization's (ILO) Declaration on the Fundamental Principles and Rights at Work. Consider discriminatory working conditions and hiring practices, lack of equal opportunity, lack of clear employment terms and contracts, failure to prevent harassment, exploitation of seasonal or temporary workers, unlawful wages or working hours, and failure to ensure freedom of association.	*The project is being implemented by NABCONS which is a wholly-owned subsidiary of NABARD. The local partner has strict internal policies in place that ensure full compliance with all the relevant national and International labour laws and regulations. These policies are designed to protect the rights and welfare of all employees, participants, and collaborating organizations involved in our projects. Additionally NABCONS has signed an MoA with the Department of Horticulture, Government of Karnataka, which also ensures compliance to all the National labour laws for project implementation.*	*1*	*4*	***4***
	Describe whether there is an occupational health and safety risk to project workers while completing project activities. Consider extreme weather and dangerous road conditions that could arise when collecting data.	*The project will not entail any activities that will act as an occupational hazard for completing the project activities. All the activities are planned in strict adherence to labour laws and regulations. The data collectors along with any field staff are deputed keeping in mind the extremes of temperatures across the different seasons, for e.g. during the peak summer months, the data*	*1*	*2*	

		collectors only conduct the field work during the early hours of the day, before the temperature rises and complete the rest of the activities during sunset. This approach ensures all activities are completed well before the midday heat, thereby reducing exposure to extreme weather conditions. Even though the district consists of undulating plains intersected by small hillocks and ridges, the Mango growing region is situated on plain lands, which make the project area very accessible for the data collectors.			
	Describe whether the project could support or be linked to forced labor, harmful child labor, or any other damaging forms of labor.	*The project will not entail any activity which supports forced labour or child labour. The local partner ensures strict adherence to the National labour laws while implementing any project.*	3	2	
Gender equality & Gender based violence	Describe whether the project intervention could result in adverse gender impacts, including discrimination or the creation/exacerbation of gender-related inequalities. Consider the distribution of and access to resources (e.g. training, seedlings), farmer onboarding, and the gender balance in decision making/leadership positions.	*The local partner is fully committed to ensure all of its project interventions are free from any gender discrimination or inequality, project interventions be implemented in such a manner which will ensure no adverse gender impacts of discrimination on the grounds of gender can take place, rather the local partner will channelize all its efforts to ensure women are elected in the committee for project council, SHG members, women lead farmers will also be a part of the project councils . Through the plantation drive the local partner will try to identify women –led nurseries across the project area and try to source the saplings from these nurseries. As the project*	1	3	**3.5**

		council will be constituted at the district level through the existing village committees the NABCONS RO and CO will try to ensure women are elected as representatives.			
	Describe whether project activities could cause or contribute to gender-based violence, including risks of sexual exploitation, sexual abuse or sexual harassment? Please describe what policies are in place for the project and other employment policies in place for the local partner and other collaborating organizations.	*The project implementation will not entail any activities which could contribute to gender-based violence, including risks of sexual exploitation, sexual abuse or sexual harassment. The local partner has a very strict sexual harassment policy (POSH – Policy Against Sexual Harassment) in place to ensure gender equity and no exacerbation of gender-violence takes place. The sub-contractors are first screened based on their track record to identify any past risk. NABCONS uses the list of NABARD approved sub-contractors. If a subcontractor misbehaved in any way or caused major risks such as the one addressed here, a subcontractor will be blacklisted. Part of the screening of a sub-contractor, NABCONS looks at this list to minimalize any risk of misbehaviour.* *Apart from channels like Project Council, participants also have access to the NABCONS helpline in Karnataka. The phone number provided here directly gives farmers access to the local NABCONS representative in Karnataka. In addition, the NABCONS helpline is also put up in the local government office where the Department of Horticulture Officer is present. Farmers can use these channels to report more sensitive matters.*	2	2	

		Additionally, the local government representatives, namely the Assistant Horticulture Officers (AHOs), who operate at the grassroots level, maintain strong connections with the farming community. Farmers will be encouraged to utilize AHOs as key communication channels for assistance and support, alongside reaching out to the local NABCONS consultant.			
Resource Efficiency and Pollution Prevention (IFC #3)					
Resource efficiency and GHG emissions	Describe whether the project could lead to excessive consumption of energy, water or other resources, or lead to significant increases of greenhouse gases. Consider the use of heavy machinery.	*The project targets small holder and marginal farmers, the farming activities conducted by them does not entail heavy or excessive consumption of water or energy, rather the project area falls under the water scarcity region of Karnataka, so the farmers are extremely meticulous with the water consumption patterns. Only a few farmers of the project area utilise tractors (not all are able to afford the cost of renting a tractor) to plough their lands once every couple of years, before they start the plantation activities. with the exception of tractors no other heavy machinery is used in the project area.*	2	3	**6**
Pollution and waste	Describe whether project activities could release pollutants, hazardous substances or contaminated waste into the natural environment (air, land or water). Consider the application of synthetic fertilizers and	*The project activities entail plantation of new horticulture trees, maintaining the existing agroforestry plantations and expansion of new agroforestry models, hence no project activities could release any hazardous substance or contaminated wastes into the natural environment, as the project area falls in one of the*	3	3	**5**

	pesticides in close proximity to water bodies.	*most drought prone areas, the region faces severe water crisis and a scarcity of water is observed in the region, most of the plots are rain-fed, hence there is low to zero possibility that any synthetic fertilisers or pesticides used by the farmers will contaminate the natural environment. Additionally it has been observed most of the farmers use a combination of organic fertiliser like neem cake, through the stakeholder awareness sessions and capacity building the farmers will be educated on practicing the more sustainable and agronomical forms of cultivation, especially through the border tree planation drive., the farmers will be encouraged to use organic fertilisers for cultivation hence it is expected that utilisation of synthetic fertiliser will also decline in the project area.*			
	Describe whether project activities result in noise pollution that causes disturbance to the ecosystem. Consider the use of heavy machinery.	*The only heavy machinery used in the project area are tractors for ploughing of the fields only at the time beginning of the plantation period, hence it is unlikely that any of our project interventions could result in noise pollution that causes disturbance to the ecosystem.*	1	1	
Community Health, Safety and Security (IFC #4)					
Community, health, safety, and security	Describe whether project activities could exacerbate existing social and stakeholder conflicts. Consider conflicts with local government or authorities.	*As the local partner has signed a MoA with the Department of Horticulture, Government of Karnataka to implement this project, the possibility of a conflict arising with the local government and authorities is extremely low, all the relevant local government stakeholder gets*	1	1	**4.7**

