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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Intellecap Acorn Design Document

India | Jharkhand

Date of Submission: February, 2025

Part A: Project Summary

Question	General Information	Answer
1	**Local partner contact** (name, position, email, address, and website link)	*Concealed for data protection purposes* Website: *https://www.intellecap.com/energy/*
2	**Project location(s) - country, region & district** (attach map in Annex 1)	Multiple districts in Jharkhand state of India. The project will begin with smallholder farmers in Ranchi, Hazaribagh and Ramgarh districts. See Annex 1 for a map of the project area.
3	**If multiple project areas exist, please explain how these locations/farmers differ from each other**	Farmer characteristics: smallholder farmers of the state of Jharkhand, including women farmers and marginalized groups from of the Scheduled Tribes (approx. 40% of the participating farmers belong to the Scheduled Tribes); that speak Hindi and Maithali.
		Productivity level: low productivity due to increased temperatures and reduced water availability, as consequences to climate change. Jharkhand agriculture is largely rain-fed, with only 11 percent of the cultivated area under assured irrigation. Poor returns from agriculture are common in the tribal state. Insufficient irrigation leads to damaged crops, and many farmers can only cultivate one crop in a year.
		Ecosystem conditions: The climate of Jharkhand varies from Humid subtropical in the north to tropical wet and dry in the south-east. Most of the project areas have red soils. Red soil is known for its fertility and ability to support a variety of crops. Some of the most critical trees in the flora of Jharkhand are sal, gambhar, jackfruit, Jamun, kendu, shisham, Katha, pesar, lac, mahua, mango, baheda,aasan, and bamboo. The important faunal species of the state are wolves, hares, chital, nilgai, monkeys, common langurs, elephants, gaur, leopards, and sambar.
4	**Ecoregion(s)**	Chhota-Nagpur dry deciduous forests

5	**Since what year has the local partner been active in the project area(s)?**	Intellecap has been active in Jharkhand since 2020. For more information see https://www.intellecap.com/
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)	Sub-contractor: Transform Rural India, Jharkhand, active since 2005. Their role in the project is farmer mobilization, baseline data collection, on the ground monitoring and reporting.
7	**Main cash crop(s)** (if multiple project areas exist, describe for each project area)	No cash crops exist in the region. Farmers cultivate food crops such as rice, millets, pulses.
8	**Number of existing farmer participants** (if multiple project areas exist, estimate the number of farmers in each)	9,182 participants
9	**Potential number of additional participants** (if multiple project areas exist, estimate the number of farmers in each)	Intellecap currently have access to an additional 75,000 farmers (30,000 hectares) across the 3 districts, not including the first 25,000 farmers. It is the goal to onboard all 100,000 of these farmers to the project by 2025.
10	**Estimated average plot size per existing farmer (ha)**	0.17 ha
11	**Total size of the project area(s) (ha)**	2,496.61 ha
12	**Native language(s) spoken in the project area** (if multiple project areas exist, list the language in each area)	Hindi (the official language of the state of Jharkhand. All farmers speak and understand) and Maithali
13	**Is this project based on communal land or individual smallholder farmer land? If communal, describe the community.**	Individual smallholder farmer land
14	**Describe how smallholder farmers/communities were involved and not only informed during the design of the agroforestry project** (provide evidence of participation in Annex 3. For example, photos or	Intellecap see smallholder farmers as partners in the project who have full sense of the project ownership. Since the inception of the project, farmers are involved in every decision, be it selection of species of trees to be planted, planting layout, their contribution in-kind in the form of labour etc. The engagement of

	minutes taken in workshops, meetings)	farmers and community members is carried out through local meetings with Transform Rural[1]. See Annex 3 for images of these meetings.
15	**List the topics that have been raised with farmers/communities to seek their input on the project**	• Adverse impact of climate change realized by them; • View on agroforestry as climate resilient activity; • Process and design of agroforestry systems; • Species to be planted; • Carbon credits and its realization; • Activities to be undertaken by the farmers; • How agroforestry projects could be managed during initial 4 years (implementation phase); • How trees planted are to be managed for 20-30 years (maintenance phase).
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.)	Jharkhand is a state located in eastern India. The state have significant size of the tribal rural population (26.2% of Scheduled tribe population compared to an average of 8.63 for India). Jharkhand has higher rural poverty rate amongst other Indian states; it is ranked 3rd lowest in the monthly income per capita, the 7th highest in the number of people living below poverty line (BPL), and the 3rd highest in the rate of BPL, in the country. According to the National Sample Survey Office of India (National Sample Survey Organisation (NSSO), 55th round), Jharkhand is one of the most food insecure and malnourished state in the country. More than 10% of the households face seasonal food insecurity. The literacy rate in Jharkhand State is about 56%. There is a big difference between male literacy rate and female literacy rate. Male literacy stands at 64.3% whilst female literacy is at 46.4%. Majority of the young male members of (25-35 age group) migrate to large Indian cities for labour jobs. Women and elder member take care of the farm. In the low lands paddy (rice) is cultivated while most of the uplands are kept fallow.
17	**Describe any known local (natural or human-caused) land degradation/deforestation processes or trends, and drivers of**	No deforestation or degradation incidents reported in the project area. Although there is need of the fuelwood but rural households chop some branches off the trees for their

[1] *Community Action Labs - Grassroots Innovation | TRI (trif.in)*

	these (For example, population increase, fire, conversion for agriculture)	daily cooking related fuel wood requirements. Under this project, participants will have the knowledge and skills to understand when is the right moment to undertake light pruning of trees (after fruiting season in July each year) to obtain this fuel wood. In addition, the carbon credits provides an extra income source that makes it easier to afford fuelwood for cooking, so less reliance on own trees for this.
18	**Describe the type of land use that best represents the project area before intervention** (For example, existing agroforestry/fallow/tree plantation/monoculture perennial crop/monoculture annual crop/mixed crops /marginal land)	Before the project the predominant land use was fallow and monoculture. Monoculture is being discontinued as part of this project due to unpredictable weather conditions and adverse impacts of climate change.
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.	Official land documents are in the name of fathers or grandfathers, however there is local relevant method to get attested the land ownership. This results in farmer possessing informal titling based on inheritance. See Annex 4.
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.	The following actions have been done to obtain a letter of no objection from the government: i) Intellecap held a meeting with the state government, with Acorn present; ii) The state minister has *publicly* endorsed the Acorn program during a seminar; iii) Intellecap has shared letters about the Acorn program with the government; iv) Intellecap has answered the state's request for information on the carbon project It is expected that the government reviews Acorn's request and provide a more formal letter of no objection in the near future.
	Theory of Change (see Annex 6)	
21	**Describe the target community of this project**	This project is targeting smallholder farmers in the state of Jharkhand aged 18-45 with a focus on women farmers and marginalized groups such as tribal populations.

	(e.g. gender, age, marginalised groups, location, other stakeholders)	
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.)	Climate change, increase in temperature, reduced water availability, and low productivity of crops.
23	**Describe the project's aims and objectives** (e.g. the desired change the local partner wants to achieve)	1. To improve the livelihood of the smallholder farmers by increasing their income from the product (fruits including mango, guava and lime) derived out of the trees and through carbon credits; 2. Improve socio-economic conditions of the women (majority of these areas witness migration of men of the household for job in urban areas, women and elderly population are in villages to look after the farm); 3. Make the existing land productive, which was left fallow due to lack of availability of resources and adverse climatic conditions; 4. Overcome malnourishment of the tribal population due to non-diversifies and mostly carbohydrate-based diet.
24	**Describe how the project expects to achieve the desired change(s) described in the row above** (e.g. project interventions and activities undertaken)	Project interventions will improve the livelihood of the smallholder farmers, specifically women by: 1. Realization of additional income by supporting farmers to intercrop both vegetables and fruit trees (mango, guava, lime) on mostly abandoned land; 2. The provision of supplementary income from Acorn resulting from the sale of carbon credits generated by tree growth 3. The provision of an agroforestry design and training on land preparation, planting and long-term maintenance techniques

		4. Site visits to model farms and other farmer plots who have already started planting 5. Market linkage support is provided to farmers for collection of fruits from the farmer plot and identifying buyers for the same; 6. Access to high quality seedlings (free for the first 3 years); 7. Decreases drudgery for women farmers, who at times needed to work in other farms as labourers for another source of income. By farmers getting any additional income, seen in the business case as approx. 57 euro per year, from CRU revenue and the selling of the fruit from the mango and guava trees planted over the project life, they would have less reliance on seeking income elsewhere off the farm.
25	**Describe the conditions/resources necessary to undertake each expected activity (see row above) to achieve the desired outcome** (these are not always under the control of the local partner e.g. war, wildfire, secure funding, human resource capacity, communication methods, established nursery)	1. Availability of irrigation facility, good quality planting materials and inputs; 2. Keeping farmers involved during the initial 3-4 years to maintain their plantations; 3. Threat of announcement of any schemes by the government which offers subsidies to rural households. (the free money sometime demotivates people to invest their time and resources).
26	**Describe <u>how and why</u> the project intervention proposed is expected to positively/negatively impact the following livelihood and ecosystem conditions;** (Provide examples or reasons)	**Food security/nutritional intake**: The agroforestry intervention will ensure an increase in food security due to availability of monetary resources with the beneficiaries. Secondly, the nutrition intake also increases due to diversification of diet from only cereal based to cereal plus fruits, vegetable and dairy-based (this is not referring to additional livestock but better management of existing livestock in other areas of their farm, such as providing them with adequate feed). This will fulfil the gap of dietary protein requirement, which is currently lacking and resulting into multiple nutrient deficiencies and malnutrition in children and women.
		Farmer financial state: The agroforestry intervention will result in an increase in income status of farmer household by 100-150% (

		>60.000 INR) from the existing income (30.000 INR). This is mainly due to the income realization from sale of the fruit produced out of the trees and from the realization of the carbon credit sale proceeds.
		Gender equality: The project design is completely women centred, where the local partner identifies lead women for every 10-15 acres of the area to support and guide other women. Although the local partner identifies lead women for data collection and other purposes, the lead farmer selection is entirely done by the community. The community is already used to this process due to pre-existing women groups. These women groups are beneficial to maintain cohesiveness to the project concept and to ensure long term sustainability of the project. The project involves women in decision making, tree species selection and in finalizing package of agroforestry practices (e.g. planting, pruning etc.) to be undertaken.
		Farmer access to resources: The availability of disposable income (from sale of fruit free products and carbon credits) leads to increased access to resources for the farmers, including planting materials and tools (e.g. organic fertiliser and tools for pruning), nutritious food (protein-rich), education and healthcare.
		Biodiversity on farms: Agroforestry undertaken on once fallow plots will result in an increase in number of flora and fauna in the region. It also increases the population of soil friendly microorganisms.
	The Agroforestry System	
27	**How would you define an agroforestry system?**	It is an ecological land use management system where crops are integrated with trees for obtaining higher yield from the same piece of land along with maintaining biodiversity of the area. It suits the social and cultural characteristics of the local people and provides economic, sociocultural and environmental benefits to the smallholder farmers.
28	**Is this project new or existing agroforestry or a combination?** (Please note: Acorn considers "new" as no trees ever planted under an agroforestry project)	Existing agroforestry

29	**Type of trees that have/will be planted under agroforestry scheme** (shade, fruit-bearing, medicinal)	There will be 480 trees planted per hectare, and the agroforestry design focuses on: - 380 fruit trees per hectare (140 mango, 140 guava, 100 lime) - 100 shade trees per hectare on boundaries. The species of shade trees include 25 *Melia Azadarach* (Bakain), 25 *Gliricidia sepium*, 25 *Gmelina arobrea* (Gamhar), and 25 *Dalbergia sisso* (Shisham).
30	**How will the project ensure the survival and health of both (1) trees that existed before the start of the Acorn project, and (2) trees that will be planted during the project?"**	The project design in itself considers farmers as a part of the project and not just entity to implement the project. The project through extensive capacity building inculcates the feeling of ownership among the beneficiaries. This project involves farms on fallow land or monocropping before tree planting. Therefore, there are very little "existing" trees. To ensure survival of the first trees planted by farmers since 2018, there has been and will continue to be regular visits and guidance during the initial years on practices to be undertaken and continuous engagement of farmers for vegetable cultivation assure maintenance of the trees. After 4th year when the trees start yielding fruits, the economic value expectation from the yield will keep the farmers engaged and assure maintenance.
31	**How do the agroforestry practices in this project differ to current farming practices in the region?**	Agroforestry is highly integrated farming that is not common in the region outside of the project. Due to lack of resources, farmers tend to only cultivate paddy and some vegetables or pulses, which is mostly done as subsistence farming. Before Acorn, farmers would only receive material and labour costs, project support would only be until 2025 and only a limited area of the farmer would be eligible for the project (0.4 ha). This would among others result in very high mortality rates of trees. With the Acorn project, we can instead assure longer on the ground support, provide training on agroforestry, regular monitoring. In addition, through Acorn we aim to a) enable the farmers to include a bigger area of their farm to Acorn, and b) scale the project to new farmers that want to transition to agroforestry.
32	**Is planned (wood) harvesting part of the agroforestry design for this project?**	No. Although some species can be classified as timber species, they are used on the farm as to provide shade and a boundary.

	(Please note: Acorn considers harvesting in this case as cutting down the entire tree)	
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)	In the agroforestry design, timber trees are planted to protect mango and other fruit trees from heatwaves and entry of animals. Hence, it is of the interest of farmers to keep the timber tree up to 40 years. The farmers involved in the project are made aware of the condition of not cutting the trees down and understand that the plantation on their fields is an asset that will give them benefits in the long term compared to cutting the trees down. They are well aware that the fruit trees will provide them with sustenance for the trees' lifetime and the timber trees will provide them with the bulk of the carbon finance and will prevent wild animals from entering the fields and harming the fruits. This understanding ensures that the farmers do not try to cut the trees down within the 40 year period or more.
	Project Additionality	
34	**Is the project incorporated by any other accounting program (For example, compliance, voluntary or national GHG program)? If yes, describe how project ensures no carbon credit is accounted for in in any other carbon program other than Acorn.**	No. The project is facilitated financially by the State government. State government provides funding for the material and labour cost of the project. However, the program is not associated with any carbon program nor is it mandatory.
35	**In what year, season and month(s) will/were the first trees planted?**	Existing agroforestry since 2018
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 (2018): 51 Year 2 (2019): 476 Year 3 (2020): 303 Year 4 (2021): 3645 Year 5 (2022): 3377 Year 6 (2023): 3021 Year 7 (2024): 3040 For the year 1 onboarding to the Acorn platform, plan is to start with appr. 25,000 farmers, including those who began planting trees as seen in the table above and afterwards increase to include majority of farmers, an additional 75,000 that have started or will transition to agroforestry as part of this project.

37	**Is this project mandatory under any national or local laws?** (List relevant forestry regulations, national climate change commitments etc.)	No, 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. See the NDC of India 2022 and State of Forest report 2022.
38	**What is the main driver encouraging farmers to transition to agroforestry?**	Expectation of higher income for smallholder farmers and improved soil health, and farmer understanding of the impact of climate change on the field crops, resulting in the decline in yield, and the need to take action.
39	**Was the promise of carbon credits an enabling factor for farmers to transition to agroforestry?**	Yes, carbon credit is an enabling factor but the major driver is the increased income realization from the sale of fruit crops and higher productivity resulting in better livelihood.
	High-over business case	
40	**If existing agroforestry, how has this project been funded to date?** (financed by the local partner, the farmers, grants/funding, or a combination)	The project has been funded to date by State government support under Birsa Munda Bagwaani scheme under the MGNREGA, Government of Jharkhand. Important to note this funding is not given to the project but direct to the farmers for material (seedlings, fertilizer etc.) and labour cost (cash transfer to farmer for their work, based on set expected labour costs). It will last only until the end of 2025. This is why carbon income is important to bridge this gap and help farmers purchase additional resources after this time.
41	**Roughly estimated, what are the average farmer costs for the project per ha?** (this includes seedlings, transport, ground preparation, labour, fertilizer but excludes maintenance costs and irrigation systems)	The costs of farmer include: - Labour (planting and maintenance of the trees until at least 20-30 years); - Irrigation; - Biopesticides; - Fertilizers; - H-staking.
42	**Briefly describe the total costs for the local partner and/or the sub-contracting party to successfully complete this project.** (e.g. seedlings, onboarding, data collection, training, farmer engagement, planting materials, see Annex 7 for farmer and Local Partner business case). Note, if activities are outsourced, please roughly describe how the costs are	The costs for the local partner include: - Training and capacity building (LP will pay this cost to the sub-contractor); - Monitoring; - Data collection; - Seedlings for the first 3 years (after 2026 it is the idea that the project will use SAF to cover these costs for farmers onboarding to Acorn).

	split between you as local partner and the sub-contracting party.	
43	**What budget do you have available to (pre)finance (part of) Acorn implementation costs (either farmer or local partner costs).**	State government support under Birsa Munda Bagwaani scheme under the MGNREGA, Government of Jharkhand for the next 3 years. However, additional costs will be required for training capacity building, data collection and monitoring of the project. The carbon revenue, with support of some funds from Intellecap, will be required to support the project costs and the farmers to continue maintaining their plantation for 20-25 years.
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.**	Intellecap can secure funding through convergence with other government projects.
45	**If necessary, are you as an organization, allowed to take up a loan to cover costs of the Acorn project?**	Yes, Intellecap is a private entity in India and therefore allowed to take up loans.
46	**Are you as an organization legally allowed to perform pay-outs to farmers (related to the farmer 80% share of CRU revenue)? What are the structures in place to do so?**	Yes, Intellecap is legally allowed to do so and has proposed the creation of a trust structure to do so. This type of structure is ideal in a context of a project where the agroforestry transition for 90,000+ farmers across an area of 79,000 km^2, was made possible through a governmental scheme. Therefore, there is a need to establish a link among farmers for their aggregation through a pooling vehicle. Trust structure is familiar to farmers and the easiest way to bring them together as a group. In addition, Intellecap has significant tax liability and accounting issue in case of direct receipt of the farmers 80% share this shall leads to (i) reduction in Intellecap' s share as a Local Partner and (ii) reduction in farmers share to be passed on due to direct tax liability if transferred through Intellecap. Considering these issues of needing a pooling vehicle, a mechanism for better transparency to the state government and lower tax liability, the trust structure has been introduced as the ideal solution. Also, trusts have space for better participation of community (e.g. being part of Board of trustees, participate in

