Gold Standard for the Global Goals

TEMPLATE

KEY PROJECT INFORMATION & VPA DESIGN DOCUMENT (VPA DD)

PUBLICATION DATE **29.06.2023**

VERSION **v.2.3**

RELATED SUPPORT

- Programme of Activity requirements
- TEMPLATE GUIDE VPA Design Document

This document contains the following sections

KEY PROJECT INFORMATION

Type of VPA	☒ Real case VPA ☐ Regular VPA
Scale of VPA Note that a VPA can be of one scale. Please select applicable scale accordingly.	☐Microscale ☐Small scale ☒Large scale
Title of corresponding real case VPA (if applicable)	NA
GS ID of real case VPA (if applicable)	NA
GS ID of VPA	GS12315
Title of VPA	GS12314-GS12315-Climate Action Program for Community-led Carbon Sequestration VPA-01
Time of First Submission Date	31/01/2024
Date of Design Certification	NA
Version number of the VPA-DD	01
Completion date of version	08/02/2024
Coordinating/managing entity	OffsetFarm Pte Ltd.
VPA Implementer (s)	Udaipur Urja Initiatives Producer Company Limited (UUIPL)
Project Participants and any communities involved	Individual farmers may be involved if trees are planted on their lands.
Host Country (ies)	India
GS ID and Title of applicable Design Certified VPA	NA
GS ID and Title of applicable Performance Certified VPA	NA
Activity Requirements applied	☐ Community Services Activities ☐ Renewable Energy Activities

	☒ Land Use and Forestry Activities/Risks & Capacities ☐ N/A
Other Requirements applied	GS4GG Programme of Activity Requirements and Procedures, Version 2. Annex B – Requirements for LUF Smallholder & Microscale Projects
Methodology (ies) applied and version number	Methodology for Afforestation/ Reforestation (A/R) GHGs Emission Reduction & Sequestration, Version 2.
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
VPA Cycle:	☒ Regular ☐ Retroactive

Land-use & Forest and Agriculture - Key Project Information[1]

Scope:	☒ Forestry ☐ Agriculture
Silvicultural system:	☒ Conservation (no use of timber) ☐ Selective Harvesting ☐ Rotation Forestry
Project Area (ha):	5000 ha
Eligible Area (ha):	5000 ha
10% Set Aside Conservation area (ha):	Not Applicable. 100% of planting will be conservation plantation with native species and does not involve harvesting. Also Annex B of LUF is applied.

[1] Please refer to 0 for detailed information on LUF projects

Evidence that Project Area Boundary is clearly distinguishable in the field:	The spatial/non-spatial forest assessment of eligible lands is submitted for preliminary review
Planting Area	5000 ha
How many Modelling Units (MUs) are included in the eligible area:	One MU
Summary of New Areas added (copy and insert as needed):	
Size (ha):	
Date Added	

Key Information required for Projects applying Annex B for Smallholder Farmers

Based on the LUF Activity Requirements for Annex B for projects with smallholder farmers, the following KPI is included:

(a) Organisations involved in the project (including legal details of the Project Developer and its relationship to the local communities of the project): Offset Farm Pte. Ltd. as the CME and Udaipur Urja Initiatives Producer Company Limited as the Project Implementer are involved in the project activity. The VPA Implementer is working in the area with the communities on several rural community projects. All project end users are shareholders of UUIPL.

(b) Target smallholder groups that will be invited to participate: Small and marginal smallholder farmers with non-cultivable/agriculture lands in Kherwara and Rishaddeo Blocks of Udaipur District, Rajasthan.

(c) Distribution of revenues (between the Project Developer and the smallholders): All the revenue from the usufructs of trees planted will belong to the communities. Only the carbon rights will belong to the VPA Implementer/CME, from which revenues will be generated to implement the project. The CME/VPA Implementer will be working with the farmer's families till the end of the VPA crediting period. Firstly, replanting will be done for 3 years to ensure better survival rate. Monitoring of these plots will be done periodically. Technical advice will be provided to the farmers to tend to these trees and use of the lands for sustainable agriculture. In addition, products will be aggregated from these lands and help provided in getting the best price from the market through women agri-entrepreneurs. This way the families are ensured continues financial support.

Based on 3.1.1 additional information is required to support Key Project Information:

(a) Project region: A map with a polygon reflecting the boundaries is submitted as Arc GIS File

(b) Project areas: A map with one GPS point per project participant and each project participant shall have a hand-drawn map of its part of the project area: this will be submitted during first verification as the project will be implemented by 01/07/2024.

(c) The projects shall submit digital polygons of each Modeling Unit plot area as by Google Earth or other online tools or on-site GPS or Lidar measurements.: This will be submitted during first verification as the project will be implemented by 01/07/2024

(d) Protected areas: A map with national parks (as by Google Maps) and UNESCO sites (as by http://whc.unesco.org/en/interactive-map/) : these are agriculture lands and there are no protected areas

(e) Biodiversity areas: A map with a polygon reflecting the boundaries: The project area is non-cultivable/agriculture lands and there are no biodiversity areas.

(f) Infrastructure and permanent water bodies: As by Google Maps: there will be no infrastructure and permanent water bodies on the project area as there are discrete plots of planting area on farmer's lands

(g) Location of affected people: One GPS point per person, group of persons or community with a caption that describes the effect: The project area is non-cultivable/agriculture lands and will not affect any people located in the region. In fact it has a positive affect by providing better micro-environment and income to the families.

(h) Sites with special cultural, ecological, economic, religious or spiritual significance: One GPS point per site with a caption that describes the significance and effect: The project area is non-cultivable/agriculture lands that are discrete plots of land. These are declared agriculture lands as the lands have title deeds in the farmer's name.

3.1.3 At validation and verification, each smallholder participating in the project shall:

(a) know during any field visit what area of his land is part of the project activity (project area), AND (b) have a hand-drawn (or digital) map of this area that contains the size of his land and/or the number of trees: As the project will be implemented by mid of 2024, the project area will be provided at the time of first verification.

3.1.4 Safeguarding Principles & Requirements

(a) Under the Principle 3 Community Health, Safety and Working Conditions, Working Conditions and the Occupational Health & Safety assessment can be limited to 'workers' of the project only

(b) Under Principle 9 Environment, Ecology and Land Use, ***the following requirements are not applicable*** for smallholder and microscale projects and hence not applicable to the project area:

- buffer zones and infrastructure habitat connectivity for flora and fauna
- A minimum of 10% area under High Conservation Value (HCV)
- Buffer zones of water bodies.
- Biological diversity and workers handing pesticides.

4.0 LEGAL RIGHTS

According to section 4.1.1. The VPA Implementer, UUIPL will shall sign an *agreement* with the Smallholders which confirms that the smallholder holds the 'GSVERs user rights' from the trees that are planted due to the project but has passed these rights on to CME/VPA Implementer, AND the smallholder holds all necessary rights to implement the project (e.g. planting permits, right to harvest).

- A sample end user agreement is uploaded which will be implemented.

According to 4.1.2 the same will be explained to the end user and the agreement will be in the local language.

According to 4.1.3 If a smallholder does not hold land rights, the person or legal entity that does meet those respective requirements shall endorse the participation of the smallholder in a written form

According to 4.1.4 UUIPL will maintain the following required information:

- names and contact details from the participating smallholders
- the locations (GPS points) and area (ha) of their project areas
- the end dates of the lease contracts and frequency of renewal (if applicable),
- the start and end dates of the smallholders participating in the project.

Table 1 – Estimated Sustainable Development Contributions

SUSTAINABLE DEVELOPMENT GOALS TARGETED	SDG IMPACT (DEFINED IN B.6.)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
13 Climate Action (mandatory)	GHG Removals through A/R activities (tCO_2/year)	50,959.82	tCO_2/year
1 No Poverty	Economic returns (Rs.) to farmers from the project area	At least Rs.1000	Rs./year/ha
2 Zero Hunger	Density of fruits and medicinal species/ha	200/ha	Number/ha

	Production of fruits and medicinal species (Kgs)/ha in the project area	At least Fruits - 10 Medicinal – 2	Kgs/ha/year Kgs/ha/yr
	Increase in nutritional value at household level	Based on produce and fruits and will be determined ex-post in %	% over baseline
5 Gender equality	Income to women agri-entrepreuners	At least Rs.1000	Rs./woman/ year
6 Clean water and sanitation	Increase in water holding capacity of planted area.	Will be determined ex-post	% over baseline
8 Decent Work and Economic Growth	Number of employees	At least 5	Number
12 Responsible consumption and Production	NTFPs from the project area	Number of NTFPs that are generated from project area	Number
15 Life on Land	i. Number of project beneficiaries ii. Area under planting iii. Number of species and seedlings planted	i. 5000 ii. 5000 ha iii. At least 15 species and 2 million seedlings	i. Number ii. Ha iii. Number
17 Partnerships for the goals	Investment to implement the project	Will be determined ex-post	Rs.

SECTION A. DESCRIPTION OF PROJECT

A.1. Purpose and general description of project

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Purpose and general description of the VPA

This VPA-01, "GS12314-GS12315-Climate Action Program for Community-led Carbon Sequestration VPA-01", is the first real case VPA under the PoA "GS12314-Climate Action Program for Community-led Carbon Sequestration" by OffsetFarm, the CME. The VPA implementer for the VPA is Udaipur Urja Initiatives Producer Company Limited (UUIPL). Udaipur Urja Initiatives (UUI) Producer Company Limited is a community-owned social enterprise based out of Udaipur, Rajasthan[2]. The purpose of the VPA is to sequester carbon through ecological restoration of the degraded landscape by carrying out plantation activity. The project also aims to improve farm-based livelihood of the community through rejuvenation of non-cultivable land. The proposed project centers around village institutions and community leadership. Women will play a very critical role in taking this project forward. The project will be implemented by the Udaipur Urja Initiatives which is incubated at Seva Mandir, Udaipur. Seva Mandir has worked with local communities for almost 40 years to rejuvenate over 20,000 hectares of marginal land or wasteland under both private and common ownership. In this process, Seva Mandir has built and nurtured village institutions who have sustained the ecological restoration work.

The VPA is a smallholder farmer project and hence applies Annex B – requirements for LUF smallholder and microscale projects.

i ***The physical/geographical location of the VPA;*** The VPA plans afforestation/reforestation on degraded farm lands in rural areas of Kherwara and Rishabhdeo Blocks in Udaipur District, Rajasthan State, India.

ii ***The technologies/measures to be employed and/or implemented by the project activity;*** The project area is characterized by an undulating terrain and can be

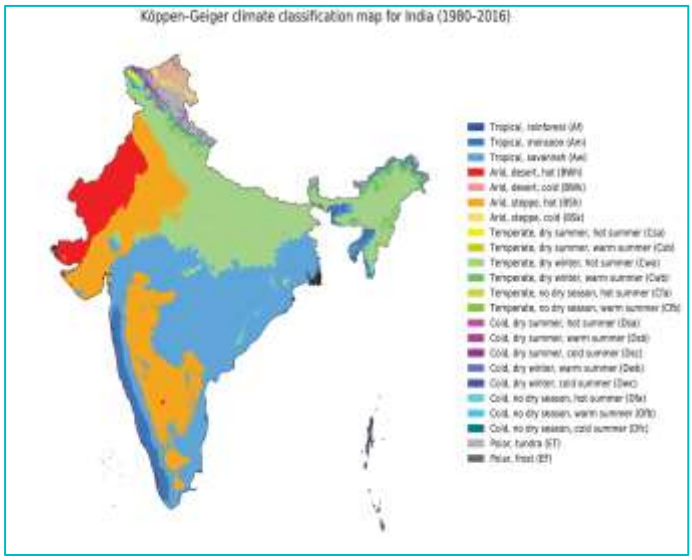
[2] https://www.udaipururja.in/

divided into upper ridge, middle ridge and the lower ridge. Quality of land in terms of soil depth and moisture regime differs among the three ridges. Accordingly, selection of the species will be done keeping the ridges in the mind.
The lands will be planted with multipurpose trees species. The proposed model of the Carbon Forestry is based on the objective of developing individual non cultivable land in participation with farm families and village institutions. The tree species will be in consultation with the farmers that could yield various livelihood benefits to them.
There are three models of lists of species that has been proposed, taking into account the aforementioned factors and the specific land criteria and preferences of local farmers. These lists cater to a range of ecological, economic, and ecological criteria for ensuring the successful implementation of the afforestation project in the region.

iii ***The project boundary;*** The project boundary for the project is uploaded as shape files on the GS share point and is also included in section A.2. The project boundary is degraded farm lands in villages of Kherwara and Rishabhdeo Blocks in Udaipur District, Rajasthan State, India.

iv ***The baseline scenario;*** The baseline scenario of the project area is degraded farmlands, which is devoid of forests before the project activity and 10 years prior to the planting activity.

a. Present environmental conditions of the area planned for the Forestry VPA, including the climate, hydrology, soils and ecosystems



Climatic Zone Map of India[3]

Koppen-Geiger Climate Classification[4]

Soil Map of India[5]

Forest type in India[6]

Climate: The project area falls under arid and semi-arid region of the Indian Climatic Zone based on Koppen Classification. The tropical arid and semi-arid climate dominates regions where the rate of moisture loss through evapotranspiration exceeds that from precipitation; it is subdivided into three climatic subtypes and the project area falls under arid climate. Most of Rajasthan experiences an arid climatic regime (hot desert climate). Cloudbursts are responsible for virtually all of the region's annual precipitation, which totals less than 300 millimetres (11.8 in). Such bursts happen when monsoon winds sweep into the region during July, August, and September. Such rainfall is highly erratic; regions experiencing rainfall one year may not see precipitation for the next couple of years or so. Atmospheric moisture is largely prevented from precipitating due to continuous downdrafts and other factors. The summer months of May and June are exceptionally hot; mean monthly temperatures in the region hover around 35°C, with daily maxima occasionally

[3] https://upload.wikimedia.org/wikipedia/commons/8/88/India_climatic_zone_map_en.svg
[4] Köppen climate classification - Wikipedia
[5] https://en.wikipedia.org/wiki/Major_soil_deposits_of_India#/media/File:Major_soil_types_in_India.jpg
[6] Forestry :: Forest Types Map - India (tnau.ac.in)

topping 50°C. During winters, temperatures in some areas can drop below freezing due to waves of cold air from Central Asia. There is a large diurnal range of about 14°C during summer; this widens by several degrees during winter. In particular, the climate of the districts are as follows:
Kherwara and Rishabhdeo lie in the southern part of Udaipur, some of the salient features are as follows[7].

- Have highest elevation of 358.6 and 755.3 m amsl[8] and lowest elevation of 275.3 and 222.7 m amsl respectively.
- The mean annual rainfall for period 1971 to 2020 are between 1332 mm to 844.6 mm.
- In Kherwara from period 1971 to 2020 there has been 3 years under severe drought, 8 years under moderate, 17 years under mild and 22 years under no drought.
- There has been no drought in Rishabhdeo in the past 11 years for period 2010 to 2020.
- Temperature- the period of March to June is the period of continuous rise in temperature. May and first half of June being the hottest part of the year. The mean daily maximum temperature during this period is 43.8 degree Celsius in Udaipur. By the third and fourth week of June, with the arrival of monsoon the temperature drops appreciably. The day temperature rises again in September after withdrawal of the monsoon, although the night temperature begins to drop. From November onwards, the day temperature also drops with January being the coldest month.
- Humidity- In the rainy reason, the relative humidity is about 70%. In summer season, it drops to 20-25%. In remaining part of the year, it ranges between 40 to 50%.
- Cloudiness- In monsoon season, especially July and August, sky is often moderately to heavily cloudy to overcast. During rest of the year, sky is

[7] http://cgwb.gov.in/old_website/AQM/NAQUIM_REPORT/Rajasthan/Udaipur%20Final.pdf
[8] amsl stands for meters above mean sea level

generally clear or lightly clouded. In winter, season brief spells of cloudy weather occur though winters are generally marked by clear bright weather.

- Winds-Winds are generally light with some strengthening in the latter half of summer and monsoon season. Dust storms and thunderstorms are sometimes accompanied with squalls in the summer season.

Above climatic conditions are favorable for the growth of species found in tropical dry deciduous forests. Most of the species proposed under the project grow well in the local agro-climatic conditions.

Hydrology: Geomorphologically, Udaipur district area is sub-divided into three major geomorphological units, and the project area is essentially i.e., hills (structural/linear/denudational), denudational origin (pediment/buried pediment) and fluvial origin. Most of the area is covered by hills, mostly runoff zones and covered by denudational origin, which is formed by erosion, stripping, and leaching, and serves as good recharge zones. Nearby the water bodies, the area is covered by fluvial origin, which is formed by the mass movement, transportation, and deposition and erosion of soil/sediment by streams, and serves as good recharge zones[9]. Based on the study by Shyam et al., 2022 for Udaipur including the project area, the principal aquifer for the availability of groundwater is quartzite, phyllite, gneisses, schist, and dolomitic marble, which occur in unconfined to semi-confined zones. Furthermore, all primary chemical ingredients were found within the permissible limit, including granum. The average annual rainfall days in a year in the region is 30 from 1957 to 2020, and there are chances to receive surplus rainfall once in every five deficit rainfall years. Using integrated remote sensing, GIS, and a field-based spatial modelling approach, the author found that that the dynamic groundwater reserves of the area are 637.42 mcm/annum, and the total groundwater draft is 639.67 mcm/annum. The deficit groundwater reserves are 2.25 mcm/annum from an average rainfall of 627 mm, hence the stage of groundwater development is 100.67% and categorized as over-exploited. However, as per the relationship between reserves and rainfall events,

[9] https://www.researchgate.net/publication/358727164_Assessing_the_Groundwater_Reserves_of_the_Udaipur_District_Aravalli_Range_India_Using_Geospatial_Techniques

surplus reserves are available when rainfall exceeds 700 mm. The study shows that there is enough static groundwater reserves in the area to sustain the requirements of the drought period. For the long-term sustainability
of groundwater use, controlling groundwater abstraction by optimizing its use, managing it properly through techniques such as sprinkler and drip irrigation, and achieving more crop-per-drop schemes, will go a long way to conserving this essential reserve, and create maximum groundwater recharge structures.

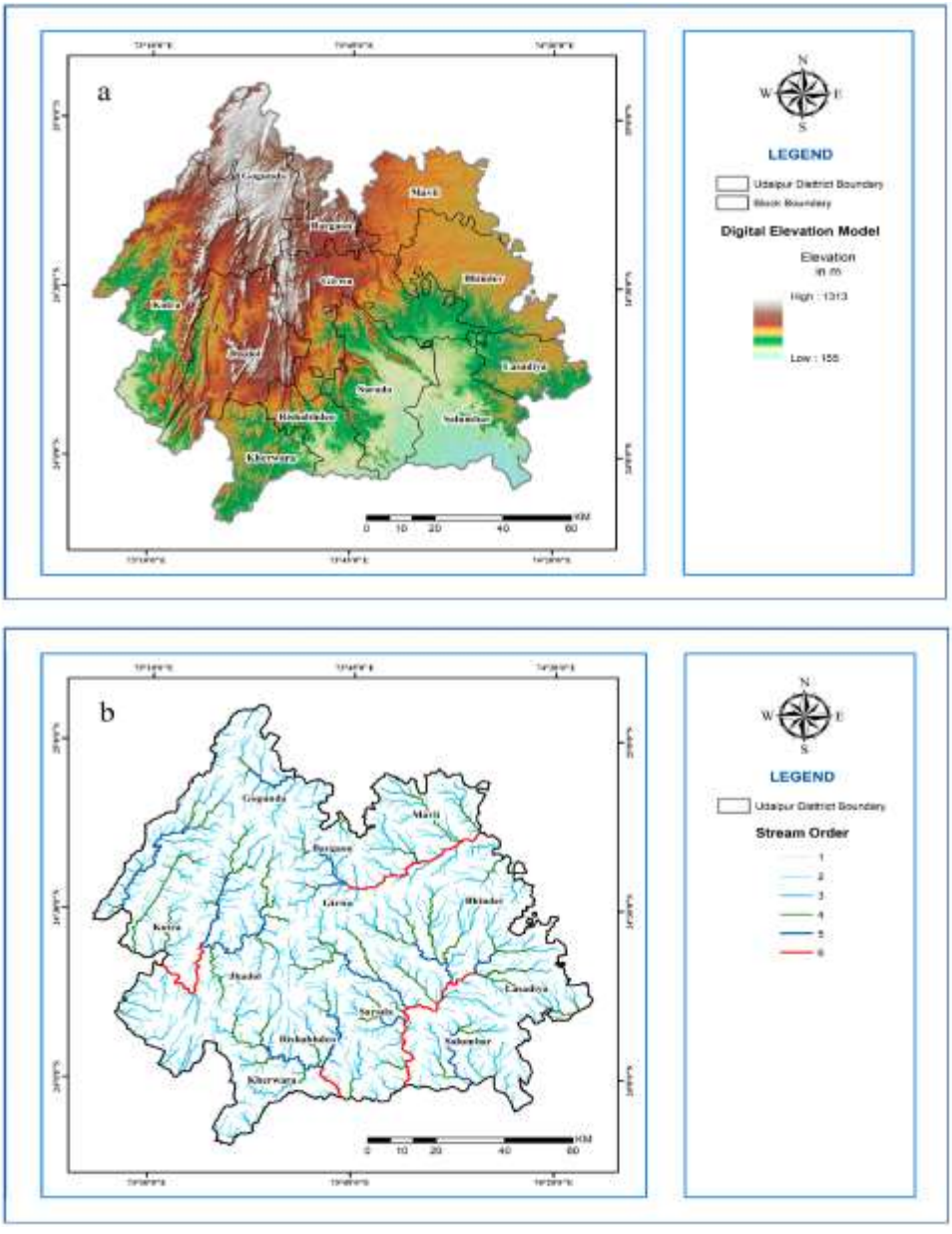


Fig 01: Elevation and drainage characteristics in Udaipur District.

