GROUPED SUSTAINABLE AGROFORESTRY PROJECT VALIDATION REPORT

Carbon CHECK

Document Prepared by Carbon Check (India) Private Limited

Project Title	Grouped Sustainable Agroforestry Project
Version	4.0
Project Location	Andhra Pradesh and Telangana, India
Report ID	CCIPL1849/VCS-CCB/VAL-VER/GSAP/20230411

Report Title	Grouped Sustainable Agroforestry Project Validation Report
Client	Clime Trek Limited
Pages	128
Date of Issue	31-March-2024
Prepared By	Carbon Check (India) Private Limited
Contact	Regd. Off: 2071/38, 2nd Floor, Naiwala, Karol Bagh, New Delhi - 110005 Corporate off: Unit No.: 1701, Logix Office Tower, Plot No.: BW - 58, Sector - 32, NOIDA (Uttar Pradesh) - 201301 Telephone: +91 120 4373114 URL: www.carboncheck.co.in | e-mail: projects@carboncheck.co.in
Approved By	Priya Suman (Compliance Officer)
Work Carried Out By	Isha Kapoor (Team Leader/Technical Expert) Lalit Mohan Saklani (Assessor/Technical Expert) Vempally Prashanth (Assessor/Local Expert/Technical Expert) Vikash Kumar Singh (Technical Reviewer)

Summary:

A brief description of the validation and the project.

ClimeTrek Limited has appointed *Carbon Check (India) Private Ltd.* to carry out the validation of the project "Grouped Sustainable Agroforestry Project" with regards to the relevant requirements of CCB Standards v3.1 (dated 21/06/2017)/B01/ and VCS Standard Version 4.6 (dated 21/031/2024)/B01/.

The project "Grouped Sustainable Agroforestry Project" is a grouped project, falling under the Afforestation, Reforestation and Revegetation (ARR) category and targeting the following Verra certifications: Climate, Community & Biodiversity Standard (CCB) and Verified Carbon Standard (VCS).

The project is being implemented in Indian States of "Andhra Pradesh and Telangana". The verified total project area of the 1st Project Activity Instance (PAI) is 29883.69 hectares/01/03/04/10/. Based on the review of CCB & VCS PD/01/ along with on-site inspection/interviews/i-xiii/, *Santalum album* and a variety of other 40 native tree species/01/06/ have been planted. The CCB & VCS project has applied CDM Methodology AR-ACM0003 – "Afforestation and reforestation of lands except wetlands" v 2.0/B02/.

Table I: Dates & Timelines of CCB & VCS project:

Start date	4th November 2019/07/
Crediting period	4th November 2019 – 3rd November 2049
On-site Inspection Dates	6th November 2023- 8th November 2023

The purpose and scope of validation.

The purpose of the validation is the independent evaluation of the project's compliance with the CCB Standard v3.1/B01/ and VCS Standard v4.6/B01/, in particular, the project's baseline/01/10/12/, monitoring plan/06/, project implementation/06/12/, carbon captured by the project/03/, methodology requirements/B03/ and compliance with the relevant CCB/B01/ and VCS/B01/ and host party criteria. These are validated in order to confirm that the project design/01/, as documented, is sound and reasonable and meets the identified criteria and the project has been implemented in compliance with the monitoring plan stated in the CCB & VCS PD/01/. Carbon Check's objective is to perform a thorough, independent assessment of the validation of the project activity.

Validation scope is defined as an independent and objective review of the CCB & VCS Project Description (PD)/01/ against the relevant criteria and guidance documents provided by VERRA including the following:

- VCS Program Guide (v4.4, dated 29/08/2023)/B01/
- VCS Standard (v4.6, dated 03/04/2024) /B01/
- CCB Standard (v3.1, dated 21/06/2017) /B01/
- CCB Program Definitions (v3.0 dated 21/06/2017) /B01/
- VCS Program Definitions (v4.3, dated 29/08/2023) /B01/
- VCS Registration & Issuance Process (v4.4, dated 04/10/2023) /B01/
- AFOLU Non-Permanence Risk Tool (v4.2, dated 12/10/2023) /B01/
- VCS Validation and Verification Manual (v3.2, dated 19/10/2016) /B01/

Based on the requirements above, the VVB has assessed if the project meets the applicability criteria of the selected baseline and monitoring methodology, "AR-ACM0003: Afforestation and reforestation of lands except wetlands -Version 02.0"/B02/. VVB has also assessed the claims and assumptions made in the CCB & VCS PD/01/.

Method and criteria used for validation.

To conduct the validation audit, Carbon Check (India) Private Limited (CCIPL) conducted an assessment including a desk review of the Project Document (PD)/01/ and other supporting documents/02-12/ in compliance with the requirements stated in the VCS Validation and Verification Manual v3.2/B01/. Thereafter, verified the details and information from CCB & VCS PD/01/ by conducting an on-site inspection from 6th November 2023- 8th November 2023.

Number of findings raised during validation.

During the validation, a total of 27 findings have been raised, which includes 10 (ten) Corrective Action Requests (CARs), 17 (seventeen) Clarification Requests (CLs) and 00 (zero) Forward Action requests (FARs). The VVB states that all findings were properly addressed by PP and satisfactorily closed by the validation team.

Any uncertainties associated with the validation.

No uncertainty associated with the project implementation and calculations of GHG removals has been observed by the VV team.

Summary of the validation conclusion.

Based on the on-site inspection and the review of the CCB & VCS PD/01/ and supporting documents/2-12/, the CCIPL team confirms that the project PD/01/ has been developed taking appropriate assumptions and values in compliance with the requirements of VCS Standard v4.6/B01/ and CCB Standard v3.1/B01/ and the methodology applied/B02/. Also, the VV team confirms that the project has been implemented in line with the VCS and CCB requirements/B01/, methodology requirements/B02/ and monitoring plan stated in the CCB& VCS PD/01/.

Validation conclusion: In accordance with the requirements of VCS Standard v 4.6/B01/, CCB Standard v3.1/B01/ and the methodology applied AR-ACM0003 v2.0/B02/, the validation team confirm that all the values and assumption included in the CCB & VCS PD/01/ including objectives, scope and criteria, level of assurance, baseline and monitoring plan are valid and applicable.

Table of Contents

ABBREVIATIONS

AFOLU	Agriculture, Forest and other Land Use
ARR	Afforestation, Reforestation and Revegetation
CAR	Corrective Action Request
CCIPL	Carbon Check (India) Private Ltd.
CCB	Climate, Community and Biodiversity
CDM	Clean Development Mechanism
CO_{2e}	Carbon Dioxide Equivalent
CL	Clarification Request
DBH	Diameter at breast height
HCV	High Conservation values
KML	Keyhole Markup Language
DR	Document review
DVR	Draft Validation Report
FA	Final Approval
FAR	Forward Action Request
FVR	Final validation Report
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
IR	Internal resource
MP	Monitoring Period
MR	Monitoring Report
PAI	Project Activity Instance
PD	Project Design
PP	Project Proponent
QC/QA	Quality control /Quality assurance
SOC	Soil Organic Carbon

TA	Technical Area
TR	Technical Review
UQL	Unacceptable Quality Limit
VVB	Validation & Verification Body
VVS	Validation and Verification Standard
VCU	Verified Carbon Unit

1 INTRODUCTION

1.1 Objective

The purpose of this report is to document the compliance of the CCB & VCS project "Grouped Sustainable Agroforestry Project"/01/ (hereafter referred to as "project") with the requirements of the Verified Carbon Standard (VCS)/B01/ and Climate, Community & Biodiversity Standard (CCB)/B01/ and the applied CDM methodology AR-ACM0003/B02/. The CCB & VCS PD/01/ describes this project is owned by ClimeTrek and GKF Agroforestry.

Based on the review of CCB & VCS PD/01/, VVB has ascertained the following on the CCB VCS project:

Table II: Project Details

VCS category	Afforestation, Reforestation and Revegetation (ARR)
Applied methodology	CDM Methodology "AR-ACM0003: Afforestation and reforestation of lands except wetlands -Version 02.0"/B02/
Sectoral scope	14: Agriculture, Forest and other Land Use (AFOLU)

The validation objective of the project includes:

- ✓ Assessment of compliance with the VCS Program Guide/B01/, VCS Standard version 4.6/B01/, CCB Standard version 3.1/B01/ and other relevant VCS & CCB requirements/B01/.
- ✓ Assessment of compliance with the applied CDM methodology AR-ACM0003 version 2.0/B02/.
- ✓ Assessment of project compliance with the relevant rules including host country legislation.

1.2 Scope and Criteria

Scope of Validation: The scope of validation is to assess the conformance of the CCB & VCS PD/01/ and other relevant supporting documents/02-12/ against the CCB & VCS requirements/B01/ and applied methodology/B02/ and tools/B03/, including the assessment of:

- ✓ Physical infrastructure, activities, technologies and processes of the CCB & VCS project/01/
- ✓ Project's physical boundaries/01/10/,
- ✓ GHG sources, sinks and/or reservoirs/03/,
- ✓ Growth and yield models/03/,
- ✓ Stakeholder involvement/05/,
- ✓ Environmental impacts,
- ✓ Baseline and additionality justification/10/B06/,
- ✓ Community and Biodiversity aspect/01/12/,
- ✓ Monitoring plan/06/,
- ✓ Estimated GHG removals/03/,
- ✓ Grouped project eligibility for the inclusion of PAI and
- ✓ Eligibility of 1st PAI in line with grouped project inclusion criteria

The **validation criteria** follow the guidance documents provided by CCB & VCS including the following: VCS Standard version 4.6/B01/, CCB Standard 3.1/B01/, CCB Program Definitions/B01/, VCS Program Guide version 4.0/B01/, AFOLU Non- Permanence Risk Tool version 4.2 and the applied CDM methodology AR-ACM0003 – "Afforestation and reforestation of lands except wetlands" (version 2.0) /B02/.

1.3 Summary Description of the Project

The project "Grouped Sustainable Agroforestry Project" is a grouped project, falling under the ARR category and targeting the following VERRA certifications: Verified Carbon Standard (VCS) and Climate and Community & Biodiversity Standard (CCB).

The project is a grouped project activity implemented in two states of India namely Telangana and Andhra Pradesh. Figure 10 & 11 in the CCB & VCS PD/01/ outlines the geographic area (Project zone) in which project activity instances (PAI) could be implemented as part of the grouped project. The geographic area of the entire grouped project boundary is 275,047 sq km/01/. The project is a conservation project which includes farmers income through the sale of non-wood forest products (fruits) and the carbon credits generated through the plantation activities. Farmers will maintain the trees for 40 years, as verified and checked from the landowner agreements/11/.

The 1st PAI includes a total of 29883.69 ha/01/03/04/10/ including districts from both the states under the grouped project boundary/10/. These are comprised of the privately owned/04/ agricultural land/04/10/ that belongs to the farmers and has become low productive over a course of time. The CCB & VCS project/01/ has applied and demonstrated compliance with the approved CDM methodology AR-ACM0003 (A/R Large Scale Methodology, Afforestation and Reforestation project activities implemented on lands other than wetlands- Version 2.0)/B02/. VVB confirms that the land subjected to project activity does not come under wetland/10/. The project implementation area under the 1st PAI does not consist of organic soils/B05/. VVB confirms that there is no implementation of organic or inorganic fertilizers in the project scenarios. In the baseline scenario/10/, the agricultural lands were low productivity land. As the project activities implemented on agricultural lands owned by farmers/04/ and the farming practices are still being carried out in combination with the trees following a suitable agroforestry models. PP has accounted expected leakage estimations for the land that got displaced by plantation activities/03/.

The project has defined both spatial and temporal project boundaries/10/. The selected carbon pools/03/, under the project are Above ground tree biomass (AGB) and Below ground tree biomass (BGB). The baseline and additionality have been determined using the CDM AR-AM tool 02/B03/. PP has opted the random stratified sampling following the resource manual "Measurement of Forest Carbon stocks for capacity building of state forest departments" published Indian Council of Forestry Research and Education, Dehradun, India (ISBN: 978-81-936157-8-2)/B06/ and stratification process is accordance with applied methodology/B02/ requirements.

The CCB & VCS ARR project/01/ aims to promote agroforestry (i.e., Agri-horticulture & Agri-silviculture) by planting a mix of 41 fruit and timber tree species in which 75% are fruit trees and 25% are timber trees/03/ on the less productive agricultural land owned by farmers to improve the tree outside forest for mitigation of climate change, improvement in livelihood of the local communities and developing natural habitats for the biodiversity of the region. Harvesting is not the

part of the project; trees in the project area are promoted for the conservation and sale of non wood forest produce in the form of fruits for income to the farmers so that the livelihood of the communities residing in project area is improved. The implementation of the 1st PAI results in estimations of GHG emission removal/03/ of 9,766,617 tCO_2e/03/ for 30-years of crediting period with annual average of 325,554 tCO_2e (Before deducting -23% buffer) and results in removal rate of 10.89 tCO_2e/ha/yr/03/.

Based on on-site inspection and interviews/i-xiii/, VVB confirms that the project's community objectives are focused on improving livelihoods, raising awareness for the climate change, creating jobs and opportunities, promoting additional income to small scale farmers.

VVB, based on document review/01/03/12/ and on-site inspection/interviews/i-xiii/, confirms the following:

Climate benefits: The project adopts the activities that will include climate change mitigation and adaptation by planting of timber and fruit trees. This will eventually remove the significant greenhouse gas (GHG) emission creating a carbon sink.

Community benefits: The project is focused on poverty alleviation of farmers, full time employment opportunity to local communities and community development with improved food and nutrition security.

Biodiversity benefits: The project implementation develops natural habitats including restoration of the degraded habitats. This will in time alleviate the faunal population in the region).

2 VALIDATION PROCESS

2.1 Audit Team Composition (*Rules* 4.3.1)

Team Leader/Technical Expert: Isha Kapoor is a forestry graduate and has knowledge & skills for the land use & forestry sector. She is a qualified lead validator/verifier and technical expert for TA 14.1 under CDM SS categorization and extensive expertise in forestry, social, ecological and biodiversity issues. She has more than three years of work experience in GHG mechanism including development of standards and methodology for an Indian GHG program. Currently, she is working on a variety of land use & forestry projects under different GHG programs including GS, CDM and VCS.

Assessor: Lalit Mohan Saklani is a forestry post-graduate and has knowledge & skills for the land use & forestry sector and has been working for the past year in the GHG programs. Currently, he is working on a variety of land use & forestry projects under different GHG programs including GS, CDM and VCS. He has relevant ecological and biodiversity expertise for assessing WRC, ARR, IFM & REDD projects and relevant forestry and/or other land use experience in the region. He is also a lead assessor and a technical expert for TA 14.1 projects.

Assessor/Local Expert: Vempally Prashanth has done master's degree in forestry graduate and has knowledge & skills for the land use & forestry sector. Currently, he is working on a variety of land use & forestry projects under different GHG programs including GS, CDM and VCS. He has relevant ecological and biodiversity expertise for assessing WRC, ARR, IFM & REDD projects and relevant forestry and/or other land use experience in the region. He is the author of research work article (Prashanth et al., 2023) and co-authored two research articles (Murari et al.,2023 & Shakith

et al., 2023). He is also a lead assessor and a technical expert for TA 14.1 projects. He is a local expert and belongs to the same region of the project and well versed (native Telugu[1] speaker) with local language and customs.

Vikash Kumar Singh: Qualified lead assessor and internal technical reviewer for validations and verifications GHG mitigation projects under CDM, VCS and Gold Standard (GS) and actively been involved in the validation and verification and internal technical review of more than 300 GHG mitigation projects. He is qualified as technical expert for TA 1.1, 1.2, 3.1,4.1,13.1, 13.2, 14.1 and 15 under CDM SS categorization. He has undergone extensive training in the validation and verification of carbon offset projects and extensive expertise in forestry, social, ecological and biodiversity issues including the accreditation requirements for the VVBs. Currently, he is employed with Carbon Check in the capacity of Executive Director. Vikash has extensive work experience on working on land use & forestry projects under GS, CDM and VCS projects globally.

Table III: Team Composition:

S.No.	Role	Type of Resource	Last Name	First Name	Affiliation (e.g., name of central or other office of VCS Validator and Verifier or Outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Validation findings
1.	Team Leader /Technical Expert	IR	Kapoor	Isha	CCIPL	X			X
2.	Assessor/Technical Expert	IR	Saklani	Lalit Mohan	CCIPL	X	X	X	X
3.	Assessor/Local Expert/Technical Expert	IR	Vempally	Prashanth	CCIPL	X	X	X	X

Table IV: Technical reviewer and approver of the Validation report:

	Role	Type	Last Name	First Name	Affiliation

[1] **language native to the Indian states of Andhra Pradesh and Telangana, where it is also the official language.**

Sr. No.					(e.g., name of central or other office of VCS Validator and Verifier or Outsourced entity)
1.	Technical Reviewer	IR	Singh	Vikash Kumar	CCIPL

2.2 Method and Criteria

The validation of the project includes the following assessment activities:

- ✓ Contract review & signing
- ✓ Appointment of team members based on competencies
- ✓ Assessment Planning
- ✓ Desk review on CCB & VCS PD/01/, carbon sequestration calculation sheets (Ex ante)/03/ and other documents/03-12/
- ✓ Interviews with the stakeholders and local stakeholder meeting(s)/05/ during the on-site inspection/i-xiii/
- ✓ A review of data and information presented by the PP to verify their completeness.
- ✓ A review of the monitoring plan and monitoring methodology paying particular attention to the frequency of measurements, the competency of personnel performing the monitoring and the QA/QC procedures/06/.
- ✓ Reporting and recording of assessment.
- ✓ Findings and their closure APPENDIX 2: FINDINGS LOG
- ✓ Additional validation activities
- ✓ Submission of final report

A project specific validation plan has been developed to guide the auditing process to ensure efficiency and effectiveness. The purpose of the validation plan is to present a risk assessment for determining the nature and extent of validation procedures necessary, thus reducing the risk of auditing error to a reasonable level.

The evidence gathering plan was followed by VVB to lower the risk to an acceptable level. The techniques used by VVB for validation is as follows:

- ✓ Inquiry
- ✓ Analytical testing
- ✓ Confirmation
- ✓ Recalculation
- ✓ Examination
- ✓ Retracing
- ✓ Cross-checking

✓ Reconciliation

The validation of the CCB & VCS PD/01/ has been conducted in compliance against the requirement documents as stated in APPENDIX 1: LIST OF DOCUMENTS.

2.3 Document Review

During the document review, CCIPL has applied standard auditing techniques in compliance VCS Validation and Verification Body manual v3.2/B01/ to assess the quality of information provided. The validation is performed primarily based on the review of the CCB & VCS PD/01/ and the supporting documentation/02-14/.

For validation, this process includes:

- A review of data and information presented to verify completeness and consistency in accordance with VCS Standard (version 4.6)/B01/ and CCB Standard (version 3.1) requirements/B01/.
- A review of the project description and monitoring methodology/B02/, paying particular attention to the applicability conditions of the methodology/B02/, baseline/10/ and additionality related requirements/B06/
- A review of the monitoring plan/06/ and the project's compliance with relevant VCS and CCB criteria/B01/.

Fig 1: Interviews and Document Review

2.3.1 Interviews

Table VI below describes the on-site inspection/ interview/i-xiii/ process and further identifies personnel, including their roles, who were interviewed and/or provided information additional to that provided in the CCB & VCS PD/01/ and any supporting documents/02-12/.

During the on-site inspection, some farmers/landowners have been interviewed/i-xiii/ on the CCB & VCS project design and project implementation.

Table VI: Project representatives and stakeholders interviewed:

Sl. No.	Name (Organisation)	Date	Topic	Team Member
i	S.K.M Pasha (GKF Agroforestry)	06/11/2023 & 08/11/2023	• PP's roles and responsibilities. • Baseline scenario. • Community Baseline • Biodiversity Baseline • Project implementation. • Future project plans. • Organization structure, roles • Non-Permanence risk Assessment • Ownership of land titles • Ownership of carbon credits • Employment generation from the project • Land agreements • Financial viability to ensure permanence	Lalit Mohan, V. Prashanth
ii	P Laxmi Narayana (GKF Agroforestry)	06/11/2023 - 08/11/2023		
Iii	CH. Vamshi Krishna (GKF Agroforestry)	06/11/2023- 08/11/2023		
Iv	Y. Krishna (GKF Agroforestry)	06/11/2023		
v	Mradul Shrivas (Clime Trek Limited)	06/11/2023- 08/11/2023		
vi	Dr. Shahid (Clime Trek Limited)	06/11/2023- 08/11/2023	• Carbon quantification • Stratification • Sampling procedures • Monitoring plan • CCB aspects of project	
vii	Rajia Begum (GKF Agroforestry)	06/11/2023 & 08/11/2023	• PP's roles and responsibilities. • Baseline scenario. • Project implementation. • Future project plans • Ownership of land titles • Remote sensing analysis	
viii	P. Lalitha (GKF Agroforestry)	06/11/2023 & 08/11/2023		
ix	Shankaramma (Farmer)	06/11/2023	• Local stakeholder consultation • Grievance Mechanism • Community Engagement • Land agreements • Land ownership and carbon rights • Benefits from the project • CCB aspects of project	
x	Pedda Laxmi (Farmer)	06/11/2023		
xi	Veera Venkata Rao (Farmer)	07/11/2023		
xii	Srinivas Rao (Farmer)	07/11/2023		
xiii	P. Chinnapichaya (Farmer)	07/11/2023		

2.4 Site Inspections

The validation on-site inspection[/i-xiii/] has been conducted from 06th November 2023 to 08th November 2023. A ground truthing and the on-site inspection/interviews[/i-xiii/] with PP and relevant stakeholders[/05/] of the project has been conducted to assess project implementation[/06/12/], baseline scenario, project scenario Community and Biodiversity scenario[/10/] as described in PD[/01/]. Members of the CCIPL team visited selected plots within 1st PAI and confirmed pre-project scenario was agriculture land[/10/] and confirms the Community, Biodiversity baseline and project implementation through on-site inspection and interviews[/i-xiii].

Fig2: Interviewing project management team to confirm project implementation during field visit.
The following aspect of the project have been assessed during the on-site inspection.

- Project Proponent's roles and responsibilities.
- Brief description of the project[/01/]
- Project Implementation framework[/06/]
- Community and Biodiversity aspect[/12/].
- Community-without project

- Biodiversity-without project
- Communities and community groups
- SDG Impacts associated with the project.
- Project start date/07/
- Baseline scenario/10/.
- Additionality/B06/
- Project implementation/06/12/.
- SOP's and QA/QC Procedures/06/
- Forest and non-Forest analysis/10/
- Future project plans.
- Future instances
- Organization structure, roles and responsibilities/06/.
- Non-Permanence risk Assessment/02/
- Ownership of land titles/04/

Sampling/Validation Plan

In order to ensure a complete, transparent and timely execution of the validation task, the team leader has planned the complete sequence of events necessary to arrive at a substantiated final verification opinion. Various tools have been established in order to ensure an effective assessment planning.

Step 1- Identification of Materiality threshold

Table VII: Materiality threshold selected:

Check the relevant box against applicable threshold level	Threshold	Related to
☐	**1%**	Emission reductions or removals for registered large scale project activities achieving a total emission reduction or removal of > 300,000 tonnes of CO_2e equivalent per year.
☒	**5%**	Emission reductions or removals for registered small-scale project activities achieving total emission reductions of <300,000 tonnes of CO_2e per year

Based on the review of CCB & VCS PD/01/, the average annual ex-ante GHG removals/03/ from the project has been estimated as 133,950 tCO_2e. Hence the applied materiality threshold would be 5% i.e., 6,698 tCO_2e/year.

Step 2- Identification of risks, their level and assessment

On the basis of the risk analysis the validation has been planned in accordance with the latest applicable version of Guideline: "Application of materiality in validations". The risk assessment has been used in developing the validation and evidence-gathering plans. Any input into the risk assessment shall be recorded.

The risk assessment output may address how the validation is planned with respect to the following:
• GHG emissions SSRs.
• boundaries.
• data management details.
• management controls.

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the potential risk		Assessment of the records/information/interview with personnel to check controls/ mitigation measures
		Risk level	Justification	
1.	**VCS & CCB project activity requirements** Adherence to VCS & CCB rules and requirements including those related to applicable category AFOLU & ARR.	High	This corresponds to high risk since compliance with the VCS & CCB rules and requirements is critical for the project.	The risk will be mitigated by reviewing the VCS & CCB PD and supporting documents thoroughly in compliance with each section of VCS & CCB template instructions, VCS Standard v4.6 and CCB Standards v3.1 requirements.
2.	**Ownership** Adherence to ownership and legal right of the project including the proof of right of carbon credits.	High	Since, this is a grouped project which includes plantation on agricultural lands, the evidence of project ownership, in respect of each project activity instance, held by the project proponent from the respective start date of each project activity instance shall be assessed. VVB considers this as high risk.	The risk will be mitigated by checking the agreement between the PP and landowners assigned of project implementation and proof of title.
3.	**Baseline methodology** Adherence to selected baseline protocol as per the applied methodology, AR-ACM0003, Version 2.0	Medium	This corresponds to medium risk category since compliance with the	The risk will be mitigated by reviewing the evidence for pre-project scenario and confirming the same by observation and interviews during the on-site inspection.

	and its applicability conditions.		applied methodology, AR-ACM0003 v2.0 is critical for the project.	
4.	**Time period (for e.g., project start date, start date of crediting period and length of crediting period) covered by Project Report** Adherence to the VCS & CCB requirements for start date, crediting period and length of the project	High	Project shall meet the VCS & CCB requirements for time period such as project start date, crediting periods, (section 3.8 & 3.9 of VCS Standards v4.6 and G1 (9) of CCB Standards v3.1). In the opinion of the VVB this risk is considered as high.	The risk will be mitigated by reviewing the evidence pertaining to the project start date including the time stamped pictures, contracts and receipts.
5.	**Baseline Scenario and Additionally** Accuracy of baseline scenario identification and compliance with eligibility for positive list for additionality demonstration as per VCS & CCB requirements, applied methodology, and additionality tool.	High	Since this is a grouped project which intend to include new project activities , the baseline determination and additionality demonstration as per VCS & CCB Standards for all project activity instances shall be combined, which in the opinion of the VVB, shall have a high risk	The risk will be mitigated by interviews and review of evidence of baseline and additionality during on-site inspection and documents review.
6.	**Baseline assertion** Accuracy of baseline assertion	Medium	Considering the project activity, applying the	The risk will be mitigated by interviews and review of evidence of baseline and

			methodology AR-ACM0003 v2.0, the risk for the baseline assertion including the compliance with determination of schedule of activities in the baseline scenario as stated in the methodology, is considered as medium.	additionality during on-site inspection.
7.	**Correctness of source of data used for Emission reduction estimation/calculation.** Accuracy of default/ex-ante fixed values and allometric equations used for the ex-ante carbon calculation.	High	As per the methodology, various sources for the data such as default values from allometric equations shall be used, including IPCC, and any other Peer-reviewed published data. This forms a high risk for overall carbon removals from the project.	The risk will be mitigated by assessment of all sources, sinks and reservoirs that are included in the project report during the on-site inspection.

8.	**Emission reduction estimation including future estimate / calculation.** Accuracy of default/ex-ante fixed values and allometric equations used for the ex-ante carbon calculation.	Medium	PP has used various sources for the data such as default values from IPCC, the applied methodology and allometric equations are also used, including literature reports. Furthermore, accuracy in equations and formulas applied in the spreadsheet has material impact on the carbon removals from the project. This forms a medium risk for overall carbon removals from the project.	This risk will be mitigated by cross-checking emission reduction calculation spread sheet including all baseline emission, project emission, leakage emission and final emission reduction calculation.
9.	**Monitoring Plan** Monitoring of the project as per the VCS & CCB requirements and applicability of section 6 of the applied methodology including monitoring approach for area forested, stratum-wise area, area of sample plots, diameter and possibly heights of trees in sampling lots, monitoring of project implementation	Medium	Since the grouped project has followed monitoring plan as per the applied methodology, the risk is considered as medium.	The risk will be mitigated by reviewing the measurement, calculation, and management /sampling plan of monitoring parameters during the on-site inspection, as per the applied methodology.

10.	**VCS & CCB project description (PD)** Completeness and correctness of project design description.	High	Since the project design has multiple components, the appropriate description of all the aspects including the applied methodology is pertinent. Hence, in the opinion of VVB, this risk is considered as high.	The risk will be mitigated by reviewing adherence of the PD to the actual site condition for e.g., the existence of the project; project start date; GHG inventory of sources and sinks; sources and sinks; records kept on site.
11.	**Permanence Risk** Accuracy of assessment of permanence of carbon stock and buffer credits.	High	Since this is a grouped project, developed by GKF Agroforestry, with the involvement of farmers residing within the project boundary, the risk of permanence due to various factors such as project management, financial, Nature risk etc. is high.	The risk will be mitigated by cross-checking each and every risk affecting the permanence nature of carbon stock as per the non-permanence risk tool with evidence provided by the PP. The project management plan (including implementation plan) & ownership of land, roles & responsibility to be checked during the on-site inspection and through document review.
12.	**Leakage** Identification of source of project emissions including leakage due to displacement of pre-project activities.	Medium	Since the project includes tree plantation on degraded agricultural lands belonging to farmers, in the opinion of VVB, no shifting of activities has taken place. However, due to being agricultural land and shift	The risk will be mitigated by confirming the pre-project scenario through on-site inspection and interviews that there is no displacement of pre-project activities due to project implementation.

			of activities, VVB has considered the risk of leakage as medium.	
13.	**Project Area and Eligibility** Assessment of eligibility of land and calculation of area for each geographic area specified in the PD.	High	This corresponds to high risk as the proposed project activity is a grouped project and intend to include new activity instances. This also has a material impact on overall carbon removals from the project.	The risk will be mitigated by interviewing the contractors of the project implementation and by further reviewing documents to cross check the land-use pattern and geographical boundaries, on-site inspection of sample sites and review of project management plan.
14.	**Participation under any other GHG Program** Risk of double counting of project or carbon credits	High	Since the project is implemented by collaborating with farmers, checking of title of land and rights of carbon credits including project's existence in any other GHG program corresponds to a high-risk category.	The risk will be mitigated by reviewing agreement of PP with contractors, land ownership proof, proof for waiver of carbon credits by the other entities along with checking the project on other registries.

