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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IORA Ecological Solutions Acorn Design Document

India | Meghalaya

Date of Submission: 02 – 2025

Part A: Project Summary

Question	General Information	Answer
1	**Local partner contact** (name, position, email, address, and website link)	Iora Ecological Solutions Pvt. Ltd. (Iora) *Provided. Concealed for data protection purposes*. *www.ioraecological.com*
2	**Project location(s) - country, region & district** (attach map in Annex 1)	**Country:** India **State:** Meghalaya **Region**: Khasi-Jaintia Hills and Garo Hills **Districts:** *Khasi-Jaintia Hills*: East Khasi Hills, West Khasi Hills South West Khasi Hills, Eastern West Khasi Hills, Ri-Bhoi, East Jaintia Hills, West Jaintia Hills *Garo Hills*: East Garo Hills, West Garo Hills, South Garo Hills, North Garo Hills, South West Garo Hills
3	**If multiple project areas exist, please explain how these locations/farmers differ from each other**	**Farmer characteristics- (Ethnicities and Culture)** Khasi-Jaintia Hills: Predominantly inhabited by the Khasi and Jaintia tribes. The Khasi people follow a matrilineal system where lineage and inheritance are traced through the mother. Their culture includes traditional dances, festivals and a strong community bond. Garo Hills: Mainly inhabited by the Garo tribe, who also follow a matrilineal system. The Garos have rich traditions, including the Wangala festival, which is a harvest festival. They mostly practice shifting cultivation (jhum) and have a strong connection to their land and forests.
		Ecosystem conditions: *Climate:* Khasi-Jaintia Hills: Characterized by heavy rainfall. The climate is generally cool and humid. Garo Hills: Also receives substantial rainfall but is slightly warmer compared to the Khasi-Jaintia Hills. The region has a tropical climate with distinct wet and dry seasons. Both regions rely heavily on rainfed agriculture due to the high rainfall they receive. *Natural Risks:* Khasi-Jaintia Hills: Prone to landslides and soil erosion due to heavy rainfall and hilly terrain.

		Garo Hills: Faces risks from floods and soil erosion, especially in areas practicing shifting cultivation. *Elevation:* Khasi-Jaintia Hills has a high elevation and Garo Hills *has* Lower elevation compared to the Khasi-Jaintia Hills, with rolling hills and valleys. Both regions are hilly and forested, with rich biodiversity. *Soil Conditions:* *Khasi-Jaintia Hills:* Consist of red and lateritic soils, which are fertile but prone to erosion. *Garo Hills:* Similar soil conditions but with more areas affected by shifting cultivation. Water Availability is abundant due to high rainfall, but water management practices are varying. *Native Plants, Shrubs, Trees, and Wildlife:* *Khasi-Jaintia Hills:* Rich in biodiversity with species like the pitcher plant, orchids, and a variety of ferns. Wildlife includes species like the clouded leopard and various bird species. *Garo Hills:* Also rich in biodiversity, with tropical forests housing species like elephants, tigers, and a variety of birds and reptiles.
4	**Ecoregion(s)**	Meghalaya Subtropical Forest
5	**Since what year has the local partner been active in the project area(s)?**	Iora (established in 2009) has been active in the project area since 2012.
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)	Meghalaya Basin Development Authority (MBDA) will be the sub-contracting party responsible for: - Supporting Iora in the implementation of the project. The organisation has long standing collaborations with communities across Meghalaya and will facilitate the on-ground activities. Providing support for development and /or procurement of saplings, plantation activities, enterprise development, and community mobilisation.
7	**Main cash crop(s)** (if multiple project areas exist, describe for each project area)	Turmeric, maize, ginger, banana, paddy (rice), pineapple, potato.
8	**Number of existing farmer participants** (if multiple project areas exist, estimate the number of farmers in each)	50,000 Ha of existing agroforestry (approximately 25 000 farmers).

9	**Potential number of additional participants** (if multiple project areas exist, estimate the number of farmers in each)	100,000 Ha of new agroforestry to be on-boarded which will be approximately 75 000 farmers. This will include both individual and community lands (about 30%). Community land will be enrolled as part of the scaling plan and most likely to be included under version 2.0 of the methodology.
10	**Estimated average plot size per existing farmer (ha)**	2-3 ha (individual land) 5-50 ha (community land)
11	**Total size of the project area(s) (ha)**	9461 ha
12	**Native language(s) spoken in the project area** (if multiple project areas exist, list the language in each area)	Khasi and Garo
13	**Is this project based on communal land or individual smallholder farmer land? If communal, describe the community.**	Individual small holder farmer land and community 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)	Smallholder farmers are the major stakeholder of this project. Consultation meetings are being conducted across the state by the Iora and MBDA teams. These are convened by the village headman for community sensitization and awareness. The first community sensitization meet was conducted on December 21, 2023, in Khasi Hills and the second meet on January 15, 2024 in Garo Hills. In total 15 large (district level) with up to a 100 participants were held across the state, along with several village level meetings with 20-30 participants. Once the farmers are onboarded, there will be a minimum of 1 meeting every 6 months to get feedback regarding project implementation and challenges (Project Council). Participants are residents of a village or a cluster of small villages. Therefore, multiple village level meetings are also being held regularly, which are more informal in nature. IORA and MBDA will leverage this by ensuring participation of the on-ground IORA team. The design for agroforestry has been finalized and approved by the landowners. A workshop was held to develop the AF design for new plantations. This was attended by key govt. depts, academic institutions and community representatives. It provided valuable information regarding the best combinations of

		species and crops for different regions in the state, along with an overview of farmer preferences. This information was used to update existing AF designs that were developed previously by MBDA through extensive community consultations for their ongoing JICA project. In addition to this, Iora also collected data from the ground about species mix of existing plantations and carried out a survey of farmer preferences. All this information has helped develop the 9 AF designs that have been finalised. Photos of some community meetings are attached below.
15	**List the topics that have been raised with farmers/communities to seek their input on the project**	List of topics discussed with farmers and communities: 1. Consent to using the land for the purpose of long term Agroforestry 2. Preferred agroforestry design and species, and crops they want to grow 3. Monetary support required as initial investment 4. Regular participation in village meetings, training or workshops for capacity building, one-to-one engagement with data collectors 5. Long term maintenance of the trees 6. Expected benefits from long term agroforestry 7. Challenges faced by them Other support that the project can provide, such as value chain development, etc.
16	**Provide a general description of current socioeconomic conditions in the project area(s)** (including marginalised/minority groups, 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.)	Meghalaya, located in northeastern India, is home to approximately 2.97 million people, with a remarkable tribal majority, comprising 86.15% of the population. The three primary tribes—Khasi (48%), Garo, and Jaintia —dominate the demographic landscape. In terms of religion, Christianity is predominant at 74.59%, while Hindus make up 11.53% and Muslims 4.40% of the population. In the state, 49.8% of the population is female. District-wise per capita income varies, with East Khasi Hills recording figures ranging from INR 21,084 to 31,202, and Jaintia Hills ranging between INR 19,932 and 26,015 across different years. However, despite these figures, 27.79% of the population remains below the poverty line. Addressing education gaps is also vital, with a literacy rate of 74.43%, with male literacy at 75.95% and female at 72.89%, and a varied Gross Enrolment Rate (GER) at different education levels. Meghalaya is a matrilineal society where traditionally the youngest daughter inherits land and ownership remains in the name of the women. The nokma's (village heads) in Garo hills are also women, and have traditionally had a vital role, being responsible for distributing land to villagers and

		providing directions according to Garo customary laws. Additionally, as with other Indigenous communities, women in Meghalaya as well have traditionally been custodians of natural resources. Here, while both women and men are actively involved in agriculture and farming activities, it is women who are known to spend more time in the woods and are the main providers of fuelwood, food, medicinal and Non-Timber Forest Products.
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 state of Meghalaya has been under pressure of degradation/ deforestation. From 2002 to 2022 the state lost around 48.1 thousand Ha of primary forest. Some of the major drivers of degradation/ deforestation: 1. Proximate causes - Agricultural expansion - Logging - Mining 2. Underlying causes - Population growth - Poverty - Weak governance - Hilly terrain 3. Other causes - Infrastructural and industrial development - Climate change However, this deforestation is not particularly seen at specific project areas due to the nature of the relationship Meghalaya has with nature. The people of Meghalaya are known to respect nature and appreciate the benefits they receive from the greenery in the State, although the clearing of forests has only occurred for the purposes of subsistence. Moreover, two separate projects being implemented by MBDA – MCLLMP (World Bank funded) and MegLife (JICA funded) – have agroforestry plantations and have been successful in engaging farmers and carrying out plantations. However, they have seen challenges with survival of these beyond the initial 3-4 years. These projects focussed on communicating benefits of agroforestry and working with communities to implement different resilience and livelihood related activities. The same best practices and learnings for farmer engagement can be implemented to this project. However, due to the long term nature of returns, and minimal returns in the short and intermediate terms, often these plantations have seen very low survival beyond 3-4 years. Therefore, an incentive is required to make these plantations survive in the long term. To do so, carbon finance is sought. The added benefit of CRUs will help to further secure the plantations and provide farmers with an incentive to maintain them.
18	**Describe the type of land use that best represents**	The state of Meghalaya, much like other parts of the North East of India, has witnessed degradation, in forest and

	the project area before intervention (For example, existing agroforestry/fallow/tree plantation/monoculture perennial crop/monoculture annual crop/mixed crops /marginal land)	agricultural lands. A major factor for land degradation is the practice of shifting cultivation (*Jhum*), which is done for the purpose of growing food. This is an age-old practice, which has not become unsustainable because the cycle of slash and burn has reduced from 22-25 years to 5-7 years. Additionally, the region is also facing the impacts of other anthropogenic pressures and climate change. According to studies carried out by Government of India. About 25% of the state is undergoing land degradation. Providing alternate forms of income and food security can arrest this trend. Our project will focus majorly on agricultural lands, with an attempt to bring a large part of it under tree cover. This will help address soil erosion, water run-off, and enhance site quality, along with long term livelihood of communities
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.	Land tenure among participants is arranged in accordance with the traditional land systems. Furthermore, each of the ethnic groups has their own traditional systems of land management that captures data including name, address, area, and signature. The system of land holding is governed by an Order of the Supreme Court of India, vesting power in the communities to distribute land. Examples of land holding included in annexes.
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.	Iora is partnering this project with the MDBA (Meghalaya Basin Development Authority) who will be the subcontracting party. The MBDA is a government institution in India.
	Theory of Change (see Annex 6)	
21	**Describe the target community of this project** (e.g. gender, age, marginalised groups, location, other stakeholders)	Tribal communities are the most socio-economically disadvantaged sections who would traditionally practice *Jhum* or shifting cultivation on community-held land (described above). Over time, these landscapes have degraded and are in critical condition. People do not have the capacity nor knowledge to restore these land. In this project, women and youth will play a dominant role in ensuring the success and longevity of the interventions. They are involved as Village Community Resource (VCF) (called Agroforestry Carbon Associates – ACAs in this project) persons and legally, the land is owned by the

		women in the household. VCFs are community representatives that have been trained by MBDA through their 2 programmes on different activities related to NRM and M&E. For this project, 60 ACAs will be equipped to conduct onboarding, surveys, and monitoring of Acorns project activities. They will be trained as expert trainers for several aspects of farmer training. These ACAs will be engaged with the project for the next 5 years, with some of them continuing longer, depending on project need. Iora will work with them to build their capacities as well, helping them to find employment opportunities beyond the 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.)	Some of the major challenge faced by the agricultural communities of Meghalaya are • Climate change • Lack of capital and financial accessibility • Lack of access to market for agricultural produce • Land degradation • Reducing crop productivity • Unproductive barren land • Draughts. Although the wettest place of Asia, due to deforestation it is difficult to let rain sink into the ground, which is also leading to soil erosion. • Forrest Fires • Access to fencing, when planting new plantation
23	**Describe the project's aims and objectives** (e.g. the desired change the local partner wants to achieve)	Some of the major objectives of the project are: • Promote agroforestry in Meghalaya. • Provide sustainable and green livelihood opportunities to communities of Meghalaya. • Incentivise enhancement of forests and agricultural lands in Meghalaya for conservation of biodiversity and ecosystem services. • Establish Meghalaya as a pioneer in India in the development of Jurisdictional Carbon Finance instruments that enhance green cover and community livelihoods. Iora and MBDA will implement this across the state for agroforestry with Acorn and for REDD+ with other partners. Additionally potential overlap of projects will be closely monitored. • Enhance resilience of communities and ecosystems to climate change. • Recognise and utilise traditional knowledge of communities for conservation of forest resources. • Contribute to India's efforts for reducing GHG emissions through sustainable forest management activities. • Contribute towards achieving Sustainable Development Goals (SDGs) – 1, 2, 5, 8, 13 and 15. • Contribute to a local ecosystem that retains rain for ground water and springs • Rejuvenate unproductive barren land

		• Preventing forest fires by training and community mobilization
24	**Describe how the project expects to achieve the desired change(s) described in the row above** (e.g. project interventions and activities undertaken)	The project strives to achieve these changes through: • Promotion of agroforestry practices that 1) incorporate native tree species and intercropping techniques that are based on a combination of traditional cultivation and climate smart practices; or 2) plant native forestry species on unproductive barren land, taken care of by the communities, providing a local ecosystem suitable to maintain production of annual crops in lower lands. Also, planting trees will rejuvenate the barren land and allow for food production once rejuvenated, in times of a growing population and shortage of productive land • Community awareness on benefits and co-benefits of agroforestry, advantages of being a part of the project, carbon credits, etc. • Providing resource accessibility by developing a nursery for saplings with pre-financing from Acorn which will be supplied to the landowners at minimum cost as well as other farming input such as tools, organic inputs, material for fencing, planting and maintenance costs • Income enhancement through enterprise development that is micro-scale processing industries that can process the fruit, leaves and other non-timber produce from the agroforestry plantations. Processing can take place at either existing or new industries, depending on the requirements. and capacity building, along with value addition supply chains and market linkages. Iora will leverage financing from other resources for establishing cluster level micro-processing units. Additionally they will help establish farmer producer organisations (FPOs) and self-help groups (SHGs) who will manage these units in an entrepreneurial manner. After initial handholding, they will be given to the FPOs/SHGs to manage and run. As part of the handholding, Iora will train them on value addition of various products, and how to manage a business, along with supporting them with branding and marketing of products and developing market linkages. • Preventing forest fires by training on fire-preventing measures and mobilizing the community to take on the fire prevention activities such as: leaves and other dead biomass along lines, creating Fire Lines where the fire cannot spread
25	**Describe the conditions/resources necessary to undertake each expected activity (see row above) to**	1. Build nurseries in a cluster of villages to generate quality saplings 2. Consistent farmer engagement efforts consist of regular meetings at the village-level and site level, training in agroforestry benefits and maintenance,

	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)	Agroforestry for climate change, convening Project Council meetings for updates, and so on to ensure a close connect with framers. 3. Pre-financing from Acorn of agricultural inputs to encourage the uptake of agroforestry 4. Smooth flow of information and resources (clear documentation in native languages, farmer acceptance and trust, monitoring of farmer understanding etc).
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** Implementation of agroforestry practices in degraded land areas will increase area under cultivation. With the carbon income, farmers will also be able to purchase more food for their household. *AF-Design with intercropping:* the project will include fruit trees, which could be both a source of income and nutrition for the family. Crops will be grown in between the tree spacing. These include turmeric, maize, ginger, pineapple, etc. This will result in improved production and farmer incomes, helping to improve the nutritional and food security of communities. *AF-Desing with community lands with forestry species for rejuvenation*: The forestry species will contribute to a local ecosystem that allows to retain rain water, helping improve soil health and reduce erosion. This is much needed to keep on producing the annual crops of the farming community, in times of climate change. Apart from rice, farmers mainly grow the annual crops for home consumption or local markets. Over time the forestry species will also contribute to rejuvenation of the currently barren land, allowing the communities to use the lands to produce food crops. Due to a growing population, communities are already experiencing land-shortage and these fields will be required for food production.
		Farmer financial state Through the creation of sustainable green livelihoods and utilization of Carbon Finance, the project provides opportunities for work and economic growth, aligning with the goal of promoting decent work and sustainable economic development. Farmers will receive additional and diversified source of income from the CRU revenue and revenue from the timber species when harvested(which will only occur after 50 years), along with benefits from value chains that will be developed for NTFPs and other products.
		Gender equality The project ensures equal opportunities for all individuals, promoting gender equality across all levels of project management and in project activities, including livelihood generation for the communities involved. This will begin right at the start with gender balance encouraged while onboarding data collectors. Additionally, as Meghalaya is a

		matrilineal society and land owners are women, there already exists gender parity in society in the State. To further empower the women, Iora will ensure that there is gender balance in all capacity building activities carried out by the project. They will also ensure that when establishing micro enterprises, equal opportunities are provided to women, and local entrepreneurs include both men and women. The ACAs will have regular contact with project farmers they are responsible for. Through these close relationships they will identify farmers who will be interested in taking on the entrepreneurial role, and who will be able to maintain it in a sustained manner post project completion. This will be assessed on multiple criteria ranging from capability to knowledge, leadership skills, etc. During this process Iora will ensure that there is gender balance when selecting farmers. Being a matrilineal society, women do have property and decision making rights, however men are equally involved in major decisions. The males also play a huge role in society, advising the women household heads in all major decision making. Iora has experienced that the decision to join the projects is taken together, with majority of those joining taking a few days to discuss with family before agreeing to the terms. Additionally, agriculture activities are carried out by both men and women in Meghalaya, with women being more involved in forest related activities.
		Farmer access to resources Livelihood development and creation of green income generating activities from NTFPs (Non Timber Forest Produce is tree produce such as leaves, flowers, seeds that can be processed and marketed) and their value chains is an integral part of the proposed project. Farmers will be given planting material, and fencing if required, along with training on agroforestry and its related components. Additionally, as mentioned above, the project will actively work to establish micro enterprises at a cluster level, which will include training on value addition, marketing, etc. Regarding the barren unproductive community lands to-be planted with forestry species: these trees contribute to rejuvenating barren land, increasing community's access to productive land.