		informed about the project either through stakeholder awareness sessions or through government letters. The local partner also conducted a state level consultative workshop wherein all the relevant stakeholders participated and they were all capacitated on the technicalities of this project, hence the project activities influence on exacerbation of existing social and stakeholder conflicts is quite limited. Village level farmer awareness sessions are also conducted to spread awareness about the project, which in turn also ensures all the local stakeholders are well aware about the project activities no conflicts take place. The local horticulture assistant officers also inform the farmers about the CCF project, which aids in the farmer awareness procedure, hence the numerators of the data collection agency can always reach out to these officers to resolve conflicts pertaining to the CCF project.			
	Describe whether there is a risk of political instability in the project region or country, such as war and economic crisis. Describe how the project keeps informed on local and national political conditions. Consider communication channels with the government.	*As per the scoping study done on the ground level there is a low risk of political stability in the project area, the state is not undergoing any economic crisis nor is it partaking in any war which limits any chance of political instability in the region. Moreover, the local partner has signed a MoA with the Department of Livelihood, Government of Karnataka, to implement this project across Karnataka, hence the local partner also depends upon the state government to inform about the local political conditions. Moreover, NABCONS has*	1	1	

		a regional office based out of Karnataka as well, hence the local RO also keeps on informing the Corporate office regarding any political instability in the project region.			
	Describe any other activities that could adversely affect the health and safety of participants and local stakeholders. Consider for example exacerbating human-wildlife or human-human conflict, the transmission of diseases, exposure to contaminated water or hazardous substances, excessive vehicle traffic near the local partners office or participating farms, poorly constructed buildings, or strains on the local water supply. Additionally, consider the cultivation or presence of certain tree and plant species that could have negative health impacts, for instance due to their toxicity, addictiveness, psycho-active effects.	*The project area has minimal risk activities that may adversely affect the health and safety of participants and local stakeholders. The Ramanagara district has seen incidences of man-animal conflict, elephant attacks on the plantations have increased. In the last couple of years, it has been observed that at least 10-15 cases of elephant attacks have taken place in the Ramanagara district. Two farmers have been encouraged to install solar electric fencing with the necessary resources or access to relevant schemes to mitigate elephant attacks. Additionally, as part of the border plantation initiative, particularly in the Ramanagara area, specific tree species will be selected to serve as protective border plants. These trees will help safeguard the mango plantations from potential elephant incursions.*	4	3	
Human rights	Describe whether the project could prevent people from fulfilling their economic or social rights as outlined in the Universal Declaration on Human Rights, such as the right to life, the right to self-determination, cultural survival, health,	*The project does not hinder the local community from fulfilling their economic or social rights outlined in the Universal Declaration on Human Rights, such as the right to life, self-determination, cultural survival, health, work, water and adequate standard of living etc. Before onboarding, each farmer is informed about the*	2	2	**6**

	work, water and adequate standard of living.	*different aspects of the project, and after the farmers' full consent, they are on board the project. Moreover, the additional income generated from the CRU auctions will only increase the income portfolio of the farmers which in turn contributes to increase their standard of living, productivity of the plantations etc. ensuring holistic development of the rural community.*			
	Describe whether the project could prevent people from enjoying their procedural rights, for example through exclusion of individuals or groups from participating in decisions affecting them. Consider choice of species planted and farmer payment method.	*The project will formulate a Project Council as a part of the project structure, wherein the Local Partner will take the help of the local government officers to ensure inclusivity in the council formed. The local partner will try to ensure that representatives also comprise women, youth, and localized communities apart from the lead farmers and panchayat representatives; this, in turn, will provide an equitable and non-discriminatory decision-making process. For more information on how women should be included in Project Councils, please see the 'Stakeholder Identification' section in this document.* *Participants have and will continue to be engaged in the project's design. The Department of Horticulture is top-down organized, meaning it is a state-level institution with branches down to the village level. Close to the farmers and part of the Department of Horticulture system are the 'Centre of Excellence for Mango' offices. The Department of Horticulture and their agronomist experts*	2	4	

		interact with farmers via this centre of Excellence. The Centre of Excellence provides input on the variety of species and recommended density to prevent pests and diseases as best as possible, and the farmers ultimately decide upon the variety and density to plant in their fields. *Under the Acorn program, the aim is to bring more biodiversity via border species. To do so, first, Agronomist Experts of the Department and Acorn's Agroforestry Hub will discuss suitable species to propose to farmers. After the first Project Council meeting with farmers in December 2024, feedback from participants on the list of species will be gathered.*			
Food and financial security	Describe whether project activities could exacerbate existing or create new problems in terms of food affordability and accessibility in the project region. Consider the replacement of essential food crops with shade trees.	*The project activities are carefully designed to ensure that they do not exacerbate existing or create new problems related to food affordability and accessibility in the project region. No annual crops or food crops will be replaced with shade trees or border trees as a part of the project. The local partner encourages the plantation of native species of trees and annual crops that are well-adapted to the local environment and support sustainable agricultural practices. By promoting the cultivation of native crops, the project aims to improve the sustainability and resilience of local farming systems. Moreover the additional income from auctioning of the CRUs expands the*	1	3	**3.5**

		purchasing power of the farmers and increases the consumption basket of the farmers. *The community has traditionally practised intercropping of annual crops but has been restricted to only one or two locally cultivated crop varieties. Through the project interventions, especially the training imparted through the Project Councils and stakeholder awareness sessions. The target population will be educated on cultivating a good mix of suitable inter-crops to make more varieties of nutritious foods readily available to the participants' families. By rotating the appropriate annual inter-crops according to the season, the households consume a portion of the produce. This improves the quality and variety of their intake, thereby improving the nutritional security of the project area population.*			
	Describe whether project activities could negatively impact farmer/household income or reinforce existing financial hardship in the project region. Consider expected changes in productivity.	*The project activities will not negatively impact the farmer/household income or reinforce existing financial hardships in the project region. As the project model onboards farmers with existing agroforestry, the farmer will incur no additional costs to participate in this project (farmers will repay planting material through their CRU revenues – see Benefit Sharing Mechanism section in the ADD). Instead, the project is expected to positively impact the farmer's income and increase the household income through the additional income incurred from CRU payments.*	1	4	