		General body meetings and space in decision-making).
	Farmer survey	
47	**In addition to the mandatory indicators of farmer income, 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 productivity • Women empowerment • Youth inclusion	- Agricultural land use productivity - Women empowerment

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.	Intellecap brings more than two decades of experience working in the agriculture and food systems sector, and more recently in climate change and decarbonization solutions. We have closely worked with smallholder farmers, farmer collectives, state and central government, agriculture technology enterprises, private sector players and ecosystem enablers in the global south(India and Africa). Intellecap through its network of grassroot partners is implementing agroforestry projects in Jharkhand and West Bengal state of India. Intellecap is also coordinating with some of the state government for support in availing carbon finance for their existing and proposed plantations undertaken in the farms of the farmers outside forest areas. Intellecap subsidiary, NRMC, is a social impact advisory and research firm in the development sector that provides evidence-based solutions for sustainable, equitable and inclusive development. See Annex 8 for the detailed organizational chart.
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).	Intellecap have more than 15 years of working experience and linkage with the grassroot partner organizations, who have on-ground presence in multiple locations within India and Africa. Intellecap has undertaken multiple projects in the afforestation and forestry domain in Jharkhand, most of these projects are 7 to 15 years duration. We have significant experts in our team who have professional post graduate degree in forest management. We work with a systems approach in partnership with local communities, governments, private sector and NGOs to facilitate sustainable use and management of natural resources (including forest resources) for

		improved livelihoods, better food security and greater climate resilience. We have undertaken multiple long-term community-led projects in forestry space. These projects include (1) Monitoring and evaluation of small and large scale NRM (natural resource management), livelihoods and Climate Change projects, (2) enabling Trees Outside Forests through collaborations with industry, donors and communities, (3) women empowerment as a key focus in livelihood improvement. We have supported the management of over 700,000 hectares of forest land impacting over 1 million livelihoods, directly or indirectly. This is evidenced by the following data: Community institutions mobilized- 5,294 Self-help groups mobilized- 16,000 Livelihood of households impacted directly- 16,100. Apart from Intellecap's experience, our sub-contractor TRIF has presence in Jharkhand since past 12 years and involved with the communities and government across the state.
Inclusivity	The local partner has the capacity to undertake community engagement, promote social inclusion and ensure gender inequalities are not reinforced.	Yes. Intellecap have significant experience of working with smallholder farmers, rural youths and women. Intellecap's work in gender ranges from research studies such as the evaluation of women's property rights in emerging economies, program pilots for the financial inclusion of women-in-agriculture to digital financial services from cash-based systems in Maharashtra, to impact assessments and M&E of programs that target SDG 5. Intellecap also conducted the first landscape study on Gender Lens Investing in Southeast Asia. Intellecap also worked with USAID and FHI360, to digitize women-dominant agricultural value chains in rural Maharashtra, Bihar, Jharkhand and Orissa. Intellecap's previous work in gender has also cantered on property rights. For instance, Intellecap conducted a study on women's property rights in emerging economies for the Rockefeller

		Foundation. We have already mobilized around 16,000 Self-help groups mobilized, majority of these are women led. Our partner grassroot organizations have substantial capacity as they directly work with the state government's rural development departments on gender inclusion and youth empowerment projects.
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. [https://www.rabobank.com/en/images/sustainability-policy-framework.pdf]	Yes
Participant organization	Describe how the project is organized, or in the process of being organized, into cooperatives, associations, community-based organizations or other organizational forms able to contribute to the social and economic development of the participants and their communities (e.g. farmer groups/clusters for training).	Intellecap mapped the grassroot/ community based organization to mobilize the farmers. For each 4-5 ha area these organization selected and trained a local resource person to take care of the farmers contained in that 4-5 ha. This resource person help in organizing focus group discussions, undertaking baseline mapping, collecting co-ordinates of the farmer's field. The local resource person is represented at the block level team which is further supervised by the district and state level unit. At each village there are village groups (in which a local resource person is a member), one member of these village groups represent their group at block level and one member from each block represent the block at cluster level.
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	Yes

	Framework for the duration of the project.	
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).	Intellecap have closely worked with smallholder farmers, farmer collectives, state and central government, agriculture technology enterprises, private sector players and ecosystem enablers in both Africa and India. Intellecap through its network of grassroot partners is implementing agroforestry projects at Jharkhand (project area) and West Bengal state of India.
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	Yes

		themselves with the help of their families.	
Sustainable land use activity	Smallholder farm size	The local partner confirms that either (i) the participants land is under 10 hectares in size or (ii) only 10 hectares of the participants land will be monetized under the Acorn project.	Yes
	Carbon rights	The local partner recognizes that participants own the carbon benefits of the project intervention.	Yes
	Land-tenure	The project applies to land over which the participants/community have (formal/informal) ownership of land or long-term user rights.	Yes
	Project design	The project is/will be designed to promote sustainable land-use and has/will have a feasible business case underwritten by agronomist(s) and community representatives.	Yes
	Deforestation	The local partner confirms with all participants that no deforestation has taken place within five years before the start of the Acorn project intervention. If this cannot be confirmed, describe the cause of the deforestation and the measures that have been or will be taken to prevent deforestation from happening again.	Yes
	Additionality	The local partner ensures project additionality.	Yes
	Durability	The local partner and participants both confirm that they are aware of and commit to the mandatory durability period of 20 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).	The state of Jharkhand has been divided into 6 horticulture regions depending on the climatic conditions and average rainfall as both of these factors impacts agriculture in the region. Climate of Jharkhand varies from Humid subtropical in the north to tropical wet and dry in the south-east. The main seasons are summer, rainy, autumn, winter and spring. The summer lasts from mid-April to mid-June. May, the hottest month, characterized by daily high temperatures around 37 °C (99 °F) and low temperatures around 25 °C (77 °F). The southwest monsoon, from mid-June to October, brings nearly all the state's annual rainfall, which ranges from about 1,000 mm (40 in) in the west-central part of the state to more than 1,500 mm (60 in) in the southwest. Nearly half of the annual precipitation falls in July and August. The winter season lasts from November to February. The main vegetation in this region comprises of moist deciduous forests and dry deciduous forests.

Among the various dry varieties of the trees and plants, the fruit which grows is filled with massive nutrients and antioxidants. Some of the most critical trees in the flora of Jharkhand are sal, gambhar, jackfruit, Jamun, kendu, shisham, Katha, pesar, lac, mahua, mango, baheda, aasan, and bamboo. The important faunal species of the state are wolves, hares, chital, nilgai, monkeys, common langurs, elephants, gaur, leopards, and sambar. Jharkhand agriculture is largely rain-fed, with only 11 percent of the cultivated area under assured irrigation. Poor returns from agriculture are common in the tribal state. Insufficient irrigation leads to damaged crops, and many farmers can only cultivate one crop in a year. Jharkhand is a diverse state in terms of soil types and their fertility. The state has a total geographical area of 79,714 square kilometres, and the soil types found in Jharkhand can be broadly classified into four categories: red soil, laterite soil, alluvial soil, and black soil. Most of the project areas have red soils. Red soil is known for its fertility and ability to support a variety of crops.

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?	At the project level, the planting will happen in phases over multiple years, because the participants need to develop awareness of the project benefits and understanding of the skill and resource requirements, which is a gradual process each time farmers are onboarded. However, at the farmer level, almost 90% of the farmers will be transitioning to agroforestry in one year.
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?	The average farmer will plant trees in first year of the Acorn project itself. The farmers plant trees in the area supported by the funding availability under state government scheme. The state government scheme provide support only for 0.4 ha of land. This government scheme has been operational since 2018 and will be operational until 2025. As part of Acorn, farmers will have the opportunity to plant more trees using the carbon income they will receive.
3. What barriers did farmers face that prevented them from transitioning to a successful and long-lived agroforestry system before intervention of the local partner and Acorn?	All the identified land plots have been lying fallow primarily due to lack of financial and knowledge resources among the farmers. The project smallholder farmers are currently undertaking subsistence farming, which is highly rainwater based. The major crop cultivated was paddy (rice) that too in the low land areas having potential to avoid water runoff. The high land parcels available with the farmers are kept fallow as the initial investment required for undertaking agroforestry or even vegetable cultivation is significant. Due to lower literacy levels and lack of collaterals, financial institutions are not willing to lend long term loans to the farmers. The other major reason is the lack of knowledge of the practices and market linkages to sell the produce.
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.	5. **Agroforestry training**: Training on the steps to be followed for land preparation, pit digging, identification of right quality of saplings, agroforestry design to be followed, year wise maintenance practices to be undertaken. 2. Guidance on identifying sources of highquality saplings and other materials Saplings will be provided to farmers free of charge for the

	first 3 years (funded by the government program). After this time farmers will rely on carbon income to purchase additional seedlings. Intellecap assure high quality of saplings provided for farmers. For timber tree saplings, they are raised beforehand in the site itself, or can be procured from forest department nurseries. For mango/ fruit saplings, quality parameters can be seen in Annex 3. 6. **Site visits to the model farms and other farmer plots**: TRI has developed a model farm to demonstrate the spacing and fruit bearing capacity of the plant. The tour will also be organized for farmers based out of new to the project district to visit the agroforestry plot for farmers already implemented the project. 7. **Advisory on market linkages**: Market linkage support is provided to farmers for collection of fruits from the farmer plot and identifying buyers for the same. Only agroforestry model related trainings are available to farmers with the Acorn project. As a part of the government program, farmers receive only initial once off training on how to plant the seeds that they are provided. Farmer uses his own labour for pit digging and field preparation and pit filling. The Acorn project can provide more extensive training related to farmer mobilisation on the carbon program, knowledge on how to expand the agroforestry farm and integrate additional trees, how to maintain the plantations long-term, and on market linkage. The support provided through carbon finance can help farmers to manage the plantations after the support provided by government will cease.
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	Jharkhand (project area) has a higher rural poverty rate amongst other Indian states; it is ranked 3rd lowest in the monthly income per capita, the 7th highest in the number of people living below poverty line (BPL), and the 3rd highest in the rate of BPL, in the country. The literacy rate in Jharkhand State is about 56%. Due to the low literacy levels and lack of collaterals, financial institutions are not willing to lend long term loans to the farmers for them to transition to agroforestry. Additionally, farmers have no way of access the carbon market on their own. Without the project, the farmers would only be able to maintain the trees until 5 years due to initial support provided under the government program. However, to ensure that they do not chop down their trees or neglect their plantations after the 5 years, additional benefits like carbon finance are needed.	As part of the Acorn project, farmers will receive additional income as a result of intercropping both vegetables and fruit trees (mango, guava etc.) on land that was mostly abandoned. Farmer income will increase and diversify further with the supplementary carbon income that they will receive for the growth of their trees. Farmers will no longer be restricted by the amount of trees they can plant on their farms (under the government scheme) and can use their additional income to plant more trees. Additionally, the receipt of carbon income will incentivize farmers to maintain their trees over the long term in a manner that is in accordance with the agroforestry design and good agricultural practices.
Knowledge barrier	Smallholder farmers in the project area have low literacy and education levels, resulting in a lack of awareness and knowledge on agroforestry, the carbon market, and how to market their products. This results in farmers undertaking unsustainable farming practices or leaving their farms idle as fallow land that are vulnerable to the impacts of climate change and result in low productivity.	As part of the Acorn project, participants will be educated on agroforestry and the necessary practices need to prepare, implement and maintain a successful long-term agroforestry system. The sub-contractor, TRIF, (ground agency), through its network and with guidance of Intellecap and support from the state government, will organize ongoing farmer trainings on "maintaining long term agroforestry". Every year new farmers will be added and the trainings will be provided to the groups of new farmers before planting. These trainings will be on year wise management of the trees planted. This training is complemented by site visits that farmers will undertake to the plots of model farmers. These model farms will demonstrate for example the spacing and fruit bearing capacity of the trees and will give farmers an incentive to maintain their agroforestry systems long-

		term. Additionally, farmers will be provided with market advice on the collection of fruits from the farmer plot and identifying buyers for the sale of the fruits.
Capacity barrier	Due to low productivity from the existing low land, male member of the house migrate to cities during winter and summer months, leaving women to take care of the family and the farm. This results in a lack of community cohesiveness and organisation that prevents farmers from being able to access the resources and services needed to transition to agroforestry.	As part of the Acorn project, the participants will be supported by Intellecap to collectively work and form new Farm Interest Groups, for marketing of their products and creating a sustainable supply chain. The purpose of Farm Interest Groups is to impart trainings and keep participants inform them about the carbon revenue utilization through knowledge sharing. The composition of these groups depends upon the catchment area. For example; when the participants are in close vicinity, a single group might have 50 farmers, whereas if farmers are far apart then may be 20 farmers can represent a group.

Conclusion:

The acorn project is located across multiple districts in Jharkhand state of India and consists of 10,000 farmers that cultivate subsistence crops rather than cash crops, mainly rice. These farmers have recently begun their transition to agroforestry with the support of the government providing seedlings for 0.2 ha – 0.4 ha of land within minimal planting training. Under this project farmers will be able to increase the size of their agroforestry systems and further integrate additional trees species such as mango and guava. With the carbon revenue generated under this project, Intellecap will provide ongoing trainings for farmers focused on maintenance of their agroforestry systems (knowledge they are currently missing), market linkages (to ensure they can sell the fruits produced and increase their income further), and identification of high quality seedlings/saplings. The training offered to farmers will also include visits to model/demo farms to be see how an existing system can be maintained long-term. To ensure the training is enforced and distributed across all farmers, Intellecap will use the CRU revenue to for Farm Interest Groups. The establishment of these groups are necessary to overcome the capacity barrier that is faced in the project area, due to migration and a lack of social cohesion. The training provided by Intellecap overcomes the knowledge barrier that farmers face in the area. Without this knowledge farmers might not be able to maintain their trees after 5 years and could resort to cutting them down in terms of financial hardship (e.g. due to impact of climate change such as floods or droughts), especially without the additional carbon finance that they would receive. Therefore, the carbon income acts as an incentive to keep their trees in the ground long-term in such a poverty stricken state. With the additional carbon finance, farmers will no longer be restricted by the amount of trees they can plant on their farms (under the government scheme) and can use their additional income (carbon revenue and income from fruit produced) to plant more trees. This project expects to grow from 25,000 farmers to 100,000 farmers in the next 5 years, with the expectation that farmers will increase the amount of land dedicated to agroforestry with the CRU revenue received. The reward of carbon finance for the initial 10,000 farmers will motivate the additional farmers to also expand and maintain their agroforestry systems long-term.

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		
130		31	99		
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**	Acceptable at 55%
Local livelihood	**Farmer income**	**Annual farmer revenue (income + CRU revenue – expenses)**	**Farmer survey**	**1, 8**	4,3884.6 Indian Rupees
	Household Nutrition	**Number of food groups consumed in the household in the past 24 hours.**	**Household Dietary Diversity Score (HDDS) index survey[2]**	**2**	Average of 3.5 food groups
	Agricultural productivity	Average yield of main cash crop(s) (kg/ha/year) and total farm yield (kg/ha/year)	Farmer survey	2, 8, 12	Average total farm yield is 20,485.35 kg/ha/year (see Table 6 for cash crops' yield)
	Women empowerment	Number of female employees, Project Council members, and participants. Subjective farmer perception of women involvement in the project.	Farmer survey and local partner survey	5	Women account for 62.5% of participants (Year 1), 90% of lead farmers, and 90-95% of project council members.

1. Agricultural Biodiversity

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

[2] *Swindale & Bilinsky, 2006*

The project promotes individual farmers' tree cultivation in small land plots to help prevent soil erosion, enhance the water table and the local watersheds, and enhance biodiversity. Trees are crucial in creating a favourable microclimate for agriculture by providing shade, retaining moisture, acting as windbreaks, preventing soil erosion, and improving soil organic carbon while providing a favourable environment for farming amid worsening climatic conditions. The project is expected to positively impact the region's biodiversity by planting thousands of trees in monoculture lands, thus significantly increasing forest cover in the landscape, serving as a crucial habitat for various species. This growth of forested areas enables a better habitat for local flora and fauna, promoting biodiversity conservation. Diversity of flora will increase multiple species of native fruit trees (mango, guava and others) along with various native seasonal vegetables and spices. Diversity of fauna will include numerous species of birds, favourable insects and soil microorganisms. The beneficial soil microorganisms will also increase soil health by increasing soil nitrogen content.

II.) How many farmers perform beekeeping?

The beneficiary farmers of this project do no beekeeping.

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

The majority of farmers perform pest control in their farms, evidenced by 95% of surveyed farmers. The main control methods are chemical (86%), manual (64%), and prevention (45%). The main type of pesticides used in the project area is insecticide (71%), and to a lesser extent, fungicide (18%) and herbicide (8%). On average, up to 5 L of pesticides are used on the farms on a yearly basis, mainly on mango trees.

