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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.

Table of Contents

AF Ecology Centre Acorn Design Document

India | Andhra Pradesh

Date of Submission: September 2023

Part A: Project Summary

Question	General Information	Answer
1	**Project title**	Enhancing livelihoods of smallholders and mitigating climate change through agroforestry.
2	**Project location - country, region & district**	Anantapur and Sri Satya Sai districts in the state of Andhra Pradesh, south-eastern India. See Annex 1 for the map of the project location.
3	**Ecoregion(s)**	Deccan Thorn Scrub forests.
4	**Local partner representative**(name & position) **and contact details** (phone, email, & address)	Local Partner: *Accion Fraterna* – Ecology Centre (AFEC) • Website: www.af-ecologycentre.org Local Partner Representative: Dr Y. V. Malla Reddy, AFEC Director. *Details provided, but concealed for data protection purposes.*
5	**Local partner mission statement**	We are committed to promoting livelihood security, self-reliance and human dignity for poor farmers, working through their institutions, led by women and promoting drought-climate resilient agroecology, agri-processing and non-farm livelihoods.
6	**Partnering organizations**	None
7	**Main cash crop(s)**	Perennial crops: mango, tamarind, sapota, sweet lime, jamun, guava, and banana. Annual crops (3-4 months of the year): tomato, chilli, groundnut, chickpea, mung and cluster beans, castor oil plant, red and horse gram, ragi, onion, okra, malabari spinach, maize, fenugreek, cotton, and bitter melon.
8	**Project target group**	Smallholder farmers who lack the skills and knowledge necessary to maintain a sustainable and long-term agroforestry system.
9	**Number of existing participants**	8,530 smallholder farmers

10	**Number of potential additional participants**	An additional 3,000 smallholder farmers are expected to be onboarded in the coming years. AFEC first wants to focus on establishing and improving the project with their existing onboarded farmers before scaling further.
11	**Estimated total size of project area (ha)**	The onboarded smallholder farmers have, on average, approx. 1.21 ha, resulting in a total project area of 8,981.33 ha.
12	**Describe the project's aims and objectives** (e.g. the problems this project will address)	• Develop sustainable models under Acorn Framework to promote agroforestry and enable multiple co-benefits to smallholders. • To provide additional income through Carbon Removal Units (CRUs), thereby improving the livelihoods of small holder farmers.
13	**Describe how smallholder farmers/communities were involved during the design of the agroforestry project.** (Provide evidence of participation, e.g. workshops, meetings)	For this project, AF Ecology will operate in the Anantapur district, specifically in 15 mandals, where it has offices in various strategic locations to hold various project-related activities for the several mandals[1]. A first community meeting was held on the 17th of March, 2023, with the Kalyanadurgam mandal, at AFEC's office, where 22 farmers joined. During this meeting, the Acorn-AFEC infographic was used to explain Acorn, carbon credits and the onboarding process. In addition, the Local Partner dedicated part of the meeting to discussing agroforestry, the importance of species diversity and potential trees and annual crops to be planted. Participants had the opportunity to ask questions and share their thoughts on the project, which was overall positive, as they were not familiar with the concept of carbon sequestration and carbon markets. The organization conducted more community meetings, with the remaining mandals before the onboarding of any farmers, in addition to a small meeting with the to-be-onboarded farmers (about 15) to explain the project's concepts, agroforestry species proposed etc. Finally, during onboarding, farmers were asked about their preferences on agroforestry species through data collection. AFEC used this information to better organize the farmers who have agroforestry already planted and those that don't, to manage preferences. See Annex 7 for evidence of participation and for the report of the community meeting.

[1] Mandal is an administrative division of a district; a subdistrict; in other words, a set of various villages. The Anantapur district is composed of 63 mandals.

14	**Provide a general description of current socioeconomic conditions in the project area** (income, poverty level etc.)	Anantapur District is one of the most backward districts in India. It is essentially an arid, drought-prone and entirely agrarian economy. As agriculture is the primary source of income for local communities in the project area, the population faces particular vulnerability as production suffers from severe drought and soil erosion. In addition, there is a lack of irrigation facilities. About 90% of 27.5 lakh acres under cultivation are rainfed and chronically drought-prone. Consequently, food productivity is very low, thus decreasing their income and leading to poverty. Further, industrial development is just next to zero and no industrial employment opportunities. So, the rural livelihoods are grossly inadequate for the rural population, and the available livelihoods are also highly vulnerable. There is a trend that poor income levels and the absence of adequate employment opportunities require the man of the household to migrate to urban areas to earn money for the family. Poverty levels are high due to low incomes and unequal distribution of wealth, which further impacts education levels and gender roles.
15	**Describe how the agroforestry intervention proposed is expected to impact the following;**	a. Food security: Increased agricultural productivity will increase nutritional intake and food security. The presence of fruit-bearing trees provides an additional dietary food source that farmers consume or sell to acquire other food products. In addition, the presence of trees also protects the pest and disease-vulnerable annual crops, thus increasing their productivity. b. Farmer financial state: Improvement in economic status will occur through additional income from CRUs and marketable products from the trees and annual crops. In addition, farmers will experience a reduction in pest and disease prevention as trees will decrease the presence of such, therefore alleviating financial investment. c. Gender equality: Gender equality is expected to improve as this project will focus on women farmers to alleviate their status. In addition, AFEC's policy of gender inclusivity (see Annex 11) will give focus on this by giving preference to women farmers, women employees, women-led nurseries, women resource persons, and women-led farmers etc. AFEC is actively forming Women Self Help Groups (WSHGs) and

		Women Producer Organizations (WPOs) exclusively for women farmers to build their capacity, leading to empowerment and gender equality.
		d. Farmer access to resources: Accessibility to all the required resources, including training, awareness, and planting materials, will increase due to the 10% of the carbon revenue streams, allowing the Local Partner to provide these to the farmers.
		e. Biodiversity on farms: A significant increase in biodiversity is not expected, although a halt in biodiversity loss is expected. The trees may act as a barrier to prevent run-off during heavy rainfall and loss of top soil during heavy wind, thereby maintaining soil health and biodiversity.
16	**Describe any known local land degradation/deforestation processes or trends, and drives of these** (e.g. population increase, fire, conversion for agriculture)	Nearby forest to the project has historically been prone to fires, migration, and population increase. Forest fires are uncommon in plantations; they mainly occur in forests but can spread given the right conditions. Farmers mitigate the risk of fires by clearing dry leaves and drawing fire breaks in their plantations. Due to decreasing productivity of cash crops, such as the groundnut, the project area has been experiencing a demographic trend of farmers abandoning agriculture, thus leaving their lands (60%-70% of rain-fed agriculture).
17	**Describe whether there is a low, medium or high risk of deforestation in the region surrounding the project (not project area)**	There is a medium risk of deforestation in and outside the project area due to population pressure, lack of employment opportunities, natural calamities etc. Project intervention decreases this risk to low, mainly due to the incentive of maintaining the trees long-term, as a result from carbon finance and marketable products from trees.
18	**Please select the following type of land use that best describes the project area**	Existing agroforestry/fallow/tree and crop plantation
	Land Tenure	
19	**Estimated average plot size per farmer (ha)**	Estimated at 1.6 ha before farmer onboarding but measured on the Acorn platform after onboarding at 1.25 ha.

20	**How is land tenure organised among participants** (formal titling, informal titling or land mapping)	Formal titling through Pattadar Passbooks. See Annex 2 for an example of land tenure documentation.
	The Agroforestry System	
21	**Is this project new or existing agroforestry or a combination**	This project is a combination of existing agroforestry (about 70% of farmers have 1 tree species with 1-2 annual crops), and new agroforestry (about 30% of farmers have a monoculture of one tree species).
22	**Type of trees that have/will be planted under agroforestry scheme** (shade, fruit-bearing, medicinal)	Fruit-bearing trees have been planted in the project area from 2018-2021; these include: • Grafted Mango (higher yield than normal mango) • Sweet lime Together Mango and Sweet lime account for 90-95% of the species planted Below are some additional species that together consist of 5-10% of the species planted • Tamarind • Sapota • Jamun • Improved Guava (higher yield, more suitable to the project environment) • Custard Apple • Coconut • Ber Border trees will be planted to increase the biodiversity of the lands and contribute to a diversified income (all species have economic value), once the fruit trees overshade the annual crops; these include: • Teak • Mahogany • Red sandalwood • Soapnut • Sesbania • Neem/ Malabar vepa • Terminalia
23	**Describe how the agroforestry system is expected to impact the**	The existing agroforestry system promotes an increase in biodiversity, as fruit-bearing trees and annual crops attract pollinators, and shade offered by the trees

	land (e.g. more shade, less pests, less inputs – fertilisers, presence of pollinators)	provides refuge from the harsh climate. In addition, the presence of trees allows for the reduction of pests and diseases and, consequently, the removal of costs for this prevention - farmers invest between 20%-25% of the total crop revenue. Therefore, the promoted climate-resistance trees will support the farmers in protecting their crops. After the fruit-trees have reached a sufficient height where crops are overshaded (approximately 3-5 years), border trees will be promoted, such as teak and neem. This will also provide additional benefits regarding water requirements, as these perennial trees won't need as much water input as annual crops after reaching a certain maturity/height (3-5 years).
24	**Is planned tree/wood harvesting (meaning the total loss of the tree) part of the agroforestry design for this project?**	Yes. Planned harvesting is part of this project for some of the border species that will be planted . The primary border trees that will be promoted under this agroforestry design have timber properties with the following harvesting periods: • Teak – 20-30 years • Mahogany – 20-30 years • Red sandalwood – 20-30 years • Melia Dubia/Malabar Vepa – 8 to 10 years (can be coppiced) • Terminalia – 20-30 years Some secondary border species that will be promoted have the following lifecycles. These trees will not be harvested as they have other properties and not timber value • Soapnut – 20 - 30 years • Sesbania – 20 - 30 years • Glyricidia – 20 – 30 years • Sekaaikai (Acacia concinna) – 20 – 30 years
	Project Additionality	
25	**In what year and season will/were the first trees planted?**	The first trees were planted in July- September (i.e. after the onset of the monsoon) in 2018.

26	**Was the project established with the intent of receiving carbon finance for trees planted?**	Yes, this project was established to benefit the project participants from carbon markets.
27	**Is this project mandatory under any national or local laws?** (List or attach relevant forestry regulations, national climate change commitments etc.)	This project is not mandatory under any law/regulation in India. Please refer to India's UNFCCC NDC (2016), The Forest Department of Andhra Pradesh, and India National Agroforestry Policy (2014).
28	**Is the project incorporated by any other accounting program (e.g. compliance, voluntary or national GHG program)? If yes, describe how project ensures no double counting will take place.**	No, this project is not incorporated by any other accounting program.
29	**Without the project's involvement, would farmers have the necessary resources, skills, knowledge, finances, or network to successfully transition to a long-lived agroforestry system?**	No. Agroforestry in this location cannot be transitioned into a long-lived system without the project's involvement. Farmers would almost always fail without an incentive to commit long-term and the proper knowledge to maintain such a system. The promise of additional revenue from CRUs makes agroforestry economically attractive to smallholders.
30	**What is the main driver encouraging farmers to transition to agroforestry?**	Additional income from CRUs and awareness of climate change are the main drivers encouraging farmers to transition to agroforestry.
31	**Was the promise of carbon credits the enabling factor for farmers to transition to agroforestry?**	Yes, the additional income from Carbon Removal Units (CRUs) enables farmers to transition to agroforestry.
32	**What are the biggest challenges faced by farmers** (climate change, volatility in commodity prices, low productivity, access to resources, financial security, crop damage from wildlife, human conflict etc.)	Low productivity of the crops, financial & technical barriers, and lack of access to various resources are the biggest challenges faced by farmers. In addition, climatic conditions bring about periodic droughts, intensifying the decrease in productivity, thus decreasing income and making farmers more vulnerable to poverty.

	High-over business case	
33	**If existing agroforestry, how has this project been funded to date?** (financed by the local partner, the farmers, grants/funding, or a combination)	This project has been self-financed by the farmers and supported by a combination of government and partnership with other agencies, which include: 1. The Department of Rural Development provides financial and planting materials to support the farmers in pitting, planting and water under its Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) for the first three years, an employment guarantee programme. 2. The NGO Rural Development Trust by providing planting materials and micro-irrigation systems for some farmers. 3. Paid by the farmers themselves. Some farmers may have had support from more than one source.
34	**Briefly describe the costs for the farmer in this project** (e.g. seedlings, fertilisers, labour)	The Local Partner will assume all the costs for this project to enable all farmers to participate, which will be financed by the 10% of CRU revenue and from a grant of 25,003 EUR from Rabobank.
35	**Briefly describe the costs for the local partner in this project** (e.g. seedlings, onboarding, data collection, training, farmer engagement, planting materials etc.)	Costs for the LP mainly exist of community mobilization, data collection and farmer onboarding activities. In addition, because distances in India are long, transportation costs are high (for any interaction with farmers). The costs are the following: Agroforestry design — 780000 INR/year Farmer engagement — 56.29 INR/farmer Farmer data collection — 0.01 INR/farmer Project Council — 26.22 INR/farmer Baseline surveys — 200.00 INR Annual reporting — 1600.00 INR Additional staff (field officers, technical staff) — 2,560,000 INR/year
36	**How will this project be financed and by whom during the design/implementation stage** (e.g. financed by the local partner, the farmers,	Many farmers have received their first seedlings under local government schemes (see Question 32). In addition, the project has received a 25,003 EUR grant from Acorn. The endeavour is to make it a self-financing project with the support of carbon finance.

	grants/funding, or a combination)	

Part B: Eligibility Checklists

Local partner eligibility checklist			
Topic	Sub-topic	Requested information	Result
	Organizational structure	Provide a description of your organizational structure and roles of each organization involved for the project (attach diagram/table in annex).	Accion Fraterna Ecology Centre (AFEC) was founded by Father Vincent Ferrer, the founder of Rural Development Trust (RDT), in 1982. Since then, AFEC has been working on environmental development and empowering rural communities in the drought-prone Anantapuram District. Since 2000, AFEC has been functioning autonomously under the leadership of Dr Y.V. Malla Reddy with a focus on environment development, promoting native agrobiodiversity, sustainable agriculture and drought mitigation. AFEC is well known in the development sector for its participatory approach, high-quality watershed development on a sizable scale, people-centric policy advocacy, and lobby work. AFEC is also famous for developing agro-ecology based drought mitigation technologies and diversified crop models for Rainfed Agriculture. Accion Fraterna Ecology Centre, under the leadership of Dr Y.V. Malla Reddy, has made an outstanding contribution to poverty alleviation, livelihood development, reviving rainfed agriculture, ecology restoration and bio-diversity conservation in Anantapur District. AFEC has been relentlessly striving to secure the livelihoods of the rural poor, especially women, through participatory watershed development, natural resources management, drought mitigation, sustainable agriculture and diversification of rural livelihoods. Accion Fraterna Ecology Centre (AFEC) is registered as Trust and run by a board of directors. The board of directors nominate a director to take care of day-to-day operations. The executive committee consists of different project coordinators

			who will support the director. AFEC works in 8 mandals in the Anantapur and Satya Sai districts in Andhra Pradesh. The mandal teams implement and monitor the project operations. Each mandal team is headed by a Mandal team leader, and he is supported by a team consisting of Agro ecology associates, Socio-technical officers (STO) and village karyakarthas. AF EC promoted about 900 SMGs (Sasya Mithra Groups) with 18000 households, each SMG having 15–20 woman members. These SMG conduct regular thrift and credit activities. These groups provide a platform for implementing projects. The village karyakartha monitors the SMG groups in a village. Apart from SMG groups, AFEC promoted 16 Farmer producers' organisations (FPO) in 8 mandals of 8000 shareholders. The FPO members are mainly from the SMG groups. Each FPO has a Chief executive officer (CEO) and supported AF EC staff. Due to these strong community organisations, AF EC can take up relevant projects and implement them successfully in its operational area.
Organizational capacity	Organizational capacity	Provide a description of your "on the ground" capacity to undertake long-term community-led project(s) and implement agroforestry.	AFEC developed and propagated innovative technologies and practices which are drought tolerant and suitable for rainfed lands of Anantapur District. Some of the ideas and technologies developed by the AEEC, like Farm Pond lining, Protective Irrigation, Rainfed mixed cropping models, Multiple Fruit tree models etc., had been adapted and upscaled by the Government of Andhra Pradesh through programs like Mahatma Gandhi National Employment Guarantee Scheme (MGNREGS), Community Managed Seed System (CMSS), Andhra Pradesh Drought Mitigation Project (APDMP) and Andhra Pradesh Community Natural Farming (APCNF). AFEC is well known in the development sector for its participatory approach, high-quality watershed development on a sizable scale, people-centric policy advocacy, and lobby work. AFEC is also famous for developing