		Biodiversity on farms Adopting robust agroforestry models will help attract animals, birds, and insects, which will enrich the local biodiversity. Agroforestry systems help in soil and moisture conservation which in turn supports soil microbial diversity and crop productivity. The project will also ensure that a healthy mix of native species of trees are planted, and farmers will be trained on the ideal combination of crops to be grown with the trees that they plant.
	The Agroforestry System	
27	**How would you define an agroforestry system?**	An agroforestry system is a system in which horticulture species, timber species and annual crops are grown together. It can also be a system that is implemented to rejuvenate unproductive land, allowing it to be suitable for crop production at a later stage.
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)	Project involves 50,000 Ha of existing agroforestry, with onboarding beginning in January 2024, and 100,000Ha of new agroforestry across 2024 (1,000Ha), 2025 (20,000Ha), 2026 (40,000Ha) and 2027 (39,000Ha).
29	**Type of trees that have/will be planted under agroforestry scheme** (shade, fruit-bearing, medicinal)	Agroforestry models have been developed for the new agroforestry plantations. Below are some examples of the major species that have been grown in the existing agroforestry and have also been included in the new models. Timber/Forestry species (some examples): 1. *Tectona grandis* 2. *Gmelina arborea* 3. *Toona ciliata* 4. *Duabanga grandiflora* Fruit species (some examples): 1. *Citrus limon* 2. *Citrus sinensis* 3. *Psidium guajava* 4. *Prunus domestica*
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?"**	A robust monitoring system will be implemented on the ground that will include periodical monitoring of the existing plantations, to be carried out jointly by IORA and MBDA teams on the ground. A permanent local IORA team will ensure constant and consistent coordination with data collectors and village representatives. Project pre financing also includes maintenance costs for the first three years, and this will ensure that trees are able to establish and become healthy

		during this critical period. The team will also train farmers on maintenance of their farmers and prepare appropriate awareness material for the same, along with remaining in contact with them to ensure they are aware of the benefits they receive from the plantations in addition to the CRUs. In addition, for plantations before Acorn and for trees planted during the project, farmers have been trained and mobilized to take forest fire preventive measures. For new plantations, where needed the project will provide fencing to ensure livestock cannot intervene with tree growth.
31	**How do the agroforestry practices in this project differ to current farming practices in the region?**	Majority of the farming community in Meghalaya are practicing conventional agricultural practices and existing agroforestry is small, fragmented, and commercially non-viable. The adoption of this project will result in large scale agroforestry and development of market linkages.
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)	No, harvesting is not part of the agroforestry design. The harvest cycles vary according to the species, and these have been accounted for in the agroforestry design. The wood of the forestry species included in the AF design will have economic value before they reach the age of 50 years. For instance: current practices are to timber-harvest a tree at the age of twenty-five. But, due to this project it is highly unlikely that the species will be cut before the age of 50 as there are three strong incentive to maintain the tree: 1) Over 30 years, the trees are expected to generate as much CRU Revenue as the market value of a 35y old timber tree. As a result, CRU revenue provides a financial buffer, lowering the urgency for a farmer to harvest and sell the 35y old tree. 2) The timber market value of the species keep increasing the older the trees get. This is a strong incentive for a farmer to keep the tree as long as possible 3) Timber keeps increasing in biomass, arguably even longer than fruit species as the economic value of timber is (also) in its size. Therefore, although the rapid growth curve is until 40y, there will still be CRUs generated after 40y. When a farmer would harvest the tree, the negative biomass will stop CRU generation and payouts – of which by then they are used to. This is a strong incentive to not harvest the tree before 50y, which will be the harvesting year that IORA will document in the AF-Design Template For point three above, farmers will be made to understand the consequences of biomass loss due to harvesting thus affecting CRU revenue directly. Harvesting has not been included in the AF designs in this project as both ecologically and economically it is better to keep the trees on the plantations through their life cycle rather than

		harvesting every few years which farmers will be sensitized on this. The Agroforestry designs have been developed with the communities as well. Educating farmers on this will be via the ACAs. The ACAs are local youth from the villages spread over the full project area and structurally on the payroll of IORA. They will carry out farmer data collection, and will engage with project farmers and educate them, so that the consequences of harvesting will be basic knowledge of the communities. There will not be any extensive pruning activities, but minor silviculture practices will be carried out in different years, depending on the species. There is no impact expected on tree growth as a result of this.	
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)	As mentioned above, although the project will have some timber species, it is in the best interest of the farmers to maintain the trees as their market values increase as they get older. This provides an incentive to maintain trees whilst still benefiting from other benefits such as CRU revenues or income from fruit produce.	
	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.**	The project is not incorporated by any other accounting program.	
35	**In what year, season and month(s) will/were the first trees planted?**	Iora has plantations in 2019, 2020, 2021, 2022 and 2023 as part of existing agroforestry, (March-October – Meghalaya experiences rainfall for 8-9 months in a year and therefore the window for planting lasts from March to October). For new agroforestry, 1,000 Ha of plantations will be carried out this year, before the end of the planting season.	
36	**<u>Only</u> if existing agroforestry, approx. how many farmers began their planting activities each year, before Acorn, over a maximum historical five-year period?**	Year 1	70,000 ha from 35,000 farmers
		Year 2	
		Year 3	
		Year 4	
		Year 5	

37	**Is this project mandatory under any national or local laws?** (List relevant forestry regulations, national climate change commitments etc.)	India does not have laws or regulations that mandate agroforestry projects. However, the government does promote and support projects that aim to increase tree cover, and these will help contribute to different national and international commitments. *Please refer to India's UNFCCC NDC Goals (2016), Bonn Challenge target, National Forestry Policy (1988) and India National Agroforestry Policy (2014).*
38	**What is the main driver encouraging farmers to transition to agroforestry?**	Diversification of income, developing resilience against climate & market risks, and creating long-term livelihood and ecological benefits.
39	**Was the promise of carbon credits an enabling factor for farmers to transition to agroforestry?**	No, carbon credits were not promised to the farmers to enable transition to agroforestry for the existing agroforestry. As they implemented the interventions before the start of the Acorn project, they were incentivised by MBDA on the benefits of agroforestry itself, along with support provided for other livelihood activities and capacity building towards the same. However, for the new agroforestry farmers who will be onboarded, carbon credits will be an enabling factor in them joining the project. The additional income generated through CRUs along with other benefits of agroforestry will be an important and necessary incentive in convincing farmers to join the project. Given the long gestation period of agroforestry returns, the promise of CRUs that offer a higher rate than other carbon credit schemes and a larger proportion of this income being passed on to farmers will act as an incentive to join this project.
	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)	Agroforestry has been encouraged by the MBDA through several Government and donor funded programs and initiatives. Additionally, the state is also promoting agroforestry through the centrally funded rural employment guarantee scheme – MGNREGA.
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	**Farmers will incur the below costs for carrying out plantations** (costs given are per tree) *New plantations: 400 trees / Ha + 100 trees / Ha for mortality replacement* *Gap Filling: 120 trees / Ha* 1. **Site Development** (including labour, tools, and materials for: clearance, de-weeding, raking,

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<td>costs and irrigation systems)</td>
<td>levelling. This will be given as an incentive to farmers post successful establishment of sapling): INR 10.00
2. Sapling Cost (in the first year the cost is higher as there is a need to purchase saplings. In subsequent years, costs will reduce considerably when the project has established its own nurseries: INR 50.00 (Year 1) and INR 20.00 (later years)
3. Sapling Transport Cost: INR 2.50
4. Compost and other substrates: INR 18.32

Total per tree cost for plantations:
2024: INR 80.82
2025-27: INR 50.82

5. Fencing (in addition to planting costs, some new plantations may require fencing): INR 7,500 per Ha

Total per Ha cost for plantations:

<table>
<tr><th rowspan="2">Plantation Costs</th><th colspan="2">New (INR)</th><th rowspan="2">Gap Filling (INR)</th></tr>
<tr><th>Without Fencing</th><th>With Fencing</th></tr>
<tr><td>2024</td><td>40,410</td><td>47,910</td><td>9,698</td></tr>
<tr><td>2025-27</td><td>25,410</td><td>32,910</td><td>6,098</td></tr>
</table>
</td>
</tr>
<tr>
<td>42</td>
<td>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.</td>
<td>LP Costs (Estimated)
The costs outlined below are in line with the categories included in the BuCa.
- Staff costs will cover multiple activities including project management and strategic development, farmer onboarding, nursery development, community engagement and awareness, value chain and micro-enterprise development, financial management and CRU revenue distribution, etc.
- Costs outlined in Nos 2 to 7 are for the expenses incurred for carrying out the activity. Staff time associated with those is accounted for in the staff costs given (No. 1).

<table>
<tr><th rowspan="2">No.</th><th rowspan="2">Activity</th><th colspan="2">Cost</th></tr>
<tr><th>INR</th><th>EUR</th></tr>
<tr><td>1</td><td>Staff Costs (including costs for ACAs, local PM team and IORA senior management)</td><td>4,49,00,000</td><td>4,98,889</td></tr>
<tr><td>2</td><td>ACA (data collector) Training</td><td>86,400</td><td>960</td></tr>
<tr><td>3</td><td>Office Admin and Logistics</td><td>32,41,000</td><td>36,011</td></tr>
</table>
</td>
</tr>
</table>

		4	Farmer Onboarding (printing of partnership agreement; devices for ACAs, etc.)	5,30,000	5,889
		5	Farmer Engagement (awareness meetings, trainings, etc.)	29,50,000	32,778
		6	Stakeholder Engagement	5,00,000	5,556
		7	Farmer Outreach & Awareness Material Development	1,85,000	2,056
		Total (annual for first 5 years) #		**5,23,92,400**	**5,82,138**
43	**What budget do you have available to (pre)finance (part of) Acorn implementation costs (either farmer or local partner costs).**	Project will require funds/grants for start-up activities including onboarding, nursery development, capacity building of data collectors, community mobilisation, creating and distribution of IEC material, and so on. The design phase is being funded by IORA and MBDA by leveraging existing government resources and other sources of public financing. IORA has also received a start-up grant from the Rabo Foundation to expedite the design phase. This has also supported initial onboarding of farmers. For achieving the intended scale of the project, pre-finance through SAF is required.			
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.**	In case of a funding gap, the project would seek support from public sources, including leveraging government schemes to implement different activities, in addition to applying for grants and exploring financing from other carbon investors. We would also explore scaling down the project in the case of a funding deficit			
45	**If necessary, are you as an organization, allowed to take up a loan to cover costs of the Acorn project?**	Yes, IORA is a private limited company which is legally able to take up both domestic and overseas loans. This is allowed as per the Articles of Association of IORA			
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?**	As a private limited company we are allowed to make pay-outs to farmers. In order to do this, a separate account will be opened to transfer the 80% of the CRU revenue and a dedicated accountant will manage the transfers to each farmer. IORA will hire an accountant and finance manager for the project who will be responsible for ensuring CRU payments to farmers			
	Farmer survey				
47	**In addition to the mandatory indicators of farmer income,**	Youth inclusion			

	biodiversity and nutrition, please choose <u>at least</u> 1 of the following additional indicators that you would like to monitor at least every 3 years through sampled farmer surveys; • Agricultural land use productivity • Women empowerment • Youth inclusion	

Part B: Eligibility Checklist

Acorn eligibility checklist			
Topic	Sub-topic	Requested information	Result
	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.	IORA has an experienced team who combines their expertise and collaborates to leverage their unique, integrated research and work experiences across Forest Management; Climate Policy Advisory; Agriculture Research and Advisory; Remote Sensing and GIS, and NbS based Carbon Asset Management. IORA has developed its team very carefully with professionals who are committed to the cause of conservation and development and who come with a strong background in their respective thematic areas. The team is a mix of senior, mid-level and junior positions and IORA is focusing on developing leadership capacity in the next line managers as well (see organogram attached). Apart from its own team, IORA has also developed associations and partnerships with universities, and various research and funding agencies all over the world, with ready access to resources, which support us in providing best services to our clients.
Organizational capacity	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).	Established in April 2012, the MBDA (Meghalaya Basin Development Authority) is led by the Chief Secretary of the Government of Meghalaya. Focusing on rural areas, MBDA recognizes the potential of natural resources and river basins to offer diverse livelihood opportunities. This includes the "Integrated Basin Development and Livelihood Promotion Program (IBDLP) to support community driven landscape management. The project included the development of participatory approaches such as capacity building workshops, awareness and sensitization training programs and informational seminars. The MBDA team comprises about 1000+ employees and contractual staff. This is

		across multiple projects that they are implementing in Meghalaya. Communities are mobilized through the network created by the MBDA consisting of VCFs and village headmen to strengthen communities and traditional institutions to manage natural resources. MBDA has presence across almost all villages in the state. Their 12 District Project Management Units work through a network of Block Project Management Units (>40). These BPMUs manage Green Field Associates and thousands of Village Community Facilitators (VCFs) who are responsible for data collection, community engagement and M&E activities. IORA's on ground implementation team for this project will consist of time of several members from the Senior Management, 1 Project Lead, 2 Regional coordinators, four sub-regional managers, deputy managers, 60 ACAs, admin and procurement manager, finance manager. Communications manager and an M&E manager. The ACAs engaged on the project have worked with MBDA before on NRM related activities (as VCFs) and are now solely dedicated to this project. They, along with IORA's local team, will be responsible for implementing, maintenance and monitoring of project interventions, as well as reporting back to IORA management.
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

	[https://www.rabobank.com/en/images/sustainability-policy-framework.pdf]	
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).	For this current project, the aim is to organize farmers in either villages or clusters or multiple villages, depending on the size of the village (a village population can vary from 10-1,000 people). The project will work with communities to develop value chains for the Non Timber Forest Produce (NTFPs) from their agroforestry and other Agri produce. This will be done though existing Self Help Groups (SHGs – women's organisations) – Meghalaya has a large network of nearly 450 across the state – and other community based organisations such as farmer producer organisations (FPOs) and cooperatives. Where required, the project will also develop new organisations for this purpose.
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 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).	Yes

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).	IORA has worked with MBDA on several projects since 2012, with the most recent being in 2020 on Meghalaya Community Led Landscape Management Program (MCLLMP) by assisting them with generation of several thematic baseline datasets using high resolution satellite images for integration into NRM plans. Iora also designed temporal Land Use Land Cover (LULC), vegetation indices and carbon stock maps to assist local communities to visualise their land use and understand status of natural resources in the landscape. This assisted communities and local staff in preparing their own integrated NRM plans (consisting of resource mapping, data collection, land use planning, project design and monitoring). Currently as well, IORA and MBDA are working together on a project for the valuation of the ecosystem benefits provided by the tree plantations carried out by MBDA in the last five years. IORA introduced Acorn as a prospective partner in the project to the State Government after a visit from the Acorn team to Meghalaya. MBDA is the State Government partner in this project. Since the start of the project, IORA has strengthened its relationship with MBDA and other State Government actors and the autonomous councils. A workshop was jointly organised by IORA, MBDA and the Office of the Development Commissioner of Meghalaya for developing the agroforestry designs. Key state govt. depts., academic institutions and community representatives attended this. IORA was also invited to attend the last meeting of the Honourable Chief Minister's Climate Change Council.

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 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).	Yes
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 their land mainly by themselves with the help of their families.	Yes
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	As part of Acorn's onboarding process, any farms that have seen more than 60% deforestation in the last five years are not included in the project. However, if the sites saw removal only for replacement of unproductive vegetation, which includes weeds, etc., then it will be included. If native trees were removed, then the site will be excluded

	deforestation and the measures that have been or will be taken to prevent deforestation from happening again.	from the project. This will be assessed through Acorns remote sensing based analysis. To ensure that farmers do not carry out any deforestation after that start of the project, IORA will carry out training and capacity building workshops with project farmers. These will train farmers on benefits of agroforestry, maintenance techniques and pruning practices. The local project team will also stay in regular touch with the farmers to be able to address any concerns they may be having with the plantations.

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).	Meghalaya, situated in northeastern India, offers a hilly, forested landscape with elevations ranging from 150 to 1,965 meters above sea level. The fertile soil supports agriculture, particularly rice cultivation. Meghalaya is home to diverse native flora, including orchids, bamboo, and living root bridges, while its forests house a variety of wildlife such as clouded leopards, Hoolock gibbon, Asian elephants, and various bird species, contributing to its ecological significance.

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?	The project will be implemented in phases where new farmers will be included into the project activity at every phase. The economic value of the trees increase the longer they stay without being harvested, thus it is recommended to plant all trees on a farm in one year. For a given farm, all plantation will be carried out in one year with gap filling / replacement carried out in later years – planned density (400 trees/hectare) as some of the trees will be used as boundary wind breaks and will be quite in close proximity to each other. This will be achieved in year 1 in identified sites with monitoring for replacement of up to 20% in subsequent two years. The State has a high survival rate of 80%. The project will work through three models described below: 1. Existing healthy agroforestry plantations (less than 5 years old) that do not require any support • 5,000 Ha in 2024 • 10,000 Ha in 2025 2. Existing agroforestry plantations (less than 5 years old) that may require some support for gap filling • 5,000 Ha in 2024 • 15,000 Ha in 2025 • 15,000 Ha in 2026 3. New plantations • 1,000 Ha in 2024 • 20,000 Ha in 2025 • 40,000 Ha in 2026 • 39,000 Ha in 2027 For all farms that will require planting, either for gap filling or new, the plantations will be carried out in one year only, with later years (up to 2 years) only providing support for gap filling to replace mortality.
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?	*Not Applicable* as planting for a particular farm or community land will be carried out in one year only and not spread over multiple years.
3. What barriers did farmers face that prevented them from transitioning to a	Key factors that prevented transition to agroforestry:

successful and long-lived agroforestry system before intervention of the local partner and Acorn?	1. Lack of capital for farming input such as seedlings, fertilisers, fencing and tools. This is due to the socio-economic disadvantages of the communities. 2. Limited market knowledge and access to sell their produce. 3. While agroforestry plantations are carried out across the state, particularly through the central govt. rural employment scheme, MGNREGA, these plantations have very low survival rate and farmers do not normally maintain these for long periods. Main reasons for this are lack of a monitoring process, no capacity building of farmers and no incentive to maintain plantations.
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.	1. Technical support/ knowledge across the following topics: • Agroforestry design/ advisory on species mix and planting density • Intercropping recommendations • Intercultural/ silvicultural operations • Maintenance and pruning practices 2. Nursery development 3. Capacity building and awareness on how inputs can be applied and used. These will be delivered via the local ground staff 4. Financial support (pre-financing) in planting materials, fencing and site development e. g in clearing debris, manuring, raking, hoeing and pit digging. 5. Value chain and micro enterprise development 6. Training and community mobilization on fire prevention and management.
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	Lack of access to capital for being able to implement agroforestry is a challenge. Majority of farmers do not have resources to purchase saplings and prepare their lands for tree planting. Additionally, the long gestation period of an agroforestry model where the returns can take 3-5 years often do not allow a small holder farmer to implement these systems. The practice of shifting cultivation/slash and burn, locally referred to as "jhum" involves slash and burn agriculture with eventual abandonment of the land when unproductive. This is because of the lack of capital *for investment in rejuvenation of the land.*	The pre-financing of planting material from farmers carbon revenue will help in promoting new agroforestry plantations. Farmers will have incentives that will hasten and motivate the change from convectional to climate smart farming. The access to affordable finance will also help increase speed and scale. If farmers do not have to put in any monetary resources of their own for planting, they have clear incentive for joining the project.
Technical barrier	Access to enough or good quality saplings to implement agroforestry across a farm can often be a challenge. Farmers may be able to collect enough seeds to plant a small number of trees as bund plantations, etc., however to have an agroforestry farm, they require 350-400 saplings per Ha, where often 30% of these would be horticulture species that need to be grafted. This can be a challenge for them to access on their own.	Farmers face a lack of access to high quality planting materials in the area due to a lack of nurseries, especially for forestry species. Development of nurseries is a key part of the program to ensure quality and quantity input of saplings in the AF design. As part of the farmer package, IORA will ensure that quality planting materials are made available to the farmers by developing community nurseries. Both IORA and MDBA will initially work through the existing nursery network and identify gaps, based on which they will develop additional nurseries. Some will be at a village level, and some in a cluster of villages. For plantations to be carried out in 2025, Iora will also develop 200 village community nurseries, which will be able to support plantings in 4-5 surrounding villages. In addition to this, they will also develop fifty larger, cluster nurseries

		(also managed by community members), which will have capacity to support 20 surrounding villages. The number of cluster nurseries will be increased to 100 in 2026 and, together these nurseries will be able to manage project demand. These nurseries will be established in an entrepreneurial manner to ensure their survival. This will act as an incentive to the communities to maintain them and produce high quality saplings.
Knowledge barrier	Agroforestry is not an entirely new concept in Meghalaya as communities typically depend on the land for subsistence and income in many forms. Communities have however lost traditional knowledge regarding agroforestry, and there is a belief that they will lose productivity of their crops if they grow trees on their land. There is also a lack of understanding about which crops should be grown with which trees to ensure that there is no loss of productivity of either.	Capacity building through frequent community meetings and awareness on the long term benefits of agroforestry can help promote that amongst communities and ensure its long-term maintenance. Additionally, agroforestry designs that clearly outline for farmers which crop combinations should be grown with which tress will also help them to understand the benefits they can get, beyond just carbon. The project ACAs who are local youth from the villages spread across the state and on the payroll of IORA, will be responsible for data collection, and will continue to engage with farmers and spread awareness about the benefits of agroforestry, and the agroforestry models.

Conclusion: IORA's expertise, established since 2009, ensures quality implementation via a robust on-the- ground team in Meghalaya, which enables strong farmer engagement, customised training programmes and adaptive responses to challenges. The project aims to enhance sustainable natural resource management by implementing high quality community focused projects that promote environmental conservation, improve livelihoods and address climate challenges. With existing agroforestry that has survival rates at risk and with large-scale potential of planting new agroforestry, the project plans to utilize finance from Sustainable Agriculture Finance (SAF) to implement agroforestry activities over 100,000 hectares of new plantations while sustaining 50,000 hectares of existing plantations. Despite partial funding from the government, previously implemented programmes show that plantations suffer from low survival rates when there is inadequate farmer incentives and lack of training. This is highlighting the critical role of carbon finance and technical training in ensuring sustainability. The project - through IORA as the implementing party - bridges this gap by converting financial resources into impactful activities such as plantation maintenance and farmer training, which brings opportunities such as biodiversity enhancement, water conservation, forest fire prevention and climate resilience.