It is a common practice in the project area to apply fertilizer. 99% of surveyed farmers apply fertilizer in their farms, in the form of manure (92%), waste (51%), mulch (42%), phosphorous (36%), and nitrogen (28%). On average, between 13 to 220 kg of organic fertilizer, and 13 kg of inorganic fertilizer is used on the farms, on a yearly basis.

IV.) Gini-Simpson Index Results.

Table 2. Gini-Simpson Index Results.

Crops	Area	pi	p2	Livestock	number	equivalent	pi	p2
Arhar	1.1	0.01	0.00	Cows	280	1*280	0.67	0.45
Badam	0.4	0.00	0.00	Sheeps/goats	436	0.1*436	0.10	0.01
Beans	0.4	0.00	0.00	Chickens	753	0.014*753	0.03	0.00
Bottle gourd	0.0	0.00	0.00	Rabbits	2	0.02*2	0.00	0.00
Brinjal	0.0	0.00	0.00	Buffalo	83	1*83	0.20	0.04
Daal	0.8	0.01	0.00	*Total*		417.18		0.502
Garlic	0.2	0.00	0.00					0.498
Groundnut	7.7	0.05	0.00					
Guava	0.1	0.00	0.00					
Kattal	0.0	0.00	0.00					
Lemon	0.2	0.00	0.00					
Litchi	0.9	0.01	0.00					
Maize	2.8	0.02	0.00					
Mango	45.7	0.30	0.09					
Mustard	0.3	0.00	0.00					

Onion	2.0	0.01	0.00					
Papaya	0.2	0.00	0.00					
Peanuts	0.8	0.01	0.00					
Peas	0.4	0.00	0.00					
Pomegranate	0.1	0.00	0.00					
Potato	3.0	0.02	0.00					
Radish	0.4	0.00	0.00					
Ragi	9.3	0.06	0.00					
Rice	53.5	0.35	0.12					
Sesame	0.7	0.00	0.00					
Sugarcane	0.2	0.00	0.00					
Sweet potato	0.1	0.00	0.00					
Til	0.2	0.00	0.00					
Timber	0.4	0.00	0.00					
Tomato	2.1	0.01	0.00					
Urad	16.0	0.10	0.01					
Wheat	3.5	0.02	0.00					
Total	153.5		0.2					
			0.8					
Total (%)			**77.1**	**Total (%)**				**50**

Natural vegetation, trees and pollinators		
	Description	**Value**
Productive area with natural vegetation	*Most farmers (51%) report having an area with natural vegetation smaller than 25% on their farm. Others, on a lesser majority (21%), report having a productive area between 25% and 50%, and (19%) between 50% and 75%.*	0.5
Pollinator Presence	*Most surveyed farmers (>50%) report seeing, on average moderately, the presence of bees, butterflies, ants and flies in their farms. To a lesser extent, (<50%), farmers have also reported seeing mosquitos, beetles, moths, bats, and monkeys.*	0.66
Beekeeping	*91% of the surveyed farmers don't perform beekeeping; those that do, mainly perform wild beekeeping (9%).*	0
Average natural vegetation, trees and pollinators		**39%**
Agricultural Biodiversity Score	**55 %**	

V.) List wild animals in the project area.

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

Animal type	**Prevalence (*Regularly/Sometimes/Rarely*)**
Bear	*Rarely*
Deer	*Sometimes*
Elephant	*Rarely*
Fox	*Sometimes*
Jackal	*Sometimes*
Monkey	*Rarely*
Pig	*Sometimes*

Rabbit	*Sometimes*
Snake	*Regularly*
Wild boar	*Rarely*

2. Famer Income

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

The project involves smallholder/marginal farmers in Jharkhand, who experience low income due to low productivity as a result of the decrease of fertile land, low use of manure, greater dependence on monsoons for irrigation, backward/ outdated and limited technology,[3] and unproductive use of debt[4]. The project participants are currently earning very little (approx. 60,000 Rs/ annum) which is causing financial and capability constraints for the farmers to better their lives. Thus, there are various income and livelihood issues for marginal farmers in the project area.[5]

The existent agroforestry system presents high risks of survivability, as there is a technical gap when the participants first started their transition (i.e, seedling handouts from the government). In addition, the participants' states of impoverishment and marginalization, wouldn't be eased if not for the participation in such a carbon project that allows for annual income from the growth of trees. The funds from the sale of carbon credits generated by the farmers will aid them in the maintenance of the trees and also in providing them with income during the initial years before the trees bear fruit. The farmers in the area tend to plant more fruit trees as they can rely on them for their livelihood quickly compared to timber trees that have to be tended to for a longer time period (approx. 15-20 years). By incentivizing farmers through income coming from the sale of carbon credits the farmers can also be motivated to plant and care for the trees in their fields. This agroforestry model thus creates an asset for the farmer providing them with steady income through the sale of fruits. The asset so created will be easily managed by the family and is able to generate sufficient income to keep the farmer interested in doing maintenance of the plantation for the long term.

In addition, and depending upon the water availability, farmers may cultivate vegetables or spices in one, two or three seasons, which can further increase their income. To incentivize this, Intellecap will hold farmer trainings to inform them about the intercropping practices and which crop to grow region wise, and market wise.

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.

[3] i.e., lack of understanding of agroforestry design, sapling selection, key scientific farming, weed management, intercropping, etc.) Most farmers just broadcast some seeds of legumes or other cereal crop, but due to high week infestation, and lack of scientific management the crop doesn't yield much and ultimately, the farmer starts keeping the land fallow.

[4] The unproductive use of debt by farmers refers to situations where farmers acquire loans or credit but fail to invest these funds in ways that generate sufficient returns to cover the debt and contribute to farm profitability. This can occur when borrowed money is used for non-essential expenses, inefficient farming practices, or investments that do not enhance productivity or income. Ultimately, the mismanagement of debt in agriculture can lead to financial strain, inability to repay loans, and a negative impact on the overall financial health of the farm operation.

[5] Income and livelihood issues of tribal farmers in Jharkhand , Researchgate, January 2023,

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)
6,9023.1 ₹	• Sale of cash crops • Sale of milk, and eggs • Sale of sweets • Sale of honey • Sale of livestock • Other (working at shops, and hotel).	2,5138.5 ₹	• Grocery • Animal care • Travel • Education • Farming expenses (seeds, pesticides, fertilizers, boundary protection, hired labour)	4,3884.6 ₹

3. Household Nutrition

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

The current availability and accessibility to adequate and nutritious food in Jharkhand remain a concern, as indicated by the persisting high levels of undernutrition among children and adults. Despite improvements in children's nutritional status, with reduced percentages of stunting, wasting, and underweight children, the state still faces challenges in ensuring proper nutrition. Additionally, the prevalence of anaemia among children and adults, along with issues like inadequate exclusive breastfeeding rates and high levels of underweight women, underscores the ongoing need for enhanced food security and nutritional interventions in Jharkhand.

For most surveyed farmers, the yields from their farms represent between 25%-50% (42% of farmers), and 50%-75% (49% of farmers) of their household diet. The remaining, farmers acquire from local markets, however most farmers (92%) are only able to buy few products for their household diet. Their diets mainly consist of cereals (83%; i.e., rice and wheat), oils and fats (45%: i.e., sunflower and mustard oil), spices and condiments (43%; i.e., salt, turmeric, and chillies), vegetables (44%; i.e., tomato, cauliflower, bottle gourd, and dal), and roots and tubers (38%; i.e., potato, radish, and pumpkin). On average, a participating household consumer 2.6 food groups (out of 12) which doesn't demonstrate significant nutritional variability.

An agroforestry-based carbon project intervention is expected to positively impact the current availability and accessibility to adequate and nutritious food in the state of Jharkhand. By promoting agroforestry practice of planting mango trees along with timber trees enhances carbon sequestration, leads to increased land productivity, diversified food sources, and improved soil health. This also results in a more sustainable and resilient food system, providing households with a wider variety of nutritious foods, potentially reducing reliance on market foods and enhancing food security. Additionally, the cultivation of indigenous crops and the preservation of traditional

ecological knowledge within agroforestry systems contributes to dietary diversity and nutritional security among communities, fostering a more sustainable and nutrient-rich food environment.

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	83.85
Root and tubers	38.46
Vegetables	43.85
Fruits	11.54
Meat, poultry, offal	4.62
Eggs	12.31
Fish and seafood	1.54
Pulses, legumes, nuts and seeds	20.77
Milk and milk products	31.54
Oils and fats	45.38
Sweets	10.00
Spices, condiments and beverages	43.08
Average number of food groups consumed per household: 3.5	

4. Agricultural Productivity

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

Jharkhand's current agricultural productivity state is characterised by low productivity, particularly affecting tribal and smallholder farmers who face challenges such as limited use of manure, lack of irrigation sources, dependence on monsoons, and traditional and subsistence agricultural practices, leading to low incomes[6]. Lack of knowledge about agroforestry systems, maintenance of fruit trees and ability to bear the upfront cost of purchasing materials prevents farmers from increasing the land's productivity by plating fruit trees. Per the farmer survey carried out with 130 participants, the biggest impacts on productivity come from diseases, droughts and input costs.

The project intervention is expected to positively impact the current state of agricultural productivity and challenges in Jharkhand. By integrating trees into agricultural landscapes, agroforestry systems can improve soil health, increase water retention, and promote biodiversity, enhancing crop productivity and resilience to climate change. Apart from the initial funding for planting trees, farmers need support to maintain the plantations for a significant time. The project provides farmers with alternative income sources through carbon credits, which can help them invest in better farming practices and improve their livelihoods. The planted trees help retain soil moisture and increase the water table, which further helps increase the per tree fruit outcome and enables farmers to cultivate vegetables or spices between the trees.

[6] *(PDF) INCOME AND LIVELIHOOD ISSUES OF TRIBAL FARMERS IN JHARKHAND (researchgate.net)*

II.) Fill in the survey in Table 6 depending on the yield of your cash crop and total farm yield, including the percentage of productivity that accounts for crops other than the cash crop.

Table 6. Agricultural productivity survey results.

Cash crop type	Average yield of cash crop (kg/ha/year)	Average total farm yield (kg/year)	Other crops contributing to productivity and their amount (%) in terms of amount produced per kg/ha.
Rice	*269,370.00*	*20,485.35*	*Varied vegetables contribute approximately 0.3% to the total productivity.*
Potato	*11,537.00*		
Wheat	*2,750.00*		
Maize	*1,900.00*		
Dal	*1,425.00*		
Peas	*1,000.00*		
Ragi	*500.00*		
Tomato	*391.00*		
Madua	*300.00*		
Onion	*150.00*		

5. Women's Empowerment

I.) Describe the balance of gender in the project area and challenges experienced in terms of inclusion of women in decision making and leadership positions, and how project intervention is expected to positively/negatively impact this.

Gender roles in Jharkhand reflect traditional patterns where women often hold significant responsibilities in managing resources like home gardens and innovative agroforestry practices. However, challenges persist in terms of inclusion of women in decision-making and leadership positions due to limited access to technical information, credit, and extension support. Additionally, discriminatory land governance systems coupled with gendered social norms contribute to violence and oppression of women in the state, particularly in relation to land rights and leadership positions[7]. Women face gender-based violence, limited access to justice, and cultural barriers that hinder their participation in decision-making processes and leadership roles.

The women involved in the project are going to be part of the project in various capacities. They are involved in the data collection process as data collectors. They will also be engaged in community engagement as Baghwani Sakhis (local term for farmer friend). The Baghwani Sakhis are part of the community and are well known for their experience and guidance in plantation related activities. The Baghwani Sakhis will engage with the farmers and inform them about the project, the implications of participation, benefits for the farmers and what their responsibilities will be as members of the project. The women will also be part of the project council and will be involved in the meetings in a decision-making capacity and will represent members of their community. These roles will enable the women in the project area to be more participative in the betterment of the community and have a greater voice in the decision-making processes.

II.) Fill in Table 7 below depending on the number of women involved in certain roles in the project.

Table 7. Women empowerment survey results.

[7] *India's tribal women left behind in progress toward gender equality - Landesa*

Number of women farmers/ participants	Number of women lead farmers	Number of women participating in project council	Areas where women are employed in the project (nurseries, agronomists, project coordinators etc.)
In year one of the project, 40,000 farmers+ are expected to be on boarded. Form these, about 25,000+ are women participants.	*The lead farmer has a three tier approach:* *1. Village cluster level lead;* *2. Block level lead;* *3. District level lead;* *4. State level lead;* *90% of the lead farmers will be women. Around 1,000 lead farmers will be women across different levels.*	*The state level project council have around 50 members with 90%-95% women participation.*	*1. Community Engagement Agents;* *2. Data collectors for farmer onboarding;* *3. Project Council Members;* *4. Project coordinator.*

Part E: Stakeholder Identification

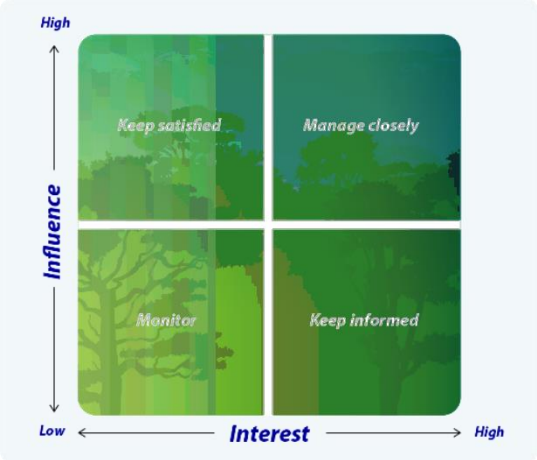


Figure 1. Stakeholder map.

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).

Intellecap has organised multiple meetings with the state government of Jharkhand. The meetings were done specifically with the Rural Development Department of Jharkhand and the Chief Minister Office. The detailed letter about the benefits of the program, the role to be played the stakeholders and other relevant details about the project interventions was submitted and can be viewed in Annex 5.

2. For this activity, the local partner, together with influential community member/farmer(s), should brainstorm and identify different secondary stakeholders (i.e., government, authorities, nurseries, etc.) that may impact or be impacted by project intervention. The interest (those who have a stake in the project) and the influence (those who have the ability/power to impact project intervention) of each secondary stakeholder in the project should then be determined and justified in Table 9 based on Figure 1 above.
   Example: the government is of high influence, as they can stop the project activities due to laws they create, prohibiting generation of carbon credits in agroforestry, and the interest could also be high, if the government wants to claim the CRUs generated by the project towards their NDC.

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

Table 8. Secondary stakeholder groups of the project.

Stakeholder	Interest	Influence	Justification	Outcome	How were they informed?
Authorities responsible for land management and/or	*High*	*High*	*The government's interest can be substantial if they seek to utilise the Carbon Removal*	*Manage closely*	*Letters of intent have been sent to all block level offices and to all relevant governmental*

greenhouse gas emissions/ National Government			*Units (CRUs) produced by the project to fulfil their Nationally Determined Contributions (NDC).*		*authorities informing of the project and its impact. In person meetings have been conducted with officers from the district regarding the same. However, as the project beneficiaries are individual farmers who are the owners of their land, government does not have high influence in the project.* *These stakeholders include:* - *MGNREGA Commissioner* - *Secretary of the Rural Development Department* - *The Department of Planning and Development* - *Honourable Chief Minister of the Government of Jharkhand* *The first three stakeholders listed are responsible for the BHGY scheme.*
Local government	*High*	*Low*	*The project engages block offices[8] to get data about plantations done on farmer fields under the BHGY scheme. The block officers also help in Community engagement.*	*Keep informed*	
Local authorities	*High*	*Low*	*The project collaborates with local authorities (i.e., Village Panchayats) to avoid social conflicts and to engage with the local communities in the project area.*	*Keep informed*	
Donors	*NA*	*NA*	*The project does not receive any grant funding from a donor.*	*NA*	*NA*
Financial partners/ institutions	*High*	*Low*	*The project, currently does not receive any loans to pre-finance the project. However, it might seek funding from SAF*	*Keep informed*	*NA*

[8] A block is a district sub-division for the purpose of rural development. Each district in the state of Jharkhand has roughly 10 blocks, and the project will cove 24 districts. Intellecap reaches out to district collectors, and through them, to the block officers.

			if carbon revenues are not enough		
NGOs	*Low*	*Low*	*Apart from the subcontractor in this project which is TRI, other NGOs have least interest and influence over the project, as no other NGO hold influential power in Jharkhand.*	*Keep informed*	*The State Government has undertaken a press conference to inform all the local stakeholders about the project.*
Technical/ agronomical partners	*High*	*High*	*TRI had involved a team of agronomists to assist in the project by creating the agroforestry design for the BHGY scheme.*	*Manage closely*	*The TRI team is currently involved in the execution of the project, as the sub-contractor.*
Procurement services	*NA*	*NA*	*The project does not source any planting materials from local nurseries as the plantation is already done under the BHGY scheme.*	*NA*	*NA*
Value chain actors (i.e., traders, manufacturers, and processors)	*NA*	*NA*	*The project's cash crop (Mango) is not bought by a trading company or sold in the market by the Local partner. The produce belongs to the farmer and is theirs to do with as they wish.*	*NA*	*NA*

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

Table 9. 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	• No	• No
Non-native language	• No	• No
Low income	• No	• No
Fire risk	• No	• No
Low status	• No	• No
Religion	• No	• No
Ethnicity	• No	• No
Low educated	• No	• No
Remote	• No	• No
Disabled	• No	• No
Migrants	• No	• No
Other	• No	• No

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

Through the block officers, the project identifies local women and men from the various villages in Jharkhand who have a strong connection with the farmers in their communities. These individuals have also been community engagement agents under the BHGY scheme, and therefore they already have a good understanding of plantation activities. The female community agents are Baghwani Sakhis[9] whose primary function is to engage with the community, specifically the farmers identified as potential participants for the project. The Baghwani Sakhis are trained on the programme details and are also informed about the benefits and responsibilities involved as part of the project. The farmers are informed about the Farmer agreement which is free and prior informed consent by the local partner and Baghwani Sakhis supported by the sub-contractor in the engagement process and explain the agreement in full so as to ensure the farmer knows exactly what he/ she is agreeing to by signing the agreement. The farmer agreement is converted into local language for better understanding of the farmers. In addition the local engagement is aided by providing the Baghwani Sakhis with relevant infographics highlighting key aspects of the project.