		agro-ecology based drought mitigation technologies and diversified crop models for Rainfed Agriculture.
Sustainability	The local partner agrees with the Rabobank's sustainability policy.	Yes
GDPR	The local partner's current data handling policies are compliant with GDPR regulations.	Yes
Participant organization	Describe how the project is organized, or in the process of being organized, into cooperatives, associations, community-based organizations or other organizational forms able to contribute to the social and economic development of the participants and their communities, and which is democratically controlled by the participants.	For the purpose of this project, AFEC is expanding its network of mandals from 8 to 15, so that more farmers can benefit from carbon finance. With more than 20 years of working with the mandals, AFEC will promote the organization of the project's participants through the already-existent structure. Farmers are organized by mandals, which consist of a group of villages. Each mandal has a representative and co-representative, called communal and co-communal, respectively. Once a month, a meeting is conducted on the mandal level (between 30-50 farmers), where information is passed down to the village level. Two meetings are conducted every month, with about 15 participants. Here, several topics are discussed, such as savings, loan requirements, progress and planning. AFEC will use this organization to disseminate necessary information and train the farmers directly through appointed staff.
Project effects	The project strives to not contribute, or does its utmost to avoid, environmental or (agricultural) biodiversity harm.	Yes
Entity	The local partner is an established legal entity that takes responsibility for the project and for meeting the requirements of the Acorn Framework for the duration of the project.	Yes
Local presence	The local partner has a strong in-country presence and the respect and experience	Yes

	required to work effectively with local participants and their communities.	
Local policies	The local partner has a solid understanding of local policies and can confirm that the country's policy allows individual CRUs to be sold.	Yes
Influence	The local partner is capable of negotiating and dealing with government, local organizations and institutions.	Yes
Resources	The local partner is focused and has the organizational capability and ability to mobilize the necessary resources to develop the project (e.g. including access to seedlings, inputs, agronomic knowledge, monitoring and technical support).	Yes
Data collection	The local partner can provide reliable data (i.e. GPS polygons, phone numbers, other KYC data).	Yes
Training	The local partner has the ability to mobilize and train participants, and implement and monitor project activities.	Yes
Condition (i)	The local partner recognizes that the participant's involvement in the project is entirely voluntary.	Yes
Condition (ii)	The local partner recognizes that participants own the carbon benefits of the project intervention.	Yes
Participant payments (i)	The project coordinator ensures that payments are made in a transparent and traceable manner.	Yes
Participant payments (ii)	The project coordinator ensures that mobile payments to participants are either already possible or there are	Yes

		no foreseeable obstacles for this in the near future.	
	Contributions	The local partner does not draw more than 10% of sales income for ongoing coordination, administration and monitoring costs. Exceeding this percentage is only possible in exceptional circumstances where justification is provided and Acorn formally approves a waiver.	Yes
	Participant identity	The local partner is able to collect and provide proof of participant's identity.	Yes
Tenure & rights	Land-tenure and carbon rights (i)	Provide a description of how land tenure is organized amongst the target project participants	The lands are privately owned, and land tenure documentation is verified trough Pattadar Passbooks.
	Land-tenure and carbon rights (ii)	The project applies to land over which the participant/community has (formal/informal) ownership or long-term user rights.	Yes
Sustainable land use activity	Land use	Provide a description of the current land use activities, before the start of the project intervention, within the project.	The current use of the project area is for subsistence agriculture. Some smallholders have monocrops of either tree crops or annual/short-duration crops, and others have already implemented agroforestry through trees intercropped with annual crops.
	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 that no deforestation has taken place five years before the start of the project intervention (project baseline). If this cannot be confirmed, a description of the cause of the	Yes

	deforestation is provided, including the measures that have been taken to prevent deforestation from happening again.	
Additionality	The local partner ensures project additionality and ensures a durability period of 20 years.	Yes
Existing agroforestry (i)	Agroforestry at the farm level has been implemented less than 5 years before the start of the project intervention.	Yes
Existing agroforestry (ii)	Participants and local partners confirm that previously sequestered CO_2 on the land has not yet been monetized.	Yes
Existing agroforestry (iii)	Existing agroforestry has been funded largely by donors/grants.	No – see Question 32 of the Project Summary.
New agroforestry	There is sufficient supply of seedlings, inputs, water and other required resources.	Yes
Naturalized species	The local partner promotes the use of native species. The use of naturalized species is acceptable under the conditions outlined in the Framework.	Yes
Current habitat	Provide a description of the current ecosystem and flora and fauna species of the project area.	Some examples of the common flora found in the region include: • *Hildegardia populifolia* (poplar sterculia) • *Parahyparrhenia bonariensis* (grass) • *Gyrocarpus americanus* (helicopter tree) • *Cocos nucifera* (coconut palm) • *Mangifera indica* (mango) • *Citrus limetta* (Sweet lime) • *Punica granatum* (pomegranate) • *Tectona grandis* (teak) Some examples of the fauna found in the region include :

- *Calotes versicolor* (oriental garden lizard)
- *Bonnet macaque* (Macaca radiate)
- *Copsychus fulicatus* (Indian Robin)
- *Pavo crisatus* (Indian peafowl)
- *Bubulcus ibis* (cattle egret).

 **At introduction with project summary**  **Once at the start**  **Local partner and participants**  **Acorn**

The local partner, in collaboration with participants, completes one overarching eligibility checklist to ensure basic conditions are in place.

Participant eligibility checklist			
Topic	Sub-topic	Requested information	Result
Organizational Capacity	Smallholder labour force	Participants are not structurally dependent on permanent hired labor, and manage their land mainly by themselves with the help of their families.	Yes
	Smallholder farm size	The cultivated land of participants does not exceed 10 ha.	Yes
	Resources	Participants, with the support of the local partner, have the ability to mobilize the necessary resources to implement the project.	Yes
	Data collection	Participants can allow reliable data to be collected for the project (i.e. GPS polygons, phone numbers, other KYC data).	Yes
	Condition (i)	Participants are aware that their decision to participate in the project is entirely voluntary.	Yes
	Participant identity	Participants are able to provide proof of their identity.	Yes

Tenure & rights	Land-tenure and carbon rights (i)	Provide a description of how land tenure is organized.	The lands are privately owned, and land tenure documentation is verified trough Pattadar Passbooks.
	Land-tenure and carbon rights (ii)	The project applies to land over which the participant/community has (formal/informal) ownership or long-term user rights.	Yes
Sustainable land use activity	Land use	Provide a description of the current land use activities within the project.	The current use of the project area is for subsistence agriculture. Some smallholders have mono-crops of either tree crops or annual/short-duration crops, and others have already implemented agroforestry through trees intercropped with annual crops.
	Deforestation	Participants confirm that no deforestation has taken place five years before the start of the project intervention (project baseline). If this cannot be confirmed, a description of the cause of the deforestation is provided, including the measures that have been taken to prevent deforestation from happening again.	Yes
	Additionality	Participants ensures project additionality and is aware that the project has a durability period of 20 years.	Yes
	Existing agroforestry (i)	Participants confirm agroforestry at the farm level has been implemented less than 5 years ago.	Yes
	Existing agroforestry (ii)	Participants confirm that previously sequestered CO_2 on the land has not yet been monetized.	Yes
	Current habitat	Provide a description of the current ecosystem and flora and fauna species of the project area (including	Some examples of the common flora found in the region include:

	temp, elevation, soil health etc.).	• *Hildegardia populifolia* (poplar sterculia) • *Parahyparrhenia bonariensis* (grass) • *Gyrocarpus americanus* (helicopter tree) • *Cocos nucifera* (coconut palm) • *Mangifera indica* (mango) • *Citrus limetta* (Sweet lime) • *Punica granatum* (pomegranate) • *Tectona grandis* (teak) Some examples of the fauna found in the region include : • *Calotes versicolor* (oriental garden lizard) • *Bonnet macaque* (Macaca radiate) • *Copsychus fulicatus* (Indian Robin) • *Pavo crisatus* (Indian peafowl) • *Bubulcus ibis* (cattle egret).

Part C: Additionality Assessment

 **After eligibility assessment introduction**

 **Once at the start**

 **Acorn**

 **Local partner**

Acorn, in consultation with the local partner, completes the additionality assessment to ensure basic conditions are in place. If the project expands into another country a new assessment must be completed.

Positive list	Demonstrate that the project meets requirements (a) and (b) and at least one of the requirements (c) and (d).	
	(a) The project area is located in a country or region with a recent UNDP Human Development Indicator[2] below or equal to 0.8.	Yes, this project is located in a country with an indicator higher than 0.8 (0.633).
	(b) The project shall not be mandatory by any law or regulation, or if mandatory, the local partner shall demonstrate that these laws and regulations are systematically not enforced.	This project is not mandatory under any law/regulation in India. Please refer to India's UNFCCC NDC (2016), and India National Agroforestry Policy (2014).
	(c) The project is located in a region with a mean annual precipitation of less than 600 mm[3].	Yes, the mean annual precipitation is approximately 600 mm[2].
	(d) The project area is (predominantly) located in a country or region with a recent UNDP Human Development Indicator below 0.6.	No, this project is located in a country with an indicator higher than 0.6 (0.633).
Barrier analysis	Demonstrate that the project intervention would not have taken place due to a least one of the following barriers.	
Type of barrier	Situation without project	Situation with project
Financial/ economic barrier	The project-target group are functionally illiterate farmers with low per-capita income and, therefore, cannot afford high investment costs. The revenue streams are delayed since the gestation periods for tree species are long (4-5 years for fruit-bearing species such as mango and 3-6 years for sweet lime, for example). Farmers often fail to access loans from the banks. Banks usually insist on collateral security, mortgage etc., to advance loans to the farmers who usually cannot meet such requirements of the bank. Relying solely on agricultural	This project will enable farmers to benefit from additional revenue through carbon finance, which will help them overcome the instabilities in income that revolve around agricultural produce. In addition, by increasing the number of species planted, through border trees, farmers will also benefit from additional marketable products, and cash reserve for urgent needs (e.g., mahogany harvest can allow for a rapid significant income for medical

	activities on smallholders' land is not an economically viable option due to several factors, such as fluctuations in market price, unstable productivity/yield, and natural disasters such as cyclones, storms, droughts, etc.	expenses, while maintaining other trees on the land). Both fertilizer and pesticide financial investments are also expected to decrease as the fallen leaves and pruning materials will be reused to enrich the soil, and the presence of trees and training on biopesticide making will diminish pests and disease events.
Technical barrier	Farmers do not have access to quality seed sources/planting material for the financial reasons described in the barrier above, and much less to sustainable agricultural practices.	Farmers will be provided access to quality planting materials, such as red sandalwood, one of the most valuable timber species in the world. In addition, they will also receive training on sustainable practices, such as biofertilizer and biopesticide making.
Ecological barrier	Due to the practices of subsistence agriculture, farmers face problems of degraded soil, which, in addition to poor biodiversity, leads to frequent episodes of pests and diseases. This leads to a reduction in the productivity of cash crops. Farmers also experience some biotic pressure regarding grazing, generally from March through May. Finally, soil erosion leads to topsoil removal and degrades the land. In addition, climate change is also bringing about more struggles through more prolonged droughts and less frequent, but more intense precipitation events.	The proposed agroforestry design will increase the farmers' lands biodiversity, and ultimately its resilience, as high-water-consuming annual crops will be substituted by perennial ones that will also provide economic return. Farmers will be trained to plant tree species in appropriate ways and timing, as to not decrease the survival rate. The border species will provide both opportunities for marketable products, protection against cattle and wildlife, and acting as windbreaks, enriching the soil, fodder for livestock, giving bee forage, shade, and dust control. With the carbon finance from Acorn, farmers will be able to afford more materials for bio-fencing, and other sustainable agricultural practices. Finally, farmers will be trained in making biopesticides and biofertilizers instead of chemical ones (Annex 12).
Cultural barrier	As mentioned in the financial barrier, the project participants are functionally illiterate smallholder farmers without knowledge of carbon sequestration and carbon markets. Therefore, they do not	AFEC has been working with the mandals in the region for over 20 years through numerous projects demonstrating the necessary knowledge and relationship with the

	understand the importance of keeping trees to mitigate climate change. These smallholders live off the harvests of their lands, and all efforts are put into cash crop productivity without considering sustainable practices. The lack of skills is a significant barrier for farmers transitioning from subsistence agriculture to sustainable agroforestry. In the absence of the project, farmers will attempt to transition to an agroforestry system. Still, they will suffer financial hardships due to lack of knowledge resulting in tree mortality and inability to thrive due to competition, overshading etc.	targeted farmers. With this project, AFEC will introduce tailored training sessions to promote sustainable land management practices (i.e.., making of biofertilizers and biopesticides, plantation management, etc.) and to create awareness on the importance of preserving trees and climate change resilience (i.e. training on carbon sequestration and agroforestry), while also involving women farmers through capacity building initiatives, such as skill development and alternative activities (AFEC provides credits to women entrepreneurs to develop commerce activities).
	Regarding gender roles, culturally, women are generally not integrated into farming activities, as they take upon domestic responsibilities and household chores, which places them in a more disadvantaged position regarding carbon finance and agroforestry knowledge.	More women will also be indirectly involved in this project through the training of data collectors, as they will take upon this role to inform and onboard farmers into the project, and women volunteers (total of 230) who report AFEC of the projects by taking an active part during the meetings that take place monthly at the mandal level.

Overall conclusion:

This agroforestry project, led by AF Ecology Centre (AFEC), was established in 2023 to reward farmers for maintaining the trees they have planted and scaling their agroforestry systems to make them more resilient against environmental stressors by offering carbon finance.

The first trees were planted just after the onset of the monsoon (July-September) in 2018, and seedlings were provided either for free by governmental or NGO schemes, such as the MGNREGA program, or paid by the farmers themselves. The carbon credits farmers receive for the trees planted in the project are ex-post based and will only be derived from one year before CRU issuance. To ensure additionality in response to the first trees planted by these farmers, the adjustment factor for pre-project trees will be applied as per the Acorn methodology.

The main barriers farmers face are financial and cultural, as their economic situation is unsustainable, and they lack the knowledge of environmental concerns and sustainable agricultural practices to mitigate these. Agriculture is the primary source of income for local communities in the project area. However, due to the lack of a resilient and sustainable system, productivity is affected by soil erosion, severe droughts, pests and disease infestations. Consequently, food productivity is very low, thus decreasing their income and leading to poverty. Farmers are forced to migrate to the city to earn money to feed their families for at least half the year, leaving their families and farms vulnerable to increasing extreme weather events (i.e.

droughts and flooding). Unfortunately, farmers depend on crops mainly produced for a single season (annual crops) and can only harvest a few times a year. In addition to this, farmers lack skills and knowledge in terms of spacing, pruning, species suitability and mixing etc., as well as the understanding of the importance of keeping trees to mitigate climate change, and much less on carbon sequestration and carbon finance, which means that they are not able to optimize their lands to become resilient, productive, and be additionally rewarded for such.

Therefore, through project intervention, AFEC will overcome the cultural barrier by providing participants with the necessary information on 1) agroforestry concepts, 2) the carbon sequestration process and the importance of maintaining the trees on their lands, 3) natural farming practices, such as manual preparations of biopesticides and biofertilizers, and 4) planting of border trees. To overcome the financial barrier, AFEC will fully subsidize seed costs, and the increase in productivity expected to take place with the implementation of sustainable practices, along with the additional revenue from carbon credits, is expected to alleviate farmers' economic status, preventing them from having to migrate to the city. Furthermore, the CRUs Acorn offers farmers act as incentives to plant trees and keep the existing ones in the ground, which is not customary in traditional practices. The trees planted will increase soil health, regenerate the land from degraded cultivation and protect the land from climate change.

Suppose farmers who transitioned with AFEC are not rewarded with income from the carbon credits. In that case, they may be discouraged from maintaining and scaling up their agroforestry interventions using carbon credits after all their hard work and lack of significant benefits. This lack of reward will reflect poorly on agroforestry schemes for other farmers in the community and region that have the potential to transition, resulting in a barrier to scaling up. Therefore, the financial benefits (carbon finance and increased productivity) and environmental benefits (protection from extreme weather events) from transitioning to such a long-term agroforestry system will significantly increase farmer and family livelihood in the project area.

Part D: Farmer Surveys

 **With the carbon baseline assessment**  **Every 3 years**  **Local partner and participants**  **Acorn**

A sample of participants, in collaboration with the local partner, answer survey questions based on livelihood and environmental indicators

Table 1. Farmer surveys results.