Climate vulnerability	Describe whether the project has assessed and understood trends in climate variability in the project area(s) and the vulnerability of communities and local stakeholder groups towards this, in terms of climate change and extreme weather events.	The Local Partner has interacted with the state's Horticulture Department and other local stakeholders to assess the climate vulnerability of the project area and the local community. The region has been experiencing intense heat waves followed by hailstorms at the onset of the monsoon season. Due to the more frequent hailstorms, the productivity of the project's area main cash crop (mango) has decreased over the past few years.	1	4	**8**
	Describe whether climate variability and changes in weather patterns could influence the effectiveness of project activities or increase community exposure to climate extremes and hazards. Consider floods, droughts, wildfires, landslides, cyclones, pest and diseases etc.	*The region has been experiencing severe heat waves in recent years accompanied by an increased frequency of severe hailstorms; in the months when these weather phenomena occur (March – June), it is expected that the speed of farmers' onboarding daily will be reduced.* *To ensure a successful project implementation, selecting appropriate border species is crucial. Firstly, there will be interaction with the agronomists of the Department of Horticulture and then with Acorn's Agroforestry Hub to make a list of suitable species based on - among other things - climate resilience.* *As a follow-up step, this list will be taken to the farmers during the project council planned for December. During this meeting, feedback from farmers will be gathered regarding what they consider to be climate resilient species & also species that have economic interest for the*	4	4	

		farmers. The latter is essential so farmers are as motivated as possible to protect the trees in challenging circumstances. *Finally, through the cooperation with agronomists from the Department of Horticulture, the right timing for planting will be determined.*			
Vulnerable groups	Describe whether the project has identified vulnerable groups or individuals, including people with disabilities, those with lower income and landless groups in the project area, and describe whether the disadvantages they face are well understood by the project.	*The project targets smallholder and marginal farmers as its beneficiaries; hence, low-income people automatically get onboarded onto the project. All the farmers are a part of awareness sessions wherein they communicate their views about the project and the local conditions of the area. These sessions take place before onboarding; block level or taluk level awareness sessions are held in a particular district wherein the farmers are communicated about the CCF project, the sub-contractors, enumerators, department officials and local NABCONS consultants along with farmers, FOPO representatives are a part of this session.*	2	3	**6**
	Describe whether the project could disproportionally affect or discriminate against vulnerable groups. Consider access to project services or benefits and decision-making.	*The project's target group is the smallholder and marginal farmers of the region; the project council representatives will be selected from these beneficiaries, ensuring inclusivity and equitability in the decision-making process. Refer to the Project Council section of this document for more information.*	2	3	
Land Acquisition and Involuntary Resettlement (IFC #5)					

Land tenure conflicts	Describe whether project activities could exacerbate any existing land tenure disputes or lead to land tenure or user rights disputes. Consider conflicts between communities and the state over rights to land and natural resources, or those arising from a change of land ownership.	*A certain percentage of farmers in the project area still have land records in the name of their grandfathers and ancestors, which have not been transferred in the name of the existing beneficiary; hence, the current bifurcation of land is not recorded in the legal document; thus a risk of conflict arising amongst families and communities of the project area regarding land tenure may arise.* *The on-ground team (data collectors, active via the sub-contractor) interact with farmers during farmer engagement and onboarding. During engagement, the data collectors will interact with farmers and screen for potential issues. During farmer onboarding, the data collector will walk around the plot with the farmer. This ensures that the collected plot is according to what the farmers claim as their land. The neighbouring farmer will be collected the same day after the first farmer is collected. If there is any overlap in what the farmer claims to be their plot, it will show in the DCT directly. If so, the data collector can bring both farmers together to decide the actual border collectively.* *In case a situation cannot be solved on the ground, the farmers that experience conflict can be brought together with lead farmers and, when it seems relevant, a representative of the Department (together with the subcontractor) to*	3	3	**9**

		solve the matter, building upon social structures and respected authority of government officials.			
Stakeholder engagement	Has the project identified the challenges that participants and communities face and what they need and value as part of the project intervention.	*The Local Partner has conducted a scoping study of the project area. Some fundamental challenges and the needs faced by the region have been identified and mentioned in this document. This preliminary assessment has provided insights into the local context regarding existing agricultural practices, socio-economic conditions, etc. During the first Project Council meeting to be held right before the CRU payments, the local partner and the local government officials will address the remaining challenges. This forum will bring together project stakeholders, community representatives, and participants to facilitate open dialogue, gather additional feedback, and refine the project plan to better align with the communities' priorities.*	1	3	**2.75**
	Describe whether the project has a plan for establishing project council(s) and actively engaging with local stakeholders, women and vulnerable groups. If such a plan is still in development, please explain.	*In the project region, each Project Council representative will be chosen from the village level; these selected representatives will be Lead farmers, Panchayat members, Self Help Group (SHG) members, etc. The local partner and government officials will try to incorporate SHG women members and women lead farmers as part of the project council. The council formulation will ensure women representation as lead farmers or from the Self-Help Groups. The project will also try*	1	3	

		to identify women-led nurseries in the area and promote them to the beneficiaries.			
	Describe whether the project has informed local stakeholders of the project by providing relevant project information in an accessible format, or describe the plan in place to achieve this.	*During the initial stages of project implementation, Acorn and NABCONS interacted with the Centre of Mango Excellence, wherein farmers were also a part of the stakeholder awareness session, after which the data collectors onboard the farmers in the project area conduct awareness sessions for the farmers, during this session infographics in the local language is shared with the farmer.*	1	2	
	Describe whether the project has a plan in place for ongoing reporting on the project (changes, impacts and outcomes) to local stakeholders? If such a plan is still in development, please explain.	*The Local Partner has signed an MoA with the Horticulture Department of the Government of Karnataka. As a part of this MoA, a monitoring steering body is created at the state level. This body will meet at least twice a year to review the progress of the project; the Department is informed of the ongoing project progress through letters and progress reports, and any changes in the project design implementation are immediately notified to the Department via email.*	1	3	
Grievance mechanism	Describe whether the project has a grievance mechanism in place and how this is accessible to all stakeholders that may be impacted by project intervention?	*Apart from channels like the Project Council, participants can access the NABCONS helpline in Karnataka. The phone number provided directly gives farmers access to the local NABCONS representative in Karnataka. In addition, the NABCONS helpline is also put up in the local government office where the Department of*	1	3	**3**

		Horticulture Officer is present. Farmers can use these channels to report more sensitive matters. *All the grievances of the farmers will be reported at the block level, which in turn will be reported at the district level for settlement of the issues; any issues which could be resolved at the district level will be taken up at the state level by the department officials and the committee members.*			
	Describe whether the project has an external consultant that can resolve grievances that are not suitable or able to be solved by the local partner?	*The local partner has signed an MoA with the Horticulture Department of the Government of Karnataka. As a part of this MoA, a monitoring steering body is created at the state level. This steering committee is constituted under the chairmanship of the Secretary of Horticulture, Government of Karnataka, Chief Operating Officer of NABCONS as its member Secretary and Additional Director of Horticulture(Fruits) as the Joint Member Secretary. Other relevant stakeholders, like the deputy director of the particular districts of the project area, will be members of this body. This body will meet at least twice a year to check on the project's progress and discuss the challenges faced. All the grievances of the farmers will be reported at the district level for settlement of the issues; any issues which could be resolved at the district level will be taken up at the state level by the department officials and the committee members.*	1	3	