Sampling approaches during validation:

According to section 3.3.1 of the VCS Validation and Verification Manual, v3.2[/B01/],

"*Sampling applies to both quantitative and qualitative data and information. Qualitative information (eg, procedures or applicability) is particularly relevant for validation. Quantitative data (eg, monitored results) is a principal focus at verification*."

Given that this is validation of project, VVB has conducted the review and on-site visit of project within the scope of requirements under section 3.3.1.1 of VCS VVB Manual v3.2[/B01/] and assessed **full data set** for both *Qualitative information (eg, procedures or applicability) and quantitative data (eg, for ex-ante carbon calculation)*. There are no *monitored results or any sampling by PP since it*

is not combined validation and verification and for the same reason no acceptance sampling has been performed by the VVB (and thus no sampling plan has been used for the site visit).

2.5 Public Comments (*Rules* 4.6)

The project has undergone a 30- day public comment period spanning from 04th October 2023 to 03rd November 2023. VVB has confirmed from the VERRA website/B04/ that there were no public comments.

2.6 Resolution of Findings

The objective of the validation is to resolve any outstanding issues (issues that require further elaboration, research or expansion) which has been clarified/corrected prior to final VVB's conclusions on the project's baseline, monitoring plan from the CCB & VCS PD/01/ and subsequently the project implementation, monitoring practices and Material discrepancies identified during the validation are addressed either as CARs, CLs or FARs APPENDIX 2: FINDINGS LOG.

Corrective Action Requests (CAR) are issued, where:

✓ mistakes have been made with a direct influence on project results requiring adjustments of the VERs in monitoring report.

✓ applicable methodological specific requirements have not been met.

A Clarification Request (CL) is used where additional information is needed to fully clarify an issue or where the information is not transparent enough to establish whether a requirement is met.
A Forward Action Request (FAR) has been issued, where:

✓ the actual project monitoring and reporting practices requires attention and /or adjustment for the consecutive verification period, or

✓ an adjustment of the MP is recommended.

In the context of FARs, risks have been identified, which may endanger the delivery of high-quality GHG removals in the future, i.e., by deviations from standard procedures as defined by the MP. Therefore, such aspects should receive a special focus during the consecutive verification. A FAR may originate from lack of data sustaining claimed GHG removals.

CAR/CL/FAR		**Section no.**		**Date:**
Description of CAR/CL/FAR				
PP response				
Documentation provided by PP				
VVB assessment				**Date:**

A total of 00 FAR, 10 CARs, and 17 CLs has been raised. The VVB states that all findings were properly addressed by PP and satisfactorily closed by the validation team. Please refer to APPENDIX 2: FINDINGS LOG below for the details of the FARs/CARs/CLs.

2.6.1 Forward Action Requests

No forward action request has been raised during this validation by VVB.

3 VALIDATION FINDINGS

3.1 Summary of Project Benefits

In line with section 1.2 of CCB VCS PD/01/ and confirmed through on-site inspection/interviews/1-xiii/the unique project benefits summarized and assessed as follows:

- Climate benefits include climate change mitigation and adaptation by planting of timber and fruit trees.
  The project is estimated to remove 9,766,617tCO2e/03/ from the atmosphere at the end of its crediting period over its 30 years lifetime, which is equivalent to an average of 325554tCO2e/year/03/

- Community benefits include poverty alleviation of farmers through NTFP products, full time employment opportunity to local communities and community development with improved food and nutrition security.
  The project aims to enhance livelihoods and employment opportunities to community members. The employment opportunities for 1500 members of the community with including 600 women and improved livelihood of 26486 community members/04/10/ with including 9000 of women.

- Biodiversity benefits include restoration of the degraded habitats as well as increasing the forest cover over the area of 29883.61ha/10/ and species diversity as the plantations of project activity includes 41 tree species in which 6 tree species are threatened as per IUCN/B06/.

VVB validates that all the achievements reported correspond to the information provided in relevant sections of CCB& VCS PD/01 and project activities will improve quality of life of the communities and contribute to the conservation of biodiversity.

3.2 General

3.2.1 Summary Description of the Project (G1.2)

The project “Grouped Sustainable Agroforestry Project” is a grouped project, falling under the ARR category and targeting the following VERRA certifications: Verified Carbon Standard (VCS) and Climate and Community & Biodiversity Standard (CCB).

The project is a grouped project activity implemented in two states of India namely Telangana and Andhra Pradesh. Figure 10 & 11 in the CCB & VCS PD/01/ outlines the geographic area (Project zone) in which project activity instances (PAI) could be implemented as part of the grouped project. The geographic area of the entire grouped project boundary as the CCB & VCS PD/01/ is 275,047 sq km. The project is a conservation project which includes farmers income through the sale of non-wood forest products (fruits) and the carbon credits generated

through the plantation activities. Farmers will maintain the trees for 40 years, as verified and checked from the landowner agreements/11/.

The 1st PAI includes a total of 29883.69 ha/01/04/03/10// including districts from both the states under the grouped project boundary/10/. These are comprised of the privately owned agricultural land that belongs to the farmers and has become low productive over a course of time. The CCB & VCS project has applied and demonstrated compliance with the approved CDM methodology AR-ACM0003 (A/R Large Scale Methodology, Afforestation and Reforestation project activities implemented on lands other than wetlands- Version 2.0)/B02/. VVB confirms that the land subjected to project activity does not come under wetland/10/. The project implementation area under the 1st PAI does not consist of organic soil/B05/. VVB confirms that there is no implementation of organic or inorganic fertilizers in the project scenarios. In the baseline scenario, the agricultural lands were low productivity land. As the project activities implemented on agricultural lands owned by farmers and the farming practices are still being carried out in combination with the trees following suitable agroforestry models. PP has accounted expected leakage estimations/03/ for the land that got displaced by plantation activities.

The project has defined both spatial and temporal project boundaries/10/. The selected carbon pools/03/, under the project is Above ground tree biomass (AGB) and Below ground tree biomass (BGB). The baseline and additionality have been determined using the CDM AR-AM tool 02/B03/. PP has opted the random stratified sampling following the resource manual “Measurement of Forest Carbon stocks for capacity building of state forest departments” published Indian Council of Forestry Research and Education, Dehradun, India (ISBN: 978-81-936157-8-2)/B06/.

The CCB & VCS ARR project/01/ aims to promote agroforestry by planting fruit and timber tree species on the less productive agricultural land and wastelands owned by farmers to improve the tree outside forest for mitigation of climate change, improvement in livelihood of the local communities and developing natural habitats for the biodiversity of the region. The implementation of the 1st PAI results in estimated GHG emission removal of 9,766,617 tCO_2e/03/ for 30-years crediting period with annual average of 325,554 tCO_2e (Before deducting -23% buffer) and results in removal rate of 10.89 tCO_2e/ha/yr /03/.

Based on on-site inspection and interviews/i-xiii/, VVB confirms that the project’s community objectives are focused on improving livelihoods, raising awareness for the climate change, creating jobs and opportunities, promoting additional income to small scale farmers.

As assessed in section 3.1 of this report and based on document review/01/03/12/ and on-site inspection/interviews/i-xiii/, VVB confirms that the following are the specific, measurable and distinct objectives of the proposed activity:

- Climate benefits include climate change mitigation and adaptation by planting of timber and fruit trees.
  The project is estimated to remove 9,766,617 tCO2e/03/ from the atmosphere at the end of its crediting period over its 30 years lifetime, which is equivalent to an average 325,554 tCO2e/year/03/.

- Community benefits include poverty alleviation of farmers through NTFP products, full time employment opportunity to local communities and community development with improved food and nutrition security.

The project aims to enhance livelihoods and employment opportunities to community members. The employment opportunities for 1500 members of the community with including 600 women and improved livelihood of 26486 community members/04/10/ with including 9000 of women.

Biodiversity benefits include restoration of the degraded habitats as well as increasing the forest cover over the area of 29883.61ha/10/ and species diversity as the plantations of project activity includes 41 tree species in which 6 tree species are threatened as per IUCN/B06/

Project type and category

The project falls under the category Afforestation, Reforestation and Revegetation (ARR) and has been developed under VCS sectoral scope 14: Agriculture, Forestry and Other Land Use (AFOLU).

Technologies and measures implemented

During on-site inspection/ interviews/i-xiii/ it has been informed to the VVB that the farmers have bought the saplings from nursery, and some were provided by PP, this has been further confirmed by reviewing land agreements/04/07/. These saplings are transplanted in the field by digging 1.5 feet by 1.5 feet (length and width) pits with spacing ranging from 10 x 10 to 25 x 30m for all 41 different species. This was further confirmed during on-site inspection/interviews/i-xiii/ with project management team/i-xiii/ and worker training manual/06/.

Based on review of the CCB & VCS PD/01/ and on-site inspection/interviews/i-xiii/, VVB confirms that the CCB & VCS project includes the plantation of 41 native species/10/ namely,

1. *Anacardium occidentale*
2. *Annona reticulata*
3. *Artocarpus heterophyllus*
4. *Aquilaria malaccensis*
5. *Azadirachta indica*
6. *Bambusa vulgaris*
7. *Murraya koenigii*
8. *Butea monosperma*
9. *Borassus flabellifer*
10. *Chloroxylon swietenia*
11. *Casuarina equisetifolia*
12. *Citrus limetta*
13. *Citrus limon*
14. *Cocos nucifera*
15. *Dalbergia sissoo*
16. *Elaeis guineensis*
17. *Ficus carica*
18. *Ficus benghalensis*
19. *Grevillea robusta*
20. *Haloptelea integrifolia*
21. *Leucaena leucocephala*
22. *Melia dubia*
23. *Millettia pinnata*
24. *Mangifera indica*
25. *Manilkara zapota*

26. *Moringa oleifera*
27. *Pterocarpus santalinus*
28. *Phyllanthus emblica*
29. *Phoenix dactylifera*
30. *Prunus amygdalus*
31. *Psidium guajava*
32. *Punica granatum*
33. *Roystonea regia*
34. *Santalum album*
35. *Swietenia macrophylla*
36. *Sapindus mukorossi*
37. *Syzygium cumini*
38. *Tamarindus indica*
39. *Tectona grandis*
40. *Theobroma cacao*
41. *Ziziphus mauritiana*

Eligibility of Project

Based on the review of CCB & VCS PD/01/, supporting evidence/10/ and on-site inspection/interviews/i-xiii/, VVB has assessed the eligibility requirements for VCS & CCB Standard/B01/ (VCS general criteria, CCB general criteria and ARR criteria) and methodology applied/B02/ which is as follows:

Table IX (a): Assessment of Project Eligibility as per VCS Standard, V4.6

VCS Eligibility Criteria		VVB Assessment
1.	**Project Activity DO NOT convert native ecosystems or degrade hydrological functions to generate GHG credits**	Based on the review of the CCB & VCS PD/01/, Forestry and non- forestry analysis report/10/ and on-site inspection/ interviews/i-xv/, the project includes the plantation of timber and fruit trees on land that was previously held as agricultural lands/10/ . Hence, VVB has confirmed that the project does not convert ecosystem or degrade the hydrological functions of the project area. Furthermore, VVB ascertains that the areas were not cleared of the native ecosystem to create GHG credits. This has further confirmed by reviewing remote sensing forest and non-forest analysis/10/ and associated GIS shapefiles/10/.
2.	**If clearing or conversion of land by the project activity was done, it took place at least 10 years prior to the proposed project start date.**	With reference to the above assessment and based on the review of Forest/Non-Forest Analysis Report/10/ and analysis of GIS/10/ and remote sensing shapefiles/10/, VVB confirms that there was no conversion of land by the project activity has been done in the last 10 years prior to start date.
3.	**If the AFOLU project area was drained or converted, such draining, or conversion took place prior to 1 January 2008**	With reference to the above assessment and based on the on-site inspection/interviews/i-xiii/, review of CCB &

		VCS PD[/01/] and analysis of GIS[/10/] and remote sensing shapefiles[/10/], VVB has ascertained that the project area has not been drained or converted due to implementation of the project as the pre-project scenario was the cultivation lands
4.	**Project Activity is requesting for registration within Eight years of the project start date**	Based on the review of CCB & VCS PD[/01/], the start date of the project activity is 04th November 2019[/07/]. The same was verified during the on-site inspection by visiting the first plantation site and through document evidence[/07/]. In the opinion of VVB, the start date is in compliance with the requirement of VCS standards v4.6[/B01/] and CCB Standards v3.1[/B01/], as this is the date when GHG removal from the first plantation took place. VVB confirms that the project complies by this VCS & CCB requirement[/B01/], as the project can be registered till 03rd November 2027.

Table IX(b): Assessment of Project Eligibility as per CCB Standard, v3.1

CCB Eligibility Criteria[/B01/]		**VVB Assessment**
1	**Project Activity shall have specific, measurable and distinct climate objectives**	In line with section 1.2 of the CCB & VCS PD[/01/], review of carbon calculation spreadsheet[/03/] and confirmed through on-site interviews[/i-xiii/], the project includes the distinct and measurable climate objectives. Climate benefits include climate change mitigation and adaptation by planting timber and fruit trees. Hence VVB confirms the project climate objectives. (Refer VVB assessment to section 3.1 of this report).
2	**Project Activity shall have specific, measurable and distinct Community objectives**	In line with section 1.2 of CCB & VCS PD[/01/] and confirmed through on-site interviews[/i-xiii/] and , the project includes the distinct and measurable community objectives. Community benefits include poverty alleviation of farmers through NTFP products i.e., fruits, full time employment opportunity to local communities and community development with improved food and nutrition security. Hence VVB confirms the project has specific, measurable and distinct community objectives. (Refer VVB assessment to section 3.1 of this report).

3	**Project Activity shall have specific, measurable and distinct Biodiversity objectives**	In line with section 1.2 of CCB & VCS PD/01/ and confirmed through on-site interviews/i-xiii/ and/, the project includes the distinct and measurable biodiversity objectives. Biodiversity benefits include restoration of degraded habitats as well as increasing the habitats for the existing ones as the plantations of project activity includes 41 tree species in which 6 tree species are threatened as per IUCN/B06/. Hence VVB confirms the project biodiversity objectives. (Refer VVB assessment to section 3.1 of this report)

Table IX(c): Assessment of Project Eligibility as per VCS AFOLU Category i.e., ARR

Afforestation, Reforestation and Revegetation (ARR)		**VVB Assessment**
1.	**Project increase carbon sequestration and/or reduce GHG emissions by establishing, increasing or restoring vegetative cover (forest or non-forest) through the planting, sowing or human-assisted natural regeneration of woody vegetation**	VVB confirms that the project complies with the ARR requirements as the project aims at plantation of non-invasive tree species, on lands that were previously held as agricultural lands and promote in carbon sequestration by removing/03/ CO_2 from atmosphere.
2.	**Project may include timber harvesting in their management plan**	VVB based on the review of CCB & VCS PD/01/, and on-site inspection/interviews/i-xiii/ confirms that the project does not include timber harvesting in their management plan/06/. Moreover, VVB through on-site inspection/interviews/i-xviii/, confirms that project activity includes plantation of fruit trees and timber species to ensure greater income from NTFP products *i.e., Fruits* and does not includes harvesting. Hence, VVB confirms that the proposed project activity is designed for conservation objectives, with no intention for commercial timber production and these activities are protected by legal binding agreements between PP and landowners/04/. VVB has confirmed through on-site visits and interviews/i-xviii/ with both landowners and PP that they are aware of this obligation to sustain project trees for the entire period of project activity. In the opinion of the VVB, the project is a conservation project and does not fall

		under the definition of harvesting activity/B01/.

Project proponent and other entities involved in the project

Based on the review of CCB & VCS PD/01/, project proponent and other entities are listed below:

Table X: Project Proponent and Other Entities:

Name	Title/Organization/Community	Role
DK Balin	CEO, Clime Trek Limited	Project Proponent (Primary)
SK.M. Pasha	CEO, GKF Agroforestry (P) Ltd	Project Proponent

Project start date

As per the section 3.8 of VCS Standard v 4.6/B01/,

"*The project start date of an AFOLU project is the date on which activities that led to the generation of GHG removals are implemented (e.g., preparing land for seeding, planting, changing agricultural or forestry practices, rewetting, restoring hydrological functions, or implementing management or protection plans).*"

As per Section G1.9 Of CCB Standard v 3.1/B01/,

"*Defined as the start of implementation of activities that will lead to the generation of GHG emission reductions or removals".*

Based on the review of CCB & VCS PD/01/, the start date of the project activity is 04th November 2019. The same was verified during the on-site inspection by visiting the first plantation site and through document evidence/07/ and land agreements/04/ . In the opinion of VVB, the start date is in compliance with the requirement of VCS standards v4.6/B01/ and CCB Standards v3.1/B01/, as this is the date when GHG removal/03/ from the first plantation took place.

Project scale and estimated GHG removals

As per section 3.10.1 of VCS Standard v4.6/B01/,

"Project size categorizations are as follows:

1. Projects: Less than or equal to 300,000 tonnes of CO2e per year.

2. Large projects: Greater than 300,000 tonnes of CO2e per year."

Based on the review of CCB & VCS PD/01/ and supporting document/02/,

The proposed activity will remove on average 325,554 tCO2e/03/ per year throughout the 30 years. Hence, VVB confirms the grouped project is classified as a large scale.

Project location

Based on the review of CCB & VCS PD/01/, and GIS shapefiles/10/ the grouped project and 1st project activity instance is located in Indian states of Andhra Pradesh and Telangana. VVB has verified the location through review of shapefiles/10/ and through on-site inspection/interviews/i-xiii/.

Overall, in the opinion of VVB project description stated in the CCB & VCS PD/01/ is in compliance with indicators of section G1 of the CCB Standards v3.1/B01/.

3.2.2 Physical Parameters (G1.3)

The following steps has been taken by VVB to assess the basic physical parameters of the grouped project and the 1st PAI:

- Review of CCB-VCS PD/01/
- On-site inspection/interviews/i-xiii/
- Supporting evidence/B06/

The verified physical parameters are as below:

ANDHRA PRADESH:
Andhra Pradesh is a state in the southern coastal region of India. It is the seventh largest state with an area of 162,970 sq km and tenth most populous state, with 49,577,103 inhabitants.

Climate:
The climate varies considerably, depending on the geographical region. Summers last from March to June. In the coastal plain, the summer temperatures are generally higher than the rest of the state, with temperature ranging between 20 and 41 °C (68 and 106 °F). July to September is the season for tropical rains from Southwest monsoon and November to February are the winter months. Since the state has a long coastal belt, the winters are not very cold. The range of winter temperature is generally 12 to 30 °C (54 to 86°F).

Population:
Based on the 2011 Census of India, population of Andhra Pradesh is 49,577,103 with a density of 304 person per sq km. The total population consists of 70.53% of the rural population and 29.47% of urban population. The state has 17.08% Scheduled Caste and 5.53% of Scheduled Tribe population. Children in the age group of 0–6 years are 5,222,384, constituting 10.6% of the total population. Among them 2,686,453 are boys and 2,535,931 are girls. The state has sex ratio of 997 females per 1000 males.

Agriculture:
The agricultural economy comprises agriculture, livestock, poultry farming, and fisheries. Four important rivers of India, the Godavari, Krishna, Penna, and Tungabhadra flow through the state and provide irrigation. 60% of the population is engaged in agriculture and related activities. Rice is the major food crop and staple food of the state. The state has three agricultural export zones in the Chittoor district for mango pulp and vegetables, the Krishna district for mangoes, and the Guntur district for chilies. Besides rice, farmers grow sorghum, pearl millet, maize, many varieties of pulses, oil seeds, sugarcane, cotton, chili pepper, mango, and tobacco. Crops used for vegetable oil production such as sunflowers and peanuts are popular.

TELANGANA

Telangana is a landlocked state in India situated on the south-central stretch of the Indian peninsula on the high Deccan Plateau. It is the eleventh largest state and the twelfth most populated state in India with a geographical area of 112,077 sq km and 35,193,978 residents as per 2011 census.

Climate:
Telangana is a semi-arid area and has a predominantly hot and dry climate. Summers start in March, and peak in May with average high temperatures in the 46 °C (115 °F) range. The monsoon arrives in June and lasts until September with about 755 mm (29.7 inches) of precipitation. A dry, mild winter starts in late November and lasts until early February with little humidity and average temperatures in the 22–23 °C (72–73 °F) range.

Agriculture
In line with PD/01/ 60% of the rural population of Telangana is employed in agriculture and its allied activities

Soils:
Telangana contains various soil types, some of which are red sandy loams (Chalaka), Red loamy sands (Dubba), lateritic soils, salt-affected soils, alluvial soils, shallow to medium black soils and very deep black cotton soils.

VVB based on assessment above, confirms that the PD/01/ has sufficiently described the physical parameters of grouped project area and 1st PAI, in compliance with requirements of section G1.3 of CCB Standards v3.1/B01/.

3.2.3 Social Parameters (G1.3)

The following steps has been taken by VVB to assess the basic physical parameters of the grouped project and the 1st PAI:

- Review of CCB-VCS PD/01/
- On-site inspection/interviews/i-xiii/
- Supporting evidence/B06/12/

VVB confirms that the area under the 1st PAI comprised of the lands owned by farmers. The farmers of the region are predominantly employed in agriculture and its allied activities. PP has conducted various training/06/ programs to adopt crop diversification and organic farming practices.

The land use pattern, main settlements, economic activities, socio-cultural patterns for the states of Telangana and Andhra Pradesh has been demonstrated in the CCB & VCS PD/01/ from the state government database/B05/. The cultivable area is predominant in the regions as it is the major source of employment.

3.2.4 Project Zone Map (G1.4-7, G1.13, CM1.2, B1.2)

The following steps has been taken by VVB to assess the project zone of the grouped project and the 1st PAI:

- Review of CCB-VCS PD/01/
- On-site inspection/interviews/i-xiii/
- Supporting evidence/10/12/

The boundaries of the project zone/10/ (geographical boundary of the 1st instance project area is grouped with including all districts of Telangana and Andhra Pradesh as referred in Figure 8 and 9 of CCB VCS PD/01/). The audit team reviewed the areas of the farmer lands/10/04/, the project area/10/, the location of the communities/12/, community groups/12/, the geographic coordinates/10/, the KML file/10/, and the database GIS/10/, and concluded that the project has accurately defined the boundaries of the project zone.

In addition, the VVB assessed the risk of overlap between the project area and its surroundings areas through GIS and remote sensing analysis/10/ and confirms that the project area does not overlap with the other AFOLU projects areas..

In the opinion of VVB, CCB VCS PD/01/ has sufficiently described the project zone of the proposed activity in compliance with requirements of G.1(4-7) of CCB Standards v3.1/B01/.

3.2.5 Stakeholder Identification (G1.5)

The following steps has been taken by the VVB to assess the process of stakeholder's identification and also to check analysis used to identify stakeholder's and the stakeholder groups:

- Review of CCB VCS PD/01/
- Review of SBIA Manual/B06/
- Review of LSC documents and meeting records/05/

On-site inspection/interviews/i-xiii/ with PP, community groups and stakeholders/farmers/05/

Based on the review of CCB & VCS PD/01/ and on-site inspection/interviews/I01-VIII/, VVB affirms that the process of identifying stakeholders has involved four distinct steps, which were developed by adapting the guidelines outlined in the section 3.2 of SBIA Manual part/B06/ and in compliance with section G.3 of CCB standards v3.1/B01/

- Step-1: Brainstorm with key informants or focus groups to list and classify stakeholders.
- Step-2: Analysis of the level of influence and importance of each group
- Step-3: Analyze each stakeholder group in terms of their interests, motivation to participate and relationships with other stakeholders.
- Step-4: Analyze the level of influence and importance of each potential stakeholder group.

In the opinion of VVB, the stakeholder identification process described in the CCB VCS PD/01/ adequately addresses the assessment of rights, interests and relevance to the project for each stakeholder group/12/ in line with the requirements of section G1.5 of CCB Standards v3.1/B01/.

3.2.6 Stakeholder Descriptions (G1.6, G1.13)

As assessed in the section 3.2.5 of this report, the VV team confirms that all the stakeholders/05/ and stakeholder groups/12/ that are included/may be included in the project were found appropriate as verified during the onsite inspection interviews/i-xiii/:

The identified stakeholders are:

- Farmers
- Local Panchayat Members
- Ethnic Groups
- Non-Governmental Organization
- Women

The VV team assessed that the PP identified each stakeholder category in the project zone/10/12/, and determined their rights, interests, and overall importance to the project/01/ and stakeholder description is valid and in line with requirements of section G.3 of CCB standard v3.1/B01.

3.2.7 Sectoral Scope and Project Type

Based on the review of CCB & VCS PD/01/, Grouped Sustainable Agroforestry project is an AFOLU (Agriculture, Forestry and Other Lands Use) project under the sectoral scope 14 “Agriculture, Forestry and Other Land Use” and falls specifically under the ARR (Afforestation, Reforestation and Revegetation) category. The project is developed under the Verified Carbon Standard (VCS) and Climate, Community & Biodiversity Standards (CCB) of Verra. The project is a Grouped project.

3.2.8 Project Activities and Theory of Change (G1.8)

The following steps has been taken by the VVB to validate the causal relationships or theory of change that is linked to the project activity’s predicted climate, community and biodiversity benefits:

- Review of the CCB & VCS PD/01/
- Biodiversity reports/12/
- Community reports/12/
- Review of LSC documents and meeting records/05/.
- On-site inspection/interviews/i-xiii/ with the PP and the stakeholders/farmers/05/

In line with CCB & VCS PD/01/, PP has included clearly identifiable project activity actions as explained below

1. Plantation of timber and fruit tree species

2. Employment generation
3. Capacity building
4. Social inclusion of the community
5. Sustainable livelihood
6. Health checkup camps
7. Distribution of medical kits.

Based on the above assessed indicators for theory of change, VVB confirms that the proposed activity seeks to promote joint actions in the climate, community and biodiversity goals aiming to generate net benefits for all three purposes. This set of interconnected strategies will enable community development and biodiversity conservation seeking to ensure the fulfillment and achievement of the proposed activities.

Furthermore, Through on-site inspection/interviews[/I-XIII] it has been confirmed that all the activities proposed in the PD[/01/] are feasible and VV team concluded that the theory of change and their expected outputs, outcomes and impacts in the project description are in line with Section 2.3 of SBIA Manual for REDD+ Projects[/B07/] and footnote 25 and 132 of CCB Standard, v3.1[/B01/].

VVB based on its sectoral and host country expertise confirms that India has implemented jurisdictional REDD+ programme. However, the project is not located within a jurisdiction covered by any sub-national jurisdictional REDD+ programme in India.

3.2.9 Sustainable Development

The project's SDG contributions and it's assessment by the VVB has been provided below.

SDG Goal	VVB Assessment
SDG Goal 1: No Poverty **Target:** Additional income to the farmers by selling NTFP and timber	VVB, based on the on-site inspection/Interviews[/i-xiii/], confirms that the project activities include plantation of timber and fruit trees. Hence, VVB ascertains that the project is designed for conservation purposes and NTFP from fruit trees will increase income to the participating farmers.

SDG Goal 2: Zero Hunger **Target:** Fruit production due to plantation activity will become source of food which will reduce the hunger and improve nutritional health of the participants	VVB, based on the CCB & VCS PD/01/, confirms that the produce of NTFP from project activities along with crop cultivation increases food production to the participating farmers and other communities, thus resulting in zero hunger.
SDG Goal 5 Gender Equality: **Target:** Decision making capacity will be improved due to project activities.	The following steps has been taken by the VVB to assess the SDG goal: • Review of the CCB & VCS PD/01/ • Review of employment records/06/ • Review of Anti-discrimination policy/06/ • Interviews/i-xiii/ with the PP, HR, management team and the sample stakeholders/05/
SDG Goal 8: Decent work and Economic growth: **Target:** Decent work and economic growth will be achieved due to project activity	The following steps has been taken by the VVB to assess the SDG goal: • Review of the CCB & VCS PD/01/ • Review of Employment records/06/ • Worker Training records/06/ • Interviews/i-xiii/ with the PP, management team and the sample stakeholders
SDG Goal 13: Climate Action: **Target**: Resilience of the marginal farmers will be improved towards the changing climatic conditions and will help them to adapt to adverse impacts of climate change along with financial well-being.	VVB confirms that the project will remove 9,432,534 tCO_2e/03/ from the atmosphere throughout the crediting period of the project activity. The following steps has been taken by the VVB to assess the SDG goal: • Review of the CCB & VCS PD/01/ • ER spread sheet /03/ • Monitoring Plan/06/ • Interviews/i-xiii/ with the PP and the management team.

Based on the review of CCB VCS PD/01/ and on-site inspection/interviews/i-xiii/, the VV team confirms that the project proponent will contribute to sustainable development through the implementation of the project activities and in line with the requirements of 3.17 of VCS Standard v4.6/B01/.