Number of participants surveyed		Total number of project participants	Percentage of women participants included in baseline		
105		**6,715**	**30%**		
Area	**Indicator**	**Metric**	**Source**	**SDG**	**Result**
Local livelihood	**Farmer income**	(Carbon revenue + farm revenues) – operating expenses	Survey (information collected on the Acorn platform)	1, 2, 8	-31,466.7 INR
	Nutritional variety	Number of food groups in the diet (see Appendix 7.9)	Household Dietary Diversity Score (HDDS) index survey[4]	1, 2	Average farmer consumes 5 food groups daily
Environmental improvement	**Agricultural land use productivity**	Farm output value per hectare per crop type [kg/ha/crop]	Survey (information collected on the Acorn platform), FAO TAPE Tool[5]	1,2, 8	44,026.8 Kg/ha/year
	Agricultural biodiversity	Crop/animal/pollinators count	Gini-Simpson Index survey[6]	2, 15	62% (acceptable)

1. Famer income from carbon finance

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

The financial state of most of the farmers is poor due to the inadequate income from subsistence agriculture. The farmers who are functionally illiterate, - 90% of surveyed farmers said they have only partial education,- and have low per-capita income (approx. INR 1000 per annum), therefore being unable to afford high investment costs and fail to access loans from the banks. As a result, farmers highly depend on cash crops for income and food crops for self-consumption, which is unsustainable

[4] *Swindale & Bilinsky, 2006*
[5] *FAO, 2019*
[6] *Izsák & Papp, 2000*

due to the rising impacts of climate change and high input costs. This is reflected on the survey, as 93% of the respondents claimed their financial situation is just enough to get by (while the remaining percentage experience financial hardship), presenting a situation of risk and vulnerability to the livelihood of farmers on the long-term.

Project intervention is expected to improve farmer financial status through additional income from CRUs and products from trees that are marketable (i.e., mango and sweet lime). There should be no long-term negative impact as the initial costs of planting materials and resources to transition (mainly free or subsidized by government - such as Mahatma Gandhi National Rural Employment Guarantee Scheme) are outweighed by the income from carbon that farmers will receive over the life of the project.

II.) Please describe the type and amount of income and expenses you have on the farm each year.

Majority of farmers' income is based on marketable products from their cash crops and livestock, although in average, each farmer's main revenue source is from the sale of crops. Approx 71% and 36% of surveyed farmers reported their farm revenue coming from the sale of crops and from livestock products, respectively. An example provided is that of a farmer earning approx. 50,000 INR from agricultural produce and approx. 25,000 INR from milk products. For this same farmer, his/hers expenses include 60,000 INR for food maintenance, 10,000 INR for seeds, 30,000 INR for fertilizer, and 20,000 INR for animal medical investment, which results in a negative yearly balance. This is the case for 54% of the surveyed farmers, resulting on an annual average income per farmer of -31,466.7 INR. In addition, some of the surveyed farmers (approx. 17%) reported being in a situation of debt, or having to pay loan interests. Therefore, project intervention is expected to alleviate this situation by increasing the productivity of cash crops, and through annual carbon finance.

Table 2. Farm revenue and operating expenses.

Average annual farm revenue per farmer	**Description of revenue sources** (crops for market, livestock products, selling fruit from trees)	**Average annual operating expenses per farmer**	**Description of expenses** (food, seeds, fertilisers, feed, pesticides, livestock purchases, veterinary costs, labour, fuel, transport, taxes, loan interest, rent)
85,276.2 INR	Crops for market – tomato, groundnut, sweet lime, mango, banana, chilli, ragi, etc. (see Table 4 for the crops present in the project area); Livestock products – milk, chicken; Others – seeds, sale of cool drinks and labour work (depending on the season and need, some farmers work on other farmer's land).	116,742.9 INR	Animal feed, including fodder; Animal health expenses; Seeds, fertilizers, and pesticides; Labour; Transportation, including petrol and tractor expenses; Debt and loan interest.

2. Nutritional Variety

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

Most farmers eat three daily meals (87% of surveyed farmers), and the remaining eat 2 daily meals. In addition, most farmers (83%) also do not usually skip meals, and those that do (17%), do so on a daily basis (67% of respondents). The nutritional variety of farmers' diet mainly comes from their farms and local markets (91% of respondents reported that they usually buy a few products), as only 0-25% and 25-50% of their diet is grown in their own farms (56% and 38% of respondents, respectively).

Farmers' diet mainly consists of vegetables (brinjal, okra, tomato, chillies, radish, beans, carrot, etc.), cereals (rice, ragi, millets and maize), and milk-derived products (milk, curd, gee, and buttermilk). In comparison, food like meat, seafood and sweets represents smaller portions of farmer's diet (see Table 3 below).

Project intervention is expected to improve farmers' financial status and their diet through additional revenue from carbon finance and marketable products from trees (i.e., mango and sweet lime). Fruit trees are of added value, as 50% of farmers consume fruits in their diets, leading to increased nutritional intake.

II.) HDDS Index Survey Results.

Table 3. Nutritional variety – HDDS Index survey results.

Food group type	Amount of farmers consuming each food group (%)
Cereals	81.9
Root and tubers	32.4
Vegetables	82.9
Fruits	49.5
Meat, poultry, and offal	14.3
Eggs	23.8
Fish and seafood	8.6
Pulses	41.0
Milk	60.0
Oils and fats	43.8
Sweets	5.7
Spices, condiments and beverages	45.7
Average food groups consumed per farmer	*5 groups*

3. Agricultural Biodiversity

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

88% of surveyed farmers rated their biodiversity as low; however, the Gini-Simpson biodiversity index is acceptable at roughly 62%. This result reflects high diversity of 1) crop species (82% score), 2) livestock (64% score), and 3) natural vegetation, trees, and pollinators (41% score). Farmers already plant various crops for self-consumption, and biodiversity is expected to be maintained while the agroforestry trees grow (mango, sweet lime, jamon, guava, sapota, and tamarind). After this, new border planting will be introduced and biodiversity is expected to maintain or increase slightly.

Wild animals, such as rabbits, rats and snakes are sometimes spotted by most of the surveyed farmers (>50%). To a lesser extent (<50%), farmers also sometimes spot animals such as bears, deer, peacocks

and wild pigs. The trees can offer shade for native flora to grow and native fauna to seek refuge from the harsh climate. Furthermore, these trees can enable soil preservation during heavy rainfall and wind, thus promoting biodiversity.

Threatened native species are rarely spotted in the project area, such as cheetahs (only one surveyed farmer reported seeing this animal) and Indian Cobra. The encouragement of carbon finance to maintain trees will provide a safe space for wild fauna to pass through. With the project intervention, farmers will be provided with the necessary know-how to increase their biodiversity (such as utilizing biopesticides and biofertilizers), influencing the increase in the presence of wild and threatened fauna and reducing the risk of diseases affecting the crops.

II.) How many farmers perform beekeeping?

The great majority of farmers don't perform beekeeping (91%), and those that do perform mainly wild beekeeping (8%).

III.) Gini-Simpson Index Results.

Table 4. Agricultural biodiversity - Gini-Simpson Index results.

Crops	Area	pi	p2	Livestock	number	equivalent	pi	p2
Apple	1.2	0.00	0.00	Cows	158	1*158	0.48	0.23
Bitter gourd	2.0	0.01	0.00	Sheep/ goats	614	0.1*614	0.18	0.03
Brinjal	8.1	0.03	0.00	Chickens	447	0.014*447	0.02	0.00
Castor	6.9	0.03	0.00	Pigs	35	0.027*35	0.00	0.00
Chickpea	0.8	0.00	0.00	Rabbits	24	0.02*24	0.00	0.00
Chilli	17.9	0.07	0.00	Llamas/ alpacas	16	0*16	0.00	0.00
Cotton	1.6	0.01	0.00	Buffalos	105	1*105	0.32	0.10
Dragon fruit	0.9	0.00	0.00					
Figs	0.2	0.00	0.00					
Groundnut	98.9	0.37	0.13					
Guava	1.6	0.01	0.00					
Horse gram	2.8	0.01	0.00					
Jamun	0.8	0.00	0.00					
Maize	20.1	0.07	0.01					
Mango	21.3	0.08	0.01					
Okra	1.0	0.00	0.00					
Onion	2.8	0.01	0.00					
Ragi	7.3	0.03	0.00					
Red gram	11.4	0.04	0.00					
Rice	0.2	0.00	0.00					
Sorghum	0.8	0.00	0.00					
Sweet lime	16.3	0.06	0.00					
Tamarind	3.8	0.01	0.00					
Tomato	39.3	0.15	0.02					

Vegetables	1.0	0.00	0.00					
Total	**269.21**		**0.181**	**Total**		**332.083**		**0.361**
Total (%)			**82**	**Total (%)**				**64**
Average of crop/livestock indices				**73.5 %**				

Natural vegetation, trees and pollinators		
	Description	**Value**
Productive area with natural vegetation	Most farmers (65%) report having an area with natural vegetation smaller than 25% on their farm. Others, on a lesser majority (22%), report having a productive area between 25% and 50%.	0.25
Pollinator Presence	Most surveyed farmers (>50%) report having regular presence of small pollinators, including ants, flies and mosquitos. Most surveyed farmers also report having occasional presence of bees and butterflies. At a lesser extent, farmers (<50%) report seeing occasionally small pollinators like bats, beetles, hummingbirds and moths.	0.66
Beekeeping	91% of the surveyed farmers don't perform beekeeping; those that do, mainly perform wild beekeeping (8%).	0.33
Total (%)		**41%**
Agricultural Biodiversity Score	**62% acceptable**	

IV.) List pollinator species in the project area.

Table 5. Prevalence of pollinators in the project area results.

Present in project area	**Pollinator type**
Regularly	Ants, flies, mosquitos and moths
Moderately	-
Sometimes	Bats, bees, beetles, butterflies, hummingbirds, and monkeys
Rarely	-

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

Table 6. Prevalence of wild animals in the project area results.

Species (*latin name*)	**Prevalence (*Regularly/Sometimes/Rarely*)**
Snakes, including the Indian Cobra (*Naja naja*)	*Sometimes – reported by 79% of surveyed farmers*
Rabbits	*Sometimes – reported by 51% of surveyed farmers*
Deer (*Antilope cervicapra*, and *Rusa unicolor*)	*Sometimes – reported by 36% of surveyed farmers*
Peacock (*Pavo cristatus*)	*Sometimes – reported by 35% of surveyed farmers*
Wild boars (*Sus scrofa cristatus*)	*Sometimes – reported by 13% of surveyed farmers*
Bears (*Melursus ursinus*)	*Sometimes – reported by 11% of surveyed farmers*

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

Table 7. monitoring objectives/plan for species with a high local environmental and social conservation value.

Species *(Latin name)*	**Threat Classification** (Culturally Significant/ Vulnerable/Endangered/ Critically Endangered)	**Project Influence** (Positive /Negative)	**Justification for influence**	**Monitoring Objectives/Plan**
Peacock (*Pavo cristatus*)	Culturally significant – India's national bird (since 1963)	Positive	The project intervention would not lead to any negative impacts, but would instead provide habitat and corridors for the movement of all identified threatened / culturally significant animal species, through an increase in flora diversity (planting of trees), availability of water, and nutrients in the soil. The trees planted provide much needed shade in the harsh South Indian climate.	Every three years, AFEC will determine the presence of threatened /culturally significant species in the project area through farmer surveys.
Indian Cobra (*Naja naja*)	Culturally significant, as it is revered in Indian mythology and culture. In addition, this species is protected under the Schedule-II of the Indian Wildlife (Protection) Act, 1972 and categorized as "Vulnerable" in the IUCN Red List of Threatened Species as a result of hunting practices for production of leather goods.			
Cheetahs (*Acinonyx jubatus jubatus*)	Extinct in India, but reintroduced as part of *Project Cheetah*.			
Blackbuck Deer (*Antilope cervicapra*), and Sambar Deer (*Rusa unicolor*)	Endangered species listed in Schedule I of Indian Wildlife Act, 1972. Vulnerable under IUCN Red List since 2008			
Sloth bears (*Melursus ursinus*)	Vulnerable under the IUCN Red List. The decline in population is mainly due to habitat loss, poaching, trade, and lack of conservation efforts.			
Monkeys (*Bonnet Macaques*)	Vulnerable under the IUCN Red List. The decline in population is mainly due to habitat loss, human-animal			

	conflict in agricultural and urban areas, and lack of conservation efforts.			

4. Agricultural land use and productivity

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

The majority of surveyed farmers (84%) classify their productivity level as average, while the remaining ones (16%) classify it as poor. In addition, the great majority (90%) have unstable productivity, which has been the case for the past 10-12 years for the respondents (20% and 13%, respectively). The main reasons for negatively impacted productivity include drought (96% of respondents), high input and planting material costs (94%), lack of shade (85%), floods (82%), pests (80%) and diseases (76%).

Farmers plant a variety of annual cash crops, which, amongst the most productive includes groundnuts (peanuts), maize and banana. The farmer's main tree cash crop, that is currently the most productive is sweet lime. The average productivity of cash crops per ha and per year is that of 44,026.8 kg.

Therefore, project intervention will provide the farmers with the necessary skills and resources to overcome technical challenges, the shade of the trees will increase soil health and increase resistance to drought and diminish the need for fertilizer, and the fruits of the trees will increase the overall productivity. To counteract the loss of productivity of the annual cash crops on the long-term (due to overshading from the mature trees), border planting will be introduced.

II.) Please fill in the table below.

Table 8. Cash crops productivity results.

Cash crop type	Yield of cash crop (kg/ha)	Amount of farmers cultivating the cash crop (%)	Other crops contributing to productivity and their amount (%)
Banana	123,552.7	1.2	Other varieties of chilli, jamun, flowers, and tamarind contribute approx. 16% of the total productivity.
Bitter melon	3,953.7	1.2	
Castor	13,714.3	8.2	
Chickpea	1,729.7	1.2	
Chilli	44,726.1	4.7	
Cluster beans	4,447.9	1.2	
Cotton	3,953.7	2.4	
Fenugreek	2,471.1	1.2	
Groundnut	295,488.6	75.3	
Horse gram	247.1	1.2	
Maize	112,432.9	30.6	
Malabari spinach	24,710.5	1.2	
Mango	11,391.6	16.5	
Mung beans	247.1	1.2	
Okra	11,366.8	2.4	
Onion	17,297.4	5.9	
Ragi	4,695.0	2.4	

Red gram	15,320.5	17.6	
Sweet lime	102,548.7	9.4	
Tomato	86,239.8	18.8	
Average productivity	44,026.8 kg.		

Part D: Carbon Baseline Assessment

 **After additionality assessment**  **Once at the start**  **Local partner**  **Acorn**

The local partner completes sample based carbon baseline assessment to provide complementary information to the T-5, biomass measurements and eligibility

Carbon Baseline	
Requested information	Answer
Describe how land tenure has been demonstrated	*Farmers can evidence land tenure in the form of formal land tenure. The lands are privately owned and the farmers practise agriculture and other income generating activities. The farmers have absolute right over the lands they own. The land ownership is demonstrated through Pattadar Pass Books issued by the government.*
Describe potential land tenure issues and measures taken to mitigate these	• *Potential issue 1: smallholder farmers who own less than 10 hectares of land will be the project participants. However, some of the farmers may have to sell their land during the project period to meet the expenses of education and marriage of their children in times of financial hardship.* • *Mitigation measure 1: the agroforestry design proposed, includes high-valued timber trees, which can meet such expenses (if the trees have reached their harvesting period). Nevertheless, farmers will be advised not to sell the land as they would lose the revenue from the CRUs. However, if he/she has to sell the land, the purchaser would be encouraged to retain the trees which will enable him/her to earn revenue from CRUs.* • *Potential issue 2: If the revenue from the CRUs is not enough due to a fall in prices, the farmer may want to change their land use.* • *Mitigation measure 2: Farmers would be advised to adopt best agroforestry models to maximise the revenue from land holdings as this is also the most resilient land use in the face of climate change.* • *Potential issue 3: In the case of a land owner's death, the land tenure takes some time to pass down to the son (between 3-6 months).* • *Mitigation measure 3: AFEC will use the Project Council meetings to discuss these occurrences and discuss possible resolutions directly.*

Description of current land use	*The land is used by the private small holder farmers to cultivate crops and grow trees. Cultivated tree species include mango, sweet lime, tamarind, jamun, sapota, guava and banana. Annual crops (3-4 months of the year) include tomato, chilli, groundnut, chickpea, mung and cluster beans, castor oil plant, red and horse gram, ragi, onion, okra, malabari spinach, maize, fenugreek, cotton, and bitter melon. All of these species are consumed by farmer and the rest of the produce are sold on the market.* *For the 8 mandals which AFEC works with, pests are controlled on the farms through the use of sticky traps and pheromonal traps, but also some already make biopesticides, but in the last resort farmers use chemical pesticides. On the remaining 7 new mandals, pesticide use is expected to be mainly chemical. From the farmer surveys results, (Part D, above), on average, each farmer uses approx. 35 litres of pesticides per year. The most common pesticide used is insecticide (93% of surveyed farmers), followed by fungicide (76%) and herbicide (72%). Regarding fertilizers, each farmer, in average, uses approx. 2,709.6 kg of organic fertilizer, such as mulch (98% of respondents), manure (91%) and compost (92%), and 415.0 kg of inorganic fertilizer, including nitrogen (85%) and phosphorus (69%). Both pesticides and fertilizers are applied on all crops.* *Without project intervention the farmers would have no support to continue planting trees to optimise their agroforestry system, and no incentive to maintain a sustainable agroforestry system. They would not be able to afford to purchase new seedlings and would have only the trees species that were selected by the government on their land. Farmers would also not have the resources or skills to plant biofences or chose the best species for border planting. Without the regular support and training provided by AFEC, on the importance of agroforestry systems it would be likely farmers would cut down the trees in times of financial hardship or change their land use to cattle raising.*
Description of current habitat species	*Some examples of the common flora found in the region include:* • *Hildegardia populifolia (poplar sterculia)* • *Parahyparrhenia bonariensis (grass)* • *Gyrocarpus americanus (helicopter tree)* • *Cocos nucifera (coconut palm)* • *Mangifera indica (mango)* • *Citrus limetta (Sweet lime)* • *Punica granatum (pomegranate)* • *Tectona grandis (teak)* *Some examples of the fauna found in the region include :* • *Calotes versicolor (oriental garden lizard)*

	• *Bonnet macaque (Macaca radiate)* • *Copsychus fulicatus (Indian Robin)* • *Pavo crisatus (Indian peafowl)* • *Bubulcus ibis (cattle egret).* *These species are part of a habitat characterized by harsh environmental conditions such as deficient rainfall, intense solar radiation and high wind. The area's main economic activity is agriculture, which, together with the impacts of aridness and drought-proneness, the vegetation is the main casualty, having a landscape defined by red sandy soils, with few trees and shrubs, and significant agricultural activities.* *In the absence of this project, the biodiversity would decrease further (limited diversity of tree species and loss of suitable habitat/corridor for native wildlife and birds), due to the continuance of subsistence agriculture, grazing and fuel wood collection, combined with increasing loss of fertile land due to climate change.*
Description of deforestation potential	*All Acorn plots passed the deforestation check (see question 3 below). The project area was not subjected to any form of deforestation in the past 5 years. For more information see Questions 16 and 17 of Part A.*
Description of trees species <2m and their distribution	*See table under question 1 below.*
Number of existing trees ≥2m	*17,629*
Number of existing trees older than 5 years	*4,449*
Coverage percentage of existing trees older than 5 years	*14%*

1. Existing tree species list (<2m).

Table 9. Existing tree species list (<2 m).