In sum, there are three level of engagements:

1. *Village or block level meetings: initial sessions with the aim of training the community engagement agents (primarily Baghwani Sakhis and other volunteers; who might also be farmers themselves). These agents are trained by Intellecap and by the TRI team of professionals, to then, further inform 10-15 farmers about the project;*

[9] In Hindi, these are the local rural women, involved in the BHGY scheme to aid local participating farmers. They will be trained on the project details, to provide information to the participating farmers and assist in the overall project coordination.

2. *Detailed information on the Free and Prior Informed Consent (FPIC) content and having FPIC in local language;*
3. *Two-pager infographics (translated to Hindi) for the illiterate and disadvantage segment of the population to understand the project (see below). In practice, the data collectors take the infographics with them when onboarding the farmers to inform them about the project.*

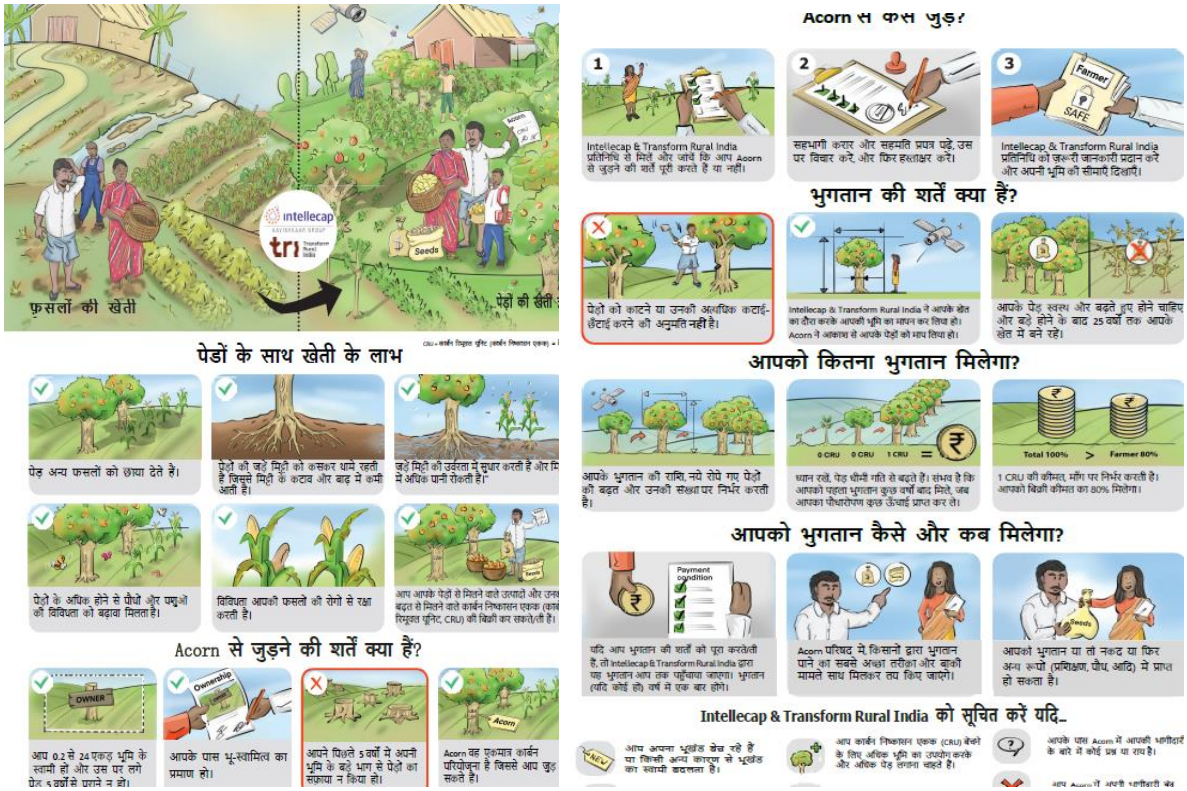


Figure 2. Infographic, in local language, used to communicate with the project participants.

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.*

One integral aspect to the project is its governance structure as means to ensure participant representation in a project area that crosses 79,00 km^2 and includes over 90,000 participants. As a result, the project will adopt three levels of governance (see Figure 3 below).

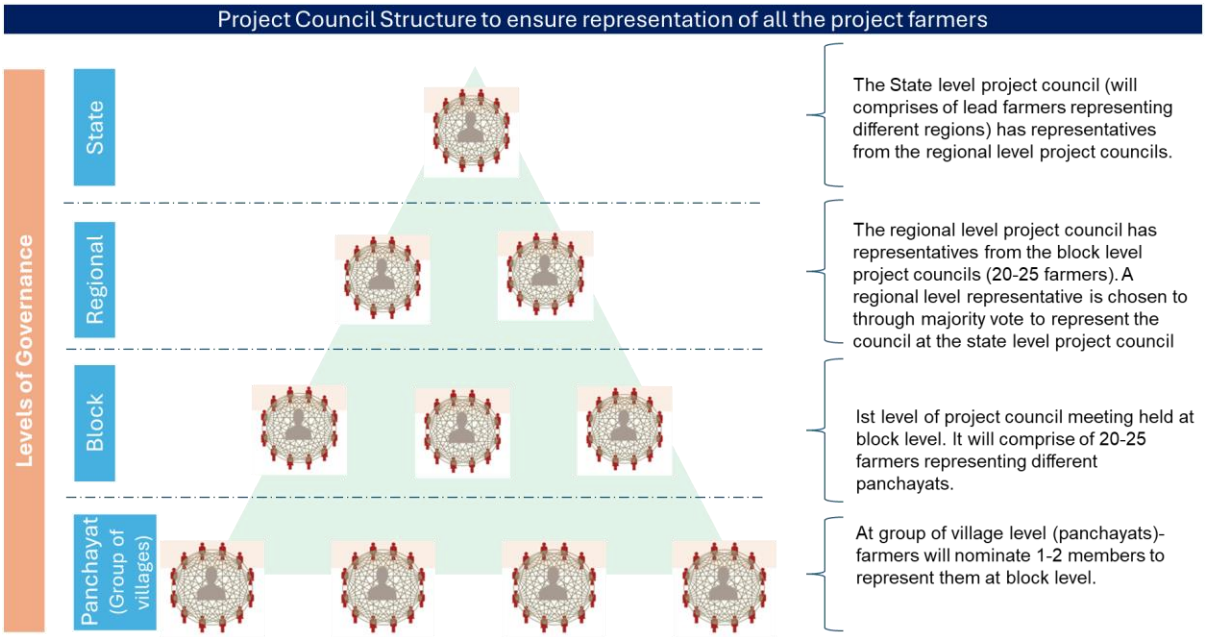


Figure 3.Project Council levels of governance.

The farmers are spread across districts, villages, and blocks. In Jharkhand, there are 24 districts, where each district has around 6 to 20 blocks. Further, each block has around 10-20 panchayats where the participants are spread. The TRI on-ground team will facilitate the project councils at all levels and the Intellecap team will participate and facilitate the councils at the State/ district level.

The governance structure will be established through the creation of Baghwani Samithis[10] at the panchayat level[11]. The Baghwani Samithi includes a group of farmers organised under the Birsa Harit Gram Yojna (BHGY) scheme, under which the existing agroforestry intervention started. This group includes women farmers, ST/SC and youth farmers who have participated in the BHGY plantation program. The Baghwani Sakhi supporting the plantation activities in the neighbourhood/panchayat will also be part of the Baghwani Samithi.

The Project Council members will be selected from the existent Baghwani Samithis, at the local level. Members of the Samithis will be nominated based on i) how influential they have been in

[10] Hindi for Project Council/group of farmers.

[11] Within the administrative setup of India the democratically elected Local governance bodies are called the municipalities in urban areas and the Panchayati Raj Institutes (simply called the "panchayats") in rural areas. Panchayats cover about 96% of India's more than 5.8 lakh (580,000) villages and nearly 99.6% of the rural population. The Various levels of the administration in India are :1) National Level 2) State Level 3) District Level 4) Block Level 5) Panchayat Level. The Panchayat level is the level of the on-ground farmer engagement.

their community, ii) their proficiency in using mobiles and, iii) their activeness in the project engagements. The farmers and participants of the project will vote for the nominees, and the candidates with majority of votes will be selected as members of the Project Council. To gather input from the local stakeholders, the Project Council members will have quarterly meetings with the farmers. Each representative, at the various levels, is responsible for informing the groups below their level on the decisions and outcomes of the council meetings, ensuring that every farmer down to the village level is well informed of the project council outcomes.

In sum, the Project Council will take place in three levels:

1) *State level – 1 Project Council in Jharkhand, and therefore two meetings per year;*
2) *Regional level – 20-25 project councils meetings per year (depending on the number of onboarded farmers in the particular district);*
3) *Bock level – 20-25 project councils meetings per year (depending on the number of onboarded farmers in the particular district).*

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*.

Local stakeholders will be kept informed on the outcomes of the Project Council meetings, through the following methods:

i. *The Project Council members will share the Project Council Report in a WhatsApp group for the group they represent;*
ii. *For those that don't have access to WhatsApp, the Report will be shared in a community bulletin board, available in the Panchayat office/sub-contractor office. The farmers involved in the project can view the key updates to the program at these locations;*
iii. *The Project Council members will discuss the report at the start of each quarterly meeting with the Baghwani Samithi.*

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 take place in a community/village center (exact location to be determined before the meeting), during the afternoon to ensure the participation of its members (i.e., coming from farther areas). These meetings will take place twice a year to ensure that the farmers are well informed about the developments of the project.
During the first year of the project, there will only be one Project Council composed of representatives from the various village level Bhagwani Samithis. In the following years, and with the scaling of the project, the number of Project Councils will be reassessed.
The meetings will be facilitated by the TRI on-ground team of coordinators. Intellecap has already

provided the necessary guidelines for TRI to conduct the Project Councils, and the on-ground team has participated in the initial councils held in June, gaining valuable insights into the process. Additionally, the TRI team has experience in facilitating farmer group meetings, including grievance redressal mechanisms, equipping them to effectively conduct the Project Councils. This foundation ensures that they are well-prepared to carry out the councils successfully.
All decisions will be made by majority of vote.

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

The project council members will be representatives from the Bhagwani Samithis in each block/ village, elected by the members of the respective block/village, taking into consideration the following factors:

i. They should be a vocal member of the community;
ii. They should own and be able to use a smartphone;
iii. They should be forward thinking community leaders;
iv. They should have a good quality plantation to act as example.

These members are nominated by the participants themselves. A participant can pitch the nominee in front of the other participants and say why he/she should be chosen. Based on this, an independent and anonymous vote is carried out. Those who gain majority of vote are elected.

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 meetings will create the opportunity for all council members to actively contribute to discussions by:

i. Ensuring the project's team is well trained in handling farmer groups and will ensure the project council members actively participate in the meetings;
ii. Providing beforehand the meeting agendas to ensure that the members are prepared in advance;
iii. Creating an environment for raising questions at the earliest and hence provide solutions at the earliest as well. The project council serves as a platform that provides an environment for members to raise questions and issues. Based on the scale and complexity of the issue, the following process will be followed:
    a. Minor issues can be addressed during the project council by the TRI on-ground team.
    b. Major issues will be noted and deliberated upon by the TRI and Intellecap teams.
    c. Resolutions and responses to the raised queries will be communicated to the representative who originally raised the issue.

    This approach ensures that questions and concerns are addressed promptly, with major issues receiving due attention and resolution from the project leadership.
iv. Breaking the members into smaller groups to address specific areas (i.e., gender-based concerns).

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.

The Project Council will have a three-tier structure. There will be councils at the blocks, districts and finally at state level as farmers are spread across a large geography (see Figure 3). As of now, the project has conducted two block-level project council meetings at Bero and Angara block of Ranchi districts, on the 18th of June, 2024. The details of the members are provided in Table 11 below and the report is provided in Annex 3.

Table 10. 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)
1	*Priti Oraon*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Mithila Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Seema Dewariya*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Yashoda Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Vineeta Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Fulkumari Oraon*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Elam Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Namita Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Madhuri Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Aaru Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Anita Toppo*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Gunjari Urain*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Devika Dhan*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Dyavanti Dhan*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Prathiba Toppo*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Kiran Reshma*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Banti Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*

1	*Aprajita Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Anita irkey*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Leelavati Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Shubhvati Tirkey*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Panchu Oraon*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*
1	*Vinod Oraon*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*
1	*Dilip Oraon*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*
1	*Jairam Oraon*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*
1	*Nirmala Varla*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
1	*Bolva Oraon*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*
2	*Shukri Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Seema Kumari*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Anu Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Sangeeta Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Kiran Kumari*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Sushma Kumari*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Rekha Kumari*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Anita Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Ujala Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Sugan Kumari*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Vachan Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Jhuniya Kumari*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Mamta Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Geeta Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Agam Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*

2	*Kiran Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Panchami Oraon*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Asha Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Sunita Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Vineeta Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Santoshi Devi*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Sandhya Devi*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*
2	*Manju Devi*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*
2	*Punam Devi*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*
2	*Polura Oraon*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*
2	*Afsari Khatun*	*Project Participant*	*F*	*Ranchi*	*Smallholder farmer*
2	*Doli Kumari*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*
2	*Pankaj Mahato*	*Project Participant*	*M*	*Ranchi*	*Smallholder farmer*

Part G: Grievance Mechanism

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

   The local partner, the sub-contractor, creates the grievance mechanism in unity with the panchayat heads. The lead farmer representing panchayats is the first level of grievance submission. Then, it's escalated to the block, regional, and state levels. Parallelly, the project participants can voice their grievances with the local partner through the sub-contractor team or WhatsApp messages. The farmers can also directly inform the panchayat heads about any grievances.

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

   During the onboarding of participants, Intellecap and TRI are working in close coordination with the government offices at state, district, blocks and village level. The project informs the district and block level government offices about the farmer onboarding. Further, the project also updates the village head men/ women and panchayats about the program. The project participants have significant trust on the village head men/ women and panchayat. The project informed the local stakeholders by communicated them through formal process. The document is furnished in annex 2.

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.).

   In one method, the project's participants and non-participants can communicate their grievances during farmer training meetings and Project Council meetings. In each of these, there will be a grievance collection box for anyone to anonymously introduce their grievance. From this, the council members will bring the topics to the Project Council meetings. In another method, participants can raise their grievances through WhatsApp messages and letters to the council members or Local Partner.

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.

   Level 1: Panchayat Level Project Council Meetings: The farmer beneficiary informs their local lead farmer (panchayat representatives for the Project Council) about the issue that they are facing. These representatives will endeavour to solve the issue at their level.
   Level 2: Block Level Project Council Meetings: If the issues are not resolved at the panchayat level meetings, then the lead member representing the panchayat takes the concern to the district level meetings.
   Level 3: District Level Project Council Meetings
   Level 4: State Level Project Council Meetings

   At any of these levels, the respective lead farmers can also reach out to the sub-contractor through sub-contractor's regional representative or through them to the Local Partner.

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 such case, the local panchayats/ block level officer will be involved, as these people have significant respect and trust at the village level.

Part H: Baseline Assessment

1. Baseline Scenario

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

Table 11. Land tenure issues and mitigation actions baseline.

Land tenure/use disputes	Mitigation action
Land is inherited by multiple family members	*Mitigation action 1: Land records are established in governmental records;* Mitigation action 2: *The family members who inherit the land sign an agreement that demonstrates who has the rights to operate each portion of the land.* *The process[12] of changing land ownership in Jharkhand involves property mutation, which is the transfer of title ownership during a sale or transfer. This process records the new owner in the land revenue department, allowing the government to levy property tax. Governmental records of land ownership, such as the Jharkhand Records of Rights (ROR), play a crucial role in these cases by endorsing the real owner of a land, helping to detect false claims on lands, avoiding land grabbing, and providing crucial information for court litigations related to land/property. These records are vital for checking ownership of ancestral land, obtaining details of land type and activities carried out on land, facilitating sale transactions of land, applying for loans, and producing land records as proofs in civil litigations. The Jharkhand ROR is a significant indicator of the legal status of a property and helps individuals avoid legal hassles in the future.*

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

Table 12. Land use, land cover and agricultural management baseline.