3.2.10 Implementation Schedule (G1.9)

As verified in the section 3.2.1, the project start date is 04th November 2019/07/ and other key milestones demonstrated as follows:

Table XIII: Milestone(s) in the project's development and implementation:

Date	Milestone(s) in the project's development and implementation
March 2019	Reconnaissance survey to identify the project locations, interaction with the farmers, field visit, focused group discussion, consultation with local stakeholders;
04 November 2019	Planting of trees started, project expansion, regular meeting with the community members, regular monitoring and training.
2020	Second instance of the plantation activities
2021	Third instance of the plantation activities
2022	Fourth instance of the plantation activities
2023	Fifth instance of the plantation activities
2023	Validation
2023	Monitoring Report
2024	Verification

Based on on-site inspection/interviews/i-xiii/ VV team considers the milestones presented in the PD/01/ and their compliance with requirements of section G1.9 of CCB Standards v3.1/B01/.

3.2.11 Benefits Assessment and Crediting Period (G1.9)

During the crediting period and project lifetime, quantitative and qualifying studies on climate, community and biodiversity will be done periodically.

Based on the review of CCB VCS PD/01/, the start date of project/07/ is 04th November 2019 with the crediting period starting on 04th November 2019 and ends on 03rd November 2049 which sums up to 30 years and is deemed to be valid and appropriate by VVB.

VVB based on the documents of start/07/ and land agreements/04/ concludes that the benefit assessment and crediting period in line with the requirements of section G1.9 of CCB Standards v3.1/B01.

3.2.12 Risks to the Project (G1.10)

CCB & VCS PD/01/ states and identified the all-potential risks (likely natural and human-induced risks to the expected clime, community and biodiversity benefits during the project lifetime) for this project activity and also provided the intended mitigation measures/06/.

Identified Risk	Mitigation Measures	VVB Assessment
Encroachment	Land belongs to individual farmer with defined land records and demarcated	VVB, based on the review of land agreements/04/ and thorough cross

	boundaries. Their agricultural lands are far from the main village so there are negligible chances of encroachment of their land	checking with relevant government websites/B05/ confirms that lands are privately owned and there is no dispute or encroachment found and this mitigation measures are valid to cover risk
Mortality	Adaptive management of the project is in place to mitigate mortality rate and replanting.	VVB has reviewed the mitigation plan/06/ of the project activity and confirms that this plan is valid and sufficient to cover the risk. Furthermore, based on on-site inspection/interviews/i-xiii/, VVB confirms that no mortality has been observed till date.
Pest and Disease	Adaptive management of the project is in place to mitigate pest infections	VVB has reviewed the mitigation plan/06/ of the project activity and confirms that this plan is valid and sufficient to cover the risk. Furthermore, based on on-site inspection/interviews/i-xiii/, VVB confirms that no adverse infection found in planted trees.
Weed growth	Weed eradication will be checked regularly and manual weeding will be done by the farmers.	During on-site inspection/interviews/i-xiii/, it has been informed to VVB that, PP has provided sufficient training/06/ and valid SOPs/06/ were in place and this was further confirmed by reviewing supportive evidence/06/.

		VVB concludes that PP has efficient to mitigate this risk

Based on the desk review[/01/12/] and on-site inspection/interviews[/i-xiii/], VVB confirms risks to the expected climate, community, and biodiversity benefits during the project lifetime are assessed accurately and the mitigation measures are in place. VVB confirms that the overall risks to the project are low, no major risks have arisen that may cause any loss of project benefits for the local community, climate and biodiversity, so that long-term viability is assured.

3.2.13 Benefit Permanence (G1.11)

As described in the CCB & VCS PD[/01/], land rights are owned by farmers. Farmers will maintain the plantation as they are the direct beneficiaries of the project activities . Additional income from the sale of carbon credit will maintain the interest of the local communities in the project. The project proponents are promoting tree-based livelihoods in the timber and fruit trees to participating communities and raising awareness on needs for tree permanence, replanting in case of mortality, sustainable management and program renewal in its trainings. This ensures ownership and motivation of farmers to maintain agroforestry systems productive. Farmers will receive the regular payments from the sale of non-timber forest produce in the form of fruits. Farmers will fetch good return after the sale of fruits in the local market. Agroforestry systems are developed on less productive land. Hence after the successful implementation of the plantation activities, fertility of the soil will increase and hence the productivity of the fruit bearing trees will also improve.

The VV team has verified the benefit-permanence activities through the desk review[/01/12/] and during the onsite interviews[/i-xiii/] and considers the measures will likely achieve the sustainable development goals of the project and that these will last beyond its lifetime of project activity in compliance with requirements of section G1.11 of the CCB Standards v3.1[/B01/].

3.2.14 Financial Sustainability (G1.12)

The on-site inspection/ interviews[/i-xiii/] revealed that the project activities have been funded by Clime Trek Limited, a UK based company[/06/] that is also the project proponent for this project and further verified by reviewing supporting document[/08/] Hence, VVB ascertains that the financial mechanism[/08/] can provide adequate funds for project implementation to achieve the project's climate, community and biodiversity objectivities and in line with the requirements of section G1.12 of CCB Standards v3.1[/B01/]. .

3.2.15 Grouped Projects

1) Eligibility Criteria for Grouped Projects (G1.14)

As per VCS Program definitions v4.3[/B01/] and CCB program definitions v3.0 [/B01/]:

"A project to which additional instances of the project activity, which meet pre-established eligibility criteria, may be added subsequent to project validation".

VVB confirms that the project activity is developed as a grouped project with inclusion of new project instances.

Based on the review of CCB & VCS PD/01/ and on-site inspection/ interviews/i-xiii/, VVB confirms that the project proponent has provided a comprehensive set of eligibility criteria for the inclusion of new project instances within the Project zone. These criteria encompass various aspects, such as:

- The future project areas will be within the current project boundaries.
- Adoption of project activities in the same manner as reflected in project description.
- The futures instance will meet the project eligibility criteria as specified in the adopted methodology.
- New areas are subject to the determination of baseline scenarios is described in the project description.
- New project instances will have characteristics with respect to additionality that are consistent with the initial instances for the specified project activity and geographic area.
- New project instances will have the same community and biodiversity without-project scenarios as determined in project description.
- New project activity instance subjected to plant the species selected and already in plantation activities of the project.
- New project activity instance should have their own land for plantation
- Have a start date that is the same as or later than the grouped project start date.
- New PAI should not be registered for any other GHG removal carbon projects or any other environmental benefit project.

In the opinion of VVB, definition of eligibility criteria set out in CCB & VCS PD/01/ complies with sections 3.6.16 & 3.6.17 of the VCS Standard version 4.6/B01/ and met the requirements of G1.14 of CCB standard version 3.1/B01/.

2) Scalability Limits for the Grouped Projects (G1.15)

No scalability limits has been established by the PP, as the project activity involves afforestation carried out on low productivity farm lands that will create carbon sinks and helps in removal of GHG's/03/ from the atmosphere. In addition to that, the project implementation will create job opportunities for the local communities that will eventually help in upliftment of their livelihood. The biodiversity of the project zone will also improve as there will be creation of natural habitats and improvement of the existing habitats. Hence, the project is expected to deliver net positive impacts to the climate, community and biodiversity. The inclusion of new areas (that comply with the eligibility criteria) for the carbon project will not entail negative impacts on the climate, community

or biodiversity components of the project. VVB confirms that due to the positive impacts on addition of new instances, no scalability limits have been established.

3) Risk Mitigation Approach for Grouped Projects (G1.15)

Based on the review of CCB & VCS PD/01/ and on-site inspection/interviews/i-xiii/, VVB confirms that scalability limit does not exist for the grouped project.

3.2.16 Land-Use Scenarios without the Project (G2.1)

Based on the review of CCB & VCS PD/01/, supporting evidence/1012/ and on-site inspection/ interviews/i-xiii/ land-use before the project implementation was low productive agricultural lands/10/. Hence, VVB has ascertained that without project land use scenario is crop lands (Agricultural lands). Furthermore, this was analyzed by "Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities Version 01"/B03/. (Refer section 3.3.5).

3.2.17 Most-Likely Scenario Justification (G2.1)

Based on the assessment in section 3.2.16 of this report, VVB confirms that the most-likely land-use scenario will be low productive agricultural lands. This was further confirmed by reviewing Forestry/ Non-Forestry analysis report/10/, interviewing/i-xiii/ landowners (farmers) and eye-witnessing project area. (Refer section 3.3.5 for detailed baseline scenario assessment).

3.2.18 Community and Biodiversity Additionality (G2.2)

An extensive description of the prevalent communities has been provided in section 4.1.1 of the VCS_CCB PD/01/ by the PP. Local communities of the project area are employed in mainly in agriculture and allied activities but agricultural returns have diminished over the years. Thus, a need for the introduction of sustainable agricultural practices has arisen. Various training programs have been conducted by Project Proponent to train the communities to adopt crop diversification including agroforestry and organic farming practices. The state of Andhra Pradesh has 23 City Forests (Nagaravanams), 13 wildlife sanctuaries, 3 national parks with 7 temple parks being developed.

Furthermore, VV team validates the information provided in this section during the on-site visit, interviews/i-xiii/ and document review/B06/12/.

3.2.19 Stakeholder Access to Project Documents (G3.1)

In line with CCB VCS PD, VVB confirms that the project proponent has a complete framework and mechanism/05/12/ for disseminating the project to the communities. During on-site inspection/interviews/i-xiii/ it has been informed to VVB that PP will maintain a printed version of the project description document, standard operating procedure, validation reports, monitoring reports and verification report in English and the local language for public viewing and with publication of documents through PP's website and VERRA websites/B05/. Regular meetings will be conducted with farmers and relevant stakeholders/05/ for detailed information regarding project development. Hence, VVB confirms that the PP has correct information on stakeholder participation and adequately presents the summary of stakeholder access mechanisms to project documents.

In the opinion of VVB, the project has demonstrated the section that it made project documentation accessible to communities, and other stakeholders to meet the requirements of section G3.1 of CCB Standards v3.1[/B01].

3.2.20 Community Costs, Risks and Benefits (G3.2)

The project proponent clearly explains how relevant and adequate information on the potential costs, risks, and benefits for the communities, identified through a participatory and transparent process, has been provided to the communities.

Based on the review of CCB & VCS PD[/01/], Consultations and meetings were organized to explain the benefits of the project to the local community, environment, biodiversity and the role of trees in climate change mitigation. Further, the potential costs and risks that the local communities could perceive due to the implementation of the project were explained.

Based on the on-site inspection/interviews[/i-xiii/] and supporting document[/05/], VVB confirms that the communities and project workers understood the information provided and their participation in the project.

3.2.21 Information to Stakeholders on Validation and Verification Process (G3.3)

In line with CCB & VCS PD[/01/], Information regarding validation and verification process of Verified Carbon Standard and Climate, Community and Biodiversity have been informed to the farmers and all other stakeholders[/05/].

During on-site inspection/interviews[/i-xiii/], VVB reviewed and discussed the content of the local consultations[/05/] and meetings[/05/] and confirmed that the CCB & VCS validation process and VVB's site visit were discussed with community members in a variety of meetings[/05/]. VVB concludes that the measures taken, and the communication methods used to inform the communities are in accordance with the requirement of section G.3(3) of CCB Standards v3.1[/B01].

3.2.22 Site Visit Information and Opportunities to Communicate with Auditor (G3.3)

During on-site inspection/ interviews[/i-xiii/], VVB has eye witnessed the project area and interviewed stakeholders[/05/] and farmers[/05/]. Hence, VVB confirms that PP has informed stakeholders regarding project activity implementation, VVB audit process and how direct and independent communication with auditor were facilitated to them in line with requirements of section G3.3 of CCB Standards v3.1[/B01].

Fig3: Interviews with farmers, local panchayat members and community groups at Village Secretariat, Andhra Pradesh

3.2.23 Stakeholder Consultations (G3.4)

The following steps has been taken by the VVB to assess the process of stakeholder's consultations and also to check analysis used to identify stakeholder's and the stakeholder groups:

Review of CCB-VCS PD/01/

Review of LSC documents and meeting records/05/11/

On-site inspection/interviews/i-xiii/ with PP, community groups and stakeholders/farmers/05/On-going Grievance Mechanism/05/11//.

In compliance with CCB & VCS PD/01/, the Local Stakeholder Consultation meetings/05/11/ were held by the PP with stakeholders/ farmers/05/11/ and all members in all the project 1st Instance project areas/0/. PP has adopted a distinctive process for engaging with local stakeholders. The meetings/05/ were conducted at the following places as per the invitation letter/11/05// provided.

- ✓ Telangana- 06/09/2019
- ✓ Telangana)- 11/10/2019

The meetings were coordinated by the team of GKF Agroforestry and team of Clime Trek in all the areas of project 1st instance. The on-site inspection/interviews/i-xiii/ reveal that the participants were informed about the VERRA's Climate, Community and Biodiversity Standards and Verified Carbon Standard (VCS), guidelines and aspects of validation by an accredited third party. Carbon credits as additional benefits for farmers were also explained and discussed. But it was clearly explained that carbon/carbon credits are always a co-benefit and not the primary reason for them for taking up and practicing agroforestry.

Furthermore, in line with CCB VCS PD/01/ and confirmed through on-site inspection/inspection/i-xiii/ that stakeholders had allowed them to discuss challenges, share innovative ideas, and propose suggestions for the project's further improvement. The active involvement of panchayat members ensured a holistic representation of the local governance structure, enabling community-driven decision-making processes.

During the on-site interviews/i-xiii/ with farmers and other stakeholders, the following questions were asked by the VVB:

1. Are you aware of the project?
2. Are you aware of the carbon credits and revenue?
3. Has the project improved your living or income?
4. Have you been invited to give your comments on the project?
5. Were your comments addressed by the PP?
6. Were you imparted any training for capacity building and/or monitoring procedures?
7. Was your plot/land parcel included in the project?

During on-site visit, VVB has observed that the farmers/stakeholders/05/ were aware of VVB's site visit, the CCB & VCS project validation and verification process and its registration in VERRA. They were given capacity training by the PP and confirmed the locations of sample plots included in the project. VVB confirms (based on assessment above, review of documents and on-site inspection interview's /observation) the following:

- ✓ PP has Summarized stakeholder input received during the local stakeholder consultation meeting.
- ✓ Furthermore, since there was no negative comment from stakeholder, it is not required for the project proponent to take due account of all and any input,
- ✓ PP has appropriately communicated to the local stakeholders in regard to the project information and about the project design and implementation, risks, costs and benefits.
- ✓ VVB has ascertained that the project complies with national laws, statutes, and other regulatory frameworks.

VVB, based on the documentation review/05/11/ during on-site inspection, confirms that Local Stakeholder Consultations/05/11// have been conducted in local languages/05/11/ and furthermore, during the LSCs, the feedback form was also given to farmer and is also reviewed by VVB during the on-site inspection and deems it suitable and appropriate.

Overall, VVB concludes that the LSC/05/11/ done by PP is in line with the requirements of section G3.4 of CCB standards v3.1./B01/ and section 3.18 of VCS Standard v4.6/B01/ is appropriate.

3.2.24 Stakeholder Consultation Channels (G3.5)

During on-site inspection/interviews/i-xiii/ with farmers and all other stakeholder, it has been formed to VVB that the following channels were used for LS Consultation channels,

- Advertisements in local newspaper/01/16/

- Meetings at Grama Panchayats
- Information with community leaders.
- Regular visits to farmlands by PP

Based on the above assessment, VVB confirms that stakeholder consultation channels and participatory process has been described appropriately in CCB VCS PD/01/ and have undertaken directly with stakeholders and farmers in compliance with the requirements of section G3.5 of CCB Standards v3.1/B01/.

3.2.25 Stakeholder Participation in Decision-Making and Implementation (G3.6)

In line with the CCB & VCS PD/01/, the project related consultations with the communities are regularly conducted during project design and implementation phases so that the local/traditional knowledge is well incorporated, and participation of women and marginal stakeholders are also considered for decision making process.

This was further confirmed during the on-site inspection/ interviews/i-xiii/ with the farmers and all other local stakeholders/05/11/. Hence, VVB concludes that project proponent has been and will enable effective participation in culturally appropriate and gender sensitive manner with all communities in compliance with requirements of section G3.6 of CCB Standards v3.1/B01.

3.2.26 Anti-Discrimination Assurance (G3.7)

The on-site inspection/interviews/i-xiii/ with PP, management team and other stakeholders revealed that the none of the personal engaged in project design and implementation activities have been involved in form of discrimination or sexual harassment and the same has been confirmed by reviewing PP's anti-discrimination policy/06/. Hence VVB ascertains that PD has adequately demonstrated the anti-discrimination assurance/06/ in line with requirements of section G3.7 of CCB Standards v3.1/B01/ and anti-discrimination can be assured.

3.2.27 Feedback and Grievance Redress Procedure (G3.8)

During on-site inspection/interviews/i-xiii/, it has been informed to VVB that Grievances/05/ redress mechanism was developed, and the project will be free from any kind of conflict and implemented in a smooth manner to keep the project running smoothly and free of conflict. If any grievances are reported, action will be taken in a transparent and comprehensive way with time frame of 7 to 30 days by local officer and PP in the 1st and 2nd stages, If the issue remains unresolved, it will be further reported to the local Gram Panchayats at the third stage. Assessment of the grievances will be done to identify and verify the cause, actors and scale of grievances and project management team will recommend resolution options based on feedback from the stakeholders.

Assessment of Feedback and Grievance Redress Procedure in compliance VCS requirement, section 3.18.19 & 3.18.20, VCS Standard, v4.4

CCB Requirement	**VVB Assessment of Project compliance**
The project proponent shall develop a grievance redress procedure to address disputes with local stakeholders that may arise during project planning and implementation, including with regard to benefit sharing.	VVB, through on-site inspection, confirms that Grievances Redressal mechanism to address disputes with local stakeholders is in place.
The procedure shall include processes for receiving, hearing, responding and attempting to resolve grievances within a reasonable time period, taking into account culturally-appropriate conflict resolution methods.	Stakeholder has direct and indirect measures to report the grievances to the management either through mobile communications, visit to the field office, and through email, grievance register and grievance box (for anonymous feedback and grievances) or any other means of communication available. If any grievances are reported, action will be taken in a transparent and comprehensive manner. The respective field management office concerned will attempt to resolve in an amicable way within 7 days and report to the management about the resolution of the conflict. If the local field office is unable to resolve the conflict within 7 days, the field officer will report the conflict to the Head Office at Bhadrachalam and management will resolve the conflict after having views of all the parties involved. If the management is not able to resolve the conflict within 30 days of reporting to the Head Office
The procedure and documentation of disputes resolved through the procedure shall be made publicly available.	Documentation of the feedback and grievances will be done by the field staff. Grievances if any received will be discussed in the meeting in the presence of stakeholder so that the grievances are resolved in the meeting after receiving feedback from all the present stakeholders. Findings and resolutions will be publicly shared during meetings and will be kept at project office for public viewing.

The procedure shall have three stages:	
1) The project proponent shall attempt to amicably resolve all grievances and provide a written response to the grievances in a manner that is culturally appropriate.	Assessment of the grievances will be done to identify and verify the cause, actors and scale of grievances and project management team will recommend resolution options based on feedback from the stakeholders. Grievance register and box is placed at the Office for any person who wish to submit his/her grievance anonymously. Record of all the grievances will be maintained at the office. Farmers and other stakeholder are encouraged to report any conflict to their respective field management office and office concerned will attempt to resolve in an amicable way within 7 days and report to the management about the resolution of the conflict.
2) Any grievances that are not resolved by amicable negotiations shall be referred to mediation by a neutral third party.	If the local field office is unable to resolve the conflict within 7 days, the field officer will report the conflict to the Head Office at Bhadrachalam and management will resolve the conflict after having views of all the parties involved.
3) Any grievances that are not resolved through mediation shall be referred either to a) arbitration, to the extent allowed by the laws of the relevant jurisdiction or b) competent courts in the relevant jurisdiction, without prejudice to a party's ability to submit the grievance to a competent supranational adjudicatory body, if any.	If the management is not able to resolve the conflict within 30 days of reporting to the Head Office, the issue shall be taken to the local government (Gram Panchayat) to resolve.
All communication and consultation shall be performed in a culturally appropriate manner, including language and gender sensitivity, directly with local stakeholders or their legitimate representatives when appropriate.	As confirmed during the on-site inspection, the all the input and resolution of grievances are done keeping in mind the people's sentiments and their culture including publication of notifications and resolutions in the vernacular language/s.
The results of implementation shall be provided in a timely manner and consultation shall be performed prior to design decisions or implementation to allow	VVB confirms that the grievance procedure in the project adheres to a strict timeline. The local field office shall resolve

stakeholders adequate time to respond to the proposed design or action.	the conflict within 7 days, if not, the field officer will report the conflict to the Head Office at Bhadrachalam. If the management is not able to resolve the conflict within 30 days of reporting to the Head Office, the issue shall be taken to the local government (Gram Panchayat) to resolve.

As per the review of the CCB & VCS PD/01/, VVB concludes the feedback and grievance procedure is properly addressed and thus in compliance with section G3.8 of CCB Standard version 3.1/B01/ and section 3.18.19 of the VCS Standard version 4.4/B01/.

3.2.28 Worker Training (G3.9)

During on-site inspection/ interviews/i-xiii/ VVB was informed that PP was provided adequate training in terms of GPS handling, data recording, sample plot laying, carbon stock calculations, application of Google earth etc. for implementation of project activities. Furthermore, it was revealed that these training sessions are ongoing processes conducted by the PP to ensure that all workers receive appropriate training. This was further confirmed by interviewing/i-xiii/ workers and the management team.

Based on the review of CCB & VCS PD/01/, SOP's/06// and other supportive evidence/06/11/, VVB ascertains that PP has provided/will provide sufficient and adequate training for workers in line with requirements of section G3.9 of CCB Standards v3.1/B01.

3.2.29 Community Employment Opportunities (G3.10)

The on-site inspection interviews/i-xiii/ revealed that the project includes employs from participating villages, local communities, marginal groups and expertise of subject relevant knowledge with respect to Human rights. Hence based on the review of CCB & VCS PD/01/, employment records/06/ and HR records/06/ confirms that project provides equal employment opportunities to people from community in line with requirements of section G3.10 of CCB Standards v3.1/B01.

3.2.30 Relevant Laws and Regulations Related to Worker's Rights (G3.11)

VVB, based on the on-site inspection/ Interviews/i-xiii/ with PP, farmers and other stakeholders/05/ confirms that PP has not violated any host country legislations on worker rights/B06/. Furthermore, VVB confirms that PP has adequately demonstrated the host country legislations in CCB & VCS PD/01/ and meets applicable laws/B06/ and regulations regarding workers' rights in line with the requirements of G3.11 of CCB Standards v3.1/B01/ .

3.2.31 Occupational Safety Assessment (G3.12)

During on-site inspection/ interviews/i-xiii/ with management team, it has been informed to VVB that PP was provided sufficient training/06/ in terms of occupational health hazard/06/ to adhere during

project implementation activities. Furthermore, during field visit VVB observed that there was no usage of heavy machinery and workers have proper knowledge of first aid in case of emergency. Hence, VVB ascertains that PP and management team has adequate knowledge on occupational safety and measures are designed to minimize project related risk in line with requirements of section G3.12 of CCB Standards v3.1/B01.

3.2.32 Project Governance Structures (G4.1)

In line with the CCB VCS PD/01/ and confirmed through on-site inspection/interviews/i-xiii/ Clime Trek and GKF Agroforestry will be responsible for managing the project activities.

The PP also highlighted that organization structure/05/ and project governance will ensure the involvement of participating rural producers, who will sign agreements that include all terms of responsibility, rights, and informed consent. Besides, this section contains a brief description of the responsibilities of the other organizations that were part of the project conception and development.

Based on the review of CCB VCS PD/01/, on-site inspections/interviews/i-xiii/, VVB confirms that project is backed by a solid governance and its structure allows for the appropriate project implementation; roles and responsibilities of all entities involved were clarified and in compliance with requirements of section G4.1 of CCB Standards v3.1/B01/.

3.2.33 Required Technical Skills (G4.2)

During on-site inspection/ interviews/i-xiii/, VVB has verified that each individual, experience and education and other qualifications in field of forest restoration, forest monitoring, carbon accounting, GIS and remote sensing and engagement with communities as indicated in CCB & VCS PD/01/.

Furthermore, based on the review of CCB & VCS PD/01/, and supportive evidence/05/, VVB confirms that Project proponent has sufficient personals with required technical knowledge for implementation of project successfully including climate, community engagement, carbon measurement and biodiversity activities in line with requirements of section G4.2 of CCB Standards v3.1/B01.

3.2.34 Management Team Experience (G4.2)

The on-site inspection/ interviews/i-xiii/ revealed that the project management team has specific and sufficient knowledge/06/ in terms of design, implementation of land management, restoring activities and carbon projects at scale of this project activities with the purpose of causing net positive impacts to the climate, community and biodiversity. Furthermore, it was confirmed during the field visit that the PP's management team has prior experience in such land use activities. Hence, in the opinion of VVB, PP's management team has expertise's to achieve the carbon emission removals CCB benefits in line with the requirements of section G4.2 of CCB Standards v3.1/B01.

3.2.35 Project Management Partnerships/Team Development (G4.2)

As assessed in sections 3.2.32, 3.2.33 & 3.2.34 of this report, VVB confirms that the project has all the necessary partnerships, technical knowledge & capacity development trainings/06/ for the design and implementation of the restoration activities of the proposed project activities. Hence, VVB confirms that PP has established management partnerships and team development in compliance with section G.2 of the CCB Standards v3.1.

3.2.36 Financial Health of Implementing Organization(s) (G4.3)

VVB, based on review of PD/01/ and on-site inspection/interviews/i-xiii/, confirms that the implementation organization has been funding by UK based company Clime Trek Limited and verified/08/ the financial health of implementing organizations/08/ and they can ensure adequate financial support through carbon credits over the project lifetime In line with the requirements of section G4.3 of CCB Standards v3.1/B01/.

3.2.37 Avoidance of Corruption and Other Unethical Behavior (G4.3)

Based on the desk review/01/ and on-site inspection/ interviews/i-xiii/, VVB confirms that the UK based company Clime Trek limited is providing funds for the implementation of project activities. Hence VVB ascertains that the project proponent's Clime Trek and GKF Agroforestry were legally registered companies/08/, and their management team has not been involved in any form of corruptions, economic or social, bribery, fraud, favoritism, nepotism, etc in line with the requirements of section G4.3 of CCB Standards v3.1/B01.

3.2.38 Commercially Sensitive Information (*Rules* 3.5.13 – 3.5.14)

VVB after reviewing the CCB & VCS PD/01/, confirms that no commercially sensitive information has been excluded from the public version of the project description. Furthermore, during on-site inspection interviews/i-xiii/ PP has assured that financial plans, agreements, benefit sharing mechanisms etc., documentations will be made available with VVB whenever required.

3.2.39 Statutory and Customary Property Rights (G5.1)

In line with CCB & VCS PD/01/ and confirmed during the on-site inspection/ interviews/i-xiii/ that project activities have been implemented on farmer lands with entering the contractual agreements/04/. Therefore, PP has absolute right to access and management of project and plantation activities within the project area. Furthermore, based on the review of GIS/Shapefiles/10/ and contractual agreements VVB affirms that PP has clearly demonstrated statutory and customer rights in line with requirements of section G5.1 of CCB Standards v3.1/B01.

3.2.40 Recognition of Property Rights (G5.1)

VVB has reviewed the contractual agreements/04/ with farmer, in clause 11 it has been stated has,

"The part of the second part will have no rights whatsoever as to the title, ownership, possession of the land/property of the part of the first part nor will it any alienate the party of the first part part

from the land property particularly nor mortgage, lease, sublease or transfer of the land property of the first party in any other reasons/ institution during the continues of this agreement".

VVB based on the review of contractual agreement/04/ with farmers and on-site inspection/ interviews/i-xiii/ confirms that all property rights are recognized, respected and supported in line with requirements of G5.1 of CCB Standards v3.1/B01/.

3.2.41 Free, Prior and Informed Consent (G5.2)

The on-site inspection/interviews/i-xiii/ reveal that project activities do not expect to involve land areas with conflict or affect property rights and the same has been confirmed by reviewing contractual agreements/04/ with farmers. Furthermore, VVB confirms that farmers were informed regarding project activities during local stakeholder communications/05/ and PP has obtained free, prior and informed consent before implementing project activities and besides that the project involves farmers who voluntarily participate and can enroll in the project through contractual agreements/04/ with PP.

.

In the opinion of VVB, PP has followed transparent process for obtaining free, prior and informed consent from farmers for implementation of project activities on their lands and in line with requirements of section G5.2 of CCB Standards v3.1/B01/.

3.2.42 Property Rights Protection (G5.3)

Based on the assessment provided in section 3.2.39, 3.2.40 & 3.2.41 of this report, VVB confirms that the project activities do not lead to involuntary removal or relocation property rights holder from their land in with the requirements of section G5.3 of CCB Standards v3.1/B01/.

3.2.43 Illegal Activity Identification (G5.4)

During on-site inspection/interviews/i-xiii/, it has been informed to VVB that farmers are landowners and no illegal logging, or any kind illegal activity has been identified. Further, PP has entered agreement/04/ with landowners by providing clause to maintain trees on their till end of entire period of project activities. Hence, VVB confirms that no illegal activity has been identified in the project area and complies with requirement of section G5(4) of CCB Standards v3.1/B01/.