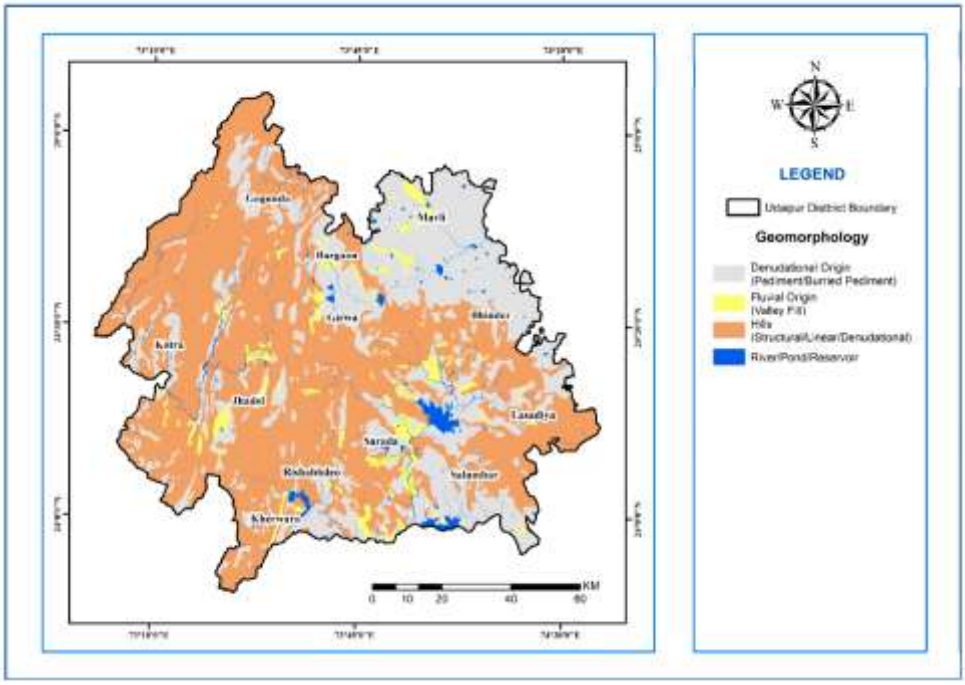


Fig 02: Geomorphology characteristics in Udaipur District.

Soils: Rajasthan state has arid and alluvial soil types. Soil is one of the most important factors in determining the type of species which can be suitable for the particular region. Kherwara and Rishabhdeo has mostly fine loam soil category representing 87.80% of the total area. This soil category is moderately suitable for cultivation. It helps in the cultivation of field crops like maize, sorghum, paddy, blackgram, sesame, groundnut and soybean in the rainy season (Kharif) while in the winter season crops like gram and barley are grown under residual moisture. Farmers having irrigation facility also cultivate wheat in the winter season (Rabi). Some farmers having access to irrigation grow green gram, groundnut and vegetables in the summer season (Zaid). Others category include clay, coarse loam and sandy representing 12.2% of the total area[10].This kind of soil type supports naturally growing tree species which are Ronjh (Acacia), Ber (Zizipus), Neem (Azadirachta indica), Churel (Holoptelia integrifolia) , Karanj (Pongamia pinnata) etc.

[10] National bureau of Soil Survey & Land Use Planning, Udaipur (In District Statistical profile (2020), Udaipur)

Ecosystems: Udaipur district's major portion is covered with rocks & hills which are well stocked with forests. It covers about 297,620 hectares under forests. The forests are valuable source of income and partly sustain the economy of the district. The economically important species are tendu, katha, honey, wax, barks and grasses. The forests of the project area is Mixed Miscellaneous Forests. These forests are mostly found in south eastern and eastern part of Rajasthan comprising Chittorgarh, Kota, Udaipur, Sirohi, Banswara, Dungarpur, Baran and Jhalawar districts. These Forests mainly have *Anogeissus pendula, Anogeissus latifolia, Terminalia tomentosa, Terminalia arjuna, Terminalia chebula, Albizia lebbeck, Dalbergia paniculata etc.* and its associates[11].

a) ***Describe the presence, if any, of rare and endangered species and their habitats:*** The region being degraded agriculture lands within village boundary, there are no rare and endangered species in the project area.

b) ***Describe the species and varieties selected for the Forestry VPA:*** The following species will dominantly be planted in the project area

S.No	Local Name of the Species	Botanical name
1	Aam (Mango)	*Mangifera indica*
2	Mahua	*Madhuca longifolia*
3	Rayan	*Manikarna hexandra*
4	Karanj	*Pongamia pinnata*
5	Jamun	*Syzigium cumini*
6	Palash	*Butea monosperma*
7	Shisam	*Dalbergia sissoo*
8	Neem	*Azadirachta indica*
9	Kala Siris	*Albizzia lebbak*

[11] https://forest.rajasthan.gov.in/content/raj/forest/en/footernav/forest-resource/forest-in-rajasthan/natural-forests.html

10	Churel	*Holoptelea integrifolia*
11	Kher	*Acacia catechu*
12	Ronjh	*Acacia leucophloea*
13	Dhok	*Anogeissus pendula*
14	Ber	*Zizyphus mauritiana*
15	Achar(Chironji)	*Buchnania lanzen*
16	Desi Babool	*Acacia nilotica*
17	Bamboo	*Dendrocalamus strictus*
18	Aaonla	*Phyllanthus emblica*

Other native species will be included depending on the request of the farmers. The species will be updated in the annual reports and monitoring report at the time of issuance.

c) ***Describe the measures and know-how that will be transferred to the host Party, if applicable:*** There are no measures and know-how that will be transferred to the host party. These are local species and is proven to do well in the region. The local NGO has adopted these models in the region and is proven.

d) ***Describe or list the legal title(s) to the land, current land tenure and rights enabling determination of the owner of the GS VERs to be issued for the Forestry VPAs:***

Land Type	Legal Title to the land	Rights
Agriculture Land	Private lands owned by farmers	The rights to crops and trees and usufructs from the trees are with the farmers. The GS VERs from the trees are with CME, OffsetFarm Pte. Ltd. This is transferred through end user agreements to the CME/VPA Implementer.

A.1.1. Eligibility of the VPA under approved PoA

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Table 2 Eligibility for VPA inclusion as per PoA requirements

NO.	ELIGIBILITY CRITERION	DESCRIPTION/ REQUIRED CONDITION	DESCRIPTION OF THE VPA IN RELATION TO THE CRITERIA, MEANS OF VERIFICATION AND SUPPORTING EVIDENCE FOR INCLUSION
1	Types of project	Eligible projects shall include physical action/ implementation on the ground. Pre-identified eligible project types are identified in the Eligibility Principles and Requirements section.	Afforestation & Reforestation project is identified as eligible[12]
2	Location of Project	Projects may be located in any part of the world.	The PoA is India and the VPA is located in Rajasthan State in India as can be seen from the shape maps of project area submitted.
3	Project Area, Project Boundary and Scale	The Project Area and Project Boundary shall be defined. Projects may be developed at any scale. In order to avoid double counting the Project shall not be included in any other voluntary or compliance standards programme unless approved by Gold Standard (for example through dual certification). Also, if the	The project area is Kherwara and Rishabhdeo Blocks in Udaipur District, Rajasthan State, India. The VPA is large-scale. The CME/VPA Implementer has provided in writing that there is no double counting.

[12] OPTIONAL REQUIREMENT - GHG Emissions Reduction & Sequestration Product Requirements v.2.1 (goldstandard.org) – Page 6.

		Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, the project shall demonstrate that there is no double counting of impacts at design and performance certification (for example use of similar technology or practices through which the potential arises for double counting or misestimation of impacts amongst projects).	
4	Host Country Requirements	Projects shall be in compliance with applicable Host Country's legal, environmental, ecological and social regulations.	The project is in compliance with India's National Environment Policy[13] which includes the legal, environmental, ecological and social regulations.
5	Contact Details	As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of all Project Participants; AND in case of an organization (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within	Contact details of CME, and VPA Implementer is provided in Appendix 2 and can also be seen at OffsetFarm Pte. Ltd and UUIPL website[14]. The legal registration of OffsetFarm Pte. Ltd. and UUICL is submitted to the VVB.

[13] https://ibkp.dbtindia.gov.in/DBT_Content_Test/CMS/Guidelines/20190411103521431_National%20Environment%20Policy,%202006.pdf
[14] https://www.udaipururja.in/

		the required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where reputational concerns are highlighted.	
6	Legal Ownership	Full and uncontested legal ownership of any Products that are generated under Gold Standard Certification, (for example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and with full, prior and informed consent (FPIC). Note that for certain Project types there is a requirement for full and uncontested legal land title/tenure to be demonstrated. These are contained within specific Activity or Product Requirements. All projects shall immediately report to Gold Standard any land title/tenure disputes arising.	The full and uncontested legal ownership of carbon credits is provided through end user agreements between the project beneficiaries and the CME/VPA Implementer. Sample copies are submitted to SustainCert for preliminary review.
7	Other Rights	As well as legal title and ownership, the Project Developer shall also demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (for	Uncontested legal rights and/or permissions are demonstrated through end user agreements between the project beneficiaries and the CME/VPA Implementer.

		example, access rights, water rights etc.). Any known disputes or contested rights must be declared immediately to Gold Standard by the Project Developer and resolved prior to further project implementation in affected areas.	
8	ODA Declaration	All Project Developers applying for project activities located in a country named by the OECD Development Assistance Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support.	No ODA is involved in the PoA, as confirmed by the CME. The signed ODA declaration is uploaded to the Registry.
Section 2.2.1., General Requirements as per GS4GG Land Use and Forestry Activity Requirements			
1	Eligible project type	Eligible project types are Afforestation & Reforestation Projects (A/R) and Agriculture Projects (AGR).	The project type is Afforestation & Reforestation (A/R)
2	a) No deforestation In the case when the eligible area has been deforested during the last 10 years prior to project start date, the eligibility of the project shall be determined by Gold Standard as part of the Preliminary Review.	The eligible area shall not meet the definition of forest 10 years before project start date and at project start date. The Project Developer shall provide evidence that the deforestation activity has not taken place with an intention to implement project activities that generate Gold Standard Certified SDG Impact Statements and/or Products, such as GSVERs.	The eligibility of the planting area is demonstrated by following the guidelines of Annex C – Guidelines to conduct a spatial forest/non-forest assessment of GS4GG LUF Activity Requirements, Version 1.2.1. The evidence of unintentional deforestation for a carbon project is applicable as there is no deforestation in the project area.

3	Double Counting	Projects issuing GSVERs with a vintage of 2021 or later and which are used i) towards an NDC or domestic climate mitigation target other than that of the Host Country; ii) under CORSIA shall conform to the GHG Emissions Reduction and Sequestration Product Requirements - Annex A. Annex A requirements are not applicable for projects generating GS VERs which do not fall under the abovementioned uses.	Full compliance with the double counting requirements of the Gold Standard as per GHG Emissions Reduction & Sequestration Product Requirements, Annex A will be proven in case that GS VERs are used towards an NDC or domestic climate mitigation target other than that of the Host Country or under CORSIA. A Letter of Authorization is not needed as the GS VERs are not used for one of the abovementioned purposes.
4	Eligible A/R Projects	Can include planting trees Can include single-species plantations Can apply all silvicultural systems, e.g. conservation forests (no use of timber); forests with selective harvesting; rotation forestry All projects can include agriculture (agroforestry) or pasture (silvopasture) activities	The details of the planting trees and system is provided in section A.3. The planting system is Agroforestry with no use of timber.
5	FSC dual certification	Not Applicable	Not Applicable
6	Secured Titles	For all project participants, the following information and evidence shall be provided: (a) Name and contact details	The details of the project participants is provided through end user agreements for every parcel of land of the project activity, which also includes the carbon

		(b) Each entity's legal registration number and documentation by the governing jurisdiction that proves that the entity is in good standing. AND (c) For the duration of the crediting period the Project Developer: i. must own the CO2 user rights or carbon sequestration rights for the project area, AND ii. hold an uncontested legal land title for the Project Area, AND iii. own the rights for timber and non-timber forest products for the project area, AND iv. hold all necessary permits to implement the project (planting permits, infrastructure permits, harvesting permits, etc.), AND v. participate in the financing of the project.	rights and secured titles of land and products.
7	Safeguarding principles and requirements	The Project Developer shall conduct the Safeguarding Principles assessment following Safeguarding Principles & Requirements and Risks & Capacities Guideline assessed for the Project Area, taking into account likely issues in the context of the Project Region.	The safeguarding principles assessment is conducted and included in section D.
8	Protected areas	A minimum of 10% of the total Project Area shall be identified and used to protect or enhance the biological diversity following High Conservation Value (HCV) approach.	As it is a agroforestry system and does not include harvesting, there will be no protected areas to enhance biological diversity following HCV approach. Also Annex B of LUF is applied.

9	Buffer zones for water bodies	The Project Developer shall maintain a buffer zone of 15 meters for water bodies on both sides of any permanent or temporary water bodies such as lakes, streams, rivers, wetlands, etc. Irrigation channels are excluded from this requirement.	The planting areas are agriculture lands and there are no buffer zones for water bodies as can be seen from the shape maps submitted. Also Annex B of LUF is applied.
10	Stakeholder inclusivity	The Stakeholder Consultation shall be conducted prior to the project start date. The Project Developer shall refer to Stakeholder Consultation Engagement Requirements for further details.	The stakeholder consultation report is submitted for preliminary review.
11	Crediting period	The crediting period shall be a minimum of 30 years and maximum 50 years. The crediting period starts either with the Project Start Date or three years prior to the date of Project Design Certification, whichever occurs later.	The crediting period is for 30 years for the VPA.
12	Verification and issuance	Verification shall be completed at least every 5 years until the end of the crediting period.	Verification will be completed atleast every 5 years for the VPA.
13	Additionality	Any VPA shall demonstrate additionality as per the Principles & Requirements, or GHG Emissions Reduction and Sequestration Product Requirements, as applicable.	Additionality is proven following - Option 1 – CDM tool: the latest version of the A/R CDM 'Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities'. The CDM specific terms of the A/R CDM additionality tool (tCERs, A/R CDM project, etc.) is interpreted in the context of Gold Standard.

Table 3 Eligibility for VPA inclusion as per PoA requirements

No.	Eligibility Criterion	Description/ Required condition	Description of the VPA in relation to the criteria, Means of Verification and Supporting evidence for inclusion
1	*a. Geographical boundaries of the VPA consistent with that of the PoA*	The geographic boundary of the VPA shall be India	The VPA-01 will be in Kherwara and Rishabhdeo Blocks in Udaipur District, Rajasthan State, India. The shape map of the project area is the means of evidence.
2	*b. Conditions to avoid double counting of GHG emission reductions or net anthropogenic GHG removals, such as unique identifications of product and end user locations*	The VPA shall not previously be registered as a project activity or included as a VPA in any other registered PoA or deregistered as a VPA of a PoA.	The CME/VPA Implementer provides the database of all the farmers that are part of the VPA. They are not be part of any other VPA or PoA or standalone project activity within GS and other standards. The CME/VPA Implementer has provided a letter.
3	*c. Conditions to check the start dates of VPA through documentary evidence*	The start date of the VPA shall be on or after the start date of the PoA	The project start date is confirmed through the end user agreement and signed declaration by the project

			implementing entity of the start date of the VPA. This will be submitted to at the time of first verification.
4	*d. Conditions to ensure compliance with the applicability of the applied methodologies, the applied standardised baselines and the other applied methodological regulatory documents*	The only methodology used for VPAs under the PoA is "LUF_AR-Methodology-GHGs-emission-reduction-and-Sequestration-Methodology, Version 2". The tool "LUF AR Methodology Soil Carbon Tool" is used in order to calculate the Soil Organic Carbon	Compliance with the methodology applicability criteria is demonstrated in section B.2. of the VPA-DD.
5	*e. Conditions to ensure that VPA meet the requirements for demonstration of additionality*	For demonstration of additionality, one of the following options will be applied: Option 1: Latest version of A/R Methodological tool "Combined tool to identify	Section B.5. of the VPA describes the additionality based on Option 1 applied.

		the baseline scenario and demonstrate additionality in A/R CDM project activities Option 2: Latest version of Positive list (as per 3.1.16, (b) of the Land Use & Forests Activity Requirements) or other latest options proposed by GS4GG	
6	*f. Condition to ensure that the real case VPA and its regular VPAs meet the applicability criteria of selected methodology of combination of methodologies*	The only methodology used for VPAs under the PoA is "LUF_AR-Methodology-GHGs-emission-reduction-and-Sequestration-Methodology Version 2". The tool "LUF AR Methodology Soil Carbon Tool" is used in order to	Compliance with the methodology applicability criteria will be demonstrated for the regular VPA too.

		calculate the Soil Organic Carbon	
7	*g. Conditions to ensure that real case and its regular VPAs systematically demonstrate additionality in accordance with Principles & Requirements.*	For demonstration of additionality, one of the following options will be applied: Option 1: Latest version of A/R Methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities Option 2: Latest version of Positive list (as per 3.1.16, (b) of the Land Use & Forests Activity Requirements) or other latest options proposed by GS4GG	The regular case VPA will describe option 1 according to the real case VPA-01.
8.	*h. Target group*	The target group would be rural/urban	The target group of the VPA is smallholder farmers who have legal

		regions of India and will be with project beneficiaries of farmers, organizations, companies, etc. that have legal ownership of the land.	ownership of their lands in rural regions of India.
9.	*i. Conditions related to sampling requirements for the PoA*		Sampling in accordance with the sampling plan in the corresponding real case Forestry will be described.
10.	*j. Conditions to ensure that CPAs that will be included meet the small-scale or microscale thresholds and remain within those thresholds throughout the crediting period*	The conditions of the GS4GG LUF Activity Requirements for small-scale or microscale thresholds will be applied depending on the VPA scale that will be included	The VPA is large scale and his condition is not applicable
11.	*k. Conditions to be met for retroactive VPAs*	The start date shall be after the start date of the PoA and retroactive VPAs shall submit the required	This is not a retroactive VPA and hence not applicable.

		documents to Gold Standard within five years of its start date (time of first submission) according to the GS4GG LUF Activity Requirements and prove that carbon credits were considered for the activity.	
12.	*l. Conditions to be met for CER Labelling*	Not applicable, as it is a VER project	Not Applicable
13.	*m. Conditions to be met in multi-country PoAs*	No applicable, as it is a single country, India	Not applicable

Applying the scope and applicability of Annex B – Requirements for LUF Smallholder and microscale projects

1.1.1 Annex B presents simplified requirements for Smallholder and Microscale projects seeking Gold Standard certified statements and or products such as Gold Standard VERs. The following sections outline the requirements that are modified, simplified or waived for Smallholder and Microscale projects. If a particular requirement in the 'Land Use & Forest Activity Requirements' is not discussed here, it implies that the 'Land Use & Forest Activity Requirements' and/or Principles & Requirements shall be followed. If a project intends to apply the requirements of the 'Land Use & Forests Activity Requirements' instead of the adapted version outlined in this guideline, it may do so.

- The Annex B –Requirements for LUC smallholder and microscale projects is applied for this real case VPA and other regular VPAs that will be included under this real case VPA. The land parcels will include smallholder farmers wherein the survey number of the parcel of land belongs to family members; 50% of

farm work is done by family members, cooperatives or neighbours and if workers are employed it is less than 3 months. Most of the lands are non-cultivable lands or marginal agriculture lands which will be taken up for planting activities

1.1.2 To avoid undermining the purpose of the simplified requirements, Project Developers are not allowed to register projects with similar characteristics as separate projects

- The area under is this VPA is not included in any other projects

1.1.3 These requirements shall be applied in combination with the Gold Standard 'Land Use & Forest Activity Requirements'.