Topic	Description of the current situation in the project region prior to the Acorn project intervention	How is this expected to change, over a period of 10 years, if the Acorn project intervention were to never take place?
Land use	*The land without the project intervention is degraded/ fallow land on which no cultivation was being done (due to the lack of resources and know-how, farmers were not able to utilize their land to*	*Farmers would start agroforestry by availing local government support, however due to poor knowledge about the agroforestry model and inability to maintain the trees, the result is high mortality. This government support is available to all farmers that meet the*

[12] https://www.indiafilings.com/learn/jharkhand-land-mutation/

	the full potential, thus leaving to become degraded and fallow).	*following minimum criteria: i) small plot of land (0.5 ha) that is baren; ii) lack of financial means to carry out the activity on their own, iii) consent to participate their labour for the agroforestry work on their plot. Additionally, negative impact of climate change further worsens the productivity as the farmers would not have sufficient to be climate resilient.*
Land cover	*Degraded/ fallow land*	*Land used for marginal cultivation declines in productivity and is no longer usable*
Agricultural management activities	*As the land was degraded/ fallow no agricultural management activities were being done.*	*Due to the marginal cultivation being practised the lack of agricultural management activities would continue and the soil would continue to degrade.*

2. Carbon Baseline

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

The top species at the start of project intervention, in descending order are:

- Mango (*Mangifera indica*)
- Bamboo (*Bambusa vulgaris)*
- Teak (*Tectona grandis*)
- Sal (*Shorea Robusta*)
- Papaya (*Carica papaya*)
- Indian blackberry (*Syzygium cumini*)
- Guava (*Psidium guajava*)
- Jack fruit (*Artocarpus heterophyllus*)
- Jujube (*Ziziphus Mauritiana)*

3. Livelihood Baseline

I. Describe in Table 14 the livelihood conditions (including marginalised/minority groups, income, poverty level, remoteness, education, transport, gender balance, migration, population growth, typical assets, and other livelihood activities, etc.) within the project region, and how these are likely to change over a period of at least 10 years in the absence of the Acorn project intervention.

Table 13. 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 Jharkhand, livelihood conditions are challenging, particularly for marginalised and minority groups, with income levels often below the poverty line. Residents, especially farmers, face issues related to remoteness, limited access to education, poor transportation infrastructure, and gender inequality. Women, despite contributing significantly to agricultural labour, often lack land ownership rights and decision-making power within households. Educational opportunities are limited, leading to difficulties in sending all children to school regularly. Male members of households frequently migrate to urban areas between farm harvests to supplement income, highlighting the economic strain faced by families.*	*Despite endowed with rich minerals, the economy of Jharkhand region is predominantly agricultural with 71 % of its population dependent on agriculture for their livelihood and 43 % of income being delivered from agriculture. However while agriculture plays such a major part in the employment and income for the farmers the income is very low compared to other states. As of 2022 the Average household income from Agriculture was Rs. 4,895. Over the next decade, in the absence of the intervention, these conditions are likely to persist or worsen. Without sustainable income sources, poverty levels may remain high or increase. Remote areas may continue to face challenges in terms of infrastructure and access to essential services. Gender disparities could persist, impacting women's empowerment and participation in decision-making. Limited educational opportunities may hinder socio-economic progress, and migration for additional income may continue as a coping strategy for families.*

4. Ecosystem Baseline

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

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

Table 14. 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	*Jharkhand is an agrarian state and faces challenges in agriculture due to its climate and land*	*Without trees in the project area, soil erosion is expected to continue and*

conditions within the project area	*characteristics. The state receives an average annual rainfall of 1100 mm, with 85% occurring during the monsoon months. However, there is a lack of systematic rainwater harvesting efforts. Approximately 80% of the cultivable area is drought-prone, impacting agricultural productivity.*[13]	*intensify leading to an increased loss of productivity in the land.*
Description of the fauna and flora in the project area	*Jharkhand's ecosystem hosts a variety of flora and fauna. Common flora species include Mahua, Madhuca longifolia, and other forest trees. The fauna consists of vultures, snakes, bats, and various wildlife species such as Elephants, Sloth Bear, Leopard, Tiger, Wolf, Jackal, Hyena, Gaur, Spotted Deer, Langur, Rhesus Monkey, Mouse Deer, Civet Cat, Sambar Chausingha, etc.*	*The overall biodiversity would decrease as farmers would be inclined to cut down the existing native trees for their timber value and in search of more productive land for cultivation. As a consequence, the wildlife in the project area would not have a habitat and migrate from the project area.*
Description of the current state of biodiversity in the project area	*The project area has an abundant diversity of flora and fauna species due to the many forests in the state in the state of Jharkhand, which are maintained by the Forest department under the Government of India. As such they are protected and thus maintain the biodiversity of fauna and flora. In many cases the farmers land are in close vicinity to these forests, however their abundance has not resulted in increased productivity for the farmers in the area as to develop their land, inputs of capital and knowledge are needed yet are unavailable.*	*The farmers will continue their marginal cultivation in degraded land till the soil has degraded to a point where they cannot continue their cultivation and have to cut surrounding forest area for cultivation.*
Description of deforestation potential	*The project region is prone to deforestation due to common practices using wood for fuel for cooking.*	*Without the additional income of the Acorn project and the impacts of climate change, farmers would be likely to cut down trees for their monetary value.*

[13]http://journal.iujharkhand.edu.in/June-2021/Sustainable-Agriculture-and-Food-Security-Challenges-and-Policies-of-Jharkhand.pdf

Part I: Agroforestry System Design

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

Table 15. 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**
Horticulture timber mix with intercropping	*Agrisilvipastoral*	*Jharkhand*	*No harvesting*	*370 trees/ha*	*The agroforestry design was developed by the Government of India, within the MGNREGA program. The Rural Development Department consulted multiple institute and experts.*	*Positive*

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

Table 16. Agroforestry species promoted under each agroforestry system.

Agroforestry Name	**Agroforestry tree species**	**Native, naturalized or invasive?**	**If naturalised, describe its likely:** **Livelihood benefits that make it preferable to any alternative native species**	**Impact on biodiversity or other provision of key ecosystem services in the project and surrounding areas**
Horticulture timber mix with intercropping	*Psidium Guajava*	*Naturalized*	*Provides fruits with commercial value, enhancing the income of the farmer.*	*Habitat for various wildlife species (i.e., increases honey bee population). The deep-root system helps prevent soil erosion and improve soil structure.*
	Mangifera Indica	*Native*	*Provides fruits with commercial value, enhancing the income of the farmer.*	*Habitat for various wildlife species (i.e., increases honey bee population). The deep-root system helps prevent soil*

			Important herb in the ayurvedic medical system.	*erosion and improve soil structure.*
	Citrus aurantiifolia	*Naturalized*	*Provides fruits with commercial value, enhancing the income of the farmer. Medical properties (high in antioxidant and antibacterial properties).*	*Increases biodiversity within the agroforestry design (i.e., increases honey bee population).*
	Dalbergia Sisso	*Native*	*Provides timber with commercial value (which can be harvested after project's crediting period).*	*Acts as a windbreak and prevents soil erosion.*
	Gmelina Arboria	*Native*	*Provides timber with commercial value (which can be harvested after project's crediting period).*	*Acts as a windbreak*
	Tectone Grandis	*Native*	*Provides timber with commercial value (which can be harvested after project's crediting period).*	*Acts as a windbreak*
	Gliricidia Sepium	*Naturalized*	*Provides timber with commercial value (which can be harvested after project's crediting period).*	*Acts as a windbreak*

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).

Intellecap is a private company registered under the Companies Act, 2013 of India.

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).

Intellecap has also appointed a subcontractor that has been working in the project area, with the farmers, for a long time and regularly interacts with them for capacity building activities. The subcontractor has a network of district coordinators, block coordinators and Bhagwani Sakhis that interact with the participants and confirm their interest and ability to undertake the project. Through this project, a participant agreement has been signed with each participant in the Acorn programme, where it lists the roles and responsibilities of the participants. Furthermore, Intellecap has also established Project Council meetings and a grievance redressal mechanism to note any difficulties that the participants may face during the course of implementation of the project.

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 project promotes employment opportunities for women and youth by engaging them as data collectors, trainers and to oversee the maintenance of the project. The project also creates a market for selling the agroforestry produce, generated from fruit bearing trees and other crops planted on the land. The project promotes economic development of the participants by connecting them with the global carbon market.

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.).

Intellecap has worked with more than 11 million farmers across various geographies of India such as Jharkhand, West Bengal, Maharashtra via engagements and investments (i.e., technology related engagements where Intellecap connected Agtechs with farmers and FPOs, support of farmers in establishing market linkages, working with governments on the policy front, and monitoring and evaluating multiple DFI (Development Finance Institutions) funded projects.

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.)

All information disseminated to the participants is developed and distributed in a format that would be most appropriate for them to understand and absorb. Participants have been provided information on the project in the local language along with infographics that make it easy for them to understand. All coordinators, supervisors and data collectors converse with the participants in the local language. The participant agreements have also been translated in the local language and a local representative has further described and elaborated on each activity mentioned in the agreement to the participants. The resources deployed by the Local Partner on ground ensure that farmers are timely informed about the activities to be undertaken in the project. The participants are often informed of the project through meetings or the community engagement agents travel to each farmer before data collection and inform them of the project and what it entails.

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.

All project information will be stored on local servers of the Local Partner and will be backed up on cloud storage. Regular data backups will be undertaken to prevent data loss, accidental deletion or security breaches. Where relevant, data will be anonymized to protect personal information of the participants. As much as possible data will be stored digitally and even where physical copies are required, these will be converted to digital files at the earliest.

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).

Law	***Description of Law***	***Compliance by Project activity***
Forest Conservation Act, 1980	*An Act to provide for the conservation of forests and for matters connected therewith or ancillary or incidental thereto.*	*The agroforestry model prevents harvesting of trees and instead promotes tree plantation*
Environment (Protection) Act, 1986	*This Act was enacted with the main objective to provide the protection and improvement of the environment and for matters connected therewith.*	*The agroforestry project support tree plantation which in turn results into improvement in environment and biodiversity*
National Forest Policy	*The principal aim of this Policy is to ensure environmental stability and maintenance of ecological balance including atmospheric equilibrium which are vital for sustenance of all life forms, human,*	*The project will maintain ecological balance through undertaking good practices of plantation, and improving soil management and improving*

	animal and plant.	*biodiversity*
Biological Diversity Act, 2002	*An Act to provide for conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources, knowledge and for matters connected therewith or incidental thereto.*	*The plantations will lead to an increase in biodiversity*
National Environment Policy, 2006	*This Policy emphasizes that caring for the environment is the bounden duty of any institution, government or non-government, and of any individual that uses, or otherwise carries out an activity that has an impact on, the resources of the environment.*	*The plantations will be maintained for at least 20 years by the individual farmers undertaking the plantation*
Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006[14]	*This Act recognizes the rights of the forest dwelling tribal communities and other traditional forest dwellers to forest resources, on which these communities were dependent for a variety of needs, including livelihood, habitation and other socio-cultural needs.*	*In some areas where the plantations are being carried out, the land belongs to scheduled tribes. The project support that the produce grown by the farmers belongs to them and will also provide for additional income through carbon credits*

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 will take actions to ensure inclusivity and avoid discrimination of the participants, through the following actions to be incorporated in discussions with participants:

- *Inclusive project council meeting where women and youth are also represented. This will be made possible by having key community agents present in the meetings regardless of gender and age. The process of project council members election is done by nominating people who are active members of the community.*
- *Ensure that location of the meeting is such that is accessible to all local stakeholders;*
- *Use inclusive and culturally appropriate language and respect the local customs and traditions;*
- *Ensure and encourage participation of women in decision making and income*

[14] *THE INDIAN FOREST ACT, 1927 (nbaindia.org); Legislative Department | Legislative Department | India*

generation. Promote women leadership roles for women. This will be made possible as 90% of the members of the project council are women and will be directly involved in decision making and income generation.

- *Encourage active participation and collaboration among diverse groups of participants spread across the different districts.*

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.)?

The initial step for farmer selection is based on the list received from the government of those farmers who are under the Birsa Harit Gram Yojana[15] under which they have received the fruit and timber trees for plantation. Subsequent to this, the following activities are taken to determine and onboard the farmer for the project:

i. *Dissemination of information on the project through community meetings, Baghwani Sakhis, information being displayed on bulletin boards in key areas of the panchayats;*
ii. *Survey to receive free and informed consent of the farmer to be part of the programme;*
iii. *Availability of farmer on the farmland where plantation has taken place;*
iv. *Mortality percentage of the plantations undertaken by the farmers;*
v. *Farmers willingness to commit to the long duration of the project.*

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.

The key policies are highlighted in the Aavishkaar employee code of conduct provided 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.).

The women involved in the project are providing a range of services, the key being community engagement. The women are functioning as Baghwani Sakhis and are responsible for engaging with the beneficiaries and informing them about the project and its benefits. The Baghwani Sakhis further form the Baghwani Samithis and will be involved in communicating the issues faced by the beneficiaries and also communicating the outcomes of the meetings and project councils to the farmer beneficiaries. This role ensures that the women involved in the project are engaged at the ground level and have a voice in the project. In addition to this, women will be a key part of the project councils and will form 60% of the body thus ensuring that women play a key role in the decision-making process.

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.).

[15] The Jharkhand government has launched three schemes under the National Rural Employment Guarantee Act to revive the rural economy affected by the lockdown. The three initiatives launched are Birsa Harit Gram Yojna for rural plantations, Neelambar Pitambar JAL Sammridhi Yojana for water conservation and the Poto Ho Khel Vikas Scheme for making playgrounds.

Through the Baghwani Samithis the Baghwani Sakhis ensure that the knowledge and experiences of the beneficiaries from other villages are discussed. Trainings will be provided by the subcontractor and experiences will be shared in the Project councils. The knowledge gained is then informed to the beneficiaries by the Baghwnai Sakhis. The updates to the project are also disseminated to the beneficiaries by the Baghwani Sakhis members of the project council. Important information is communicated to the beneficiaries by the Baghwani Sakhis in person or through the notice boards in community centres such as Panchayat offices and government buildings.

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.).

The trainings for the farmers are a vital part of the project and will primarily be undertaken by the Baghwani Sakhis, as they have a good connection with the local communities and the beneficiaries of this project. The BHGY scheme under which the plantations are done also involves local women called Baghwani Sakhis who have a strong presence in the community to go to the farmers periodically and give them training on the maintenance of the crops and plantation. These training involve topics such as land preparation, maintenance of trees, harvesting and pruning, preparation and application of biopesticides and organic fertilisers, etc. The same training and Baghwani Sakhis will be used in the project in accordance with the government training schedule and guidelines (they will become more structured for the farmers involved in the project).

Part K: Financial Feasibility

1. Provide a summary of th (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);
    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);
    c. The expected annual income from agricultural production and carbon sequestration;
    d. The expected productivity changes that will result from project interventions;
    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).

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

The local partner and its subcontractor have entered into an agreement that outlines the cost and expenses borne by the subcontractor. This will further be recorded and detailed in a simple excel tool. The Local partner uses Tally book and Quickbooks for undertaking the accounting.
The sub-contractor will also establish a Trust through which payment will be made to the beneficiary farmers for the revenue from CRUs.

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 cost for farmer mobilisation, farmer onboarding, data collection, training etc. is covered under the accounting system.

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.)

The 80% of the revenue received from CRUs will be transferred to a Trust structure who's members will include the beneficiary farmers that are part of the ACORN project. This Trust will ensure payment to individual farmers. As the money goes into a trust structure it can only be used for the specific reason for which the trust is set up i.e. payment to the farmers. Therefore this structure will ensure that 80% of the revenue received does not get used in project cost or by local partner. Together with Rabobank a deep-dive is being performed to ensure that such a structure is supported by respective partners and laws.

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 CRU benefits will be delivered individually, in full amount (no in-kind provisions) to each participant, based on the individual's performance. Pay-out will be done once a year, between the harvesting periods, to level out the timing of income for farmers.

The distribution of pay-outs towards Intellecap 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 a 'collective', and in turn this collective will distribute the funds directly to farmers to their individual bank-accounts. This type of set up is very normal for such large-scale projects in India; and provides additional transparency and ability for stakeholders (including the government) to track the carbon benefits. This set-up has been extensively reviewed from a legal and risk perspective on both Intellecap and Rabobank side, with a positive advice to use this set-up for farmer pay-outs. Currently, action points are taken to set up the 'collective' and arrange necessary adjustments (such as amending the partnership agreement to allow for such a set-up). Expectation is that the set-up will be operational in Q2 2025, if not earlier. (Note, further details on the set-up and the risk and legal considerations can be found in the CRO+L advice document).

Because every participant has a bank account, the payment will be done through bank transfer, guaranteeing a straightforward traceability. Payment details are collected during onboarding, and if there is a change (relating to phone numbers, as bank account details are not expected to change), it can be communicated through the WhatsApp groups of the council members, and during the biannual Project Council meetings.

Intellecap will track the payment information through Acorn's Local Partner Portal and through an excel overview. Information will include the participant's information (i.e., name and bank account), validation of CRUs generated based on the portal's data, transfer amount confirmation, payment dates, and outstanding payments.