Comparisons of projects previously implemented in Meghalaya (funded by either NREGA, JICA or the World Bank) revealed that programs that provided training and tailored agroforestry designs

(JICA and World Bank) show higher survival rates and more biodiversity due to different species being part of the agroforestry model, in comparison to programs that did not provide these critical components (NREGA). The project emphasises that finance alone is insufficient to create long term impact, rather a quality implementing party is indispensable for translating funds into well executed, sustainable interventions. Training under the Acorn programme, funded by part of the 80% of farmer CRU revenues, equips farmers with technical skills and climate adaptive practises. Together with the positive incentive for maintaining agroforestry provided by payout of CRU revenue, interventions such as agroforestry training reduce risks for tree mortality. Farmers under programs that provide(d) training (JICA or World Bank funded) only would receive training during the initial years. These farmers would still benefit from ongoing training to maintain plantations in the face of shifting climate patterns, because trainings guide farmers into adapting to changing climate conditions. For instance, via training on forest fire management, water conservation, and/or pest management.

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		
102		52	50		
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**	**53,4%**
Local livelihood	**Farmer income**	**Annual farmer revenue (income + CRU revenue – expenses)**	**Farmer survey**	**1, 8**	
	Household Nutrition	**Number of food groups consumed in the household in the past 24 hours.**	**Household Dietary Diversity Score (HDDS) index survey[1]**	**2**	**8,33**
	Youth inclusion	Number of youth employees, Project Council members, and participants. Subjective farmer perception of youth involvement in the project.	Farmer survey and local partner survey	4, 8	**198**

1. Agricultural Biodiversity

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

Plantation of native species leading to improvement in soil health is expected to positively impact flora and fauna in the region. The presence of native tree species will also positively impact other biodiversity in the area, including soil biodiversity and populations of bees and other pollinators. The project will promote the use of natural pesticides and biological control methods for managing any pests and diseases that may arise.

II.) How many farmers perform beekeeping?

16 out of 102 farmers perform beekeeping.

III.) Describe the current fertilizer use and pest control techniques applied in the project area.

[1] *Swindale & Bilinsky, 2006*

The project will emphasize and promote the use of bio-based fertilisers to support farmers in the transition from synthetic fertilisers which is a common practice amongst farmers in the region. In addition natural pesticides and biological control methods for managing any pests and diseases that may arise will also be promoted. However, in certain cases during the initial stages due to severe attack, it may become necessary to use synthetic pesticides in order to ensure survival of plantations which Iora will closely monitor. However, Iora is fully aware of the potential negative implications i.e excessive use of these can cause contamination of groundwater, become toxic for biodiversity and result in development of pesticide resistance hence farmers will be trained in farmers in the correct dosage and use of these pesticides to ensure that there are minimal impacts on the environment. Iora will also provide training on integrate pest management techniques which will transition the need to use these pesticides. ACAs will be responsible for the monitoring for instance if the right quantities have been administered properly.

IV.) Gini-Simpson Index Results.

Table 2. Gini-Simpson Index Results.

Crops	Area	pi	p2	Livestock	Number	equivalent	pi	pi^2
Arecanut	30,69	0,12	0,01	Cows	231	1*231	0,87282785	0,7618285
Jamyrdoh	24,85	0,10	0,01	Chickens	1556	0,014*1556	0,08231031	0,006775
Orange	24,68	0,10	0,01	Pigs	99	0,027*99	0,01009987	0,000102
Banana	11,36	0,04	0,00	Deers	4	0*4	0	0
Ginger	10,38	0,04	0,00	Goats/ sheep	92	0,1*92	0,03476197	0,0012084
Yam	8,90	0,04	0,00	Buffalo	0	1*0	0	0
Potato	8,54	0,03	0,00					**0,769913843**
Sying	7,33	0,03	0,00					
Lemon	7,32	0,03	0,00					
Soh Jamon	7,20	0,03	0,00					
Pumpkin	7,11	0,03	0,00					
Herbs	6,16	0,02	0,00					
Jatira	5,37	0,02	0,00					
Sohphlang	5,30	0,02	0,00					
Mango	5,18	0,02	0,00					
Jajew	4,83	0,02	0,00					
Pineapple	4,57	0,02	0,00					
Tomato	4,41	0,02	0,00					
Synsar	3,96	0,02	0,00					
Broomgrass	3,66	0,01	0,00					
Turmeric	3,59	0,01	0,00					
Coffee	3,21	0,01	0,00					
Shriew	3,06	0,01	0,00					
Guava	2,87	0,01	0,00					
Sohiong	2,67	0,01	0,00					
Jarain	2,65	0,01	0,00					
Tyrso	2,57	0,01	0,00					
Wang	2,39	0,01	0,00					

Pear	2,38	0,01	0,00		
Rice	2,36	0,01	0,00		
Others:	34,03	0,13	0,00		
Total	**219,58**	**Total %**	**95,2**	**Total % [(1-Σ pi^2)*100]**	**23%**

Natural vegetation, trees and pollinators		
	Description	**Value**
Productive area with natural vegetation	Most farmers (68%) report having an area with natural vegetation smaller than 25% on their farm. Others, on a lesser majority (11%), report having a productive area between 25% and 50%.	0,25
Pollinator Presence	Most surveyed farmers (>50%) report seeing, on average regularly, the presence of Ant, butterflies, flies and mosquitos in their farms. To a lesser extent, (<50%), farmers have also reported seeing bees, beetles and moths.	1
Beekeeping	72% of the surveyed farmers don't perform beekeeping; those that do, perform wild beekeeping (28%).	0
Average natural vegetation, trees and pollinators %		**42%**
Agricultural Biodiversity Score %		***53,4% (Acceptable)***

V.) List wild animals in the project area.

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

Animal type	Prevalence (*Frequent, Regularly/Sometimes/Rarely)*
Ant	Frequent
Barking Deer	Regularly
Bear	Rarely
Birds	Frequent
Deer	Regularly
Flying Squirrel	Regularly
Fox	Frequent
Gibbon	Rarely
Hen	Regularly
Leopard	Rarely
Lizard	Regularly
Miawkhlaw	Frequent
Monkey	Frequent
Pangolin	Frequent
Pig	Frequent
Rabbit	Frequent
Rat	Frequent
Snake	Frequent
Squirrel	Frequent
Tiger	Frequent
Wild duck	Regularly
Wild hen	Regularly
Wild pig	Frequent
Wild boar	Frequent
Wild cat	Frequent
Wild hen	Regularly
Wild pig	Frequent

2. Famer Income

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

As the project is working with smallholder farmers, the majority of them in this region are below the poverty line. Further, climate change and land degradation has resulted in reduction in crop productivity, thus impacting their incomes. Based on Government of India reports, Meghalaya ranks at the top income, earning INR 29,348 per month. However, this statistic does not account for marginal farmers who work under informal title systems prevalent in the state. Marginal households engage in subsistence farming and agricultural labour, and account for 61.9 % of overall population, but only hold 30.9% of agricultural land. Across the state, 97.6% of rural households have plots smaller than 4Ha, with 41.9% falling in the 0.01-0.4 ha category. Farmers expenses range from INR 500-800 per day, inclusive of transportation and food, and expenses such as school fees and other ancillary costs like medical care. Incomes do not vary based on gender but the day to day expenses are overseen by women as the state is a matrilineal society.

It is expected that these interventions would positively impact financial stability of farmers and communities. Project activities are designed to diversify income sources and increase

resilience against market and climate risks. By integrating agroforestry practices, the project aims to enhance long-term financial benefits for farmers, such as through the sale of CRUs and NTFPs. Iora's project team recognizes that initial changes in land use could temporarily affect the productivity levels of traditional crops. However, it is anticipated that through careful planning, the introduction of agroforestry will lead to an overall increase in productivity and sustainability of agricultural practices, while also enhancing the ecosystem services and biodiversity of the region. Initiatives such as training programs, access to quality planting materials, and technical support mechanisms such as Agroforestry design/ advisory on species mix and planting density, Intercropping recommendations, intercultural/ silvicultural operations and maintenance and pruning practices will be in place to facilitate a smooth transition and ensure that any potential short-term negative impacts on household income are mitigated. While there may be a transition period as farmers adapt to new practices, the project will provide support and training to minimize any temporary decrease in productivity and to maximize long-term gains. Additionally, farmers can access an insurance scheme in case for instance a natural disaster occurs. The Pradhan Mantri Fasal Bima Yojana is a crop insurance scheme offered by the Central Government to all farmers. It provides insurance coverage and financial support to farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases, All farmers growing notified crops in a notified area during the season who have insurable interest in the crop are eligible. Maximum premium payable by farmers is 2% (of crop value – based on the minimum support price) for all Kharif crops, 1.5% for Rabi crops and 5% for commercial / horticultural crops. The rest of the premium amount is covered by the government.

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)
	• Crops for market - Turmeric, maize, ginger, banana, paddy (rice), pineapple, potato • Livestock products – milk, eggs. • Selling fruit from trees – Lemon, sweet orange, guava and plum.	142 441,17₹	• Children's Education and Household Maintenance & needs e.g groceries, clothing • Farm expenses (saplings, manure, vermicompost, labour, maintenance and cleaning,	

3. Household Nutrition

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

Farmers in the region mainly practice subsistence farming where they rely on the produce from their lands for their food and nutritional needs. Major crops grown in the region are potato, rice, pineapple, ginger, turmeric, squash, maize, banana, chilli, black pepper. Traditionally, in both Garo and Khasi-Jaintia regions this has provided adequate nutrition for communities. However, in recent years, due to reduction in crop productivity, coupled with reduction in incomes, accessibility to nutritious food has become a challenge. The government of India provides staple food grains to families below the poverty line at a subsidised rate (PDS – Public Distribution System). Most rural communities rely on this for essentials. However, as costs of fruits and vegetables continue to rise, they are unable to procure these in adequate quantities, impacting their nutritional security.

The transition to agroforestry is carefully designed to balance the introduction of shade trees with the preservation of essential food crops. The project promotes intercropping and the use of fruit-bearing trees to maintain affordability and accessibility and enhance crop diversification. The crop species that have been recommended in the agroforestry models with shade trees are those that grow well under shade. Crops that do not grow well under shade are recommended with tree species that do not have a dense canopy cover, and their spacing design ensures that they do not excessively hamper crop growth. These models have been developed in consultation with communities, to ensure they are able to grow the crops and tree species they need and find beneficial. Additionally, the project aims to bolster financial security by diversifying income streams through the sale of non-timber forest products (NTFPs), and CRUs, potentially increasing household incomes and fostering local economies. This will have a positive impact on food and nutritional security. Agroforestry by design integrates the best mix of native trees and crops for maximised and diversified yields. The project intervention is expected to contribute significantly to food security and improved nutrition intake through produce of seasonal vegetables and local fruit.

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	-
Root and tubers	-
Vegetables	**26,47**
Fruits	**28,43**
Meat, poultry, offal	**3,92**
Eggs	**1,96**
Fish and seafood	**0,98**
Pulses, legumes, nuts and seeds	**6,86**
Milk and milk products	**8,82**
Oils and fats	**6,86**
Sweets	**12,75**
Spices, condiments and beverages	**2,94**
Average number of food groups consumed per household: 8,33	

4. Youth Inclusion

I.) Describe how youth are involved in the project and challenges experienced in terms of inclusion of youths in decision making and leadership positions, and how project intervention is expected to positively/negatively impact this.

Majority of youth in Meghalaya are very closely connected to their communities and feel a sense of responsibility to protecting the natural environment, and often return to their villages after gaining education. They prefer being back with their community, rather than live in a city or other parts of the country. Families are closely knit, and adult children live with their parents. They are from an early age (around 5-7years) engaged in community activities and easily come in to the role of leaders and decision makers. People in Meghalaya believe that being engaged in community events and learning traditional practices is a part of their education, being important for building social bonds and physical and mental well-being. However, this does not interfere with formal education structures and children attend school regularly. The state has a higher literacy rate than the national average. The project will leverage this existing community structure, and work with the youth to spread the message of the benefits of the project to both the participant farmers and the local community. We will also actively work to build their capacity on different aspects such as agroforestry management, nursery development, value chain and enterprise development, etc.

The project will expand to cover approximately 150,000 Ha over the next four years. This hilly and vast terrain is being covered by an intricate network of Agroforestry Carbon Associates (ACAs) who will come from and traverse different regions to find remote farmers, sensitize them on the impacts and benefits of the project and onboard them. The team of ACAs is currently being built and is expected to actively engage over 60 youth through the course of the project. These ACAs are from different socio-economic and educational backgrounds, and the project will actively work with them to build their capacity on different aspects such as use of remote sensing/ GPS tools, M&E of plantations, being trainers on agroforestry and plantation maintenance, nursery development, knowledge on climate change, etc. These ACAs will receive trainings from the MDBA to build their capacity. Along with this, the project will also create value chains for NTFPs and Agri-produce that the communities will harvest from the agroforestry farms. This will include establishment of local entrepreneurship models. These entrepreneurs will be from the local community and will include a number of youths and women. The project will build their capacity on value addition, business development, marketing and sales, etc.

The project is expected to positively impact youth in the State. The youth engaged by this project will be skilled and trained on important topics such as Natural Resource Management, best practices in agroforestry, maximizing benefits from agroforestry, scheduling and attending community sensitization meetings as well as Project Councils, and collecting valuable data from the field. They will be empowered to on-board farmers to the program and collect valuable data. Over time, high performing ACAs will move to team management and supervisory roles, continuously providing mentoring and support to other ACAs. Along with this, the entrepreneurs that will be established will see benefits of a sustainable livelihood, and enhanced incomes. Both these aspects of capacity building and enhanced incomes will support youth in becoming leaders within their communities.

II.) Fill in Table 8 below depending on the number of young people involved in certain roles in the project.

Table 6. Youth inclusion survey results.

Number of participants aged between 15-24*	Number of lead farmers aged between 15-24*	Number of farmers aged 15-24* participating in project council	Areas where farmers aged 15-24 are employed in the project (nurseries, agronomists, project coordinators etc.)
198	**131**	Exact figure to be decided following confirmed.	Currently 47 ACAs (this will likely be increased to 60)

*The age is set at the time the farmer is onboarded in the Acorn project.

Part E: Stakeholder Identification

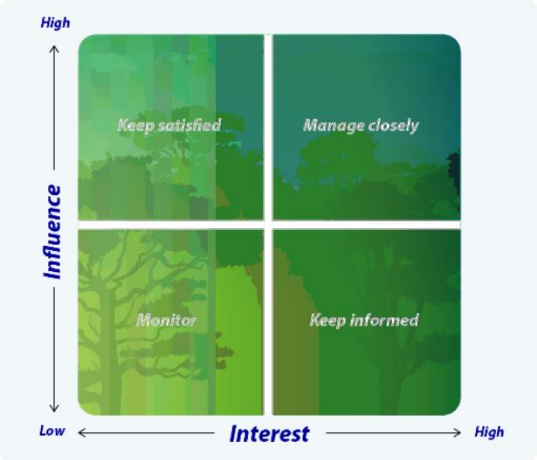

Figure 1. Stakeholder map.

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).**

   The Acorn agroforestry program is being implemented with the support/partnership of a subcontractor, Meghalaya Basin Development Authority (MBDA), a government institution headed by the Chief Secretary, Government of Meghalaya for the purpose of Natural Resource Management in the state. Details of communication with the State, including endorsement by the Honourable Chief Minister, have been provided 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 <u>impact</u> or be <u>impacted by</u> 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	How were they informed?
Authorities responsible for land management	High	High	The Acorn Agroforestry project is being implemented in collaboration with MBDA, which was setup by the Government	Through collaboration as subcontractor for

and/or greenhouse gas emissions/ National Government			of Meghalaya for the purpose of developing sustainable livelihoods and Natural Resource Management.	project implementation.
Local government	High	High	The project has support from the highest level of government in Meghalaya, with the Hon'ble Chief Minister endorsing it as the Carbon Finance project with State Government backing. Additionally, The Autonomous District Councils for the three regions i.e. Khasi Hills, Jaintia Hills and Garo Hills run in parallel with the State Government. They administer various functions including General and Forest Administration. Council members are elected by majority vote. They have also extended their support to the project and will also be working with us to facilitate relationships with communities.	Several rounds of engagement through meetings have been conducted and permission has been sought and received to carry out agroforestry activities in the State.
Local authorities	High	High	The MBDA Governing council consists of members from various Government departments who approve all projects taken up by MBDA	Formal project proposal and approval communications through MDBA
Donors	Low	Low	Existing Agroforestry being onboarded to the Acorn program was achieved by grants received from international donors.	Official communication from Iora and MBDA.
Financial partners/ institutions	N/A	N/A	No external pre-financing sought.	IORA will have their own staff responsible for the project who will be responsible for ensuring CRU payments to farmers and will not partner with any financial partners.
NGOs	Medium	Medium	Iora will have no direct collaboration with NGOs at the present stage, however as the project evolves, they will explore the possibility of	The will be informed and consulted when applicable through knowledge sharing sessions or other

			engaging local NGOs for value chain development and capacity building of communities. For instance if the project comes across an NGO carrying out similar work on agroforestry.	stakeholder consultation meetings.
Technical/ agronomical partners	High	High	Agroforestry models developed for the new plantations to be carried out have been approved by NRM specialists and agronomists who have experience in the state.	Stakeholder consultations and workshop carried out.
Procurement services	Low	Low	Vendors empanelled with MBDA for existing projects will be considered first for procurement of all materials for the project. Additionally, IORA will hire a local admin and procurement specialist for the project and their responsibility will be to ensure value for money.	Existing agreements and communications through MBDA and local staff hired for the project.
Value chain actors (i.e., traders, manufacturers, and processors)	High	High	The project aims to develop value chains for different NTFP and Agri-products and will engage with local actors in due course. We will identify local players who are important for developing value chains in project regions. This will be an important aspect of the project, and will start with mapping of these actors in each region for different products.	They will be informed through meetings, consultations, etc.
Headmen (in Khasi-Jaintia Hills) and *Nokmas* (in Garo Hills)	High	High	The headmen and *Nokmas* hold immense influence on community members across the state, with often farmers joining the project only after this has been approved by their headmen/ nokma.	They have been a part of the project sensitisation and awareness activities including district meetings being carried out across the state.

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.

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**	**Yes**
Low income	**Yes**	**Yes**
Fire risk	**Yes**	**Yes**
Low status	**Yes**	**Yes**
Religion	**No**	**Yes**
Ethnicity	**No**	**Yes**
Low educated	**Yes**	**Yes**
Remote	**No**	**Yes**
Disabled	**No**	**Yes**
Migrants	**No**	**No**
Other	**No**	**No**

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

IORA has conducted sensitization meetings for local stakeholders in each district of Meghalaya with the primary objective to meet as many farmers as possible to introduce the project to them, answer their queries and set realistic expectations of the benefits and their responsibilities. These meetings are held in the local language, and we are conducting them across the state to ensure that farmers do not have to travel large distance to reach these. At each of the meetings, communities have shown an interest towards the project with several farmers wanting to join then. Iora teams would also offer support to explain contacts of those interested and visit them over the next few days to go through the agreement with them in detail, explaining the particulars of the project. Upon their acceptance, we then onboard them. At present, Iora has conducted 12 district level meetings (one in each district) with more than 100 participants. In addition to these, more than a 100 smaller cluster and village level meetings with 30-40 people have also been carried out. These smaller meetings will continue through the course of onboarding years. We have also prepared flyers and information sheets in the local languages that are distributed at these meetings. These documents are visual in nature with minimal text in order to be accessible to as many people as possible. Over the next few months, we are also developing explainer videos about the project. In instances where community members did not want to join the project Iora's ACAs follow up with the farmers to identify the barriers and try to clarify their doubts. Additionally, Iora has also prepared awareness material along with a list of FAQs that are given to those attending the meetings. These also have contact numbers of the local team and people can get in touch in case of any questions.