- The requirements of LUF Activity Requirements is applied along with this Annex B.

1.1.4 Smallholder projects include project areas that are managed by smallholders and there is NO limit in size for such 'smallholder' projects. For projects that consist of areas managed by a mix of smallholders and non-smallholders ('smallholders' as defined in 'Definitions') can seek a combined certification. Though, these requirements can only be applied for the project areas that are managed by the smallholders.

- *The project is being implemented on farmer's lands and the total area is about 5000 ha. The projects encompasses only smallholders and does not include non-small holders.*

1.1.5 Microscale projects are defined as projects with a project area of maximum 500ha.

- This is not a microscale project activity

1.1.6 When the Project Developer is uncertain about the interpretation of 'Land Use & Forest Activity Requirements' in the context of smallholder or microscale projects, the developer shall seek clarification from the Gold Standard Secretariat.

- N/A. No clarification is sought.

A.1.2. Legal ownership of products generated by the VPA and legal rights to alter use of resources required to service the project

>> The full and contested legal ownership of GS VERs from the project activity generated under gold standard certification belongs to the CME, OffsetFarm Pte. Ltd.

End user agreements are signed by the project beneficiary-the farmer and CME/VPA Implementer, wherein the GS VERs generated from the project activity is owned by the CME, OffsetFarm Pte. Ltd.

Except GS VERs, the resources of the land including the land title, the non-timber forest produce (NTFPs), water rights, crops, etc. continue to belong to the farmer.

A.2. Location of VPA

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Country: India

State: Rajasthan

District: Udaipur

Blocks: Kherwara and Rishabhdeo

District Udaipur is located in southern Rajasthan, spans an area of 12,596 sqkm, and known for its diverse topography, ranging from elevated plateaus in the north to fertile plains in the east and rocky terrain with relatively dense forests in the south. This region falls into two agro-climatic zones, primarily Sub-humid Southern Plains and Humid Southern Plains[15]. The proposed project area with blocks falls under IV-a-Sub humid southern plain.

[15] https://www.rajras.in/rajasthan/districts/udaipur/

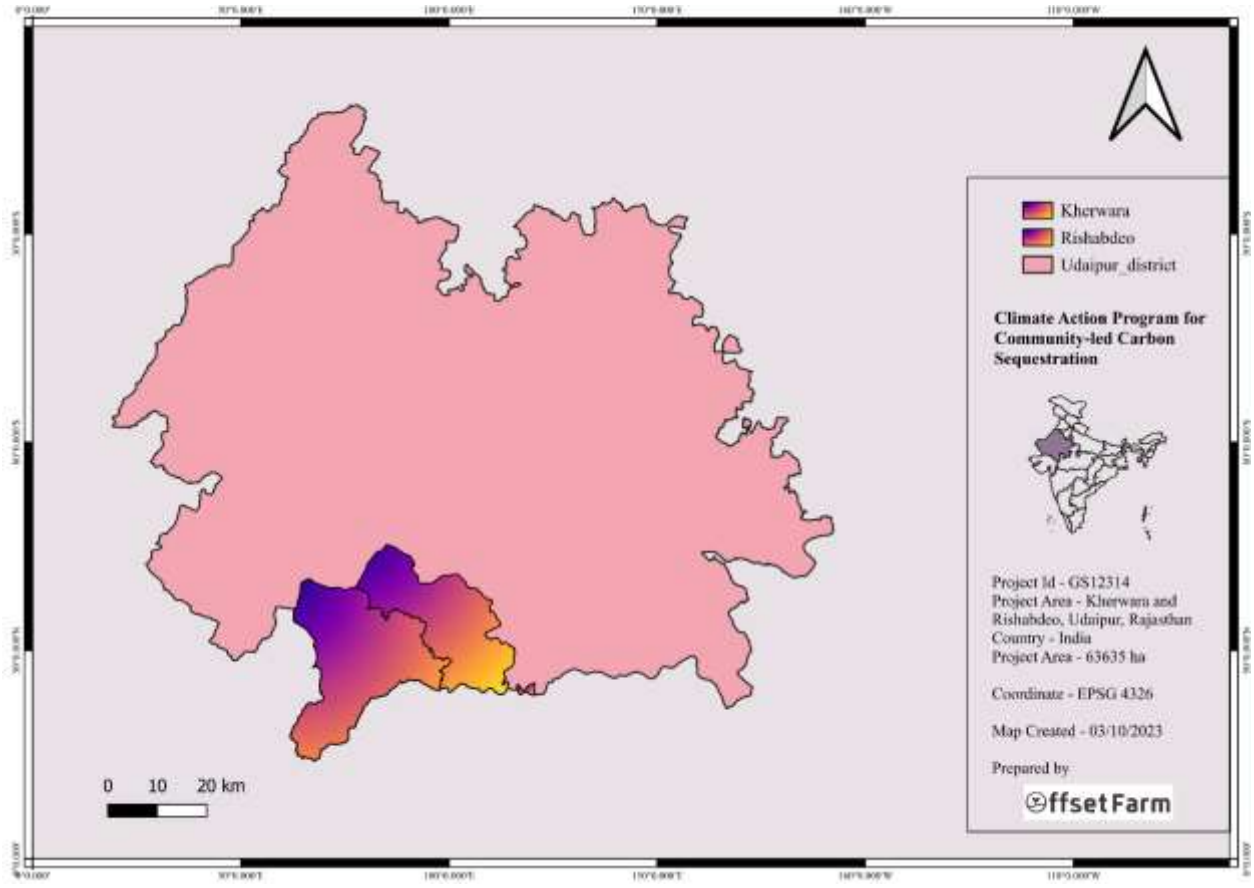

Fig 03: Proposed Project Area

A.3. Technologies and/or measures

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Plantation Model: The plantation model has been devised based on the understanding that the available farmer owned lands will be undulating. The model is explained in the table below.

Ridge Type	Major land type (slope, soil depth, moisture regime etc.)	Suggested species type- suitable for plantation.	Inclination of ridges
Upper ridge	Quite sloppy land with shallow soil depth with a lower moisture regime.	Thorny, high drought and heat tolerant ones.	Above 30 degrees

Middle ridge	Moderately sloppy land with medium soil depth & moisture regime.	Species which have moderate to high drought tolerance.	Up to 30 degrees
Lower ridge	Minimum sloppy land with somewhat better soil depth & moisture regime.	Species which are relatively broad leaved with a dense canopy. These require relatively a higher moisture regime & prefer a greater soil depth.	Up to 10 degrees

Fig 04: Image depicting the three ridges

Species selection and survival rates: The species are selected based on the above-mentioned factors and their survival rate will depend on several factors like environmental condition, human interference, grazing, maintenance care & protection from pests and adaptability of competing species. Most of the local species like babool, mango, jamun etc. have more chances of survival rate.

The land category on which the trees will be planted are non-cultivable lands are locally known as ***beed***[16] in the local language of Rajasthan. This type of non-cultivable land is best suited for growing trees. Farmers traditionally grow tree species which are source of food, fodder, fuel, medicine and timber. These models of private forestry will bring in enormous livelihood benefits like food, fodder, timber and many non timber forest products (NTFPs). In addition to livelihood benefits, the plantation program will improve soil and moisture regime of the area which will greatly be beneficial to overall ecosystem & the environment. This intervention will also be helpful in building and strengthening village level institutions and local leadership.

In participation of farm families and village institutions, the VPA Implementer shall select species of trees which could yield various livelihood benefits to the farmers. There are three models of lists of species that has been proposed, taking into account the aforementioned factors and the specific land criteria and preferences of local farmers. These lists cater to a range of ecological, economic, and ecological criteria for ensuring the successful implementation of the afforestation project in the region. The below table explains the factors responsible for the type of species selected.

Factors	**Rationale** ***Why this factor is suitable for the species which are to be planted in the region***
Soil Type-Alfisols	Alfisols are typically considered quite productive soils. These soils are derived under native prairie and forest vegetation, respectively, have inherently fertile parent materials, and have had favourable climates that supports rich growth of the respective vegetation types.

[16] The term "beed" refers to a type of non-cultivable land, often characterized by arid or barren conditions.

	Source- O.C. Spaargaren, J.A. Deckers, in Encyclopedia of Soils in the Environment, 2005
Temperature	The proposed species under the planting model, can very well withstand mean annual temperature and temperature experienced across the seasons. These species have successfully been raised in earlier plantations.
Native	All the species proposed in our model of plantation grow naturally in the forests of Kherwara and Rishabhdeo.

The project will be happening in the phased activity starting with 5000 hectares of land in Kherwara and Rishabhdeo. The project activities are aligned in the following manner (Figure 5).

Fig 05: Timeline for the project activites

A detailed calendar of operations to be conducted at the plantation sites under carbon forestry plantation following a Six-year cycle to ensure a higher rate of survival & appropriate growth of planted saplings. This is explained below in the table.

First Year (2023-24-25)

December 2023- April 2024
1) Obtain legal papers of the land & complete MoU/contract

2) Conduct GPS survey and preparation of the map of the plantation area
3) The area should be fenced completely to stop grazing of animals.
4) Prepare a lay out plan & work out the exact number of saplings to be planted. Also work out, species wise details of total saplings.
5) Accordingly, dig the number of pits keeping proper distance. Pit size could be 1.5` X 1.5 X 1.5 (Length X Width X Depth in feet) Average pit to pit distance of 5-5 meter should be maintained. Put a pitcher (*ged*) an indigenous drip irrigation system.

6) Book all the required number of species wise plants with the local nursery of the Forest Department. Ensure that good quality saplings of moderate height (3 to 4 feet) are available in the nursery. The order will be placed in March-April to ensure timely availability of saplings by in July.
7) Establish half yearly nurseries to obtain plants of fast-growing species.
8) Planting/Direct seeding of seeds of Ratanjot, Kher, Neem & local shrubs species to be done in the III week of June. Farmers & village level institutions will be encouraged to collect seed of these species and plant these near fencing. The produce from these plants will be an added income or livelihood source.

July-August 2024

(1) Work out details of transportation of the saplings and ensure proper handling while transporting.

(2) Saplings are lifted from the nurseries when the rainy season arrives. Sometimes, there is gap in the onset of rains. Hence provisions for storing the saplings near the planting site will be made till the rains resume.

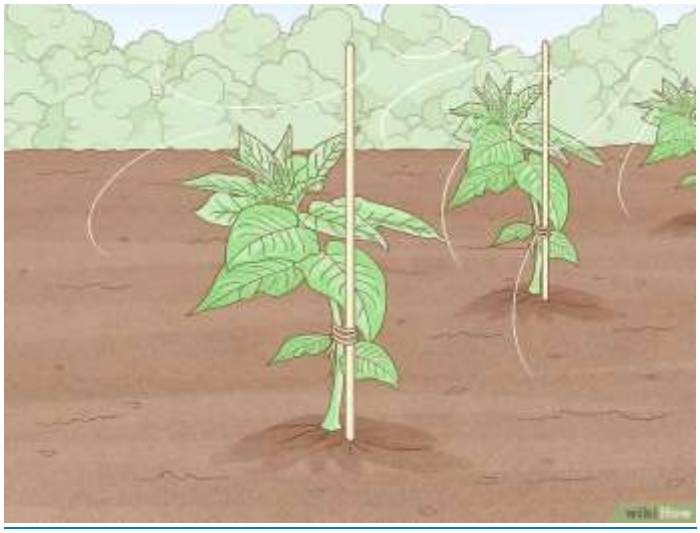
(3) Making arrangements for watering before plantation, in case rains are delayed.

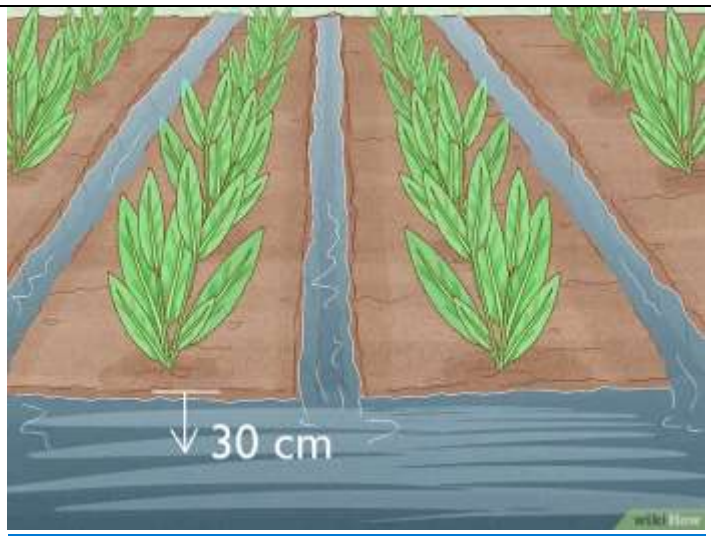
(4) Making arrangements for safe transportation of saplings from storage place to the plantation site. The best way is to carry saplings in a *tagari* or tasla (dished bucket) to avoid breaking of poly bags and the stem.

(5) Plantation to be carried out during the active monsoon season. The– best time of planting is when there is light drizzling rain. Ensure the poly bag is removed properly without damaging the roots. Place the removed poly bag under a stone near the planted sapling as a token of assurance that the poly bag is removed.

(6) Plant should be planted in the center of the pit.

(7) Prepare a small basin (Thawla) with a provision to drain out excess rain water from the basin of the sapling. If the planted sapling is taller than 5`, tie it with a stick for support.





September last week or October first week 2024
(1) Conduct first weeding and hoeing operations. Remove weeds from the basin of the sapling. Dig up soil near the sapling and prepare a crescent shaped shallow basin (0.5 m radius) to facilitate percolation of winter dew drops in the soil. (2) Irrigate saplings using *ged* after weeding and hoeing if, the soil is hard and dry.
November 2024 -January 2025
Provide irrigation (using *ged*) once in a month to avoid danger of frost
Mid-February to March First 2025
(1) Conduct a second weeding and hoeing operation. Remove weeds from the basin of the sapling. (2) Irrigate saplings once in a month using ged.
Month – April 2025
Irrigate Saplings using ged. Frequency of irrigation could be fortnightly or weekly depending upon the ambient temperature. Irrigation to be provided in morning hours.
Month – May 2025
(1) Irrigate Saplings using ged. Frequency of irrigation could be weekly or twice in a week depending upon the ambient temperature. Irrigation to be provided in morning hours. Count species wise number of live saplings and determine number of species wise dead saplings. a. Book number of species wise saplings with the nursery (to be planted in upcoming monsoon season) b. Start preparations for establishment of annual nurseries.

Second Year (2025 – 26)

Month – June 2025
(1) Dig out pits of dead saplings. Planting/Direct seeding of seeds of Ratanjot, Kher, Neem, local grasses etc species (to fill up the gaps) should be done in the III week of June
Month – July 2025
Plant saplings in the dugout pits of dead saplings following relevant instructions in Sr. No.2 of the first year.
Month – September last week or October first week 2025
(1) Conduct third weeding and hoeing operation. Remove weeds from the basin of the sapling. Work up soil and repair crescent shaped shallow basin (0.5 m radius) to facilitate percolation of winter dew drops in the soil. (2) Measure girth of the grown saplings.
Month – November 2025-January 2026
Provide irrigation once in a month to avoid frost.
Month – July 2025
Plant saplings in the dugout pits of dead saplings following relevant instructions in Sr. No.2 of the first year.
Month – Mid February or March First 2026
(1) Conduct fourth weeding and hoeing operation. Remove weeds from the basin of the sapling. (2) Irrigate Saplings once in a month using *ged*
Month – April 2026
(1) Irrigate Saplings using *ged*. Frequency of irrigation could be fortnightly or weekly depending upon the ambient temperature. (2) Irrigation should be provided in morning hours.
Month – May 2026
(1) Irrigate Saplings. Frequency of irrigation could be weekly or twice in a week depending upon the ambient temperature. Irrigation should be provided in morning hours. (2) Count species wise number of live saplings and determine number of species wise dead saplings. Book number of species wise saplings with the nursery (to be planted in upcoming monsoon season)

Third Year (2026-27)

Month – June 2026
(1) Irrigate Saplings. Frequency of irrigation could be fortnightly or weekly depending upon the ambient temperature. (2) Irrigation should be provided in morning hours. (3) Dig out pits of dead saplings. (4) Sowing of seeds of Ratanjot, Kher, Neem, local shrubs etc (to fill up the gaps) species should be done in the III week of June
Month – July 2026
Plant saplings in the dugout pits of dead saplings following relevant instructions in Sr. No.2 of the first year.
Month – September last week or October first week 2026
(1) Conduct fifth weeding and hoeing operation. Remove weeds from the basin of the sapling. Work up soil and repair crescent shaped shallow basin (0.5 m radius) to facilitate percolation winter dew drops in the soil. (2) Measure girth of the grown saplings.
Month – November 2026-January 2027
Provide irrigation once in a month.
Month – Mid February or March First 2027
(1) Conduct sixth weeding and hoeing operation. Remove weeds from the basin of the sapling. Work up soil and repair crescent shaped shallow basin (0.5 m radius) to facilitate percolation of irrigation water. (2) Irrigate Saplings once in a month.
Month – April 2027
Irrigate Saplings. Frequency of irrigation could be fortnightly or weekly depending upon the ambient temperature.
Month – May 2027
(1) Irrigate Saplings. Frequency of irrigation could be weekly or twice in a week depending upon the ambient temperature. Irrigation should be provided in morning hours

Fourth Year (2027-28)

Month – June 2027

(1) Irrigate Saplings. Frequency of irrigation could be fortnightly or weekly depending upon the ambient temperature. Irrigation should be provided in morning hours.
Month – September last week or October first week 2027
(1) Conduct sixth weeding and hoeing operation. Remove weeds from the basin of the sapling. Work up soil and repair crescent shaped shallow basin (0.5 m radius) to facilitate percolation winter dew drops in the soil. (2) Measure girth of the grown saplings.
Month – November 2027-January 2028
Provide irrigation once in a month.
Month – Mid February or March First 2028
(1) Conduct seventh weeding and hoeing operation. Remove weeds from the basin of the sapling. (2) Irrigate Saplings once in a month
Month – April 2028
Irrigate Saplings. Frequency of irrigation could be fortnightly or weekly depending upon the ambient temperature.
Month – May 2028
(1) Irrigate Saplings. Frequency of irrigation could be weekly or twice in a week depending upon the ambient temperature. Irrigation should be provided in morning hours.

Fifth Year (2027-28)

Month – June 2028
(1) Irrigate Saplings. Frequency of irrigation could be fortnightly or weekly depending upon the ambient temperature. Irrigation should be provided in morning hours.
Month – September last week or October first week 2028
1) Conduct eighth weeding and hoeing operation. Remove weeds from the basin of the sapling. Work up soil and repair crescent shaped shallow basin (0.5 m radius) to facilitate percolation winter dew drops in the soil. Measure girth of the grown saplings.
November 2028-January 2029
Provide irrigation once in a month.

Mid February or March First 2029
Conduct ninth weeding and hoeing operation. Remove weeds from the basin of the sapling. Work up soil and repair crescent shaped shallow basin (0.5 m radius) to facilitate percolation of irrigation water (2) Irrigate Saplings once in a month.
Month – April 2029
Irrigate Saplings. Frequency of irrigation could be fortnightly or weekly depending upon the ambient temperature.
Month – May 2029
(1) Irrigate Saplings. Frequency of irrigation could be weekly or twice in a week depending upon the ambient temperature. Irrigation should be provided in morning hours.

Sixth Year (2028-29)

Month – June 2029
(1) Irrigate Saplings. Frequency of irrigation could be fortnightly or weekly depending upon the ambient temperature. Irrigation should be provided in morning hours.
Month – September last week or October first week 2029
(1) Conduct tenth weeding and hoeing operation. Remove weeds from the basin of the sapling. Work up soil and repair crescent shaped shallow basin (0.5 m radius) to facilitate percolation winter dew drops in the soil. (2) Measure girth of the grown saplings.
Month – November 2029-January 2030
Provide irrigation once in a month.
Month – Mid February or March First 2030
(1) Conduct eleventh weeding and hoeing operation. Remove weeds from the basin of the sapling. (2) Irrigate Saplings once in a month
Month – April 2030
Irrigate Saplings. Frequency of irrigation could be fortnightly or weekly depending upon the ambient temperature.
Month – May 2030

(1) Irrigate Saplings. Frequency of irrigation could be weekly or twice in a week depending upon the ambient temperature. Irrigation should be provided in morning hours

A.4. Scale of the VPA

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This is a forestry project and the annual credits will be greater than 16,000 tCO_2/year. Hence it is a large scale project activity.