3.2.44 Ongoing Disputes (G5.5)

Based on the review of CCB & VCS PD/01/, project has been implemented on the private lands that belongs to farmers and agreement/04/ was signed by project proponent with the landowners to establish individual rights. Hence, there are no ongoing or unresolved conflicts or disputes over land, territories and resources rights and this was further verified by checking relevant government land record websites/B05/

In the opinion of VVB, the project has no ongoing disputes or unresolved conflicts, hence no measures are needed and designed to resolve conflicts or disputes and complies with section G5.5 of CCB Standards v3.1/B01/.

3.2.45 National and Local Laws (G5.6)

The CCB & VCS PD/01/ provides an extensive list/06/ of national and local laws and regulations and explains their applicability to the project and the way compliance with the law is achieved by the project where applicable I.e.,

- ✓ Indian Forest Act, 1927
- ✓ Wildlife (Protection) Act, 1972
- ✓ Water (Prevention and Control of pollution) Act, 1974
- ✓ Forest Conservation Act, 1980
- ✓ Air (Prevention and Control of Pollution) Act, 1981
- ✓ Environment (Protection) Act, 1986
- ✓ National Forest Policy, 1988
- ✓ Biological Diversity Act, 2022
- ✓ National Environment Policy, 2006
- ✓ The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006
- ✓ The National Green Tribunal Act, 2010
- ✓ National Agroforestry Policy, 2014

Based on the review of the CCB & VCS PD/01/, host country knowledge and through own research, VVB confirms that project is complying with relevant national and local laws and regulations. Furthermore, VVB confirms that the proposed CCB VCS project will not lead to violation of any applicable law even if the law is not enforced and in line with section G5.6 of CCB Standards v3.1/B01/.

3.2.46 Approvals (G5.7)

Based on the review of CCB & VCS PD/01/ and confirmed during on-site inspection/ interviews/i-xiii/ that none of the above-mentioned laws (Refer section 3.2.45 of this report) mandates tree plantation on agricultural lands owned by farmers. Hence VVB ascertains that the project activities implemented by PP are complete voluntary does not require approval for tree plantation on lands belonging to farmer.

3.2.47 Project Ownership (G5.8)

Based on the review of CCB & VCS PD/01/ and contractual agreements/04/, VVB confirms that the lands involved in the 1st PAI are owned by farmers/landowners and project activity management

rights are owned by PP, Further, VVB during on-site inspection/interviews[/i-xiii/] have reviewed and cross-verified all the agreements[/04/], against the respective state government website[/B05/].

Furthermore, VVB affirms that the land agreements[/04/] are structured to clearly delineate land rights, project activity rights, and carbon rights,

- Clause 2, 3 & 4 of the agreement[/04/] stipulate the obligation to maintain trees throughout the project lifetime (i.e., 40 years) and to manage project related activities, including land preparation and pest management, in accordance with advice provided by PP.

- Clause 11 stipulates that the PP does not possess any right to claim title, ownership, or possession of the land or property where project activities are implemented.

- Clause 16 of the agreement[/04/] addresses the allocation of carbon credits held with PP. As the project includes multiple proponents, GKF Agroforestry and Clime Trek Limited have joint venture agreement[/08/] (Article 5.1)[/08/] in which GKF Agroforestry has assigned carbon rights to Clime Trek Limited.

On the basis of review of the agreements[/04/] and respective state government websites[/B05/], VVB confirms that the farmers hold land rights[/04/] and assigns carbon credits[/04/] to PP(GKF Agroforestry) and) Clime Trek Limited through contractual agreement[/04/]. Furthermore, GKF and Clime Trek have joint venture agreement[/08/] (Article 5.1) in which GKF has assigned carbon rights to Clime Trek Limited. This was further reviewed and confirmed by VVB.

VVB confirms that the legal ownership of land title[/04/] is held with farmer and carbon credits[/08/] generated from the project activities with Clime Trek Limited.

3.2.48 Management of Double Counting Risk (G5.9)

Based on CCB & VCS PD[/01/], supporting evidence[/08/] and on-site inspection/interviews[/i-xiii/] VVB confirms that PP's (ClimeTrek Limited and GKF Agroforestry) have self-declared[/08/] that the current project is entirely independent and the emissions reduction or removal resulting from project activities will not be used for compliance under any other trading program or mechanism. Hence VVB ascertains that there will be no double counting occurring on the project benefits.

3.2.49 Emissions Trading Programs and Other Binding Limits

Net GHG emission reductions or removals generated by the project will not be used for compliance with an emission trading program or for meeting binding limits on GHG emissions. VVB confirms this by checking the declaration[/08/] from the PP.

3.2.50 Other Forms of Environmental Credit

Based on the review of CCB & VCS PD[/01/] and on-site inspection/interviews[/i-xiii/], the project has not sought or received another form of GHG-related environmental credit, including renewable energy certificates. VVB deems the justification as valid.

3.2.51 Participation under Other GHG Programs

In line with CCB & VCS PD/01/ the project has not been registered and is not seeking registration under any other GHG programs. VVB confirms this by checking the declaration/08/ from the PP and checking the public website of other emission trading programs. (CDM/VCS/GS/GCC/Plan Vivo)/B04/.

3.2.52 Projects Rejected by Other GHG Programs

In line with CCB & VCS PD/01/ the project has not sought registration under, and as a result has not been rejected by, any other GHG program/B04/. VVB deems the justification as valid.

3.2.53 Double Counting (G5.9)

This project is being simultaneously validated through VCS. The issuance of VCUs will ensure the avoidance of double counting as the credits generated from the project will be sold as offsets on VCS registry publicly, the series number of the issued credits can be tracked to avoid any potential double counting.

3.3 Climate

3.3.1 Title and Reference

The methodology applied is the CDM A/R Large-scale Consolidated Methodology AR-ACM0003: Afforestation and reforestation of lands except wetlands v02.0/B02/. Proposed by the United Nations Framework Convention on Climate Change (UNFCCC) in the sectorial scope 14 of Agriculture, Forestry and other Land Uses (AFOLU).
Besides the methodological document, the following additional tools were applied:

- AR-Tool 02: Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities version 1.0/B03/.
- AFOLU Non-Permanence Risk Tool, Version 4.2
- AR-Tool 14: Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities" (Version 04.2);/B03/
- AR-Tool 12: Estimation of carbon stocks and change in carbon stocks in deadwood and litter in A/R CDM project activities version 3.1/B03/.
- AR-Tool 16: Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities" (Version 01.1.0)/B03/.
- AR-Tool 08: Estimation of non-CO2 greenhouse gas (GHG) emissions resulting from burning of biomass attributable to an A/R CDM project activity version 4.0/B03/.
- AR-Tool 15: Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activities version 2.0/B03/.

- Calculation of the number of sample plots for measurements within A/R CDM project activities version 2.1[/B03].

3.3.2 Applicability

For methodology AR-ACM003 v2.0[/B02/], VVB has assessed the applicability conditions which are as follows:

AR-ACM0003	VVB Assessment
Condition: **The land subject to the project activity does not fall in wetland category.** **Justification:** **As per the IPCC GPG LULUCF 2003, wetlands are defined as lands that are covered or saturated by water for all or part of the year (e.g., peatland) and that does not fall into the forest land, crop land, grass land or settlements categories including reservoirs, natural rivers and lakes. The project activity sites consist of fallow agricultural land and wasteland does not cover any wetlands. Hence, this criterion is applicable.**	Based on the review of CCB VCS PD[/01/], VVB has verified that the proposed activity is carried out on farmer owned lands, which were formerly used for agriculture practices and further this land does not fall under scope of definition of wetlands[/B06/]. This has been further verified by the VVB during the on-site inspection/interviews[/i-xiii/], reviewing the GIS shapefiles[/10/], maps[/10/], Forest/Non-Forest Analysis report[/10/] and reviewing web source https://www.global-wetland-outlook.ramsar.org/[/B06/] Moreover, within the 1st PAI, no areas with rice cultivation, either before or after project activity, have been identified. This fact was confirmed through on-site inspections and interviews[/i-xiii/]. Additionally, remote sensing analysis[/10/] was conducted to verify that the project areas under the 1st PAI do not encompass any natural or artificial wetlands, including rice-flooded fields.
Condition: **Soil disturbance attributable to the project activity does not cover more than 10 per cent of area in each of the following types of land, when these lands are included within the project boundary:** **(i) Land containing organic soils.** **(ii) Land which, in the baseline, is subjected to land-use and management practices and**	VVB based on the review of the CCB & VCS PD[/01/] and through on-site inspection/interviews[/i-xiii/] confirms that the soil disturbance is not occurred more than 10 %. Furthermore, during on-site inspection/interviews[/i-xiii/], VVB has eye witnessed the soils present in the project 1st instance area are red soils and black soils are high activity clay soils and which do not fall under the definition of organic soils. The same

AR-ACM0003	VVB Assessment
receives inputs listed in appendices 1 and 2 to this methodology. **Justification:** **Soil disturbance attributable to the project activity does not, in any case, cover more than 10% of the total area. The land subjected to the project activity does not contain organic soil and there were no land management practices carried out before the project.**	has been confirmed by reviewing evidence and source (Soil and Land Use Survey of India)/B05/ figure in section 3.1.2 of PD and through the source Support to Renewable Energy Directive (europa.eu)/B06/ Hence, VVB ascertains those soils included in project area is not organic soils.
Condition **The project activity applying this methodology shall also comply with the applicability conditions of the tools contained within the methodology and applied by the project activity.**	VVB based on the review of CCB & VCS PD/01/ confirms that the applied tool applicability conditions are in compliance with the project activity.

VVB assessment of compliance for applied tools:

Sr. No.	Applicability Criteria AR-Tool 02	VVB Assessment
1.	**Condition** Forestation of the land within the proposed project boundary performed with or without being registered as the A/R CDM project activity shall not lead to violation of any applicable law even if the law is not enforced	As assessed in section 3.2.45 of this report, VVB confirms that the proposed activity complies with relevant national and local laws and regulations/06/ of the host country and no law mandates plantation of trees on agriculture lands owned by farmers. Furthermore, VVB confirms that proposed CCB VCS project will not lead to violation of any applicable law even if the law is not enforced.
2.	**Condition** This tool is not applicable to small scale afforestation and reforestation project activities.	According to UNFCCC CDM rules/B06/, project activities are classified as large scale, if the carbon removal exceeds 16,000 tCO2e per year. Based on the review of CCB VCS PD/01/ and ex-ante calculation sheet/03/, the expected carbon removals of project activity is

		325,554tCO2e/year[/03/]. Hence, VVB confirms that the project is large scale and in compliance with the applicability of the tool for this project.

Sr. No.	Applicability Criteria AR-Tool 08	VVB Assessment
1.	**Condition** The tool is applicable to all occurrence of fire within the project boundary. Non-CO2 GHG emissions resulting from any occurrence of fire within the project boundary shall be accounted for each incidence of fire which affects an area greater than the minimum threshold area reported by the host Party for the purpose of defining forest, provided that the accumulated area affected by such fires in a given year is ≥5% of the project area	VVB based on review of project documents[/01/] such as SOPs[/06/] of plantation and through on-site inspection/interviews confirms that no biomass burning is involved in the project and thus exclusion of burning of woody biomass as explained in section 3.1.3 of PD[/01/] is deemed to be appropriate and valid and is in compliance with paragraph 13 of applied methodology requirements[/B02/].

For **AR-Tool 12 & 14,** there are no internal applicability conditions and **AR-Tool 16** is not applied as the SOC estimations excluded from the project activity.

3.3.3 Project Boundary

Based on the review of VCS PD[/01/] and compliance with paragraph 9 of the applied CDM Methodology AR-ACM0003 v2.0[/B02/], VVB has reviewed the project boundary carbon pools and emissions as follows

Table XVI: Carbon Pools Accounted (Baseline & Project scenarios):

Source		Gas	Included?	Justification/Explanation
Baseline Scenario	Above Ground Biomass	CO_2	Yes	This is the major carbon pool subjected to project activity.
		CH_4	No	Not included in carbon pool
		N_2O	No	Not included in carbon pool
		Other	No	Not included in carbon pool
		CO_2	Yes	This is the major carbon pool subjected to

	Below Ground Biomass			project activity
		CH_4	No	Not included in carbon pool
		N_2O	No	Not included in carbon pool
		Other	No	Not included in carbon pool

Source		Gas	Included?	Justification/Explanation
Project Scenario	Above Ground Biomass	CO_2	Yes	This is the major carbon pool subjected to project activity.
		CH_4	No	Not included in carbon pool
		N_2O	No	Not included in carbon pool
		Other	No	Not included in carbon pool
	Below Ground Biomass	CO_2	Yes	This is the major carbon pool subjected to project activity
		CH_4	No	Not included in carbon pool
		N_2O	No	Not included in carbon pool
		Other	No	Not included in carbon pool

In line with the paragraph 10 of the applied methodology[/B02/], following emission sources and GHGs are selected for accounting,

Source	**Gas**	**Included?**	**Justification/Explanation**
Burning of woody biomass	CO_2	No	PP does not envisage burning woody biomass for the purpose of site preparation, or as part of forest management.
	CH_4	No	PP does not envisage burning woody biomass for the purpose of site preparation, or as part of forest management.

In line with PD Carbon pools i.e., SOC, dead wood and litter have been conservatively excluded from carbon accounting[/03/]. Furthermore, based on the review of PD[/01/], SOP's[/06/] and through on-site inspection/interviews[/i-xiii/] VVB confirms that no biomass burning is involved in the project. and that there have been no instances of wood burning or loss of cover through fire and the sources of emission and gases as defined (i.e., CO_2 emissions due to burning of biomass) under paragraph 10 of the applied methodology AR-ACM0003 Ver 2.0[/B02/] have also been excluded from the calculation of carbon stock change.

Taking into account the justifications, assumptions and supporting information provided and the

design of the project, VVB confirms that project boundary along with geographical boundaries of project area and selected sources, sinks and reservoirs and their justification of inclusion and exclusion is valid and in compliance with the applied methodology and section 3.12 of VCS Standard v4.6/B01/.

3.3.4 Baseline Scenario

The procedure for determination of the baseline scenario in the project activity was applied using the methodological tool "AR-Tool 02 Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities v1.0. (Refer section 3.3.5)/B03/.

3.3.5 Additionality

Based on the review of CCB VCS PD/01/ the baseline scenario/10/ & additionality/B06/ has been determined by using A/R CDM 'Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities' (version 01)/B03/. The most likely land-use scenario in the absence of the Project - or baseline scenario - would be low productive agricultural lands/10/. The baseline scenario was also witnessed and confirmed by the VVB during the on-site inspection. Based on the tool applied/B03/, VVB has assessed the steps for baseline and additionality followed in the CCB VCS PD/01/ below:

Step 0: Preliminary screening based on the starting date of the A/R project

As per the applied tool, the project claiming to have start date after31 December 1999 but before the date of its registration shall provide a) Evidence for start date of project activity (which is after 31 December 1999), and b) Evidence (preferably official, legal and/or other corporate) that was available to third parties at, or prior to, the start of the project activity demonstrating the decision to incentivize project from the planned saleof CERs

Based on the review of CCB VCS PD, VVB confirms that the start date of the Project is 04th November 2019/07/, which is the date of first plantation took place, which is after 31 December 1999 (as per the tool requirement). The on-site inspection/ interviews/i-xiii/ with the PP reveals that the incentive/revenue from the planned sale of carbon credits has been considered in the decision to proceed with the Project for ensuring its sustainability over the 30-year crediting period and ensures forest is maintained for conservation purposes over this timeframe.

STEP 1. Identification of alternative land use scenarios to the proposed CCB & VCS project
Sub-step 1a. Identify credible alternative land use scenarios to the proposed A/R project.

The alternative scenarios identified for the CCB & VCS project/01/ are as follows:

The step requires the Identification of realistic and credible land-use scenarios that would have occurred on the land within the proposed project boundary in the absence of the VCS project activity including, but not limited to:

- ✓ Continuation of the pre-project land use
- ✓ Forestation of the land within the project boundary performed without being registered as the A/R CDM project activity .
- ✓ If applicable, forestation of at least a part of the land within the project boundary of the proposed VCS 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 CCB VCS project activity occurring in a period since 31 December 1989 as selected by thePPs

- ✓ Scenario 1: Continuation of the pre-project land use
- ✓ Scenario 2: Project activity on the land within the project boundary performed without being registered as the VCS AFLOU project.

VVB, based on the on-site inspection interviews/i-xiii/ and document review/01/ confirms that the alternative scenarios identified are realistic and credible and that there are no other plausible baseline alternatives to the project other than those identified by the PP.

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

As per the tool applied tool, this step requires the demonstration of compliance of all land use scenarios identified in the sub-step 1a with mandatory applicable legal and regulatory requirements.

For the continuation of the pre-project land use/10/, the lands belong to the farmers and the continuation of the land status as cropland (agriculture lands) is not against any national laws and regulations and there are no legal requirements for forestation of such agriculture lands.

VVB based on the CCB & VCS PD/01/ and through own research confirms that the identified alternative land use scenarios a) and b) in sub-step 1a are valid and in compliance with the mandatory applicable laws and regulations as assessed in section 3.2.45 of this report. Furthermore, VVB confirms that the proposed CCB VCS project/01/ shall not lead to violation of any applicable law even if the law is not enforced and aligns with requirements of section 3.14.1 of VCS Standard v4.6/B01/.

Step 2. Barrier Analysis

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

This step includes the identification of barriers present in the project area that prevent realization of the land use scenarios identified in Sub-step 1b. Barriers identified in the CCB VCS PD/01/, in compliance with the tool:

Project land alternative	Barrier faced	VVB Assessment
Continuation of the pre-project land use: crop lands	No barrier faced	Based on the review of PD/01/, supporting evidence/10/ and on-site inspection/interviews/i-xiii/, VVB confirms that the scenario of pre-project is croplands, and it is not restricted by any barrier
Forestation of the land within the project boundary performed without registered as the project activity	Barrier related to local tradition Barrier due to local ecological conditions Barrier due to social conditions and land use practices	Barrier related to local tradition As confirmed from the VCS PD and further observed by the VVB during the on-site inspection interviews/i-xiii/, traditionally, farmers practice age old agriculture resulting in low productivity of the land. Due to lack of awareness and understanding of the benefits of forestry projects, there is scepticism among the farmers to shift their practice to forestry and hence, have strong resistance to change. Furthermore, VVB has observed that farmers depend on their land for their livelihood, and any change in land use can be seen as a threat to their economic stability.

		Therefore, VVB confirms the local tradition barrier for the implementation of project activities for scenario-2 and same has confirmed by reviewing expert committee report by Government of India/B06/ Barrier due to local ecological conditions Review of VCS PD and on-site inspection interviews/i-xiii/, reveal that the top soil is eroded due to wind and water erosion[2]. Changing climatic conditions like frequent drought in the region[3] are not allowing agriculture to flourish and make the livelihood of the farmers less attractive[4]. Hence, VVB confirms the barrier of local ecological condition for identified scenario-2 of the proposed activity is valid and acceptable. This has been further confirmed by reviewing Telangana

[2] Within India, Telangana is one of the states that witnessed significant land degradation over the years. According to the Desertification and Land Degradation Atlas of India (SAC/ISRO, 2016), Telangana ranked 4th among major Indian states, with 25 % of the total geographic area (TGA) classified as degraded. Soil erosion is a significant contributor to cropland degradation in Telangana. (Source: Dayakar & Kumar, 2024)
[3] https://www.hindustantimes.com/india/telangana-sees-harshest-drought-in-living-memory/story-tpGJwr842isUxTZJrmM0OI.html
[4] https://journals.sagepub.com/doi/10.1177/2321022220923197

		state climate action report[5/B06/ /B06/ /B06/]. Barriers due to social conditions and land-use practices The on-site inspection interviews[/i-xiii/] reveal that the social conditions of the farmers are affected by economic activity and this economic activity is driven by subsistence farming. Hence VVB confirm the social barrier due to social conditions for the identified scenario-2 project activity and same has been confirmed by reviewing expert committee report by Government of India[/B06/].

Sub-step 2b. Elimination of land use scenarios that are prevented by the identified barriers
This step includes the determination of alternative scenarios identified in Sub-step 1b which are prevented by at least one of the barriers listed in sub-step 2a.

As per the CCB VCS PD[/01/], and confirmed through on-site inspection/interviews[/i-xiii/], the alternative land use scenario 1 i.e., continuation of the pre-project land use Croplands is not prevented by the barriers relating to investment, technology, local ecological conditions, lack of organizational communities and social conditions. Hence VVB confirms the approach for identifying baseline scenario of the project activity is valid and applicable.

Step 4: Common Practice Analysis:

Based on the review of VCS & CCB PD[/01/] and on-site inspection interviews[/i-xiii/] VVB confirms that the project promotes agroforestry practices on the low productive agricultural land[/10/] and provides technical knowledge to the farmers to plant and maintain trees on their own land. The plantation of trees on low productive agricultural lands provides additional benefits of carbon credits along with non-timber forest products. Moreover, PP has analysed the similar forestation activities on the

[5] http://moef.gov.in/wp-content/uploads/2017/09/Telangana.pdf

VERRA registry and provided the exhaustive list of these projects in the PD according to para 33 & 34 of CDM AR-Tool02/B03/. VVB, based on the web research, confirms that the projects (as listed below), are distinct form the proposed project. Detailed analysis can be referred below:

Id	Name of project	VVB Assessment for Distinctions
3477	Core carbon Vanam in Andhra Pradesh	Includes harvesting
4577	Grouped ARR project in Telangana	oil palm plantations with intercropping of turmeric and groundnuts; includes harvesting
2933	Solve for carbon neutrality-LTI's afforestation project	Small scale project (refers to CDM AR-AMS0007 Version 03.1)
2404	Reforestation of degraded land by MTPL in India	Registered project; small scale project
3478	Core carbon Vanam in Telangana state	Commercial planting; Includes harvesting
3507	Carbon sequestration through agroforestry by farmers in Telangana state	Includes harvesting of timber and fruit trees
3535	Core carbon Sahaja Vyavasayam in Andhra Pradesh	Not Applicable; ALM project (VM0017, v1.0)
4630	Agroforestry plantations to enhance the livelihood of rural communities in India	Small scale project (refers to CDM AR-AMS0007 Version 03.1)
4851	Incentivizing smallholder farmers to transition to low-emissions agriculture and agroforestry	Not Applicable; ALM project (VM0042, v2.0)
4043	Enhancing livelihood of tribal communities through agroforestry in South India	Includes harvesting of timber and fruit trees
4052	Mitigating climate change and enhancing rural livelihoods through plantations raised to provide raw material to the paper industry	Includes harvesting of timber and fruit trees

2531	Grouped project for reforestation on degraded and non-forest lands	Includes harvesting of timber and fruit trees

From the above analysis, VVB has concluded that the proposed project activity is distinct from the above listed projects as it is a conservation project and involves plantation of 41 different tree species, among which 2 are classified as vulnerable, 3 as endangered, and 1 as critically endangered according to the IUCN for conservation objectives on low productive farmer lands. Hence, VVB confirms that proposed activity complies with paragraphs 33 and 34 of CDM ARTool-2 and hence, are additional[B03]

Based on the above assessment, VVB concludes that the procedures for identifying the baseline scenario and additionality were correctly followed in compliance with the CDM Tool "Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities/B03/" and the identified scenario reasonably represents what would have occurred in the absence of the project. Hence, VVB confirms the proposed project activity is additional.

3.3.6 Methodology Deviations

Based on the review of VCS & CCB PD/01/ there are no deviations from the applied methodology and related tools VVB deems the justification as valid and appropriate.

3.3.7 Quantification of GHG Emission Reductions and Removals

Procedures for quantifying the GHG removals generated by the project during the project crediting period were conducted in accordance with the methodology "AR-ACM0003: Afforestation and reforestation of lands except wetlands", Version 02.0/B02/. VVB has performed review of all input data, parameters, formulas, calculations, conversions, statistics and resulting uncertainties and output data to ensure consistency with the VCS & CCB documentation/06/11/, methodology/B02/, tools/B03/, and the CCB & VCS PD/01/.

Based on the review of ex-ante carbon calculation sheet, VVB confirms that the PP has applied methodology AR-ACM0003, v2.0"/B02/, step wise approach to quantify the baseline, project, leakage emission and net removals of project activity.

Conversion factors, formulas, and calculations were provided by the PP in spreadsheet/03/ format to ensure all formulas were accessible for review. VVB has recalculated subsets of the analysis to confirm correctness. Where applicable, references for analysis methods or default values were checked against relevant scientific literature for best practice. The net anthropogenic GHG removals by sinks has been calculated as follows:

Baseline Emissions

The baseline net GHG removals by sinks:

$$C_{BSL,t} = \Delta C_{TREE\_BSL,t} + \Delta C_{SHRUB\_BSL,t} + \Delta C_{DW\_BSL,t} + \Delta C_{LI\_BSL,t} \quad \text{Equation (1)}$$

Where:

$C_{BSL,t}$ = Baseline net GHG removals by sinks in year t; t CO_2-e
$C_{TREE\_BSL,t}$ = Change in carbon stock in baseline tree biomass within the project boundary in year t, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"; t CO_2e
$C_{SHRUB\_BSL,t}$ = Change in carbon stock in baseline shrub biomass within the project boundary, in year t, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"; t CO_2e
$C_{DW\_BSL,t}$ = Change in carbon stock in baseline dead wood biomass within the project boundary, in year t, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities"; t CO_2e
$C_{LI\_BSL,t}$ = Change in carbon stock in baseline litter biomass within the project boundary, in year t, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities"; t CO_2e

As assessed in the section 3.3.3 of this report, the project activity excludes the shrub, deadwood and litter biomass as insignificant from carbon calculations.

In line with section 3.2.1 of CCB & VCS PD/01/, VVB confirms that the land under the first project instance was previously/10/ croplands and there were no pre-project trees which can be harvested or cleared. Additionally, there is no mortality because of competition from trees planted in the project and PP has accounted only trees which are planted as part of project activities.

Furthermore, VVB has verified the above criteria through the remote sensing analysis/10/ (Forest and non-forest analysis/10/) and associated GIS shapefiles/10/ for the pre-project scenario and during on-site inspection/interviews/i-xiii/. Therefore, VVB confirms that all the conditions of Para 11 of CDM Tool 14/B03/ are met, and the baseline emissions are not mandatory for estimation and can be accounted as zero.

Project Emissions

PP has referred to applied methodology AR-ACM0003 v2.0/B02/ for the calculation of project emissions:

1. The actual net GHG removals by sinks is calculated as follows

$$\Delta C_{ACTUAL,t} = \Delta CP_{,t} - GHG_{E,t} \quad \text{Equation (2)}$$

Where: $\Delta C_{ACTUAL,t}$ = Annual actual net GHG removals by sinks at time t; t CO_2-e yr-1
$\Delta CP_{,t}$ = Change in carbon stocks in project, occurring in the selected carbon pools, at time t; t CO2-e yr-1
$GHG_{E,t}$ = Increase of non-CO_2 GHG emissions within the project boundary as a result of the implementation of the A/R project activity, in year t; t CO_2-e

2. Change in the carbon stocks in project, occurring in the selected carbon pools in year t shall be calculated as follows:

$$\Delta CP_{,t} = \Delta C_{TREE\_PROJ,t} + \Delta C_{SHRUB\_PROJ,t} + \Delta C_{DW\_PROJ,t} + \Delta C_{LI\_PROJ,t} + \Delta C_{SOC\_AL,t} \quad \text{Equation (3)}$$

Where:
$\Delta CP_{,t}$ = Change in the carbon stocks in project, occurring in the selected carbon pools, in year t; t CO_2-e
$\Delta C_{TREE\_PROJ,t}$ = Change in carbon stock in tree biomass in project in year t, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"; t CO_2-e

$\Delta C_{SHRUB\_PROJ,t}$ = Change in carbon stock in shrub biomass in project in year t, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"; t CO_2-e

$\Delta C_{DW\_PROJ,t}$ = Change in carbon stock in dead wood in project in year t, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities"; t CO_2-e

$\Delta C_{LI\_PROJ,t}$ = Change in carbon stock in litter in project in year t, as estimated in the tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities"; t CO_2-e

$\Delta C_{SOC\_AL,t}$ = Change in carbon stock in SOC in project, in year t, in areas of land meeting the applicability conditions of the tool "Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities", as estimated in the same tool; t CO_2-e.

As assessed in section 3.3.3 of this report, the project activity excludes the shrubs, SOC, deadwood and litter as insignificant from carbon calculations.

Furthermore, in line with the CCB VCS PD/01/ and ex-ante carbon calculation sheet/03/, VVB verifies that PP has accounted tree carbon estimations by applying IPCC 2019/B06/ default values. Specifically, PP utilized the values from table 5.2 of IPCC 2019/B06/, which are 3.25±21 and 0.80 tC/ha/yr for fruit trees (Agri-horti model) AGB and BGB carbon estimations, respectively. Additionally, for timber tree AGB carbon estimations, PP applied the values from table 4.12 of IPCC 2019/B06/, i.e., 2 tdm/ha/yr. VVB confirms that the PP has followed conservative approach for the ex-estimation of $C_{TREE\_PROJ,t}$. This was further verified by crosschecking the plausibility of estimations through the IPCC 2019 Croplands and Forest lands/B06/.

Leakage

PP has applied Tool AR0015: "Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity for the leakage calculation/B03/" by using the equation as per section 5.6 of the applied methodology/B02/:

$$\mathbf{LKt = LK_{AGRIC,\,t}} \qquad \text{Equation (4)}$$

Where:

LKt =GHG emissions due to leakage, in year t; tCO_2-e

$LK_{AGRICt=}$ Leakage due to the displacement of agricultural activities in year t, as estimated in the tool "Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity"; tCO_2-e.