Part F: Project Council

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.*

   Iora's on-ground team will comprise of about 60 ACAs who will be distributed depending on the size of the districts and participants from across Meghalaya, along with 4 district and 2 regional managers and a project lead (see map distribution below). These ACAs will meet with farmers on a regular basis to ensure they are engaged, for carrying out M&E activities, and address any challenges they may be facing. The farmers also have contact information of the project team to contact whenever needed. This process will also be utilised for gathering input for project council meetings. Iora will also create WhatsApp groups where farmers in a particular region will be present along with their local project council representative and will also be able to share their inputs. It may not be feasible to include all community members not participating in the project to be present in project council, however, they will be engaged with in village and community level meetings and the Nkomas will represent their needs in the project council. This will provide them an opportunity to have a voice in the project including airing out any grievances or concerns they may have about the project.

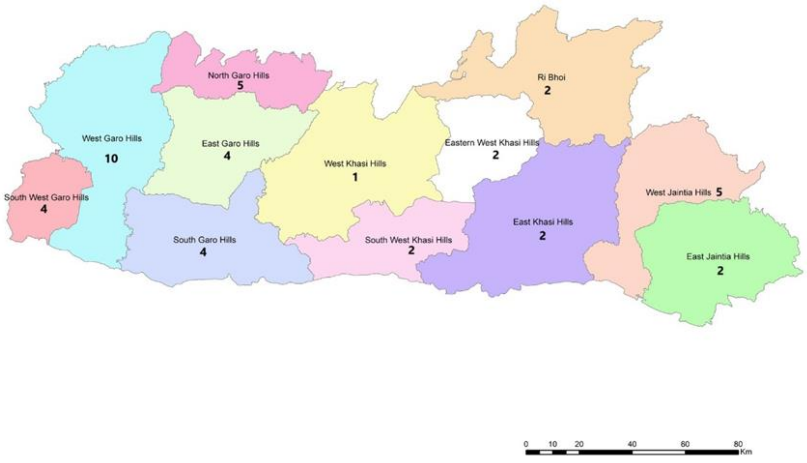

Figure 2: PC representative distribution map

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*.

   The outcomes of the project council meetings will be informed to the local stakeholders through a flyers/ newsletter which will be printed physical copies for some farmers with and digitally for the other farmers with cellphones, highlighting key points and outcomes. Additionally, the WhatsApp group established for each area will also help to keep stakeholders informed on project changes.

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 meetings will be held twice a year. Ideal time of year is before the onset of Monsoons – March/ April, and after the end of the rains – September / October. The proposed Project Council will meet one in each of the 3 regions of the State with 30 participants each and will be organized in the morning hours for easier access to transport. They will be conducted in community halls at the regional headquarters and will be facilitated by IORA with support of MBDA The decision making will be through majority vote. The decision whether voting should be anonymous or open will be taken in consultation with local communities and will then form part of the SOP of all council meeting.

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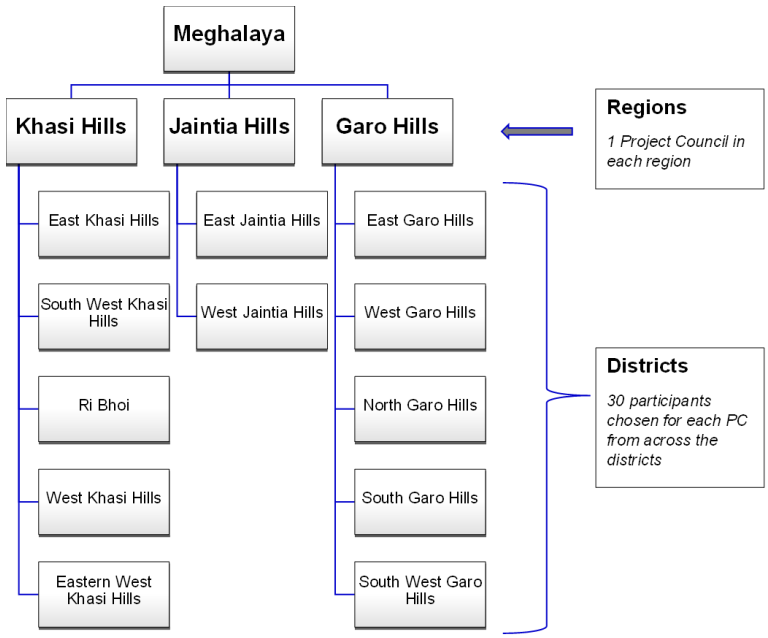


Figure 3: Project council structure

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 team will work with local stakeholders to identify project council members. These local stakeholders such as the district and block level project management units of MBDA, local government and autonomous council functionaries, existing farmer organisations. (A block is a district sub-division for the purpose of development under Panchayati Raj institutes in rural

areas and Urban Development department in cities). From each block (46 in the state), two – one male and one female – representatives will be chosen to the project council. Iora aims to change the council members every three years. For the purpose of choosing project council members, we will make block level WhatsApp groups with all farmers as part of it and request for nominations. Farmers will be allowed to self- nominate. However this approach will be monitored to see if it works as In the occasion that this happens, Iora will consult the headmen/ nokmas. In Meghalaya communities have a very strong track record of traditional/ community governance and these institutions are well respected by all. Their decision will be accepted by all. Voting may also be held through WhatsApp and Iora will continuously ensure that there is a gender balance in project council, along with inclusion of youth and any other vulnerable groups.

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.*
   The Project Council meets will be interactive sessions, consisting of written and verbal feedback from each of the attendees and encouraging the sharing of experiences and best practices. IORA aims to build capacity in the members to strengthen their abilities in engaging in productive and structured discussions. Additionally, we will also ensure that all votes are collected before any decisions are taken. In case there are sensitive topics, Iora will encourage the anonymous channel in their grievance process or have an escalation.

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.**

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)
3 at the regional level	Local farmer representatives	Participants	mix	From across each region	Project farmers
	Local project team members	Participants & Non-participants	mix		Local Partner
	Local subcontractor team members	Participants & Non-participants	mix		Government representative
	Local community representatives i.e Nokmas	Non-Participants	mix		Community members

Part G: Grievance Mechanism

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

   The grievance mechanism has not started operating. However, IORA in consultation with MDBA and Acorn will develop the Grievance mechanism for this project that will include the following:

   Grievances committee: A formal body consisting of neutral members will be formed to provide a fair and impartial forum for resolving disputes and conflicts, particularly pertaining to land, and concerns between the local stakeholders and other parties. The committee will consist of one person each from the LP (Iora), the subcontractor (MBDA) and the local community (Khasi-Jaintia Hills and Garo Hills), nominated at the central Project Council. They will be nominated in the project council to the committee on a rotational basis.

   Formation and information: The committee will be composed of individuals who are independent, impartial and knowledgeable about the principles of the project and its long-term goals. This will be he LP (Iora), the subcontractor (MBDA) and the local community (Khasi-Jaintia Hills and Garo Hills), nominated at the central Project Council. They will be vested with the authority to receive, investigate, and adjudicate grievances submitted by individuals or groups. Such communication shall be received by letter, message, or phone for which the printed details will be circulated in both languages, English and the vernacular, at the Project Council meetings and also by the ACAs on the field.

   Procedures and confidentiality**:** The committee will be empowered to establish clear and transparent procedures for handling grievances fairly and timely, resolve these grievances, or escalate to the next level, which shall be Senior Management members of the LP. The Grievance Committee shall produce a written report on each grievance handled and submit the same to the designated member of the Senior Management of the LP. The committee shall treat all information related to grievances with confidentiality and discretion, prioritizing the protection of privacy of individuals involved. Confidentiality also encourages open communication and trust in the grievance resolution process. A helpline/telephone line will be created, where participants will be able to lodge complaints anonymously. Additionally, the project offices in Meghalaya will also have drop boxes for leaving complaints anonymously.

   Dialogue and Conflict Management: The committee will be empowered to facilitate dialogue between grieving parties engage in an effort towards dispute resolution and collaborative negotiation.

   Appeals Process: The grievance mechanism also includes an Appeals process by which, parties that are dissatisfied with the initial resolution may seek review or consideration of the decision. In the event of an appeal, an external and independent local arbitrator shall be assigned the case and requested to resolve the issue. The Appeals process also serves as providing another layer of accountability for the Committee and the LP.

   Review of the Grievance Mechanism: The grievance mechanism itself will be discussed with attendees of the Project Councils and open to feedback and suggestions. Review of the proposed mechanism will be undertaken as necessary.

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

Presently the project is in the process of onboarding, and communication about the grievance mechanism and other related project aspects will be carried out in due course. This will mainly be through developing communication material that will be provided to all project farmers. Presently they are all provided with contact details of the local team and can use that as a means of raising concerns, till they are able to access the formal grievance mechanism. The structure of the grievance mechanism that will be shared with stakeholders is illustrated below:

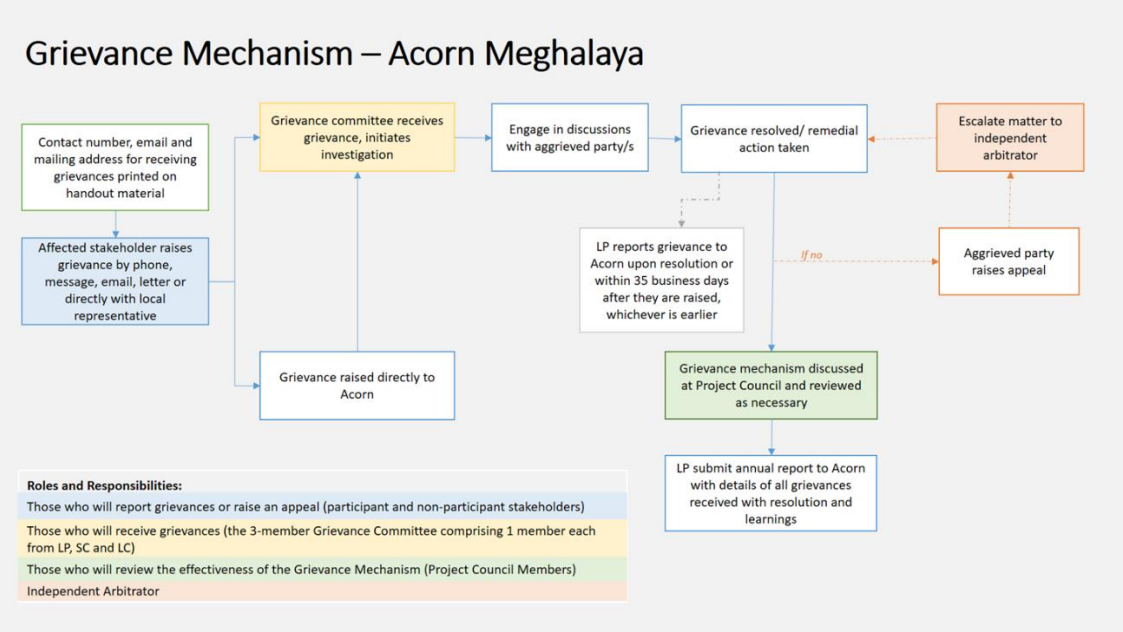


Figure 4: Iora Grievance Mechanism

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).**
   Presently local stakeholders can raise concerns with Iora's local project team. However, as the project progresses and mechanisms are in place, they will be able to get in touch with their local representative, who will then take the complaint to the committee. Each participant will also have access to all communication information which will be printed on all handout materials and brought to their attention during meets and interactions.

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 see the outline of the grievance mechanism structure in **part 2**. This will be the chain of escalation for the project. The roles and responsibilities are all also provided in the illustration.

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).**
   In case the solution offered by the internal committee is dissatisfactory to the aggrieved, they may raise an appeal, at which point an external and independent Arbitrator will be assigned the case. We expect that between the internal committee and the arbitrator, we will reach a high rate of successful resolution. For extreme or more complicated cases, the project will

work with the Autonomous District Councils (ADCs) of the three regions. Meghalaya has their own form of local administration/ governance known as the Autonomous District Councils, which are highly respected by the communities and run parallel to the State government. Each of the three regions have their own autonomous council with a governance structure and customary laws – e.g.: https://khadc.nic.in/index.htm.

Part H: Baseline Assessment

1. Baseline Scenario

I. Is this project located within a designated Protected Area? If so, please describe:

a. which classification of Protected Area this is (IUCN Category I – VI)?

b. if government approval has been received?

c. why is the project permitted to operate on this area?

The project participants will be in Garo hills and theres a number of protected areas in the region namely the Nokrek National Park, Balpakram National Park, Siju Wildlife Sanctuary. Although some of the project villages in Garo hills are in proximity to these areas, the closest will be in a 10km radius. Additionally a check was done by Acorn to detect potential overlap with protected areas and the outcome had no plots flagged there.

II. Describe in Table 10 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
Clear land titles (formal and informal)	All titles will be checked by the ACAs before commencement of any engagement. In the case of community land, the village headman or nokma will provide a No Objection Certificate to use the land for the Acorn Agroforestry program.

III. 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	Large tracts of community land being barren, resulting in their further degradation due to erosion. Infrastructure in project area is similar to other rural areas in India. Most places have mettled roads leading to villages, but the lead up the actual village may be dirt roads. Additionally, these roads can often become inaccessible during the monsoons. Most villages will have a Dorbar hall (village council hall) and primary school, both of which will be a permanent structures. Most	Community lands could become diverted towards development purposes. Changes in land use pattern will have differing impacts on dietary patterns and economic development. Diversion towards infrastructure development will result in a loss of green cover and reduction in arable land, impact food security.

	houses in villages will be either permanent or semi-permanent. The state has a small livestock sector with an average household dedicating only 0.2% of their farm area to animal rearing against the region's average of .9%. This is also indicative of the types of animals reared as the farmers prefer small bovines, piggery and poultry as their main livestock. The state's farmers use 80.8% of their agricultural lands only for crop production on average, and livestock is generally stall fed.	
Land cover	Mix of crop land and degraded land	Farmers would not have enough financial resources to adopt agroforestry practices and will continue with subsistence farming.
Agricultural management activities	Subsistence farming practices	Loss of tree and forest cover, continued degradation

2. Carbon Baseline

I. In addition to the current land use and land cover situation referred in Table 11 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*.

More information will be provided based on ground truth data.

3. Livelihood Baseline

I. Describe in Table 12 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	In rural Meghalaya, more than 50% of the population live below the poverty line. They reside in remote areas with little access to basic facilities such as decent healthcare, education and external employment opportunities. Young members would have to migrate to other cities for employment. However, given their strong connection within the community, they prefer staying in their villages.	In the last decade, MBDA has consistently worked to build the social capital by training the youth in Natural Resource Management and implementing plantation and watershed work in villages across the State. While this has contributed significantly to rejuvenating the soil and water springs, population pressures result in persisting socio-economic challenges such as migration to the cities in Meghalaya or other parts of India. There is also a lack of knowledge in sustainable agricultural practices resulting in only subsistence farming at best. The project is expected to enhance incomes of project participants and create sustainable entrepreneurship opportunities. If this were not present, it will result in the farmers remaining below the poverty line, resulting in them having a low standard of living. They would not have access to basic amenities, increasing their vulnerability to climate change.

4. Ecosystem Baseline

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

II. Describe in Table 13 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 12. 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	The project is located across the State of Meghalaya which is renowned for its abundant forest wealth, high altitude and abundant rainfall which lasts for eight months a year, from March to November. The State is also a biodiversity hotspot.	The land belongs to communities and land use in recent decades has increasingly shown conversion for agricultural practices. Deforestation has visibly resulted in soil erosion resulting in reduced water retention, springs in the State drying up and the State would be on path to facing acute shortage of water in non-rainy months.

Description of the fauna and flora in the project area	The State nurtures about 3,000 species of flowering plants, contributing a significant 18% to the nation's overall flora, of which over 1,200 are exclusively endemic. Meghalaya provides a sanctuary for rare, endangered fauna like the Asian elephant, tiger, leopard, clouded leopard, red panda, Hoolock Gibbon, Slow loris and others.	This flora and fauna would be severely threatened as farmers and landowners would continue to deforest land for conversion to cropland.
Description of deforestation potential	Meghalaya is situated in the Indo-Burma biodiversity hotspot and is a remarkable haven of biodiversity.	This rich biodiversity would be severely threatened as farmers and landowners would continue to deforest land for conversion to cropland.

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 14 below. Add additional rows, if multiple agroforestry designs exist.**

Table 14 13. 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
Mix of forestry and fruit tree species with grasses	Agrisivilculture	Khasi-Jaintia Hills and Garo Hills region	No harvesting	460 trees/ha	e.g., community meeting to discuss choice of tree species and suitability of agroforestry design	Positive

2. **For each agroforestry system described in Table 14 above, fill out Table 15 below (use additional tables if necessary) to describe the agroforestry species promoted:**

Table 15 14. 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
Mix of forestry and fruit tree species with grasses	*Litchi chinensis*	Naturalised	Litches provide nutritious fruits with commercial value in the market, enhancing the income of the farmer.	Deep root system helps in water retention and reduce soil erosion thus contributing to soil health. Habitat for various wildlife species and attract a diverse range of pollinators, crucial for the pollination of other crops
	Psidium guajava	Naturalised	Provides nutritious fruits with commercial value in the market, enhancing the income of the farmer.	Deep root system helps in water retention and reduce soil erosion thus contributing to soil health. Habitat for various wildlife species and attract a diverse range of pollinators, crucial for the pollination of other crops

	Prunus cerasoides	Naturalised	Medicinal purposes which can also provide income stream. Holds cultural and religious importance.	Provides habitat and food for various bird species and insects, supporting local biodiversity. Deep root system helps in water retention and reduce soil erosion thus contributing to soil health. Leaf litter and organic matter, contributes to soil fertility.
	Prunus domestica	Naturalised	Plums provide nutritious fruits with commercial value in the market, enhancing the income of the farmer.	Deep root system helps in water retention and reduce soil erosion thus contributing to soil health. Habitat for various wildlife species and attract a diverse range of pollinators, crucial for the pollination of other crops.
	Areca catechu	Naturalised	Areca/ betel nut, is a significant cash crop in the region and provides a stable income for farmers due to its high market demand. Holds cultural and religious importance.	Provides habitat and food for various insect species, birds, and small mammals, supporting local wildlife. Leaf litter and organic matter, contributes to soil fertility.
	Tamarindus indica	Naturalised	Commercial value due to its high market demand for both its fruit and seeds. Provides health benefits and nutrition.	Provides habitat and food for various bird species and insects, supporting local biodiversity. Root system helps in water retention and reduce soil erosion thus contributing to soil health. Leaf litter and organic matter, contributes to soil fertility.
	Averrhoa carambola	Naturalised	Starfruits provide nutritious fruits with commercial value in the market, enhancing the income of the farmer.	Deep root system helps in water retention and reduce soil erosion thus contributing to soil health. Habitat for various wildlife species and attract a diverse range of pollinators, crucial for the pollination of other crops
	Myrica esculenta	Naturalised	Box myrtle or kaphal, is providing a significant source of income for farmers due to its high market demand.	Wild edible fruits providing nutritious fruits with commercial value in the market, enhancing the income of the farmer
	Baccaurea ramiflora	Native	-	-
	Duabanga grandiflora	Native	-	-

	Michelia champaca	Native	-	-
	Toona ciliata	Native	-	-
	Gmelina arborea	Native	-	-
	Citrus limon	Native	-	-
	Citrus sinensis	Native	-	-
	Aquilaria agallocha	Native	-	-
	Artocarpus heterophyllus	Native	-	-
	Tectona grandis	Native	-	-
	Terminalia chebuca	Native	-	-
	Syzygium cumini	Native	-	-
	Elaoeocarpus serratus	Native	-	-
	Moringa oleifera	Native	-	-
	Parkia roxburghii	Native	-	-
	Cinnamomum tamala	Native	-	-
	Mangifera indica	Native	-	-
	Exbucklandia populnea	Native	-	-
	Alnus nepalensis	Native	-	-
	Anacardium occidentale	Native	-	-
	Pinus kesiya	Native	-	-
	Schima Wallichi	Native	-	-
	Azadirachta indica	Native	-	-
	Shorea robusta	Native	-	-
	Castanopsis tribuloides	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).**
   Private Limited Company

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).**
   Participants attend community sensitization meetings prior to start of the project to understand the program structure, commitment and sign the consent and agreement. Our ACAs represent each district of the State and are required to monitor the biomass growth every year for the first 3 years. Additionally, the project will also conduct regular capacity building workshops for project farmers on agroforestry, maintenance, best practices, etc.