A.5. Funding sources of VPA

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There is no public funding or ODA funding for the project activity. CME has signed the ODA Declaration form, which is submitted to SustainCert.

To ensure comprehensive support for the initiative, securing funding is a key need. For the program the CME shall explore multiple funding sources including but not limited to the following:

1. Financial investors: Investments from commercial financiers, including banks, private investment funds, which are seeking to invest in project for financial returns. We will explore this option for raising debt or project level equity.
2. Carbon credit buyers: This include offsetters or traders who deal in carbon credits and are open to investing in projects for securing a supply of carbon credits.

SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

B.1. Reference of approved methodology (ies)

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i. Methodology for Afforestation/Reforestation (A/R) GHGs Emission Reduction & Sequestration, Version 2.

ii. LUF AR Methodology Soil Carbon Tool, Version 1.

B.2. Applicability of methodology (ies)

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Based on applicability requirements of the methodology, Methodology for Afforestation/Reforestation (A/R) GHGs Emission Reduction & Sequestration, Version 2, the project fulfills them as shown below:

Applicability Requirement	Fulfillment of the requirement
Projects that include the planting of trees on land that does not meet the definition of a forest are eligible to apply this methodology. Please refer to Annex C of Land-use & Forests Activity Requirements – Gold Standard for the Global Goals for carrying out spatial assessment of land to assess eligibility of areas.	The proposed project intends to plant trees on farmer's non-cultivable lands by planting a variety of native tree species. Based on the spatial forest/non-forest assessment of the project area, the project area does not meet the definition of forest before the start date and 10 years before project start date. Kindly see the shape files submitted and the report of the assessment.
2.1.2 | The project area shall meet all of the requirements below for this methodology to be applicable for the calculation of CO_2 removal units from the project. a. Projects can apply all silvicultural systems: i. Conservation forests (no use of timber)	The project applies conservation forest (no use of timber) as the tree species planted are fruit and medicinal trees. The fruit trees that will be planted in given is section A.1.

ii. Forests with selective harvesting iii. Rotation forestry	
2.1.2.b. All projects can include agriculture (agroforestry) or pasture (silvopasture) activities.	The VPA is for agroforestry activity on farmer's lands.
2.1.2. c. Project Areas shall not be on wetlands.	The project is on agriculture land and is not wetlands. The land use map submitted for the project area shows that the project area is not forest lands and is agriculture land.
2.1.2. d. Project Areas with organic soils shall not be drained or irrigated (except for irrigation for planting).	The project is agriculture lands with alluvial soils in Rajasthan and is not organic soils that will be drained[17].
e. Soil disturbance (through ploughing, digging of pits, stump removals, infrastructure, etc.) on organic soils shall be in less than 10% of the area that is submitted to certification (not 10% of the entire project area).	Not applicable as it is not organic soils[17]
f. The most likely scenario without the project (baseline scenario) shall be defined for the project area. This scenario shall not show any significant increase of the Baseline biomass ('tree' and 'non-tree').	Based on the baseline survey conducted and the spatial forest/non-forest assessment of the project area for before the start date and 10 years before project start date, it can be seen that there is no significant increase of tree cover in the project area as it is dominantly non-cultivable lands.
2.1.3 | Special Considerations for A/R Mangrove projects:	Not Applicable as it is not Mangrove plantations.

[17] https://gsstudy.com/peaty-soils-in-indian-subcontinent/

a. 90% of the planting area shall be planted with mangrove species.	
2.1.3. b. Due to the accumulation of soil organic carbon, an additional 1.8 tCO_2/ha/year can be accounted for in the first 20 years after a Modelling Unit (MU) is planted, unless transparent and verifiable information can be provided to justify a different value. This value is based on the recommendation of 0.5 tC/ha/year by the A/R CDM methodology AR-AM0014 v3.0. It has been converted to the unit tCO2/ha/year.	Not applicable as it is not Mangrove plantations. The GS4GG soil carbon tool is used to assess accumulation of SOC.
2.1.3. c. In case there are targeted management / inputs leading to SOC improvement involved, applicable SOC Framework Methodology approaches may be allowed.	Not applicable
2.1.3.d. SOC sequestration component shall be excluded from the issuance of Planned Emission Reductions.	No PERs are claimed. Hence not applicable
2.1.4.e. Paragraph 2.1.2 (c) of this methodology does not apply to mangrove projects.	Not applicable as it is not mangrove plantations

B.3. VPA boundary

>>

a) *define the project boundary that geographically delineates the proposed VPA under the control of the CME or the project participants, including information allowing for the unique identification of the VPA. If the proposed VPA contains more than one discrete area of land, each discrete area of land shall have a unique identification.*

The project boundary is delineated and submitted as shapefiles. The project area contains more than one discrete area of land and is identified by the end user and unique identification.

b) *select the carbon pools, emission sources and GHGs to account for in the project boundary of the real case VPA, and provide explanation with justification for the choice*

Source		GHGs	Included?	Justification/Explanation
Baseline scenario	Tree biomass (aboveground and belowground)	CO_2	Yes	Could be a major source of CO_2 emissions, however no trees in the baseline scenario will be removed.
		CH_4	No	No significant GHG source
		N_2O	No	No significant GHG source
	Non-tree biomass	CO_2	Yes	Could be source of GHG emissions
		CH_4	No	No significant GHG source
		N_2O	No	No significant GHG source
	Soil	CO_2	No	No significant GHG source
		CH_4	No	No significant GHG source
		N_2O	No	No significant GHG source
Project scenario	Tree biomass (aboveground and belowground)	CO_2	Yes	Major source of GHG sequestration
		CH_4	No	No significant GHG source
		N_2O	No	No significant GHG source
	Soil	CO_2	Yes	Source of CO_2 sequestration in the project
		CH_4	No	No significant GHG source
		N_2O	No	No significant GHG source

Carbon Pools Included for the real case and regular VPAs are Above ground biomass, Below ground biomass and Soil.

c) *describe how to define the project boundary of its regular VPAs, including how to determine the physical delineation of each regular VPAs,*

The regular VPAs will be through physical delineation of the project boundary and submitting the shapefiles of the project boundary through spatial forest/non forest assessment.

d) *which sources, which carbon pools (for Forestry and AGR VPAs) and GHGs are to be included/excluded in its regular VPAs boundary, under which conditions or circumstances*.

The carbon pools and GHGs included in regular VPA boundary is as shown above in the table. It is Above Ground Biomass, Below Ground Biomass and Soil Organic Carbon.

Based on para 5.8.11 of the PoA Requirements and Procedures, for all areas of land for which the control for the VPA has not yet been established when the VPA-DD is submitted to a VVB for validation, the CME shall provide evidence of control at the latest by the time of submitting the monitoring report that covers the first monitoring period for the VPA to a VVB for verification. The project is going to be initiated by 01/07/2024. Hence all the areas of lands where planting will be done, the evidence of control will be provided ta the time of submitting the monitoring report that covers the first period for the VPA to the VVB for verification.

Based on 5.8.12, when submitting the monitoring report that covers the first monitoring period for Forestry, real case VPA to a VVB for verification, the project boundary of the VPA shall be fixed in such a way that it covers only the area of land for which the control over the VPA has been established and based on 5.8.13, for Forestry VPAs, the CME shall demonstrate that each discrete area of land to be included in the project boundary is eligible for a VPA in accordance with the applied methodologies. The eligibility of the lands are conducted through the land eligibility analysis conducted applying Annex C of the LUF Activity Requirements. The 5000 ha of land will be within the eligible lands submitted.

B.4. Establishment and description of baseline scenario

>>

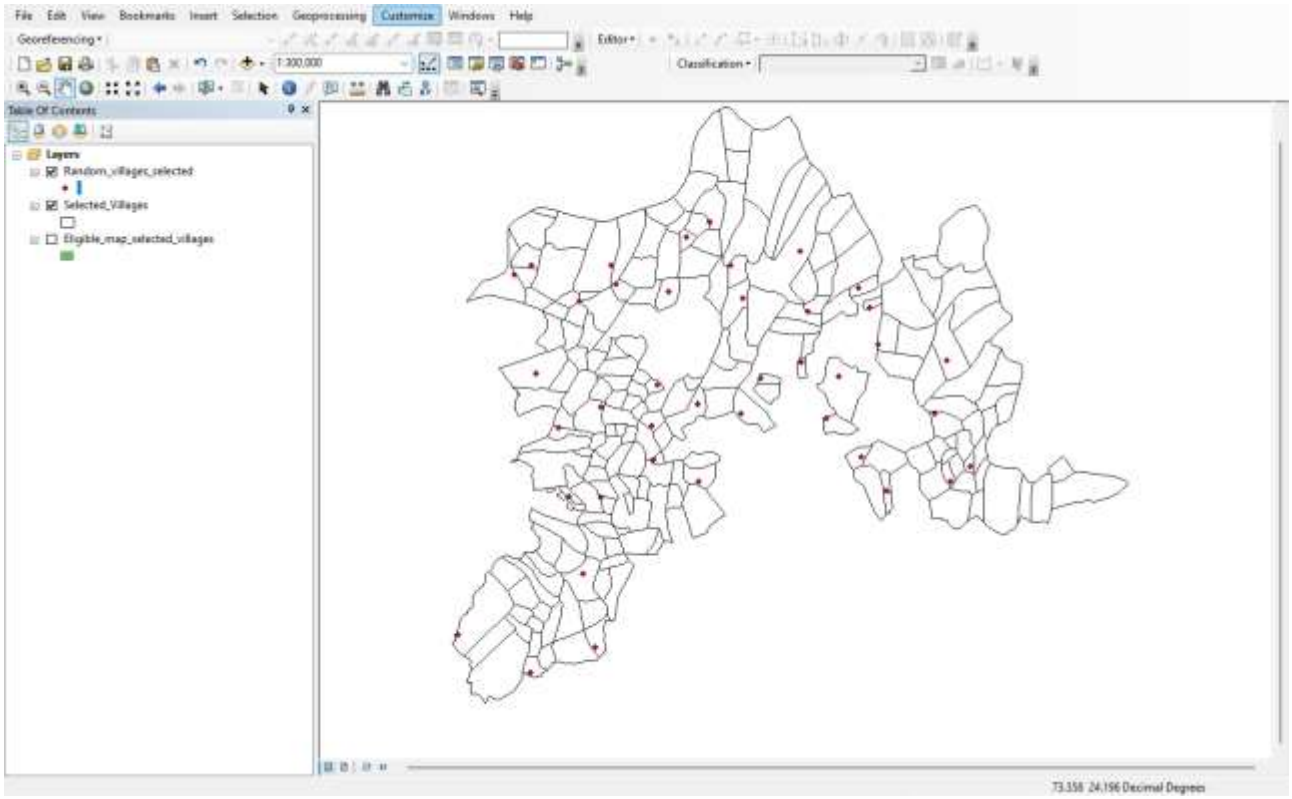
According to 3.5.1 | The Baseline shall be determined by estimating the 'tree' and 'non-tree' biomass that is present in the eligible planting area just prior to the planting start.

Based on relevant national and/or sectoral policies, regulations and circumstances, planting trees on agriculture lands is not mandatory. Farmers can decide what they want to grow on their lands, as they are private lands belonging to the farmers. Hence based on historical land use practices, baseline survey conducted and the spatial forest/non-forest assessment of the project area before the start date and 10 years before project start date, it can be seen that there is no significant tree cover in the project area as it is dominantly non-cultivable agriculture lands.

Fig 06: Baseline scenario of project area

There are three area types which are upper ridge, middle ridge and lower ridge. But the project will have one modelling unit.

A pilot baseline survey was conducted in the project area for the three MUs. There is not any difference in the baseline scenario for the three MUs. Hence the baseline scenario is treated as one strata i.e. non-cultivable lands/agriculture lands. Based on the mean standing biomass and standard deviation after removing outliers, the sample size for the project area of 5,000 ha was determined using the excel based Winrock's sampling size determination. A total of 156 samples need to be sampled based on the pilot survey. The samples were selected randomly on GIS Platform as shown below.



Sample surveys are being conducted for baseline scenario and analyzed. This is still underway and will be updated before submission to the VVB for Validation.

Based on the survey, the baseline biomass of xx tCO_2/ha from above ground and below ground biomass and xx from non-tree biomass will be deducted in year 1 of planting.

According to 3.5.2 | To determine the Baseline of the eligible planting area the land shall be a. stratified according to its vegetation types (grassland, bushland, etc.), AND

- Based on the spatial assessment, there is only one stratification, which is non-cultivable/agriculture lands. Hence for the 3 types of lands (upper, middle and lower ridge), the single baseline is non-cultivable/agriculture land.

b. for each of these strata scientifically based project-specific, regional or national default values shall be found which state 'tree' and 'non-tree' biomass of these vegetation types.

- A baseline survey is conducted to determine and tree and non-tree biomass of the non-cultivable/agriculture lands. Based on the baseline survey conducted in the project area, there are x trees/ha on these lands contributing to xx t/ha i.e. xx tCO_2/ha. This will be deducted in year 1 for GHG Removal estimations.

c. default values from the IPCC shall only be used if no other values are available.

- Not applicable as baseline survey is conducted for the project area.

B.5. Demonstration of additionality

>>

The project is a large-scale project activity and additionality is based on Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities" (Version 01)[18].

The steps as outlined in the Tool followed to demonstrate that the proposed project activity is additional and not the baseline scenario is as follows:

- STEP 0. Preliminary screening based on the starting date of the A/R project activity;

- STEP 1. Identification of alternative land use scenarios to the A/R project activity;

- STEP 2. Investment analysis to determine that the proposed project activity is not the most economically or financially attractive of the identified land use scenarios; or

- STEP 3. Barrier analysis; and

- STEP 4. Common practice analysis.

[18] https://cdm.unfccc.int/methodologies/ARmethodologies/tools/ar-am-tool-02-v1.pdf

STEP 0: Preliminary screening based on the starting date of the A/R project activity: The project is a regular project, wherein the stakeholder's meeting was conducted before the start of the project activity. The carbon revenue is seriously considered in the decision to proceed with the project activity. The start date is 01/07/2024, after the stakeholder's meeting.

STEP 1: Identification of alternative land use scenarios to the proposed A/R CDM project activity

This step serves to identify alternative land use scenarios to the proposed carbon project activity that could be the baseline scenario, through the following sub-steps:

Sub-step 1a. Identify credible alternative land use scenarios to the proposed CDM project activity: Taking into account relevant national and/or sectoral policies and circumstances, such as historical land uses, practices and economic trends, the identified land use scenarios which are credible alternative land scenarios to the proposed project activity is;

a) *Continuation of the pre-project land use – non-cultivable/agriculture lands;*

b) *Reforestation of the land within the project boundary performed without being registered as the carbon project activity.*

c) *If applicable, forestation of at least a part of the land within the project boundary of the proposed A/R project at a rate resulting from legal requirements; or extrapolation of observed forestation activities in the geographical area with similar socio-economic and ecological conditions to the proposed A/R project activity.*

The three-land use scenarios are credible. As can be seen from the mapping of the project area, the extent of agriculture area continues from 2013 until 2023 and will continue. The non-cultivable/agriculture lands accounts for a large percentage as can be seen below in the district.

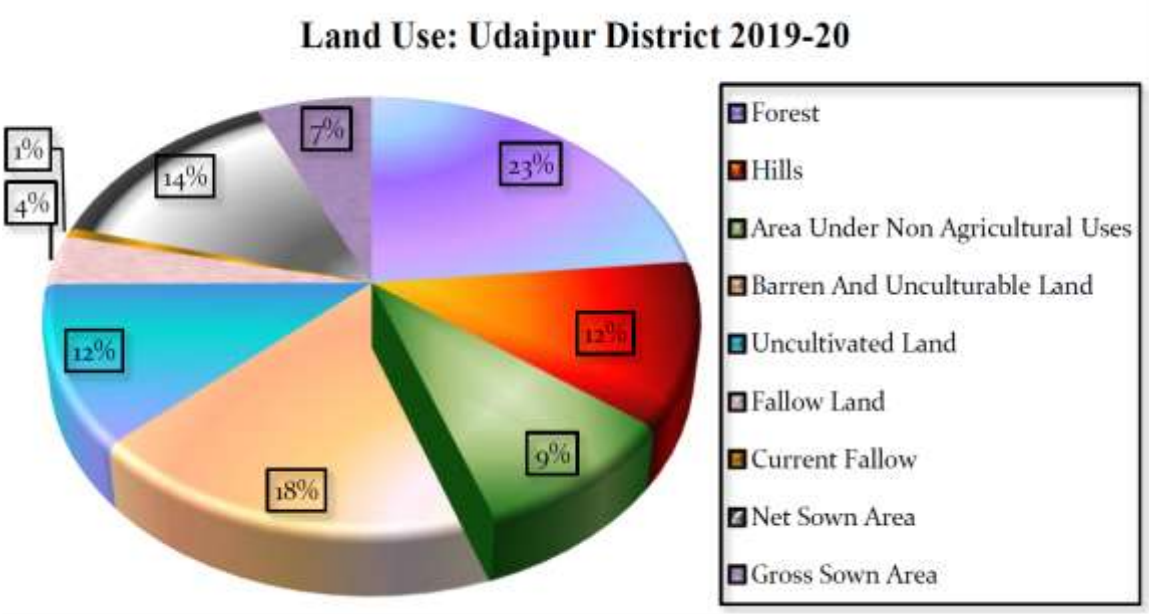


Fig 07: Land use features of Udaipur District

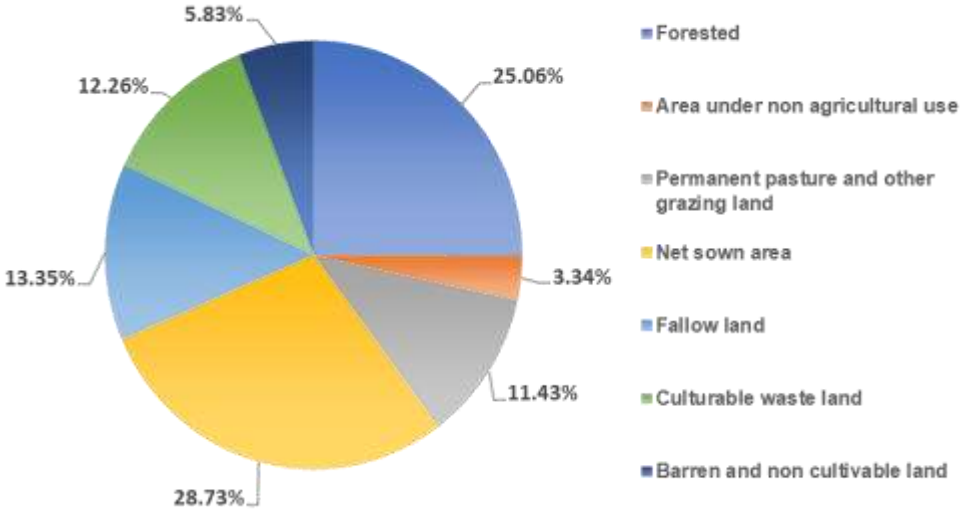


Fig 08: Land use features of Kherwara block in Udaipur District

For Kherwara block, 13.35% is fallow land, 12.26% is cultivable waste land and 5.83% is barren and non-cultivable land. For this project the most potential category of land is barren and non-cultivable land, cultivable waste land and fallow land[19].

[19] District statistical profile, Udaipur, 2020

Hence this land use will continue which is the pre-project scenario.

India, including Rajasthan state have afforestation programs under various policies and programs. Though there is no legal requirements, forestation is also a credible alternative land use.