Table 17. 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 19. 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

Table 18. Risk assessment.

a. Category	b. Risk screening question	c. Local partner response (Risks Identified)	d. Likelihood	e. Magnitude	f. 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.	*No, there are no activities involved in the project that 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.* *The local partner has policies in place internally to check 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. This is further expanded on in the Aavishkaar Group code of conduct shared in the Certification document.* *In addition, the subcontractor TRI has a checklist to check this whenever they move to a new region and hire local people as data collectors. TRI will fill in the checklist to make sure the hired labors comply with the Group code of conduct and labor laws. TRI will report this hired documentation to Intellecap.*	3	2	6

	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.	*There is no operational health and safety risk to the farmers while completing the project activities. The farmers are aware of know how to handle the risk of snakes and other wildlife in the area. The project ensures that the data collectors involved in the project are local people from the same village/ block and so are aware of the local road and traffic conditions. Intellecap will also provide necessary trainings to ensure the risk of this is minimal.*	3	2	
	Describe whether the project could support or be linked to forced labor, harmful child labor, or any other damaging forms of labor.	*The project doesn't involve any other external agency for the plantation activities and as such the farmer himself ensures the maintenance of the field and plantation and harvesting of the produce from the trees planted. Thus ensuring that there is no harmful labour activities taking place in the project.*	3	2	
Gender equality & Gender based violence	Describe whether the project intervention could result in adverse gender impacts, including discrimination or the creation/exacerbation of gender-related inequalities. Consider the distribution of and access to resources (e.g. training, seedlings), farmer onboarding, and the gender balance in decision making/leadership positions.	*No. The project identifies women as major stakeholders and takes steps to ensure they are engaged in all stages of the project. They are involved as community engagement agents reaching out to beneficiaries and explaining the benefits of the project and are also given 60% representation in all project councils, ensuring they have a voice in all decision-making processes. Through awareness, and participation in decision-making, the women will gain greater autonomy and agency, reducing their vulnerability to violence.*	1	3	4.5

	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.	*No. Local partner has prevention of sexual harassment policy in place under the Aavishkaar Group Code of Conduct. This policy is for the local partner employees. Similar to this, sub-contractor also have gender policy in place. Lastly, as a social norm, in the project location there are village panchayats (i.e. village councils in India) where there are rules and understanding of gender equality, and sexual harassment or social exploitation is considered as a social evil and the person not following this is punished at the community level. The detail of the policy is attached.*	3	2	
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 irrigation and heavy machinery.	*The project activities do not involve any heavy machinery or such instruments that could lead to a significant increase in the GHGs. The irrigation of the trees will not be so much as to flood the field as in the case of paddy cultivation which releases methane into the atmosphere. The irrigation will be through sprinkler, drip, wells or hand pumps to water the trees and ensure that the tree growth isn't hampered.*	1	4	4
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.	*The project activities do not involve the use of hazardous substances or any other activity that could produce contaminated waste. The project also does not use any synthetic fertilizers or pesticides especially in the close proximity to any water bodies.*	2	3	3,5

	Describe whether project activities result in noise pollution that causes disturbance to the ecosystem. Consider the use of heavy machinery.	*The project does not involve the use of any heavy machinery thus avoiding any noise pollution causing disturbance to the ecosystem.*	1	1	
Community Health, Safety and Security (IFC #4)					
	Describe whether project activities could exacerbate existing social and stakeholder conflicts. Consider conflicts with local government or authorities.	*No. The project's plantation activities were done with the informed consent of all the stakeholders including the government, local bodies, NGOs, and farmers. As such the government encourages the project activities and the benefits to the farmers, ensuring that there are no conflicts with the local government. In addition, the block-level and district-level authorities are informed about the project and are taken on board before the execution of the project.*	1	1	2.67
Community, health, safety, and security	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.	*No. There is no risk related to political instability in the project region nor at the country level. The project is supported by both central and state government so even in case when the state and central governments are from different political parties the project is supported by both these governments. This could be witnessed from the past track record of the project as the plantation activity started in 2017-18 and the area under plantation keeps on increasing to around 40,000 ha till 2022-23.* *Both the local partner and subcontractor closely collaborate with the central and state governments, monitoring political developments. However, since the project is implemented on*	1	1	

		the land of smallholder farmers, the government's role is minimal. *Project developers communicate with the government through various channels: Firstly, the project partner representative interacts directly with the state government every quarter. Secondly, the local partner maintains open communication with the central government through public forums, workshops, and events.*			
	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.	*No there are no other activities that could adversely affect the health and safety of participants and local stakeholders involved in the project. Only 5% -10% of the project area might witness human-wildlife conflict (e.g. trespassing wild elephants in farm plots). However, this is also mitigated by having fences erected on the boundaries of the plantation, and regular monitor by the community and forest department officials.* *No other challenges apart from this impact the stakeholders in the project.*	3	2	
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	*No. The project will not prevent people from fulfilling their economic or social rights as outlined in the Universal Declaration on Human Rights. The project design is very engaging where the farmers are joining the project at their will and participate in decision-making about the activities to be undertaken.*	3	2	4.5

	survival, health, work, water and adequate standard of living.				
	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.	*No. The project participants were involved in each of the processes right from the selection of species to planning the plantation model and the way they want to receive the payment. A project council structure is designed at the panchayat or village level where farmers can discuss the progress of the project support required in managing the plantations and time (e.g. pre-monsoon or post-monsoon) and way of receiving the carbon revenue.*	1	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.	*No, the project activities will not exacerbate existing food affordability nor create any new problems. This is because the project activities are done on fallow abandoned land or land where some subsistence cultivation was done only for 3 months during the monsoon season.* *The farmers are encouraged to maintain the trees and are also encouraged to practice intercropping between the trees to diversify the existing income and food sources, so that the agriculture outcome does not impact due to tree plantation. As the trees grow, they will be able to sell the produce from the trees to further increase income and improve affordability of food for the beneficiaries.*	1	3	4.5

	Describe whether project activities could negatively impact farmer/household income or reinforce existing financial hardship in the project region. Consider expected changes in productivity.	*No, as stated above, the project activity requires no extra cost to realize carbon revenue from the farmer's side. The farmers are encouraged to maintain the trees and are also encouraged to practice intercropping between the trees to diversify the existing income and food sources. As the trees grow, they will be able to sell the produce from the trees to further increase income and improve affordability of food for the beneficiaries.*	2	3	
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.	*Yes, the project has understood the trends in climate variability through the years in the project area. The increasing temperatures and changing rainfall patterns in the state of Jharkhand are two variables that might have impact on the community in the project area as they are primarily involved in agricultural activities that are reliant on these variables.* *Temperature variability: Over the last few years, the temperature in the project area has seen an increase with hotter summers. Both the annual minimum and maximum temperatures have an increasing trend in Jharkhand during 1986-2018. The rapid increase in the annual maximum temperature is observed after the year 2000 than ever before.* *Rainfall variability: The average rainfall in the project area is fluctuating with decadal average rainfall varying between 1173 mm and 961 mm during the decade 1941-1950 and 2011-2018 respectively.*	5	4	18

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.	*In terms of drought, not all the areas in the project are prone to drought. Some of the districts are more prone to drought conditions, however, the farmers who have undertaken the plantation have irrigation sources and are trained in water harvesting.* *In terms of forest fire, it is not a risk as the spacing between the trees is adequate also the region is hot and humid.* *The increasing variability in the temperature and rainfall are major factors that impact the growth of trees and crops and could increase the risk of certain pests and diseases that thrive in warmer or drier conditions, posing challenges to crop productivity in the project area.* *Intellecap plans to mitigate the risk by:* *1) Species selection: the species selected for the plantation are native to the project region and have a low bearing on this variability.* *2) Availability of irrigation: most of the farmers involved in the project have irrigation sources that can help alleviate the stress caused by heat. The farmers have access to diverse water resources, including surface water and stored rainwater (in the form of jalkunds).* *3) Training on pest management: the farmers will be provided training on awareness about insect and pest management and mulching to conserve the moisture in the soil.*	4	4

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.	*Yes. The project focuses on small and marginal farmer households, primarily targeting those with low income as the main stakeholders. These farmers struggle financially and often cannot afford to maintain their fields or cultivate crops, affecting their income and ability to afford food.* *Prior to this project, many male members of such households worked as migrant labourers in the nearby cities or other states of India due to a lack of resources to farm their fallow lands. Limited access to finance meant they earned little, which was insufficient to work in their fields. Additionally, changing climate conditions, such as increased heat and inconsistent rainfall, have further impacted their ability to work on their small plots of land.* *The project aims to assist these farmers in diversifying their income and providing them with the resources to build resilience to climate change.*	1	3	3
	Describe whether the project could disproportionally affect or discriminate against vulnerable groups. Consider access to project services or benefits and decision-making.	*No. The project ensures equitable treatment of vulnerable groups, including women, youth, elderly individuals, transgender individuals, and people with disabilities. The project council, as proposed, will include representatives from these groups to ensure their views are considered. All beneficiaries receive a fair share of the carbon finance based on the carbon sequestered by their trees. Training is provided to all farmers, with equal representation in the project council.*	1	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.	*No, the project will not exacerbate any land tenure disputes or result in physical displacement.* *The plantations are established on land parcels owned by the farmers, who hold legal title to the land. The government has no ownership claim over these parcels. In the event of the farmer's death, ownership of the land passes to their next of kin, typically the widow or eldest son. This must be done through a legal document called land mutation (transfer of official document). The land mutation application process has been made online now, and takes approximately 90-120 days. The application process can be found in the following website:* *https://www.indiafilings.com/learn/jharkhand-land-mutation/* *To avoid disputes over land ownership and ensure clarity, the farmer agreement is signed by the landowner, confirming their ownership and entitlement to the project's benefits.*	2	2	4
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.	*Yes, the project has identified the challenges, needs and values of the project participants before the execution of the project.*	1	3	4.25
	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	*Yes, the project has a project council structure in place to actively engage with the stakeholders. This has been explained in full in the certification document. Key points from the same are:* *1) The project councils will be held every quarter.* *2) The project council will have 60% women representatives.* *3) Any grievances that are escalated to the representative of*	1	3	

plan is still in development, please explain.	*the farmer beneficiary will be addressed in the project council.* *4) The project council members will be chosen from the among the block level Baghwani Samhitis.*		
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.	*Yes, the local stakeholders are informed about the project through infographics about the project in the local language by the local Baghwani Sakhi or data collector who are also members of the same community and speak the same language thus ensuring trust and understanding between the farmer and the Baghwani Sakhi. In addition, the participant agreement and every other communication/ document is read to the participant by the data collector prior to any data collection to ensure that the participant is well informed about the project and its work.*	1	2
Describe whether the project has a plan in place for ongoing reporting on the project (changes, impacts and outcomes) to local stakeholders? If such a plan is still in development, please explain.	*Yes, any changes, impacts and outcomes relating to the project will be informed and discussed by the project council. The project council members will further disseminate the information among the beneficiaries that they represent through the Baghwani Sakhis. The beneficiaries will also be informed about any updates through the messaging feature through ACORN. In addition, there will be a Whatsapp group created at the project council level and Intellecap representatives will be part of the group. Any developments in the program will be directly communicated to the participants through the group.*	3	3

	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?	*The project has a grievance mechanism in place to handle any grievances that may arise because of the project. The farmer beneficiaries are informed about the project and the grievance mechanism by their local community engagement agent (Baghwani Sakhi) and are informed about the mechanism process and how to escalate the grievance in case they are not satisfied with the resolution.*	3	2	6
Grievance mechanism	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?	*No. The grievances will be solved at the community level first and in extreme cases they will be solved at the level of sub-contractor and local partner.* *The beneficiaries will be given the opportunity to communicate their grievances in the quarterly meetings to their council members to bring up in the project council meetings. They can also raise emergencies through WhatsApp messages and through letters to the council members or the local partner. The chain of escalation ensures that the matter can be escalated from the village level to the local partner in case the issue isn't resolved at the lower level.* *In addition, if the grievance happens between the participants and the sub-contractors/ the local partner, the affected parties can go to the local office of a village officer, who will serve as independent external third party to resolve the grievance.*	3	2	

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.	*There will not be any economic activity displacement under the project, because:* 1. *The land plot selected for agroforestry was kept fallow and no economic activity was taken then earlier.* 2. *The agroforestry model has timber trees in the boundary and fruit trees in the blocks at 5X6 spacing. The fruit trees planted are of hybrid variety and have short canopy. This allows farmers to take intercrops across 2-4 seasons depending upon the water availability.* *Farmers taking intercrops:*  *Height of 5-year-old mango tree:*	1	2	2

					
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 activities will not adversely impact the biodiversity in the project area. As such the plantation of trees in the project area will enhance the green cover and help improving local avian and insect wildlife.*	3	3	4.67
	Describe whether the species to be planted under this project could become invasive or result in competition with or damage to native species.	*The tree species being planted (mango, litchi, guava, teak, gamhar, etc.) are locally available and native species are selected through interactions with the local stakeholders and decided on by the farmers based on their interest and economic benefit. Also, geographical conditions like soil organic moisture, and availability of water post-monsoon season were also considered. The project ensures no invasive species are planted under the project activity. The selection of non-invasive species has been done earlier by the*	1	4	

		government nurseries prior to the start of the Acorn project period..			
	Describe whether the project intervention could lead to habitat degradation, fragmentation or loss, such as through land conversion and preparation.	*The project intervention will not lead to any habitat degradation or reduction in genetic diversity as the project is being done on fallow land on which nothing was growing. The planting of trees in the project area will help in interconnectivity of ecosystems and enable greater genetic diversity. No conversion of the land is being done as part of the project activity and the preparation of land only involves digging pits for the plantation of the saplings that too is done by hand or by using non-mechanical tools.*	1	1	
Soil disturbance / erosion	Describe whether project activities could result in significant soil disturbance. Consider improper or excessive land use, tree planting, tillage practices, application of synthetic fertilizers.	*The land disturbance is less than 10% of the total project area and only involves pit digging for the saplings to be planted. No tillage is done for this purpose. The farmers are given organic fertilizers and are given training on their usage by the Baghwani Sakhis.*	3	3	9
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.	*Water scarcity is a risk in some of the project areas exacerbated by increased temperature and shifting rainfall patterns. However, this will not impact the project participants as they are chosen based on the availability of water sources (wells, pumps, etc.) thus ensuring survivability of the trees during such conditions. Also, the agroforestry model recommends developing a water harvesting structure in the plot itself to fulfill the irrigation water requirement need for few additional months post monsoon season. The water is used for the maintenance of the trees that do not*	4	3	12

		require a lot of water unlike paddy cultivation thus ensuring there is no excessive consumption of water. *For the farmers that are interested in joining the Acorn project but do not yet have irrigation in place, Intellecap will help to match them with the state government scheme to get irrigation structures to withdraw water from the nearby sources. Those farmers will need to contribute to labor work of digging the wells but no extra costs will be requested.* *For the new farmers, Jharkhand government have launched scheme to construct 100,000 wells. Intellecap and its sub-contractor team support the government to plan this scheme in line with the existing agroforestry scheme. That is to say, farmers who are interested in the Acorn project but do not have access to irrigation yet, are encouraged to avail themselves of the many schemes targeted towards getting irrigation sources and will then be enrolled into the Acorn project.* https://theprint.in/india/jharkhand-cabinet-nod-to-proposal-for-1-lakh-wells-ews-reservation-in-jobs/1446941/			
Sustainable use of natural resources	Describe whether the project could lead to the unsustainable use or overexploitation of natural resources.	*The project involves planting trees and their maintenance and as such doesn't involve any activities that could lead to an overexploitation of natural resources. For the nearby forest that has a potential logging risk due to fuelwood need, the local forest officers will monitor this and report to the community and Intellecap if illegal logging activity is identified.*	3	3	9

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.	*Yes, the project at the conceptual or design stage included all the potential stakeholders including Indigenous tribal communities, smallholder farmers women, disabled, youths etc. and consulted on the project design and agroforestry model.* *According to the last population census in India from 2011, the population of the tribal community in the state of Jharkhand was 8.6 million constituting 26.2% of the total population of the state. The tribal community members were part of the meetings and discussions with stakeholders at the inception of the project and were equal participants. The outcome of the discussions was that the farmers from tribal community were eager to participate in the project and understood the importance of the program.*	3	3	7.5
	Describe whether the project could displace or negatively affect Indigenous Peoples with claims to land or territory within the project region. Consider project expansion.	*The project activities are done on the land owned by the farmers and make no claim on the land, or the trees planted by indigenous communities. Besides, the indigenous communities hold the same legal titling as non-indigenous participants.* *The percentage of participants that belong to the tribal communities are around 25 to 30% and they are widely included in the project design.* *The selection criteria of farmers were land availability, proper ownership document and willingness to participate in undertaking agroforestry. Hence, there was no distinction made on the basis of tribal or non-tribal and whoever*	2	3	

		classifies the above conditions were and are considered for this project.			
Cultural heritage (IFC #8)					
	Describe whether the project area is officially designated or proposed as a cultural site, including international and national designations.	*The project area isn't officially designated as a site with cultural, archaeological, historical, religious, or artistic significance.*	1	1	1
Cultural heritage	Describe whether the project site could potentially include important physical cultural resources, including burial sites and monuments, or natural features or resources of cultural significance (e.g. sacred sites and species, ceremonial areas) and whether the project could negatively impact this cultural heritage.	*The project site is fallow lands owned by the farmer on which there was no cultivation. As such there are no important physical cultural resources, including archaeological sites, religious sites, burial sites and monuments, or natural features or resources of cultural significance*	1	1	
	Describe whether the project could negatively impact intangible cultural heritage. Consider for example cultural practices, social and cultural norms in relation to land and natural resources.	*The project activities do not impact the intangible cultural heritage of the community in the area. The farmers are encouraged to maintain the trees planted and are given training in the best maintenance practices. However, the farmers are free to use their cultural knowledge and practices in the maintenance of the trees.*	1	1	
Other social and environmental risks					

Other social risks	Describe any other (existing) social/livelihood risks or impacts that the project will (cumulatively) contribute to.	*N/A*	0	0	0
Other environmental risks	Describe any other (existing) environmental risks or impacts that the project will (cumulatively) contribute to.	*N/A*	0	0	0
Overall E&S risk score: Low (110.5)					
Carbon reversal risks					
Understanding of the agroforestry project and agroforestry designs	Describe whether information on the agroforestry project been provided to all participants in a culturally appropriate and easy to understand manner, and whether all participants have signed/will sign a participant agreement before CRU generation?	*Yes, the information has been provided to all farmers on the agroforestry project through various infographics available in the local language by our community engagement agents prior to the data collection. The participant agreement is also explained to the participant, and all are signed and uploaded to the DCT app.*	3	1	2.33
	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.	*Yes, the agroforestry design was prepared by the sub-contractors' agronomists for the government scheme (BHGY), considering the local culture, traditions, species diversity and environmental and climatic conditions. The farmers choose the species they want to plant based on the perceived market value from the list of species available as part of the agroforestry design.*	1	3	

	Describe the availability and accessibility of agroforestry training by participants and describe whether the training is based on the practices promoted under the project's agroforestry design(s).	*Yes, the project has a proper training schedule for continuous training of the project participants. These training sessions will be based on the practices promoted under the agroforestry design.* *Multiple master trainers/ subject matter expert will deliver training at the block level to around 25-30 lead farmers, who further provide training to another 30-35 farmers each at the village level. The project might conduct 2 training sessions per year at the block level. The key aspects of the training include:* *a. Knowledge on undertaking intercrops* *b. Maintenance of the plantations* *c. Managing weeds, insects and pests in fruit trees* *Adequate irrigation schedule and others*	1	1	
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.	*Yes, the Local partner (Intellecap) and the Subcontractor (TRI) have significant experience working with farmers and communities in the state of Jharkhand in various districts and blocks for the last 15+ years. They are involved in the implementation of various government and corporate projects in the project region that involve the implementation of agroforestry and other nature-based projects and are aware of the social and cultural situation on the ground.*	1	1	1
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	*Intellecap is currently working with around 500 governmental nurseries to make sure there will always be sufficient and high-quality seedlings.*	3	4	12

	resources by creating/partner with nurseries.				
Project cash flow	Describe whether the project is able or not to access financing in the years before CRUs are generated or during unforeseen event, and whether this could result in a halt project activities or termination of the project.	*Intellecap is constantly seeking donor money and/or grants. The major cost for Intellecap in the Acorn project is the money regarding onboarding the farmers. As a result, Intellecap is also seeking funding from Acorn to support the data collection cost. Intellecap will also discuss and share the revenue and cost between the sub-contractor TRI, based on the shared roles and responsibilities in the Acorn project. However, the trees mortality rate on some plots are higher than expected due to insufficient irrigation.*	2	4	8
Logging risk	Describe whether participants or non-participants could cut down trees present in the project area. Consider the demand for wood for fuel, (temporary) reductions in productivity, and financial hardship in the project area.	*The participants are unlikely to cut down the trees as they have chosen the trees for the benefits that they provide them in the long run, especially through the availability of fruits. Due to the availability of income in the form of fruits from the trees (primary income) the Carbon income is secondary. Through regular farmer meetings and training, we encourage farmers to maintain trees in a healthy condition thus avoiding any productivity loss.*	3	3	9
Overall carbon reversal risk score: Low (32.3)					

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 19. Indicator monitoring plan.