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 implementation of all project activities are supported by members of the local communities. The ACAs are from the community, the nurseries and value chains for all plantation inputs will be sourced from local players, and we will establish local entrepreneurs. This will generate income and employment for youth and women. The participants will also receive training on agroforestry and awareness on best practices.

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.).**
   IORA has been working with rural communities on capacity building and implementation of various aspects of climate change mitigation and adaptation, sustainable forest management, value chain development, climate smart agriculture and landscape conservation. These projects have been implemented across India, working with the National Government, State Governments, bi- and multi-lateral organisations and national and international corporates. Some examples of our relevant projects are given below:

   - Carried out capacity building and developed Land Use and Land Cover Maps for 400 villages to support implementation of Meghalaya Community led Landscape Management Project (MCLLMP) under MBMA sponsored by the World Bank
   - Implemented capacity building programs on GHG Inventory Management for the State Governments of Sikkim, Maharashtra and Gujarat, The World Bank, Govt. of Ethiopia, and Environmental Protection Agency of Liberia
   - Developed a Climate Change Adaptation Toolkit for Private Sector to enable risk measurement and resource allocation in Maharashtra

- Caried out projects to identify climate vulnerabilities of Peanuts and Mint cropping systems, created GHG inventories for the cropping systems, and developed adaptation and mitigation strategies to address future climate risks
- Developed a sustainable 'agriscapes' model that incorporates ecological and biodiversity parameters, as well as livelihood improvement, when developing landscape based intervention strategies for agriculture areas
- Partner in the Farmer Zone^{TM} project, an initiative by the Department of Biotechnology, to develop a multi-purpose window for dissemination of information to farmers, including sustainable cropping practices, pest management, nutrient management, and access to input suppliers and markets linkages
- Partner in the University of Cambridge "Transforming India's Green Revolution by Research and Empowerment for Sustainable Food Supplies (TIGR2ESS)" project, working across scientific research and social science for a second, more sustainable Green Revolution in India
- Key in-country partner for a study examining increase in tree cover in TOF systems in small holder agriculture landscapes of India, in collaboration with MSU, and sponsored by NASA
- Developed innovative models and solutions for gender-sensitive sustainable harvesting and efficient market channelling of Non Timber Forest Products (NTFPs), and affordable and user-friendly fuel wood management technologies under USAIDs Innovations in Ecosystem Management and Conservation project

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.)**
   Multiple brochures and informative materials have been developed in local languages for the purpose of sensitization and awareness. Further, community meetings which are free to attend are being conducted to ensure inclusion of any person who may not be able to read. However, in the meetings conducted so far in the year 2024, it has been seen that local stakeholders are able to read the vernacular, sign their signature and jot down notes from the presentation.

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.**
   A local office has been setup in both regions of the state (Garo Hills and Khasi-Jaintia Hills) for secure storage of all crucial project documents in physical and digital mode. The local team will consist of Accounting and Administrative staff as described above.

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).**
   As MBDA is a government authority it aims to:
   - To sustainably develop the river basin resources, which shall ultimately lead to

promoting the sustainable livelihood and gainful employment opportunities for the residents of river basins, independent or through the convergence of initiatives.

- To address the felt needs and priorities of women and increase their participation in local institutions and decision making process.

- India's National Forest Policy, 1988, envisages that 33% of the geographical area of the country should be under forest or tree cover.
- The National Agroforestry Policy of India is a framework designed to improve agricultural livelihoods by maximizing agricultural productivity for mitigating climate change.

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 project extensively involves local communities, thereby recognizing groups potentially vulnerable due to socio-economic factors such as their economic standing, gender, age, or disability. The project seeks to include and empower such communities in its activities and is well-positioned to minimize the risks to vulnerable groups and contribute positively to their socio-economic development through enhanced participation and sustainable practices, including in livelihood development trainings and value chain development.

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.)?**
   Farmers with existing agroforestry from previous natural resource/ plantation projects are being onboarded first. For new agroforestry farms, the process of identifying farmers will be through awareness events conducted across regions, and advertisements carried out in local newspapers, where farmers will be encouraged to contact the project team if they are interested in joining. The team will then visit famers to onboard them, based on their eligibility and commitment to maintaining the agroforestry plantations for the project period.

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.**
    Details of all relevant policies given in annex 12.

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.).**
    Meghalaya is a matrilineal society with land ownership in the name of the woman/female. Additionally, women will also be involved in nursery setup and maintenance and in all training and awareness sessions to ensure healthy agroforestry. They will also be part of the local entrepreneurs that will be established. Additionally, the project will work with the more than 450 Self Help Groups (SHGs) of women members only that have been established across the state. These groups often work on different livelihood related activities. They will be engaged for the value addition and value chain development part of the project. SHGs started to be formed in India as far back as the 1970s. They are usually a group of more than 10-12 women from a similar socio-economic background and region who form alliances to pool their

finances for joint economic activities, or to lend money to each other in times of need at a reasonable interest rate. They also form these collectives to build their capacity on different skills, and often also build small businesses together. Both the National and State Governments across India support SHGs through different schemes for capacity building and livelihood enhancement.

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 activities revolve around active participation of all members and communities. Open forum awareness and sensitization meetings in addition to Project Councils will provide a safe and friendly platform to share knowledge, experiences and encourage continued participation. The project will also carry out capacity building trainings of project farmers along with creating communication material that can be shared across community members.

13. **Describe the training program offered by the project to participants, including:**
    a) **Is training offered to all participant farmers?**
    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.).**
    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.).**
    d) **Who conducts the training? (e.g., Local Partner's field officers, Lead Farmers, agronomist, collaborating NGO's or farmer cooperations, etc.).**
    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.).**

    Training will be offered to all participating farmers. These will be interactive sessions conducted by IORA experts and consultants and will be held in and around the village vicinities at appropriate sites and locations. Consultants will be experts from academia, govt. depts such as forest, agriculture, etc. They will be engaged for these trainings depending on their area of expertise, to supplement IORAs internal capacity on different topics. The project will be identifying training needs through engagement with farmers to assess what topics should be included. It is assumed that the topics will range from benefits of agroforestry, best practices, maintenance, carbon credits, value addition of NTFP products, establishing a business, marketing, fire prevention, pest and disease management, etc. The frequency and timing of the training will depend on the topics being covered, as some will act as regular nudges for the community and will be periodic, while others will be carried out later in the project cycle, as and when needed.

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);**
   Average plot size is 1.5 Ha. Survival rate of the planted seedlings is assumed to be 85% and the additional planting (or gap filling) on existing agroforestry plots will be done over two years. The second year is primarily for replanting of non-surviving trees. 50% of the 'To be Planted' trees yield fruit or edible saleable products. The average yield is 23 kgs per tree over a span of 30 years. But note that this average is derived from 11 different fruiting species with very different kind of fruits or products that vary greatly in their weights and yield. To elaborate on the scale of yields, there is Indian Bayleaf (Cinnamomun Tamala) in the designs and the saleable product is the low-weight leaves. Over a period of 30 years, this tree gives an average output of 6.5 kg annually. In the designs we also have jackfruit (Artocarpus heterophyllus) which produces a very heavy fruit. Over a period of 30 years, this tree gives an average output of 90 kg annually

   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);
   Below is a high-over breakdown of the planting costs associated with transitioning to agroforestry

Planting Costs	Amount (INR)	%
Total Distribution/ Logistics per Hectare	980	13%
Total New Hired Labor per Hectare	1,666	22%
Total Fertilizer/manure per Hectare	1,548	20%
Total Tools for planting per Hectare	3,456	45%
TOTAL	7,650	100%

Note that the farmer will be contributing ~40% of this amount as in kind (eg: labor required for fencing), apart from regular farm maintenance costs to support the transition**.**

As for the costs incurred at project level, IORA will be incurring EUR 23 Mn over a period of 30 years to finance aspects such as field team salaries, logistics, farmer awareness, trainings, project councils etc.

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

<u>Annual income from agricultural production</u>

The income from agricultural production can be split into 1) regular income from intercropping of annual crops and 2) Yield revenue due to the intervention of planting. Income from (1) ~INR 90,000 or EUR 880 per year per hectare, (2) This is on average EUR 3,761 per year over 30 years but this can range from EUR 450 to EUR 6,800 per year depending on the species and year.

Carbon sequestration

The average CRUs per farmer per year is 4.6 CRUs over a span of 30 years, with some years being as low as 1.7 CRUs with some years going up to 7 CRUs. Assuming an average price of EUR 47 (over 30 years), average carbon sequestration income per year per farmer would be EUR 216. Note that this figure is an estimate and can vary per farmer and per year depending on various factors.

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

For some of intercropped annual species like broomgrass, pineapple and chilli, there is expected to be a 22% drop in productivity 5 years after the intervention due to the canopy growth and additional planting. For intercrops like ginger and turmeric there is an estimated 20% increase in productivity 5 years after the intervention, which is brought about by agroforestry implementation.

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).

The financing problem has been solved for the initial phase of the project involving the current cohort of 10,754 farmers. The partner has been sanctioned a loan from an Indian financier to cover the costs of gap-filling for 2,958 farmers and trainings for 7,796 farmers. This loan will be drawn down as required to complete the gap filling in phases. For further scaling with new agroforestry as mentioned in the ADD, funding from SAF will be required

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 accounting software such as SAP or Oracle, or a system that is part of Enterprise Resource Planning tool, or a comprehensive Excel tool).

IORA currently uses Tally Prime, which is a complete ERP software. The same accounting software will be used for the Acorn project. In addition to Tally, we also work on excel spreadsheets to complement the accounting software for providing detailed analysis, custom reports, and additional flexibility. The advantage of using Excel is that it can be tailored to specific needs of the project and used for complex calculations or scenario analysis, etc.

Some of the Accounting Practices followed at IORA are highlighted below:

- *Ledger Setup*: Create separate ledger accounts for each expense and subcontracting party to track their income and expenses individually. Designate specific income and expense ledger accounts for each partner to differentiate between the revenue they generate and the costs they incur.
- *Voucher Entry*: We use appropriate vouchers to record income and expenses incurred by local partners and subcontracting parties.
- Income Vouchers: We record all sources of income generated by IORA and subcontracting parties, such as service fees or revenue sharing agreements.
- *Expense Vouchers:* We document all expenses related to the activities of IORA and subcontracting parties, including costs for materials, experts' salaries, subcontracting fees, and other project-related expenses.
- *Revenue Recognition*: We implement a system to recognize revenue from the activities of IORA and subcontracting parties in accordance with the applicable accounting standards and contractual agreements. We ensure that the revenue recognition aligns with the completion of deliverables or milestones outlined in contracts or agreements.

- Expense Allocation: We allocate expenses incurred by IORA and subcontracting parties to appropriate cost centres or projects within the accounting system. We categorize expenses based on the nature of the costs (e.g., direct project costs, overhead costs) to facilitate accurate reporting and analysis.
- *Documentation and Verification:* IORA has appropriate Standard Operating Procedures (SPOs), which are followed by finance / accounts departments to seek the supporting documentation for all income and expenses incurred by IORA teams and subcontracting parties involved in the project. These documents are duly verified by periodic audits and booked on the accounting software regularly.
- *Reporting and Analysis*: We generate regular financial reports for the management and, if required, for the client. These reports provide understanding into the income and expenditure of Iora and subcontracting parties.

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.).

The information outlined below will be managed by IORA for this project (this is under development and may be modified as project needs evolve over time). By administering this information in the accounting system, IORA will be able to effectively track financial performance, ensure transparency and accountability in project operations, and facilitate informed decision-making:

- Farmer Information**:**
  i. Name and contact details of each farmer
  ii. Legal entity information (if applicable) – as in the case of community land
  iii. Agreement details, including contract terms and billing arrangements
  iv. Bank account details

- Income Information:
  i. Loan amount, in any
  ii. Income generated from CRUs
  iii. Details of payment terms – cash vs in-kind
  iv. Payment details, including dates, and amounts
  v. Payment terms and status of payments

- Expense Information:
  i. Breakdown of expenses incurred by farmers (from the loan), including costs for site preparation, materials, saplings, compost, etc.
  ii. Expense categories and classifications for tracking purposes (e.g., direct costs, overhead costs, etc.)
  iii. Supporting documentation for expenses, such as receipts, invoices, or purchase orders

- Financial Transactions
  i. Details of financial transactions recorded in the accounting system, including journal entries, vouchers, and adjustments
  ii. Transaction dates, descriptions, and amounts for income and expenses
  iii. Reconciliation of bank transactions with recorded income and expenses

- Contractual and Compliance Information
    i. Compliance with relevant accounting standards, regulations, and contractual obligations governing the recording of income and expenses
    ii. Contractual terms and conditions related to revenue recognition, expense reimbursement, and financial reporting requirements
    iii. Audit trails and documentation to demonstrate adherence to financial policies and procedures

- Reporting and Analysis:
    i. Financial reports providing insights into income and expenses
    ii. Analysis of trends and variances in expenses to identify opportunities for optimization or cost reduction

- Documentation and Verification:
    i. Record-keeping of all supporting documentation, agreements, and correspondence related to income and expenses
    ii. Verification processes to ensure accuracy and validity of financial transactions recorded in the accounting system
    iii. Documentation of audits, reviews, or assessments conducted to verify compliance and accuracy

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.)**
   A separate account will be opened to transfer the 80% of the CRU revenue and a dedicated accountant will manage the transfers to each farmer. IORA will hire a local accountant and finance manager for the project who will be responsible for ensuring CRU payments to farmers.

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).**
    b. **Describe the payment method (e.g., cash, mobile money, bank transfer, etc.)**
    c. **Describe by whom the payment is distributed by? (e.g., by the Local Partner or by a third party)**
    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.**

    The distribution of pay-outs towards Iora will follow the usual Acorn process, where Intellecap will directly receive 10% of the Carbon Revenues. The pay-outs towards the farmers will follow an alternative set-up, where initially the full 80% lump-sum of CRU proceeds will be paid out by Rabobank to Iora, and in turn Iora will distribute the funds directly to farmers to their individual bank-accounts via Direct Bank Transfer. The ideal timing and frequency of the payments will be once a year, typically before harvesting season but further feedback from farmers will be obtained during the time of the project councils to ascertain the exact timing of the annual payment.

Table 15. In-kind provisions

In-kind provisions	In-kind types
*Seedling/sapling costs	Not applicable
*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 16. Deductible cost

Deductible cost	Deductible cost types
Taxes (e.g., carbon tax)	Tax aspects relating to the project have been evaluated in detail, and based on our observations and legal advice, there is a strong indication that the

	farmer share of CRU proceeds will be tax exempt. For example, Acorn has in other projects in India received confirmation from government entities that farmers will not be taxed. Disclaimer here is though that due to limited precedent cases on farmer carbon tax, we cannot 100% confirm if the government will remain with this position.

Part M: 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 supports development of green livelihoods, incorporating capacity building and enterprise setup, which align with national labor laws and international labor standards. It promotes fair income sources and sustainable practices that benefit the local community, reducing the risk of poor working conditions. As mentioned above, the project is engaging local youth as Agroforestry Carbon Associates (ACAs), and this includes those from different socio-economic and educational backgrounds, and they are from regions across the state. We have contracts with them with clearly outlined engagement terms, including holidays, sick days, etc. Their role will range across data collection, M&E, capacity building, etc. In the enterprise development that will be carried out by the project, we will ensure that the trainings of communities on business practices includes aspects of labor laws and fair engagement of employees, so as to ensure that there are no discriminatory working conditions.	3	3	7
	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's commitment to health and safety is embodied in its social safeguarding framework, which is a structured set of policies and procedures designed to protect individuals and communities involved in the project. Occupational Health: It will likely address the physical well-being of workers engaged in project activities, ensuring that they are protected from occupational hazards such as accidents or exposure to harmful substances.	3	2	

	Community Health: Beyond the workers, the safeguard framework will consider the health implications for the wider community, including potential impacts on public health arising from project activities. Safety Protocols: The framework will include safety protocols to prevent accidents and injuries, especially for activities that might involve physical labor, use of machinery, or interaction with the environment that could present risks. Emergency Response: It should outline emergency response plans, including first aid and rapid medical response mechanisms for incidents that may occur during project implementation. Training and Awareness: Essential to this framework will be the training of staff and community members on health and safety standards, including awareness of their rights and the measures in place to protect them. Monitoring and Evaluation: The framework will probably set up a system for monitoring health and safety conditions, evaluating the effectiveness of the implemented measures, and providing avenues for improvements. Grievance Redress Mechanism: A key component of the safeguard framework would be a grievance redress mechanism that allows workers and community members to report health and safety concerns and to seek remediation. Meghalaya receives a high amount of rain for a large part of the year, where road conditions can become dangerous with some villages becoming completely cut off. In such cases, data collectors/ ACAs will not travel to these areas to ensure their health and safety.		

	Describe whether the project could support or be linked to forced labour, harmful child labour, or any other damaging forms of labour.	The project's strong community engagement and trust, validated land titles, and community-based interventions aim to prevent any harmful labor practices. The project's structure ensures community benefits and resilience, which indirectly serves to discourage forced or harmful labor practices. This proactive approach ensures that the project not only complies with legal and ethical standards regarding health and safety but also integrates these considerations into the core of project planning and implementation. This is particularly important in the context of Meghalaya, where rural and often rugged terrains might pose unique challenges. By embedding health and safety into the project's DNA, it can proceed in a manner that is respectful of human well-being, fostering a safe and healthy environment for all involved.	2	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.	Considering Meghalaya's unique social structure, where a matrilineal system is prevalent, the project's alignment with local cultural practices further supports gender equality. The matrilineal system inherently promotes the role of women in both the social and economic domains, which can be seen as an advantage for the project in its efforts to ensure equitable access to resources and opportunities for leadership and decision-making. This cultural aspect of Meghalaya society can be leveraged to advance the project's objectives and ensure that interventions do not inadvertently create or exacerbate gender-related inequalities. With this cultural context, the project will likely reinforce the existing societal norms that value women's contributions, ensuring that	2	1	**2.5**

		activities are well-aligned with local gender dynamics and are likely to be supportive of women's empowerment. In practice, this means that the project can work within an existing framework that already values female participation and leadership, potentially making it more effective in achieving its gender equality goals. Additionally, Meghalaya large network of nearly 450 women's groups – Self Help Groups (SHGs) working on different aspects of livelihood development and natural resource management. The project will work with these groups and encourage participation of women in different aspects of the current project.			
	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.	By recognizing and respecting this aspect (described above) of the local culture, the project can avoid imposition of external norms that may not fit the local context and work to strengthen existing social structures that supports gender equity. In terms of safeguarding policies, it is vital that they are culturally sensitive and designed in consultation with local women's groups to ensure they are appropriate and effective within the matrilineal context. Iora has various policies on sexual harassment (which define the processed of how instances of gender based violence is handled and prevented), anti-discrimination and a grievance redress mechanism to safeguard women.	3	1	
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.	This project is principally aimed at improving resource efficiency and reducing greenhouse gas (GHG) emissions through sustainable forest management and promotion of natural farming practices. By its very nature, the project is designed to enhance carbon sequestration and	**3**	**2**	**6**

		reduce emissions, rather than leading to an excessive consumption of energy, water, or other resources. However, the project will need to ensure that any activities, such as the establishment of nurseries or the implementation of irrigation systems, are conducted in a manner that does not lead to the overuse of water resources or excessive reliance on heavy machinery, which could increase GHG emissions. The project plans to establish local community nurseries that will be mainly sourced by collecting seeds from the neighbouring forests, this will ensure that there are no excessive transport related emissions. While these nurseries will require water and some form of irrigation, this is often manual and does not require the use of any large electricity or diesel based irrigation systems. The use of native species and traditional agricultural practices, as proposed, typically reduces the need for excessive external inputs, aligning with the project's overall goals of sustainability and carbon reduction. Regular monitoring and evaluation will be key to managing and mitigating any potential environmental risks or negative impacts. Additionally, tree plantation will also help rejuvenate existing springs in the region that have begun to dry up due to climate change.			
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 pesticides in close proximity to water bodies.	There is a focus on natural farming practices, which implies minimal or no use of synthetic fertilizers and pesticides that could pollute air, land, or water. The emphasis on these practices will help prevent release of pollutants and hazardous substances into the environment. As described above, the State also has an emphasis on the use of bio-based fertilizers. However, pesticides will	**4**	**3**	**9**