Species <2m *(Latin name)*	**Distribution (% compared to total number of trees)**
Annona cherimola	*0.0*
Azadirachta indica	*0.0*
Cajanus cajan	*0.1*
Carica papaya	*0.0*
Citrus limetta	*28.4*

Cocos nucifera	*0.1*
Magnolia champaca	*0.0*
Mangifera indica	*3.5*
Manilkara zapota	*0.0*
Psidium guajava	*9.5*
Punica granatum	*0.3*
Solanum betaceum	*0.0*
Syzygium cumini	*0.5*
Tamarindus indica	*0.4*
Tectona grandis	*0.0*

2. Existing tree species list (≥2m).

Table 10. Existing tree species list (≥2 m).

Species ≥2m *(Latin name)*	**Number**
Annona cherimola	*11*
Azadirachta indica	*14*
Citrus limetta	*10,406*
Cocos nucifera	*43*
Mangifera indica	*6,778*
Manilkara zapota	*1*
Melia dubia	*5*
Psidium guajava	*24*
Syzygium cumini	*1*
Tamarindus indica	*323*
Tectona grandis	*23*

3. Provide T-5 check data to evidence loss of tree cover over the past five years from project start date.

Table 11. T-5 check results.

Outcome	**Number**	**Plot ID**	**Reason for failure**
PASS	6,715		
FAIL	7,102	IN139655 - 157162 IN141193 - 158771 IN141198 - 158778 IN155517 - 204030 IN156990 - 208419 IN160736 - 219811 IN160774 - 219970 IN161610 - 222484 IN177978 - 269156	*Based on consultations with farmers, AFEC has concluded that these plots have most likely failed due to extremely limited access to water in the region, which has caused high mortality rates for the trees. AFEC has provided photo evidence of these farms, which indeed show a limited amount of tree coverage present. AFEC will in the coming period reach out to the*

			farmers to assess if there is a possibility to plant more trees for these farmers and otherwise will be forced to offboard these farmers due to ineligibility. See image below for evidence.

Figure 1. Evidence of plot that failed T-5.

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

The Deccan Thorn Scrub Forests ecoregion represents the low, sparse thorn scrub vegetation in the arid parts of the Deccan Plateau, covering several Indian States, and the Jaffna Peninsula in northern Sri Lanka.

The annual rainfall is less than 750 mm, which occurs mainly between May and October, and the months between November to April are left completely dry. Temperatures are high and can exceed 40 °C during the summer months. These hot and dry conditions, combined with anthropogenic influence, has shaped the vegetation into low-canopied scrub with sparse, short, thorny trees. This ecoregion is therefore characterized by open woodland with thorny trees with short trunks and low, branching crowns; spiny and xerophytic shrubs; and dry grassland. Most of the ecoregion's natural habitat has been degraded to thorn scrub or cleared completely. Pastoralism is a major driver of forest degradation, from heavy grazing by cattle to extraction of forest resources by the pastoralists. Patches of tropical dry deciduous forests lie scattered throughout, and these forests may well have been the original vegetation, before human activity encouraged a transition into scrubby vegetation.

The plant species that dominate the vegetation in these forests is the Acacia species, including Balanites roxburghii, Cordia myxa, Capparis spp., Prosopis spp., Azadirachta indica, Cassia fistula, Diospyros chloroxylon, Carrisa carandas, and Phoenix sylvestris, etc. The patches of dry grasslands provides habitat for the native fauna also remain scattered amid the thorn scrub. The grasslands of southern Andhra Pradesh support a good population of the Indian Bustard and Blackbuck. This ecoregion was at one time home to large numbers of elephants and tigers. The remaining natural habitat is threatened by overgrazing and invasive weeds, but there are a number of small protected areas which provide a heaven for the wildlife.

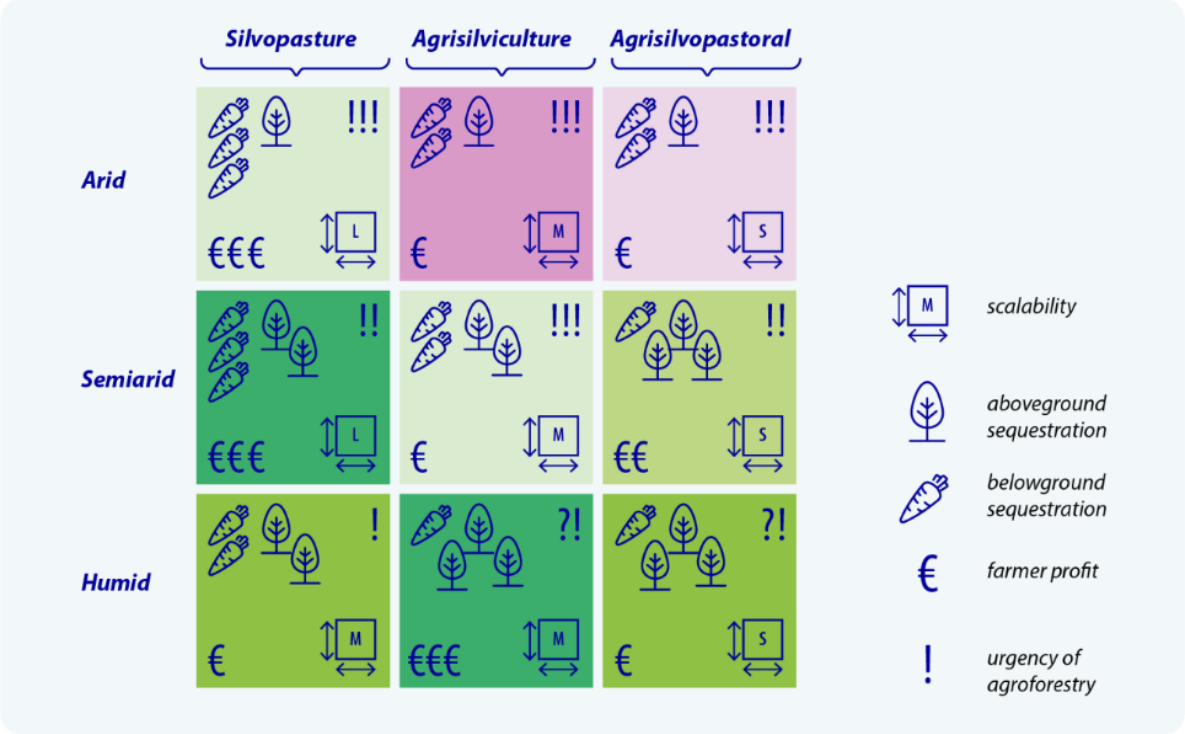
Part F: Project Activities

With the baseline assessments | **Every 3 years** | **Local partner and agronomist** | **Acorn**

GOAL!! **The local partner and agronomist co-develop an agroforestry design and describe the associated activities within the agroforestry system**

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

Farmers will be maintaining and developing agrisilvicultural systems in mostly dry and semi-arid environments (Andhra Pradesh). For farmers with existing agroforestry (approx. 70%), the agroforestry system contains a mix of fruit-bearing trees and annual crops (see Question 22 of the Project Summary). For both farmers with existing agroforestry and those without, the intention is to increase the tree cover through border planting.



2. For each agroforestry system, fill out Table 12 below (use additional tables if necessary):

Table 12. Agroforestry species and growth management.

Species details				
			If naturalised, please describe its likely:	
Type	Species	Native, naturalised or invasive?	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

Tree	*Mangifera Indica* (mango - grafted)	Native	Not applicable	Not applicable
Tree	*Citrus limetta* (sweet lime)	Native	Not applicable	Not applicable
Tree	*Syzygium cumini L.* (jamun)	Native	Not applicable	Not applicable
Tree	*Tamarindus indica* (tamarind)	Naturalised	Provides marketable products and food products for the farmers and their families. Provides good source of antioxidants.	Increases biodiversity as it can attract pollinators and shade bring refuge to animals from extreme heat conditions.
Tree	*Achras zapota* (sapota)	Naturalised	Provides marketable products and food products for the farmers and their families. The fruit is a great source of energy and promotes gut health.	
Tree	*(Annona reticulata) Custard Apple*	Naturalised	Fruits for household consumption and income generation	Soil conservation and biodiversity enhancement
Tree	*(Ziziphus mauritiana) Ber*	Native	Not applicable	Not applicable
Tree	*(Cocos nucifera Linnaeus) Coconut*	Native	Not applicable	Not applicable
Tree	*Psidium guajava* (guava - improved)	Naturalised	Provides marketable products and food products for the farmers and their families. Good for the heart and digestive system.	Its dense foliage provides shade and shelter for birds and other wildlife, and its strong root systems help prevent soil erosion, especially on slopes and hillsides.
Tree	*Tectona grandis* (teak)	Native	Not applicable	Not applicable
Tree	*Swietenia mahagoni* (mahogany)	Naturalised	Provides an immediate economic return in case of great necessity (once tree has reached maturity).	Acts as a windbreak, provides soil enrichment and prevents soil erosion. It is a drought-resistant species.

Tree	*Pterocarpus santalinus* (red sandalwood)	Native	Not applicable	Not applicable
Tree	*Sapindus mukorossi* (soapnut)	Native	Not applicable	Not applicable
Tree	*Sesbania grandiflora* (sesbania)	Naturalised	Due to its nitrogen-fixing capacity, it will increase the soil fertility, thus improving the productivity of the cash crops.	This nitrogen-fixing legume will improve the soil fertility, and prevent soil erosion.
Tree	*Azadirachta indica* (Malabar vepa/neem)	Native	Not applicable	Not applicable
Tree	*Terminalia sp.*	Native	Not applicable	Not applicable

Growth management	
Preparation and Planting	*For the already planted fruit trees, the project site was first ploughed thoroughly to turn up the soil before sowing, and the pits dug with a proclaimer (JCB), to decrease labour efforts, followed by the addition of cattle manure before transferring the seedling to the ground, to increase the productivity of the soil. Approx. 1 m^3 of soil was dug for the seedlings to be planted. The spacing depends upon the varieties and soil conditions, examples of this are i) sweet lime spaced between 4 to 6 meters, and ii) mango spaced between 7 to 10 m. Farmers usually plant their trees after the onset of monsoon i.e., during July to September.* *For the border trees, AFEC has began distributing the seeds (during the month of August 2023, and aims to finalize end of September) in addition to a training pamphlet informing farmers how and when to plant, i.e., after first heavy rainfall to guarantee seed survival. These will be planted with the dibbling method (placing a seed or a few seeds in a hole, at a predetermined spacing and depth, and covering them with soil, often done by hand). The site will be prepared by being first ploughed and holes dug, and the seeds will be spaced between 1 and 1.5 m.*
Tree/Shrub Management	*Removal of damaged, dead or diseased parts of trees can be done at any time of the year. However, it is normally undertaken in late winter or early spring before the onset of new growth (March-April).* *Appropriate silvicultural practices will be followed in the plantations areas. Pruning is done at regular intervals at least twice in a year. Fruit trees such as mango, and sweet lime are retained for the entire project period of 20 years and the fruits are harvested every year, sometimes twice per year, i.e, mango has two yields, in February to June, and October to November.*

	Timber harvesting is included in the agroforestry design, but its durability is aligned with that of the project as the harvesting period of the timber species is over 20 years (mahogany is harvested between 20 to 30 years, teak between 20 to 25, and red sandal wood > 30 years) f or most of the species. The exception is Malabar vepa, which will be harvested every eight years. *Pruning is done after harvesting and during the cooler season (after June), by removing the top crown, to decrease the shade. All of the dry branches, and old branches that have already given fruit is also removed. This biomass will be used as fodder and mulch in the farms.*
Crop Management	*The farmers will be encouraged to adopt nature based solutions such as biofertilizers, biopesticides, cattle manure, and mulching. All farmers will be encouraged to move from subsistence agriculture to sustainable agriculture. The density of the plantations are approx. 150 trees/ha, with intercrops consisting of tomatoes, vegetables and pulses, and farmers will plant an additional ~200 trees/ha of border species.*

3. Describe the project's agroforestry design/implementation plan.

The project participants have already planted fruit trees on their farms from 2018 to 2021, including mango, sweet lime, jamon, guava, sapota and tamarind, along with annual crops (see examples on Table 8). From the 8,530 *participants, about 70% have 1 tree species with 1-2 annual crops, and the remaining only have one fruit tree species, most of which is mango, followed by tamarind and sweet lime, - as these have the highest economic value for the farmers. Nevertheless, for most of the participants, the trees are still young and productivity haven't reached their peak. Mango trees start producing fruits after the 6th year of their life, and after 3-4 years for grafted mango, and sweet lime begins to bear fruit between 3 and 5 years, reaching its full production at 8 to 10 years old*[7]*. Therefore, some have other annual crops in their lands to make up for the intended income from the main cash crops.*

The agroforestry approach consists of further improving the existing agricultural system as it is either a monoculture of one tree species or an agroforestry system destined to become a monoculture of one tree species (as overshading will prevent annual crop production). To do so, farmers will plant border trees, 4 to 5 species each, to increase the biodiversity in the farms, as well as to diversify farmer income. The species promoted include teak, neem, soapnut, red sandalwood, and sisbania, etc. (chosen with the community during village meetings, facilitated by the field supervisors and coordinators), which provides a range of livelihood and environmental benefits. The timber species (teak, mahogany, and red sandalwood) will provide economic cushions when harvested, for farmers in times of need (i.e., wedding, medical bills, etc.), and act as windbreaks, increase soil fertility and promote moisture retention. Species like neem and soapnut will also act as windbreaks, and promote soil enrichment and erosion prevention, and in addition, provide marketable products, i.e., neem leaves and the soapnuts for ayurvedic/medicinal purposes. In addition, all pruning biomass will be used for mulching and fodder for livestock.

[7] *Resource*

To highlight that, as each farmer will plant 4-5 species each, and the timber trees have different harvesting periods, this will guarantee that the border tree cover is kept on the farm, hence the soil benefits remain, contributing to a long-lasting climate resilience of the land.

AFEC began the distribution of border seeds in August of 2023. Farmers received between 250 g to 1 kg, depending on the acreage of the farm, and planting will be done in a distance of 1.5 m between seedlings. Planting is generally done after the onset of monsoon in July and carried out till September. During the seeds distribution, farmers are also given pamphlets with training material on planting, which AFEC recommends to plant after the first heavy rain falls to increase survival rate of the seeds (these have hard coats that need moisture to germinate, and after germination, the water necessity decreases). Furthermore, AFEC is distributing and instructing farmers to plant more seeds as they are accounting for some loss, in order to reach 86% of survival rate.

In 2023, the state of Andhra Pradesh has been experienced severe and prolonged droughts, which have delayed the planting activities, and impacting the seedling sprout and survival rate. As a result, AFEC developed a phase approach. First, AFEC consulted with approx. 6,000 farmers (through phone calls, physical visits and Project Council meetings), and based on this, together with the availability and procurement of saplings, and the suitability of species (drought-tolerant), amount to a total of 200,600, from the following sources:

- 6,000 saplings, procured by AFEC & Rabobank combinedly;
- *55,800 procured by farmers themselves*
- 99,000 seedlings from AFEC's nursery
- 39,200 seedlings through government nurseries and other schemes.