		Initially, any grievances will be addressed at the government administration level. If unresolved, NABCONS, in collaboration with the government steering committee, will make every effort to resolve the issues. In the event of further escalation, NABCONS will escalate the matter to the grievance platform provided by Acorn for resolution.			
Economic displacement / economic change	Describe whether project activities can lead to selected shade trees not well planted / density and competition for space, nutrients and water appear between main crops/trees and additional shade trees. Furthermore, as shade tree grows, farmers may not be able to continue normal crops. Therefore farmers have to keep the tree at expense of other economic activities and loss not compensated by carbon credit.	*No shade trees are planted in the farmers' fields as mango's main cash crop does not require shade to boost productivity. Therefore, shade trees must be planted on the borders for climate resilience without interfering with the main cash crop.*	2	4	**8**
Biodiversity Conservation and Sustainable Management of Living Natural Resources (IFC #6)					
Biodiversity, Invasive alien species & Habitat loss	Describe whether project activities could cause adverse impacts on biodiversity (both in areas of high biodiversity value, and outside of these areas) or the functioning of ecosystems. Consider issues such as use of pesticides, construction, fencing, disturbance etc.	*The project is expected to positively impact the agricultural biodiversity of the target region by increasing the resilience towards climate change's effects and biodiversity by adding border crops. In addition, through the Project Council farmer awareness sessions, the farmers will be capacitated to channel a part of the additional income generated from the CRUs to expand the*	2	3	**5**

		species of the plantations and undertake more cultivation.			
	Describe whether the species to be planted under this project could become invasive or result in competition with or damage to native species.	*The project is built on the existing agroforestry model structure wherein the plants already planted by the farmers in the project area are native to the region. To ensure the most appropriate species are chosen as a part of the border tree plantation drive, district-level horticulture officers will also be consulted during the selection process together with Acorn's Agroforestry Hub.* *In addition to the farmer engagement and training programs designed to educate farmers on the risks associated with planting eucalyptus, it is important to note that the Karnataka government has implemented a state-wide ban on the plantation and cultivation of eucalyptus trees. This decision, enforced in 2017, was based on concerns about the species' detrimental environmental impact, particularly its significant depletion of groundwater resources. The ban reflects the government's commitment to addressing these environmental challenges.*	2	4	
	Describe whether the project intervention could lead to habitat degradation, fragmentation or loss, such as through land conversion and preparation.	*The project has a minimal risk of introducing any activity which could lead to habitat degradation through land preparation and conversion, as the aim is to increase biodiversity through border plantation in an existent agroforestry system.*	1	1	

Soil disturbance / erosion	Describe whether project activities could result in significant soil disturbance. Consider improper or excessive land use, tree planting, tillage practices, application of synthetic fertilizers.	*The project has a minimal risk of introducing any activity which could lead to soil disturbance; during the capacity building and stakeholder awareness sessions of the beneficiaries, the farmers are also trained on various agronomical practices of agriculture and sustainable agriculture, such as Integrated Nutrient Management (INM) and Integrated Pest Management (IPM), maintenance of trees, and pruning by Krishi Vigyan Kendra, Department of Horticulture/Agriculture and Centre Excellence of Mango.*	2	3	**6**
Water use and conservation	Describe whether water scarcity in the project area is a risk and whether project activities could exacerbate water scarcity or lead to excessive consumption of water.	*The entire project region belongs to Karnataka's dry and semi-arid zone, wherein red and lateritic soil and the water table are quite low. Kolar district is one of the most drought-prone areas. The region faces a severe water crisis, and water scarcity is observed there. The water table is relatively low in Ramnagara, Chikkaballapur, and Bangalore rural areas, and it has been declining sharply over the years.* *Through the project intervention, planting more trees will be limited to drought-resistant forestry species. In addition, by adding these species, water conservation will be improved during the monsoon season, when high quantities of water are falling in a relatively short time span. Finally, the beneficiaries will be connected to existing*	5	4	**20**

		government schemes to ensure better irrigation facilities for the border tree plantation drive.			
Sustainable use of natural resources	Describe whether the project could lead to the unsustainable use or overexploitation of natural resources.	*The project intervention activities have minimal risk that could lead to the unsustainable use or overexploitation of natural resources. If large-scale expansion is planned, water resources might fall short as water is scarce in the region. For risks relating to water use and conservation, see category above.* *In recent years, the state government has introduced various irrigation schemes focused on micro-irrigation and lift irrigation. These programs primarily target marginal farmers with limited resources, who are most likely to benefit from such initiatives. NABCONS will facilitate connections between these farmers and relevant government departments, ensuring they are nominated as beneficiaries. This will help reduce the strain on natural resources and promote more sustainable water usage in the project areas. Furthermore, through a series of farmer engagement and training sessions, beneficiaries will be equipped with the knowledge and skills necessary to utilize natural resources in a more sustainable manner.*	2	4	**8**
Indigenous peoples (IFC #7)					

Indigenous Peoples	Describe whether the project has sufficiently identified and consulted with Indigenous Peoples in the project region and/or whether the project seeks the FPIC of Indigenous Peoples.	*The project only onboard small-scale, marginal, and vulnerable farmers in the project region. The inhabitants of the project region are not indigenous; the local horticulture authorities have been consulted to identify the target group. As the project onboards the small and marginal farmers, the beneficiaries belong to the local scheduled tribe and scheduled caste communities.*	2	4	**6**
	Describe whether the project could displace or negatively affect Indigenous Peoples with claims to land or territory within the project region. Consider project expansion.	*No, none of the farmer activities will be displaced due to project intervention.*	1	4	
Cultural heritage (IFC #8)					
Cultural heritage	Describe whether the project area is officially designated or proposed as a cultural site, including international and national designations.	*The project area is not officially designated or proposed as a cultural site.*	1	1	**1**
	Describe whether the project site could potentially include important physical cultural resources, including burial sites and monuments, or natural features or resources of cultural significance (e.g. sacred sites and species, ceremonial areas) and whether the project could negatively impact this cultural heritage.	*The project site cannot potentially include important physical and cultural resources.*	1	1	