		need to be used by project farmers in the initial stages, as the incidences of pest and disease attacks is increasing. However, we will ensure minimal use of pesticides through trainings and regular interactions with farmers. Additionally, having a mix of species on farms with adequate spacing will also ensure that the spread of any disease is minimized, along with encouraging the presence of natural preys. Presently, the monoculture plantations of Areca nut across the state are suffering for a disease that is resulting wide spread loss of trees. One of the reasons for its quick spread is that these trees are planted very densely and as monocultures. By ensuring that we do not follow such unsustainable practices, the project will be able to minimize the use of pesticides. This should help protect any water bodies near project sites.			
	Describe whether project activities result in noise pollution that causes disturbance to the ecosystem. Consider the use of heavy machinery.	The project does not envision the use of any heavy machinery in planting or side preparation. Our community partners, small holder, farmers, have intergenerational experience and expertise in planting and site management through traditional practices. The only machinery use would be those of vehicles to transport saplings and materials to farmers in participating villages.	**3**	**2**	
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.	The project's activities are designed to avoid exacerbating stakeholder conflicts, with community involvement playing a pivotal role in shaping project design, participatory planning, and equitable benefit distribution. This approach mitigates potential conflicts with local government or authorities, especially considering that the MBDA, a State Government party, is a partner in the project. In case of any land related	**2**	**2**	**7**

		conflicts, the project will work with both parties to come to an agreement.			
	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.	There is no indication of political instability risk in the project region or the country. The local project team will be in constant touch with the IORA management team, who will also have an overview of all ongoing activities, and regular contact with MBDA and the state government, and in case of any developments related to political instability, we will be informed.	1	1	
	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.	Activities that could adversely affect health and safety, like exacerbating human-wildlife conflict could become a concern with increasing tree cover. However, Meghalaya has a rich forest cover already, and human-wildlife conflict is not a major concern in most regions. To ensure that this does now become a problem, the species recommended in the agroforestry design will be those that do not attract wild animals. Additionally, the project will not promote the use of synthetic fertilizers or excessive use of pesticides, thus avoiding the risks of contaminating any water bodies. The project teams will travel using motorbikes and cars when in the field, however the numbers of these will not be so high so as to result in excessive traffic. Additionally, we will utilize existing buildings in the region as our offices, and not construct anything new.	3	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, work, water and adequate standard of living.	In terms of human rights considerations, the carbon agroforestry project in Meghalaya is structured to actively promote and support the socio-economic rights of local communities. The project's framework and activities are designed with the aim to achieve Sustainable Forest Management, biodiversity conservation, and to meet socio-economic needs which align with the Universal Declaration	3	2	7.5

		of Human Rights. Here are the specific ways the project upholds various human rights: Right to Work and Adequate Standard of Living: The project is expected to create green income-generating opportunities for the communities of Meghalaya by the development of processing industries and value chains for green products from the State. This directly supports the community's right to work and to an adequate standard of living. We will also develop a local project team, and this will further support this. Right to Health: Through the promotion of natural farming and sustainable land management practices, the project contributes to the right to health by enhancing the quality of the local environment. The inclusion of fruit tree species and enhancement in incomes will also help improve and food and nutritional security of communities, thus improving their health. Cultural Rights: By utilizing a large traditional knowledge base for establishing village enterprises, the project respects and promotes cultural rights, integrating this knowledge with scientific developmental techniques. Right to Education and Capacity Building: The project will invest in community capacity building and enterprise development, ensuring that local communities receive the necessary training to manage their businesses effectively. This fostering the right to education and to freely participate in the cultural life of the community. Capacity building will also be on aspects of fire prevention (on farms), agroforestry best practices, etc. Right to Participate in Decision Making: Engagement of local community members in nursery development, forest plantations, and			

		the selection of enterprise development activities ensures their participation in decision making, which is vital for the right to self-determination. The project also includes specific welfare initiatives such as capacity building and enterprise establishment aimed at empowering communities, strengthening local institutions, and enhancing the overall well-being of the people, which feeds into their right to social security and to the continuous improvement of living conditions. Moreover, the project aligns with various international frameworks such as the United Nations Sustainable Development Goals (SDGs), furthering the commitment to human rights on a broader scale. The focus on enhancing the resilience of communities and ecosystems to climate change also ties in with the right to a safe, clean, healthy, and sustainable environment, which is increasingly recognized as a human right.			
	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 in Meghalaya is structured to ensure that community members will be central to decision-making processes, including the choice of species planted and the methods of farmer payment. The development of the agroforestry design involves community validation, and it will only be finalized after that process. Additionally, payment, whether they should be in kind or cash will also be take through project councils, which will take on board the decision of all communities.	**3**	**3**	
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 transition to agroforestry is carefully designed to balance the introduction of shade trees with the preservation of essential food crops. The project promotes intercropping and the use of fruit-bearing trees to maintain food affordability and accessibility. The crop species that	2	2	**5**

		will be recommended in an agroforestry model with shade trees will be those that grow well under shade. Other crops will be recommended with tree species that do not have a dense canopy cover, and their spacing design will be such so as to not excessively hamper crop growth. These models are being developed in consultation with communities and experts, to ensure they are able to grow the crops and tree species they need and find beneficial. Additionally, the project aims to bolster financial security by diversifying income streams through the sale of non-timber forest products (NTFPs), and CRUs, potentially increasing household incomes and fostering local economies. This will have a positive impact on food and nutritional security.		
	Describe whether project activities could negatively impact farmer/household income or reinforce existing financial hardship in the project region. Consider expected changes in productivity.	It is expected that these activities would not negatively impact financial stability. Instead, they are designed to diversify income sources and increase resilience against market and climate risks. By integrating agroforestry practices, the project aims to enhance long-term financial benefits for farmers, such as through the sale of CRUs and NTFPs. The project team recognizes that initial changes in land use could temporarily affect the productivity levels of traditional crops. However, it is anticipated that through careful planning, the introduction of agroforestry will lead to an overall increase in productivity and sustainability of agricultural practices, while also enhancing the ecosystem services and biodiversity of the region. Initiatives such as training programs for farmers, access to quality planting materials, and	3	2

		support mechanisms will be placed to facilitate a smooth transition and ensure that any potential short-term negative impacts on household income or food security are mitigated. While there may be a transition period as farmers adapt to new practices, the project will provide support and training to minimize any temporary decrease in productivity and to maximize long-term gains. Whilst access to training is indeed helpful for the farmers, engagement with farmers and also the wider community is crucial to monitor their perspective on this and include their input. Farmer engagement will be carried out on a regular basis though different means – trainings, project councils, community meetings, and contact through ACS. This will help in gaining the communities perspective about different issues.			
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 project has conducted preliminary assessments of climate variability in Meghalaya, accounting for the diverse microclimates across the 12 districts. These assessments indicate that communities and local stakeholders are increasingly vulnerable to erratic rainfall patterns and changing temperature trends. Meghalaya is the 12th most vulnerable state to climate change in India, owing to the fact that 80% of the population depends directly and indirectly on agriculture and natural resources for their livelihood. Since the region is prone to floods and soil erosion, the agriculture sector is particularly vulnerable. The project's design includes climate-resilient agroforestry practices to mitigate the impacts of climate change and extreme weather events, particularly promoting drought-resistant tree species such as Azadirachta indica, Schima wallichii, Alnus nepalensis,	**4**	**3**	**14**

		Magnolia champaca, Toona ciliata, Castanopsis spp.. Most importantly, the stats biggest climate concern is drying springs and soil run off. Carrying out tree plantations on degraded slopes combined with soil moisture conservation activities is critical for the state. Iora has planned training modules on soil and moisture conservation works- bunding, check dams, contour bunding, gully plugging. the project will also create a planting SOP which will include these measures, especially for high slope and degraded lands. organic farm manure will be provided to farmers as well.		
	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.	Climate variability and changing weather patterns are key considerations in our project planning and execution. As with all nature dependent sectors, the changing climate and any weather extremes will impact agroforestry activities being carried out. This is particularly relevant in the first few years of a plantation, before saplings have had a chance to become established and mature. In order to ensure the success of plantations, the project will support farmers in maintenance and replacement of saplings for two year to address any mortality issues along with soil and moisture conservation works. The state has traditionally had a high survival rate of 80%, and we are expecting the same for this project as well. Additionally, the project will also carry out capacity building and trainings of project farmers on proper maintenance techniques to ensure sustainability of plantations. As mentioned above, when carrying out plantations, we will work with farmers to implement activities to enhance soil health and water retention, which may help mitigate the impacts of both untimely and extreme rains and reduce erosion,	**4**	**4**

		while contributing to water retention and recharge of springs.			
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.	Meghalaya has a traditional social structure, organized of a number of tribes who are governed by a multi-tiered traditional institutional setup. There are predominantly three primary tribes—Khasi (48%), Garo, and Jaintia that dominate the the demographic landscape. Iora has had sensitization meetings to include the village headmen referred to as the Nkomas of these tribes in the disgn of the Acorn project. The unique nature of local governance and traditional rights ensures that there are very few who are landless, albeit with a big delt in land holding, with some farmers possessing land parcels as small as 0.2 ha. Hence its critical to allow smallholders with very small parcels of land to also be able to access carbon finance through our program. Different tribes are distributed across different regions of the state, and therefore, the program must ensure that there are field teams, connectivity, outreach, and dissemination of our goals across the length and breadth of the state. This will ensure that marginal farmers as well as tribal communities with the presence and remote corners of the state can benefit from the program. Another particular group of focus of the program is youth, and the program seeks to engage a large number of young males, citizens, either directly as part of our extensive field teams, or indirectly as beneficiaries of carbon finance as nursery entrepreneurs and as value chain, participants working on creating enterprises that provide higher returns to farmers for their ag to produce. The program will also focus on insuring a strong representation	**3**	**3**	**9**

		of women in decision-making. We will achieve this by prioritizing women, farmers, ensuring a minimum representation of women which will be at least 25% in the project council, and identifying women entrepreneurs who can be supported for developing agroforestry based enterprises in the state. The various tribal groups have traditional methods of tending to the land and agriculture. While there is a strong push to move away from the traditional/and slash and burn agriculture (jhum), some of the traditional methods of soil management, water management and forest food intercropping are important, and we will make a effort to integrate these into our program. .			
	Describe whether the project could disproportionally affect or discriminate against vulnerable groups. Consider access to project services or benefits and decision-making.	The project is designed to empower communities by providing sustainable livelihood opportunities and enhancing ecosystem services, which will benefit people with disabilities, those with lower income, and landless groups. It aims to improve soil health, increase biodiversity, and promote natural farming, which in turn should create more resilient communities that are less vulnerable to economic and environmental shocks. Optimistically, the project is well-positioned to not only minimize risks to vulnerable groups but also to contribute positively to their socio-economic development through various co-benefits such as capacity building, enterprise development, and enhanced participation in sustainable practices. Additionally, as described above, the project will engage with all groups within a community to ensure that the project benefits are distributed equitably.	**3**	**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.	Regarding land tenure conflicts, the project activities are structured to work within existing land ownership and tenure frameworks, mitigating the risk of exacerbating any land disputes. Meghalaya has a traditional system of land tenure which is recognized by the Government and endorsed by the supreme court of India. Traditional institutions have divided and awarded tenure to individuals and communities. Farmers have either ownership documents or an No objection certificate (NOC) from the village headmen stating that the individual has ownership of that land. The project is actively engaging with local communities to ensure that their land rights are respected. Before implementing project activities, thorough consultations with community members and stakeholders are carried out to prevent potential conflicts over land ownership or user rights. These proactive measures aim to ensure that project activities contribute positively to the community and uphold the principles of equity and sustainability. For private ownership, during onboarding of farmers, ownership documents are checked by the field teams. In the case of community lands, ownership will be validated with the heads of the traditional village institutions. In case of doubt, land titles will be validated with the District Autonomous councils- an elected local governance body.	**1**	**2**	**2**
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.	Some of the major challenge facing the agricultural communities of Meghalaya are climate change, lack of capital and financial accessibility, lack of access to market for agricultural produce, land degradation and reducing crop productivity. Support with plantations and benefits of	**3**	**3**	**15**

	agroforestry, including income from CRUs are what they will value from the project. Additionally, the support provided with the development of value chains will also help fulfil their needs of enhanced income and climate resilience.		
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.	Community involvement is essential in shaping the project's design and implementation pans. We are actively engaging with communities at this stage to raise awareness about the project and benefits of agroforestry. This is through village, block and district level meetings that are free for anyone to attend. Holding meetings at the village level encourages participation of women and vulnerable groups who may not always be able to travel large distances. Additionally, the agroforestry design for new plantations will also be developed in consultation with communities, where meetings will be help in sample villages across all regions for seeing inputs on the species and crops being proposed. Project council meetings will be held twice a year. The proposed regional Project Council meets, one in each of the three regions of the State, will be organized in the morning hours for easier access to transport and roads. They will be conducted in community halls at the district headquarters and will be facilitated by the Local Partner with support of the subcontractor. The decision making will be through majority vote.	**3**	**3**
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.	Multiple brochures and informative materials have been developed in local languages for the purpose of sensitization and awareness. These are mainly visual in nature with minimal text. Further, community meetings which are free to attend are being conducted to ensure inclusion of any person who may not	**3**	**2**

		be able to read. However, in the meetings conducted so far in the year 2024, it has been seen that local stakeholders are able to read the vernacular, sign their signature and jot down notes from the presentation.			
	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 project will stay in regular touch with all project farmers through ACAs, using personal interaction and WhatsApp groups. These will be used a means of communicating project progress and impact. Additionally, transparent channels will also be established to provide farmers information regarding the carbon sequestered by their farm and the CRUs generated, along with the income they receive from it. The outcomes of the project council meetings will also be informed to the local stakeholders through a flyer/ newsletter highlighting key points and outcomes. Additionally, as mentioned above, the WhatsApp group established for each area will also help to keep stakeholders informed.	**2**	**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?	IORA will develop the Grievance mechanism for this project that will include the below outlined aspects. Project farmers will be able to get in touch with their local representative, who will then take the complaints to the committee as part of the grievance addressal process. Grievances committee: A formal body consisting of neutral members will be formed to provide a fair and impartial forum for resolving disputes and conflicts, particularly pertaining to land, and concerns between the local stakeholders and other parties. Formation and information: The committee will be composed of individuals who are independent, impartial and knowledgeable about the principles of program and its long-term goals. They will be vested	**2**	**3**	6

		with the authority to receive, investigate, and adjudicate grievances submitted by individuals or groups. Such communication shall be received by letter, message, or phone for which the printed details will be circulated in both languages, English and the vernacular, at the Project Council meetings and also by the ACAs on the field. Procedures and confidentiality: The committee will be empowered establish clear and transparent procedures for handling grievances fairly and timely, resolve these grievances, or escalate to the next level which shall be Senior Management members of the LP. The Grievance Committee shall produce a written report on each grievance handled and submit the same to the designated member of the Senior Management of the LP. The committee shall treat all information related to grievances with confidentiality and discretion, prioritizing the protection of privacy of individuals involved. Confidentiality also encourages open communication and trust in the grievance resolution process. The farmers have contact details of the project team and the local office address. If they want to report anonymously they can write in to the office. They will be informed of this option. Mediation and Arbitration: The Committee is also empowered to facilitate mediation or arbitration sessions to help the grieving parties engage in constructive dialogue and collaborative negotiation. Appeals Process: The grievance mechanism also includes an Appeal process by which, parties that are dissatisfied with the initial resolution may seek review or consideration of the decision. The Appeals process also serves as providing another			

		layer of accountability for the Committee and the LP.			
	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?	Project has a steering committee, which is being set up, comprising senior official from the state government, with representation of various government departments, traditional community institutions, as well as the local partner. this committee is in a good position to receive, and help resolves grievances, which can be directly addressed by the local partner.	**2**	**3**	
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.				
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 emphasizes biodiversity conservation as one of its core objectives. The selection of species for planting is focused on native or naturalized species, reducing the risk of introducing invasive species that could out-compete or damage native flora. This approach also mitigates the risk of habitat degradation, fragmentation, or loss, as it supports the natural ecosystems. Where fencing will be used, it will be bamboo based and mainly to protect plantations from cattle. The use of pesticides will be necessary, as Meghalaya, like the many regions in the world, is seeing an increase in pest and disease attacks on plants due to climate change. In order to protect the agroforestry plantations, use of pesticides will	**3**	**3**	**10**

		be necessary. We will train project farmers on the proper use of these, including providing an understanding of appropriate dosages and timings.			
	Describe whether the species to be planted under this project could become invasive or result in competition with or damage to native species.	As mentioned above, the project focus is on natural or naturalized tree species only, thus there will be no threat of these becoming invasive. Additionally, the project will implement a mixed species agroforestry model, which will further ensure that there are no monocultures. Some existing plantations carried out by the State Government, e.g. those by MGNREGS, are likely to be monocultures, and in those cases, the project will provide support for gap filling to increase the biodiversity there, improving the sustainability of these.	2	1	
	Describe whether the project intervention could lead to habitat degradation, fragmentation or loss, such as through land conversion and preparation.	The project's interventions on private or community lands are designed to restore degraded lands and enhance existing forest cover through sustainable practices. It is unlikely to lead to land conversion that would adversely affect habitats, soil or the ecosystem. Instead, it aims to improve ecosystem health and increase biodiversity.	3	3	
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.	One of the key logical issues facing the state of Meghalaya, is soil, erosion, and runoff. This has happened as a result of unscientific increases in frequency of/and one agriculture, changes in rainfall pattern with very excessive rainfall in a few days and decrease in recover. The state has identified three plantations as one of the key solutions to address these issues. Our program will aid the state's school incentivizing, farmers to plant more trees with support from finance. We will augment the trip plantation with soil and moisture conservation activities, such as counter, trenches, Gali, plugging, check dams, etc.	3	2	6