VVB confirms that PP has estimated the leakage calculations for project activity and reproduced as assessed below:

$$LK_{AGRIC,t} = (44/12) \times (\Delta C_{BIOMASS,t} + \Delta SOC_{LUC,t})$$

As assessed in section 3.3.3 of this report, estimations for SOC are not applicable. Hence, $\Delta SOC_{LUC,t}$ is set as zero.

$$\Delta C_{BIOMASS,t} = [1.1 x b_{TREE} \times (1+R_{TREE}) + b_{SHRUB} \times (1+R_s)] \times Cf \times A_{DISP,t}$$

PP has considered the displaced agriculture activity occurring in land which has no forest or trees. Such assumption is on account of specific prohibition of forest land for any other non-forest purposes under the Act passed by Indian Parliament namely The Forest (Conservation) Act, 1980, dated December 27, 1980/B06/. The official gazette notification (Part II- section 1, clause 6) has been reviewed and verified by VVB. Since there are no pre-project trees/10/ in the project area, PP has categorized the area receiving displaced agriculture activities as cropland, with these practices falling under the category of shrubs. Therefore, the consideration of "bTree" is not applicable for the proposed project activity.

Hence, $\Delta C_{BIOMASS,t} = b_{SHRUB} \times (1+R_s) \times Cf \times A_{DISP,t}$.

As per tool 14/B03/ paragraph 61, Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities,

$b_{SHRUB,i} = BDR_{SF} \times b_{FOREST} \times CC_{SHRUB,i}$.

BDR_{SF} = Ratio of shrub biomass per hectare in land having a shrub crown cover of 1.0 (i.e. 100 per cent) and the default above-ground biomass content per hectare in forest in the region/country where the A/R CDM project activity is located, VVB confirms that default value of 0.10 is considered.

B_{FOREST}= Default above-ground biomass content in forest in the region/country where the A/R CDM project activity is located; t d.m. ha^{-1},. VVB confirms that default value of 73 is considered for Forest in India as per table 3A.1.4 of IPCC GPG-LULUCF 2003/B06/

$CC_{SHRUB,i}$= Crown cover of shrubs in shrub biomass estimation stratum i at the time of estimation, expressed as a fraction, VVB confirms that default value of 0.5 (Para 64 table 2 CDM Tool 14/B03/) is considered.

Cf=Carbon Fraction is considered as 0.47

$A_{DISP,\,t}$ = Area of land from which agricultural activity is being displaced in year t; ha

VVB, based on the review of PD/01/ and ex-ante carbon calculation sheet/03/, confirms that PP has estimated the leakage emission/03/ for $A_{DISP,t}$ of the First Project Activity Instance of 29883.68 hectares considering the annular ring width (i.e., assumption of crown width) from the tree basal area and this proposed approach for leakage estimations of project activity has verified by reviewing the peer-reviewed literature *Abhay et al., 2019 https://www.currentscience.ac.in/Volumes/117/06/1054.pdf*/B06/. This practice of cultivation ensures smoother intercultural operations. As such area of agriculture displaced by the Project Activity is limited to the basal area of planted tree in addition to annular ring with width of 240cm (2.40m)/B06/ around the basal area of tree side. The proposed approach for estimating leakage of project activity is deems to be valid and plausible by VVB. Furthermore, VVB confirms that the leakage estimations are based on the growth rate of *Tectona grandis*. This species, which is a component of the project activity, demonstrates robust growth compared to other species involved. Teak achieves maximum growth potential DBH with potential crown expansion, as supported by information Troup's The Silviculture of Indian Trees Vol III, The Controller of Publications, 1981/B06/ and https://www.researchgate.net/publication/271658221

Net GHG Removals

The net carbon captured by the project has been calculated by the using the equation in line with section 5.7 of the applied methodology/B02/:

The net anthropogenic GHG removals by sinks are calculated as follows:

$C_{AR\text{-}CDM,\,t} = C_{ACTUAL-t} - C_{BSL,t} - LKt$

where:

$C_{AR\text{-}CDM,\,t}$ =Net anthropogenic GHG removals by sinks, in year t; tCO_2-e

$C_{ACTUAL,t}$ =Actual net GHG removals by sinks, in year t; tCO_2-e

$C_{BSL,t}$ =Baseline net GHG removals by sinks, in year t; tCO_2-e

LKt =GHG emissions due to leakage, in year t; tCO_2-e

Year	Estimated baseline emissions or removals (tCO_2e)	Estimated project emissions or removals (tCO_2e)	Estimated leakage emissions (tCO_2e)	Estimated GHG emission reductions or removals (tCO_2e)
04 November 2019- 31 December 2019	0	0	120	-120
01 January 2020- 31 December 2020		191049	121	190928
01 January 2021- 31 December 2021	0	256356	122	256234
01 January 2022- 31 December 2022	0	303792	123	303669
01 January 2023- 31	0	329553	124	329430

December 2023				
01 January 2024- 31 December 2024	0	334231	125	334107
01 January 2025- 31 December 2025	0	334231	125	334106
01 January 2026- 31 December 2026	0	334231	126	334104
01 January 2027- 31 December 2027	0	334231	127	334103
01 January 2028- 31 December 2028	0	334231	128	334102
01 January 2029- 31 December 2029	0	334231	129	334101
01 January 2030- 31 December 2030	0	334231	130	334100
01 January	0	334231	131	334099

2031- 31 December 2031				
01 January 2032- 31 December 2032	0	334231	132	334098
01 January 2033- 31 December 2033	0	334231	133	334097
01 January 2034- 31 December 2034	0	334231	134	334096
01 January 2035- 31 December 2035	0	334231	135	334095
01 January 2036- 31 December 2036	0	334231	136	334094
01 January 2037- 31 December 2037	0	334231	137	334093
01 January 2038- 31 December 2038	0	334231	138	334092

01 January 2039- 31 December 2039	0	334231	139	334091
01 January 2040- 31 December 2040	0	334231	140	334090
01 January 2041- 31 December 2041	0	334231	141	334091
01 January 2042- 31 December 2042	0	334231	142	334089
01 January 2043- 31 December 2043	0	334231	142	334089
01 January 2044- 31 December 2044	0	334231	143	334088
01 January 2045- 31 December 2045	0	334231	144	334087
01 January 2046- 31	0	334231	145	334086

December 2046				
01 January 2047- 31 December 2047	0	334231	146	334085
01 January 2048- 31 December 2048	0	334231	147	334084
01 January 2049- 03 November 2049	0	334231	148	334083
Total Estimated ERs	0	9770769	4153	9766617
Total number of crediting years	30			
Annual average ERs	325554 tCO_2e/year			
Removal rate	10.89 tCO2e/ha/yr			

The ex-ante value calculated under the 1st PAI for the crediting period of 30 years is **9766617 tCO_{2e}** (Before deducting -23% buffer).

Through on-site inspection/interviews/I01-I20/, VVB confirms that the project is designed for conservation objectives and there is no intention for commercial timber production. Furthermore, VVB has conducted thorough review of ex-ante carbon calculations/03/ and reference sources/B06/, affirming that the adopted approach represents a conservative method for estimating ex-ante calculations/03/, considered valid and plausible.

Overall, VVB confirms that the applied methodology[/B02/] and the referenced tools[/B06/] have been applied correctly to calculate baseline emissions[/03/], project, leakage and net GHG removals[/03/] of the project during the crediting period.

3.3.8 Monitoring Plan

The monitoring plan has been defined against the requirements of section 6.4 of Methodology AR-ACM0003 (version 2.0)[/B02/]. VVB has assessed all parameters (available at validation) from CCB & VCS PD[/01/] as follows:

Table XVII: Assessment of Data/Parameters available at validation:

Data/Parameters	Value Applied	VVB Assessment
Project area	29883.69	Based on the review of land agreements[/04/] and GIS shapefiles[/10/] of project area, VVB confirms that the area of 29883.69 for 1st PAI is valid and appropriate.
Carbon Fraction	0.47	VVB after cross checking the mentioned source applied methodology ACM-0003[/B02/], confirms the value is valid and plausible.
Root Shoot Ratio Rj	0.27	VVB after cross checking mentioned source, IPCC 2003[/B06/] confirms the value is valid and appropriate.
Carbon to CO_2e	44/12	VVB confirms that the default value is as per applied methodology AR-ACM0003[/B02/] and is valid and appropriate
Free trees above ground carbon value	3.25±21 tC/ha/yr	VVB after cross checking mentioned source, IPCC 2019[/B06/] Table 5.4 confirms the applied value is valid and appropriate. Furthermore, VVB confirms that the value has applied for estimating carbon calculations for fruit trees.
Fruit trees below ground carbon value	0.80 tC/ha/yr	VVB after cross checking mentioned source, IPCC 2019 Table 5.4[/B06/] (croplands) confirms the applied value is valid and appropriate. Furthermore, VVB confirms that the value has applied for estimating carbon calculations for fruit trees.
Above ground biomass for timber tree species	2 tdm/ha/yr (conservative approach)	VVB after cross checking mentioned source, IPCC 2019[/B06/] Table 4.12 confirms the applied value is valid and appropriate. Furthermore, VVB confirms that the value has applied for estimating carbon

		calculations for timber tree species
Below ground biomass	0.54 tdm/ha/yr	VVB confirms that the applied value calculated based applying root to shoot ratio of 0.27/B02/ to above ground biomass of timber tree species.
B_{forest}	73tdm/ha	VVB after cross checking mentioned source, IPCC 2003/B06/ Table 3A confirms the applied value is valid and appropriate. Furthermore, VVB confirms that the value has applied for estimating leakage calculations
BDRsf	0.10	VVB after cross checking mentioned source, CDM AR-Tool14/B03/ confirms the applied value is valid and appropriate. Furthermore, VVB confirms that the value has applied for estimating leakage calculations
CC_{shrub}	0.5	VVB after cross checking mentioned source, CDM AR-Tool14/B03/ confirms the applied value is valid and appropriate. Furthermore, VVB confirms that the value has applied for estimating leakage calculations
Rs root to shoot ratio for shrubs in the land receiving the displaced activity.	0.40	VVB after cross checking mentioned source, CDM AR-Tool15/B03/ confirms the applied value is valid and appropriate. Furthermore, VVB confirms that the value has applied for estimating leakage calculations

The following data and parameters will be monitored in accordance with the applied methodology AR-ACM0003

Data and Parameter	Description	VVB assessment
t_{VAL}	Two-sided Students t-value, at infinite degrees of freedom in the first iteration for the required confidence level	Calculated as per the tool "Calculation of the number of sample plots for measurements within A/R CDM project activities" (Version 02.1.0)/B03/

DBH and Height	Diameter at breast height, height of the trees	Every verification through field measurements in sample plots. The diameter and height of trees planted in the project area were measured according to SOPs/06/ developed and only DBH, height of actual trees planted were measured to calculate the carbon stocks
Volume	Volume of tress at plot level	For the ex-post estimation during the following verification will use allometric equations of each species to calculate the stem volume.
Biomass	Biomass of tree species	Every verification through field measurements and applying allometric equations.
Carbon stock	Carbon stock	Every verification through field measures and applying IPCC defaults or applied methodology.
ni Number of sample plots allocated to stratum i;	Number of sample plots required for estimation of biomass stocks within the project boundary	Calculation by $ni=n\times wi\times si\Sigma wi\times sii$ as per the tool "Calculation of the number of sample plots for measurements within A/R CDM project activities/B03/
Si Estimated standard deviation of biomass stock in stratum i	Estimated standard deviation of biomass stock in stratum	Calculated as per the tool "Calculation of the number of sample plots for measurements within A/R CDM project activities" (Version 02.1.0)/B03/
E (tdm/ha)	Acceptable margin of error	Calculated as per the tool "Calculation of the number of sample plots for measurements within A/R CDM project activities" (Version 02.1.0)/B03/. A default value equal to 10% of the mean biomass stock within the project boundary was used, and the mean biomass stock within the project boundary was estimated from the preliminary sample plots.
A_{disp}	Area of land from which agricultural activity is being displaced in the year t	Calculated during every verification through requirements outlined in CDM AR-Tool 15/B03/

VVB based on the review of monitoring plan in CCB & VCS PD/01/, the monitoring team consists of competent professionals for collection of data, monitoring and verifying the data. The QA/QC procedures/06/ mentioned sound reasonable and valid.

Overall, the monitoring is done in adherence to the monitoring plan and in compliance with the requirements of section 6.1 of applied methodology/B02/ and referenced tools/B03.

3.3.9 Dissemination of Monitoring Plan and Results (CL4.2)

Based on the review of CCB & VCS PD/01/ and on-site inspection interviews/i-xiii/, the monitoring plan/06/, and any results of monitoring undertaken in accordance with the monitoring plan, will be disseminated and made publicly available on VERRA websites/B05/.

Furthermore, during the on-site inspection/ interviews/i-xiii/, VVB has reviewed and verified the hardcopies of project description, monitoring plan etc at PP office (GKF Agroforestry).

In the opinion of VVB, the dissemination of monitoring plan is in line with requirements of section CL4.2 of CCB Standards v3.1/B01/.

3.3.10 Non-Permanence Risk Analysis

VVB has reviewed the non-permanence risk report/02/ in compliance with the VCS standard v4.6/B01/ and AFOLU Non permanence risk tool v4.2/B01/. The risks identified along with the risk score and VVB assessment are as mentioned in the table below.

	Risk	VVB Assessment and Justification

INTERNAL RISK	**Project Management**	Based on the review of the CCB & VCS PD/01/ and VCS Non-Permanence Risk Report/02/ VVB confirms that 41 trees species/10/ have planted as a part of the CCB & VCS project implementation which all are native species expect *Swietenia macrophylla* (Mahogany) and *Leucaena Leucochephala* (Subabool) which are non-native trees. However, PP has provided peer-reviewed sufficient literature/B06/ to demonstrate that the tree species Mahogany and River tamarind was proven to be adapted to the agro-ecological zone(s) in which the project is located. Further tree species which were planted benefiting from reduced threats as a result of project activity. Hence, VVB confirms that the risk rating *0* is deemed to be valid and acceptable. Additionally, VVB based on the review of PD/01/, supportive evidence/06/ and through on-site inspections/interviews/i-xiii/, it has been verified that the risk score selected for sub-clauses (b-g) related to project management is considered valid and acceptable by VVB, thus justifying a score of "0." **Mitigation:** As assessed in section 3.2.33 & 3.2.34 of this report, based on the review of VCS Non-Permanence Risk Report/02/ and on-site inspection/interviews/i-xiii/ VVB confirms that management team includes individuals with significant experience in AFOLU project design and implementation, carbon accounting and reporting (e.g., individuals who have successfully managed projects through validation, verification and issuance of GHG credits) under the VCS program and other approved GHG programs. Hence risk score 0 has been accepted by VVB. PP has established a suitable adaptive management plan/06/ for the proposed activity. Hence risk score -2 has been accepted by VVB. Based on the on-site inspection/interviews/i-xiii/ and reviewing supporting evidence/06/, in the opinion of VVB the project management risk score -0 is deemed to be valid and acceptable.
	Financial Viability	With reference to assessment for sections 3.2.36 of this report, VVB has cross-checked the SOP of funding process/08/ and interview of project managers and financial officers/i-v/, including all the assumptions for the cash flow and confirms that the project has secured from 15% to less than 40% of the funding needed to cover the total cash out required for before the project reaches breakeven and the payback period is greater than 7 and up to and including 10 years from current risk assessment. Therefore, the risk rating of 2 is valid and accepted by VVB. . Based on the assessment for financial risk identified above, VVB confirms that the overall financial viability risk score is 4.

	Opportunity Cost	With reference to the assessment for sections 3.2.18, 3.2.29 & 3.4 of this report and based on review of VCS Non-Permanence risk report[/02/] provided by PP and on-site inspection/interviews[/i-xiii/], VVB confirms that the baseline activities are subsistence-driven[/10/12/] and that net positive community impacts have been demonstrated[/01/12/]. This has been checked and confirmed by the VVB. Hence, the risk score of 0 is valid and acceptable. **Mitigation** Based on the on-site inspection/interviews[/i-xiii/], VVB confirms that the PP i.e., GRF Agroforestry and ClimeTrek Ltd has entered the land agreements[/04/] with farmers/landowners to protect the project ensuring that legally binding commitment to continue management practices that protect the credited carbon stocks over the length of the project crediting period. In the opinion of VVB, the risk rating -2 is valid and acceptable. Based on the review of supporting evidence[/04/] and on-site inspection/ interviews[/i-xiii/], VVB confirms that overall opportunity cost risk rating 0 is valid and acceptable.
	Project Longevity	In line with the VCS Non-Permanence Risk Report, the length of the CCB & VCS project[/01/] is 40 years. During the on-site inspection/interviews[/i-xiii/], it has been informed to VVB that the project longevity is based on the land agreement[/04/] with farmers/landowners and the same has been confirmed by reviewing original land agreements[/04/] with farmers. As mentioned in clause 2 of land agreements[/04/], VVB verifies and confirms the project longevity is 40 years and compliance with section 3.2.11 of VCS Standard v4.6[/B01/] and confirmed through on-site inspection/interviews[/i-xiii/], farmers are aware of their obligation to maintain project activities till end of project period. VVB utilized statistical methods[/B06/] to verify the land agreements[/04/], ensuring a 90% confidence level with a 10% margin of error for sampling across all 26,486 agreements. Consequently, based on this confidence level, VVB has verified 25 original land agreements and cross-referencing them against relevant state government land record websites[/B05/]. Therefore, the project is protected by a legal agreement to continue management practice for the entire project longevity. Hence, VVB confirms that the risk score of 15 is acceptable.
	Total Internal Risk (PM + FV + OC + PL)	In conclusion, VVB confirms that the total internal risk for the VCS project is 19, which is deemed appropriate and valid.
EXTERNAL RISK	**Land Tenure and Resource**	As assessed in sections 3.2.40, 3.2.41, 3.2.42 & 3.2.44 of this report, VVB verifies that due diligence has been carried out by PP to identify

	Access/Impacts	any disputes regarding ownership and land resources. This was further verified through on-site inspections and interviews[/i-xiii/], indicating that the lands are privately owned agricultural lands belonging to farmers, without any disputes present. Additionally, PP has obtained Free, Prior, and Informed Consent (FPIC) and has entered into land agreements[/04/] with farmers. These agreements are structured in a manner that clearly delineates the legal right[/04/] to control and operate project activities over the entire project area by PP, ownership of lands and carbon credits. Based on the above assessment and review of the VCS Non-Permanence Report[/02/], the ownership[/04/] and resource rights[/04/] are held by the same entities. Furthermore, as confirmed through on-site inspection/interviews[/i-xiii/], they are privately owned agricultural lands[/04/] belonging to farmers hence there are no instances of government intervention regarding land rights etc. This was further verified by crosschecking relevant state government land record websites[/B05/]. **Mitigation** Based on the on-site inspection/interviews[/i-xiii/], VVB confirms that the PP i.e., GRF Agroforestry and Clime Trek Ltd has entered the land agreements[/04/] with farmers/landowners to protect the project ensuring that legally binding commitment to continue management practices that protect the credited carbon stocks over the length of the project crediting period. In the opinion of VVB, the risk rating -2 is valid and acceptable. Based on the above assessment, VVB confirms that the overall selected risk rate of 0 for Land Tenure and Resource Access/Impacts is valid and acceptable.
	Stakeholder Engagement	With reference to the assessment of sections 3.2.24, 3.2.25 & 3.2.33 of this report and in line with NPR report[/02/], VVB confirms that the identified stakeholders/local population were living in the project area or within 20km of the boundary of project area. Furthermore, based on the review of stakeholder communications[/05/], document review[/05/10/12/] and on-site inspection/interviews[/i-xiii/], VVB confirms that more than 50% of stakeholders living within project area and 20% of stakeholder living outside the project area within 20km of the project area have been consulted and obtained FPIC. Based on the above assessment, VVB confirms that the overall risk score of 0 for total stakeholder engagement is valid and acceptable.
	Political Risk	Based on the review of NPR report[/02/] and on-site inspection/interviews[/i-xiii/], VVB confirms that governance score of host country is -0.13 and the project is in a host country that is party to the Paris Agreement and has submitted an NDC to the UNFCCC

		Secretariat in the last five years and includes AFOLU commitments (conditional or unconditional) in its NDC. This has been further confirmed by reviewing web-source/B06/. Therefore, the risk score of 0 for political risk is valid and acceptable.
	Total External Risk (LT + CE +PC)	In conclusion, VVB confirms that the total external risk for the CCB&VCS project/01/ gives 0, which is deemed valid and acceptable.
NATURAL RISK	**Fire (F)**	Based on the review of VCS Non-Permanence Risk Report/02/ and confirmed through on-site inspection/interviews/I-XIII/ the project is comprised of multiple small land parcels and Agroforestry system were followed and the project is designed/06/ in such a way that reduces the fire related risks. PP has also established an appropriate adaptive management plan/06/ for the prevention of fire related outbreaks in which all stakeholders are involved. VVB confirms that the SOPs/06/ will help in reducing/mitigating the risk of fire. Moreover, the risk of fire is greatly mitigated by the project design. Hence, the total risk score for the risk of fire i.e., 0 is acceptable.
	Pest and Disease Outbreaks (PD)	Based on the review of PD/01/, npr report/02/, the proposed project has risk pest and disease. However, PP has established an appropriate adaptive management plan/06/ for preventing pest infections to project activity trees. Hence VVB confirms that risk score for the pest and disease of 1 is valid and acceptable.
	Extreme Weather (W)	Based on the review of PD/01/, npr report/02/, there are no events of extreme temperatures recorded in the project area and same has been confirmed by reviewing source https://apsdma.ap.gov.in/files/4afe4671523e4dae338d84cc9560ccde.pdf/B06/ Hence VVB confirms the risk for extreme temperature of 1 is valid and appropriate.
	Geological Risk (G) and coastal risk	As per the VCS Non-Permanence Risk Report/02/ the geological risk around the scattered land parcels come under Zone II (Low risk zone). Hence, the likelihood of damages due to earthquake event is low. VVB has cross checked the data against the data from National Institute of Disaster Management, Government of India and source https://apsdma.ap.gov.in/latestupdate_pdfs/Cyclone_Preparedness_Response_Plan_09062020.pdf/B06/ Hence VVB confirms the risk score of 1 is valid and acceptable.
	Total Natural Risk (F + PD + W + G + ON)	In conclusion, VVB confirms that the total natural risk i.e, fires, pests and disease, extreme weather and other coastal risks may be affected by climate change. Hence VVB confirms the total natural risk score of 4 is valid and acceptable.

Risk Category	Rating
Internal Risk	19
External Risk	0
Natural Risk	4
Overall Risk Rating (a + b + c)	**23**

In total, the project faces minor risks and if certain risks are there, mitigation measures are in place. As the project undergoes Validation, in the opinion of VVB, the overall project design and management is sound and reasonable. Thus, the VVB concludes that the applied risk score of 23% is adequate for the project activity and total number of credits to be deposited in the AFOLU buffer account is 2169482 .820tCO2e.

3.3.11 Optional Gold Level: Regional Climate Change Scenarios (GL1.1)

Not Applicable; The project activity does not claim a climate gold level certification.

3.3.12 Optional Gold Level: Climate Change Impacts (GL1.2)

Not Applicable; The project activity does not claim a gold level certification.

3.3.13 Optional Gold Level: Measures Needed and Designed for Adaptation (GL1.3)

Not Applicable; The project activity does not claim a gold level certification.

3.4 Community

3.4.1 Descriptions of Communities at Project Start (CM1.1)

During on-site inspection/ interviews[i-xiii], it has informed VVB that the farm sector plays a key role in strengthening the national economy, improving inclusive growth, ensuring sustainable development, and dealing with climate change. Poverty reduction can take place with investment in agriculture, with a focus on improved agricultural practice. These practices include improving the efficacy of farmland by halting and reversing deteriorating soil health; encouraging crop diversification; promoting the usage of certified seeds; practicing sustainable water management with rainwater harvesting and preservation of rainwater; developing local agricultural marketing and using technology. Agriculture is a vital sector in the economies of project area and a key issue in sustainable development. The cluster of issues around 'sustainable agriculture, food security, and nutrition' has emerged as an important focus area. Due to the spread of harmful chemical agriculture, there is also a need for a transition to ecologically sound farming in many areas, otherwise, it can lead to a crisis. Lack of proper systems related to access to credit, and insurance systems can lead to many economic crises, as well. Local communities of the project area employed in agriculture and its allied activities, investing in the agriculture, agroforestry sector can address not only the hunger and malnutrition of these populations but also other challenges, including poverty, water, and energy use, climate change and unsustainable production and consumption. Paddy cultivation in both seasons has made the State the rice bowl of India in a very short span. Paddy, Cotton, Maize, Red Gram and Soybean are the major crops grown in the project area.

In the opinion of VVB that the description stated in CCB VCS PD/01/ and in compliance with requirements of section of CM1.1 of CCB Standards v3.1/B01/.

3.4.2 Interactions between Communities and Community Groups (CM1.1)

The on-site inspection/interviews/i-xiii/ reveal that the participating communities have Telugu language speaking community. Villages of the project area have their own social structure and well-defined methods of interaction. Gram Panchayat (Village Council) members act as a medium for the interaction between the villagers. To address this, regular meetings will be organized for better interaction between Village councils. VVB confirms that the project proponent has local presence and experienced in working with the local community and GKF agroforestry, the local project implementation partner, employs staff are native speakers of the Telugu language. Hence VVB ascertains that PP has no language barrier to interact with communities and community groups.

Based on above assessment VVB confirms that PD/01/ has adequately demonstrated the interaction of communities in accordance with CM1.1 of CCB Standards v3.1/B01/.

3.4.3 High Conservation Values (CM1.2)

Since, the project is a conservation project, the proposed activities will enhance the livelihood of the communities of the project area through the following, as verified and checked by the VVB, through desk review/01//05//06//11/ and on-site inspection interviews/i//ix-xiii/:

- **Economic Benefits:** The sale of carbon credits and fruits will provide a steady income source, contributing to the economic stability of local communities.
- **Cultural Preservation:** By strengthening financial independence, communities may have more resources to preserve and maintain cultural and traditional sites.
- **Social Inclusion:** By engaging local communities in the planning and decision-making processes of project as well as interaction between the communities, the needs and rights of the people are respected.

Based on the above assessment, VVB confirms that the proposed activity complies with section CM1.2 of CCB Standards v3.1/B01/.

3.4.4 Without-Project Scenario: Community (CM1.3)

It has been verified through on-site inspection/interviews/i-xiii/ and supporting evidence/05/12/ that the project located in Indian states of Telangana and Andhra Pradesh. In the vicinity of the project zone there were communities and community groups/12/, mostly farmers.

Without project land use scenario, and with interview/i-xiii/ with PP and local communities/05/12/, it is verified that agriculture is the main source income source for participating communities and farmers cannot improve their well-being in terms of income source, socio-economic conditions and

generated any additional income that could be arrived from the sale of fruits and carbon credits and have not generated any additional income from NTFP and carbon credits etc.

Based on the above assessment, VVB confirms that PD/01/ has adequately described the without project scenario and improvement in socio-economic conditions of farmers/local communities in accordance with requirements of section CM1.3 of CCB Standards v3.1/B01/.

3.4.5 Expected Community Impacts (CM2.1)

In line with section 4.2.1 of PD/01/, the project will improve livelihood of stakeholders/05/ in terms of local economy, creation of temporary jobs, social development works such as health checkup camps, distribution of free ration kits, training program on organic agriculture, quality of planting material and plantation techniques for adopting agroforestry approaches. Furthermore, no negative well-being impacts have been identified and verified by the VVB through on-site inspection/interviews/I-XIII/, while it is expected that the project activities will generate benefits on the quality of TOF and living conditions of local communities as identified in section 2.1.9 of the PD/01/.

Based on the above assessment, VVB confirms that PD/01/ has sufficiently addressed the expected community impacts of project activity and in line with section CM2.1 of CCB Standards v3.1/B01/.

3.4.6 Negative Community Impact Mitigation (CM2.2)

With reference to the assessment provided in section 3.4.3 of this report, VVB confirms that no negative impact related to HCVs have been identified. Hence there is no negative impact on communities and their groups. Furthermore, as assessed in section 3.2.25 of this report, all participating communities/05/ play a significant role in decision making process and implementation of project activities. Furthermore, it has been confirmed through on-site inspection/interviews/i-xiii/ that there is no restriction on the activities by the farmers on their own agricultural land and gathering NTFP from project activity trees. No charcoal production is carried out by farmers in baseline and project scenarios. Therefore, no mitigation measures are deemed necessary in compliance with section CM2.2 of CCB Standards v3.1/B01/.

3.4.7 Net Positive Community Well-Being (CM2.3, GL1.4)

With reference to the assessment provided in section 3.4.4 & 3.4.5 of this report, review of the PD/01/ and document review/12/, VVB confirms that the proposed project is designed to produce net positive community benefits to the communities.

It has been confirmed through on-site inspection/interviews/i-xiii/, the project activities will create diversification of own farms income by agroforestry system i.e., NTFP and carbon credits. Socio development work like health checkup camps, distribution of free ration kits and training programs on organic agriculture and quality planting materials.

Based on the above assessment, in line with section 4.2.3 of PD/01/, VVB verifies that the expected changes are reasonable and can be achieved in compliance with requirements of section CM2.3 of CCB Standards v3.1B01/.

3.4.8 High Conservation Values Protected (CM2.4)

With reference to the assessment provided in section 3.4.3 & 3.4.6 of this report, based on review of CCB VCS PD/01/, supporting evidence/10/12/ and on-site inspection/interviews/i-xiii/, VVB confirms that HCVs were identified related to community well-being in the project area were protected by social inclusion and training to communities through implementation of project activities. . Hence, no HCVs will be affected by project activities.