	Describe whether the project could negatively impact intangible cultural heritage. Consider for example cultural practices, social and cultural norms in relation to land and natural resources.	*The project could not negatively impact the intangible cultural heritage.*	1	1	
Other social and environmental risks					
Other social risks	Describe any other (existing) social/livelihood risks or impacts that the project will (cumulatively) contribute to.	*No other social/livelihood risks or impacts*	1	1	**1**
Other environmental risks	Describe any other (existing) environmental risks or impacts that the project will (cumulatively) contribute to.	*No other (existing) environmental risks or impacts*	1	1	**1**
Overall E&S risk score: 117.5 (Low)					
Carbon reversal risks					
Understanding of the agroforestry project and agroforestry designs	Describe whether information on the agroforestry project been provided to all participants in a culturally appropriate and easy to understand manner, and whether all participants have signed/will sign a participant agreement before CRU generation?	*As mentioned under the Stakeholder Assessment section, informative materials have been translated into Kannada's local language for sensitization and awareness. These are mainly visual with minimal text; the Acorn infographic is used during farmer awareness sessions. The enumerator also uses these pamphlets in the local language before onboarding the farmer further at community/farmer engagement meetings to*	1	3	**5**

		ensure the inclusion of any person who may not be able to read. *Only farmers who agree to participate in the project and sign the participant agreement are onboarded. Each farmer has explained the nuances of the participant agreement in the local language, after which, with their agreement, they are onboarded onto the project, and the farmer keeps a signed copy of the participant agreement with them. Thus, participants will have signed the agreement before the CRU generation.*			
	Describe whether agroforestry design was created by the local partner, local stakeholders and agronomist(s), and is based on local culture, traditions, and markets, species diversity, and environmental and climatic conditions.	*Local partners with key local stakeholders, such as the Department of Horticulture and the government of Karnataka, created the design of the agroforestry systems. The Department has trained agronomists and horticulture staff who understand the local culture, traditions, and market needs well. For the choice of border tree species as part of the border planting drive, recommendations will be taken from the Acorn Agroforestry Hub, checked with the Department of Horticulture, the agronomists for the Krishsi Vigyan Kendras (IKVKs) for its suitability and applicability in the local context. After this, the designs will be validated regarding usability and market access with communities across the districts before finalization.*	2	3	

	Describe the availability and accessibility of agroforestry training by participants and describe whether the training is based on the practices promoted under the project's agroforestry design(s).	*Training programs for participants are integral to the project's success, focusing on the practices promoted under the project's agroforestry designs and planting plans.* *Such training would equip local farmers and community members with the skills needed to implement and maintain agroforestry. NABCONS will work in convergence with the horticulture department and the KVKs to provide training for the existing agroforestry design of the project; in addition to this, NABCONS and the department will also impart training to the farmers on the maintenance and plantation of the border trees as a part of the border tree plantation drive.* *These will be provided to all project farmers and will range from benefits of agroforestry, best practices, maintenance, carbon credits, value addition of NTFP products, business establishment, marketing, fire prevention, etc.*	2	3	
Operational capacity	Describe whether the local partner and sub-contracting parties (if applicable) have experience working with farmers and communities in the project region and implementing agroforestry or other nature-based projects.	*Since its inception in 1963, the Department of Horticulture's mandate has been to work with and for the farmers and communities in Karnataka state. The organization has previously implemented multiple projects under the National Horticulture Mission, National Krishi Sanchai Yojana, and the development and maintenance of farms and nurseries. NABCONS and its parent, NABARD (created in 1982), also have extensive experience working directly with local farmer*	1	3	**3**

		communities, including on agroforestry projects. NABARD, through its flagship Tribal Development project, which mainly emphasizes agroforestry plantations for tribal communities' have implemented many agroforestry projects throughout the state. Their experience would be crucial for effectively implementing agroforestry or other nature-based projects.			
Nursery availability	Describe the connections projects (will) have established with (local) nurseries for the supply of high quality agroforestry tree seedlings and saplings and/or describe the plan in place to source these resources by creating/partner with nurseries.	*The project will tap into the existing government-approved and government-run nurseries in the project area. These nurseries are expected to have the capacity to support the plantation drives and the volume requirements. The department will be consulted, and a sourcing plan will be formulated once the AF-Designs of additional border planting are finalized and approved by all stakeholders, including the farmers.* *After the Department of Horticulture (together with the Acorn Agroforestry's Hub input) has finalized the list of suitable species and distribution channels, the same will be proposed to the farmers in the first Project Council meeting expected to occur in December 2024. Then, the plans for seedling procurement will be drawn up with the target of seedling distribution to farmers in June-July 2025.*	3	4	**12**

Project cash flow	Describe whether the project is able or not to access financing in the years before CRUs are generated or during unforeseen event, and whether this could result in a halt project activities or termination of the project.	*Only if the project requires additional funding for the border tree plantation drive will NABCONS request Acorn to inquire about accessing the SAF finance.* *SAF is the first finance option. However, if SAF will not be available at the necessary point in time, the diverse set of stakeholders connected to this project allow for logical follow-up steps to approach other financers. Such as Rabo Foundation, The Department of Horticulture, and/or NABARD.*	2	4	**8**
Logging risk	Describe whether participants or non-participants could cut down trees present in the project area. Consider the demand for wood for fuel, (temporary) reductions in productivity, and financial hardship in the project area.	*The farmers in the project area are encouraged to maintain the plantations as long as the trees are productive. Moreover the project also targets the farmers who plant mango as the primary tree, ensuring that the tree is not cut down before 35-40 years.* *Although only 5-10% of the farmers depend on wood as a source of fuel, most farmers have access to government schemes through which they have access to gas cylinders as a source of fuel consumption.*	3	4	**12**
Overall carbon reversal risk score[9]: 40 (Low)					

[9] The International Finance Corporation (IFC) Performance Standards (PS) are a set of guidelines designed to help businesses manage environmental and social risks and impacts. These standards are part of IFC's Sustainability Framework and provide a comprehensive approach to sustainable development, including stakeholder engagement and disclosure obligations. *For more details, you can visit the IFC Performance Standards[1]*.

Part N: Monitoring Plan

1. Indicators

1.1 Describe the impacts from the project intervention expected on the mandatory and additional livelihood and environmental indicators. For all indicators, describe the method and frequency in which you will monitoring these. And, if there are any negative impacts expected, describe the relevant mitigation actions.

Table 18. Indicator monitoring plan.

Livelihood / environmental indicator	Impact description	Mitigation action (if negative impact expected)	Monitoring frequency and method	Responsible party
Household Nutrition	*The project is expected to positively impact the target population, with additional income generated from the sale of the Carbon Removal Units. The farmers will be encouraged to use the additional income to expand their consumption basket, as it will improve the purchasing power/capacity of the farmers. There are already existing intercropping practices of annual cropping in the project area; the additional revenue can also be channelized to diversify the crops being grown as annual crops, and the training given in the Project Council will also focus on diversified annual cropping practices.*	*Not applicable.*	*The change in the household nutritional portfolio will be reflected in the farmer survey, which will be conducted every 3 years.*	*The local partner, along with the data collection company, will conduct the farmer surveys*
Agricultural biodiversity	*The project is expected to impact the agricultural biodiversity of the target region positively; through project councils' farmer awareness sessions, the farmers will be capacitated to channel a part of the additional*	*Not applicable.*		

	income generated from the CRUs to expand the species of the plantations and undertake more are into cultivation. The border plantation drive will also be implemented in the project area, which will add to the region's agricultural biodiversity. Native trees will be given priority in the border plantation drives.			
Farmer income	The project is expected to impact the farmers' income portfolio positively; the additional revenue generated from CRU auctions for practising already existing agroforestry will only boost the farmers' income profile.	*Not applicable.*		
Agricultural productivity	*The agricultural productivity is expected to be positively influenced through capacity-building sessions and the additional revenue from CRU generation. It is expected that the farmers will be capacitated to implement agronomical agricultural practices and sustainable farming methods, which will, in turn, boost agricultural productivity.*	*Not applicable.*		

2. Leakage

2.1 If leakage is like to be significant (see Part O below), describe the source of leakage and outline the mitigation action(s) and monitoring plan below.