In total, 200,600 saplings are required for conversion of the remaining 4,210 farmers with an area of 5,765 Ha of plantation in to agroforestry plantations[8]. Refer to the tables below for further details:

AFEC discourages farmers from using chemical fertilisers and pesticides while green manure, mulching and composting are encouraged. Training on making biopesticides and biofertilizers will be provided to farmers (see Annex 12 for AFEC's training material on this topic).

Additional income from carbon sequestration in the form of CRUs will be an incentive to the farmers for managing their agroforestry practices long-term. The fruits and timber will provide farmers with immediate and long-term livelihood benefits. The restoration of the degraded land through agroforestry practices will help in conservation of biodiversity, and the tree cover established through agroforestry, will help in providing shade to both human beings and to the fauna, therefore also aiding in pollination. The agroforestry design will contribute to increase in the productivity of the land. Further, the natural climate solutions such as green manuring, mulching, composting, soil and water conservation measures, - promoted by AFEC, - will help to increase soil organic carbon, thereby increasing soil productivity.

Going forward at scale, AFEC aims to expand its network of farmers to reach even more people in the state of Andhra Pradesh. This scaling will be done after the project participants receive their first CRU payments, as to show other farmers in the state, that are not yet part of Accion Fraterna Ecology Center, the real benefits of such a project.

[8] Numbers based on the plan drafted by November 2024 and therefore might not be in line with total number of participants, as more onboarding has taken place.

4. Describe how this agroforestry system is expected to impact the land (i.e. shade, less pests, increase in pollinators).

All tree species planted under this project provide shade that increase protection to soil from harsh UV, wind and heavy rain, and helps to retain moisture in the ground through the tree roots. The flowers and fruits grown on the trees provide a source of food and attraction for pollinators and wildlife. The shade offered by the trees also provides shade for the livestock of farmers and for wildlife seeking refuge or travelling through the area (i.e. birds migrating). The promotion of biofertilizers and biopesticides will also increase the health and fertility of the soil, providing a suitable home for organisms that act as natural predators to pests and diseases, therefore promoting an overall increase in biodiversity and resilience to adverse weather events.

5. How do you ensure that the trees already in the project area before project intervention (if any) do not perish due to competition with the trees planted during this project or are damaged due to project activities?

The existing agroforestry systems of this project have space for improvement in the increase and diversification of tree cover. The main cash crop species are mango, tamarind, and sweet lime, as they have the highest economic value for farmers. While these are young and not fully productive yet, farmers plant other annual crops, but expect them to become unproductive as overshading will come with the maturity of the main cash crops. Therefore, the selection of appropriate species that do not overshade the main crop, such as timber species, will guarantee the already planted trees do not perish due to competition.

In addition, sufficient care would be taken while planting, pruning and weeding to ensure that existing trees before the project intervention are not affected and the new trees do not interfere. This is a key characteristic of the project and will be communicated to the farmers during training on agroforestry models before planting.

Part G: Project Council

 **After the baseline assessments**  **Annually**  **Local partner and participants**  **Acorn**

The local partner demonstrates active engagement of participants in project design and execution and describes the method for communicating and resolving grievances

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

The Project Council structure will be composed of AFEC's representatives, including the field supervisors and field coordinators, farmer representatives and non-participant community members. For best representation of the ~7,000 participants (see distribution of participants, per mandal on the table below), the Project Council will be split into three, so that one Project Council can cover five mandals each (the total project intervention area covers 15 mandals). Depending on the availability and accessibility at the time of the Project Council, the meetings will take place either in a Centre of Mandals, - a community center that encompasses more than one mandal, - or at the AFEC offices, which exist in several mandals, - out of the 15 mandals, AFEC has offices in eight and the remaining seven is supported by field officers.

Mandal	Number of onboarded farmers	Distribution (%)
Agali	199	2.9
Rolla	412	6.0
Amarapuram	242	3.5
Gudibanda	628	9.1
Madakasira	500	7.3
Dharmavaram	337	4.9
Rapthadu	754	10.9
Atmakur	573	8.3
Kuderu	530	7.7
Kalyanadurgam	214	3.1
Beluguppa	463	6.7
Settur	391	5.7
Brahmasamudram	327	4.7
Kambadur	844	12.2
kundurpi	482	7.0
Total	6896	100.0

After the onboarding of participants, AFEC conducted several community meetings, each with 25-30 farmers, from which they, together with the community, elected one representative (see Annex 7 for the minutes of these meetings). From these, it was strategized to have 1 farmer representative for ~25 farmers, and therefore a total of 263 representatives which means, each project council will have about 87 farmer representatives. These representatives were selected during the onboarding of farmers.

These are the ones who have demonstrated capacities of leadership, education and communication. They were chosen through discussions and consensus with the other onboarded farmers. For the non-participant community member, AFEC aims to include women as they are not so well represented in the project because land is traditionally in the name of the male farmer.

The decision-making mechanism will be of consensus, rather than majority of vote, as a way to guarantee every member is in agreement with the decision made. This method has been used by AFEC in their several activities, which has proven to be the best way to engage participants and prevent conflicts. Nevertheless, feedback from the members on the decision-making mechanism will be gathered during the first Project Councils.

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

During the onboarding process of the project participants, AFEC's field coordinators created WhatsApp groups with the participants, for each mandal, to communicate any project-related information, and in turn, receive questions and feedback from the participants. The same approach has been taken for the Project Council members. Therefore, with these channels in place, participants will be able to provide feedback on the project design and implementation. In addition, because the project participants are all part of AFEC's network, they are familiar on how to contact the relevant people, if necessary, and are comfortable in doing so.

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

See Table 26 in Annex 6 for the list of project council members, including the lead representative farmers and non-participant community members.

4. Describe the grievance mechanism for this project, including;
    I.) The method for communicating grievances (WhatsApp/phone, email, Facebook, meeting, letters, anonymous box etc.).
    II.) How you ensure that complaints and/or recommendations can be done at any time and can be identified or be anonymous.
    III.) The process in place to ensure grievances raised are dealt with in a transparent, fair and timely manner (e.g. chain of escalation).
    IV.) Describe how the grievance mechanism is communicated to participants.

Farmers are explained their right to raise grievances upon onboarding and signing consent forms to the Acorn project and that these can be reported and recorded by all the possible means of communication available so to not discriminate against farmers, such as WhatsApp, phone call directly to AFEC, and in person (site visits and trainings), during project council meetings etc. Anonymous grievances such as unsigned letters will be given equal consideration to non-anonymous forms. Considering the fact that some of the farmers may also be illiterate there is also opportunity to phone in for anonymous grievances. Once grievances are reported it is ideal to resolve them during a project council where AFEC and farmer representatives meet to discuss feedback and make decisions collaboratively.

As explained in question 1 above, AFEC has put in place communication channels with the project participants and Project Council members, through WhatsApp groups, which will enable participants

to communicate grievances. The farmer representatives, and therefore, the Project Council members will take the responsibility of communicating any grievance from and back to the farmer, as well as resolution disputes. Nevertheless, the grievance mechanism will be further defined during the first Project Councils and reported to Acorn through the Project Council Report (to be attached on Annex 6).

5. All project council reports that have been produced after the first year (minimum of 2) are stored by the local partner and can be requested upon validation. These reports must be completed based on the Project Council Report template provided by Acorn (including what decisions were made, how they were made, any feedback given and how it is been acted upon, grievances reported and how they are dealt with, satisfaction with grievance mechanism, proof of meeting (minutes and attendee list).

Three Project Council meetings were held between May and June (2024), where each meeting had approx. 100 participants in attendance. Refer to Annex 6 for evidence of these meetings.

6. The project council reports demonstrate participants contributing to the selection and design of activities, considering :
    - Local livelihood (customs, needs and opportunities)
    - Land availability and tenure
    - Food security
    - Inclusion of marginalized groups
    - Opportunities to enhance (agricultural) biodiversity
    - Monitoring
    - Project implementation
    - Field management
    - Payments

During the three project councils, the project's proposal was discussed; informing participants that the main requirement of participation is to transitioning their farm lands to agroforestry. Options to enable this transition were discussed. Refer to Annex 6 for evidence of the topics discussed during the Project Council meetings.

Part H: Organisational Capacity

With the baseline assessments | **Every 3 years** | **Local partner** | **Acorn**

The local partner demonstrates their capacity and experience in undertaking this agroforestry project while inclusively supporting their farmers

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

Accion Fraterna Ecology Centre (AFEC) is a trust founded by Father Vincent Ferrer, the founder of Rural Development Trust (an NGO), in the year 1982, and is and run by a board of directors. Please refer to Annex 10 for the certificate of registration.

2. Describe your in-country presence and relationship with participants and communities in the project area.

AFEC has been working on environmental development and empowering rural communities in drought prone Anantapur District since 1982. From the year 2000, AFEC is functioning autonomously under the leadership of Dr.Y.V.Malla Reddy with focus on environment development, promoting native agro-biodiversity, sustainable agriculture and drought mitigation. The personnel of AFEC have good relationships with the project participants and the communities, demonstrated by the regular engagement during community meetings (Annex 7).

3. Briefly describe how you contribute to the social and economic development of the participants and their communities.

AFEC is well known in the development sector for its participatory approach, high quality watershed development on a sizable scale and for people centric policy advocacy and lobby work. In 40 years of activity (anniversary marked in 2022), AFEC has had the following major interventions and achievements:

Sl. No	Name of the Intervention / Activity	Unit	Achievement	Families Benefitted
I.	**Watershed Development**			
1	Soil & Moisture conservation and soil fertility development	Ha.	1,40,850	60,000
2	Restoration of Old Tanks	Nos	326	2,216
3	Construction of Percolation Tanks	Nos	436	3,128
4	Construction of Check Dams	Nos	1,576	4,452
5	Construction of Farm Ponds	Nos	595	595
6	Dry land Horticulture Development.	Plants	28,00,000	16,000
7	Forest Plantations	Plants	1,81,65,888	66,014
8	Farm Forestry (Bio-mass development)	Ha	1,59,210	62,898

II.	**Sustainable Agriculture**			
9	Crop diversification (Food & Fodder crops)	Ha	12,456	31,140
10	Border Crops (Millets & Pulses)	Ha	1,27,776	73,850
11	Vermi compost units	Nos	12,121	12,121
12	Farm Bio-compost units	Nos	7,842	7,842
13	Bio-pest Management	Ha	29,020	15,623
14	Bio-gas units	Nos	3,163	3,163
15	Natural Farming practices	Ha	2562	5128
16	Kitchen Gardens	Plots	12,000	12,000
III.	**Drought Mitigation**			
17	Mobile protective irrigation (*to protect Rainfed crops*)	Ha	12,000	10,000
18	Farm Pond with Lining *(harvesting Rain water for protective irrigation*)	No	595	595
19	Row Water sowing (*timely sowing when the soil moisture is inadequate*)	Ha	1300	1,500
20	Ground Water Sharing	Ha	210	186
21	Agro-ecological Landscape development in Rainfed lands	Ha	150	87
22	Drought-climate resilient Five Layer multiple fruit tree crops	Ha	260	150
23	Drought resilient mixed food crop models (*millets, pulses and vegetables*)	Ha	12,000	10,000
24	Contingency / Relay cropping (for fodder)	Ha	20,000	15,000
IV.	**Farmer Producer Organizations**			
25	Farmer Producer Organizations promoted	No of FPOs	18	15680
26	Primary Processing Centres	No of PPCs	4	6200
27	Secondary Processing Centre	No of SPU	1	15680
V.	**Diversified Livelihoods**			
28	Non-farm IGPs taken up by Rural women	No. of Women	12,400	12,400

29	Rural Youth trained in employable skills	No. of Youth	8,500	8,500
30	No of women provided loans for taking up Business activities	No of women	4200	4200

This agroforestry-carbon project will also contribute to the social and economic development of the participants and their communities, as it will strengthen the local economy by ensuring farmers can stay on their farm and contribute to their community year round instead of migrating (partially or completely) to the city. The additional income from the CRUs, coupled with returns from agricultural produce, will lead to empowerment and economic development of the project participants. It will also lead to gender equity as the project would also focus on prioritising women farmers.

4. What is the experience of the local partner working with farmers and in the project location (organising land tenure, implementing agroforestry, providing training etc.).

Accion Fraterna Ecology Centre, under the leadership of Dr.Y.V.Malla Reddy, has made an outstanding contribution to poverty alleviation, livelihood development, reviving rainfed agriculture, ecology restoration and bio-diversity conservation in Anantapur District (see Q3). AFEC have been providing farmers with training on good agroforestry practices, increasing farmer access to seedlings, and bringing farmers together to build their capacity and ensure knowledge transfer within the community.

5. Describe how the project will securely store project information, including project designs, business case details, proof of payment, record of participants events and monitoring results.

All important information on the project including project design, business case studies, proof of payment, record of participants, events, workshop and council meeting proceedings, monitoring and other reports will be securely stored electronically in alignment with GDPR and also in paper form.

6. List relevant local, national and international policies, laws and regulations and demonstrate how the project is aligning project activities to comply.

This project is in compliance with:

- *The National Forest Policy*
  - *Project intervention aim to enhance the ecological balance in the project area by restoring degraded land and increasing and maintaining tree cover.*
- *The Wildlife Protection Act*
  - *The trees planted provides shelter and habitat for native wildlife*
- *The Environment Protection Act*
  - *Natural pest management will be promoted and the trees planted will reduce runoff from heavy rainfall, protecting important nearby water sources from pollution.*

The project is also in compliance with the Green India Mission of the Government of India to increase the forest cover. The Acorn project is also in conformity with international conventions such as UNFCCC, UNCBD, UNCCD and also with the UN Sustainable Development Goals (especially 1, 2, 11, 13, 14, 15, 17).

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

or religion, or any other discriminatory basis.

The project will ensure that no discrimination is shown on the basis of gender, age, income, ethnicity or religion, social status, color or creed by using the stakeholder analysis tool described in the Acorn framework to clearly identify those that have the potential to be discriminated against. All the barriers to the participants and disadvantaged groups will be identified through stakeholder consultations, community meetings and in project councils.

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

The project participant farmers will be selected as per the criterion set by the Acorn Framework eligibility checklist. Only the small farmers who hold less than 10 ha of land will be selected to be part of the project activity. When selecting participants, women, youth and disadvantaged groups are selected first and given priority to join the program. AFEC will ensure that all the farmers who show interest in the project and meet the mentioned criteria within the project area are onboarded for this project. If there is sufficient interest among the farmers to join the project they will be considered for scaling up as there is a sufficient demand for CRUs as informed by Acorn.

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

Accion Fraterna Ecology Centre has a transparent Gender Equality policy (see Annex 11) and would give preference to the engagement of women, unemployed youth and people of disadvantaged groups.

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

Other than participating as farmers and in the project council, women will be involved in various activities such as raising nurseries, watering the plants, imparting skill development training programs etc.

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

The Acorn project will give due emphasis to knowledge sharing. It organizes workshops, trainings and seminar to facilitate a transition of knowledge on cultural practices and agroforestry models. One of the goals of this project is to bring farmers together to ensure their traditional knowledge is not lost but instead shared. Brochures, flyers, and posters/diagrams (for the illiterate) etc. will be prepared and shared with the participants and the communities to share knowledge on agroforestry and the local impact of the project. The project council also offers an open dialogue to share knowledge and feedback on the project and the ability for lead farmers in the council to transfer the learnings from these meetings with other farmers.

Part I: Financial Feasibility

 **When defining and assessing business case**  **Annually**  **Acorn**  **Local partner**

Acorn, in consultation with the local partner, creates and reports financial business case for the agroforestry project

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

The project entails the onboarding of farmers with young existing agroforestry. AFEC has developed a Business Case (see Annex 4) in which each of the project participants are to maintain and further develop their agroforestry systems in their farms, to result in an increase in productivity, diversification of income and increase in climate resilience. The agroforestry systems adopted includes annual crops such as tomatoes and chillis, intercropped with fruit trees such as mango, sweet lime, jamon, guava, sapota and tamarind. Once the fruit trees reach an age and height where it promotes overshading of the annual crops, AFEC will promote boundary planting to further increase the biodiversity and climate resilience to high temperatures, and diversify income generation of farmers. See Part F for details on the agroforestry design.

The seedling costs and some training was provided for by the government, through governmental programs, such as the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). Additional training and seeds for border planting will be provided by AFEC. This project does not include any costs which the farmers need to undertake, as Accion Fraterna Ecology Centre emphasizes the importance of safeguarding their farmers and hence the organization will bear the costs of the farmer package. The organization received a grant from Rabobank of an amount of 25,003 EUR to account for operational costs.