Outcome of sub-step 1a: All the land use scenarios identified in step 1a are in compliance with all the mandatory applicable legal and regulatory requirements. Hence the list of credible alternative land use scenarios that could occur on the land within the project boundary of the project activity are:

- *Continuation of the pre-project land use – non-cultivable/agriculture lands;*
- *Reforestation of the land within the project boundary performed without being registered as the carbon project activity.*
- *If applicable, forestation of at least a part of the land within the project boundary of the proposed A/R project at a rate resulting from extrapolation of observed forestation activities in the geographical area with similar socio-economic and ecological conditions to the proposed A/R project activity.*

Sub-step 1b. Consistency of credible land use scenarios with enforced mandatory applicable laws and regulations

Applying procedures of Para 12 of the tool the following three scenarios are in compliance with all the mandatory applicable legal and regulatory requirements.

a) *Continuation of the pre-project land use:* As can be seen from the spatial forest/non forest assessment of the project area, the lands have been non-cultivable/agriculture lands in 2013 and 2023 and will continue to be non-cultivable/agriculture lands. This activity is legal and complies with all national laws and regulations. The provision of basic minimum livelihood through granting of land title to farmers who have obtained title to the land is legal and complies with all the national laws and regulations. This activity is legal and complies with all national laws and regulations.

b) *Reforestation of the land within the project boundary performed without being registered as the A/R CDM project activity:* Of the total cropland of 155.11 lakh

ha in Rajasthan, 20.51 lakh ha (13.22%) is under agroforestry[20]. Reforestation of agriculture land is legal and complies with all national laws and regulations. India has a National Agroforestry Policy, 2014[21], that encourage and expand tree plantation in complementarity and integrated manner with crops and livestock to improve productivity, employment, income and livelihoods of rural households, especially the small holder farmers. Other major policy initiatives, including the National Forest Policy 1988, the National Agriculture Policy 2000, Planning Commission Task Force on Greening India 2001, National Bamboo Mission 2002, National Policy on Farmers, 2007 and Green India Mission 2010, emphasize the role of agroforestry for efficient nutrient cycling, organic matter addition for sustainable agriculture and for improving vegetation cover[21].

c) *If applicable, forestation of at least a part of the land within the project boundary of the proposed A/R project at a rate from extrapolation of observed forestation activities in the geographical area with similar socio-economic and ecological conditions to the proposed A/R project activity:* These plans are not legally binding and meeting the goals and objectives of these programs depend on availability of funds. Funds from government have been limited for such programs. The national JFM program and social forestry concentrates on forest areas rather than on such private degraded lands where the proposed A/R activity takes place. Also the farmers face cash flow limitations, multiple risks and other problems to take it on their own. Thus the baseline scenario is entirely in compliance with applicable legal and regulatory requirements but at the same time the fact that the legal requirements are in place does not mean that enough is being done. Only 20.51 lakh ha or 13.22% of agriculture land is under agroforestry. As there is no legal binding, reforestation of the lands are not common practice.

[20] https://www.researchgate.net/publication/338818714_A_country_level_assessment_of_area_under_agroforestry_and_its_carbon_sequestration_potential

[21] https://agricoop.nic.in/sites/default/files/National%20Agroforestry%20Policy%202014.pdf

The outcome of sub-step 1b is that the three scenarios as below are credible land use scenarios.

- *Continuation of the pre-project land use – non-cultivable/agriculture lands;*
- *Reforestation of the land within the project boundary performed without being registered as the carbon project activity.*
- *If applicable, forestation of at least a part of the land within the project boundary of the proposed A/R project at a rate resulting from extrapolation of observed forestation activities in the geographical area with similar socio-economic and ecological conditions to the proposed A/R project activity.*

STEP 2. Barriers analysis

Sub-step 2a. Identification of barriers that would prevent the implementation of at least one alternative land use scenarios

The agriculture sector has the facilities of insurance and credit from the financial institutions and an organized marketing structure. However, the farmers practicing tree-based farming are devoid of any such facilities and this is a major hurdle in boosting agroforestry among resource-poor farmers[22].

Based on study conducted by WRI, there are several challenges that impede implementation, such as lack of quality planting material; technical capacity and knowledge gaps; market and finance gaps; and inadequate attention to issues around land and tree tenure, gender, and social inclusion. Enabling conditions and barriers vary from state to state and account for the broad spectrum of differences in the implementation of the policies/schemes[23]. Based on the study, farmers highlighted the lack of incentives for protecting existing agroforestry systems and promoting traditional practices with native tree species. Such native systems are prioritized by women and other marginalized people who are dependent on these multipurpose trees for food, fuelwood, fodder, and nontimber forest produce. Gaps in research and

[22] https://www.biopasos.com/biblioteca/83v%201826.pdf
[23] https://files.wri.org/d8/s3fs-public/2022-03/roadmap-scaling-trees-outside-forests-india.pdf?VersionId=6dR4jQJT.TF_70rCP7EQ00jhznFyxAVc

extension services also limited awareness among farmers on available models and policy incentives. Lack of quality planting material, continuing ambiguities regarding permits for harvest and transit of farm-grown timber across state lines, and poorly developed value chains were highlighted by stakeholders as disincentives preventing farmers from taking up planting. Lack of attention to tree tenure dissuaded tenant farmers and women from practicing tree planting.

Sub-step 2b. Elimination of land use scenarios that are prevented by the identified barriers

There are no support for agroforestry-based land use practices, similar to those in crop production and inputs such as fertilizer, credit for smallholder farms, which discourages them going for tree-based crop production on their small holdings. In fact, the policy support for fertilizer encourages more fertilizer use rather than going for agroforestry which builds nutrients in the soil over a period of time[24].

The proposed A/R project activity reduces the gestation period for economic returns through carbon credits and makes the project a more attractive economic proposition. The VPA Implementer, an NGO, with support from CME, has taken up the proposed A/R carbon project activity with a view to promote tree planting on these lands and is bearing all project investigation and preparation costs. The project activity is going to support landowners with resources, capacity development and finance. The financing will support development of nurseries, and transportation and maintenance of saplings. It will also cover re-plantation of trees which do not survive after some years. In addition to this the project will support salaries of community monitors who will monitor the project on a regular basis.

Capacity development will include training community members participating in the project activity to run nurseries, maintain saplings and monitor the plantation. The project intends to conduct regular training programs and workshops for the project personnel to equip them with knowledge and tools to ensure growth of the plantation. Capacity development will also include trainings for best possible uses of

[24] Vinod Chandra Pande, 2021. Farm-Forestry, Smallholder Farms and Policy Support. https://www.intechopen.com/chapters/75916

the forest produce which in turn will enhance the livelihood of the community in the long run. This is being done only because it is a carbon project. Annual cropping of marginal lands costs Rs 1,000-3,000 per hectare. Banks usually lend loans to the public at certain rate of interest but with collateral security. Some people will not have any asset for collateral security; hence they end up borrowing from informal sources like pawn brokers and other money lenders and micro finances. This level of borrowing is available more readily from informal sources where collateral is not needed. Gestation periods are short and money that has been borrowed informally can be returned more quickly to the lender. The even more likely alternative of leaving the land in a degraded state costs nothing and is generally preferred.

Hence the option b. *Reforestation of the land within the project boundary performed without being registered as the carbon project activity* is eliminated based on the barrier analysis presented above.

To increase the trees outside forests, the Government of Rajasthan's Forest Department and the U.S. Agency for International Development (USAID), announced the launch of the "Trees Outside Forests in India (TOFI)" program in Rajasthan, which will bring together farmers, companies, and other private institutions to rapidly expand tree coverage outside of traditional forests in the state. The new initiative will enhance carbon sequestration, support local communities, and strengthen the climate resilience of agriculture, thereby supporting global climate change mitigation and adaptation goals. Based on the order by the government of Rajasthan[25] the area of planting undertaken by the project activity is not in the region when planting will be undertaken. Hence reforestation of the land within the project boundary without being registered as a carbon activity is not a possibility.

With regard to scenario C, forestation of at least a part of the land within the project boundary of the proposed A/R project at a rate resulting from legal requirements there are no legal requirements that farmers need to afforest their private lands; Based on extrapolation of observed forestation activities in the geographical area with similar socio-economic and ecological conditions to the proposed A/R project activity,

[25] https://forest.rajasthan.gov.in/content/dam/raj/forest/ForestDepartment/PDFs/orderscircular/TOFR%20Magzine.pdf

it can be seen that potential of agroforestry in Rajasthan is 155.11 lakh ha of cropland and 50.01 lakh ha of fallow land. Of this, 20.51 lakh ha i.e.10% is under agroforestry[26]. Hence based on extrapolation of observed forestation activities forestation of at least a part of the land within the project boundary of the proposed A/R project at a rate resulting from extrapolation of observed forestation activities in the geographical area with similar socio-economic and ecological conditions to the proposed A/R project activity is not possible.

Hence the option C. *forestation of at least a part of the land within the project boundary of the proposed A/R project at a rate resulting from extrapolation of observed forestation activities in the geographical area with similar socio-economic and ecological conditions to the proposed A/R project activity* is eliminated based on the barrier analysis presented above.

Outcome of sub-step 2b: List of land use scenarios that are not prevented by any barrier is

Continuation of the pre-project land use – non-cultivable/agriculture lands;

STEP 3: Investment analysis

The project is conservation forestry and there is no harvest from the project activity. The products from the project area belongs to the farmer, the land owner and the CME or the VPA Implementer are not benefited from financial benefits. The only income is through carbon related income to implement the project on farmer's lands.

STEP 4. *Common practice analysis*

An analysis of the extent to which similar forestation activities have occurred in the geographic area of the project activity, shows that area under agroforestry accounted for 10% in the state[27].

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26 https://www.researchgate.net/publication/338818714_A_country_level_assessment_of_area_under_agroforestry_and_its_carbon_sequestration_potential

27 https://www.researchgate.net/publication/338818714_A_country_level_assessment_of_area_under_agroforestry_and_its_carbon_sequestration_potential

Presently there are two afforestation programs of the forest department ongoing in Kherwara and Rishabhdev tehsils in Udaipur district. 1. ToFR (Trees outside forests in Rajasthan) and 2. NMSA (National Mission for Sustainable Agriculture).

To increase the trees outside forests, the Government of Rajasthan's Forest Department and the U.S. Agency for International Development (USAID), announced the launch of the "Trees Outside Forests in India (TOFR)" program in Rajasthan, which will bring together farmers, companies, and other private institutions to rapidly expand tree coverage outside of traditional forests in the state. The new initiative will enhance carbon sequestration, support local communities, and strengthen the climate resilience of agriculture, thereby supporting global climate change mitigation and adaptation goals. Based on the order by the government of Rajasthan[28] the area of planting undertaken by the project activity is not in the region when planting will be undertaken. Hence reforestation of the land within the project boundary without being registered as a carbon activity is not a possibility.

As part of the ToFR program, the forest department is supposed to distribute 5 crore saplings across Rajasthan to individuals and/or private entities for the purpose of establishing plantations outside forest areas. However individuals/entities will have to first register themselves on the SSO Id portal of the Government of Rajasthan to get the saplings from the forest department. This is a cumbersome process as the process of registration by the villagers can be done in the government-run E-mitras only in which there are service charges for each registration. Because of this, the villagers are not keen on registering for the ToFR program and hence have not received saplings from the forest department. In the community meetings, it was observed that there was no outreach by the forest department for either of the programs (ToFR and NMSA) and most of the villagers have no idea about the existence of this program.

The charges for each 6-monthly sapling is Rs.9 and that of an annual sapling is Rs.15. So far in the project region, the farmers have not procured any saplings from the programs.

[28] https://forest.rajasthan.gov.in/content/dam/raj/forest/ForestDepartment/PDFs/orderscircular/TOFR%20Magzine.pdf

The NMSA, is an agroforestry initiative with the primary focus on agriculture and forests serving the secondary purpose of augmentation of livelihood for the farmers and is aimed for progressive farmers. There is no clarity regarding implementation of this program in Udaipur particularly because of the fact that Udaipur's farmers are mostly small or marginal and engaged in subsistence farming.

Hence, the program is limited to only providing saplings at a cost to the farmers. There are barriers too for the farmers to get these saplings. The registration to get the saplings, which is again a process that the farmers are not aware of and is elaborate. The other costs to overcome technical and social barriers as listed above needs to be addressed.

There are essential distinctions which is a fundamental and verifiable change in circumstances under which the proposed carbon project activity will be implemented when compared to circumstances under the USAID project is being implemented. The USAID is a 3-year funded program with a target of planting 5 crore samplings under common lands and agroforestry, after which there is no support to the farmers. In this carbon project, The CME/VPA Implementer will be working with the farmer's families till the end of the VPA crediting period. Firstly, replanting will be done for 3 years to ensure better survival rate. Monitoring of these plots will be done periodically. Technical advice will be provided to the farmers to tend to these trees and use of the lands for sustainable agriculture. In addition, products will be aggregated from these lands and help provided in getting the best price from the market through women agri-entrepreneurs. This way the families are ensured continues financial support.

The proposed carbon activity is beyond the activity that is being implemented without any financial benefits from the forest department or the government and is being done only with carbon incentives.

The common practice analysis shows that the rate of afforestation on agriculture lands are very low. The role of agroforestry practices in climate change mitigation in India can be realized to its full potential by overcoming technical barriers (management

skills), financial and institutional (differing interests between farmers and forests departments and industry)[29].

Hence the proposed A/R carbon project is not the baseline and is additional.

B.5.1. Prior Consideration

>> N/A

B.5.2. Ongoing Financial Need

>> N/A

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

		SDG IMPACT
SUSTAINABLE DEVELOPMENT GOALS TARGETED	MOST RELEVANT SDG TARGET	**INDICATOR (PROPOSED OR SDG INDICATOR)**
13 Climate Action (mandatory)	13.2 Integrate climate change measures into national policies, strategies and planning	GHG Removals through A/R activities (tCO_2/year)
1 No Poverty	1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	Economic returns (Rs.) from the project area

[29] https://www.researchgate.net/publication/337167646_Agroforestry_systems_Opportunities_and_challenges_in_India

2 Zero Hunger	2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality	Density of fruit, medicinal, timber species/ha Production of fruits, medicinal and other produce (Kgs)/ha in the project area Increase in nutritional value at household level
5 Gender equality	5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	Income to women agri-entrepreuners from usufructs of the project area
6 Clean water and sanitation	6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Increase in water holding capacity of planted area.
8 Decent Work and Economic Growth	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.	Number of employees
12 Responsible consumption and Production	12.2 By 2030, achieve the sustainable management and efficient use of natural resources	NTFPs from the project area

15 Life on Land	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	i. Number of project beneficiaries ii. Area under planting iii. Number of species and seedlings planted
17 Partnerships for the goals	17.3 Mobilize additional financial resources for developing countries from multiple sources	Investment to implement the project

B.6.1. Explanation of methodological choices/approaches for estimating the SDG Impact

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SDG 13

Biomass

Baseline

According to Para 3.5.3 of the methodology, the Baseline shall be determined on a Modelling Unit (MU) level using the following formula:

Baseline MU,t [tCO_2/ha] = Baseline Eligible planting area [tCO_2] ÷ Eligible planting area [ha] *Eq. 3*

As mentioned in section B.4. the baseline GHG is considered as zero.

CO_2 removal

According to the methodology, the following steps will be followed.

The yearly CO_2-removal is determined at the level of Modelling Unit (MU) during the crediting period.

For every MU a growth-model and conversion factors the following conversion procedure will be followed and the conversion factors shall be determined at the level of a MU Unit. The MU is homogeneous in terms of the land type. Each of the state will be an MU. the conversion factor will be applied for each of the tree species for the following parameters and included as ex-ante in section B.6.2.

a. Wood Density

b. Biomass Expansion Factor

c. Root-to-Shoot ratio

The conversion factors allow the conversion of the 'Stem volume', measured in cubic meters [m^3] to 'tree biomass' with the unit tCO_2 and is included in section B.6.2. and subject to monitoring.

Aboveground biomass = stem volume x Biomass Expansion Factor x wood density x carbon fraction x C to CO_2 factor

According to Para 3.6.4 of methodology existing 'tree biomass' from the carbon stock of the Baseline that is not removed shall be reflected in the growth-model.

The baseline tree biomass will not be removed and retained in the project boundary.

According to para 3.6.5 of the methodology, a realistic survival rate of 80% shall be reflected in the growth model.

In the first three years, the seedlings that do not survive will be replanted. Also each of the farm is being taken care of by the farmer by providing irrigation and protection from grazing. Also since census approach is considered for GHG Removal calculations, the survival rate for each of the farm will be done at the time of monitoring and accounted for GHG Removal calculations.

Calculation of Yearly CO_2 Removals

The yearly CO_2-removal is determined at the level of Modelling Unit (MU) during the crediting period.

The CO_2 removal unit is determined for each year (t) of the crediting period using the following formula

CO_2 removal units MU,t = (CO_2 removal MU,t) – Baseline MU,t – Leakage MU,t -

Other Emissions MU,t x Eligible Planting Area MU

$CO_{2removal}$ Project Area,t = $\sum_{MU=1}^{MUs} \sum_{t=1}^{CP} CO2\ removal\ MU,t$

Where,

$CO_{2removal}$ Project area,t	=	CO2 removal units of a project area in year t (CO_2)
CO_2 removal MU,t	=	CO2-removal of a MU in year t (tCO2)
MUs	=	MUs of a project area (1,2,3,…)
T	=	Years of the crediting period (1,2,3,…)
CP	=	Year the crediting period ends (1,2,3,…)

Leakage emissions

According to the methodology, leakage are emissions that occur due to a *shift of activities* from the inside of a project area to the outside of a project area and are due to a. collection of wood (for firewood, charcoal, etc.), b. timber harvesting, c. agriculture (crop cultivation, shrimp cultivation, etc.) and d. livestock.

Importantly, only the 'tree biomass' affected by these activity shifts shall be considered and will be determined on a Modelling Unit (MU) level using the following formula

Leakage MU,t [tCO2/ha] = Leakage Project area [tCO2] ÷ Eligible planting area [ha] *Eq. 5*

Currently, the trees in the project area accounts to 5 trees/ha. These trees will continue to exist and will not be cut. Hence there is no leakage from the project area to outside of the project area to account for leakage. Hence leakage will not be estimated.

SOC

The SOC Tool will be applied to estimate the SOC Increment for the project area. Based on the sample survey analysis the non-cultivable lands are degraded and are the baseline SOC is very low. This is also supported by secondary literature.

The SOC increment based on the SOC Tool and input parameters are as follows:

Soil Stratum: Tropical Dry

Soil Type: HAC Soils

Pre-Project Activities: Short-term or set aside croplands

Management: Nil

Input: Nil

Based on these input parameters, the carbon increment is 2.93 tCO_2/ha/yr

Other SDGs

The rest of the SDGs the SDG Impact is assessed as below

SDG Net Benefit = Project Impact – Baseline Scenario

B.6.2. Data and parameters fixed ex ante

SDG13

Data/parameter	Wood Density

Unit	t/m^3
Description	Ratio between the mass of dry wood divided by its volume
Source of data	1. Wood Specific Gravity in Indian Forests: A Review https://www.researchgate.net/publication/360343562_Wood_Specific_Gravity_in_Indian_Forests_A_Review 2.Wood Densities of Tropical Tree Species https://www.researchgate.net/publication/237339477_Wood_Densities_of_Tropical_Tree_Species 3. Wood density and Physiognomy of tree species in Pachaimalai hills of Southern Eastern Ghats, Tamil Nadu, India (PDF) Wood density and Physiognomy of tree species in Pachaimalai hills of Southern Eastern Ghats, Tamil Nadu, India (researchgate.net)
Value(s) applied	See table below

Tree Species	t/m^3
Acacia catechu	*0.5*
Acacia leucophloea	*0.76*
Acacia nilotica	*0.36*
Albizzia lebbak	*0.7*
Anogeissus pendula	*0.61*
Azadirachta indica	*0.63*
Buchnania lanzen	*0.78*
Butea monosperma	*0.48*
Dalbergia sissoo	*0.77*[30]
Dendrocalamus strictus[31]	*0.799*
Holoptelea integrifolia[32]	*0.64*
Madhuca longifolia	*0.74*
Mangifera indica	*0.57*
Manikarna hexandra	*0.87*
Phyllanthus emblica	*0.86*
Pongamia pinnata	*0.83*
Syzigium cumini	*0.61*
Zizyphus mauritiana	*0.85*

If species other than the above are planted, the appropriate wood density will be applied from secondary sources.

[30] https://www.wood-database.com/sissoo/
[31] https://www.ijser.org/researchpaper/Physical-and-Mechanical-Properties-of-Bamboo-Dendrocalmus-Strictus.pdf
[32] https://ecologicalprocesses.springeropen.com/articles/10.1186/s13717-019-0163-y

Choice of data or Measurement methods and procedures	Secondary source of information
Purpose of data	To determine project GHG removals
Additional comment	For species without specific wood density available, the general default value of 0.7 t/m^3 will be applied. The wood density is considered for tropical region, India and dry deciduous forests. If wood density values of species for the region is available, it will be updated during first verification.