Table 19. Leakage monitoring plan.

Source of leakage	Mitigation action	Monitoring (frequency and method)	Responsible party
NA	*NA*	*NA*	*NA*

3. Risk

3.1 If medium or high risks were identified in the risk assessment in Part M, describe the risks and outline the mitigation action(s) and monitoring plan for each below.

Table 20. Risk monitoring plan.

Risk category	Identified risk areas or potential negative impacts	Mitigation action	Monitoring (frequency and method)	Responsible party
Biodiversity Conservation and Sustainable Management of Living Natural Resources (IFC #6)	Water use and conservation	*Information regarding different state and central government schemes will be informed to the farmers –e.g. Pradhan Mantri Krishi sinchai Yojana (recharge groundwater, increasing tank storage capacity by renovating and improving reservoirs, reducing water usage through micro irrigation), Krishi Bhagya Scheme (helps farmers make their farms more sustainable by harvesting rainwater and using it for irrigation), etc. through the farmer awareness sessions or the Project Council meetings.*	The Department of Horticulture, as the project's sub-contractor and implementing partner, is a very respected and empowered entity in the region to monitor these district-overarching challenges for (rural) livelihood. Being able to tap into the monitoring system of the state, via the Department Of Horticulture, is a significant strength of this project set up.	Department of Horticulture

Part O: Technical Specifications

1. Applicability Conditions

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

Table 21. Applicability conditions.

	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	Input and evidence provided by agroforestry design of an agronomist/expert
B	The Project Area must not have been cleared of native vegetation within 5 years of the start of the Project Intervention.	Yes	Initially verbal check by Local Partner with eligibility checklist and carbon baseline. After receiving polygon information T-5 check is further confirmed by Remote Sensing measurements
C	Individual plots within the Project Area are between 0.1 and 10 ha and are not on wetlands.	Yes	Initial verbal commitment by Local Partner with eligibility checklist. Followed and confirmed by polygon and land cover check performed by remote sensing measurements.
D	All land within the Project Area is either cropland or degraded land under the Baseline Scenario	Yes	Initial verbal explanation in carbon baseline and was further supported and confirmed by the land cover check performed by remote sensing measurements.
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 confirmed via project baseline agricultural biodiversity survey. To be reconfirmed in the new round of farmer surveys in 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 and included in agroforestry design
G	Heavy machinery must not be used for site preparation or management.	Yes	Covered in Local Partner contract and included in agroforestry design
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 and included in agroforestry design
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;	Yes	Initial Organic soil check via SoilGrid indicates it is not on high organic soils, with the following results thickness details: >100cm, SOC content less than 20%, and clay of <50%

	- Land which, in the baseline, is subjected to land-use and management practices and receives inputs listed in the Acorn Methodology		

2. Adjustment Factors

Table 24 below gives an overview of the adjustment factors applied for this specific project.

Table 22. Adjustment factors.

AdjF	Factor (%)	Reasoning
Leakage	*0%*	*See reasoning in leakage section below.*
Uncertainty	*13%*	*Based on model version 20250123_v1.*
Pre-project	*25%*	*Based on model version 20250123_v1.*

3. Leakage Assessment

I. Describe the potential leakage situation of the project over its lifetime, by addressing the following topics:

a. The project's impact on the cash crops productivity in the first 5 years of project implementation and over its lifetime (i.e., loss in productivity, loss or change of crops, etc.);

The project area consists of existing plantations of horticulture and timber border trees on smallholder lands planted in the last 5 years. The project intervention refers to the implementation and promotion of agroforestry. There is no expected loss in productivity or loss/change of crops in the first 5 years of the project implementation. Over the lifetime, the project intervention of training on better mango cultivation practices and productivity benefits of agroforestry is expected to enhance yield/productivity.

b. Any negative financial impacts expected from the project that could result in farmers cutting down trees outside of their farms (i.e., sourcing timber in nearby forest area because harvesting is not part of the project design);

The farmers will be incentivised to maintain their trees through the finance from the sale of the CRUs.

c. Complete Table 25 below based on the leakage calculation outlined in the Acorn Methodology.

Table 23. 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%	*Mango*	Between 80-90%	No shift

II. Describe the land between farms and a maximum of 5 km outside of the project area in Table 26 (i.e. crop land, degraded land, forest).

Table 24. Land cover assessment.

Shrub land	Grass land	Crop land	Built-up	Bare/Sparse vegetation	Herbaceous wetland	Tree cover <60%	Tree cover >60%
5,21	2,14	88,13	2,07	0,85	0,0	1,21	1,50

III. List any farmer activities, performed before the project implementation, that will be displaced (replaced or moved somewhere else) as a result of project interventions.

Table 25. Displaced farmer activities.

Description of the displaced farmer activity	Replaced or moved?	If moved, where will the displaced activity take place.
No farmer activity will be displaced as a result of project intervention.	*NA*	*NA*