3.4.9 Impacts on Other Stakeholders (CM3.1)

The on-site inspection/interviews with local community members who do not have eligible lands for adopting agroforestry practices /i-xiii/ reveals that the project activity will provide an opportunity to other stakeholder have the positive biodiversity, climate change mitigation and community benefits to the region which are not directly involved in the project. Hence, VVB based on the desk review/01/05/12/ and on-site inspection/interviews/i-xiii/, confirms that the project will have positive impacts which will be demonstrated over the time. Furthermore, it has been verified that project activities will not lead to net negative impacts on other stakeholders, aligning with the requirements of section CM3.1 of CCB Standards v3.1/B01/.

3.4.10 Mitigation of Negative Impacts on Other Stakeholders (CM3.2)

Based on assessment in section 3.4.9 of this report, VVB confirms that no negative effects are expected to have on the well-being of other stakeholders during the project lifetime, hence no mitigation measures are deemed necessary.

3.4.11 Net Impacts on Other Stakeholders (CM3.3)

Refer to assessment provided in sections 3.4.9 & 3.4.10 of this report.

3.4.12 Community Monitoring Plan (CM4.1, CM4.2, GL1.4, GL2.2, GL2.3, GL2.5)

Based on the review of PD/01/ and on-site inspection/interviews/I-XIII/, VVB confirms that PP has established adequate community monitoring in line with CM4.1 of CCB Standards v3.1/B01/.

To validate the community monitoring plan, VVB has taken the following stepwise approach,

a. Checking the monitoring plan contents.

With reference to the assessment provided in section 3.2.8 of this report, the monitoring indicators are confirmed as consistent with the expected impacts which have been created by project activities and these monitoring indicators i.e. Training for communities and income generation due to sale of fruits have been designed and used for monitoring actual changes and for monitoring perceived impacts by considering the different impacts to the stakeholders. Also, a PRA, especially Focus Group Discussion (FGD) process will be conducted to collect the issues and comments from the communities and to improve the implementation and participation in project activities.

b. Verify the reasonability of the plan.

It has been confirmed through on-site inspection/interviews[/i-xiii/], PP will establish a series of procedures including organizing expert team and PRA survey specially Focus Group Discussion (FGD) and this PRA survey includes self-help groups, farmers, Panchayat members and women.

Based on the above assessment, VVB confirms that the indicators mentioned in the PD[/01/] (section 2.1.11) are valid and appropriate for monitoring well-being impacts and risks for farmers/ community members and indicators of impacts on women, in accordance with the requirements of section CM4.1 of CCB Standards v3.1[/B01/].

3.4.13 Monitoring Plan Dissemination (CM4.3)

With reference to the assessment provided in section 3.2.19 of this report and based on review of CCB & VCS PD[/01/], document review[/05/06/] and on-site inspection interviews[/i-xiii/], VVB confirms that the community monitoring plan disseminated in the meeting for participating communities the monitoring plan, and any results of monitoring undertaken in accordance with the monitoring plan, will be disseminated and made publicly available on VERRA websites[/B05/].

Furthermore, during the on-site inspection/ interviews[/i-xiii/], VVB has reviewed and verified the hardcopies of project description and relevant project documentation at PP office (GKF Agroforestry).

In the opinion of VVB, the dissemination of community monitoring pan is in line with requirements of section CM4.3 of CCB Standards v3.1[/B01].

3.4.14 Optional Gold Level: Exceptional Community Criteria (GL2.1)

Not applicable; The project activity does not claim a community gold level certification.

3.4.15 Optional Gold Level: Short-term and Long-term Community Benefits (GL2.2)

Not applicable; The project activity does not claim a community gold level certification.

3.4.16 Optional Gold Level: Community Participation Risks (GL2.3)

Not applicable; The project activity does not claim a community gold level certification.

3.4.17 Optional Gold Level: Marginalized and/or Vulnerable Community Groups (GL2.4)

Not applicable; The project activity does not claim a community gold level certification.

3.4.18 Optional Gold Level: Net Impacts on Women (GL2.5)

Not applicable; The project activity does not claim a community gold level certification.

3.4.19 Optional Gold Level: Benefit Sharing Mechanisms (GL2.6)

Not applicable; The project activity does not claim a community gold level certification.

3.4.20 Optional Gold Level: Benefits, Costs, and Risks Communication (GL2.7)

Not applicable; The project activity does not claim a community gold level certification.

3.4.21 Optional Gold Level: Governance and Implementation Structures (GL2.8)

Not applicable; The project activity does not claim a community gold level certification.

3.4.22 Optional Gold Level: Smallholders/Community Members Capacity Development (GL2.9)

Not applicable; The project activity does not claim a community gold level certification.

3.5 Biodiversity

3.5.1 Existing Conditions (B1.1)

The biodiversity conditions within the project zone at the project start justified in the CCB VCS PD/01/. It has been confirmed through on-site inspection/interviews/i-xiii/, the project zone characterized by extensive and long-term farming on agricultural lands and no other activities have been developed during the years and ecological structure of most project sites is relatively homogeneous due to traditional agricultural practices and same has been confirmed by reviewing evidence/10/12/. VVB confirms that the project site is mostly low productive agricultural lands/10/ under immense anthropogenic pressures like population growth, overexploitation of natural resources, fragmentation and habitat destruction, therefore biodiversity was verified as low and does not support biodiversity of the region.

Based on the above assessment, VVB confirms that the status of biodiversity within the project zone at the start of the project is actual and reasonable and PD/01/ has been adequately demonstrated the existing biodiversity at project start in compliance with requirements of section B1.1 of CCB Standards v3.1/B01/

3.5.2 High Conservation Values (B1.2)

In line with the PD/01/ and confirmed through on-site inspection/interviews/i-xiii/ that the project is predominantly conservation of tree species and includes the plantation of 41 tree species in which 3 endangered species, 2 vulnerable and 1 critically endangered species. Furthermore, VVB confirms that the proposed activity aims to promote conservation of threatened species through agroforestry activities.

Based on the above assessment, VVB confirms that PP has adequately demonstrated the HCVs present in the project area in compliance with B1.1 of CCB Standards v3.1/B01/.

3.5.3 Without-project Scenario: Biodiversity (B1.3)

With reference to the assessment provided in section 3.5.1 of this report, VVB confirms that the without project scenario would clearly have no positive effect on biodiversity of the area. VVB has

taken following steps have been carried to validate how the without project land use scenario would affect the biodiversity conditions of the project zone.

The biodiversity conditions within the project zone at the project start justified in the CCB VCS PD/01/. It has been confirmed through on-site inspection/interviews/i-xiii/, the project zone characterized by extensive and long-term farming on agricultural lands and no other activities have been developed during the years and ecological structure of most project sites is relatively homogeneous due to traditional agricultural practices and this has been further confirmed by reviewing evidence. Furthermore, project sites are mostly low productive agricultural lands/10/, therefore biodiversity was verified as low and the scenario without project has a serious threat to the species due to extreme anthropogenic pressure like population growth, habitat destruction, fragmentation and over exploitation of natural resources present in project zone.

Hence, in compliance with section B1.3 of CCB Standards v3.1/B01/, VVB concludes that without project land use scenario would affect the biodiversity conditions in the project zone due to continuing the non-use of the current land and has a serious threat to the species present in project zone, thus the positive changes to biodiversity can't be expected.

3.5.4 Expected Biodiversity Changes (B2.1)

VVB, based on the review of PD/01/ and confirmed through on-site inspection/interviews/i-xiii/, the project activity includes the plantation of 41 different tree species with including threatened species as per ICUN/B06/. It has been confirmed that the polyculture pattern is used by the project for afforestation and such pattern of mixed tree species will increase the flora and fauna biodiversity compared to baseline scenario.

Hence, in compliance with section B2.1 of CCB Standards v3.1/B01/, VVB concludes that the project impact on biodiversity will be overwhelmingly positive when compared to without project scenario.

3.5.5 Mitigation Measures (B2.3)

Based on the review of CCB & VCS PD/01/ and confirming through on-site inspections and interviews/i-xiii/, it has been ascertained that the project does not exhibit any adverse impacts, and therefore, no mitigation measures are deemed necessary.

Furthermore, with reference to the assessment provided in section 3.2.12 & 3.5.9 of this report, VVB confirms risks to the expected biodiversity benefits during the project lifetime are assessed accurately and the mitigation measures/06/ are in place. VVB confirms that the overall risks to the project are low, no major risks have arisen that may cause any loss of project benefits for the biodiversity, so that long-term viability is assured, and this has further verified by reviewing supporting document/06/ and on-site inspection/interviews/i-xiii/ with PP and stakeholders.

3.5.6 Net Positive Biodiversity Impacts (B2.2, GL1.4)

With reference to the assessment provided in section 3.5.4 of this report, based on review of CCB & VCS PD/01/ and confirmed during on-site inspection/interviews/i-xiii/ project involves plantation of 41 different species has different positive impact on soil, climate and biodiversity and plantation of trees on agricultural lands increase of flora and fauna biodiversity can be recorded and species of animals and diverse tree outside forest will be protected. Furthermore, VVB confirms that afforestation activity is implemented with scientific and reasonable configuration method, no

burning and slash and effective control on pest infections/06/ and with these planted trees gradually grow up to forest, project sites will become ecological community with the domain of tall species which will improve biodiversity.

Furthermore, based on desk review and on-site inspection/interviews/i-xiii/, VVB confirms that the proposed activity designed as agroforestry, which play critical role in sustain sustainable agriculture, food security, household economy, supply of many products and services being reservoirs of ecological functions like conservation of biodiversity and carbon sequestration and Tree outside forest, will be viewed as an avenue for biodiversity conservation, carbon sequestration, climatic stabilization and livelihood support in rural areas.

In the opinion of VVB, project benefits biodiversity deems to be reasonable and realistic, so that long-term viability is assured in compliance with the requirements set out in section B.2.2 and GL1.4 of CCB Standard version 3.1/B01/.

3.5.7 High Conservation Values Protected (B2.4)

With reference to the assessment provided in section 3.5.2 of this report, based on review of CCB VCS PD/01/, supporting evidence/10/12/ and on-site inspection/interviews/i-xiii/, VVB confirms that HCVs were identified related to biodiversity in the project area are protected and conserved by farmers. Hence, no HCVs will be affected by project activities.

3.5.8 Species Used (B2.5)

Based on the review of CCB & VCS PD/01/ and confirmed during on-site inspection/interviews/i-xiii/ that project activity includes plantation of non-invasive species i.e., *Santalum album* and a variety of other 40 native tree species namely,

1. *Anacardium occidentale- Cashew*
2. *Annona reticulata- Custard apple*
3. *Artocarpus heterophyllus- Jack fruit*
4. *Aquilaria malaccensis- Agarwood*
5. *Azadirachta indica- Neem*
6. *Bambusa vulgaris- Bamboo*
7. *Murraya koenigii- Sweet neem*
8. *Butea monosperma- Palash*
9. *Borassus flabellifer- Asian palmyra tree*
10. *Chloroxylon swietenia- East Indian satinwood*
11. *Casuarina equisetifolia- Iron oak*
12. *Citrus limetta- sweet lemon*
13. *Citrus limon- Lemon*
14. *Cocos nucifera- Coconut*
15. *Dalbergia sissoo- Indian rose wood*
16. *Elaeis guineensis- Oil Palm*
17. *Ficus carica- Fig tree*
18. *Ficus benghalensis- Banyan tree*
19. *Grevillea robusta- Silk oak*
20. *Haloptelea integrifolia- Indian elm*
21. *Leucaena leucocephala- Wild tamarind*
22. *Melia dubia- Malabar Neem*
23. *Millettia pinnata- Indian beech*

24. *Mangifera indica- Mango*
25. *Manilkara zapota- Sapodilla*
26. *Moringa oleifera- Drumstick tree*
27. *Pterocarpus santalinus- Red Sandalwood*
28. *Phyllanthus emblica- Amla*
29. *Phoenix dactylifera- Palm*
30. *Prunus amygdalus- Almond*
31. *Psidium guajava- Guava*
32. *Punica granatum- Pomegranate*
33. *Roystonea regia- Royal palm*
34. *Santalum album- Indian sandalwood*
35. *Swietenia macrophylla- Mahogany*
36. *Sapindus mukorossi- Indian soapberry*
37. *Syzygium cumini- Java plum*
38. *Tamarindus indica- Tamarind*
39. *Tectona grandis- Teak*
40. *Theobroma cacao- Cocoa tree*
41. *Ziziphus mauritiana- Indian jujube*

3.5.9 Impacts of Non-native Species (B2.6)

Based on review of CCB & VCS PD/01/ and on-site inspection/ interviews/i-xiii/, VVB confirms that only tree species i.e., *Swietenia macrophylla* (Mahogany) and *Leucaena Leucochephala* were planted as a part of the project implementation which are a non-native tree. However, PP has provided sufficient literature/B06/ to demonstrate that the species have been proven to be adapted to the agro-ecological zone(s) in which the project is located.

In the opinion of the VVB, the plantation of mahogany tree and *Leucaena Leucochephala* species have no potential adverse effects on the region's environment, and it will not create potential adverse impacts to the other tree species which have planted part of project activities deems to be valid and compliance with the requirements of section B2.6 of CCB Standards v3.1/B01/.

3.5.10 GMO Exclusion (B2.7)

In line with VCS & CCB PD/01/ no GMOs were used in the project to generate GHG emissions reductions or removals.

Furthermore, based on site visit and interviews/i-xiii/ VVB confirms that no GMOs have been used in project activities.

3.5.11 Inputs Justification (B2.8)

During on-site inspection/interviews/i-xiii/, it is confirmed that only farmyard manure used as fertilizer to improve the soil fertility. This farmyard manure is organic, and no adverse effects are anticipated from its use. Hence VVB confirms that no harmful or chemical inputs are used.

3.5.12 Waste Products (B2.9)

During the on-site inspection/interviews[/i-xiii/], it was confirmed that there are no waste and waste products laid on the project area. In addition, the leaves, fruits and nuts shed by trees will either be used as fodder or food for humans or be left as litter.

3.5.13 Negative Offsite Biodiversity Impacts (B3.1) and Mitigation Measures (B3.2)

With reference to assessment provided in section 3.5.5 of this report, VVB confirms that there will be no potential negative impacts on biodiversity outside of the project zone would resulting from project activities; the project contributes to the conservation of the project area biodiversity and ecosystem. Hence no mitigation measures are deemed necessary. This has been further confirmed by reviewing the PD, supporting evidence and on-site inspection/interviews[/i-xiii/].

3.5.14 Net Offsite Biodiversity Benefits (B3.3)

With reference to the assessment provided in sections 3.5.4 & 3.5.6 of this report. VVB confirms that increased tree cover in project area will provide opportunity to biodiversity of the region to grow and regenerate and improves local environmental conditions and resilience for the region to changing climatic patterns and this has been further verified by reviewing PD[/01/] and on-site inspection/interviews[/i-xiii/].

Based on the above assessment, VVB justifies that the net effect of the project on biodiversity will be positive and in compliance with requirements of section B3.3 of CCB Standards v3.1[/B01/].

3.5.15 Biodiversity Monitoring Plan (B4.1, B4.2, GL1.4, GL3.4)

Based on the review of PD[/01/] and on-site inspection/interviews[/i-xiii/], VVB confirms that PP has established adequate biodiversity monitoring in line with CM4.1 of CCB Standards v3.1.

To validate the community monitoring plan, VVB has taken the following stepwise approach,

a. Checking the monitoring plan contents

In line with the CCB VCS PD, PP has established standard ecological methods for monitoring biodiversity and sample plot of 0.1 ha will be laid according to the Stratified Random Sampling techniques in farmer's field. Sampling will be conducted at each verification of the project. In each quadrat cbh (circumference at breast height i.e., at 1.37 m above ground level) of each tree (>10 cm cbh) will be measured and individuals at cbh< 10 cm will be recorded as saplings (Pande *et al*., 1988) and vegetation composition will be evaluated by analyzing the frequency, density, abundance and importance value index (IVI) according to Mishra (1968) and Curtis and McIntosh (1951) as given below:

$$\text{Frequency} = \frac{\text{Total no. of quadrats in which the species occurred}}{\text{Total no. of quadrats studied}} \times 100$$

VVB confirms that frequency indicates the number of sampling units in which a given species occur and thus expresses the dispersion of various species.

$$\text{Density} = \frac{\text{Total no. of individuals of a species}}{\text{Total no. of quadrats studied}}$$

VVB confirms that the density represents the numerical strength of species in the community.

$$\text{Abundance} = \frac{\text{Total no. of individuals of a species}}{\text{Total no. of quadrats in which the species occurred}}$$

VVB confirms that the The ratio of abundance to frequency (A/F) was used to represent the distribution pattern

Importance Value Index (IVI):

VVB confirms that IVI expresses the abundance and ecological succession of any species. IVI was estimated as follows,

$$\textbf{Relative Frequency}\ (\%) = \frac{\text{Frequency of a species}}{\text{Frequency of all species}} \times 100$$

$$\textbf{Relative Density}\ (\%) = \frac{\text{Number of individuals of a species}}{\text{Number of individuals of all species}} \times 100$$

$$\textbf{Relative Dominance}\ (\%) = \frac{\text{Basal area of a species}}{\text{Basal area of all species}} \times 100$$

Importance Value Index (IVI) = Rel. Freq. + Rel. Den. + Rel. Dom.

Consistency of species was also calculated to know the stability in the distribution of species in all the sites. The formula applied will be as follows:

$$\text{Consistency}\ (\%) = \frac{\text{Total number of occurence of a species}}{\text{Total number of treatments studied}} \times 100$$

The **Shannon–Wiener diversity index** (H¢) (Shannon and Wiener, 1963) was calculated from the IVI values using the formula as given in Magurran (1988):

$$H' = -\sum_{i=1}^{s} p_i \ln p_i$$

where, s = the number of species

p_i = the proportion of individuals or abundance of the ith species expressed as a proportion of total cover

ln = log base n

Concentration of dominance (C_d) was measured by Simpson's index (Simpson, 1949) on the basis of their density:

Concentration of dominance (C_d) $= \sum_{i=1}^{s} (pi)^2$

where p_i is the same as for Shannon-Wiener's index.

α-diversity is within area diversity, measured as the number of species occurring within an area of given size (Huston, 1994). It is therefore a measure of richness of a potentially interactive assemblage of species.

The **beta diversity** (β-diversity) was introduced by Whittaker (1960) to designate the degree of species change along a given habitat; as such it is a measure of the between area diversity. It indicates rate of proportion and is normally represented in terms of similarity index or of a species turnover rate. It was computed by using the following formula:

Beta diversity(β) **=** $\frac{Sc}{S}$

where Sc is the total number of species encountered in all communities and S is the average number of species per community.

Equitability or **evenness** was calculated following the formula given by Pielou (1966, 1969), which reads:

Evenness (J) = $\frac{H'}{H'_{max}} = \frac{\sum_{i=1}^{s} p_i \ln p_i}{\ln s}$

where, s = the number of species
p_i = the proportion of individuals or abundance of the i^{th} species expressed as a proportion of total cover
ln = log base n

b. Verify the reasonability of the plan

With reference to the above assessment, VVB verifies that PP has established a suitable biodiversity monitoring plan designed to ensure accuracy and complete coverage of entire of the project area. Furthermore, VVB confirms that the sample plots are located randomly, aiming to cover the heterogeneity of the project area. Therefore, in the opinion of VVB, the biodiversity monitoring plan described in CCB VCS PD is deems to be valid and in compliance with requirements of section B4 of CCB Standards v3.1.

3.5.16 Biodiversity Monitoring Plan Dissemination (B4.3)

With reference to the assessment provided in section 3.2.19 of this report and based on the review of CCB & VCS PD/01/ and on-site inspection interviews/i-xiii/, the monitoring plan, and any results of monitoring undertaken in accordance with the monitoring plan, will be disseminated and made publicly available on VERRA website/B05/.

Furthermore, during the on-site inspection/ interviews/i-xiii/, VVB has reviewed and verified the hardcopies of project description and relevant documentation at PP office (GKF Agroforestry)/B05/.

In the opinion of VVB, the dissemination of biodiversity monitoring pan is in line with requirements of section CM4.3 of CCB Standards v3.1/B01.

3.5.17 Optional Gold Level: High Biodiversity Conservation Priority Status (GL3.1)

Not applicable; The project activity does not claim a biodiversity gold level certification

3.5.18 Optional Gold Level: Trigger Species Population Trends (GL3.2, GL3.3)

Not applicable; The project activity does not claim a biodiversity gold level certification

4 VALIDATION CONCLUSION

CCIPL has performed the validation of the proposed project activity "Grouped Sustainable Agroforestry Project" commissioned by the project proponent ClimeTrek Limited.

The validation process was performed based on all guidance and criteria as provided by VCS & CCB including the following: VCS Standard version 4.6/B01/, CCB Standard 3.1/B01/, CCB Program Definitions v3.0/B01/, VCS Program Guide version 4.3, AFOLU Non- Permanence Risk Tool version 4.2 and the applied CDM methodology AR-ACM0003 – "Afforestation and reforestation of lands except wetlands" (version 2.0)/B02/. The project specific information has been provided in the CCB & VCS PD/01/ as required by the VCS and CCB Standards and meets the requirements of the applied baseline and methodology AR-ACM0003/B02/.

The validation assessment has been conducted to indicate the reasonableness of assumptions, limitations, and methods supporting the statement made by project proponent regarding the ex-ante i.e., constant values for the relevant data and parameters.-Based on the review of the CCB & VCS PD/01/, carbon calculation spreadsheet/03/, and relevant supporting evidence (i.e., peer review literature/B06/, IPCC default values/B06/,), VVB confirms that all the assumptions and statements made by PP are valid and appropriate with the possible reasonableness. Further, VVB assessed the relevant data and parameters in section 3.3.8 of this report.

The estimated GHG statement is the responsibility of the project proponent. The project activity provides the information in CCB & VCS PD/01/ as required by the CCB & VCS Standard/B01/ and Validation and Verification Manual and in Carbon Check's opinion meets the requirements of the applied baseline and monitoring methodologies and is likely to achieve the estimated emission reductions.

VVB, at conclusion, confirms the reasonableness of the assumptions, limitations and methods, used to forecast information, and based on the evaluation (as detailed in this report), confirms that sufficient and appropriate information has been provided in the CCB & VCS PD/01/ for future estimate, any limitation and methods, used for the forecast.

The validation has been performed using a risk- based approach, as described above. VVB, during the validation, a total of 27 findings have been raised, which includes 10 (ten) Corrective Action Requests (CARs), 17 (Seventeen) Clarification Requests (CLs) and 00 (Zero) Forward Action requests (FARs). The VVB states that all findings were properly addressed by PP and satisfactorily closed by the validation team.

APPENDIX I: LIST OF DOCUMENTS

S no	Documents	Reference
/01/	CCB & VCS PD	Version 01 (Dated: 10-08-2023) Version 02 (Dated 31/12/2023) Version 03 (Dated: 20/04/2024) Version 04 (30/03/2024)
/02/	VCS NPR Report A.2 NPR GKF Agroforestry VCS_NPR_REP_ NPR_Evidence	Version 01 (Dated: 01-08-2023) Version 02 (Dated:31-12-2023) Version 01 (Digitally filled) (Dated: 26-03-2024)
/03/	Exante carbon calculations B.1 GKF Calculations_ ex-ante Exante CLIMETREK_ER_SHEET_GKF_26_MARCH_2024 CLIMETREK_ER_SHEET_GKF_29_MARCH_2024	Carbon calculation sheet
/04/	Land & Carbon Rights documents. D.1 Contractual agreement between parties involved Folder_D. 2 Agreement between project implementor and landowners H.3 Land records and Carbon rights Folder_SampleAgreements (40-year agreements)	Land & Carbon Rights documents
/05/	Stakeholder Consultations I.1 GKF-LSC Report I.1 GKF-LSC Report I.2 Invitation Letter I.3 Stakeholder meeting presentation I.4 MOM_ Nagar Kurnool[1] (1) I.4 MOM_Allapalli[1] (1) I.4 MOM_Krishna[1] (1) I.4 MOM_Nalgonda[1] (1) I.5 attendance sheet I.7 Stakeholder Analysis (1) Meeting Agenda Folder_Attendence Grievance I.7 Stakeholder Analysis (1)	Local Stakeholder consultations
/06/	Project operation Monitoring policy Non-Conformities ORGANISATION STRUCTURE Quality Assurance (1) AMP_Climetrek (Adaptive management plan) Models J.9 Pest Control and Prevention K.5 List of Species Folder_J.7 Training Waste management policy National and Local Laws	

	officials letters SS C.3 GKF Project implementation plan Folder_Employment(cv) Folder_Training manual and record Anti-discrimination policy Occupational safety document & Worker safety manual	
/07/	Start Date Start date proof document. Folder_ Start date document sample	
/08/	K.2 Declaration GKF GKF JV signed Folder_Incorporation	Others (Double counting letter)
/09/	Folder_K.4 Field Pics	Others
/10/	GIS Shapefiles and Forest and non-Forest analysis Merged 1 Kml (1).kml Folder_ GKF KML 14 dictrict FRESH__AP_TS Folder_ AP_TS_FOR_NON (1) Districts kml files with areas (1) FOREST_NON_FOREST_AREA_REPORT Folder_Excell sheets Folder_kml files	KML/ Shapefiles/Forest and non-Forest analysis
/11/	Documents reviewed during on-site inspection/interviews Land Agreements with farmers Nursery seedling purchase receipt (Project start date) Grievance Mechanisam (whatsapp) GKF Farmers Register Farmer Grievance Register Staff Trainings SOP's Nursery Activities Booklet LSC- Invitation Letter LSC original stakeholder attendance list LSC- Minutes of Meeting	Documents reviewed during on-site inspection/interviews.
/12/	CCB relevant documents A.6 BASELINE_BIODIVERSITY A.5 COMMUNITY BASELINE SURVEY REPORT A.4 Community Engagement Report CCB_DEMONSTRATION_1 CCB_IMPLEMTATION_PLAN I.8 LIST OF COMMUNITIES AND COMMUNITY GROUPS	
/B01/	VCS Program Guide (v4.4, dated 29/08/2023) VCS Standard (v4.6, dated 21/03/2024) CCB Standard (v3.1, dated 21/06/2017) (d) CCB Program Definitions (v3.0 dated 21/06/2017 (e) Program Definitions (v4.3, dated 21/12/2022) (f) Registration & Issuance Process (v4.3, dated 17/01/2023) e) VCS Registration & Issuance process (v4.4 dated 04/10/2023) VCS Validation and verification manual (v3.2 dated 19/10/2016) AFOLU Non-permanence Risk Tool (v4.2 dated 12/10/2023)	Others (CCB & VCS Requirements)
/B02/	CDM AR-ACM0003: Afforestation and reforestation of lands except wetlands -Version 02.0	Applied methodology
/B03/	"Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities" (Version 01)	Applied tools

	"Calculation of the number of sample plots for measurements within A/R CDM project activities" (Version 04.2) Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities	
/B04/	a) Other GHG programs: CDM: https://cdm.unfccc.int/Projects/index.html VCS: https://registry.verra.org/app/search/VCS/All%20Projects GSF: https://registry.goldstandard.org/projects?q=&page=1 PlanVivo: https://www.planvivo.org/pages/category/projects?Take=28	
/B05/	State Government Land record websites Telangana: https://dharani.telangana.gov.in/knowLandStatus Andhra Pradesh: https://meebhoomi.ap.gov.in/ Soil: https://slusi.dacnet.nic.in/dss/searchDSS.html https://gkfagroforestry.in/ https://find-and-update.company-information.service.gov.uk/company/13347526	
/B06/	Literature review https://www.iucn.org/resources/conservation-tool/iucn-red-list-threatened-species https://www.currentscience.ac.in/Volumes/117/06/1054.pdf https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/4_Volume4/19R_V4_Ch04_Forest%20Land.pdf https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/4_Volume4/19R_V4_Ch05_Cropland.pdf icfre.gov.in/publication/publication43.pdf EXPERT-COMMITTEE-REPORT-ON-TOF-18112018_0.pdf (moef.gov.in) https://www.researchgate.net/publication/271658221 https://bhuvan-app1.nrsc.gov.in/thematic/thematic/index.php https://redd.unfccc.int/media/india_national_redd__strategy.pdf	Literature sorces

	https://iclg.com/practice-areas/employment-and-labour-laws-and-regulations/india https://www.worldbank.org/en/publication/worldwide-governance-indicators/interactive-data-access https://apsdma.ap.gov.in/files/4afe4671523e4dae338d84cc9560ccde.pdf https://redd.unfccc.int/files/india_national_redd__strategy.pdf https://www.britannica.com/place/Andhra-Pradesh/Government-and-society https://www.britannica.com/place/Andhra-Pradesh/People Socio Economic Survey 2022-23, Planning Department, Govt. of Andhra Pradesh https://www.fao.org/3/cb1203en/CB1203EN.pdf https://www.global-wetland-outlook.ramsar.org/ http://www.raosoft.com/samplesize.html https://verra.org/wp-content/uploads/social-and-biodiversity-impact-assessment-sbia-manual-for-redd-projects-part-1.pdf Support to Renewable Energy Directive (europa.eu)	
/B07/	SBIA Manual for REDD+ Projects: Part 1 – Core Guidance for Project Proponents	

APPENDIX II: FINDINGS LOG

4.1 Table 1. CL from this validation

CL	01	**Section no.**	Stratification	**Date:** 01/11/2023
Description of CL				
The stratification is carried out on the basis of the variability of the biomass stock of the dominant pool. PP is requested to clarify on, that how stratification captures the biomass distribution of the project and improves the precision of the biomass estimates. As the project area is not homogenous, PP is requested to demonstrate the stratification in compliance with section 5.3 of the AR-ACM0003 v2.0 methodology.				
Project proponentresponse				**Date: 20/01/2024**
Section 5.3 of the AR-ACM0003 v2.states that "If biomass distribution over the project area is not homogeneous, stratification should be carried out to improve the precision of biomass estimation'", Stratification is based on the year of plantation as the main criteria for the determination of sample size. Tress planted in different year has variable growth rates. Further, for the representation of spatial extent of the project area and the species planted in project area, Area Proportionate method of sample allocation was followed so that the species and spatial location of the project area are significantly represented and the desired precision of 90 % confidence interval with 10 % error is achieved as recommended in A/R Methodological Tool "Calculation of the number of sample plots for measurements within A/R CDM project activities". Stratification method has been described in PD Section 3.3.3 Monitoring Plan.				
Documentation provided by project proponent				
Sample plot calculated are mentioned in PD.				
VVB assessment				**Date:22/01/2024**
VVB, based on the review of response and section 3.3.3 of revised PD confirms that PP has appropriately demonstrated the stratification process that followed during monitoring activities and in line with section 5.3 of applied methodology requirements. Furthermore, the same has been confirmed during on-site inspection/ interviews with PP and MRV personnel. **CL has been closed**				

CL	02	**Section no.**	Leakage	**Date:** 01/11/2023
Description of CL				
PP is requested to clarify on the account of estimation of leakage as zero. As mentioned in the section 2.1.1 of VCS-CCB PD, the project is being implemented in fallow agricultural land. This leads to a risk of displacement of agricultural activities due to plantation of trees. Additionally, PP is requested to demonstrate the planting density that allows sufficient crop production. Furthermore, PP shall provide leakage calculations in compliance with section 6 of CDM tool 15.				
Project proponent response				**Date: 20/01/2024**
Various plantation models like 20 ft X 20 ft, 18 ft X 20 ft, 15 ft x 15 ft, 12 ft x 18 ft, 12 ft X 12 ft models are followed. Digging of soil for the plantation is done in 1 ft X 1 ft pit (0.09 sq m). Considering maximum spacing of 6 m X 6 m, 0.24 percent area of land is disturbed due to soil management while considering minimum spacing of 4 m X 4 m, 0.67 percent area of land is disturbed due to soil management which is less than 10% of the area				
Documentation provided by project proponent				
Agroforestry models adopted for plantation with spacing are attached.				
VVB assessment				**Date: 22/01/2024**

As per review of PP response and section 3.2.3 of revised CCB & VCS PD, VVB finds it unclear how the implemented plantation models would allow sufficient crop yield that prevent displacement of agricultural activities. Additionally, PP is required to provide justification supported by evidence demonstrating the feasibility of the proposed plantation models within an agroforestry/intercropping planting design.