Data/parameter	**Biomass Expansion Factor (BEF)**
Unit	Dimensionless
Description	Biomass conversion factor to convert stem volume to above ground biomass.
Source of data	2006 IPCC Guidelines for National Greenhouse Gas Inventories Table 4.5, Default Biomass Conversion and Expansion Factors (BCEF), Tonnes Biomass (M3 of Wood Volume)-1, BCEF for expansion of merchantable growing stock volume to above-ground biomass (BCEFS), for conversion of net annual increment (BCEFI) and for conversion of wood and fuelwood removal volume to above-ground biomass removal (BCEFR)
Value(s) applied	Hardwood - 1.5

	
Choice of data or Measurement methods and procedures	Default data values accepted under GS A/R GHG Emissions Reduction & Sequestration Methodology, version 2.0.
Purpose of data	To estimate project GHG Removals
Additional comment	Nil

Data/parameter	**Root to shoot ratio**
Unit	**-**
Description	Root-to-Shoot Ratio (Rts) is the ratio of belowground (root) biomass to aboveground biomass (shoot) biomass.
Source of data	Table. 4.4, Page 18-21.Volume 4: Agriculture, Forestry and other Land Use, 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.
Value(s) applied	**0.440**
Choice of data or Measurement methods and procedures	The value for Tropical Dry for Asia is applied.
Purpose of data	To estimate project GHG Removals
Additional comment	

Data/parameter	**Carbon fraction for tree biomass**
Unit	tC/tdm
Description	The carbon fraction for tree biomass refers to the total carbon content that it is contained in the tree biomass.
Source of data	Default value as per GS A/R GHG Emissions Reduction & Sequestration Methodology, version 2.0
Value(s) applied	0.5
Choice of data or Measurement methods and procedures	Default value as per GS A/R GHG Emissions Reduction & Sequestration Methodology, version 2.0
Purpose of data	To calculated project GHG Removals
Additional comment	

Data/parameter	**Conversion of tC to tCO_2**
Unit	tCO_2/tC
Description	The factor to convert carbon content of biomass to CO_2.
Source of data	Default value as per GS A/R GHG Emissions Reduction & Sequestration Methodology, version 2.0.
Value(s) applied	44/12
Choice of data or Measurement methods and procedures	Default value as per GS A/R GHG Emissions Reduction & Sequestration Methodology, version 2.0.
Purpose of data	To estimate project GHG Removals
Additional comment	

Data/parameter	**Baseline non-tree biomass**

Unit	tCO_2/ha
Description	Baseline non-tree biomass in the baseline scenario
Source of data	Based on baseline survey in agriculture land, tCO_2/ha
Value(s) applied	0.1 tCO_2/ha
Choice of data or Measurement methods and procedures	Based on baseline surveys conducted in the project area before the start of the project activity.
Purpose of data	To estimate biomass in the Baseline scenario
Additional comment	

Data/parameter	**SOC Increment**
Unit	$tCO_2/ha/yr$
Description	SOC Increment in the project scenario
Source of data	SOC Tool
Value(s) applied	2.93 $tCO_2/ha/yr$
Choice of data or Measurement methods and procedures	Based on the SOC Tool of GS4GG
Purpose of data	To estimate SOC Increment under the project scenario
Additional comment	The tool is based on input values depending on the soil stratum and pre-project activities

Other SDGs

There are no Parameters fixed ex-ante for other SDGs.

B.6.3. Ex ante estimation of SDG Impact

>>

SDG 13

INPUT DATA			
Start Year and Month	01-07-2024		
Year of Project Activity	30	Years	
Total Area Planted (ha)	5,000.00	ha	Area planted in phased manner
Baseline Carbon Stock (t/ha/yr)	0.10	t/ha/yr	Based on Baseline Studies
AGB Increment (t/ha/yr)	4.03		Based on field Studies conducted in the Project Area
Survival Rate (%)	80%		
AGB Increment (t/ha/yr)	3.23	t/ha/yr	After applying survival rates
AGB: BGB Ratio	0.44	-	Average of IPCC values for <20 and >20 year for tropical dry forests
BGB Increment (t/ha/yr)	1.42	t/ha/yr	
Carbon Fraction	0.50		IPCC Value
Conversion of C to CO2	3.67		Default Value

Values from SOC

Year	SOC (tCO_2) (From SOC Tool)
2024-2025	-
2025-2026	5,866.0
2026-2027	14,666.0
2027-2028	14,666.0
2028-2029	14,666.0
2029-2030	14,666.0
2030-2031	14,666.0
2031-2032	14,666.0
2032-2033	14,666.0
2033-2034	14,666.0
2034-2035	14,666.0
2035-2036	14,666.0
2036-2037	14,666.0
2037-2038	14,666.0

2038-2039	14,666.0
2039-2040	14,666.0
2040-2041	14,666.0
2041-2042	14,666.0
2042-2043	14,666.0
2043-2044	14,666.0
2044-2045	14,666.0
2045-2046	8,800.0
2046-2047	
2047-2048	
2048-2049	
2049-2050	
2050-2051	
2051-2052	
2052-2053	
2053-2054	

The calculation of CO_2 removal for the project activity is based on the GS4GG A/R GHG emissions reduction and sequestration methodology, V.2.0 and SOC Tool.

Year	Baseline estimate	Project estimate	Net benefit
2024-2025	200	8,591	8,391
2025-2026	300	48,469	48,169
2026-2027		57,269	57,269
2027-2028		57,269	57,269
2028-2029		57,269	57,269
2029-2030		57,269	57,269
2030-2031		57,269	57,269
2031-2032		57,269	57,269
2032-2033		57,269	57,269
2033-2034		57,269	57,269
2034-2035		57,269	57,269
2035-2036		57,269	57,269

2036-2037		57,269	57,269
2037-2038		57,269	57,269
2038-2039		57,269	57,269
2039-2040		57,269	57,269
2040-2041		57,269	57,269
2041-2042		57,269	57,269
2042-2043		57,269	57,269
2043-2044		57,269	57,269
2044-2045		57,269	57,269
2045-2046		51,403	51,403
2046-2047		42,603	42,603
2047-2048		42,603	42,603
2048-2049		42,603	42,603
2049-2050		42,603	42,603
2050-2051		42,603	42,603
2051-2052		42,603	42,603
2052-2053		42,603	42,603
2053-2054		34,012	34,012
Total	500	15,28,795	15,28,295
Total number of crediting years			30
Annual average over the crediting period	**16.67**	**50,959.82**	**50,943.15**

* Values are inclusive of SOC Increment

Total Sequestration (tCO_2 - 30 Years)	15,28,795	tCO_2
Annual Sequestration (tCO_2)	50,960	tCO_2
Per Ha Sequestration (Before deducting Buffer)	10.19	tCO_2/ha/yr

After deducting 20% Buffer Value		
Total Sequestration (tCO_2 - 30 Years)	12,22,636	tCO2
Annual Sequestration (tCO_2)	40,755	tCO2
Per Ha Sequestration (After deducting Buffer)	8.15	tCO_2/ha/yr

Other SDGs

SDGs	SDG IMPACT	Baseline	Project Scenario	Net Benefit
13 Climate Action	GHG Removals through A/R activities (tCO_2/year)	16.67	50,959.82	50,943.15
1 No Poverty	Economic returns (Rs.) to farmers from the project area	0	At least Rs.1000/year /ha	At least Rs.1000/year /ha
2 Zero Hunger	Density of fruits, medicinal and species/ha Production of fruits, medicinal and other produce (Kgs)/ha in the project area Kgs/ha/year Increase in nutritional value at household level	<5/ha 0 kgs/ha	200/ha At least Fruits – 10 kgs/ha Medicinal – 2 kgs/ha Based on produce and fruits and will be determined ex-post in %	200/ha At least Fruits – 10 kgs/ha Medicinal – 2 kgs/ha Based on produce and fruits and will be determined ex-post in %

5 Gender equality	Income to women agri-entrepreuners from usufructs of the project area	0	At least Rs.1000	At least Rs.1000 women/year
6 Clean water and sanitation	Increase in water holding capacity of planted area.		Will be determined ex-post	Will be determined ex-post
8 Decent Work and Economic Growth	Number of employees	0	At least 5	At least 5
12 Responsible consumption and Production	NTFPs from the project area GHG	0	Number of NTFPs that are generated from project area	Number of NTFPs that are generated from project area
15 Life on Land	i. Number of project beneficiaries ii. Area under planting iii. Number of species and seedlings planted	0 ha	i. 5000 ii. 5000 ha iii. At least 15 species and 2 million seedlings	i. 5000 ii. 5000 ha iii. At least 15 species and 2 million seedlings
17 Partnerships for the goals	Investment to implement the project	Rs. 0	Will be determined ex-post	Will be determined ex-post

B.6.4. Summary of ex ante estimates of each SDG outcome

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
2024-2025	200	8,591	8,391
2025-2026	300	48,469	48,169
2026-2027		57,269	57,269
2027-2028		57,269	57,269
2028-2029		57,269	57,269
2029-2030		57,269	57,269
2030-2031		57,269	57,269
2031-2032		57,269	57,269
2032-2033		57,269	57,269
2033-2034		57,269	57,269
2034-2035		57,269	57,269
2035-2036		57,269	57,269
2036-2037		57,269	57,269
2037-2038		57,269	57,269
2038-2039		57,269	57,269
2039-2040		57,269	57,269
2040-2041		57,269	57,269
2041-2042		57,269	57,269
2042-2043		57,269	57,269
2043-2044		57,269	57,269
2044-2045		57,269	57,269
2045-2046		51,403	51,403
2046-2047		42,603	42,603
2047-2048		42,603	42,603
2048-2049		42,603	42,603
2049-2050		42,603	42,603
2050-2051		42,603	42,603
2051-2052		42,603	42,603
2052-2053		42,603	42,603
2053-2054		34,012	34,012
Total	500	15,28,795	15,28,295
Total number of crediting years	30		

Annual average over the crediting period		16.67	50,959.82	50,943.15

SDGs	SDG IMPACT	Baseline	Project Scenario	Net Benefit
13 Climate Action	GHG Removals through A/R activities (tCO_2/year)	16.67	50,959.82	50,943.15
1 No Poverty	Economic returns (Rs.) to farmers from the project area	0	At least Rs.1000/year/ha	At least Rs.1000/year/ha
2 Zero Hunger	Density of fruits, medicinal and species/ha	<5/ha	200/ha	200/ha
	Production of fruits, medicinal and other produce (Kgs)/ha in the project area Kgs/ha/year	0 kgs/ha	At least Fruits – 10 kgs/ha Medicinal – 2 kgs/ha	At least Fruits – 10 kgs/ha Medicinal – 2 kgs/ha
	Increase in nutritional value at household level		Based on produce and fruits and will be determined ex-post in %	Based on produce and fruits and will be determined ex-post in %
5 Gender equality	Income to women agri-entrepreuners from usufructs of the project area	0	At least Rs.1000	At least Rs.1000 women/year
6 Clean water and sanitation	Increase in water holding capacity of planted area.		Will be determined ex-post	Will be determined ex-post
8 Decent Work and Economic Growth	Number of employees	0	At least 5	At least 5

12 Responsible consumption and Production	NTFPs from the project area GHG	0	Number of NTFPs that are generated from project area	Number of NTFPs that are generated from project area
15 Life on Land	i. Number of project beneficiaries ii. Area under planting iii. Number of species and seedlings planted	0 ha	i. 5000 ii. 5000 ha iii. At least 15 species and 2 million seedlings	i. 5000 ii. 5000 ha iii. At least 15 species and 2 million seedlings
17 Partnerships for the goals	Investment to implement the project	Rs. 0	Will be determined ex-post	Will be determined ex-post

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored

SDG 13

Data / Parameter	Area planted under the project activity
Unit	Ha
Description	The project area that will be planted under the VPA
Source of data	Field measurements
Value(s) applied	5,000 ha
Measurement methods and procedures	GPS readings of the polygons
Monitoring frequency	Continuous as and when planting is done

QA/QC procedures	The total control of land is through the end user agreement signed with the small holder farmers for each of the parcel of land.
Purpose of data	To estimate GHG Removals
Additional comment	

Data / Parameter	Date of planting
Unit	-
Description	The date of planting for each of the seedlings will be recorded
Source of data	Field data
Value(s) applied	DD/mm/yyyy
Measurement methods and procedures	The date of planting will be recorded and maintained based on which GHG removals can be calculated.
Monitoring frequency	Continuous as and when planting is done
QA/QC procedures	The data can be triangulated with the bills and invoices for purchase of seedlings from the nursery/number of seedlings from the nursery raised by the VPA Implementer.
Purpose of data	To estimate GHG Removals
Additional comment	

Data / Parameter	Survival Rate
Unit	%
Description	Number of seedlings that has survived
Source of data	For initial 3 years
Value(s) applied	80%

Measurement methods and procedures	The survival rate will be recorded at the time of monitoring to ensure that the GHG removals are calculated only for trees that have survived.
Monitoring frequency	At the time of monitoring
QA/QC procedures	Sample plots will be cross checked
Purpose of data	To determine GHG Removals
Additional comment	

Data / Parameter	Mean Annual Increment in above-ground biomass
Unit	t/tree/year
Description	Mean annual increment in above-ground biomass for species *j*,
Source of data	FSI, 2020. Trees Outside Forest Resources in India. FSI Technical Information Series, Volume 2, No. 1 2020. http://webline.co.in/fsi-result/technical-information-series-vol2-no1-2020.pdf Barhma et al., 2021. A critical review of forest biomass estimation equations in India. Trees, Forests and People 5 (2021) 100098. A critical review of forest biomass estimation equations in India | Elsevier Enhanced Reader
Value(s) applied	Allometric equations of following species and any other species planted will be applied which will be from secondary sources. An attempt will be made to get the allometric equations of the planted trees from the region, forest type of the country. If not available, generic equations will be applied for the forest type.

Tree Species
Acacia catechu
Acacia leucophloea
Acacia nilotica
Albizzia lebbak
Anogeissus pendula

	Azadirachta indica *Buchnania lanzen* *Butea monosperma* *Dalbergia sissoo* *Dendrocalamus strictus*[33] *Holoptelea integrifolia*[34] *Madhuca longifolia* *Mangifera indica* *Manikarna hexandra* *Phyllanthus emblica* *Pongamia pinnata* *Syzigium cumini* *Zizyphus mauritiana*
Measurement methods and procedures	Volume/AGB/Bole biomass of the tree will be calculated based on allometric equations developed with DBH and height measurements of trees. Permanent plots will be established. The number of plots will be determined through sample size determining equations. Average girth and height of each of the species in permanent sample plots will be measured. Applying biomass equations and BEF, biomass will be calculated. Standing biomass for each of the plot will be calculated based on estimation of mean annual increment (MAI)/tree from permanent plots.
Monitoring frequency	The Girth and Height will be measured every 5 years during the monitoring report submission.
QA/QC procedures	Based on the allometric equations derived from literature for India. In absence of species specific allometric equations, general equations are used. During verification it will be verified if any species specific and location specific equations are available and will be used for estimation of above ground biomass.

[33] https://www.ijser.org/researchpaper/Physical-and-Mechanical-Properties-of-Bamboo-Dendrocalmus-Strictus.pdf
[34] https://ecologicalprocesses.springeropen.com/articles/10.1186/s13717-019-0163-y

Purpose of data	To estimate GHG removals in the project area.
Additional comment	The allometric equations will be determined during the first verification based on species that will be planted. These could be other the species already included above. The same equations will be applied in subsequent verifications too.

Other SDGs

1 No Poverty

Data / Parameter	**Economic returns (Rs.) to farmers from the project area**
Unit	Rs./year/ha
Description	Economic returns in terms of products used by the farmer for subsistence and sold in the market from the project area
Source of data	Sample Surveys
Value(s) applied	At least Rs.1000/year/ha
Measurement methods and procedures	This will be based on sample survey of farmers. Surveys will be conducted for at least 30 farmers.
Monitoring frequency	At the time of verification
QA/QC procedures	Random samples will be selected without bias.
Purpose of data	To understand the contribution of the project activity to the SDG.
Additional comment	

2 Zero Hunger

Data / Parameter	**i. Density of fruits and medicinal species/ha** **ii. Production of fruits, medicinal and other produce (Kgs)/ha in the project area**

	iii. Increase in nutritional value at household level
Unit	i. Number/ha ii. Kgs/ha/yr iii. % over baseline
Description	i. Average number of trees/ha planted in the farmers lands for various species that yields usufructs ii. Average production of fruits and medicinal species/ha ii. Increase in nutritional value at household level
Source of data	i. Based on sample surveys ii. Based on sample surveys iii. Based on sample surveys and secondary source of information for important nutrients i.e. carbohydrates, dietary fiber and protein
Value(s) applied	i. Total of 400/ha for fruit and medicinal trees ii. At least 10 kgs for fruit and 2 kgs for medicinal species/ha/yr iii. Will be determined ex-post based on quantities used for subsistence.
Measurement methods and procedures	i. Will be based on sample surveys conducted during verification ii. Will be based on sample surveys conducted during verification iii. Will be determined based on sample surveys and use published values from literature based on analysis conducted for nutritional content of fruits
Monitoring frequency	i. at the time of verification ii. at the time of verification iii. at the time of verification
QA/QC procedures	Random samples will be selected without bias.
Purpose of data	To understand the contribution of the project activity to the SDG.
Additional comment	

5 Gender equality

Data / Parameter	Income to women agri-entrepreuners from usufructs of the project area
Unit	Rs/women/year
Description	Women from the villages will be trained to collect the products from the farmers of the village under the project activity, aggregate, package and sell in the market that will provide income from the project activity
Source of data	Based on data from VPA Implementer UUIPL
Value(s) applied	At least Rs.1000/women/year.
Measurement methods and procedures	Based on data from the VPA Implementer UUIPL that will maintain the records of all transactions. UUIPL will train these women to develop them as entrepreneurs.
Monitoring frequency	Continuous
QA/QC procedures	All transactions can be triangulated with invoices and ledgers maintained.
Purpose of data	To understand the contribution of the project activity to the SDG.
Additional comment	

6 Clean water and sanitation

Data / Parameter	Increase in water holding capacity of planted area
Unit	%
Description	% increase in water holding capacity of planted area compared to baseline lands
Source of data	Field studies conducted
Value(s) applied	Will be determined ex-post based on studies conducted
Measurement methods and procedures	Soil samples will be collected and analysed for soil moisture/water holding in planted areas and non-cultivable lands (baseline) to determine the increase.

Monitoring frequency	At the time of verification
QA/QC procedures	Random samples will be analysed without any bias.
Purpose of data	To understand the contribution of the project activity to the SDG.
Additional comment	Literature survey would be conducted to best assess this parameter

SDG 8

Data / Parameter	Number of employees
Unit	Number
Description	Number of employees permanent and temporary that will be involved in the project activity for implementation and monitoring.
Source of data	Records of employment for the project activity
Value(s) applied	5
Measurement methods and procedures	Records of employment for the project activity who will be involved in implementation, monitoring and maintenance of the project activity
Monitoring frequency	Continuous
QA/QC procedures	The parameter can be triangulated with the salaries/payments made to the employees
Purpose of data	To understand the contribution of the project activity to the SDG.
Additional comment	

12 Responsible consumption and Production

Data / Parameter	**NTFPs from the project area**
Unit	Number of NTFPs

Description	Number of non-timber forest produces that are made and used by farmer families
Source of data	Sample surveys
Value(s) applied	Will be determined ex-post
Measurement methods and procedures	There are many NTFPs such as food plates from leaves, products from bamboo and other products that can be produced to use by families. These will be determine ex-post
Monitoring frequency	At the time of verification
QA/QC procedures	Random samples will be selected without bias
Purpose of data	To understand the contribution of the project activity to the SDG.
Additional comment	

SDG 15

Data / Parameter	i. Number of project beneficiaries ii. Area under planting iii. Number of species and seedlings planted
Unit	i.Number ii.Ha iii.Number
Description	i. Number of smallholder farmers who are project beneficiary ii. Area under planting in ha iii. Number of species and seedlings planted in the project area
Source of data	Field data
Value(s) applied	i.5000 farmers ii.5000 ha iii.About 15 species and 2 million seedlings

Measurement methods and procedures	The farmer wise and plot wise details will be recorded as and when planting is done.
Monitoring frequency	Continuous as and when planting is done.
QA/QC procedures	The geocoordinates of the plots will be recorded with the details of the species planted and the number of seedlings planted and submitted for verification along with monitoring report.
Purpose of data	Contribution to SDG 15
Additional comment	GHG Removals will also be based on this parameter

SDG 13

Data / Parameter	GHG Removals through A/R activities (tCO_2/year)
Unit	tCO_2/year
Description	GHG Removals through A/R activities (tCO_2/year) from biomass and SOC
Source of data	Calculated based on the methodology
Value(s) applied	50,959.82
Measurement methods and procedures	Based on the approved methodology of GS4GG
Monitoring frequency	At least once every 5 years.
QA/QC procedures	The QA/QC procedures as per the methodology will be followed.
Purpose of data	Contribution of the project activity to SDG 13
Additional comment	

17 Partnerships for the goals

Data / Parameter	Investment to implement the project

Unit	Rs.
Description	Finance both domestic and international to implement the project activity
Source of data	From CME records
Value(s) applied	Will be determined ex-post
Measurement methods and procedures	Will be tabulated based on the audited statements
Monitoring frequency	Yearly
QA/QC procedures	These will be from audited reports
Purpose of data	Contribution of the project activity to the SDG
Additional comment	

B.7.2. Sampling plan

>>

SDG 13

The GHG Removals through reforestation of the project area, will be estimated by a sampling approach. A Forest inventory guideline will be developed for further description of the strata determination and sampling plan. The guideline including the project stratification and sampling plan will be submitted to VVB during validation.