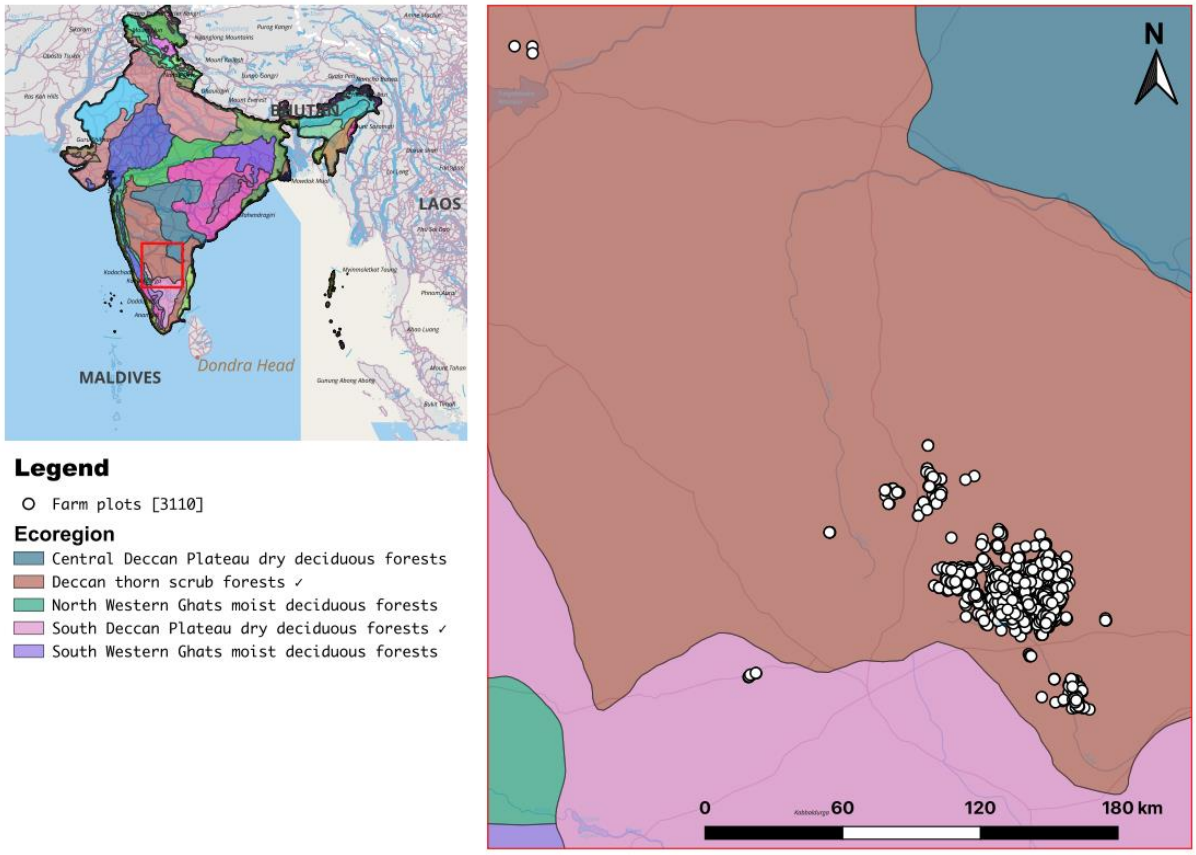
4. Root-Shoot

I. Complete the table below based on the root-shoot calculation outlined in the Acorn Methodology.

Table 26. Root-shoot ratio.

Ratio	Reasoning
0.32	Applied the default value for the calculations as alternative literature is very limited.

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



Annex 2: Sub-contractor assessment

Provided. Concealed for data protection purposes

Annex 3: Evidence of participation

Provided. Concealed for data protection purposes.

Annex 4: Land tenure documentation (sample-based)

The Survey Number and Hissa Number (sub-number of survey) is unique to each farmer. The Survey Number can be used to map out the land tenure document of each farmer from the Government of Karnataka website. The Land Tenure Document gives the owners details along with area and other details.

The image below is an example of the digital Patta Book from the official website of Department of Revenue and Land Records, Government of Karnataka.

Copy of Account / Patta Book

Account Number : 43

District :	Kolar	Taluk:	Kolar	Hobli	Kasaba	Village :	Seepur

Order no	Survey and hissa no	Name of owner and father	Area	shape	local cali()	health care	Vidya Kara	Total
1	111/*/1	K. Chikkamunishami	1.21.08.00	2.27	1.14	0.34	0.23	3.98
		Total	1.21.08.00	2.27	1.14	0.34	0.23	3.98

Location: Kolar	Revenue Inspectors / Village Accountants
Date : 5/17/2023	signature

Amount :15/-
Certified copy

Annex 5: Evidence of communication with the authorities responsible for land management and/or greenhouse gas emissions

Provided. Concealed for data protection purposes.

Annex 6: Theory of change

Please see below the finalized version of the theory of change that has been created with local stakeholders.

Problem statement
The project targets smallholder and marginalised farmers, who primarily have only a single source of income – cultivation of horticulture trees or annual crops. With the vagaries of monsoons and the increasing impact of climate change, drought and lack of water security have been observed in the target districts surrounding Bengaluru. This, in turn, results in crop failure, poor land productivity and an overall declining trend in agricultural production has been observed. Hence, the food security of these farmers is poor, and most of them rely on subsidies from the government. They have a very restricted income and consumption basket due to no alternative source of income or no stable income while practising the same traditional way of agriculture. In addition to the lack of access to resources, their lack of information exacerbates their vulnerability to climate change and perpetuates socio-economic disparities in the region. As part of the ground truthing, it was also observed that the project area lacked the density of border tree species initially laid out in the agroforestry designs. This, in turn, leads to relatively lower species diversity at the farm level and, thereby, sub-optimal soil health and yields as opposed to farms with sound agroforestry systems and species mix. The project aims to address this by promoting additional border planting by the farmers.