Breakdown of the key findings of the business case (weighted average):

Number of beneficiaries	*7000 farmers*
Timeline	*20 years starting 2018*
Total Investment (Cost of the Project)	*3,4 million EUR*
Estimated CRU Revenue for Farmers	*4,49 million EUR*
Estimated CRU Revenue for the Local Partner	*0,82 million EUR*
Price per CRU	*20 EUR*
Minimum % CRU benefits that flow to the farmers (excluding interest rates)	*80%*
Maximum % CRU benefits withheld by Acorn (monitoring, registering and verification)	*10%*
Expected tree survival	*86%*

CRU per farmer (rounded) per year (from year 3)	*1.6 CRUs*

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

AFEC will open a bank account exclusively for the Acorn project to ensure transparency and traceability of the carbon payments. Once the CRUs are sold, AFEC, in collaboration with Acorn, will prepare an excel document with the payment information, for each farmer, including relevant taxes, and in-kind payments (the latter will be discussed in the Project Council). After this, the 80% of the carbon revenue (minus any agreed-upon deductions) will be deposited directly in their personal bank accounts (data collected during the onboarding process).

Part J: Payments and Benefit Sharing

After CRUs have been paid | **Annually** | **Local partner** | **Acorn**

The local partner provides evidence demonstrating how the farmers receive their CRU payments.

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

The 80% of the carbon revenue for farmers will be transferred directly to their bank accounts to ensure both traceability and transparency. All farmers in the project have personal bank accounts, which was collected during onboarding. The 10% of the CRU proceeds that AFEC will receive will be used to meet the project management costs, capacity building, training, documentation, knowledge sharing, etc.

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

There will be no cash payments in this project.

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

No in-kind contribution will be part of this project; farmers will receive the full 80% of CRUs revenue, and border seeds will be fully subsidized by AFEC (see Part F: Project Activities).

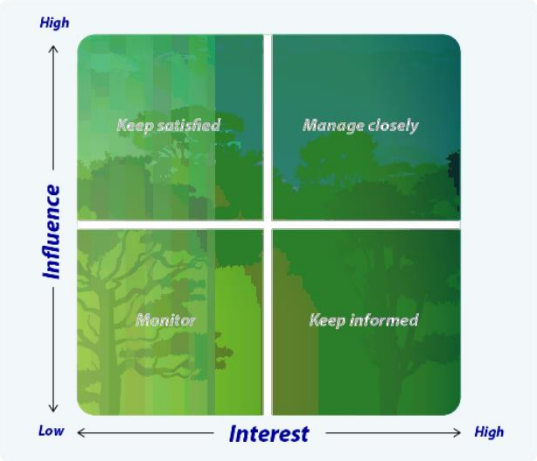
Table 13. In-kind benefits.

Benefit	Examples	Description
Inputs	• Seedling costs • Sapling costs • Fertilizer	*Not applicable*.
Education	• Training costs • Agronomist consultation costs	*Not applicable*.
Operation	• Mobile communication costs • Mobile payment costs • Fencing	*Not applicable*.
Livelihood	• Land tenure consultation costs	*Not applicable*.

Part K: Stakeholder Analysis

With the baseline assessments | **Once at the start** | **Local partner** | **Acorn**

GOAL!! **The local partner, in consultation with Acorn, maps out the stakeholders with high interest/influence in the project and those that need to be informed of project intervention**



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

Table 14. Stakeholder analysis.

Stakeholder	Interest	Influence	Justification	Outcome	Informed
Participants/ Farmers	High	High	Project participants have been engaged during community meetings and site visits. During the onboarding process, farmers were first engaged and placed in a WhatsApp group with the Field Coordinators for continuous communication. See Part G and Annex 7.	Manage closely	Yes
Local communities	High	High	Local communities have been engaged during project design in community meetings and provided input on the selection of species for the agroforestry design. See Annex 7.	Manage closely	Yes
National Government	High	High	AFEC is committed to engage with the national government, through	Manage closely	Yes

			the local level, to inform about the project taking place in the scope of the volunteering carbon market, and Acorn will provide support on this, before CRU generation. AFEC is interacting with the state level of Andhra Pradesh for a letter of no objection. The Chief Conservator of Forests has also visited Acorn farms in August 2024.		
Local government	High	High	The local government, the District Administration, is aware of the project and AFEC has collaborated with them in linking farmers to subsidies. Many participants have received seedlings from government schemes, and AFEC will continue to link farmers, such as to the nurseries of the Forest Department of Anantapur. AFEC is in contact with the District Collector (CTO), head of the district government, and at the lower levels, AFEC meets with local elected bodies on the panchayat, and mandal levels.	Manage closely	Yes
Donors	High	High	The project has received a grant of 25,003 EUR from Rabobank Foundation provided to Accion Fraterna Ecology Centre in order to account for the Local Partner costs.	Manage closely	Yes
Technical/ agronomical partners	High	High	This project is led by AFEC's program coordinator, with a background in Agroecology, who provides agricultural technical assistance. Acorn's Agroforestry Hub is supporting the project's agroforestry implementation development and AFEC aims to hire an agroforestry expert in October of 2024.	Manage closely	Yes
Procurement services	High	Low	The necessary planting material will be sourced from AFEC's nurseries, governmental schemes from the Forest Department of	Keep satisfied	Yes

			Anantapur, and from the Agriculture and Horticulture Departments Commercial nurseries can also be included if the project is not able to procure sufficient seedlings from the mentioned sources. These are farther away (500 km), and include Shri Shiridisai.		
Local authorities	High	Low	Project activities must abide by local laws and regulations, demonstrated in Part H – question 5.	Keep informed	Yes

2. Please 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 the table below.

Table 15. Local stakeholder group identification; results from farmer survey.

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

Part L: Reversal Risk Assessment

 **With the baseline assessments**

 **Every 5 years**

 **Acorn**

 **Local partner**

Acorn, in consultation with the local partner, assesses the risk of project reversal against potential drivers to identify mitigation/monitoring actions for high risks

Project phase	Drivers behind reversal risk	Risk level	Potential mitigating measures	Justification
Project adoption/start	Limited education or inadequate understanding of agroforestry	Low	• Build on local culture, traditions and markets[9] • Ensure accessible training • Secure agronomist assistance	Training will be organised in a decentralised manner to cover between 40-50 farmers in the villages' community centres in such a way that all participating farmers (regardless of gender, illiteracy, status, distance) will be able to access and benefit from the programme. The training programmes will invariably be built on local culture and traditions respecting their sentiments and beliefs with inputs from the meetings conducted through Participatory Rural Appraisal and community and farmers during project design (See Annex 7). The project's project manager is an agroecologist that assists in the technical aspects of the project, including the agroforestry design and training to the farmers.
	Marginal community support or low community involvement	Low	• Explore farmer needs • Promote program • Demonstrate positive	During the project design, farmers and the community were involved through community meetings, per village, to discuss the project's opportunity, to identify interest, needs and

			impact on social and economic well-being	preferences in the choice of species. furthermore, the ongoing requirements of the farmers/community and the impact of project intervention (both positive and negative) will be identified through regular project council meetings and a grievances redressal mechanism has been put in place, and integrated into the implementation of the project.
	Inadequate operational capacity (limited experience, no local presence)	Low	• Use the train-the-trainer principle	The project targets an existing network of farmers under AFEC, which means farmers have a standing relationship and trust on the organization. AFEC has offices in various mandals, which facilitates the participants proximity to the organization. Training will be done in groups of 40 to 50 farmers, and will take place in the village's community centres to facilitate the participant's access. Training will be provided, through the training of trainers model, by first training the field coordinators who then will train the participants. In addition, AFEC has several training material in the form of pamphlets with pictures and text, suitable for the participants understanding.
	Insufficient (local) nurseries	Low	• Make upfront arrangements • Negotiate purchasing power	The existing trees have been financed by a combination of government programs, such as the Department of Rural Development and the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

				scheme, and by the farmers themselves. Under the Acorn-AFEC project, new trees will be planted through seeds, which are provided by the local partner at no cost to the participants, and through seedlings sourced fromi) AFEC's nurseries which has been successfully providing planting materials for the past 30 years, ii) through the Forest Department of Anantapur, and iii) from the Agriculture and Horticulture Departments. Commercial nurseries can also be included if the project is not able to procure sufficient seedlings from the mentioned sources. These are farther away (500 km), and include Shri Shiridisai.
	Animal or human interference	Medium	• Erect fencing (natural, etc.) • Help mediate disagreements between perceived land boundaries	The risk of tree/crop loss due to human interference is very low in the project area. As for animals, the risk is medium, as animals like deer and wild boars present threats to the crops. The land owners keep a close watch of their lands until sunset and ensure that their crops/ trees are not damaged by animals, and few participants have fences in place. It is not expected that animal interference will affect the agroforestry trees planted as participants are experienced in protecting their lands from animals.

Project progress	Negative project cash flow	Medium	• Ensure adequate financial planning • Ensure local financing for unforeseen events	AFEC has received a grant from Rabobank to meet its necessary financial resources for the project implementation. The organisation doesn't have a financial buffer in place and will have to allocate financial resources from other sources within the organization, if needed.
	Poor agroforestry schemes	Low	• Encourage species and genetic diversity • Secure agronomist assistance	The existing agroforestry system would become a monoculture of fruit trees on the long-term. With the project intervention, AFEC conducted several village meetings with the communities in the project area to understand what species farmers would want to plant and keep; species that have economic value and environmental benefits. From this, AFEC gathered a list of species and began distributing seeds to the participants, with training pamphlets, to plant, each, 4-5 species, therefore promoting a significant improvement in species and genetic diversity. The project's agroforestry design is supported by the project coordinator who has a background in agroecology, ensuring that the design promotes diversity and all the additional benefits.
	Change of land ownership and coverage	Low	• Involve one entity to manage/track rights status	The project participants all have formal land tenure in the form of Pattadaar Pass Books. Change in land ownership will be

				monitored by the field coordinators who can accompany this topic through their communication channels with the project participants (see Part G: Project Council). In addition, the regular project councils will provide an opportunity for the local partner to monitor the changes in land ownership during the project period. The existent legal process to change land ownership documentation is extensive. Therefore, in case of change is ownership, and possibly size (i.e., land is inherited by more than one son who wish to split the land into two), a discussion will first take place to understand if splitting land and CRU is applicable. If so, the project will perform a land mapping exercise with a signed consent on the decision by the participating farmers.
	Political instability (e.g. war, economic crisis)	Low	• Keep up-to-date on local and national political conditions	AFEC will remain up-to-date on these conditions, as the government & various national and international organisations. AFEC will monitor the international, national and local conditions regularly and will bring it to the notice of the stakeholders, as appropriate.
	Natural risks: - Fires - Pests & disease	High	• Perform historical risk analysis and apply applicable	Disaster management cells are located in all the districts and they also provide training on containing natural risks.

	- Extreme weathers - Other events		preventive measures • Training in effectively containing natural risks	Forest fires are uncommon in plantations themselves, they mostly occur in forests which is not part of the project area surroundings. Nevertheless, farmers mitigate the risk of fires through clearing dry leaves. As for pests and diseases, AFEC provides training on making biopesticides, and the agroforestry system proposed is expected to increase the lands resilience to pests, diseases and other extreme weather events. Because the project area is characterized by aridness and drought-proneness, farmers' lands and productivity are greatly affected. To mitigate this, AFEC provides pamphlets during border seed distribution with instructions on planting activities (i.e., after the first heavy showers to increase survival rate). The proposed agroforestry design acts as a drought-mitigation strategy as it includes only drought-resistant species, an intends to increase the farm's biodiversity while reducing the need for water intake (mature border trees require less water intake than annual crops) and maintaining the economic return through the choice of border species and carbon revenue.
Project maturity	Logging risk	Low	• Ensure alternative fuel for wood	The project area has access to natural gas, and in some cases, biogas. Therefore,

			• Ensure food productivity of trees	the use of wood for fuel is not common and doesn't pose a risk to the project. In addition, the agroforestry design proposed includes highly valuable timber species that will be harvested and sold for timber instead of used for fuel wood. Pruning materials will be incentivized by the Local Partner to be used as mulching and fodder for livestock.
	Waning or short-lived local partner commitment	Low	• Facilitate continuous dialogue and evaluation • Sign commitment agreements	The Local Partner has been active in the region since 1982, through several interventions and benefiting thousands of people (see Part H: Organizational capacity). Agreements are signed as part of this project with Acorn, the local partner and the farmer, demonstrating their commitment to the longevity of this project. The ACORN supply team will keep communication open with the local partner and evaluate their commitment to the project.

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

Table 16. Mitigation and monitoring plan for high project risks.

Classification	Risk	Mitigation action	Monitoring Frequency	Responsible party
Natural risks	Water scarcity – the project area is characterized by aridness	The project promotes an agroforestry design with drought-tolerant	AFEC will monitor the impacts of project intervention on water resources	AFEC

	and drought-proneness.	species (i.e., teak, red sanders, sandalwood, arjuna, Malabar neem, and mahogany). Technical input will be provided, in the form of leaflets, to the participants to optimize their seedling plantation in the water scarce context. AFEC is and will continue to link farmers to governmental schemes that can alleviate the water shortage in the region.	through the regular field visits from the supervisors to the farmers, and during the biannual Project Council meetings.	

Part M: Monitoring

1. Indicators

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

Table 17. Indicator monitoring objectives.

Livelihood / environmental indicator	Impact description	Mitigation action (if negative impact expected)	Monitoring frequency and method	Responsible party
Nutritional Variety	Increased agricultural produce will lead to increased nutritional intake. The implementation of more sustainable agricultural practices, such as applying biofertilizers and biopesticides, in addition to increased shade, is expected to increase the cash crops' productivity. Through meetings, ecology days, village campaigns and pamphlets and newsletters shared with farmers, AFEC aims at sensitizing the participants on good agricultural practices. In the future, AFEC will also promote border crops and/or biofencing which can contribute to a higher variety of dietary products.	No mitigation measures are identified for each indicator because all are expected to improve instead of declining.	These indicators will be measured annually through site visits and project council meetings. The farmer surveys, carried out every three years, will serve as monitoring data for AFEC. To reduce the risk of biodiversity and productivity loss, AFEC will promote the plantation of border crops and biofencing by training on agroforestry and subsidizing part of the seedlings' costs. In addition, at the project's onboarding, the organization collects information on the existing agroforestry systems and	A.F. Ecology Centre
Agricultural biodiversity	A significant increase in biodiversity is not expected, although a halt in biodiversity loss is expected. The trees could offer shade for native flora to grow and native fauna to seek refuge from the harsh climate. The trees may act as a barrier to prevent run-off during heavy rainfall and loss of top soil during heavy wind			

	thereby maintain soil health and biodiversity. In addition, future interventions (border planting and biofencing) will allow for biodiversity to be maintained long-term.		farmers' preferences for planting and species for the future.	
Farmer financial state	Improvement in financial status will occur through additional income from CRUs and marketable products from the trees and annual crops. There should be no long-term negative impact as the costs of planting materials and resources to maintain/optimize the existing agroforestry systems are outweighed by the income from carbon that farmers will receive over the life of the project.			
Agricultural land use and productivity	Land use practices are expected to improve, as AFEC will promote training on appropriate cultivation practices, such as pruning, but also on biofertilizer and biopesticide preparation. In addition, the organisation will also promote knowledge on agroforestry so that farmers plant more species on the long-term to substitute crops that no longer grow under the shade of the mature trees. Therefore, productivity is expected to increase and stabilize.			

2. Grievances

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

Table 18. Monitoring of grievances reported.

Grievance reported	Action taken	Responsible party
None reported to date	n/a	n/a

3. Risks

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

Table 19. Monitoring of identified risks.

Risk	Mitigation action	Monitoring (frequency and method)	Responsible party
Natural risks – water scarcity	The project promotes an agroforestry design with drought-tolerant species (i.e., teak, red sanders, sandalwood, arjuna, Malabar neem, and mahogany). Technical input will be provided, in the form of leaflets, to the participants to optimize their seedling plantation in the water scarce context. AFEC is and will continue to link farmers to governmental schemes that can alleviate the water shortage in the region	AFEC will monitor the impacts of project intervention on water resources through the regular field visits from the supervisors to the farmers, and during the biannual Project Council meetings.	AFEC

4. Leakage

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

Table 20. Monitoring of leakage.

Source of leakage	Mitigation action	Monitoring Frequency	Responsible party
No significant sources	n/a	n/a	n/a

Part N: Technical Specifications

1. Applicability Conditions

 **After the baseline assessments**  **Once at the start**  **Acorn**  **Local partner**

Acorn completes the applicability conditions checklist to ensure basic conditions of the methodology are in place.

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

Table 21.Applicability conditions of the Acorn Methodology.