		Further we will optimize the application of synthetic fertilizers replacing these to a large extent with farm yard, manure and mulch. We have already planned in our program, training and dissemination of best practices for both soil and conservation, composting, menu application to our farmers. These will also be captured in SOP's and guidance documents that we provide to farmers when we support them in plantations. In our agroforestry designs we have included several nitrogen fixing trees. These agroforestry designs have been thoroughly validated, not only with scientific experts, government representatives, but also with community members themselves			
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 state receives the highest rainfall in India, and plantation will be carried out during the monsoon season. Given the high amount of rainfall there is no need to apply any external irrigation. In Meghalaya at the time of plantation there is no requirement of applying irrigation. Additionally, for new plantations we will also carry out soil moisture conservation interventions such as trenches, gully plugs, etc. This will help reduce soil run off and hold water in the soil, supporting the new plantations.	**2**	**2**	**4**
Sustainable use of natural resources	Describe whether the project could lead to the unsustainable use or overexploitation of natural resources.	Core objectives include enhancing biodiversity, restoring degraded land, and developing green livelihoods through sustainable forest management and organic farming practices. Such an approach typically involves careful resource management, avoiding overexploitation, and maintaining ecological balance. As the project emphasizes the use of native species and natural farming practices, it is less likely to lead to the unsustainable use or	**2**	**2**	**4**

		overexploitation of natural resources. The project's success depends on its ability to maintain the health and productivity of the land, which requires sustainable practices that do not deplete natural resources. Thus also building the climate resilience of ecosystems. However, as with any project that interacts with natural ecosystems, there is a potential for resource overexploitation if not managed correctly. To prevent this, the project employ rigorous monitoring and adaptive management strategies to ensure that resource use remains within sustainable limits and does not compromise the ecological integrity of the region.			
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.	Meghalaya is a predominantly a tribal state, with a large Indigenous community population and the major tribes – Garo, Khasi and Jaintia – comprising more than 85% of the population. These tribal communities, along with other smaller tribes, have ownership rights over the land and forests, and the project respects these rights. The project has actively involved these indigenous communities in its planning and implementation. The onboarding process clearly outlines the rights of communities on their lands and takes their consent before the signing of the participant agreement.	**3**	**2**	**5**
	Describe whether the project could displace or negatively affect Indigenous Peoples with claims to land or territory within the project region. Consider project expansion.	Stakeholder consultations form a primary step in project implementation, with community members being the key stakeholders. This inclusive approach ensures that the processes and practices for enterprise development and green livelihood generation will be selected collectively with community involvement, including	**2**	**2**	

		representation from various government departments and community representatives.			
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.	As the project is being implemented on individual and barren community lands, it will not be on any culturally significant sites. We do acknowledge the cultural heritage of the region by recognizing the ownership rights of communities over the land and forests. The forests, covering a diverse range of forest types and species, are integral to the cultural fabric of the state, which is home to a significant number of endemic species and contributes to the country's overall biodiversity.	**2**	**1**	**5**
	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.	As mentioned above, the project will be on individual and barren community lands. Thus, this should not have any negative impacts on the cultural heritage of the state.	**2**	**2**	
	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.	By employing a participatory approach involving local communities, the project supports the preservation of intangible cultural heritage, such as traditional agricultural practices. The linkage with state initiatives like the Green Finance Scheme shows an alignment with local socio-cultural norms and practices. Additionally, the project focuses on using native and fast-growing native species for afforestation and restoration, such as Gmelina arborea, Magnolia champaca, and local bamboo species like Dendrocalamus hamiltonii. This approach not only helps in	**2**	**2**	

		maintaining the ecological balance but also supports the conservation of local biodiversity, which is part of the area's cultural heritage.			
Other social and environmental risks					
Other social risks	Describe any other (existing) social/livelihood risks or impacts that the project will (cumulatively) contribute to.	The project is designed to mitigate social and livelihood risks by enhancing sustainable practices, promoting biodiversity conservation, and providing green livelihood opportunities. However, any shift in land use or introduction of new agricultural practices could potentially disrupt crop productivity, thus impacting livelihoods. However, a shift back to traditional practices of agroforestry will result in an enhancement in social and ecological conditions. Transition to new forms of enterprise will also require skill development and could initially challenge existing social structures. Careful monitoring, inclusive planning, and community engagement will be crucial to manage these risks and ensure that the project contributes positively to the social and economic fabric of the region.	**3**	**3**	**9**
Other environmental risks	Describe any other (existing) environmental risks or impacts that the project will (cumulatively) contribute to.	Any project of this nature carries potential environmental risks, such as: <u>Resource Competition:</u> The introduction of trees could result in an initial loss of productivity of agriculture crops. <u>Ecosystem Balance:</u> Even with a focus on native species, there's a risk of altering the ecological balance if the species mix changes significantly. <u>Water Use:</u> The project does not foresee any need or use of irrigation.	**3**	**2**	**6**

		Disease and Pest Management: Increased plant density could lead to disease or pest outbreaks that need to be managed carefully to avoid the use of harmful substances. These risks will need to be managed through careful planning and constant monitoring to ensure the project contributes positively to the environment and does not exacerbate any existing environmental issues.			
Overall E&S risk score: *(Acorn to complete)*					**139(low)**
Carbon reversal risks					
	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 above, multiple brochures and informative materials have been developed in local languages for the purpose of sensitization and awareness. These are mainly visual in nature with minimal text. Further, community meetings which are free to attend are being conducted to ensure inclusion of any person who may not be able to read.	**2**	**2**	
Understanding of the agroforestry project and agroforestry designs	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.	Only farmers who agree to be a part of the project and then sign the participant agreement are onboarded. Thus, yes participants will have signed the agreement before CRU generation.	**1**	**2**	**5**
	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).	The design of agroforestry systems is expected to be informed by local partners, stakeholders, agronomists, and respects local culture, traditions, and market needs. The choice of species and farming techniques would consider the region's species diversity and climatic conditions. We are currently in the process of finalizing the design, where we will conduct a	**2**	**2**	

		workshop with participants from relevant state government departments (forest, agriculture, soil and water conservation, etc.), academics, agronomists and practitioners to validate design and develop agroforestry design. Post this the designs will be validated with communities across the state before finalization.			
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.	Training programs for participants would be integral to the project's success, focusing on the practices promoted under the project's agroforestry designs. 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, establishing a business, marketing, fire prevention, etc. Such training would aim to equip local farmers and community members with the skills needed to implement and maintain the agroforestry systems effectively.	**2**	**2**	**4**
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.	MBDA has extensive experience in working with farmers and communities in the region. The organisation has previously implemented multiple projects on agroforestry, rural livelihood development, watershed management, and similar activities. Thus, the staff has extensive experience of similar work to the Acorn project. Their experience would be crucial for the effective implementation of agroforestry or other nature-based projects. IORA has implemented several projects on agroforestry and other nature based solutions across the country.	**2**	**2**	**4**
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	The project has a plan for establishing community nurseries to provide a consistent supply of high-quality agroforestry tree seedlings and saplings. These	**2**	**2**	**4**

	result in a halt project activities or termination of the project.	nurseries will be developed in partnership with local communities to ensure that they meet the project's requirements and support its sustainability goals. In addition to establishing nurseries, the project will also work with the existing system of nurseries established by MBDA, MGNREGS and SWC to assess their capacity to support plantations for the project.			
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 project is expected to have financial planning in place to ensure smooth operation until CRUs are generated. This would be important to mitigate the risk of project activities being halted due to unforeseen financial challenges. In the case of any unforeseen events, IORA will be able to sustain project activities for a short period, to ensure farmers do not face any adverse impacts.	**5**	**3**	**15**
Overall carbon reversal risk score: *(Acorn to complete)*[2]					**32 (Low)**

[2] 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 16. Indicator monitoring plan.

Livelihood / environmental indicator	Impact description	Mitigation action (if negative impact expected)	Monitoring frequency and method	Responsible party
Household Nutrition	Positive impacts are expected due to the fruit trees planted, which will provide more nutritious food for households. The additional income from CRUs and value chain development will also help provide nutritional security.		Farmer Surveys every three years	IORA's local project team
Agricultural biodiversity	Positive impact expected due to implementation of scientific agroforestry systems with improved and enhanced yields to optimize land productivity. As the project is promoting plantation of mixed species for both trees and crops, this will help improve agricultural biodiversity.		Annual monitoring of project farms	IORA's local project team
Farmer income	Positive impact expected due to diversified income streams (from both agroforestry and carbon revenue) contributing to farmer's improved quality of life. Project will also support development of value chains and local entrepreneurs, which will also help improve incomes.		Farmer Surveys every three years	IORA's local project team

Youth inclusion	Positive impact is expected due to active and fulltime engagement by the project for all implementation and monitoring activities over the long-term. Additionally, capacity building and entrepreneurship models will also engage youth.		Regular monitoring through engagement with project farmers	IORA's local project team

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 17. Leakage monitoring plan.

Source of leakage	Mitigation action	Monitoring (frequency and method)	Responsible party
Leakage may arise from removals through premature harvest, or natural causes such as disease attacks, fire events, etc.	The high carbon prices and awareness generation on the rules of the program we are carrying out, and will continue to do periodically, will mitigate losses due to premature harvest. We are working on getting the best available planting material to reduce mortality. Additionally, we will ensure adequate spacing between trees and a mix of different species to reduce the chances of pest and diseases. We will also create fire lines where needed and provide training on fire prevention to project farmers.	We will have teams working with community members to carry out regular monitoring for early assessments of any risks and their management. These community members will be trained on what signs to look out for with regards to pest and diseases, to ensure early detection and control.	Local IORA project team with oversight by IORA management

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 18. Risk monitoring plan.

a. Risk category	b. Identified risk areas or potential negative impacts	c. Mitigation action	d. Monitoring (frequency and method)	e. Responsible party
Climate Vulnerability	12 districts of Meghalaya are prone to erratic rains and droughts. What exact drought resistant species and other climate-resilient techniques will be adopted to improve the adaptive capacity? Additionally as the area is prone to extreme weather events which accompany pests and diseases which are likely to affect a plant success rates. Therefore an emergency/disaster preparedness and response plan should be provided by Iora	• Iora will provide drought resistant saplings and including species such as Azadirachta indica, Schima wallichii, Alnus nepalensis, Magnolia champaca, Toona ciliata, Castanopsis spp. • Soil moisture conservation technique of tree plantations on degraded slopes • Farmer Training on proper pesticide use and dosage including soil and moisture conservation works-bunding, check dams, contour bunding, gully plugging. • Emergency/disaster preparedness and response plan	This will be part of ongoing monitoring of sapling survival, and will be supplemented with special monitoring in the event of any natural disasters.	ACAs
Vulnerable groups	"The project has identified some vulnerable groups or individuals in the project area, including with lower income. These are youth groups and tribal communities such as Khasi, Garo, and Jaintia. However there is partial understanding of the disadvantages faced by these	• At least 1 Representative belonging to each tribal group will be included in the project council meetings to cater to their needs and or concerns. Project councils will be established in each region in the state. • Empowering the youth to be part of the ACAs who will be responsible for	The project council will be carried out in each region and we will ensure there is representation of different groups at these. Trainings will also be carried out across the state and all participating	Iora project team

	populations, but some gaps remain in fully comprehending their unique challenges and needs. Therefore there is a moderate risk of overlooking specific needs and vulnerabilities of marginalized populations,	performing activities such as training other farmers as well as translating material to vernacular languages for some farmers, data collection and monitoring activities	farmers will attend these. We will also encourage all groups to attend the value addition and value chain development trainings that will be carried out.	
Human rights	Iora will encourage agroforestry models to transition farmers away from jhum cultivation. This and use change that the farmers have to adapt to. How will they be sustained/what incentive do they have in the immediate years before the CRU money has been generated and can see the benefits?	• Farmers and the community will be consulted in Project councils to ensure their support of the agroforestry design • Training to also sensitize farmers on the benefits of the transitions away from Jhum will be delivered to participants	Training reports and participation details along with participant feedback will be prepared for all trainings.	Iora project team
Community, health, safety, and security	Seeing Community exposure to contaminated water bodies through pesticide use	Farmer Training on proper pesticide use and dosage including soil and moisture conservation works- bunding, check dams, contour bunding, gully plugging.		
Labor and working conditions	There are moderate deviations from the ILO standards, LP must be ILO compliant in regards to clearly stating workers freedom of association of workers and compulsory labor	• Iora will revise policies to ensure all policies and employee contracts clearly state: That workers are free to organize unions join unions and engage in collective bargaining without fear of retaliation • Periodic verification that workers are not	Periodic surveys with all workers	Iora project team

		being coerced into working through threats, debt bondage or other forms of compulsion		
Grievance mechanism	The grievance has not been established yet and it should be monitored. Additionally, Iora must enhance its grievance process by having an external consultant that can resolve grievances that are not suitable or able to be solved by them	• Setting up of the grievance committee within Iora where each participant will also have access to all communication/ contact information which will be printed on all handout materials during meets and interactions. Additionally Iora, through the assistance with the ACAs will be responsible for the record keeping of all the grievances reported • Setting up of steering committee as a third party to resolve the grievances that are escalated by the farmers/communities	Meeting reports of the grievance committee and the third party in instance where they are involved	Iora project team
Stakeholder engagement	Iora plans to organize 3 project councils – 1 in each region of the state. Capacity of LP to organize 6 project council meeting each year along with other community meetings must be monitored	Financial and administrative capacity monitoring of organizing project council and other community meetings	Project council reports after each meeting	Iora project team
Other social risks	Challenge may occur to existing social structures as project transitions to new forms of enterprise and famers needing to upskill.	Monitoring of farmers response to crop/financial transitions in community or project council meetings	Project council reports and regular feedback from participating farmers in case of any concerns	Iora project team

Biodiversity	Species reduction such as essential insects and pollinator disruptions through pesticide uses.	Farmer Training on proper pesticide use and dosage including soil and moisture conservation works	ACAs will have regular contact with farmers and this will help ensure they use the recommended amount of pesticides/ fertilizers and follow the appropriate health and safety procedures. It will also help ensure that they have understanding of the different trainings given and are implementing those activities.	ACAs
Soil disturbance	Project activities could lead to moderate soil disturbance, particularly if there is improper administration of synthetic fertilizers	• Farmer Training on proper fertilizer use and dosage including soil and moisture conservation works		
Pollution and waste	High pest/disease risk leading to increased pesticide use: There have been some reported pest attacks Hoertia viressoides which defoliates the Agar tree and Calopepla leayana which threatens G. Arborea and Bud rot on Areca nut trees. The area is prone to pests for which the farmers would require a sizable amount pesticides. How will Iora ensure that optimal levels are monitored. Additionally synthetic fertilizers may pose a threat to nearby water supplies.	• Farmer Training on proper pesticide use and dosage including soil and moisture conservation works • Periodic monitoring of farmer fields		
Logging risk	Deforestation is a major issue in Meghalaya, more information is needed to address what alternatives will be available for participating and non-participating communities in place of wood. What	• Iora plans on distributing, improve cookstoves, electric cooking systems to farmers on an as needed basis • Raising awareness generation of the benefits of trees on the fertility and	Tree survival will be monitored and periodic awareness generation activities will be carried out in the region	ACAs

	actions/steps will be taken to address illegal logging?	water availability in the state. • Periodic M&E activities including remote, sensing based assessments of survival, regular visits and interaction of our field associates with farmers ongoing stakeholder engagement will be carried out		

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 19. 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	**Yes**	The SoilGrid confirmed that project is not on high organic soils, with the following results thickness detail >

	more than 10% of a plot that is under any of the following types of land: - Land containing organic soils; - Land which, in the baseline, is subjected to land-use and management practices and receives inputs listed in the Acorn Methodology		40cm, SOC content less than 20%, and clay of <50%

2. Adjustment Factors

Table 22 below gives an overview of the adjustment factors applied for this specific project.

Table 2220. Adjustment factors.

AdjF	Factor (%)	Reasoning
Leakage	0%	See adjustment file and section below
Uncertainty	20%	See adjustment factor data package
Pre-project	50%	Check out adjustment file for calculation

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.);

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);

There could be a loss in productivity in the initial stages of introduction of agroforestry, having resulting impact on incomes. However, as mentioned in sections above, transition to agroforestry is being designed to balance introduction of shade trees with the preservation of essential food crops. The project promotes intercropping and the use of fruit-bearing trees to maintain food affordability and accessibility. The crop species that have been recommended in the agroforestry models with shade trees are those that grow well under shade. Crops that do not grow well under shade are recommended with tree species that do not have a dense canopy cover, and their spacing design ensures that they do not excessively hamper crop growth.

Farmers who will take up new agroforestry will also be provided pre-financing, thus there being no burden on them for taking up plantations. Additionally, while farmers are not allowed to harvest the trees they will grow, they can carry out minor pruning activities, as and when needed. This should help in not increasing any burden on neighbouring forests or cutting of trees outside of the farm. Presently as well, communities rely on fuelwood for cooking purposes, and they are permitted to collect this from forest areas. This is in the form of fallen or decaying branches and does not require the cutting of trees.

The proportion of land use to grow main cash crop will depend on the agroforestry model being recommended, as the density of trees will be different in these. The agroforestry models have been developed keeping in mind that farmers rely on these lands for food and income. It has been ensured that the density of trees is not so high so as to now allow crop production.

c. **Complete Table 23 below based on the leakage calculation outlined in the Acorn Methodology**.

Table 23 21. 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
-20% (y5)	Broomgrass	1.37%	Cropland
-25% (y5)	Pineapple	1,71%	Cropland
-20% (y5)	Chilli	0,78%	Cropland

II. Describe the land between farms and a maximum of 5 km outside of the project area in Table 24 (i.e. crop land, degraded land, forest).

Table 2422. Land cover assessment.

Shrub land	Grass land	Crop land	Built-up	Bare/Sparse vegetation	Herbaceous wetland	Tree cover <60%	Tree cover >60%
0,00	1,26	30,57	0,55	0,18	0,03	39,18	27,96

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 2523. Displaced farmer activities.

Description of the displaced farmer activity	Replaced or moved?	If moved, where will the displaced activity take place.
Timber harvest for monetary gain	Replaced	
Monoculture tree plantations	Replaced	

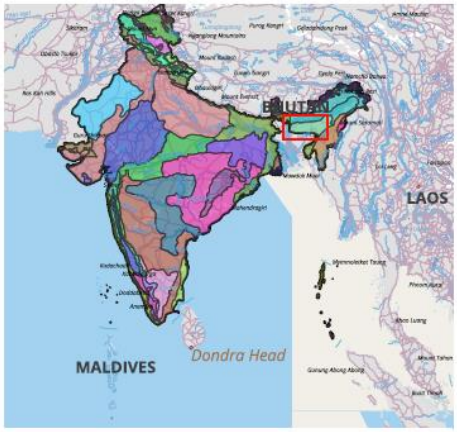
4. Root-Shoot

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

Table 2624. 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)

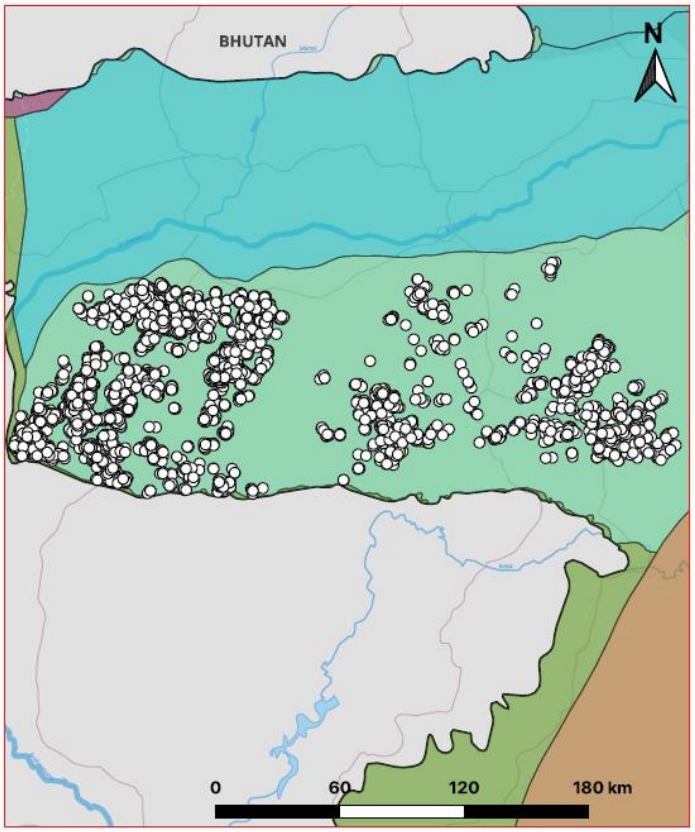


Legend

○ Farm plots [6903]

Ecoregion

- Brahmaputra Valley semi-evergreen forests
- Lower Gangetic Plains moist deciduous forests
- Meghalaya subtropical forests ✓
- Mizoram-Manipur-Kachin rain forests



Annex 2: Sub-contractor assessment

Activity	Local Partner	Sub-contractor 1 [MBDA and its affiliates]	If 2 or more partners (including the local partner) share activity, please describe how (i.e. who does what, location, farmer group)
Active engagement with farmers (i.e. meetings and workshops)	Yes	Yes	IORA's local Project Management team along with MBDA's on-ground implementation team that is spread across the state consisting of 12 District Project Management Units with multiple members who manage different divisions at block and village levels, will jointly organize engagements with farmers through several planned meetings and consultations.
Community/stakeholder engagement (i.e. raising awareness of project and government approval)	Yes	Yes	IORA is responsible for raising awareness of the project amongst stakeholders and obtaining all necessary government approvals. MBDA will support in reaching relevant local stakeholders.
Grievance mechanism establishment and reporting of grievances	Yes	Yes	IORA will take responsibility for establishing the grievance reporting mechanism. MBDA will also provide advisory service to assist and ensure an effective process.
Establishing the project council and organising the meetings (i.e., location, members, and time)	Yes	Yes	IORA's local Project Management team will be responsible for establishing the project council, organising those meetings in a timely manner and organising and coordinating village level community meetings. MBDA representatives will also attend these meetings and support in facilitating the proceedings.
Facilitating project council meetings and reporting the minutes to Acorn	Yes	Yes	IORA will take the lead role in facilitating Project Council meetings and reporting minutes of these meetings to Acorn. MBDA will be present in the meetings to support.
Appointing lead farmers	Yes	No	IORA will take the lead in identifying qualifying farmers.
Completing project documentation (i.e. eligibility and certification assessments)	Yes	No	IORA will be responsible for all project documentation. Where required, information will be sought from MBDA.