Livelihood / environmental indicator	Impact description	Mitigation action (if negative impact expected)	Monitoring frequency and method	Responsible party
Household Nutrition	*The agroforestry design consists of fruit trees, which promotes two main benefits: i) inclusion of fruits in a current carbohydrate-based diet, and ii) the income derived from the sale of carbon credits and the fruits produced also help farmers to include more protein in their diets, therefore resulting in an overall improvement of the household nutrition. This also results in a more sustainable and resilient food system, providing households with a wider variety of nutritious foods, potentially reducing reliance on market foods and enhancing food security.*	*Not applicable as a positive impact is expected.*	*Details about the inclusion of fruit, milk, and protein in the farmer's household diets will be discussed during the project council meetings and a record of this will be kept reflecting the improvement in the diet. In addition, the farmer survey carried out every three years will also monitor this indicator.*	*Local Partner, subcontractor, and Acorn*
Agricultural biodiversity	*By integrating trees in fallow lands, agroforestry creates diverse habitats that support a wide range of plant and animal species. The presence of trees in agroforestry systems offers shelter, food sources, and nesting sites for various wildlife, including birds,*	*Not applicable as a positive impact is expected.*	*The increase in tree and vegetation diversity, fauna population will be recorded in discussion with the beneficiaries in the project council meetings to be done twice during the year.*	*Local Partner and Acorn*

	small mammals, insects, and reptiles. Additionally, agroforestry helps in reducing biodiversity loss by offering a protective tree cover along agricultural fields, creating secondary habitats for species, and preventing the conversion of natural habitats into agricultural land.		*In addition, the farmer survey carried out every three years will also monitor this indicator.*	
Farmer income	*The farmer income will be enhanced from the sale of fruits in local markets and also through the additional income from the sale of carbon credits generated from their plots which was previously fallow and not used for cultivation.*	*Not applicable as a positive impact is expected.*	*Monitoring and recording the increase in farmer income at the project council meetings. In addition, the farmer survey carried out every three years will also monitor this indicator.*	*Local Partner and Acorn*
Agricultural productivity	*By integrating trees into agricultural landscapes, agroforestry systems can improve soil health, increase water retention, and promote soil microorganisms which can lead to enhanced crop productivity. Enhancing farmers' knowledge and skills in agroforestry practices, such as the selection and management of multipurpose trees and shrubs, the integration of trees with crops and the use of agroforestry to improve soil fertility and reduce erosion. The trainings address challenges faced by*	*Not applicable as a positive impact is expected.*	*The evidence of increase in the productivity will be recorded in the farmer council meetings. Also, farmers will be encouraged to undertake soil test to validate the increase in soil health which further reflects the increased productivity (subsidised under various governmental schemes. The project will facilitate in the convergence of these). In addition, the*	*Local Partner and Acorn*

	farmers in adopting new technologies, such as lack of knowledge and limited access to information.		*farmer survey carried out every three years will also monitor this indicator.*	
Women's empowerment	*The women involved in the project are going to be part of the project in various capacities. They are involved in the data collection process as data collectors. They are also engaged in the project as trainers and community engagement agents. The women will also be part of the project council and will be involved in the meetings in a decision-making capacity and will represent members of their community. These roles will enable the women in the project area to be more participative in the betterment of the community and have a greater voice in the decision-making processes.*	*Not applicable as a positive impact is expected.*	*The engagement of the women in the data collection is weekly monitored through the Acorn DCT portal to identify best performers and those data collectors who are facing issues in data collection to help them overcome it. Community engagement is also monitored, by the district coordinators through regular meetings with the Baghwani Sakhis. The project council has 60% women members, and this will be monitored in every project council through an attendance list. In addition, the farmer survey carried out every three years will also monitor this indicator.*	*Local Partner and Acorn*

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 20. Leakage monitoring plan.

Source of leakage	Mitigation action	Monitoring (frequency and method)	Responsible party
Assumed to be zero sources of leakage, as explained in Part O: 2. Adjustment Factors	*NA*	*NA*	*NA*

3. Risk

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

Table 21. 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	*Increasing instability of temperature and rainfall influence crop productivity, leading to more pests, diseases, and droughts.*	1. *Training on water harvesting* 2. *Farmers onboarded all have access to irrigation* 3. *Species selection and spacing in AF design* 4. *Training on pest management*	*The training is provided before every project council, and the frequency is twice per year*	*Intellecap and sub-contractor TRI*
Labour and working conditions	*Intellecap has a Group Code of Conduct in place, yet there is no monitoring plan to check this topic.*	*The subtractor has a template in place to check the qualification of the hired labor when they hire data collectors and report the hired data back to Intellecap.*	*Hiring report at a frequency of approximately twice per month, when the sub-contractor moves to a new region to hire new staff to collect data*	*Intellecap and sub-contractor TRI*
Indigenous people	*No guaranteed seats for tribe members in the project council as the tribal communities consist of a major (~25-30%) portion of*	*The tribal community in the project area live mixed together with the other communities in the project area. There is no such distinction itself. Their representation is*	*The training is provided before every project council, and the frequency is twice per year*	*Intellecap and sub-contractor TRI*

	the population in the project area.	*around 25-30% (may vary among blocks). The project will promote member from tribal community to stand for lead farmer election from their blocks.* *The project will assure that members of tribal community will be included in the training programs and provide their substantial inputs in designing training programs.*		
Soil disturbance	*Approximately 10% of the project area is prone to soil disturbance.*	1. *Organic fertilizers are given to the farmers* 2. *Training on using organic fertilizer over synthetic fertilizer*	*The training is provided before every project council, and the frequency is twice per year*	*Intellecap and sub-contractor TRI*
Water use and conservation	*Water scarcity is a risk in some of the project areas exacerbated by increased temperature and shifting rainfall patterns.*	*1. Training on water harvesting* *2. Farmers onboarded all have access to irrigation* *3. Farmers without irrigation will be referred by Intellecap to the government irrigation scheme*	*The training is provided before every project council, and the frequency is twice per year*	*Intellecap, sub-contractor TRI, government irrigation scheme*
Sustainable use of natural resources	*The need for fuelwood and not being able to cut down the trees in the project area could lead to residents chopping down the woods illegally in the nearby forest instead.*	*Illegal logging activities will be identified by the local forest officers and reported to the community and Intellecap*	*Every month*	*Forest officers*

Project cashflow	*The trees mortality rate on some plots are higher than expected due to insufficient irrigation.*	*1. Seek funding support from Acorn to cover data collection cost* *2. Discuss with sub-contractor TRI in terms of the distribution between revenue and expenses based on the relative roles and responsibilities*	*Ad hoc, when necessary*	*Intellecap, sub-contractor TRI, Acorn*
Logging risk	*The need for fuelwood for daily use poses a threat to logging in the project area.*	1. *Regular farmer meeting* 2. *Training about not to cut down the trees in the project area*	1. *Twice per quarter for female members regular meeting* 2. *The training is provided before every project council, and the frequency is twice per year*	1. *Female members from the project council* 2. *Intellecap and sub-contractor TRI*

Part O: Technical Specifications

1. Applicability Conditions

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

Table 22. Applicability conditions.

	Applicability Condition	Met	Reasoning
A	The Project Interventions meet the Agroforestry definition (see Section 3 of Acorn methodology v1.0) and any trees planted are Native or Naturalized species.	Yes	Input and evidence provided by agroforestry design of an agronomist/expert
B	The Project Area must not have been cleared of native vegetation within 5 years of the start of the Project Intervention.	Yes	Initially verbal check by Local Partner with eligibility checklist and carbon baseline. After receiving polygon information T-5 check is further confirmed by Remote Sensing measurements
C	Individual plots within the Project Area are between 0.1 and 10 ha and are not on wetlands.	Yes	Initial verbal commitment by Local Partner with eligibility checklist. Followed and confirmed by polygon and land cover check performed by remote sensing measurements.
D	All land within the Project Area is either cropland or degraded land under the Baseline Scenario	Yes	Initial verbal explanation in carbon baseline and was further supported and confirmed by the land cover check performed by remote sensing measurements.
E	The project interventions must not include activities that increase the total number, weight or number of grazing days for any livestock type, relative to the baseline scenario.	Yes	Explained to participants and confirmed via project baseline agricultural biodiversity survey. To be reconfirmed in the new round of farmer surveys in the coming years.
F	The project intervention must not include the planned harvesting of planted trees during or after the crediting period.	Yes	Covered in Local Partner contract and included in agroforestry design
G	Heavy machinery must not be used for site preparation or management.	Yes	Covered in Local Partner contract and included in agroforestry design
H	The project intervention must not increase the use of synthetic (nitrogen-containing) fertilizers relative to the baseline scenario.	Yes	Covered in Local Partner contract and included in agroforestry design
I	Soil disturbance attributable to the project intervention must not occur on more than 10% of a plot that is under any of the following types of land: - Land containing organic soils;	Yes	Initial Organic soil check via SoilGrid and included in agroforestry design

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

2. Adjustment Factors

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

Table 23. Adjustment factors.

AdjF	Factor (%)	Reasoning
Leakage	*0%*	*This project is new agroforestry and therefore no displacement of activities is expected.*
Uncertainty	To be provided	Adjustment factors are not yet available as of the documentation submission date. To be provided.
Pre-project	To be provided	Adjustment factors are not yet available as of the documentation submission date. To be provided.
Harvesting		

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.);

As the project involves plantation of horticulture and timber trees on smallholder lands that were previously unused or used only for marginal cultivation, there is no loss of productivity for the farmer, losses in any form or any change in the crops.

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

The farmers choose an area of land (on average 0.3 ha) to do the plantation of the fruit bearing trees, thus approximately 80-90% of the total land available to the farmer. They plant the timber species on the boundaries of the field. Apart from this the farmers also undertake intercropping and plant seasonal vegetables on the main plot between the fruit trees.

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

Table 24. 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

Not applicable as this project entails new agroforestry.	Seasonal vegetables, such as rice, millets, and pulses.	Between 10-20% is used to grow the season vegetables. Farmers are intercropping the vegetables with fruit bearing trees and planting timber on the border of their plots.	Agroforestry

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

Table 25. Land cover assessment.

Shrub land	Grass land	Crop land	Built-up	Bare/Sparse vegetation	Herbaceous wetland	Tree cover <60%	Tree cover >60%
1.56209	14.41719	32.821	0.43306	0.09668	0	0.05761	0

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 26. Displaced farmer activities.

Description of the displaced farmer activity	Replaced or moved?	If moved, where will the displaced activity take place.
No activities are displaced by the project as the land was fallow at the start of the project.	There is no replacement of any activity.	Not applicable

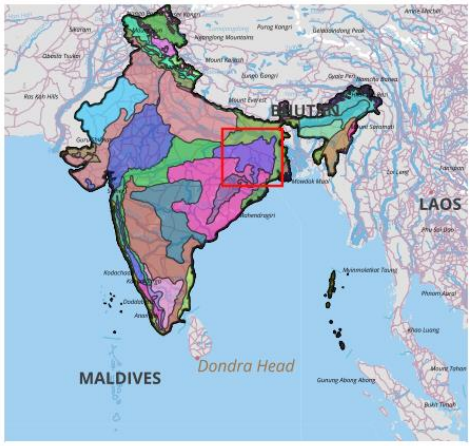
4. Root-Shoot

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

Table 27. Root-shoot ratio.

Ratio	Reasoning
0.32	Default value (Kim, Kirschbaum & Beedy, 2016)

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

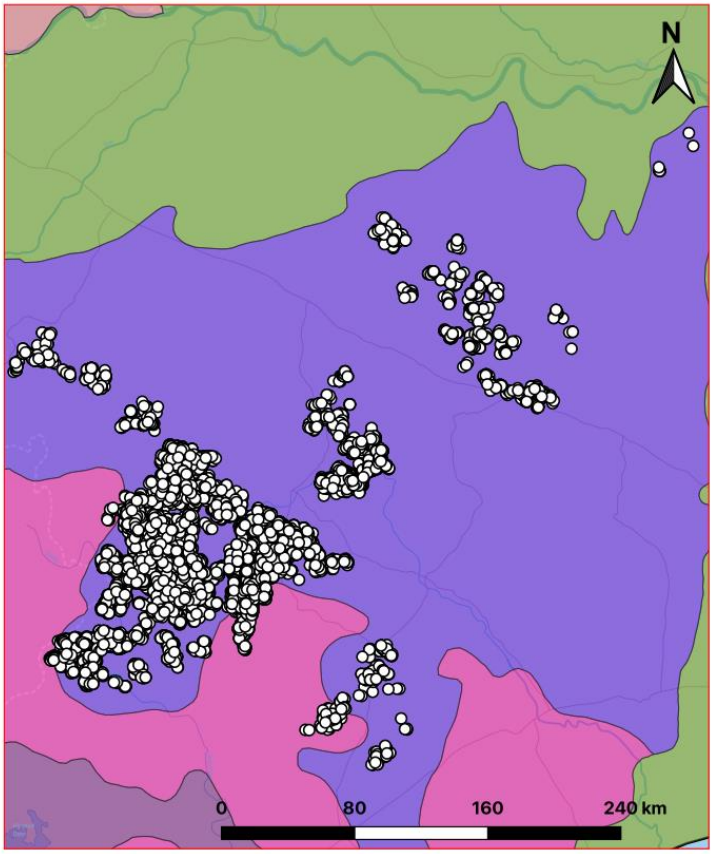


Legend

Farm plots [14388]

Ecoregion

- Chhota-Nagpur dry deciduous forests ✓
- Eastern highlands moist deciduous forests ✓
- Lower Gangetic Plains moist deciduous forests
- Northern dry deciduous forests



Annex 2: Sub-contractor assessment

Activity	Local Partner	Sub-contractor 1- TRIF	Sub-contractor 2 [insert name]	Sub-contractor 3 [insert name]	If activity is shared by 2 or more partners (including the local partner), please describe how (i.e. who does what, location, farmer group)
Active engagement with farmers (i.e. meetings and workshops)	*Yes*	*Yes*			Intellecap is responsible for supporting the planning/implementation of this, while TRIF are the ones running the engagement events.
Community/stakeholder engagement (i.e. raising awareness of project and government approval)	*Yes*	*Yes*			Intellecap is responsible for supporting the planning/implementation of local stakeholder engagement, while TRIF are the ones running the community engagement events. Intellecap are responsible for communication with secondary stakeholders.
Grievance mechanism establishment and reporting of grievances	*Yes*	*Yes*			Created by both Intellecap and TRIF and communicated to participants by TRIF.
Establishing the project council and organising the meetings (i.e. location, members, and time)		*Yes*			
Facilitating project council meetings and reporting the minutes to Acorn		*Yes*			
Appointing lead farmers		*Yes*			
Completing project documentation (i.e. eligibility and certification assessments)	*Yes*				
Assessing and reporting on project risks (i.e. risk reversal assessment)					