Furthermore, PP shall provide clarification on plantation densities implemented in project area and expected plantation densities in future instances. This information should be demonstrated in relevant sections of PD. While doing so, PP shall make leakage calculations in line with CDM AR-Tool15.

CL is still open.

Project proponent response	**Date20/01/2024**

In the Project site (i) Agri-horticulture system that it combines fruit trees with crops and (ii) Agri-silvi-horticulture system of combining trees, fruit trees, and crops are among twenty common agroforestry systems are practiced are being followed across India[6].

ARR activities are implemented in the low productive agriculture land owned by the farmers.
Agroforestry models adopted are having the spacing of 5m x 5m, 3 m x 3m and 8m x 8m.

- ***https://hindi.icfre.gov.in/UserFiles/File/Books/Agroforestry%20Models%20Developed%20by%20ICFRE.pdf***
- ***https://www.researchgate.net/publication/299283879_Evaluation_of_Mango_Based_Agroforestry_is_an_Ideal_Model_for_Sustainable_Agriculture_in_Red_Laterite_Soil***

Handa, A. K., Dev, Inder., Rizvi, R H., Kumar, Naresh., Ram, Asha., Kumar, Dheeraj., Kumar, Anil., Bhaskar, S., Dhyani, S K. and Rizvi, Javed (eds). 2019. Successful Agroforestry Models for Different Agro-Ecological Regions in India. Jointly published by the Central Agroforestry Research Institute (CAFRI), Jhansi, and the South Asia Regional Programme (based in New Delhi) of World Agroforestry (ICRAF).

ARR activities are implemented in the low productive agriculture land owned by the farmers. Agroforestry models adopted are having the spacing of 5m x 5m , 3 m x 3m and 8m x 8m which contributes less than or equal to 1 percent displacement of agricultural activities within the project boundary. The agricultural activities will not be displaced outside the project boundaries.

Leakage justification mentioned in PD.

Documentation provided by project proponent

Density of the tree species followed in the project area

VVB assessment	**Date:12/03/2024**

Based on the review of the ex-ante calculation sheet, VVB confirms that PP has estimated leakage calculations due to land displacement in line with the raised CL.

During on-site inspections and interviews, it has been informed to VVB that the leakage estimations are based on the growth rate of Tectona grandis. This particular species, which is a component of the project activity, demonstrates robust growth compared to other species involved. Teak achieves maximum growth potential with potential crown expansion, as supported by information Troup's The Silviculture of Indian Trees Vol III, The Controller of Publications, 1981[/B06/] and https://www.researchgate.net/publication/271658221.

According to VVB's assessment, basing leakage estimations on the growth rate of Tectona grandis and considering it as the upper limit of growth compared to other species is considered valid and plausible.

CL has been closed.

CL	03	**Section no.**	Baseline emissions/removals	**Date:** 01/11/2023

Description of CL

PP shall justify zero baseline carbon stocks and zero changes in baseline carbon stocks. Additionally, PP is requested to demonstrate the baseline carbon stocks and changes in baseline carbon stocks are accounted as required by AR-Tool 14, Para 11-12.

Project proponent response **Date: 20/01/2024**

The project is being implemented in low productive agricultural land without any pre-project trees and shrubs. A/R Methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities" and Methodological Tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities Version 04.2" was applied to demonstrate the baseline scenarios. According to the Tools, baseline carbon stocks and changes in baseline carbon stocks will be zero. The details are described in "Quantification of GHG Emission Reductions and Removals" Section 3.2 of PD.

Para 11 of AR-Tool 14 described about the "Estimating carbon stock in shrubs at a point of time", as the project is being implemented in low productive agricultural land, the pre-project trees and shrubs are not present in project area, and hence estimation of carbon stock in shrubs at a point of time is not determined.

Para 12 is about "Data and parameters used in the tool", data and parameters are described in section 3.3 Monitoring of PD.

Documentation provided by project proponent

The relevant section of the PD has been updated.

VVB assessment **Date: 22/01/2024**

VVB, based on the review of PP response and section 3.2.1 of revised CCB & VCS PD, confirms that the land under the first project instance was previously cropland and there were no pre-project trees which can be harvested or cleared and due to no pre-project trees, Additionally, there is no mortality because of competition from trees planted in the project and PP has accounted only trees which are planted as part of project activities.

Furthermore, VVB has verified the above criteria through the remote sensing analysis for the pre-project scenario and during on-site inspection/interviews. Therefore, VVB confirms that all the conditions of the Para 11 & 12 of CDM Tool 14 are met, and the baseline can be accounted as zero.

CL has been closed.

CL	04	**Section no.**	Contractual agreement	**Date:** 01/11/2023

Description of CL

As per section 2.1.19 of the CCB-VCS PD,

"*Land and tree rights are owned by local communities and farmers are not under any legally binding commitments to maintain trees cover for the entire crediting period.*"

Furthermore, as per section 2.2.4 (5) of the non-permanence risk tool v4.0,

"Legal agreement or requirement to continue the management practice refers to any legally enforceable agreement or requirement, such as a conservation easement or protected area law that would require the continuation of the management practice that sequesters carbon or avoids emissions for the entire project longevity." As per the Non permanence risk report, PP has calculated the longevity score using the legal agreement or requirement to continue the management practice. PP shall clarify on whether the contract signed with the farmer is a legally binding and enforceable agreement for the entire project longevity.
Project proponent response **Date: 20/01/2024**
The contract signed with the farmers is legally binding but the farmers are encouraged to maintain their trees for the duration of the project crediting period. Non-permanence risk report has been revised "With legal agreement or requirement to continue the management practice".
Documentation provided by project proponent
Revised Non-permanent risk report is attached
VVB assessment **Date: 22/01/2024**
Based on the review of response, revised NPR report and agreements between PP and landowner, VVB verifies that the PP has chosen to proceed *with legal agreement or requirement to continue the management practice.* Furthermore, VVB affirms that while these agreements are legally binding, they are structured in a manner that obliges the landowners (farmers) involved in the project to maintain the project for the entire project period. These agreements have been signed by the project implementor and farmers, and during on-site inspections/interviews with farmers and the PP, it was confirmed that farmers are aware of their obligation to sustain project activities until the end of the project activity. However, as per ID.8 of document *"August 2023 Overview of VCS program updates and effective dates"* dated: 29/08/2023. *"Projects that request registration on or after 01st January 2024, PP shall comply with requirements of section 3.2.11 of VCS Standard v4.5. (Projects shall have a minimum of a 40-year project longevity.)"* However, as per review of "*clause 2*" of documents *"Agreements between project implementor and farmers".* The agreements are signed for 30 years and as per section 1.4 of revised NPR report project longevity calculated for 30 years which may lead to failure of risk assessment. In compliance with section 3.2.11 of VCS Standard v4.5, PP shall clarify on how the project longevity is ensured since agreements signed for 30 years. **CL is still open**
Project proponent response **Date:05/03/2024**
The agreement between PP and farmers has been updated for 40 years according to the as per ID.8 of document *"August 2023 Overview of VCS program updates and effective dates"* dated: 29/08/2023. *Projects that request registration on or after 01st January 2024, PP shall comply with requirements of section 3.2.11 of VCS Standard v4.5. (Projects shall have a minimum of a 40-year project longevity.)*
Documentation provided by project proponent
VVB assessment **Date 12/03/2024**

Based on the review of response, revised NPR report and agreements between PP and landowner, VVB verifies that the PP has chosen to proceed *with legal agreement or requirement to continue the management practice.*

Furthermore, VVB affirms that while these agreements are legally binding, they are structured in a manner that obliges the landowners (farmers) involved in the project to maintain the project for the entire project period. These agreements have been signed by the project implementor and farmers, and during on-site inspections/interviews with farmers and the PP, it was confirmed that farmers are aware of their obligation to sustain project activities until the end of the project activity.

CL has been closed

CL	05	**Section no.**	2.1.12, CCB &VCS PD	**Date:** 01/11/2023

Description of CAR

Under section 2.1.12 of the CCB-VCS PD, for the well being of SDG 1, it has been mentioned that:

"*Sale of NTFP and timber will provide additional income to the farmers.*"

Furthermore, in section 2.5.5 of the CCB-VCS PD, it is mentioned that,
"Farmers are the owners of the trees also and they may cut the trees as per their requirement, however, during various meetings and awareness programs farmers were advised to maintain the trees on their lands till the project duration."

PP is requested to clarify on whether harvesting is part of the project and how the permanence of the carbon stock is ensured throughout the crediting period.

Project proponent response — **Date: 20/01/2024**

Harvesting is not the part of the project; trees in the project area are promoted for the conservation and sale of non wood forest produce in the form of fruits for income to the farmers so that the livelihood of the communities residing in project area is improved.

Documentation provided by project proponent

Harvesting is not the part of the project. Agreement with farmers is for maintenance of trees for project duration

VVB assessment — **Date: 22/01/2024**

As per review of response and revised CCB & VCS PD, VVB observed the following,

Under section2.5.5 of the CCB-VCS PD, it has been mentioned that,

"Farmers are landowners and no illegal logging, or any other kind of illegal activity has been identified. Farmers are the owners of the trees also and they may cut the trees as per their requirement".

As this statement clearly indicates that farmers have the right to cut trees as required, VVB finds it unclear what specific measures the PP has developed to ensure that the project trees are not harvested, and that the permanence of project stocks is maintained.

Furthermore, it is unclear to VVB how the project is a conservation project, with no harvest, but involves the plantation of commercial timber species, and as per section 2.1.11 of revised PD, the project claims that farmers' incomes will improve through the proposed agroforestry project activity.

In view of above inconsistencies, PP is required to provide further justification for not harvesting in accordance with definition *harvesting activity* under VCS Program Definitions v4.4

CL is still open.

Project proponent response	**Date: 05/03/2024**
Farmers income will improve through the sale of non-wood forest products (fruits) and the carbon credits generated through the plantation activities. Farmers will maintain the trees for 40 years as agreement has been revised. The contribution of carbon stock of the commercial tree species is less than 20% over a five-year period that starts when a reduction of carbon stocks occurs.	
Documentation provided by project proponent	
Revised PD is attached.	
VVB assessment	**Date: 12/03/2024**
Based on the review of PP response and revised CCB VCS PD, VVB confirms that section 2.5.5 has been revised to make it transparent and included that no harvesting will be allowed till the end of project lifetime making it as a conservation project activity. Furthermore, VVB through on-site inspection/interviews, confirms that project activity includes plantation of 85% of fruit trees and 15% of commercial timber species to ensure greater income from NTFP products and this timber species were planted on boundaries but not intercropping on croplands to serve as shelterbelt and windbreaks hence, farmers and PP are not willing to harvest timber tree species. VVB affirms that the project activities are safeguarded by agreements between PP and Landowners. These agreements are structured to obligate/mandate the landowner to maintain project trees for the entire project lifespan. Furthermore, VVB has confirmed during on-site visits and interviews with both landowners and PP that they aware of this obligation to sustain project trees for lifetime. In opinion of the VVB, the project is conservation project does not fall under the definition of Harvesting activity and do not require LTA calculations. **CL has been closed**	

CL	06	**Section no.**	2.1.2, CCB &VCS PD	**Date:** 01/11/2023
Description of CL				
As per section 3.10.1 of the VCS standard v4.4: *"Projects*: Less than or equal to 300,000 tonnes of CO_2e per year. *Large projects*: Greater than 300,000 tonnes of CO_2e per year." As per the CCB & VCS PD, the project is a large-scale project. However, the annual average emission removals are133,950 tCO_2e which falls in the category of projects scale. PP is requested to clarify on the same.				
Project proponent response				**20/01/2024**
Calculation for the average annual GHG emission removal has been updated to 3963446 tCO2e, hence project will comes under the category of Large Scale.				
Documentation provided by project proponent				
Ex ante sheet is attached				
VVB assessment				**Date: 22/01/2024**
VVB, based on the review of revised PD and ex-ante calculation sheet, PP has revised to large scale as per raised CL and in line with section 3.10.1 of VCS Standard v4.5 **CL has been closed**				

CL	07	Section no.	2.1.4, CCB & VCS PD	Date:01/11/2023
Description of CL				
As per the CCB & VCS PD template instructions and section G1(1) of the CCB standard v3.1, *"A primary project proponent must be identified if there are multiple project proponents; this primary project proponent must match the project proponent listed on the title page of this template."* PP shall clarify on the primary project proponent under section 2.1.4 of the CCB & VCS PD in compliance with the above-mentioned requirement.				
Project proponent response				**Date: 20/01/2024**
Primary project proponent is Climetrek Ltd. Certificate of Incorporation submitted				
Documentation provided by project proponent				
--				
VVB assessment				**Date: 22/01/2024**
Based on the review of response and revised CCB & VCS PD, VVB confirms that the primary project proponent is *Climetrek Ltd*. Further contact details of project proponents appropriately provided on the title page of the revised CCB & VCS PD in accordance with template instructions. **CL has been closed**				

CL	08	Section no.	3.8, VCS standard v4.4	Date: 01/11/2023
Description of CL				
As per section 3.8 of the VCS standard v4.4, *"The project start date of an AFOLU project is the date on which activities that led to the generation of GHG emission reductions or removals are implemented (e.g., preparing land for seeding, planting, changing agricultural or forestry practices, rewetting, restoring hydrological functions, or implementing management or protection plans)."* PP is requested to provide documentary evidence to demonstrate the start date of the project, i.e., 4th November 2019.				
Project proponent response				**Date: 20/01/2024**
1st on-the-ground plantation establishment started on 04/11/2019 therefore considered start date of the project activity. Documentary evidence is attached.				
Documentation provided by project proponent				
Receipt/Invoice for the sale of tree sapling is attached.				
VVB assessment				**Date: 22/01/2024**
VVB, based on the review of supporting evidence observed that the evidence is unclear in demonstrating the project start date on 04th November 2019. Hence PP is requested to provide additional justification supported by evidence to claim start date on mentioned date in line with section 3.8 of VCS Standard v4.5. **CL is still open**				
Project proponent response				
Declaration by the GKF against the start of the project is attached				
Documentation provided by project proponent				

Invoice and Declaration is submitted.	
VVB assessment	**Date:12/03/2024**
Based on the review of evidence "Start date proof document", VVB verified that PP has rectified and resolved the document as per raised CL. Therefore, VVB confirms that the initiation of project activities occurred on November 4th, 2019, the date when the first trees were planted. The same has been confirmed through on-site inspection/interviews. **CL has been closed**	

CL	09	**Section no.**	Additionality	**Date:** 01/11/2023
Description of CL				
As per section 3.14.2 of the VCS standard v4.4, "*Additionality shall be demonstrated and assessed in accordance with the requirements set out in the methodology applied to the project*". The applied methodology refer to CDM tool*"AR-Tool 02 Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities*" However, as per the CCB-VCS PD, VT0001 v3.0 tool has been applied to demonstrate additionality. PP is requested to clarifywhy the applied methodology has not been referred to demonstrate additionality.				
Project proponent response				**Date: 20/01/2024**
Section 31.4 of the PD has been updated according to the CDM tool "Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities" as recommended by the applied methodology.				
Documentation provided by project proponent				
Revised version of PD is attached.				
VVB assessment				**Date: 22/01/2024**
Based on the review of response and section 3.1.4 & 3.1.5 of revised VCS & CCB PD, PP has demonstrated baseline and additionality of project activity by using tool *"CDM AR-Tool02"*and in line with requirements stated under section 3.14.2 of VCS Standard v4.5 and paragraph 11(a) of applied methodology AR-ACM0003. **CL has been closed**				

CL	10	**Section no.**	Forest/Non-forest analysis report	**Date:** 01/11/2023
Description of CL				
PP is requested to provide the forest/non-forest analysis report to demonstrate the jjustification of the most likely land-use scenario in the baseline for the ARR project activity and to demonstrate the applicability conditions under paragraph 3 of the methodology and the requirements under section A1.1 of the VCS standard v4.4.				
Project proponent response				**Date: 20/01/2024**
Forest/Non Forest analysis report to demonstrate the justification of the most likely land use scenario in the baseline for ARR project activity is attached. Various plantation models like 20 ft X 20 ft, 18 ft X 20 sq ft, 15 ft x 15 ft, 12 ft x 18 ft, 12 ft X 12 ft models are followed. Digging of soil for the plantation is done in 1 ft X 1 ft pit (0.09 sq m). Considering maximum spacing of 6 m X 6 m, 0.24 percent area of				

land is disturbed due to soil management while considering minimum spacing of 4 m X 4 m, 0.67 percent area of land is disturbed due to soil management which is less than 10% of the area.
Documentation provided by project proponent
Forest/Non Forest Analysis report is attached.
VVB assessment **Date: 22/01/2024**
Based on the review of forest and non-forest analysis report, VVB confirms that the report is valid and appropriate for demonstrating most-likely land use scenario in the baseline, requirements under paragraph 3 of the applied methodology and A.1.1 of VCS Standard v4.5. However, PP is required to provide the shapefiles of forest and non-forest analysis according to requirements of VCS Standard. **CL is still open**
Project proponent response **05/03/2024**
Relevant shapefile having non forest and forest area is prepared.
Documentation provided by project proponent
Shapefile submitted
VVB assessment **Date:12/03/2024**
Based on the review of shapefiles, VVB confirms that the shapefiles align with the forest and non-forest analysis report presented by PP. Based on the review of shapefiles, VVB confirms that the PP has rectified and addressed the documents as per raised CL. Furthermore, VVB confirms that the shapefiles are consistent with remote sensing forest and non-forest analysis. **CL has been closed**

CL	11	**Section no.**	2.2.3, CCB-VCS PD	**Date:** 01/11/2023
Description of CL				
As per section 2.2.3 of the CCB-VCS PD template instructions, PP shall clarify on how existing laws, regulations, and governance arrangements, or lack of laws and arrangements, would likely affect land use in the absence of the project and revise the PD accordingly.				
Project proponent response				**Date: 20/01/2024**
Indian laws like, Indian Forest Act, 1927, Wild Life (Protection) Act, 1972, Water (Prevention and Control of Pollution) Act, 1974, Forest (Conservation) Act, 1980, Air (Prevention and Control of Pollution) Act, 1981, Environment (Protection) Act, 1986, National Forest Policy, 1988, Biological Diversity Act, 2002, National Environment Policy, 2006, The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, National Agroforestry Policy, 2014, and National Action Plan on Climate Change does not affect the famers practicing agroforestry on their own land. Section 2.2.3 PD has been updated accordingly.				
Documentation provided by project proponent				
Section 2.2.3 of the CCB-VCS PD has been updated. PD is attached				
VVB assessment				**Date: 22/01/2024**
Based on review of response and section 2.2.3 of revised CCB & VCS PD, VVB confirms that PP has made necessary corrections as per raised CL. Furthermore, VVB confirms that none of the mentioned laws mandate the implementation of proposed project activities and tree plantation on farmer lands. **CL has been closed**				

CL	12	Section no.	Additionality demonstration	Date: 03/05/2023

Description of CL

As per section 3.1.5(6) of CCB & VCS PD. It has been mentioned that,

"*The proposed project is first of its kind in the region to promote agroforestry practicesand provides technical knowledge to the farmers to plant and maintain the trees on their own land. The proposed project is not the baseline scenarios and not a common practice in the region, hence it is additional.*"

However, In accordance with CDM AM-tool-23 (v1) - Additionality of first-of-its-kind project activities,

"Applicable geographical area - should be the entire host country. If the project participants opt to limit the applicable geographical area to a specific geographical area (such as province, region, etc.) within the host country, then they shall provide justification on the essential distinction between the identified specific geographical area and rest of the host country."

PP shall demonstrate the claim for first-of-its-kind in compliance with the above tool requirements "

Project proponent response — **Date: 20/01/2024**

The claim for first-of-its kind in compliance has been updated in PD. According to the applied methodology, lot of project are listed and registered on the Verra website https://registry.verra.org/app/search/VCS/All%20Projects

Documentation provided by project proponent

Revised PD is attached.

VVB assessment — **Date: 22/01/2024**

Based on the review of revised CCB & VCS PD, VVB confirms that PP has not claimed first of its kind project. Instead,PP has demonstrated additionality through a*common practice analysis* in line with step 4 of *CDM AR-Tool 02".* This approach is deemed to be valid and appropriate.

As per paragraph 33 & 34 of CDM tool "Combined tool to identify the baseline scenario……"

- "Provide an analysis to which extent similar forestation activities to the one proposed as the A/R CDM project activity have been implemented previously or are currently underway. Similar forestation activities are defined as that which are of similar scale, take place in a comparable environment, inter alia, with respect to the regulatory framework and are undertaken in the relevant geographical area, subject to further guidance by the underlying methodology".
- "If forestation activities similar to the proposed A/R CDM project activity are identified, then compare the proposed project activity to the other similar forestation activities and assess whether there are essential distinctions between them. Essential distinctions may include a fundamental and verifiable change in circumstances under which the proposed A/R CDM project activity will be implemented when compared to circumstances under which similar forestations were carried out".

However, demonstration of step-4 (common practice analysis) of revised CCB & VCS PD is not in line with above requirements. Hence, PP is required to demonstrate common practice analysis in compliance with paragraph 33 & 34 of CDM AR-Tool02.

CL is still open.

Project proponent response

The common practice analysis has been updated according to the CDM AR Tool 02 in the revised PD.
Documentation provided by project proponent
VVB assessment **Date:12/03/2024**
Based on the review of PP response and section 3.1.4 of CCB VCS PD, VVB confirms that PD has updated to include demonstration of common practice analysis in accordance with paragraph 33 & 34 of mentioned CDM tool. Furthermore, VVB confirms that the proposed project includes plantations of 41 different species in which 02 species are vulnerable, 03 species are endangered, and 01 species is critically endangered as per the IUCN Red List. Hence, in the opinion of VVB the proposed project is additional and not a common practice in the baseline scenario. **CL has been closed**

CL	13	**Section no.**	Supporting documents	**Date:** 01/11/2023
Description of CL				
In compliance with section G.4 and section 4 of CCB Standards v3.1. PP is requested to provide the following documents: • Capacity building training manuals/records • Community employment records • Certificate of incorporation of the different project proponents involved in the project activity. • Occupational safety document • Anti-discrimination policy • Worker safety manual				
Project proponent response				**Date: 20/01/2024**
In compliance with section G.4 and section 4 of CCB Standardv3.1, the documents are submitted.				
Documentation provided by project proponent				
Documents submitted include Training Manual, community employment record, Certificate of incorporation of different project proponent, Occupational safety document, Anti-discrimination policy and Worker safety manual				
VVB assessment				**Date: 22/01/2024**
VVB, based on the review of supporting document confirms, that PP has addressed and rectified document as requested, and information is consistent with section G.4 and section 4 of CCB Standards v3.1. **CL has been closed**				

CL	14	**Section no.**	3.3.1 & 3.3.2, CCB-VCS PD	**Date:** 01/11/2023
Description of CL				
Under section 3.3.1 of the CCB-VCS PD for parameter “Allometric equation”, PP has mentioned that the value applied is according to the species. However, as per the provided ex-ante carbon calculation sheet, PP has opted for the allometric equation for mixed woody species and no species-specific equation has been provided. PP is requested to clarify whether general allometric equations or species-specific equations are used for calculation of ex-ante emission removals. Furthermore, the parameters like BEF, wood density, root to shoot ratio are missing from the data and parameters available at validation. PP is requested to clarify on the same.				