	Applicability Condition	Met	Reasoning
A	The Project Interventions meet the Agroforestry definition (see Section 3 of Acorn methodology v1.0) and any trees planted are Native or Naturalized species.	Yes	Confirmed by local partner and explained in Part F – project activities.
B	The Project Area must not have been cleared of native vegetation within 5 years of the start of the Project Intervention.	Yes	Initially, a verbal check was performed with the local partner who confirmed this and t-5 checks from remote sensing measurements confirmed it as well
C	Individual plots within the Project Area are between 0.1 and 10 ha and are not on wetlands.	Yes	Confirmed through polygon checks
D	All land within the Project Area is either cropland or degraded land under the Baseline Scenario	Yes	Initial verbal explanation by local partner and land cover check performed and confirmed by Acorn
E	The project interventions must not include activities that increase the total number, weight or number of grazing days for any livestock type, relative to the baseline scenario.	Yes	Explained to participants and to be confirmed by sample-based agricultural biodiversity check over the coming years
F	The project intervention must not include the planned harvesting of planted trees during or after the crediting period.	Yes	Covered in local partner contract
G	Heavy machinery must not be used for site preparation or management.	Yes	Not applicable for these smallholder farmers and covered in the local partner contract

H	The project intervention must not increase the use of synthetic (nitrogen-containing) fertilizers relative to the baseline scenario.	Yes	Covered in local partner contract
I	Soil disturbance attributable to the project intervention must not occur on more than10% of a plot that is under any of the following types of land: - Land containing organic soils; - Land which, in the baseline, is subjected to land-use and management practices and receives inputs listed in Annex 4 of Acorn Methodology	Yes	The SoilGrid confirmed that project is not on high organic soils, with thickness results of > 200 cm, SOC content is less than 20%, namely 1,6%, and limited clay 39%.

2. Adjustment Factors

After polygons processed | **Every 3 years** | **Acorn**

Acorn determines the adjustment factors for pre-project trees, leakage and uncertainty to ensure adequate and valid generated CRUs and informs local partner

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

Table 22. Adjustment factors.

AdjF	Factor (%)	Reasoning
Leakage	0%	See the analysis and land cover assessment results below.
Uncertainty	0%	An uncertainty value of 5.2% leads to zero adjustment.
Pre-project	25%	Calculations can be found in AdjFs_AFEC_India

Leakage Assessment

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

The main cash crops for farmers in the project area are groundnut, maize, bananas and sweet lime (see Part D – question 4). The sweet lime trees, in addition to mango and tamarind have been planted between 2018 and 2021, which means that although sweet lime is productive, most of these cash crops are still young and haven't reached their full maturity (height and productivity). Therefore, some farmers (approx. 70%) have also planted annual crops in the rows between the fruit trees, to increase the farm productivity and revenue. However, as the trees grow, the space between them without shade reduces, thus limiting the annual crops' productivity up to a point where the annual crops become overshaded and unproductive. However, the maturity of the cash crop trees planted in

addition to the border planting results in no overall productivity loss. This is something known and expected by the farmers before the project intervention. Through this project, AFEC wants to help farmers further improve their agroforestry design, so that it is a long-lived system in place, bringing several livelihood and environmental benefits to the participants. The proposed agroforestry approach is by introducing border planting with species with economic value, such as timber and medicinal species. Therefore, the expectation with project intervention is that the overall productivity of the farms will increase.

The possibility of deforestation inside or outside the project area is very low due to the extra income farmers will receive from tree-based products and carbon finance, and due to the awareness training conducted by AFEC. Logging for firewood is not common as the area has availability of natural gas, and in some cases, biogas. Logging for timber is also not as common as the region is characterized by crop land and degraded land. The project could in the future be affected by decreased productivity due to natural disasters, but the frequency of such destructive disasters is low in the area.

Table 23. Cash crop productivity and land assessment.

Estimated reduction in project productivity (%)	Cash crop(s) contributing most to project productivity	Proportion of project land used to grow cash crop (%)	Type of land production will be shifted to
0	Sweet lime, groundnut, maize, banana	43.9%	Crop land

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

The land between farms, and a maximum of 5 km outside the project area is dominated by crop land and degraded land. There is very few discontinued patches of forest land in the areas surrounding the project intervention.

Shrub land	Grass land	Crop land	Built-up	Bare/Sparse vegetation	Permanent water bodies	Herbaceous wetland	Tree cover <60%	Tree cover >60%
21.120	1.829	71.616	1.046	0.408	0.000	0.754	0.001	0.000

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

Table 24. List of displaced farmer activities.

Displaced farmer activity	Area activity displaced to
Not applicable	Not applicable

3. Root-Shoot

With the adjustment factors

Once at the start

Acorn

Acorn determine the ratio of below-ground biomass to above-ground biomass and informs local partner

Table 25. Root-shoot ration results.

Ratio	Reasoning
0.32	Default value.

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

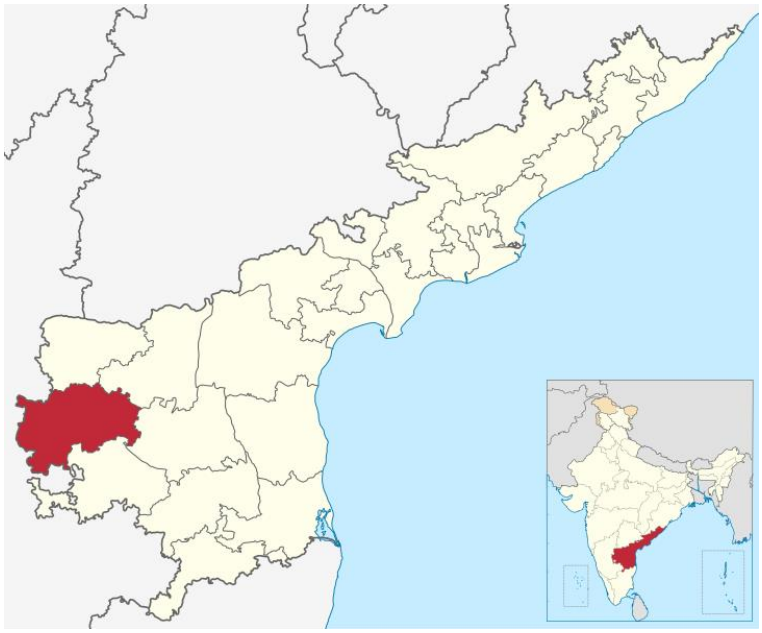


Figure 2. The red boundary on the lower right map represents the state of Andhra Pradesh, and on the left map, it represents the Anantapur district.

Project-target mandals:

1. Ananthappuram Mandals:
    a. Rapthadu
    b. Atmakur
    c. Kudereu
    d. Kalyanadurgam
    e. Belaguppa
    f. Brahmasamudram
    g. Settur
    h. Kundurpi
    i. Kambadur
2. Sri Satya Sai district Mandal:
    a. Dharmavaram
    b. Madakasira
    c. Rolla
    d. Agali
    e. Gudibanda
    f. Amarapuram

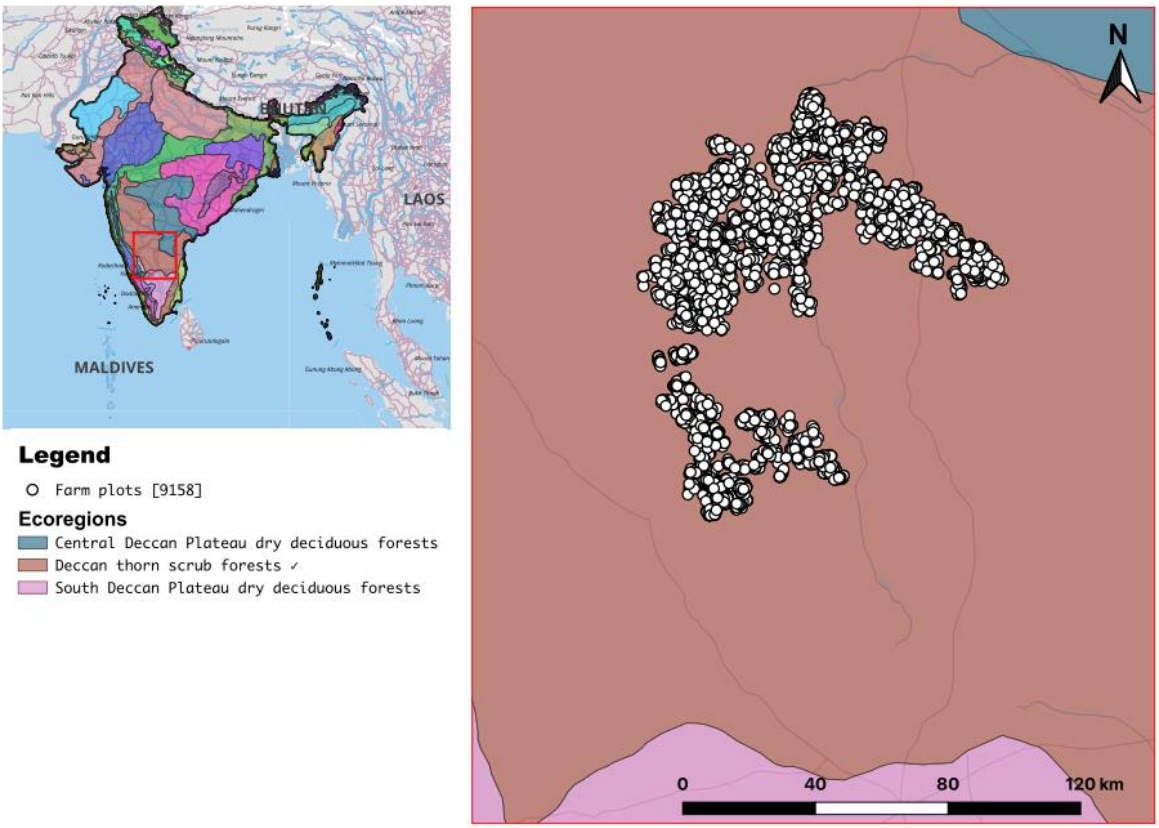
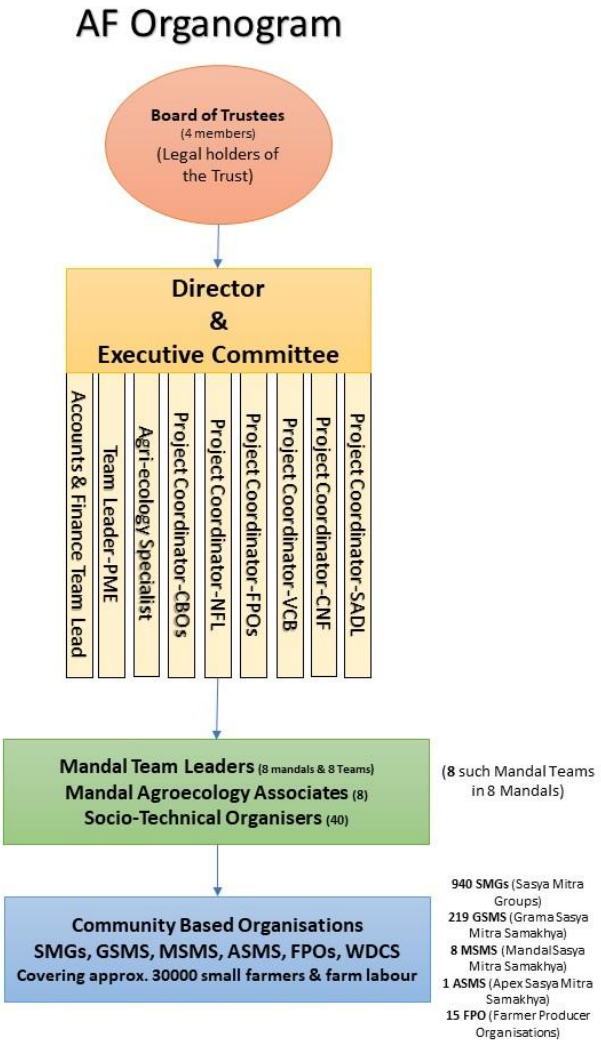


Figure 3. Map of the project area demonstrating the ecoregion and farmer plots.

Annex 2: Land Tenure Documentation (sample-based)

Provided. Concealed for data protection purposes.

Annex 3: Organisation structure



Annex 4: Local partner and farmer business case

Provided. Concealed for data protection purposes.

Annex 5: Communication with the government

Provided. Concealed for data protection purposes.

Annex 6: Project Council Reports

Provided. Concealed for data protection purposes.

Table 26. Project Council members list.

Project Council Member	Gender	Mandal	Village
Farmer 1	M	Agali	Ragelinganahalli
Farmer 2	M	Agali	Dokkalapalli
Farmer 3	M	Agali	Bommarasanapalli
Farmer 4	M	Agali	Hanumanahalli
Farmer 5	M	Agali	Mukkdampalli
Community member 1	F	Agali	Hallikera
Farmer 6	M	Agali	Madhudi
Farmer 7	M	Agali	Agali
Farmer 8	M	Agali	Lakshmipuram
Farmer 9	M	Agali	Birlapalli
Farmer 10	M	Rolla	Kaki
Farmer 11	M	Rolla	Tirumaladevarapalli
Farmer 12	M	Rolla	Kothapalyam
Farmer 13	M	Rolla	Rathnagiri
Farmer 14	M	Rolla	R Vadrahatti
Farmer 15	M	Rolla	Giddabommanahalli
Farmer 16	M	Rolla	Bandrepally
Farmer 17	M	Rolla	K P Thanda
Farmer 18	M	Rolla	Vannarnapalli
Farmer 19	M	Rolla	G N Palyam
Farmer 20	M	Rolla	Hulikunta
Farmer 21	M	Rolla	Gottu Guriki Gollahatti
Farmer 22	M	Rolla	Agraharam
Farmer 23	M	Rolla	Dodderi
Farmer 24	M	Rolla	Hottebetta
Farmer 25	M	Rolla	Ranganapalli
Farmer 26	M	Rolla	P. Gollahatti
Farmer 27	M	Rolla	Dasappapalyam
Farmer 28	M	Rolla	Gottuguriki
Farmer 29	M	Rolla	H T Vadrahatti
Farmer 30	M	Rolla	H.T Halli
Farmer 31	M	Rolla	Cherlopalli
Farmer 32	M	Rolla	Kalvepalli

Farmer 33	M	Rolla	Kalluroppam
Farmer 34	M	Amarapuram	Kachikunka
Farmer 35	M	Amarapuram	Gunehalli
Farmer 36	M	Amarapuram	Hemavathi
Farmer 37	M	Amarapuram	Huduguru
Farmer 38	M	Amarapuram	K Gollahatti
Farmer 39	M	Amarapuram	Hanumanthunapalli
Farmer 40	M	Amarapuram	Basavanapalli
Farmer 41	M	Amarapuram	Arohanahalli
Farmer 42	M	Amarapuram	Kanakanapalli
Farmer 43	M	Amarapuram	Chitnaduku
Farmer 44	M	Amarapuram	Halukuru
Farmer 45	M	Amarapuram	Kadathadahalli
Farmer 46	M	Amarapuram	Thambalahati
Farmer 47	M	Amarapuram	Nagavanahalli
Farmer 48	M	Amarapuram	Thammidepalli
Community member 2	F	Amarapuram	Valasa
Farmer 49	M	Amarapuram	Sunnakalahatti
Farmer 50	M	Amarapuram	Aladapalli
Farmer 51	M	Amarapuram	Gollarahati
Farmer 52	M	Amarapuram	Devaganipalli
Farmer 53	M	Amarapuram	Kenkera
Farmer 54	M	Amarapuram	Agraharam
Farmer 55	M	Amarapuram	Nidragatta
Farmer 56	M	Madakasira	Madakasira
Farmer 57	M	Madakasira	B Rayapuram
Farmer 58	M	Madakasira	Uppidipalli
Farmer 59	M	Madakasira	Kothulagutta
Farmer 60	M	Madakasira	Kallumarri
Farmer 61	M	Madakasira	Bullasamudram
Farmer 62	M	Madakasira	Thurukavandlapalli
Community member 3	F	Madakasira	Jekkepalli
Farmer 63	M	Madakasira	Rekulakunta
Farmer 64	M	Madakasira	Peddapalli
Farmer 65	M	Madakasira	Amidalagondi
Farmer 66	M	Madakasira	T D Palli
Farmer 67	M	Madakasira	Melavoi
Farmer 68	M	Madakasira	Singepalli
Farmer 69	M	Madakasira	A R Roppm
Farmer 70	M	Madakasira	C. Rangapuram
Farmer 71	M	Madakasira	Ugrepalli
Farmer 72	M	Madakasira	Kadirepalli
Farmer 73	M	Madakasira	Gurrapukonda Thanda