Farmer data collection for onboarding (i.e. farmer ID, polygons, land tenure and consent forms)		*Yes*			
Monitoring and reporting (i.e. field visits, farmer surveys, land ownership, progress reports)	*Yes*	*Yes*			Intellecap is responsible for overall lead of surveys such as giving direction to TRIF in overall planning & implementation of monitoring activities. Intellecap is responsible for reporting to Acorn.
Conducting ground truthing data collection		*Yes*			
Financial management (i.e. creating the business case)	*Yes*				
Field visits to determine suitability of land for trees		*Yes*			
Creating the agroforestry design (i.e. tree species selection and land type assessment)	*Yes*	*Yes*			The AF design is created by Intellecap together with TRIF (as TRIF are directly engaging with the farmers to seek their feedback and undertaking land type assessment).
Providing training (i.e. agroforestry and financial management)	*Yes*	*Yes*			Intellecap and TRIF will together create the training materials, while TRIF will be the ones conducting the training at village level.
Provision of agri inputs (i.e. seedlings and fertilisers, if applicable)		*Yes*			
Establishing/supportin g demo farms (if applicable)		*Yes*			
Establishing/supportin g nurseries (if applicable)		*Yes*			
Critical activities					
Paying the farmers their 80% of the CRUs	*Yes*	*Yes*			Intellecap will be supporting TRIF to pay the participants with planning and monitoring this, while TRIF are the

					ones transferring the funds.
Receives CRU sales from Rabobank into bank account and stores farmer payment separately/ear-marked	*Yes*	*Yes*			Although Intellecap will receive the payment from Rabobank, TRIF will be responsible for distributing this to participants and providing evidence of this and their accounting system.
Setting up loan/in-kind/payment administration					

Name of sub-contractor	Transform Rural India
Representative name and position:	Ashok Kumar, Director, Farm Prosperity
Contact details:	*Concealed for data protection purposes*
Website URL:	https://www.trif.in/
Description on organisation and their goal:	TRIF model of rural development attempts transformation through better rural livelihoods, rural education and rural healthcare, skilling and involving the community, the government and the marketplace. Our aim is to help communities tap into opportunities and acquire the means, skills and understanding that will transform their lives for the better from one generation to another. We want change that is self-driven, sustainable and impactful so we can help transform rural India.
Key role in the project:	Key role is the farmer mobilization, organizing data collection, trainings, assuring implementation of agroforestry model on ground and monitoring and verification of the activities undertaken by the farmers.
Number of years active in project area:	7 years+
Past experience working with farmers and in the project location (organising land tenure, implementing agroforestry, providing training etc.).	TRI is working with farmers with tree-based cropping systems including Agroforestry with fruit trees as main crops in the 4 states of India. The engagement involves mobilizing farmers to adopt agro-forestry model with intercrops as livelihood activity, dedicate land area under the agro-forestry model, connect with suppliers of high-quality planting materials and inputs, train the local resource persons to motivate farmers, and provide on-ground support during implementation and follow up. TRI is also engaged with the rural development department (RDD) to promote horticulture and agro forestry at large scale through the

	MGNREGA program. With the technical and strategic support provided by TRI supported MGNREGA Planning cell RDD has already implemented high density fruit plantation in about 30,000 hectares across Jharkhand State.
Contribution to the farmer/community livelihood and social/economic development of the participants and their communities:	TRIF is working to bring multi-dimensional change in around 2000 villages of 37 blocks in central and eastern India. The interventions are around economic development, access to public healthcare and nutrition and primary education. As of now TRIF is working with around 1,90,000 households with multi-thematic engagement.

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: 28 September 2023

Signature of sub-contractor representative:

Date: 23 September 2023

Signature of local partner representative:

Below is a set of minimum requirements that an outsourcing party needs to comply to in order 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	TRIF is registered as a Section 8 company (not for profit) at Delhi, India.
1.2 Does the organization have a formal structure of different governance levels (Executive Board, Executive Committee or Management) with delineated respective	The organization has a formal structure of different governance levels, and the respective roles and responsibilities are somewhat delineated	Y	TRIF has an advisory Board of 4 eminent people from social sector and 7 membered board of directors to look after the governance of Organization.

roles and responsibilities?			
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	TRIF has 206 full time professional team and around 80 specialists as consultants.
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 are outsourced)	Y	42 FTE in Jharkhand.
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	About 80% staff are local people from within the state and the thematic experience as well as experienced in working with community collectives, government systems and markets.
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 agoforestry expert or should have extensive agroforestry knowledge	Y	Yes we have people with Masters in Agriculture, INRM and have extensive experience of working on Agro Forestry models
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	Yes we have annual plans, with quarterly review and follow up system. At State level the data is collected with MIS and reviewed periodically. The team meetings happen every two months to monitor progress and make course correction if required.
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	We prepare Quarterly reports and submit them to relevant stakeholders. The indicators are decided based on project objectives in consultation with the stakeholders.
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	Y	Yes, third party evaluation done by agencies like Dalberg, Sambodhi and Deloitte.
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	Yes, we have online internal accounting system.
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	Yes, we have a system of internal and external audit system that happens twice a year. Deloitte is our external auditor.
6. Comparative advantage			
6.1 Is the organization recognized as credible by its stakeholders and partners? (attach evidence in comment field - ex. Emails, referrals, polls alternatively nominate references / contact points)	The organization is considered to be credible by most stakeholders, proven by a.o. positive project evaluation from key stakeholders	Y	TRIF is partnering with Government agencies like Ministry of Rural Development, Ministry of Home Affairs, Govt of India and have formal MOUs with state government of Jharkhand, MP, UP and Chhattisgarh. Largest philanthropic institutions like BMGF, IKEA Foundation, Axis Bank Foundation, Walmart Foundation, HDFC etc have shown confidence in us by supporting us and our work. *https://trif.in/TRI-Annual-Report-2023/#p=77* *https://trif.in/TRI-Annual-Report-2023/#p=78* *https://www.trif.in/media-mentions/*
6.2What 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	Y	TRIF is already implementing a pilot project on Agro-Forestry for VCM in collaboration with Intellecap. *https://www.intellecap.com/in_the_media/trif-and-intellecap-launch-climate-action-platform-with-jharkhand-state-govt-extensive-regional-media-coverage/* *https://www.villagesquare.in/new-platform-helps-farmers-in-jharkhand-earn-money-from-carbon-projects/*
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	Presently TRIF have around 206 fulltime staff, and more than half of them are working with TRIF for long term. *https://www.trif.in/our-team/*
6.4 Does the organization have adequate physical infrastructure: building, office space, and furniture?	Organization has basic office infrastructure in place	Y	TRIF has national office at Delhi, State offices at Ranchi, Lucknow, Raipur, and Bhopal the state capitals of Jharkhand, UP, Chhattisgarh and MP respectively. We have block offices in the 37 Blocks from where the field team operates. *https://www.trif.in/about-us/#footprint* *https://www.trif.in/contact-us/*
6.5 To what extent is the organization connected to grassroot	The organization has strong connections with local community	Y	TRIF is working to develop thriving locality compacts of Community institutions, panchayat systems and local administrations. TRIF works

& local community networks and does it cover both urban and rural areas? (attach proof in comments field)	& grass root networks in relevant field (sustainability & development) and covers urban and rural areas. Please provide information on engagement with network and community.		directly with the community collectives like women SHGs, Village Organizations and Cluster level federations (CLF) to be at the helm of decision making and support implementation. *https://www.trif.in/about-us/#*
7. Knowledge management			
7.1 Does the organization have systems and tools to systematically collect, analyze, and use programme monitoring data?	Some systems and tools exist and are frequently populated with data	Y	Yes, TRIF has MIS and data collection system to review the progress against the plans. The data and information collected are used in the regular team meetings & Review meetings to track progress and support each other.
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	TRIF is working with leading philanthropies like BMGF, Azim Premji Foundation, TATA Capital CSR, IKEA Foundation, World Resource Institute (WRI). *https://www.trif.in/who-supports-us/*

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	
Jharkhand has higher rural poverty rate amongst other Indian states; it is ranked 3rd lowest in the monthly income per capita, the 7th highest in the number of people living below poverty line (BPL), and the 3rd highest in the rate of BPL, in the country. *According to the National Sample Survey Office of India (National Sample Survey Organisation (NSSO), 55th round), Jharkhand is one of the most food insecure and malnourished state in the country. More than 10% of the households face seasonal food insecurity. The productivity of the land is a major cause of this issue as rice is frequently cultivated in the low land area and the uplands are kept fallow due to lack of resources, inputs, technical knowhow and financial means. The Acorn project aims to address problems faced by smallholder farmers in Jharkhand, including poverty, lack of sustainable livelihoods, deforestation and biodiversity loss that is becoming an increasingly serious issue due to the impact of climate change.*	
Intended Outcomes	**Description**
Livelihood Benefit	*Increasing farmer income from the produce (fruits) derived out of the trees and through carbon finance from the sale of carbon credits generated.*
Ecosystem Benefit	*Improving project area microclimate which is getting warmer due to climate change causing adverse impacts on the biodiversity in the project area.*
Women Empowerment	*Improve socio-economic conditions of the women by acknowledging the work that they do on the fields and the responsibilities they take in the absence of the men in the village. The majority of these areas witness migration of men of the household for jobs in urban areas, women and elderly population are in villages to look after the farms.*
Improving land productivity	*Improving the existing land productivity which is low as most of the land is left fallow due to lack of availability of resources and adverse climatic conditions.*
Overcome malnourishment	*Overcoming malnourishment of the rural population involved in agriculture mainly caused by lack of finances resulting in non-diversified and mostly carbohydrate-based diet.*
Output 1	*Realization of additional income*
Activity 1.1	*Supporting farmers by promoting horticulture and persuading them to practice intercropping both vegetables and fruit trees (mango) on mostly fallow land*
Activity 1.2	*Provision of supplementary income from Acorn resulting from the sale of carbon credits generated by tree growth and through the promotion of horticulture in the plantation area.*
Output 2	*Improvement in Soil conditions such as SOC, water table and reduction in soil erosion.*
Activity 2.1	*Promoting tree and intercrop cultivation in small fallow land plots of individual farmers, prevents soil erosion and enhances water table. The project equips participating smallholders with the skills to*

	transform fallow land into agroforestry, thus enhancing local watersheds, biodiversity, and reducing erosion risks.
Output 3	*Improvement of biodiversity in the project area*
Activity 3.1	*The planting of trees through this project significantly increases green cover in a landscape that serves as a crucial habitat for various species. This growth of tree areas enables a better habitat for local flora and fauna, promoting biodiversity conservation. The project helps reduce the strain on natural habitats and mitigates the risk of deforestation in vulnerable forest patches.*
Output 4	*Improvement in Socio-economic conditions of women*
Activity 4.1	*The project design is women focused with many of the farmer beneficiaries being women. The women are also engaged in the data collection and community engagement wherein they inform the beneficiaries about the project and encourage them to join the program.*
Activity 4.2	*The women involved in the project are also Baghwani Sakhis who are involved in the project to provide training to the farmers and to assuage any issues that they might have in terms of managing their fields.*
Activity 4.3	*The project involves women in decision making, tree species selection and in finalizing the package of practices to be undertaken as they are key members of the project councils*
Outcome 5	*Improved health and quality of life*
Activity 5.1	*Through the trees planted the farmers have access to fruits from the trees over the course of the project and the intercropping being practiced gives them access to diverse sources of nutrition in the form of fruits and vegetables.*
Activity 5.2	*The additional income from the sale of carbon credits generated and the sale of produce enables the farmers to use the income from sale to buy diverse nutritious food for consumption.*

Assumptions

Assumption 1: Tree Growth rates- The project assumes certain growth rates for the selected tree species based on historical data, growth models, or empirical observations. These growth rates may vary depending on factors such as age, genetics, site conditions, and management practices.

Assumption 2: Soil Carbon Dynamics: The project assumes that trees contribute to soil organic carbon accumulation through litterfall, root turnover, and other processes. This assumption considers factors such as decomposition rates, soil type, microbial activity, and land management practices.

Assumption 3: Silvicultural Practices: The project assumes the implementation of appropriate silvicultural practices to optimize tree growth, canopy development, and carbon sequestration efficiency.

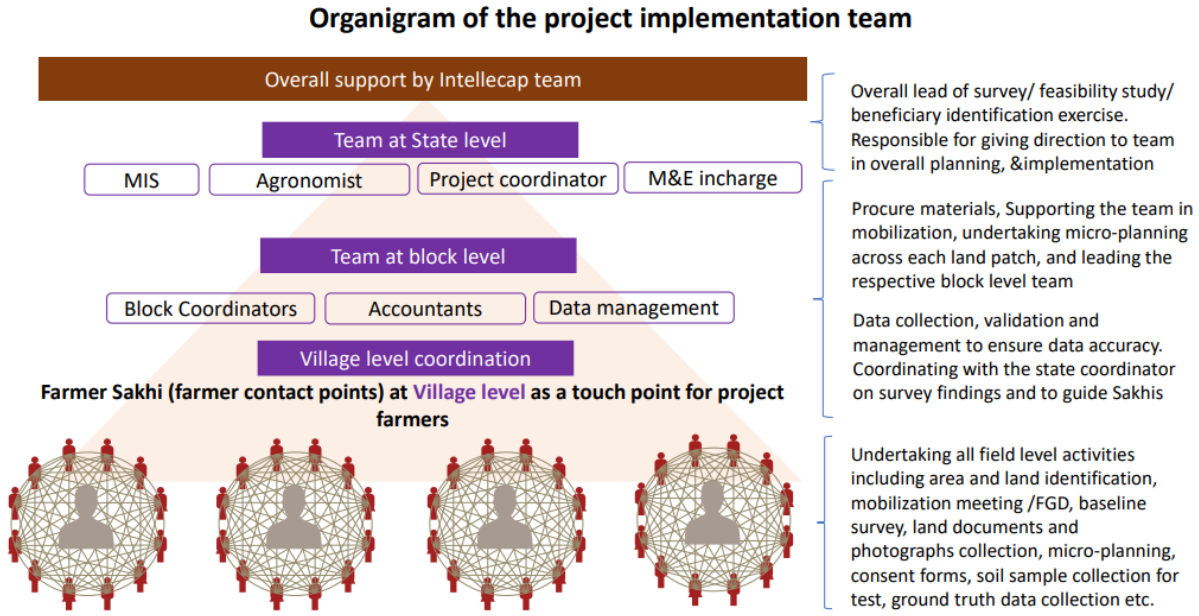
Assumption 4: Carbon Removal unit Prices: Sustained demand of nature-based carbon credits in the national and international markets. Minimum price of carbon credits is more than EUR 20

Assumption 5: Maintenance of the trees by the farmers: Project farmers manage the tree planted for longer time period (at least 20 years)

Annex 7: Local partner and farmer business case

Provided. Concealed for data protection purposes.

Annex 8: Organisation structure



Annex 9: Exclusion List

For each row of prohibited activities, please answer "yes" if the activity is/will be excluded from the project intervention, and "no" if the activity is/will be part of the project. For the latter, please provide a justification for why it is part of the project, and a mitigation action to remove the prohibited activity from the project.

Excluded Activity (prohibited activity)	**Answer - Description**
Any project activities leading to or requiring the destruction of critical habitat, or any forestry project which does not implement a plan for improvement and/or sustainable management.	Yes
Any activity which could be associated with the significant impairment of areas particularly worthy of protection of cultural heritage (without adequate compensation in accordance with international standards).	Yes
Trade in animals, plants or any natural products not complying with the provisions of the CITES/Washington convention.	Yes
Large-scale commercial logging operations for use in primary tropical moist forest.	Yes
Production or trade in wood or other forestry products other than from sustainably managed forests.	Yes
Exploitation of diamond mines and marketing of diamonds where the host country has not adhered to the Kimberley Process.	Yes
Activities involving harmful or exploitative forms of forced labour or harmful child labour.	Yes
Projects that include involuntary physical displacement and/or forced eviction.	Yes

Production or activities that encroach on lands owned, or claimed or occupied by Indigenous Peoples, without full documented consent of such peoples.	Yes
Production, use, sale or trade of toxic or dangerous materials, wildlife or products regulated under CITES, including all products that are banned or are being progressively phased out internationally	Yes
Production or trade of arms, ammunition, weaponry, controversial weapons, or components thereof (e.g., nuclear weapons and radioactive ammunition, biological and chemical weapons of mass destruction, cluster bombs, anti -personnel mines, enriched uranium).	Yes
Procurement and use of firearms.	Yes
Provision of finances to military institutions involved in conservation or security activities.	Yes
Production or trade of strong alcohol intended for human consumption or other alcoholic beverages (excluding beer and wine).	Yes
Production or trade of drugs.	Yes
Gambling, gaming establishments, casinos or any equivalent enterprises and undertaking.	Yes
Any trade related to pornography or prostitution.	Yes
Production or trade in radioactive material. This does not apply to the procurement of medical equipment, quality control equipment or other application for which the radioactive source is insignificant and/or adequately shielded.	Yes
Production or trade in unbound asbestos. This does not apply to the purchase or use of cement linings with bound asbestos and an asbestos content of less than 20%.	Yes
Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals. Hazardous chemicals include gasoline, kerosene, and other petroleum products.	Yes
Transboundary trade in wastes, except for those accepted by the Basel Convention and its underlying regulations.	Yes
Any activity leading to an irreversible modification or significant displacement of an element of culturally critical heritage.	Yes
Production and distribution, or investment in, media that are racist, antidemocratic or that advocate discrimination against a part of the population.	Yes
Projects involving the planting or introduction of species that are invasive in a certain ecosystem or geographical region.	Yes
Projects that increase the dependency of primary participants and other stakeholders on fossil fuels.	Yes

Annex 10: Agroforestry system design

Provided. *Concealed for data protection purposes*.

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 14: (Local) Partnership agreement

Provided. *Concealed for data protection purposes*.