Assessing and reporting on project risks (i.e. risk reversal assessment)	Yes	Yes	IORA local Project Management team along with MBDA will ensure that any risks are assessed and reported in a timely manner.
Farmer data collection for onboarding (i.e. farmer ID, polygons, land tenure and consent forms)	Yes	Yes	IORA's local project management team will engage with data collectors who are being trained and supervised by IORA. The data collectors will be responsible for onboarding, while MBDA will facilitate community engagement.
Monitoring and reporting (i.e. field visits, farmer surveys, land ownership, progress reports)	Yes	No	IORA will conduct field visits, farmer surveys, and check land ownership documents and be responsible for preparing periodic progress reports to submit to Acorn.
Conducting ground-truthing data collection	No	No	This will be done by third party appointed by Acorn. IORA will support with organising and facilitating the field trip.
Financial management (i.e. creating the business case)	Yes	No	IORA will take the lead in preparing the Business Case with relevant input from MBDA where needed.
Field visits to determine suitability of land for trees	Yes	Yes	Both IORA's local Project Management team, MBDA local team and nominated representatives of the community will conduct joint visits to determine suitability of land
Creating the agroforestry design (i.e. tree species selection and land type assessment)	Yes	Yes	IORA and MBDA will create the agroforestry design based on experience, keeping in mind local preferences and suitability for the region. The IORA team has agronomists on the team and MBDA has extensive local knowledge. Additionally, the AF design has been validated with local agronomists, other experts, and communities.
Providing training (i.e. agroforestry and financial management)	Yes	Yes	IORA will plan training interventions and execute them with support from MBDA
Provision of Agri inputs (i.e. seedlings and fertilisers, if applicable)	Yes	Yes	IORA will primarily plan and coordinate the local provision of Agri inputs with support from MBDA.
Establishing/supporting demo farms (if applicable)	Yes	Yes	MBDA will take responsibility for establishing demo farms if applicable with management advise from IORA

Establishing/supporting nurseries (if applicable)	Yes	Yes	IORA will take responsibility for establishing nurseries with management advise from MBDA, and support for reviving CLLMP nurseries
Paying the farmers their 80% of the CRUs	Yes	No	IORA will take responsibility for paying farmers 80% of CRU revenue
Receives CRU sales from Rabobank into bank account and stores farmer payment separately/ear-marked	Yes	No	IORA will receive CRU sales from Rabobank into bank account and store farmers payments separately
Setting up loan/in-kind/payment administration	Yes	No	IORA will setup the payment administration system against monitoring and performance records.

Name of sub-contractor:	Meghalaya Basin Development Authority
Representative name and position:	Dr. Subhash Ashutosh
Contact details:	Co-chairman & Director, Centre of Excellence (NRM & Sustainable Livelihoods)
Website URL:	https://mbda.gov.in/about-mbda
Description on organisation and their goal:	MBDA aims to address management of natural resources in the state while addressing issues of livelihoods among the rural communities with emphasis on sustainable good practices. Its strategies focus on leveraging the strengths of the land while adapting to climate change, without degradation to the environment.
Key role in the project:	On ground implementation partner
Number of years active in project area:	13 years, since 2011
Past experience working with farmers and in the project location (organising land tenure, implementing agroforestry, providing training etc.).	The MBDA has implemented the following key interventions: 1. Entrepreneurship development 2. Apiculture mission 3. Livestock mission 4. Rural financial inclusion 5. Natural resource management 6. Community nursery 7. Community seedbank 8. Springshed initiative (https://mbda.gov.in/key-interventions)
Contribution to the farmer/community livelihood and social/economic development of the participants and their communities:	Through dissemination of these programs and making green job opportunities available, MBDA is working towards not only alleviating poverty, but ensuring it is achieved without environmental degradation.

As a sub-contractor for this Acorn project, I hereby understand all the requirements outlined in the Acorn Framework and agree to adhering to these requirements over the life of the project. If the

Acorn Framework is updated, the contractor will need to follow the requirements in the updated version. I take full responsibility for keeping the local partner informed of any potential risks where the requirements in the Acorn Framework may not be met.

Date: 09.11.2023

Signature of sub-contractor representative:

Date: 09.11.2023

Signature of local partner representative:

Minimum requirements assessment

Below is a set of minimum requirements that an outsourcing party needs to comply to to be accepted by Acorn to perform (part of) Acorn related activities. Acorn has the right to ask the sub-contractor for proof of any of the below requirements.

Requirement topic & question	**Acorn Minimum requirements**	**Requirements met** (Y/N)	**Comments Sub-contractor**
1. Governance & Leadership			
1.1. What is the legal status of the organization?	The organization has national legal status	Y	Special-Purpose Vehicle of the Government of Meghalaya
1.2 Does the organization have a formal structure of different governance levels (Executive Board, Executive Committee or Management) with delineated respective roles and responsibilities?	The organization has a formal structure of different governance levels, and the respective roles and responsibilities are somewhat delineated	Y	Organizational chart available on website - https://mbda.gov.in/organization-chart
2. Human Resource			
2.1 How many employees are there in the organization? (specify number in comments field)	5 FTE (full time employee or equivalent) employees or more (depending which activities are outsourced)	Y	> 1,000
2.2 How many employees are working locally in the project area? (specify number in comments field)	5 FTE (full time employee or equivalent) employees or more (depending which activities	Y	>10

	are outsourced)		
2.3 To what extent does the organization have adequate staff resources to implement Acorn activities? (as opposed to needing to hire / train more staff)	About half (36% - 65%) of the established posts are filled with staff that have (local) experience in implementing projects similar to Acorn	Y	Most of the staff of MBDA are local, with a mix of both Garo and Khasi-Jaintia ethnicity. Their experience ranges across sciences, social science, finance, community engagement, climate change, natural resource management, knowledge management, project management, etc. The organisation has previously implemented multiple projects on agroforestry, rural livelihood development, watershed management, and similar activities. Thus, the staff has extensive experience of similar work to the Acorn project.
2.4 Does the organization have in house capacity on agroforestry (Applicable only if sub-contractor performs activities related to agroforestry design / training etc)	At least one person in the team is an agroforestry expert or should have extensive agroforestry knowledge	Y	The main responsibility of developing and validating the agroforestry design has been IORAs, and the team has agronomists and agroforestry experts. MBDA has also been part of the process. Additionally, the basis of the agroforestry models that have been finalised was the models developed in the MegLife project through extensive community consultations and expert feedback.
3. Programme			
3.1 To what extent does the organization have annual work plans and a system to ensure adherence to the work plans? (Explain in comments how adherence to work plan is ensured)	The organization has annual work plans which include expected activities and resources needed	Y	MBDA has extensive experience of implementing donor funded projects across the state. These projects have requirement for detailed work plans and thus the organisation has management systems in place for adherence to these.
4. Monitoring & Evaluation			

4.1 To what extent does the organization regularly and consistently report programme progress based on reliable indicators?	The organization regularly reports programme progress	Y	As mentioned above, MBDA's experience of implementing donor funded projects has involved having robust M&E systems in place, and this will be the system they will follow for the current project.
4.2 In the past five years, have any of the organization's programmes been subjected to an independent evaluation incl. follow up recommendations?	Not a strict requirement. However, if an independent validation has taken place, attach proof on evaluation and follow-up actions	N	Internal Reviews are held regularly and Implementation Support Mission of the World Bank was also carried out a review.
5. Financial Management			
5.1 Does the organization have an accounting system (tracking cost of expenses, annual budget etc)?	Organization has an accounting system and is able to provide proof of expected costs and distribution of benefits	Y	MBDA are implementing a large scale Payment for Ecosystems (PES) scheme across 54,000 Ha of community forest lands across the state. The scheme is in the second year of its implementation, with payments made to 1000s of beneficiaries. Thus, they do have a robust accounting system. Given the success of this scheme, the state government has doubled their budget this year.
5.2 To what extent does the organization maintain and adhere to regularly scheduled internal and external financial audits?	Regular schedule of Internal and external audit exists and is adhered to	Y	Being a government organisation, MBDA is subject to Comptroller and Auditor General of India audits.
6. Comparative advantage			
6.1 Is the organization recognized as credible by its stakeholders and	The organization is considered to be credible by most	Y	The organisation has implemented multiple large scale projects across the state on NRM and rural green livelihoods. They have extensive ground presence with representatives in nearly

partners? (attach evidence in comment field - ex. Emails, referrals, polls alternatively nominate references / contact points)	stakeholders, proven by a.o. positive project evaluation from key stakeholders		every village in the state, and are very well respected and trusted across Meghalaya.
6.2 What is the organization's working knowledge and level of prominence in development and VCM (voluntary carbon market)-related fields in the country? (attach proof in comments field)	The organization has a minimum of 3 years of relevant previous work experience in the country, and has been prominent in sustainability and development related programmes within the country	N	MBDA has 13 years of experience in implementing NRM related activities. Over the past five years they have implemented agroforestry across 10,000Ha and this is being onboarded as existing agroforestry for the project. While they do not have experience of VCM, this is IORAs expertise, having developed VCM projects as well as project methodologies. The two organisation complement each other in our experience and expertise.
6.3 In the last five years, to what extent did the organization have stable core resources? (attach proof in comment field)	At least 50% of the staff have remained as stable resources over the past 5 years (if applicable)	Y	MBDA is currently implementing several large donor funded projects – World Bank, JICA, KfW. Additionally, being a government organisation, they also have support from the State Government. Their staff turnover rates are very low and most people stay within the organisation.
6.4 Does the organization have adequate physical infrastructure: building, office space, and furniture?	Organization has basic office infrastructure in place	Y	MBDA has two offices in Shillong for their central staff and 12 District Project Management Units (DPMUs) across the state. They also have vehicles for carrying out filed work.
6.5 To what extent is the organization connected to grassroot & local community	The organization has strong connections with local	Y	MBDA has presence across nearly all villages in the state. The DPMUs work through a network of Block Project Management Units (>40). These BPMUs manage local youths engaged as Green

networks and does it cover both urban and rural areas? (attach proof in comments field)	community & grass root networks in relevant field (sustainability & development) and covers urban and rural areas. Please provide information on engagement with network and community.		Field Associates (46) and 1000s of Village Community Facilitators who are responsible for data collection, community engagement and M&E activities.
7. Knowledge management			
7.1 Does the organization have systems and tools to systematically collect, analyse, and use programme monitoring data?	Some systems and tools exist and are frequently populated with data	Y	MBDA has developed a management information system (MIS) for tracking the work under their different programmes. *https://coenrm.megplanning.gov.in/*
8. Partnerships			
8.1 To what extent has the organization worked or engaged with local and international NGOs in the past five years?	The organization has worked with or engaged with many local NGO but a few international NGO. Please provide information on engagement with NGOs/INGOs.	Y	Local bodies were involved that included: • Village Natural Resource Management Committee (VNMRC) • Village Community Facilitators (VCFs-paid functionaries) • SHG members • PES Feld Associates (PFAs)

Annex 3: Evidence of participation

Provided. Concealed for data protection purposes.

Annex 4: Land tenure documentation (sample-based)

Provided. Concealed for data protection purposes.

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 State of Meghalaya is under pressure of deforestation, land degradation and soil erosion due to climate change and anthropogenic pressures. This is also threatening water security of the State. Meghalaya is the 12th most vulnerable state to climate change in India. Regions in the state are experiencing temperatures up to 40°c, not seen before in the region. In addition to this, rainfall patterns have also changed. Studies have shown that due to climate change, extreme rainfall events have quadrupled in the state over the past 4 decades, and these are project to nearly double annually. These challenges have resulted in reduction in arable land, decreased crop productivity, impacting returns from agriculture and resultantly threatening farmer livelihoods Additionally, in years with normal weather conditions, farming families on an avg. are able to use their own farm produce for 10.5 months. However, in years with climate variability, produce lasts only for 8 months. There is also a lack of knowledge and financial capacity amongst smallholder farmers to be able to adopt measures for sustainability and climate resilience.	
Intended Outcomes	**Description**
Livelihood Benefit	Trees grown in an Agroforestry system (native forestry and horticulture species such as Teak, Duabanga, Mango, Lemon, etc.) will provide farmers non timber forest produce (NTFPs) and fruits, which will be an additional source of income for the farmers. The project will also support communities with development of value chains and market linkages for these products, along with establishment of local entrepreneurs.
Ecosystem Benefit	Restoration of soil health along with improvement in water retention capacity of soil. Trees will also help in recharge of ground water and springs and enhance biodiversity in the region. A combination of native long rotation-timber and horticulture species are being supported through the program.
Output 1	**Promotion of sustainable agroforestry practices incorporating native species**
Activity 1.1	Implement agroforestry across individual and community lands through support with plantation inputs, awareness and trainings.
Activity 1.2	Raise awareness amongst farmers with existing agroforestry plots on maintenance to ensure long-term sustainability.
Activity 1.3	Promotion of agroforestry practices that incorporate native tree species and intercropping techniques that are based on a

	combination of traditional cultivation and climate smart practices through awareness sessions
Activity 1.4	Develop and strengthen community nurseries for supplying saplings for agroforestry interventions. For plantations to be carried out in 2025, the project also aims to revive/develop 200 village community nurseries, which will be able to support plantings in 4-5 surrounding villages. In addition to this, 50 larger, cluster nurseries (also managed by community members) will be developed, which will have capacity to support the surrounding villages (approx. 20). The number of cluster nurseries will be increased to 100 in 2026 and, together these nurseries will be able to manage project demand. While some of these are in use many are not, owing to the varying demand for seedlings. Iora will review these nurseries for the project. These nurseries will be established in an entrepreneurial manner to ensure their survival. This will act as an incentive to the communities to maintain them and produce high quality saplings and provide additional livelihood benefits.
Activity 1.5	Build capacity of community members on agroforestry practices as well as nursery management through trainings. This will include different aspects such as intercropping, farm maintenance, de-weeding, pruning, etc., along with propagation, maintenance and management of nurseries.
Output 2	**Income enhancement of smallholder farmers in Meghalaya and promotion of a Green Economy**
Activity 2.1	Capacity building of communities through trainings for value addition of Non-timber forest products (NTFPs) and Agri-products
Activity 2.2	Develop value chains and linkages with profitable markets for these products
Activity 2.3	Develop local entrepreneurship models and train community members in managing a business. IORA will be responsible for this component. A value chain expert will be part of the local team and we will engage with other experts and consultants as and when needed. Financing for establishing these models will be leveraged from other sources. Additionally, the project will leverage financing from other resources for establishing cluster level micro-processing units. Iora will assist in the establishment of farmer producer organisations (FPOs) and self-help groups (SHGs) who will manage these units in an entrepreneurial manner. After initial handholding, they will be given to the FPOs/SHGs to manage and run. As part of the handholding, Iora will train them on value addition of different products, and how to manage a business, along with supporting with branding and marketing of products and developing market linkages.
Assumptions	
• The two main outputs of promotion of agroforestry across the state and income enhancement of communities and smallholder farmers are each directly linked to ecosystem and livelihood benefits respectively. • Raising awareness on agroforestry and co-benefits, support with plantations and trainings will result in large scale uptake and long-term maintenance of tree species on farms. • The additional benefit of CRUs will be an added incentive for communities to adopt these systems. This will then provide an opportunity to the project to implement value addition,	

and value chain and enterprise development activities, helping to further enhance community and farmer incomes, resulting in the development of green economy in Meghalaya.

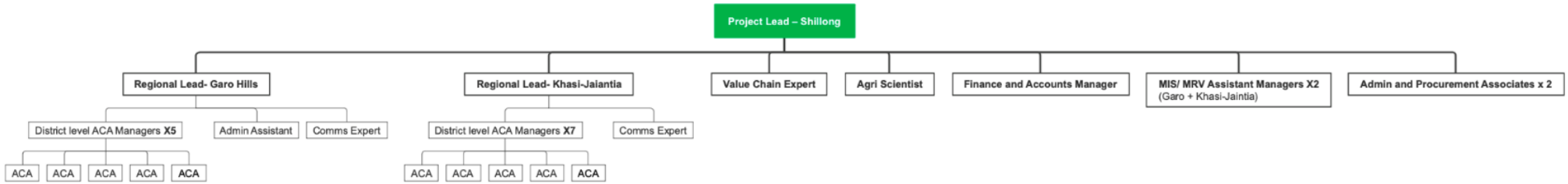
Annex 7: Local partner and farmer business case

Provided. Concealed for data protection purposes.

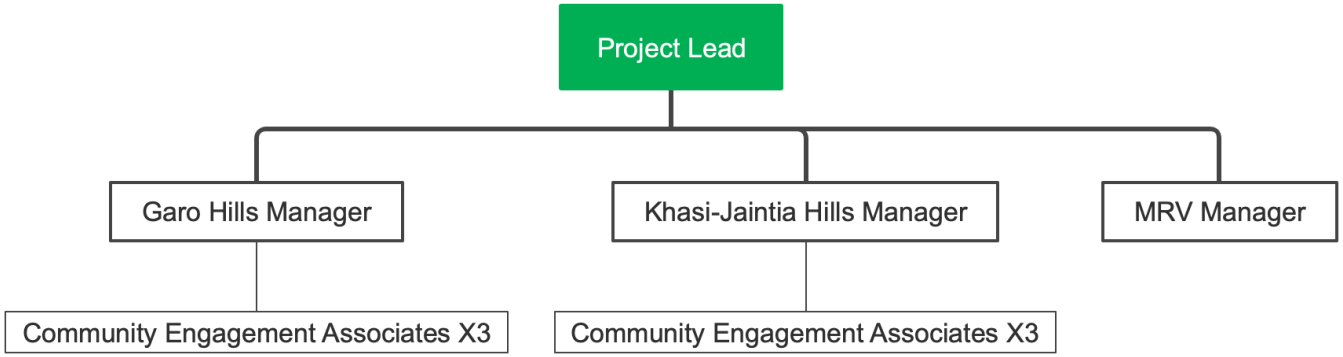
Annex 8: Organisation structure

IORA Local Project Team

IORA senior management will have continued oversight of the project.



MBDA Project Team



Annex 9: Exclusion List

Excluded Activity (prohibited activity)
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.
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).
Trade in animals, plants or any natural products not complying with the provisions of the CITES/Washington convention.
Large-scale commercial logging operations for use in primary tropical moist forest.
Production or trade in wood or other forestry products other than from sustainably managed forests.
Exploitation of diamond mines and marketing of diamonds where the host country has not adhered to the Kimberley Process.
Activities involving harmful or exploitative forms of forced labour or harmful child labour.
Projects that include involuntary physical displacement and/or forced eviction.
Production or activities that encroach on lands owned, or claimed or occupied by Indigenous Peoples, without full documented consent of such peoples.
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
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).
Procurement and use of firearms.
Provision of finances to military institutions involved in conservation or security activities.
Production or trade of strong alcohol intended for human consumption or other alcoholic beverages (excluding beer and wine).
Production or trade of drugs.
Gambling, gaming establishments, casinos or any equivalent enterprises and undertaking.
Any trade related to pornography or prostitution.
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.
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%.
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.
Transboundary trade in wastes, except for those accepted by the Basel Convention and its underlying regulations.
Any activity leading to an irreversible modification or significant displacement of an element of culturally critical heritage.
Production and distribution, or investment in, media that are racist, antidemocratic or that advocate discrimination against a part of the population.
Projects involving the planting or introduction of species that are invasive in a certain ecosystem or geographical region.
Projects that increase the dependency of primary participants and other stakeholders on fossil fuels.

Annex 10: Agroforestry system design

Provided separately.

Annex 11: Certificate of registration

Provided. Concealed for data protection purposes.

Annex 12: Local partner policies

Provided. Concealed for data protection purposes.

Annex 13: Participant agreement

Provided. Concealed for data protection purposes.

Annex 15: (Local) Partnership agreement

Provided. Concealed for data protection purposes.