B.7.3. Other elements of monitoring plan

>>

The PoA level monitoring is included in the PoA. The VPA level monitoring plan including the operational management structure for monitoring, data archiving and responsibilities and institutional arrangements for data collection and archiving will be included and provided at the time of validation to the VVB.

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1. Start date of VPA

>> 01/07/2024

Regular

C.1.2. Expected operational lifetime of VPA

>> 01/07/2024 to 31/05/2054, 30 Years, 0 Months

C.2. Crediting period of project

C.2.1. Start date of crediting period

>> 01/07/2024

C.2.2. Total length of crediting period

>>

PoA: 50 Years, 0 Months

VPA: 30 Years, 0 Months

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1. Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in Appendix 1, ongoing monitoring is summarised below.

PRINCIPLES	MITIGATION MEASURES ADDED TO THE MONITORING PLAN
Principle x.y	
There are no mitigation measures to be monitored.	

D.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?	The project addresses the key issues and requirements of Gender Sensitive design and implementation to address the hardships of women. UUIPL, the project proponent is a community-based organization initiated by grassroots level NGO working in the field of rural development. Rural women are UUIPL's target segment, who are also the shareholders. They are provided access to market to solve crucial issues concerning cooking, clean drinking water, lighting and crop-productivity to increase income35. UUI seeks to solve livelihood problems concerning cooking, lighting, clean drinking water and farming through sales of clean-technology products to rural households at affordable prices through a network of women entrepreneurs who facilitate technology accessibility, adoption and after-sales services. Literate and semi-literate women are trained and hand-held by UUIPL to serve as decentralized markets in their villages. In the supply side, they market and

[35] https://www.udaipururja.in/what-we-do/

	sell products based on clean-technology, support in adoption, after-sales service and doorstep delivery. In the demand side, they serve to act as ethical market for agro-produce, ensuring ethical trading practices and fair price for the producer at its doorstep, cutting its logistic and ancillary cost. The foundational gender-sensitive standards were addressed as follows: - The gender equality safeguards and principles is described in the relevant section of this document. - The gender inequalities and gender-related risks have been addressed by having village women as entrepreneurs to market and aggregate market produce from the project activity. - Women and men participated equitably and meaningfully in the project design and implementation. - The project will be monitored by women and also share the status of the project to UUIPL staff periodically. - The project is implemented for the marginalized families with whom UUIPL works and there is no discrimination of caste, creed or religion for selection of families.
Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	With regard to alignment with existing country policies, strategies and best practices, as gender policy is institutionalized by the NGO, it addresses all the gender policies as set forth in the GS4GG and National Policy for the Empowerment of Women, 200136, which are as follows. - The project provides positive economic and social incentives for full development of women through village level volunteers and providing them opportunities to be business women.

[36] https://wcd.nic.in/womendevelopment/national-policy-women-empowerment

	- There is not hindrance to human rights and fundamental freedom by women on equal basis with men - There is equal access to participation and decision making of women in the project - UUIPL provides entrepreneur opportunities to women at the village level and provide skill training programs. - UUIPL is involved in changing societal attitudes and community practices by active participation and involvement of women in the project activity. - Mainstreaming gender perspective in the development process and elimination of discrimination of all forms is practiced.
Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?	No, an expert for Gender Safeguarding principles and Requirements are not required. The project does no harm to women, men or children.
Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	The project was initiated after stakeholders meeting was conducted during the beginning the project. Stakeholders are involved not just at the beginning of the project, but is a continuous process as the staff of UUIPL and the village level volunteers constantly visit the villages and interact with the end-users to address all issues of the project activity. No, Expert to assist with gender issues is not required as it is integrated in the objectives of the organization to empower women and address their issues.

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes. Please refer to the separate Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round.

The local stakeholder will be conducted for a group of regular VPAs under the following conditions

- It is limited to the group of regular VPAs that are implemented or to be implemented within the state where the real case LSC meeting is conducted.
- The group stakeholder consultation is valid to new VPAs that will be added in the next 2 years of the conduct of the meeting to the PoA.
- The regular VPAs shall be submitted for inclusion within two years of the grouped physical meeting.
- The stakeholder consultation report shall be submitted to Gold Standard with inclusion request for 1st regular VPA of the group.
- For all such regular VPAs, the CME should during monitoring gather feedback from local stakeholders – primarily end users and impacted stakeholder groups on the project implementation and its impacts, on a sample basis as part of ongoing feedback mechanism.

E.1. Summary of stakeholder mitigation measures

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There are no stakeholder mitigation measures that needs to be monitored based on the LSC conducted and responses from the design consultation.

E.2. Final continuous input / grievance mechanism

METHOD	INCLUDE ALL DETAILS OF CHOSEN METHOD (S) SO THAT THEY MAY BE UNDERSTOOD AND, WHERE RELEVANT, USED BY READERS.
Continuous Input / Grievance Expression Process Book (mandatory)	Stakeholder grievances will be recorded regularly in a book which will be placed at UUIPL Head Office.
GS Contact (mandatory)	help@goldstandard.org
Telephone access (optional)	-

Internet/email access (optional)	soumyajitauddy@udaipururja.in
Nominated Independent Mediator (optional)	Village Level Volunteers can be contacted for any Grievance through phone/monthly visits

SECTION F. Eligibility and inclusion criteria for VPAs inclusion

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The below table shall be completed for all VPAs.

The CME shall provide clear description on how eligibility criteria set at real case VPAs are complied with for each real case and regular VPAs submitted for inclusion.

The CME shall not change the eligibility criteria and required condition set at real case VPAs. At the time of inclusion of regular VPAs, the CME shall only describe how the regular VPAs comply with the eligibility criterion.

NO.	ELIGIBILITY CRITERION	DESCRIPTION/ REQUIRED CONDITION	DESCRIPTION OF THE VPA IN RELATION TO THE CRITERIA, MEANS OF VERIFICATION/SUPPORTING EVIDENCE FOR INCLUSION
1.	Geographical boundaries	Geographical boundaries of VPAs consistent with the geographical boundary of the PoA.	The details of State, district and villages provided in the VPA shall be within India and for this VPA within Rajasthan.
2.	Double Counting	Conditions to avoid double counting of Impacts.	The CME/VPA Implementer shall provide the database of all the farmers that are part of the VPA. They shall not be part of any other VPA or PoA or standalone project activity within GS and other standards.
3.	Exclusiveness of VPA	The VPA shall not previously be registered as a project activity or included as a VPA in any other registered PoA or deregistered as a VPA of a PoA.	The CME/VPA Implementer shall provide an undertaking that the VPA shall not previously be registered as a project activity or included as a VPA in any other registered PoA or deregistered as a VPA of a PoA.
4.	Specification of technology/measure	N/A, since information is already provided in criterion 12.	Information provided in criterion 12
5.	Start Date	The project start date shall be the earliest	The project start date is confirmed through the end user agreement and signed declaration by the

		date when the first trees are planted. The start date of any proposed VPA will be on or after the start date of the PoA.	project implementing entity of the start date of the VPA.
6.	Applicability of the methodology	The only methodology used for VPAs under the PoA is "LUF_AR-Methodology-GHGs-emission-reduction-and- Sequestration-Methodology". The tool "LUF AR Methodology Soil Carbon Tool" is used in order to calculate the Soil Organic Carbon.	Compliance with the methodology applicability criteria will be demonstrated in section B.2. of the VPA-DD.
7.	Conditions to ensure that VPAs meet the requirements for demonstration of additionality	For demonstration of additionality, one of the two options will be applied: Option 1: Latest version of A/R Methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities Option 2: Latest version of Positive list (as per 3.1.16, (b) of the Land Use & Forests Activity Requirements).	Section B.5. of the VPA shall describe the chosen option and steps toward the determination of additionality based on Option 1 as set in the real case VPA or option 2 Latest version of Positive list (as per 3.1.16, (b) of the Land Use & Forests Activity Requirements).
8.	Conditions to ensure no diversion of ODA	Affirmation that funding from Annex I Parties, if any, does not result in a diversion of official development assistance	ODA Declaration form shall be submitted
9.	Target group	The target group would be rural/urban regions of India and will be with project beneficiaries of farmers, organizations, companies, etc. that have legal ownership of the land.	The VPA shall include the details of the target group, which is farmers in rural area of India
10.	Conditions related to sampling requirements for the PoA	Any VPA will follow the sampling requirements for forest inventories described in the LUF_AR-Methodology-GHGs Emission Reduction & Sequestration Methodology.	Sampling in accordance with the sampling plan in the corresponding real case Forestry will be described.
11.	Scale of the VPA Conditions to ensure that VPAs that will be included meet the small-scale on microscale thresholds and remain within those thresholds throughout the crediting period	Any VPA following the smallholder or microscale scheme will follow the requirements for LUF Smallholder & Microscale Projects as outlined in Annex B of the AR LUF Activity Requirements.	The large scale will be above 16,000 tCO_2 removals/year
12.	Conditions to confirm that technologies in VPAs are eligible	Can include planting trees Can include single-species plantations Can apply all silvicultural systems; e.g. conservation forests (no use of timber); forests with selective harvesting; rotation forestry	Will include agroforestry or common lands in rural regions within villages

		All projects can include agriculture (agroforestry) or pasture (silvopasture) activities	
13.	Conditions to be met by each VPA regarding project boundary	According to paragraph 5.8.10.,b. CME/VPA Implementer shall demonstrate that all areas of land planned for the proposed VPA comply with all relevant requirements, except for those related to the control and for all areas of land for which the control for the VPA has not yet been established when the VPA-DD is submitted to a VVB for validation, the CME shall provide evidence of control at the latest by the time of submitting the monitoring report that covers the first monitoring period for the VPA to a VVB for verification.	End user agreements will be submitted to meet the conditions latest at the time of verification.
14.	Conditions to be met by each VPA regarding SDG outcomes assessment	SDG outcomes, and the methods of monitoring these outcomes, are defined in the VPA-DD Section B.6. The option a) of paragraph 5.6.2 of the PoA requirements and procedures is chosen.	SDG impact assessment will be conducted at regular VPA level and included in section B.6. in the VPA-DD.
15.	Conditions to be met by each VPA regarding safeguarding principles	Summary of Safeguarding Principles, and the methods of monitoring these principles, are defined in the VPA-DD Section D.1. The option a) of paragraph 5.5.2 of the PoA requirements and procedures is chosen.	The safeguarding principles and the methods of monitoring these principles wherever required will be included in regular VPA in Appendix I.
16.	Conditions to be met for retroactive VPAs	Retroactive VPAs shall submit the required documents to Gold Standard within five years of its start date (time of first submission). Retroactive VPAs shall demonstrate that the revenues from Gold Standard Certified SDG Impact Statements or Products, such as GSVERs, were seriously considered in the decision to implement the project, AND there was continuous interest in Certified Impact Statements or Products for the project in parallel with its implementation. The maximum period for retroactive issuance is three years – which starts either with the Project Start Date or three years	Document to show GS VER revenue was considered for the retroactive project activity.

		prior to the date of Project Design Certification, whichever occurs later. New areas added to retroactive projects must follow the requirements for retroactive issuance as per the Principles and Requirements, GHG Emissions Reductions & Sequestration Product Requirements, and the Requirements stated in this document.	
17.	Conditions to ensure that VPA meets general eligibility criteria	Conditions to ensure that VPA meets general eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirements and general eligibility criteria as per section 2.1.1 of GS4GG Land Use & Forests Requirements	The regular VPA shall include the details of VPA meeting the general criteria in the VPA-DD.
18.	Conditions to ensure that VPA follows the guidelines to conduct a spatial forest/non-forest assessment	Every VPA to be included under the PoA shall not meet the definition of forest 10 years before project start date and at project start date. In the case that the eligible area has been deforested during the last 10 years prior to the project start date, the VPA implementer shall provide evidence that the deforestation activity has not taken place with an intention to implement project activities that generate GS VERs. The Guidelines as per Annex C of the Land Use & Forests Activity Requirements should be followed.	Submission of the shapefiles and report of the spatial forest/non-forest assessment for the project area.
19.	Conditions on crediting period	Every VPA shall make sure that the crediting period of the VPA shall not exceed the end of the duration of the PoA, which is for forestry PoAs 50 years.	The crediting period shall not exceed 30/06/2074.
20.	Conditions related to stakeholder consultation	A local stakeholder consultation (LSC) following the Stakeholder Consultation and Engagement Requirements has to be carried out for each VPA or A group of VPAs in case that the applicability requirements included in paragraph 5.7.3. of the PoA Requirements are complied with.	The LSC is applicable for a group of VPAs submitted within 2 years of the conduct of the stakeholder's meeting in Rajasthan.
21.	Conditions to specify the approach to address non-permanence	Every VPA shall outline in the Land Use & Forests Risks & Capacities Guideline the non permanence approach.	The applicable buffer will be applied.

22.	Approach chosen for VVB site-visits in view of inclusion of future regular VPAs	A validation on-site visit will be conducted by the VVB for each VPA, unless GS requirements allow an exception of a VVB site visit or a deviation request has been approved by GS.	All VPA inclusions will include VVB on-site visit.
23.	Conditions to ensure a SOP for managing the input and grievance mechanism	Every VPA shall adhere to the SOP for managing the input and grievance mechanism outline in the PoA Management System Manual, or describe in detail any necessary deviation of the SOP to better adjust to the specific VPA conditions.	SoP for the real case VPA and regular VPA will be submitted.
24.	Conditions to ensure the systematic description of the specific design of the real case VPA	Every VPA shall describe, as per section 5.2.2 of the Programme of Activity Requirements: a) the present environmental conditions of the area planned for the Forestry VPA, including the climate, hydrology, soils and ecosystems b) Describe the presence, if any, of rare and endangered species and their habitats c) Describe the species and varieties selected for the Forestry VPA d) Describe the measures and know-how that will be transferred to the host Party, if applicable e) Describe or list the legal title(s) to the land, current land tenure and rights enabling determination of the owner of the GS VERs to be issued for the Forestry and AGR VPAs.	The details will be included in section A.1 of the VPA-DD.

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

Complete the Assessment below and copy all Mitigation Measures for each Principle into SECTION D above. Please refer to the instructions in the Guide to Completing this Form below.

SOCIAL SAFEGUARDING PRINCIPLES		
Reference requirement	Question	Response
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is the project involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Have local communities or individuals raised human rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does this project undermine national or regional measures for the realisation of the right to development?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
Please add text here…		
Would the project potentially involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalised groups?	☐ YES ☐ POTENTIALLY ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalised or excluded individuals or groups, including persons with disabilities?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project incorporates a human rights-based approach.
For example, by describing how the project design:

- is informed by human rights analysis, including from UN human rights mechanisms (human rights treaty bodies, universal periodic review, special procedures)
- includes measures to assist the government to realise (respect, protect and fulfil) human rights under international law and to implement human rights-related standards in national law (whichever is higher)
- enhances the availability, accessibility and quality of benefits and services for potentially marginalised individuals and groups, and to increase their inclusion in decision-making processes that may impact them (consistent with the non-discrimination and equality human rights principle)
- provides reasonable accommodations to strengthen inclusivity and accessibility of project benefits and services to persons with disabilities.

Please add text here….

1.The project doesn't involve any activity that affects human right as the planting will be done on private smallholder farmer's land.

2.The project shall not discriminate with regard to participation and inclusion. Rather it enhances the participation and inclusion as the UUIPL, the project implementer works with rural communities and especially marginalized families.

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ERROR! REFERENCE SOURCE NOT FOUND.	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project prevent men and women from having equal opportunities to participate in identified tasks and activities, whether through paid work, volunteer work, or community contributions, as appropriate?	☐ YES ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Is information about project objectives being communicated in a way that is inappropriate for the local context and not tailored to the methods of understanding of both women and men, which could hinder their participation?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Has expert stakeholder(s) been involved, and has their input been requested for the project design on gender equality and women's empowerment?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
Please add text here….		

Would the project potentially involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts on gender equality and/or the situation of women and girls?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being.	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project is addressing any identified risk to gender equality and women's empowerment.
1. *The project does not directly or indirectly lead to or contribute to adversely impact gender equality. The household takes part in the project voluntarily and the usufructs will benefit all the household members.* 2. *The CME and VPA Implementer, UUIPL, as a principle does not discriminate and provides equal opportunity in the village to participate voluntarily in the project activity. UUIPL in fact promotes smallholder farmers to be part of the project activity. The project makes every effort to include the marginalized people in its design. Special preference is given to women to develop them as entrepreneurs.* 3. *The project is in line with the National Policy for the Empowerment of Women (2001) of India[37]. The project enhances social participation and decision making role of women. The stakeholder's meeting involved both men and women and had equal opportunity to provide their impacts. The project will not limit women's ability to use, develop and protect natural resources as project is related to planting activities in their own lands and have rights to the products from their lands equally for men and women. Based on the above mentioned project benefits, the project complies with the national gender policy.* 4. *The project does not have any negative impacts on gender roles and hence an expert opinion is not anticipated for the project.*

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any potential risks to the workers' safety and health?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
Would the project potentially involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	construction and/or infrastructure development (e.g., roads, buildings, dams)?	☐ YES ☒ NO

[37] https://wcd.nic.in/womendevelopment/national-policy-women-empowerment#:~:text=The%20principle%20of%20gender%20equality,discrimination%20in%20favour%20of%20women.

ERROR! REFERENCE SOURCE NOT FOUND.	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project is addressing any identified risk related to community health and safety.

The project does not expose the community to any health risks and adversely affect health as the project involves planting activities and its maintenance.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	☐ YES ☒ NO

If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE	activities adjacent to or within a cultural heritage site?	☐ YES ☐ POTENTIALLY ☒ NO

NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	alterations to landscapes and natural features with cultural significance?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	utilisation of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" or "POTENTIALLY" - are the communities made aware of their right under the law, scope and nature of proposed development and its potential consequences?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialisation of such knowledge, innovation, or practice, consistent with their customs and traditions?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", has project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project activity involves planting on farmer's lands, which is degraded lands and hence does not include sites, structures, or objects with historical, cultural, artistic, traditional or

religious values or intangible forms of culture. In fact, the end user voluntarily becomes part of the project activity.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any risks related to involuntary relocation of people?	☐ YES ☒ NO

If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	risk of forced evictions or involuntary relocation of people?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	temporary or permanent and full or partial physical displacement (including people without legally recognisable claims to land)?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	economic displacement (e.g., loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" or "POTENTIALLY", - has the project developed Resettlement Action Plan or Livelihood Action Plan in consultation and agreement with affected individual, group or community? - has the project integrated Resettlement Action Plan or Livelihood Action Plan into the Project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project activity is on agriculture lands of smallholder farmers and common lands of the village and hence does not cause physical or economic relocation of people.		
ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.		
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any risks related to identifying and managing legitimate tenure rights that may be affected by the project?	☐ YES ☒ NO
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project potentially involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	uncertainties with regards to land tenure, access rights, usage rights or land ownership? Examples include, but are not limited to water access rights, community-based property rights and customary rights.	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA

ERROR! REFERENCE SOURCE NOT FOUND.	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project does not require any change in land tenure arrangements and/or access rights, usage rights or land ownership. The land continues to belong to the farmers and continue to have rights on the usufructs of the plantations. Only the carbon rights will be with the CME/VPA Implementer as can be seen in the end-user agreement.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve Indigenous People within the Project area of influence who may be affected directly or indirectly by the Project?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project potentially involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	affect areas where indigenous peoples are present (including project area of influence)	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	affect areas, land and territory claimed by indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above questions is ''YES'' or "POTENTIALLY", - Is it determined that the proposed project may affect the rights, lands, resources, or territories of indigenous people? - Has an "Indigenous People Plan" (IPP) or "Indigenous People Plan Framework" been elaborated and included in the project documentation?	☐ YES ☐ NO ☒ NA

	- Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines?	
ERROR! REFERENCE SOURCE NOT FOUND.	risk of forcibly removing indigenous people from their lands and territories?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES" or "POTENTIALLY" - Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property? - Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? ? - Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive? - Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including health services, clean water, energy, education, safe and decent working conditions, and housing?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Has a grievance mechanism not been established at the beginning of programme or project implementation with due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned and will it remain operational throughout the project cycle?	☐ YES ☐ NO ☒ NA

ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

There are no indigenous people in or within the project area or on land/territory claimed by indigenous people. In fact the project activity is on farmer's private land and common land of the village and not in any forest area with indigenous people living on those lands. The land use maps also show that these lands are agriculture lands with no inhabitation on them.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

There is no corruption involved as the smallholder farms participate in the project is voluntarily and the NGO encourages them to participate on their own.