Farmer 74	M	Madakasira	Chipuleti
Farmer 75	M	Madakasira	Gangalavaipalyam
Farmer 76	M	Madakasira	Yelloti
Farmer 77	M	Madakasira	R. Ananthapuram
Farmer 78	M	Madakasira	Kethepalli
Farmer 79	M	Madakasira	C.Kodigepalli
Farmer 80	M	Madakasira	Agrampalli
Farmer 81	M	Madakasira	Haresamudram
Farmer 82	M	Madakasira	Kampuram
Farmer 83	M	Madakasira	Upparlapalli
Farmer 84	M	Madakasira	Gurrapukonda Thanda
Farmer 85	M	Madakasira	Gowdanahalli
Farmer 86	M	Madakasira	Echaleddi
Farmer 87	M	Madakasira	Neelakantapuram
Farmer 88	M	Madakasira	Govindapuram
Farmer 89	M	Madakasira	Chathram
Farmer 90	M	Madakasira	Nallayanpalli
Farmer 91	M	Madakasira	Pattikunta
Community member 4	F	Madakasira	Thadakalapalli
Farmer 92	M	Madakasira	Y B Halli
Farmer 93	M	Gudibanda	Gune Morubagal
Farmer 94	M	Gudibanda	Jambulabanda
Farmer 95	M	Gudibanda	Shankaragallu
Farmer 96	M	Gudibanda	Thimmulapuram
Farmer 97	M	Gudibanda	Ballekatta
Farmer 98	M	Gudibanda	Kurubarapalli
Farmer 99	M	Gudibanda	Bt Palli
Farmer 100	M	Gudibanda	Morubagal
Farmer 101	M	Gudibanda	Maddanakunta
Farmer 102	M	Gudibanda	Muthukur
Farmer 103	M	Gudibanda	Kekathi
Farmer 104	M	Gudibanda	Kk Palyam
Farmer 105	M	Gudibanda	Gudibanda
Community member 5	F	Gudibanda	Rallapalli
Farmer 106	M	Gudibanda	Mynaganipalli
Farmer 107	M	Gudibanda	Kalluroppam
Farmer 108	M	Gudibanda	Itikepalli
Farmer 109	M	Gudibanda	Veerajanapalli
Farmer 110	M	Gudibanda	Mandalapalli
Community member 6	F	Kudair	Antharaganga
Community member 7	F	Kudair	Ramachandrapuram
Community member 8	F	Kudair	Brahmanapalli
Community member 9	F	Kudair	Gotkuru

Community member 10	F	Kudair	Korrakodu
Community member 11	F	Kudair	Jallipalli
Farmer 111	M	Kudair	Shivarampeta
Farmer 112	M	Kudair	Udiripikonda
Farmer 113	M	Kudair	Mm. Halli
Farmer 114	M	Kudair	Kadadharakunta
Farmer 115	M	Kudair	Karutlapalli
Farmer 116	M	Kudair	P. Narayanapuram
Farmer 117	M	Kudair	Muddalapuram
Farmer 118	M	Kudair	Kammuru.
Farmer 119	M	Kudair	Udiripikonda Thanda
Farmer 120	M	Kudair	Mh St Colony
Farmer 121	M	Kudair	Korrakodu Dyam
Farmer 122	M	Atamakur	Pampanur Thanda
Farmer 123	M	Atamakur	Pampanur
Farmer 124	M	Atamakur	Bhramana Yaleru
Community member 12	F	Atmakur	Rangampeta
Farmer 125	M	Atamakur	Thopudurthy
Community member 13	F	Atmakur	Madigubba
Community member 14	F	Atamakur	Goridindla
Community member 15	F	Atmakur	Papampalli
Community member 16	F	Atmakur	Vaddipalli
Community member 17	F	Atmakur	Vepcherla
Farmer 126	M	Atamakur	Talupur
Farmer 127	M	Atamakur	Singam Palli
Farmer 128	M	Atamakur	Kurlapalli
Farmer 129	M	Atamakur	Atmakur
Farmer 130	M	Atamakur	Singampalli Thanda
Community member 18	F	Brahmasamudram	Bommagamipalli & Thanda (Bsm)
Farmer 131	M	Brahmasamudram	Najjapuram, Brahasamudram, & Bairasamudram
Community member 19	F	Brahmasamudram	Mamudur, Yerrakondapuram, & S Kondapuram
Community member 20	F	Brahmasamudram	Gonchireddypalli
Community member 21	F	Brahmasamudram	Sugepalli
Farmer 132	M	Brahmasamudram	Pillapalli
Farmer 133	M	Brahmasamudram	S.Konapuram
Farmer 134	M	Brahmasamudram	Theetakalu
Farmer 135	M	Brahmasamudram	Eradikera
Farmer 136	M	Brahmasamudram	Palavenkatapuram
Farmer 137	M	Brahmasamudram	Muppalakuntta
Farmer 138	M	Brahmasamudram	Yanakalu & T Rudrampalli
Farmer 139	M	Brahmasamudram	Rayalappadoddi

Community member 22	F	Brahmasamudram	Kannepalli & Muddalapuram
Farmer 140	M	Settur	Idukal
Community member 23	F	Settur	Chinnampalli
Community member 24	F	Settur	Khairevu
Farmer 141	M	Settur	Karidipalli
Farmer 142	M	Settur	Chintarlapalli
Farmer 143	M	Settur	
Community member 25	F	Settur	Makodiki
Farmer 144	M	Settur	Lingadeerlapalli
Community member 26	F	Settur	Kannukur & Malletipram
Community member 27	F	Setttur	
Farmer 145	M	Setttur	Settur
Farmer 146	M	Setttur	Cherlopalli
Farmer 147	M	Setttur	Anumpalli
Farmer 148	M	Setttur	
Farmer 149	M	Setttur	Perugupalyam
Farmer 150	M	Setttur	Mucharlapalli
Farmer 151	M	Setttur	Mulakaledu
Farmer 152	M	Setttur	Bochupalli
Farmer 153	M	Setttur	Yatakalu
Farmer 154	M	Setttur	Ayyagralpalli
Farmer 155	M	Setttur	Yerraborepalli & Lakshmpalli
Farmer 156	M	Setttur	Basampalli
Community member 28	F	Setttur	Balapampalli
Farmer 157	M	Kambadur	Nuthimadugu
Farmer 158	M	Kambadur	Thippepalli
Farmer 159	M	Kambadur	P.Venkatam Palli
Farmer 160	M	Kambadur	Palluru
Farmer 161	M	Kambadur	Kothamiddela
Farmer 162	M	Kambadur	Devendrapuram
Farmer 163	M	Kambadur	Yerramallepalli
Farmer 164	M	Kambadur	Dc Palli
Farmer 165	M	Kambadur	Gulyam
Farmer 166	M	Kambadur	Thimmapuram
Farmer 167	M	Kambadur	Ralla Anantapuram
Farmer 168	M	Kambadur	Melakunta
Community member 29	F	Kambadur	Manda
Community member 30	F	Kambadur	Kurla Palli
Farmer 169	M	Kambadur	Jakkireddy Palli
Farmer 170	M	Kambadur	Kurakula Palli
Community member 31	F	Kambadur	Iparshapalli
Farmer 171	M	Kambadur	Guddella
Farmer 172	M	Kambadur	Chennampalli

Community member 32	F	Kambadur	Ayyampalli
Farmer 173	M	Kambadur	Andepalli
Farmer 174	M	Kambadur	Achampalli
Farmer 175	M	Kambadur	Karthanaparthi
Farmer 176	M	Kundripi	Kundurpi
Farmer 177	M	Kundripi	Venkatampalli
Farmer 178	M	Kundripi	Jambagumpala
Farmer 179	M	Kundripi	Malayanur
Community member 33	F	Kundripi	Thenegallu
Community member 34	F	Kundripi	Bestarpalli
Farmer 180	M	Kundripi	Appelepalli
Farmer 181	M	Kundripi	Nijavalli
Farmer 182	M	Kundripi	Kariganpalli
Farmer 183	M	Kundripi	Bandameedapalli
Farmer 184	M	Kundripi	Tumukunta
Community member 35	F	Kundripi	Mandalapalli
Farmer 185	M	Kundripi	Mahantapuram
Farmer 186	M	Kundripi	Guruvepalli
Farmer 187	M	Kundripi	Yenumuladoddi
Farmer 188	M	Kundripi	Rudrampalli
Farmer 189	M	Rapathadu	Bandamedapalli
Community member 36	F	Rapathadu	Gangalakunta
Farmer 190	M	Rapathadu	Gollapalli
Farmer 191	M	Rapathadu	Ramineypalli
Farmer 192	M	Rapathadu	Ayyavarapalli
Farmer 193	M	Rapathadu	
Farmer 194	M	Rapathadu	Chapatla
Community member 37	F	Rapathadu	Hampapuram
Farmer 195	M	Rapathadu	M.Cherlopalli
Farmer 196	M	Rapathadu	Bukkacherla
Farmer 197	M	Rapathadu	Palacharla
Farmer 198	M	Rapathadu	Bhoginepalli
Community member 38	F	Rapathadu	Kothappali
Farmer 199	M	Rapathadu	M.Krishnapuram
Farmer 200	M	Rapathadu	Varimadugu
Farmer 201	M	Rapathadu	Gondireddypalli
Farmer 202	M	Rapathadu	Pullarevu
Community member 39	F	Rapathadu	Gandlaparthi
Farmer 203	M	Rapathadu	Bommeparthi
Farmer 204	M	Rapathadu	Rapthadu
Farmer 205	M	Rapathadu	Linganapalli
Community member 40	F	Rapthadu	Yaragunta
Farmer 206	M	Rapthadu	Jangalapalli

Farmer 207	M	Rapthadu	Marur
Farmer 208	M	Dharmavaram	Gotluru
Farmer 209	M	Dharmavaram	Nagaluru
Farmer 210	M	Dharmavaram	Malkapuram
Community member 41	F	Dharmavaram	Uppenysinapalli
Farmer 211	M	Dharmavaram	R Yerraguntapalli
Farmer 212	M	Dharmavaram	Chigicherla
Farmer 213	M	Dharmavaram	Malagundlapalli
Farmer 214	M	Dharmavaram	Kunuthuru
Farmer 215	M	Dharmavaram	Kattakindapalli
Farmer 216	M	Dharmavaram	Nadimigaddapalli
Farmer 217	M	Dharmavaram	Kamireddupalli
Community member 42	F	Dharmavaram	Venkatathimmapuram
Farmer 218	M	Dharmavaram	R Ygp Thanda
Farmer 219	M	Dharmavaram	Tummala
Farmer 220	M	Dharmavaram	Nimmalakunta
Farmer 221	M	Dharmavaram	Pothulanage Palli
Farmer 222	M	Dharmavaram	Mallenipalli
Farmer 223	M	Dharmavaram	Chinnuru Battalapalli
Farmer 224	M	Dharmavaram	C C Kothakota
Farmer 225	M	Dharmavaram	Obulanayunipalli
Farmer 226	M	Dharmavaram	Vasanthapuram&chintalapalli
Farmer 227	M	Beluguppa	Kaluvapalli
Community member 43	F	Beluguppa	Konampalli
Community member 44	F	Beluguppa	V.a. Kottala
Community member 45	F	Beluguppa	Jiddipalli
Community member 46	F	Beluguppa	Jiddipalli
Community member 47	F	Beluguppa	Gangavaram
Community member 48	F	Beluguppa	Duddekunta
Community member 49	F	Beluguppa	Ankampalli
Farmer 228	M	Beluguppa	Ramasagaram
Farmer 229	M	Beluguppa	
Farmer 230	M	Beluguppa	Seerpi
Community member 50	F	Beluguppa	Venkataadripalli
Farmer 231	M	Beluguppa	Avulanna
Community member 51	F	Beluguppa	Virupapalli
Community member 52	F	Beluguppa	Yerragudi
Community member 53	F	Beluguppa	Beluguppa
Community member 54	F	Beluguppa	Nakkalpalli
Farmer 232	M	Beluguppa	
Community member 55	F	Beluguppa	Dodagatta
Community member 56	F	Beluguppa	
Farmer 233	M	Beluguppa	Konapuram

Farmer 234	M	Beluguppa	Yalagalavanka
Farmer 235	M	Beluguppa	Narsapuram
Farmer 236	M	Kalyanadurgam	Thimaganpalli
Farmer 237	M	Kalyanadurgam	Thimaganpalli
Community member 57	F	Kalyanadurgam	Chapiri
Farmer 238	M	Kalyanadurgam	Kadarampalli
Community member 58	F	Kalyanadurgam	Kalyanadurgam
Farmer 239	M	Kalyanadurgam	Duradakunta
Community member 59	F	Kalyanadurgam	Battuvanpalli
Community member 60	F	Kalyanadurgam	Palavayi
Community member 61	F	Kalyanadurgam	Mallaapuram
Farmer 240	M	Kalyanadurgam	Papampalli
Community member 62	F	Kalyanadurgam	Kotturu
Farmer 241	M	Kalyanadurgam	Morepalli
Farmer 242	M	Kalyanadurgam	
Farmer 243	M	Kalyanadurgam	Vitlampalli
Community member 63	F	Kalyanadurgam	Hulikallu
Community member 64	F	Kalyanadurgam	Mallikarjuna palli
Farmer 244	M	Kalyanadurgam	Gubanapalli
Farmer 245	M	Kalyanadurgam	
Community member 65	F	Kalyanadurgam	East Kodi palli
Community member 66	F	Kalyanadurgam	Varli
Community member 67	F	Kalyanadurgam	Kaamakapalli
Community member 68	F	Kalyanadurgam	Narayanapuram
Farmer 246	M	Kalyanadurgam	Kurlapalli
Farmer 247	M	Kalyanadurgam	Yerramapalli
Farmer 248	M	Kalyanadurgam	Mangalkunta
Farmer 249	M	Kalyanadurgam	Thimmasamudram
Farmer 250	M	Kalyanadurgam	Kondapuram
Farmer 251	M	Kalyanadurgam	Mallipalli
Farmer 252	M	Kalyanadurgam	YEGUVA thanda& dhiguva thanda
Farmer 253	M	Kalyanadurgam	Ptr palli
Farmer 254	M	Kalyanadurgam	Moukthikapuram
Farmer 255	M	Kalyanadurgam	Kaparlapalli
Farmer 256	M	Kalyanadurgam	M.n.palli
Farmer 257	M	Kalyanadurgam	Venkatampalli
Farmer 258	M	Kalyanadurgam	Kadadaragunta
Farmer 259	M	Kalyanadurgam	Nusi kottala
Farmer 260	M	Kalyanadurgam	Nusi kottala thanda
Farmer 261	M	Kalyanadurgam	Manirevu
Farmer 262	M	Kalyanadurgam	Obulapuram
Farmer 263	M	Kalyanadurgam	Borampalli
Community member 69	F	Kalyanadurgam	Golla

Community member 70	F	Kalyanadurgam	Pata cheruvu
Community member 71	F	Kalyanadurgam	Seebai

Annex 7: Evidence of participation

Provided. Concealed for data protection purposes.

Annex 8: Farmer contract

Provided. Concealed for data protection purposes.

Annex 9: Local partner contract

Provided (document titled Annex 9).

Annex 10: Certificate of registration

Provided. Concealed for data protection purposes.

Annex 11: Gender and social inclusion policy

Provided. Concealed for data protection purposes.

Annex 12: Other additional evidence

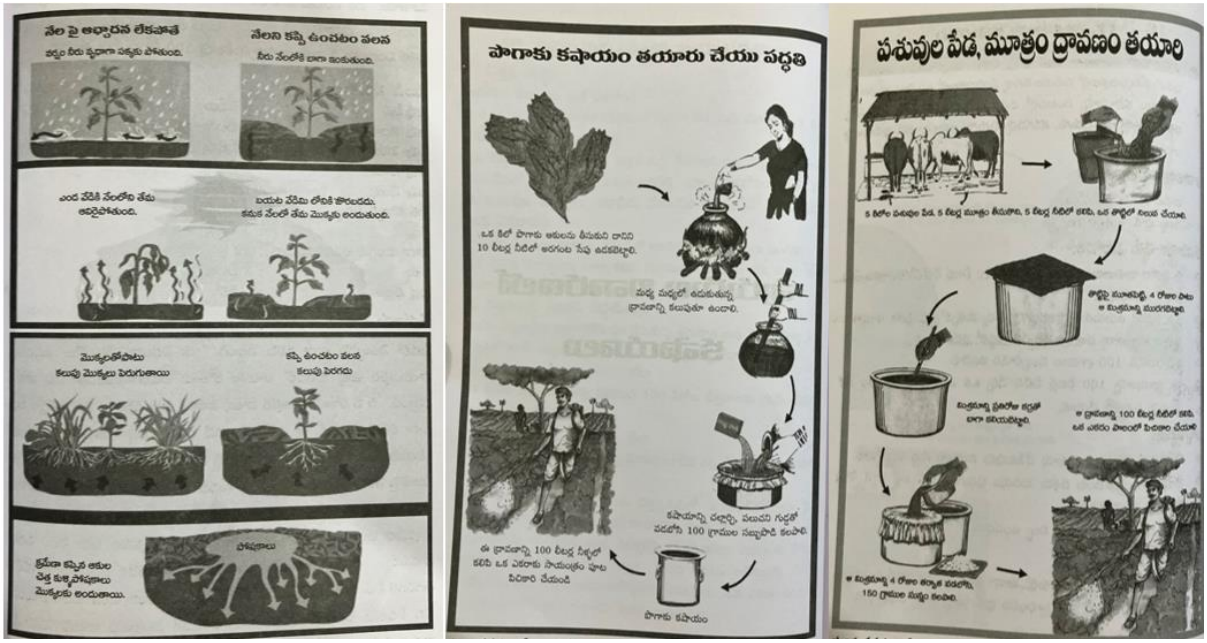


Figure 4. Examples of training materials provided to farmers on sustainable and natural agricultural practices, such as mulching (left image), biopesticide preparation (centre image), and biofertilizer preparation (right image).