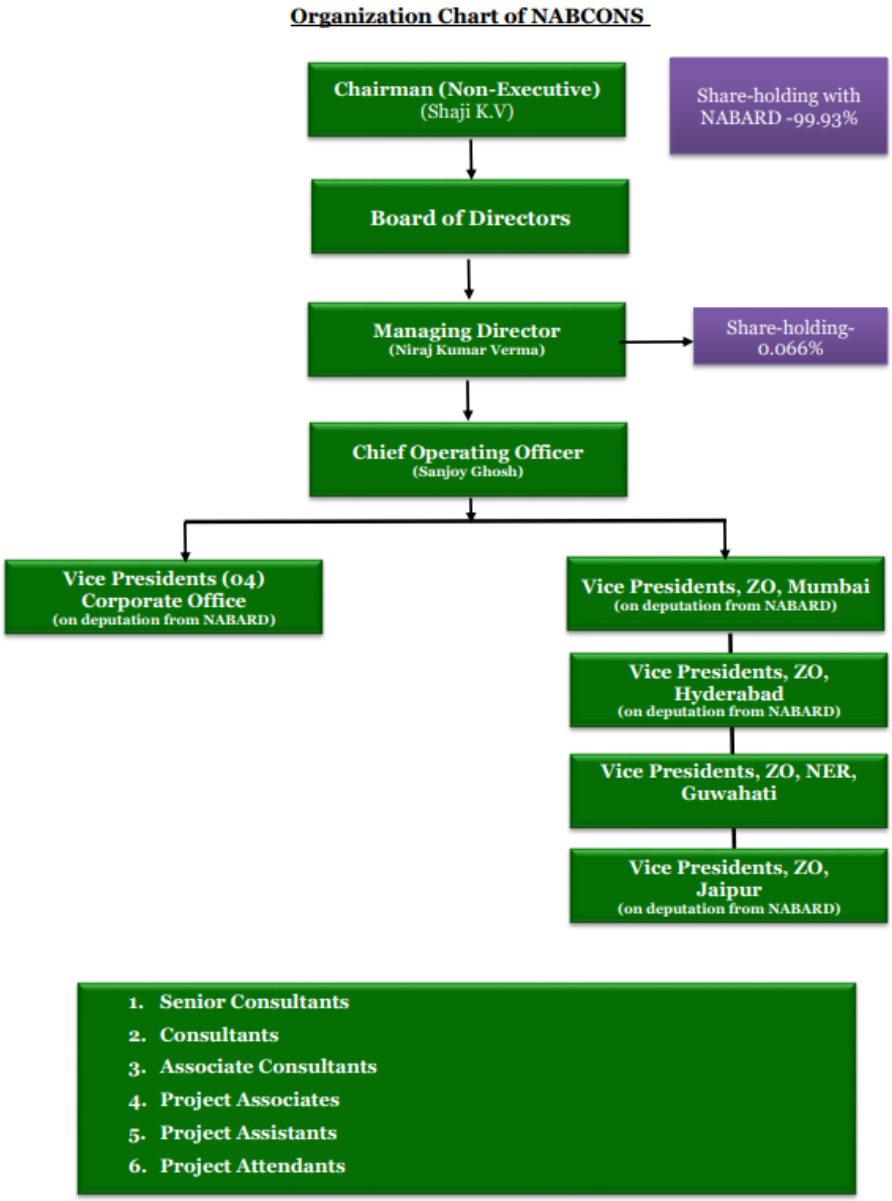
Intended Outcomes	**Description**
Livelihood Benefit	*The project will enable the farmers to earn an additional source of income apart from the primary income obtained from fruit harvesting. Firstly, this will enhance their income security. Secondly, this income from carbon finance will enable them to invest in better-quality saplings, implement more agronomical agricultural practices, and increase the variety of species planted in their plots.*
Ecosystem Benefit	*Agroforestry systems will promote soil fertility restoration and water conservation by providing incentives for maintaining trees, which in turn will encourage the recharge of groundwater and enhance biodiversity in the project region.*
Output 1	*Expansion in the income basket, empowerment and institutionalisation of farmers, and enhancement of the biodiversity in the project region.*
Activity 1.1	*Sale of Carbon Removal Units and 80% of the revenues being transferred to the farmers.* *The project will transfer 80 % (per the guidelines in the Acorn Framework) of the CRU revenue to the farmers. During the project council (scheduled for December 2024), a Benefit Sharing Mechanism will be decided upon. Based on that, the exact share to be distributed amongst farmers as in-kind and/or cash (amount on the bank account) will be determined. It is expected that some part will be an in-kind payout, as investment into border species.*

Activity 1.2	*Project councils and group consensus activities for engagement and discussion about the plantation of boundary trees, introducing multiple species of trees and annual crops converging with the local departments, and leveraging governmental schemes to provide saplings.*
Output 2	*Adoption of better agronomical practices.*
Activity 2.1	*Training and capacity-building sessions.*
Activity 2.2	*Promoting agroforestry practices incorporating native tree species and intercropping techniques based on traditional cultivation and climate-smart practices.*
Activity 2.3	*Enhancing the agroforestry designs by converging with the local Krishi Vigyan Kendra (KVK) departments.*
Activity 2.4	*Generating farmer awareness on the need for more species diversity at the farm level and organising a border tree planting drive .*
Assumptions	
• *An existing baseline awareness amongst the farmers regarding agroforestry and intercropping;* • *Strengthening the social capital and motivation towards collective action;* • *Enabling policy and institutional environment.*	

Annex 7: Local partner and farmer business case

Provided. Concealed for data protection purposes.

Annex 8: Organisation structure



Annex 9: Exclusion List

Excluded Activity (prohibited activity)	Answer - Description
Any project activities leading to or requiring the destruction of critical habitat, or any forestry project which does not implement a plan for improvement and/or sustainable management.	*Yes*
Any activity which could be associated with the significant impairment of areas particularly worthy of protection of cultural heritage (without adequate compensation in accordance with international standards).	*Yes*
Trade in animals, plants or any natural products not complying with the provisions of the CITES/Washington convention.	*Yes*
Large-scale commercial logging operations for use in primary tropical moist forest.	*Yes*
Production or trade in wood or other forestry products other than from sustainably managed forests.	*Yes*
Exploitation of diamond mines and marketing of diamonds where the host country has not adhered to the Kimberley Process.	*Yes*
Activities involving harmful or exploitative forms of forced labour or harmful child labour.	*Yes*
Projects that include involuntary physical displacement and/or forced eviction.	*Yes*
Production or activities that encroach on lands owned, or claimed or occupied by Indigenous Peoples, without full documented consent of such peoples.	*Yes*
Production, use, sale or trade of toxic or dangerous materials, wildlife or products regulated under CITES, including all products that are banned or are being progressively phased out internationally	*Yes*
Production or trade of arms, ammunition, weaponry, controversial weapons, or components thereof (e.g., nuclear weapons and radioactive ammunition, biological and chemical weapons of mass destruction, cluster bombs, anti -personnel mines, enriched uranium).	*Yes*
Procurement and use of firearms.	*Yes*
Provision of finances to military institutions involved in conservation or security activities.	*Yes*
Production or trade of strong alcohol intended for human consumption or other alcoholic beverages (excluding beer and wine).	*Yes*
Production or trade of drugs.	*Yes*
Gambling, gaming establishments, casinos or any equivalent enterprises and undertaking.	*Yes*
Any trade related to pornography or prostitution.	*Yes*
Production or trade in radioactive material. This does not apply to the procurement of medical equipment, quality control equipment or other application for which the radioactive source is insignificant and/or adequately shielded.	*Yes*
Production or trade in unbound asbestos. This does not apply to the purchase or use of cement linings with bound asbestos and an asbestos content of less than 20%.	*Yes*
Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals. Hazardous chemicals include gasoline, kerosene, and other petroleum products.	*Yes*

Transboundary trade in wastes, except for those accepted by the Basel Convention and its underlying regulations.	*Yes*
Any activity leading to an irreversible modification or significant displacement of an element of culturally critical heritage.	*Yes*
Production and distribution, or investment in, media that are racist, antidemocratic or that advocate discrimination against a part of the population.	*Yes*
Projects involving the planting or introduction of species that are invasive in a certain ecosystem or geographical region.	*Yes*
Projects that increase the dependency of primary participants and other stakeholders on fossil fuels.	*Yes*

Annex 10: Agroforestry system design

Provided separately.

Annex 11: Certificate of registration

Provided. Concealed for data protection purposes.

Annex 12: Local partner policies

Provided separately.

Annex 13: Benefit sharing mechanism

This data is still being worked on by the project and is not yet available at the date of submission. To be provided.

Annex 14: Participant agreement

Provided. Concealed for data protection purposes.

Annex 15: (Local) Partnership agreement

Provided. Concealed for data protection purposes.