ECONOMIC SAFEGUARDING PRINCIPLES

ERROR! REFERENCE SOURCE NOT FOUND.ERROR! REFERENCE SOURCE NOT FOUND.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	☐ YES ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project violate national laws, if available regarding non-discrimination in employment?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project allow child labor?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND. ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have insufficient measures to safeguard and support vulnerable project workers, such as women, people with disabilities, migrant workers, and young workers, and to prevent any kind of harassment, abuse, bullying, or exploitation, including gender-based violence (GBV)?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have no grievance mechanism available for workers to voice workplace concerns? Is information about this mechanism not provided to workers at the time of recruitment, or is it not easily accessible?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Would the project potentially involve or lead to: (NOTE: APPLIES TO BOTH PROJECT AND CONTRACTOR WORKERS)		

ERROR! REFERENCE SOURCE NOT FOUND.	use of forced labour?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	working conditions that do not meet national labour laws and international commitments?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	working conditions that may deny freedom of association and collective bargaining?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	absence of documented working agreements with all individual workers *if such agreements do not exist, or do not address working conditions and terms of employment, the project developer shall provide reasonable working conditions and terms of employment.*	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	use of migrant workers? *if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.*	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	having no arrangements for basic services[38] for workers? *the project developer shall put in place and implement policies on the quality and management of the accommodation and provision of basic services in a manner consistent with the principles of non-discrimination and equal opportunity. Workers' accommodation arrangements should not restrict workers' freedom of movement or of association*	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	any form of discrimination or harassment based on factors unrelated to job requirements, such as gender, race, nationality, ethnicity, social or indigenous origin, religion or belief, disability, age, or sexual orientation?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE	any form of discrimination in any aspect of employment, such as recruitment, compensation, working conditions, training, job assignment, promotion, termination, or discipline?	☐ YES ☐ POTENTIALLY ☒ NO

[38] Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.

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ERROR! REFERENCE SOURCE NOT FOUND.	harassment, intimidation, and/or exploitation, especially in regard to women?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to address non-discrimination in employment?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	use of child labour? (including third-party engaged workers)	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	inadequate and verifiable mechanisms for age verification?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	no processes and measures in place for the safety and health of project workers?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No provision of safety and health training provisions, including on the proper use and maintenance of personal protective equipment conducted by competent persons and the maintenance of training records?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No measures to protect vulnerable project workers from harassment, exploitation, and gender-based violence (GBV)? This includes women, people with disabilities, migrant workers, and young workers.	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No grievance mechanism available for workers to voice workplace concerns.	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	No measures for due diligence and the establishment of policies and procedures to manage and monitor the performance of third-party employees in the project?	☐ YES ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.
1.There are no labourers involved in the project activity. The NGO field staff will provide seedlings to the project activity and the smallholder farmers are involved in the planting activities on their lands and its maintenance. *2. There will not be any labourers or workers in the project activity. The smallholder farmers will participate in the project activity on their own and work on their lands to plant the seedlings and maintain them.* *3 and 4. As mentioned above, there are no labourers in the project activity.* *5.There is no child labour engaged by the NGO as can be seen from the HR records.* *6. The NGO does not anticipate any accidents and incidents that would require emergency preparedness as it involves only planting activities during monsoon.*

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ERROR! REFERENCE SOURCE NOT FOUND.	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have potential negative impacts or pose a risk to the local economy?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Are there any potential risks or negative impacts this project may have on vulnerable or marginalised social groups, despite the benefits it may bring?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		

Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	economic impacts (negative/detrimental) to the local economy?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	negative economic consequences during and after project implementation, e.g., for vulnerable and marginalised social groups in targeted communities?	☐ YES ☐ POTENTIALLY ☒ NO
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		

The project does not cause any negative economic consequence. Most of the lands are non-cultivable lands. Even if cultivated, during initial years, the farmer can still cultivate crops if he wants to and after initial few years, the trees will also provide usufructs that will provide economic benefits.
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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.
Please add text here….
Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	increase greenhouse gas emissions over the Baseline Scenario?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.
The project in fact sequesters carbon which is accounted for contribution to SDG 13
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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project pose a risk to the availability and reliability of energy supply to other users?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.
Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	negative impact on the availability and reliability of energy supply to other users?	☐ YES ☐ POTENTIALLY ☐ NO

If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.
The project does not use energy from local grid or power supply or fuel resource as the project activity is planting trees
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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project increase water usage to a level that will not allow for the maintenance of environmental flows?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project result in the discharge of wastewater that does not meet the required standard for beneficial reuse and could therefore negatively impact the environmental flow?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any processes or activities that could contaminate the groundwater and render it unsuitable for use?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.
Please add text here….
Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	☐ YES ☐ POTENTIALLY

NOT FOUND.		☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project is only planting trees on existing farm lands lands and does not affect natural or pre-existing pattern of watercourses, ground water or watersheds. The project activity in fact retains water in the fields and improves soil quality, which will be monitored as contribution to SDG.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND. - **ERROR! REFERENCE SOURCE NOT FOUND.**	negatively impact on the catchment area? *If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length assessment. Regular reassessment of these measures is necessary.*	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

On the contrary, the project activity will improve soil in the planting areas control erosion. As planting will be done on slopes i.e. upper and middle ridge, the project activity conrols erosion on slope areas.

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ERROR! REFERENCE SOURCE NOT FOUND. - **ERROR! REFERENCE SOURCE NOT FOUND.**	Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project? *If yes, the project shall maintain healthy soils by minimising negative impacts on soil health, productivity, structure, and water retention. Steps to minimise soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.*	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.
Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	if answer to above question “yes” or “potentially”, does project adopt appropriate and culturally sensitive sustainable resource management practices?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.
The project is a reforestation activity and some of the land will continue to produce crops at least in the initial few years, which was being done in the initial years.
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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have any risks associated with natural or man-made hazards that could result from land use changes due to the project?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.
Please add text here….

Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	any potential risks that require emergency preparedness and response planning?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
The project will in fact address soil erosion and is a mitigation action to climate change. It will not lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climate conditions.		
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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the transfer, handling, and use of genetically modified organisms/living modified organisms that may result in adverse effects on biological diversity?	☐ YES ☒ NO
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes" has a risk assessment by a competent Expert stakeholder been carried out in accordance with Annex iii of the Cartagena protocol on biosafety to the convention on biological diversity?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes" has any risks identified in the risk assessment?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Forestry (for example Afforestation/Reforestation) involving GMO planting? *Note - Forestry projects (for example Afforestation/ Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.*	☐ YES ☒ NO ☐ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.
The project activity involves planted native tree species on farm lands lands and does not involve GMOs. Nurseries will be raised by the VPA Implementer or seedlings bought from the local nursery of native species.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.
Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	any potential risk of pollutant release that cannot be avoided?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes" or "potentially", has the project identified all potential pollution sources that may degrade the quality of soil, air, surface, and groundwater in the project area?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes" or "potentially", do the pollution prevention and control technologies and practices applied during the project life cycle align with national regulations or international best practices?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "Yes", is there a monitoring plan to ensure that mitigation measures are implemented, and resources are protected?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.
There are no pollutants being involved in the project activty as it is only planting trees.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	☐ YES ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here….

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	the generation and management of waste materials?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	treatment, destruction, or disposal of waste material?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is “Yes”, does the project involve an environmentally friendly method that includes appropriate control of emissions and residues resulting from the handling and processing of waste material?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes”, does project has measures in place to address health risks?	☐ YES ☒ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Involve manufacture, trade, and use of chemicals and hazardous materials subject to international bans or phase-outs due to their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project activity is only planting trees and will not involve manufacture, trade, release, and/or use of hazardous and non-hazardous chemicals and/or materials.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the use of chemical pesticides?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project use fertilisers, and if so, are measures being taken to minimise their use and nutrient losses to the environment?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Please add text here….		
Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	chemical pesticides use for pest management?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to question above is "yes" or "potentially", does project has appropriate controls on manufacture, procurement, or distribution and/or use of these chemicals?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
The project will apply organic pesticides only at the time of planting within permissible limits and will not harm the environment.		
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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have a risk of unsustainable forest management, including timber harvesting?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project risk not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations using native species whenever possible?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project is conversation forestry and involves planting horticulture species. The trees will not be harvested.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the risk of negatively influencing access to and availability of food for people affected?	☐ YES ☒ NO

If the answer to the question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project is a voluntary action by the smallholder farmer to be part of the project activity. The project activity provides food, fibre and fuelwood much more than in the baseline scenario.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any risks to animal welfare? Animal welfare shall be ensured by providing access to water and food, appropriate environment, humane treatment, and staff training. Evidence of mistreatment will be treated as an immediate non-conformity.	☐ YES ☒ NO

ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project involve the risk of administering synthetic growth promoters, including hormones?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
The project does not involve animal husbandry. Hence not applicable.		
Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	animal husbandry or harvesting of fish populations or other aquatic species?[39]	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE	inappropriate spacing per animal and stocking rates per land unit?	☐ YES ☐ NO

[39] 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.

NOT FOUND.		☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	inadequate measures to address the specific needs of aquatic animals?	☐ YES ☐ NO ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	primary production of living natural resources such as animal husbandry, aquaculture, and fisheries? If the answer is yes, implement industry-standard sustainable management practices in line with to one or more relevant and credible standards and utilise available technologies.	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project does not involve animal husbandry. Hence not applicable.

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project have the risk of negatively impacting HCV areas and/or critical habitats?	☐ YES ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project in the project area or area of downstream impacts have risks to the following: native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

There is no HCV ecosystem in the project activity. Hence not applicable

Would the project involve or lead to:

ERROR! REFERENCE SOURCE NOT FOUND.	identified habitats as HCV areas and or Critical habitats?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE	If answer to above question is "yes", does the project have any risks that could negatively impact the catchment, project success, and surrounding HCV and ecological assets, as well as any measurable adverse impacts on the criteria	☐ YES ☐ NO ☒ NA

NOT FOUND.	or biodiversity values for which the critical habitat was designated, and on the ecological processes supporting that biodiversity?	
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to above question is "yes", is a robust, appropriately designed, and long-term Habitats and Biodiversity Action Plan absent which will make the project unable to achieve net gains of those biodiversity values for which the critical habitat was designated?	☐ YES ☐ NO ☒ N/A
ERROR! REFERENCE SOURCE NOT FOUND.	Does the project area or area of downstream impacts have native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	☐ YES ☐ No ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If the answer to above question is "yes", does the project has opportunities to minimise unwarranted conversion or degradation of the habitat and to enhance the habitat as part of its development?	☐ YES ☐ No ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Is the project applying Land Use & Forest Activity Requirements and managing a minimum 10% of the project area to protect or enhance the biological diversity of native ecosystems following HCV approach as per the given requirements?	☐ YES ☐ No ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
There is no HCV ecosystem in the project activity. Hence not applicable.		

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ERROR! REFERENCE SOURCE NOT FOUND.	Does the project lead to the reduction or negative impact on any recognised Endangered, Vulnerable or Critically Endangered species?	☐ YES ☒ NO
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		

Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	distortion of habitats of endangered species?	☐ YES ☐ POTENTIALLY ☒ NA
ERROR! REFERENCE SOURCE NOT FOUND.	If answer to the above question is "yes", does the project plan to protect and enhance them?	☐ YES ☐ POTENTIALLY ☐ NO ☒ N/A
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
There are no endangered species. There are a few baseline trees and is non-cultivable lands/cropland. The project activity does not impact other areas as the planting is confined to farmer's plots.		
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ERROR! REFERENCE SOURCE NOT FOUND.	Does project introduce any alien species (not currently established in the country or region of the project) into new environments?	☐ YES ☒ NO
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
All the species selected for planting are native species of the region. No alien species are being introduced.		
Would the project involve or lead to:		
ERROR! REFERENCE SOURCE NOT FOUND.	risk of introducing any alien species with a high risk of invasive behaviour regardless of whether such introductions are permitted under the existing regulatory framework?	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	risk of potential accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbour alien species.	☐ YES ☐ POTENTIALLY ☒ NO
ERROR! REFERENCE SOURCE NOT FOUND.	risk of spreading alien species into areas in which they have not already been established?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.
All the species selected for planting are native species of the region. No alien species are being introduced.

APPENDIX 2- CONTACT INFORMATION OF VPA IMPLEMENTER

Organisation name	OffsetFarm Pte Ltd
Registration number with relevant authority	
Street/P.O. Box	#14-04 160 Robinson Road
Building	Singapore Business Federation Centre
City	Singapore
State/Region	Singapore
Postcode	068914
Country	Singapore
Telephone	+919650141243
E-mail	saurabh@offsetfarm.io
Website	www.offsetfarm.io
Contact person	Saurabh Saraf
Title	Director
Salutation	Mr
Last name	Saraf
Middle name	
First name	Saurabh
Department	
Mobile	
Direct tel.	
Personal e-mail	

Organisation name	Udaipur Urja Initiatives Producer Company Limited
Registration number with relevant authority	
Street/P.O. Box	c/o. Seva Mandir, Old Fatehpura
Building	-
City	Udaipur
State/Region	Rajasthan
Postcode	313004
Country	INDIA
Telephone	+91 294 2451041,
E-mail	soumyajitauddy@udaipururja.in
Website	
Contact person	Mr. Soumyajit Auddy
Title	Chief Executive Officer
Salutation	Mr.
Last name	Auddy
Middle name	
First name	Soumyajit
Department	
Mobile	
Direct tel.	
Personal e-mail	

APPENDIX 3- LUF ADDITIONAL INFORMATION

Risk of change to the Project Area during Project Certification Period:	The project area has been non-cultivable/agriculture lands from 10 years and continues to be so. These lands are registered as agriculture lands under the Government of Rajasthan. According to Rural Areas Rules, 1992, agricultural land in Rajasthan can be converted for residential, commercial purposes such as trade or commerce or business purposes only by taking earlier permission from the competent authority in the state[40]. Also these lands are not contiguous and conversion to any other lands type needs scale, which is not possible. The non-cultivable lands are being converted to lands which will provide income for the next 50 years. Hence the risk of change to any other land use is low.
Risk of change to the Project activities during Project Certification Period:	The project area will be converted to block plantations or agroforestry with a density of 400 trees/ha. Most of the trees are of economic value and will provide usufructs to them. Hence the change to any other project activity is remote. There are no other alternative to the project activity.
Land-use history and current status of Project Area:	These lands that are to be planted are predominantly non-cultivable lands or marginal crop lands. Historically too, they have been the same as can be seen from the GIS study.

[40] Rajasthan Land Conversion (indiafilings.com)

Socio-Economic history:	The population of Udaipur high a high proportion of tribal community, constituting more than 50% of the total population. For example the Bhil tribe which inhabits Southern Rajasthan, has been residing in different areas of Udaipur and is engaged in agriculture and allied activities. There are 20 panchayat samities in Udaipur district out of which 16 panchayat samities are tribal dominated . The Udaipur district comprises of 15 blocks out of which the Kherwara-Rishabhdev block is the largest in Udaipur, with 251 villages and a population of approximately 268,000. Traditional livelihoods including agriculture, handicrafts, small scale trade etc. have significantly reduced over time, leading to rural unemployment and migration.

Figure 9 Picture of members of the bhill tribe

In Kherwara, agriculture predominantly serves as a subsistence livelihood. The average landholding for a family typically ranges between 2 to 5 bighas, or less than a hectare. Almost half of this land is uncultivable in nature. Irrigation plays a vital role, with approximately 30% of the land is irrigated. Open wells have historically been the primary source of

	irrigation but the trend is gradually shifting towards bore wells. Notably, a fraction of the farmers, around 2 out of every 5, possess bore wells. Kherwara''s economic landscape is marked by seasonal labor migration, as a significant portion of the population ventures to other states in pursuit of employment opportunities, most of them are employed in the construction sector, followed by agriculture and allied activities. When considering income, it's important to note that the average monthly earnings per person, inclusive of all income sources—be it from agriculture or alternative means—amount to approximately INR 10,000-15,000 . This economic profile underscores the need for initiatives aimed at enhancing agricultural sustainability and providing additional avenues for livelihood development in Kherwara.
Forest management applied (past and future)	There was no forest management applied earlier as these are non-cultivable/ agriculture lands.
Forest characteristics (including main tree species planted)	There are no forests on these lands.
Main social impacts (risks and benefits)	In the early stage of the project, farmers will be encouraged to practice cultivation of crops (millets, cereals and vegetables) between the alleys of planted trees. If the terrain requires, terraces could be prepared on slopes and leguminous crops like horse gram (Kulath) black gram (Urd), cluster bean (Guar), pigeon pea etc. will be encouraged. These crops can be cultivated

	on the marginal land under rainfed condition. Till trees grow completely and start yielding products, yield from these filler crops will be an added advantage. Apart from legumes farmers will be also encouraged to grow millets like finger millet (Mal or Ragi), little millet (Sama), Kodra (Kodo millet), Foxtail millet (Kangni) etc. These crops shall be gown under rain fed condition following traditional and organic farming practices. Millets like finger millet, little millet, Kodra, and foxtail millet are grown for their nutritional value, drought resistance, and suitability for rain-fed farming. Their production cycles typically range from 60 to 90 days. In the proposed plantation area, only Kharif crops under rainfed condition will be encouraged. Rainy season vegetables like pumpkin, bottle guard, ridge guard, bottle guard, bitter guard and okra shall also be cultivated. These produce can be further sold in the market and the earnings will be farmer's own benefit. *Medium to Long term benefits:* The farmers will be benefited from the sale of selected species from which fruits can be sold in the market for earnings. The earning from these will be farmer's own benefit. This will ensure the profitability of farmers. Risks will be in terms of survival rate of planted species. The selected species are

	native to the region and will establish well. To overcome this risk, the CME and VPA Implementer will re-plant for 3 years to ensure higher survival rate. In India, rural communities are dependent on forestry and agriculture for their livelihoods and sustenance, landscape restoration provides a sustainable pathway for rejuvenating land, strengthening the flow of ecosystem services, ensuring food and nutritional security, and enhancing livelihoods. There are no perceivable social risks from the project.
Main environmental impacts (risks and benefits)	Key environmental benefits include mitigate climate change, improves air quality, enhanced soil health, biodiversity conservation, improves water quality and increased resilience of local communities. There are no perceivable risks from the project.
Financial structure	To ensure comprehensive support for the initiative, securing funding is a key need. For the program the CME shall explore multiple funding sources including but not limited to the following: 1. Financial investors: Investments from commercial financiers, including banks, private investment funds, which are seeking to invest in project for financial returns. We will explore this option for raising debt or project level equity. 2. Carbon credit buyers: This include offsetters or traders who deal in carbon credits and are open to investing in projects for securing a supply of carbon credits.

Infrastructure (roads/houses etc):	The eligible project areas are farmers' private lands that are registered as farmlands or agriculture lands. There are no roads or houses on these eligible project areas where the trees will be planted.
Water bodies:	There are no water bodies too on these lands that will be disturbed as they are agriculture lands
Sites with special significance for indigenous people and local communities - resulting from the Stakeholder Consultation:	There are no sites of special significance for indigenous people and local communities resulting from the stakeholder consultation. These are private agriculture lands belonging to farmers.
Where indigenous people and local communities are situated:	No indigenous people are situated. Local communities too do not stay on these lands where planting is being done. These are essentially non-cultivable/agriculture lands. These houses may be situate near by in the village or close to the farmland.
Where indigenous people and local communities have legal rights, customary rights or sites with special cultural, ecological, economic, religious or spiritual significance:	Not applicable as these are private lands.

APPENDIX 4 - DESIGN CHANGES

A4.1. Details of proposed or actual design change

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A4.2. Describe the Impacts of Design Change on the following

a. Additionality

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b. Applicability of methodology and other methodological regulatory documents with which the project activity has been certified

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c. Compliance with the monitoring plan of the applied methodology

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d. Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan

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e. Scale of the project activity

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f. Stakeholder consultation

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g. Sustainable development criteria

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h. Safeguarding Assessment

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i. Compliance with applicable legislation

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Revision History

Version	Date	Remarks
2.3	Dd/mm/yyyy	Editorial changes in line with V2.1 of the Safeguarding Principles and Requirements
2.2	21 June 2023	Editorial changes in line with V2.0 of the Safeguarding Principles and Requirements
2.1	14 April 2023	Integrated the design change memo as annex of the document.
2.0	4 May 2022	
1.1	7 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Gender sensitive requirements added Prior consideration (1 yr rule) and Ongoing Financial Need added Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.0	10 July 2017	Initial adoption