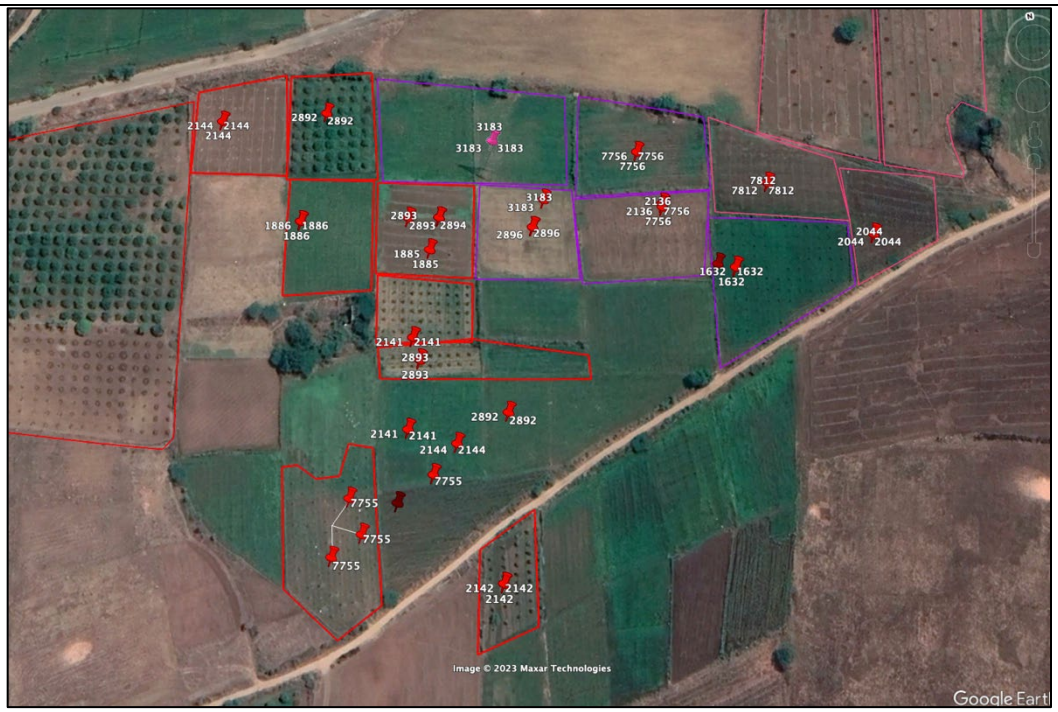
Additionally, under section 3.3.2 of the CCB-VCS PD, parameters for DBH, height, AGB, BGB, survival rate, etc. are missing. Kindly clarify on the same.
Project proponent response **Date: 20/01/2024**
General allometric equation has been applied for the trees reaching upto 10 cm of diameter while after 10 cm of DBH, species specific volumetric and allometric equations are applied in revised ex ante calculation. Section 3.3.2 of the PD has been updated and the required parameters like DBH, height, AGB and BGB has described.
Documentation provided by project proponent
PD and Ex ante sheet is attached
VVB assessment **Date: 22/01/2024**
Upon review of response and review of ex-ante carbon calculation sheet, VVB observed that the calculations are not consistent with Appendix 1(6) of CDM AR-Tool 14. (**Refer CAR 10**). Sections 3.3.1 & 3.3.2 of revised CCB & VCS PD, has been provided with all the data and parameters available at validation and to be monitored as per raised CL. However, data and parameter *"Project Area Ai"* is kept empty. **CL is still open**
Project proponent response **05/03/2024**
Data and parameter "Project Area Ai" is updated in PD and ex-ante carbon calculation sheet.
Documentation provided by project proponent
VVB assessment **Date: 12/03/2024**
Based on the review of revised PD and ex-ante calculation sheet, VVB confirms that PP has rectified and addressed the issue as per raised CL. **CL has been closed**

CL	15	**Section no.**	CCB-VCS PD	**Date:** 01/11/2023
Description of CL				
PP is requested to clarify on whether the project is opting for Gold Level for climate, community and biodiversity aspects.				
Project proponent response				**Date: 20/01/2024**
The project is not opting for Gold Level and necessary amendment in the PDD has been done in section 3.4 and 4.5				
Documentation provided by project proponent				
VVB assessment				**Date: 22/01/2023**
Based on the review of response and revised CCB & VCS PD, VVB confirms that the PP is not opting for Gold Level for climate, community, and biodiversity aspects. **CL has been closed**				

CL	16	**Section no.**	CCB-VCS PD	**Date:** 01/11/2023

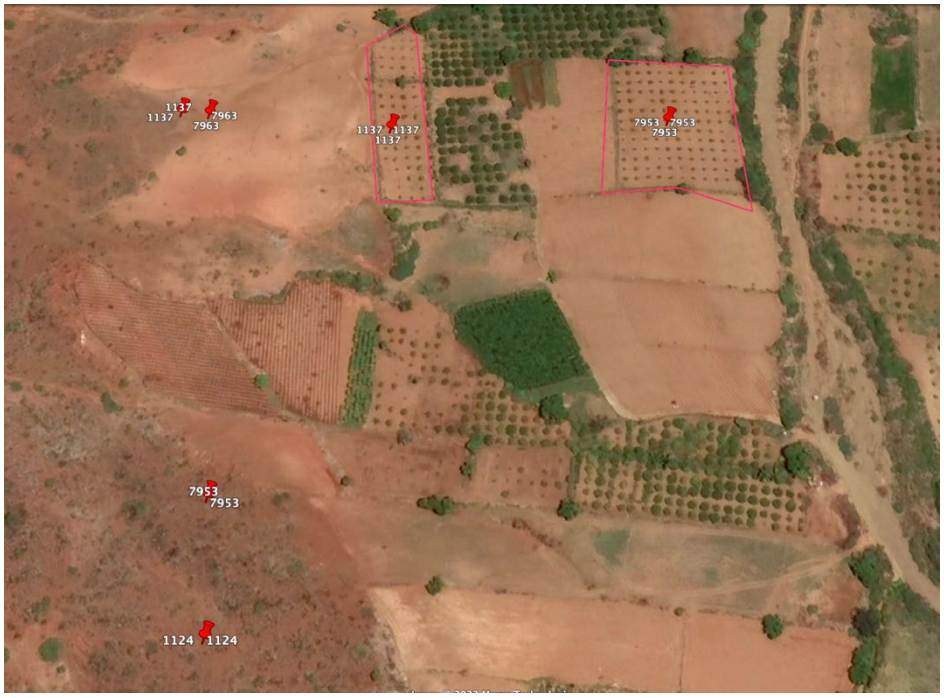
Description of CL	
As per section 5.2.5 of the CCB-VCS PD, there are 28 tree species identified by the PP. However, in the evidence, "K.5 List of Species", 31 tree species has been mentioned. Kindly clarify on this inconsistency and revise the necessary document accordingly.	
Project proponent response	**Date: 20/01/2024**
List of tree species has been updated in PD section 5.2.5. 41 species has been planted in the project area.	
Documentation provided by project proponent	
Revised list of species is updated in PD.	
VVB assessment	**Date: 22/01/2023**
Based on the review of response and section 5.2.5 of revised CCB & VCS PD, VVB confirms that 41 species included in the project activity. Furthermore, the same has been confirmed during on-site inspection &interviews. **CL has been closed**	

CL	17	**Section no.**	KML Files	**Date:** 01/11/2023
Description of CL				
The KML file provided doesn't comply with the VCS Standard, v4.4, Section 3.11.2; The polygons that correspond to each parcel or beneficiary have duplicate, triplicate and even septuplicate points, repeating the same point with the same information many times, it is required to purify the points of each parcel and leave a single point for each polygon as correspond by parcel, for reference see the examples in the next figure bellow, a) *Points in red represent the parcels with the detail information of the parcel, those points are duplicated and have more than one points in the same parcel; there are points without parcel polygon defined.*				



b) *In red five points of the same parcel, each one point has the same information of the parcel/beneficiary.*

c) *Points in red "1137,7963,7953,1124" without polygon of parcel.*



d) *A lot points (purple color) without polygon of the parcel*

e) *Red points "5989" the same polygon with 5 points for the same parcel*

f) *In compliance with section 2.1.7 of the CCB & VCS PD template instructions,*

"For grouped projects, specify potential project areas and communities that may be included in the project at a future verification.
Geodetic coordinates must be provided to allow an unambiguous identification of boundaries of the project area(s), which may be submitted separately as a KML file."

PP is requested to provide the KML files in compliance with section 3.11.1 & 3.11.2 of VCS standard v4.4 and section 2.1.7 of the CCB & VCS PD template.

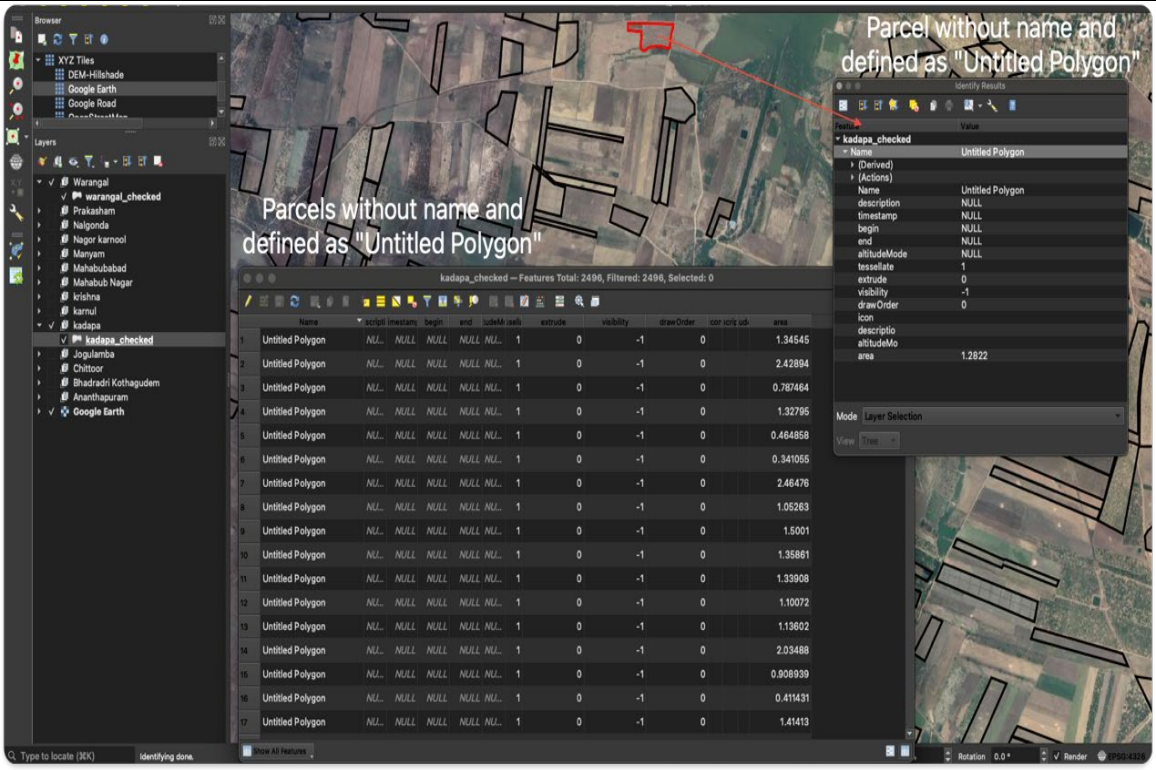
g) *According to section G.1 (7) of CCB Standards v3.1., provide a map identifying the location of communities and the boundaries of the project area(s), of the project zone, including any high conservation value areas , and of additional areas that are predicted to be impacted by project activities in achieving a reasonable level of certainty through the provision of digital data such as GPS coordinates, KML files, or shape files.*

Project proponent response	**Date: 20/01/2024**
KML files in compliance with section 3.11.1 & 3.11.2 of VCS standard v4.4 and section 2.1.7 of the CCB & VCS are submitted.	
Documentation provided by project proponent	
Revised KML files are submitted	
VVB assessment	**Date: 22/01/2024**
a. The kml files submitted by PP all the parcels are corrected delimitated according to verified in Google Earth, but some of the parcels exhibit inconsistencies about the detailed information regarding to the compliance of the VCS standard v4.4 section 3.11.1 & 3.11.2.	

- *The table below evidenced that parcels have missing detailed information (name of parcels/name of beneficiary or unique code name for each parcel), in the table the **red number** corresponding to the total number of parcels without unique name and in others case parcels that has been named "Untitled polygons", according to the VCS standard each parcel should to have a detailed information that allow to identify where net emission reduction and removals occur.*

Districts	Total parcel by kml files	Total number of the parcels without name or named "Untitled polygons" bykml file
Ananthapuram	3507	17
Bhadradri	230	6
Chittoor	1201	0
Jogulamba	88	0
Kadapa	2496	2160
Karnul	91	0
krishna	635	562
Mahabub nagar	125	5
Mahabubabad	131	10
Manyam	2781	21
Nagar karnool	3537	0
Nalgonda	5118	41
Prakasham	132	4
warangal	57	7
Total	**20,129.00**	**2,833.00**

For reference, please see the figure below to clarify the details of the inconsistencies found in the kml files provided.



CL is still open

Project proponent response	**Date05/03/2024**
Corrected KML files are uploaded and shared with VVB.	
Documentation provided by project proponent	
VVB assessment	**Date:12/03/2024**
Based on the review of KML files, the VVB confirms that all parcels are accurately delineated as verified in Google Earth. Additionally, each parcel contains detailed information in compliance with the VCS standard v4.5. **CL has been closed**	

4.2 Table 2. CAR from this validation

CAR	01	**Section no.**	Editorial, CCB &VCS PD	**Date:** 01/11/2023
Description of CAR				
1. PP is requested to revise the cover page of CCB & VCS PD in compliance with template instructions: a. The date of issue, GHG accounting period and project lifetime in DD-Month-YYYY format and other relevant sections of the PD. b. Project location- Country, Sub-national jurisdiction(s) c. Project Proponent(s)- Organization and contact name with email address and phone number; Identify a primary contact if multiple project proponents exist. d. Validation body- Organization and contact name with email address and phone number. 2. PP shall revise the estimated net benefit for theExpected number of globally Critically				

Endangered or Endangered species benefiting from reduced threatsas a result of project activities, measured against the without-project scenario under section 1.2 of the CCB & VCS PD.

3. PD shall provide brief description of the scenario existing prior to the implementation of the project and an estimate of annual average and total GHG emission reductions and removals under section 2.1.1 in compliance with the PD template instructions.
    -

4. PD shall revise the numbering sequence of CCB-VCS PD after section 5.1.2 in compliance with template instructions.

Project proponent response	**Date: 20/01/2024**

1. *Cover page of the CCB & VCS PD has been updated in compliance with template instructions.*

2. *Endangered (03), Vulnerable (02) and Critically Endangered (01) tree species are promoted through agroforestry carbon project in the project area. Number of these species will increase in the project area due to the plantation activities.*

3. *Section 2.1.1 of the PD has been updated.*

4. *Number sequence of PD has been updated*

Documentation provided by project proponent

Revised PD is attached

VVB assessment	**Date: 22/01/2024**

1.
    a. *As per review of revised CCB & VCS PD, date of issue has been revised in DD-Month-YYYY format, but all mentions of GHG accounting period and project lifetime are in DD-MM-YY. PP shall revise the date format in all relevant sections of CCB & VCS PD (i.e., 2.1.14 & 2.1.15 etc) accordance with CCB VCS PD template instructions.*
    -
    b. *In Project location, the country has been added but sub-national jurisdiction(s) are not mentionedin the revised CCB & VCS PD. PP shall provide sub-national jurisdictions as per template instructions.*
    -
    -
    c. *Project proponent has identified a primary contact in the revised CCB & VCS PD.*
    -
    d. *Validation body section has been revised in revised CCB & VCS PD as per raised CAR.*

2. *Biodiversity conservation under section 1.2 has been revised in revised CCB & VCS PD as per raised CAR.*
    -
3. *Section 2.1.1 has been revised to add an estimate of annual average and total GHG emission reductions and removals and brief description of the scenario existing prior to the implementation of the project in revised CCB & VCS PD.*

4. *Numbering sequence has been revised according to the CCB & VCS PD template, but the Appendices have been erroneously numbered as sections 5.6, 5.7. and sections of "Dissemination of Monitoring Plan and Results" and sections under 2.1.21 are mis-numbered. PP is requested to revise the PD to make the necessary changes according to the template instructions.* **CAR is still open**
Project proponent response **20/01/2024**
DD-Month-YYYY format has been followed at the relevant section of the PD. Sub-national jurisdiction(s) has been added at the relevant section of the PD. Numbering sequence of sections "Dissemination of Monitoring Plan and Results are updated. Numbering of appendices are updated.
Documentation provided by project proponent
VVB assessment **Date:12/03/2024**
Based on the review of revised PD, VVB confirms that the above raised issues were properly addressed and rectified in the revised PD. **CAR has been closed**

CAR	02	**Section no.**	2.1.8, CCB &VCS PD	**Date:** 01/11/2023
Description of CAR				
As per section 2.1.8 of the VCS CCB PD, the stakeholder identification mapping process is not clear. PP shall define the process of stakeholder identification as per footnote 20 of the CCB Standard, v3.1.				
Project proponent response				**Date: 20/01/2024**
Section 2.1.8 of the PD has been updated according to the CCB Standard v3.1. The requisite stakeholder identification mapping process has been updated as per footnote 20of the CCB Standard, v3.1.				
Documentation provided by project proponent				
Revised PD is attached.				
VVB assessment				**Date: 22/01/2024**
Based on the review of revised CCB & VCS PD, VVB confirms that the PP has revised the stakeholder identification in section 2.1.8 of the CCB & VCS PD as per footnote 20 of the CCB Standard v3.1. **CAR has been closed**				

CAR	03	**Section no.**	2.1.11, CCB-VCS PD	**Date:** 01/11/2023
Description of CAR				
PP shall revise section 2.1.11 in compliance with the template instructions andprovide with the Project activities and Theory of change table as provided in APPENDIX 2 of the CCB & VCS PD template. Furthermore, PP shall revise in the description of the project activity, stating if the project is located within a jurisdiction covered by a jurisdictional REDD+ program				
Project proponent response				**Date: 20/01/2024**
Section 2.1.11 Project Activities and Theory of Change has been updated and Appendix table is placed in the main body of the PD.				

Documentation provided by project proponent	
Revised PD is attached.	
VVB assessment	**Date: 22/01/2024**
Based on the review of the revised CCB & VCS PD, PP has revised section 2.1.11 in compliance with the CCB & VCS PD template instructions and mentioned that *"The project is not located within a jurisdiction covered by a jurisdictional REDD+ programme in India"*as per raised CAR. **CAR has been closed.**	

CAR	04	**Section no.**	2.3.12, CCB-VCS PD	**Date:** 01/11/2023
Description of CAR				
In line with CCB-VCS PD template instruction and section G3.8 of the CCB standard v3.1, PP shall revise the Feedback and Grievance redressal procedures in section 2.3.12 of the CCB-VCS PD.				
Project proponent response				**Date: 20/01/2024**
Section 2.3.12 of the PD Feedback and Grievance Redressal Procedure has been updated.				
Documentation provided by project proponent				
Revised PD is attached.				
VVB assessment				**Date: 22/01/2024**
Based on the review of revised CCB VCS PD and supporting evidence *"Grievance"*, VVB confirms that Section 2.3.12 of the CCB & VCS PD has been revised and grievance mechanismis in line with section G3.8 of the CCB standard v3.1. **CAR has been closed.**				

CAR	05	**Section no.**	2.3.16, CCB-VCS PD	**Date:** 01/11/2023
Description of CAR				
In line with the section 2.3.16 of the CCB-VCS PD and section G3.11 of the CCB Standard version 3.1, PP shall mention the list of all relevant laws and regulations covering worker's rights in the host country and measures needed and designed to inform workers about their rights.				
Project proponent response				**Date: 20/01/2024**
Section 2.3.16 of the PD Relevant Laws and Regulations Related to Worker's Rights has been updated.				
Documentation provided by project proponent				
VVB assessment				**Date: 22/01/2024**
Based on the review of CCB VCS PD, VVB confirms that PP has provided relevant worker laws and regulations in section 2.3.16of the revised CCB & VCS PD and is in compliance with section G3.11 of the CCB standard v3.1. **CAR has been closed.**				

CAR	06	**Section no.**	2.4.2, CCB-VCS PD	**Date:** 01/11/2023
Description of CAR				
PP shall revise the section 2.4.2 of the CCB-VCS PD in compliance with section G4.2 of the CCB standard v3.1 and template instructions documenting the key technical skills required to implement				

the project successfully, including community engagement, biodiversity assessment and carbon measurement and monitoring skill.
Project proponentresponse **20/01/2024**
Section 24.2 of the PD Required Technical Skills to Worker's Rights has been updated.
Documentation provided by project proponent
Revised PD is attached.
VVB assessment **Date: 22/01/2024**
Section G4.2 of the CCB standard v3.1 requires the PP to *"Document the management team's expertise and prior experience implementing land management and carbon projects at the scale of this project."* Upon reviewing revised CCB VCS PD the section 2.4.2 of PD is not in line with above requirements Hence, PP is requested to provide a brief description of the management team's prior experience implementing land management and carbon projects at the scale of this project in section 2.4.2 of CCB VCS PD. **CAR is still open**
Project proponent response **05/03/2024**
Section 2.4.2 of Pd mentioned that "Document key technical skills required to implement the project successfully, including community engagement, biodiversity assessment and carbon measurement and monitoring skills". The section 2.4.2 of PD has been updated.
Documentation provided by project proponent
VVB assessment **Date:12/03/2024**
Based on the review of CCB VCS PD, VVB confirms that the section 2.4.2 has included the information on management team prior experience and this information is aligns with section G4.2 of CCB Standards v3.1 **CAR has been closed**

CAR	07	**Section no.**	3.1.1 & 3.1.2, CCB-VCS PD	**Date: 19/01/2024**
Description of CAR				
PP shall revise the section 3.1.1 of the CCB-VCS PD demonstrating the tools and their version number applied to the project. Additionally, PP shall justify how the project activity(s) meets each of the applicability conditions of the methodology(s), and tools (where applicable) applied by the project under section 3.1.2 of the CCB-VCS PD.				
Project proponent response				**Date: 20/01/2024**
Section3.1.1 and 3.1.2 of PD has been updated and justified the applicability conditions of the methodology and applicable tools.				
Documentation provided by project proponent				
Revised PD is attached.				
VVB assessment				**Date: 22/01/2024**

Based on the review of revised CCB VCS PD, VVB confirms that the sections3.1.1 and 3.1.2 has been revised as per raised CAR in CCB & VCS PD and are in line with the CCBVCS PD template instructions. **CAR has been closed.**

CAR	08	**Section no.**	3.3.3, CCB-VCS PD	**Date:** 01/11/2023
Description of CAR				
PP in compliance with PD template instructions and section 6.2 of the applied methodology, PP shall revise the section 3.3.3 of the CCB-VCS PD demonstrating the following: • *The organizational structure, responsibilities and competencies of the personnel that will be carrying out monitoring activities.* • *The policies for oversight and accountability of monitoring activities.* • *The procedures for internal auditing and QA/QC.* • *The procedures for handling non-conformances with the validated monitoring plan.* • *Any sampling approaches used, including target precision levels, sample sizes, sample site locations, stratification, frequency of measurement and QA/QC procedures.* • *standard operating procedures (SOPs) and quality control/quality assurance (QA/QC) procedures for inventory operations, including field data collection and data management*				
Project proponent response				**20/01/2024**
PD has been updated according to the template instruction and Section 6.2 of the applied methodology and section 3.3.3.				
Documentation provided by project proponent				
Revised PD is attached.				
VVB assessment				**Date: 22/01/2024**
Based on the review of revised CCB VCS PD, VVB confirms that section 3.3.3of the PD has been revised to include all requirements as per raised CAR and is in line with the CCB & VCS PD template and section 6.2 of the applied methodology. **CAR has been closed.**				

CAR	09	**Section no.**	Non-permanence risk report	**Date:** 01/11/2023
Description of CAR				
PP is requested to revise the Non-permanence risk report for each risk including the justification and evidence for the risk factor and mitigation measures selected. For example, Under the Internal risk for project management, PP is requested to revise the selected risk rating in compliance with the Non-permanence risk tool v4.0.				
Project proponent response				**Date: 20/01/2024**
Non-permanence report has been updated according to Non-permanence risk tool v4.0.				
Documentation provided by project proponent				
Revised Non permanent report is submitted.				
VVB assessment				**Date: 22/01/2024**
As per review of revised VCS NPR report, VVB noted that the report not in compliance with requirements of section 1.1.3 of AFOLU non-permanence risk tool v4.2, Section 1.1.3 of AFOLU non-permanence risk tool v4.2 states that,				

"Project proponents shall clearly document and substantiate the risk score selected for the project. Supporting records shall include all relevant assumptions, parameters, and data sources so that the reader can reproduce the results."

PP shall provide the justifications/evidence that supports the selected risk score for all three internal, external and natural risk in compliance with above requirement.

For example,

a. *Under project management:*

   In compliance with section 2.2.1(3 & 5) of NPR tool v4.2, PP shall provide evidence that support species planted are adapted to the same or similar agro-ecological zones in which project is located and adaptive management plan.

b. *Under Financial Viability:*

   -
   - *In compliance with section 2.2.2 (4) of NPR tool v4.2, PP shall provide evidence that supports the selected risk score (i.e., Project cash flow breakeven point is greater than 10 years from the current risk assessment).*
   -

c. *Under Project longevity*

   As per ID.8 of document *"August 2023 Overview of VCS program updates and effective dates"* dated: 29/08/2023.

   "Projects that request registration on or after 01st January 2024, PP shall comply with requirements of section 3.2.11 of VCS Standard v4.5. (Projects shall have a minimum of a 40-year project longevity.)"

   However, as per review of "*clause 2*" of documents *"Agreements between project implementor and farmers"*. The agreements are signed for 30 years and as per revised NPR report project longevity calculated for 30 years which may lead to failure of risk assessment.

   PP is requested make necessary corrections in compliance with section 3.2.11 of VCS Standard v4.5.

Overall, PP shall revise the NPR report in compliance with above mentioned section 1.1.3 and use latest version of NPR risk tool. While doing so, in compliance with section 2.1.2 (2) of AFOLU NPR risk tool v4.2, PP shall provide and produce the risk assessment calculation tool.

CAR is still open

Project proponent response	**05/03/2024**

- ***The species selected are well adapted to the ecological region of the project area.***
  https://hindi.icfre.gov.in/UserFiles/File/Books/Agroforestry%20Models%20Developed%20by%20ICFRE.pdf
- ***https://www.researchgate.net/publication/299283879_Evaluation_of_Mango_Based_Agroforestry_is_an_Ideal_Model_for_Sustainable_Agriculture_in_Red_Laterite_Soil***

•
Handa, A. K., Dev, Inder., Rizvi, R H., Kumar, Naresh., Ram, Asha., Kumar, Dheeraj., Kumar, Anil., Bhaskar, S., Dhyani, S K. and Rizvi, Javed (eds). 2019. Successful Agroforestry Models for Different Agro-Ecological Regions in India. Jointly published by the Central Agroforestry Research Institute (CAFRI), Jhansi, and the South Asia Regional Programme (based in New Delhi) of World Agroforestry (ICRAF). **The NPR (latest version) has been revised to comply with the requirements.**
Documentation provided by project proponent
•

VVB assessment	**Date :12/03/2024**
VVB confirms that the PP has rectified and addressed the NPR report as per raised CL. Furthermore, VVB conducted a thorough review of the NPR report, confirming that the tool is digitally filled and that the accuracy of all selected risk scores has been ensured. **CAR has been closed**	

CAR	10	**Section no.**	Ex-antecarboncalculationsheet	**Date:** 01/11/2023
Description of CAR				
PP is requested to revise the Ex-ante carbon calculation as per the following observations: • The project duration (year) has been mentioned as 40 years while the crediting period and the project longevity is kept as 30 years. • The value under sheet “Parameters” for the cell D7 (AGB) is with incomplete source. • Under the sheet “Inputs”, the area has been mentioned as 17,833.30. However, as per the CCB-VCS PD the project area for 1st instance is 31,984 hectares. • Specify the spacing for different tree species included in this project activity under sheet “Inputs”. • Under the sheet “Credits”, the valued for mean CO_2/ha is hardcoded. • Incorporate the land data in the excel sheet mentioning each landowner along with area participating in the project. • Incorporate the survival rate and number of survived plants/trees after plantation in the final calculation. • Provide with the species specific allometric equation to be used (If applicable).				
Project proponent response				**Date: 20/01/2024**
Ex-ante calculation has been updated.				
Documentation provided by project proponent				
VVB assessment				**Date: 22/01/2024**
Based on the review of PP response and revised ex-ante carbon sheet, VVB observed that carbon calculations are not in line with appendix 1(6) of applied CDM AR-Tool 14. According to Appendix 1(6) of AR-AM-Tool-14 (v4.2), “For ex-ante estimation the allometric equation, or volume table or volume equation applied to a tree species is selected from the following sources (the most preferred source being listed first)” *(a) Existing data applicable to local situation (e.g. represented by similar ecological conditions);*				

(b) National data (e.g. from national forest inventory or national greenhouse gas (GHG) inventory);
(c) Data from neighbouring countries with similar conditions.
(d) Globally applicable data."

Upon review of revised ex-ante calculation sheet, PP has applied both allometric equations and volumetric equations for carbon calculations which are not consistent with above requirements.

For example,
In tab "*Tectona grandis- Growth",*PP has applied allometric equation for carbon calculations till 7th year and switched to volumetric equations from 8th year onwards. The same pattern has been noted in other tabs such as "*Mangifera indica- Growth", "Citrus limetta-Growth", "Santalum_albul- Growth", "Red Sanders-Growth" and so on*.

Hence, PP is required to revise calculations in accordance with above mentioned requirements. While doing so PP must adhere to Section 2.2.1 (Principle of Conservativeness and Accuracy) of the VCS Standard (v4.5), for the appropriateness and conservativeness of the ex-ante estimations of the project activity.

CAR is still open

Project proponent response	**05/03/2024**
Revised ex-ante ER sheet has been according to Section2.2.1 (Principle of Conservativeness and Accuracy) of the VCS Standard 4.5. Brown et al 1997 allometric equation has been applied to prepare the ex ante ER sheet.	
Documentation provided by project proponent	
Revised ER sheet submitted	
VVB assessment	**Date :12/03/2024**
Based on the review of ex-ante calculation sheet, VVB confirms that the PP has rectified and addressed the issue as per raised CAR, Furthermore, VVB has conducted a thorough review, confirms that the ex-ante calculations based to IPCC defaults. The PP has specifically referred to the Multistrata IPCC agroforestry aboveground and belowground carbon default values, found under table 5.2 of chapter 5: cropland of IPCC 2019 for horti (fruit trees) and for Timber (forest trees) default factors refered from table 4.12 of Chapter 4 : Forest land of IPCC 2019 which has deemes to be valid by VVB. Additionally, VVB has reproduced the calculations and confirms the estimations are accurate and conservative In VVB's opinion, the ex-ante calculations for the project activity are valid and plausible, with an overall removal rate of 10.52 tCO2e/ha/yr. **CAR has been closed**	

Appendix III: Competence Certificates

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Ms. Isha Kapoor

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☒ Validator	☒ Verifier	☒ Team Leader	☒ Technical Expert
☐ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☐ Plastic Waste Expert
☐ CCB Expert	☐ Legal Expert	☐ Financial Expert	☐ Environmental, Health and Safety financial matters
☐ SDG+	☐ Social no-harm(S+)	☐ Environment no-harm(E+)	
☒ Local Expert for India			

in the following Technical Areas:

☐ TA 1.1	☐ TA 1.2	☐ TA 2.1	☐ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☐ TA 13.1	☐ TA 13.2
☒ TA 14.1	☐ TA 15.1	☐ TA 16.1		

Issue Date
5th December 2023

Expiry Date
31st December 2024

Priya Suman

Ms. Priya Suman
Compliance Officer

Sanjay Agarwalla

Mr. Sanjay Kumar Agarwalla
Technical Director

Revision History of the document:

Revision date	Summary of changes
2022	Initial Adoption
Jan 2023	Annual revision
Dec 2023	Change in the template due to revision in TA and function

CCIPL_FM 7.9 Certificate of Competency_V4.0_112023

[1] Please refer to previous version of FM 7.9 for the revision history

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Lalit Mohan Saklani

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☒ Validator	☒ Verifier	☒ Team Leader	☒ Technical Expert
☐ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☐ Plastic Waste Expert
☐ CCB Expert	☐ Legal Expert	☐ Financial Expert	☐ Environmental, Health and Safety financial matters
☐ SDG+	☐ Social no-harm(S+)	☐ Environment no-harm(E+)	
☒ Local Expert for India			

in the following Technical Areas:

☐ TA 1.1	☐ TA 1.2	☐ TA 2.1	☐ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☐ TA 13.1	☐ TA 13.2
☒ TA 14.1	☐ TA 15.1	☐ TA 16.1		

Issue Date
5th December 2023

Expiry Date
31st December 2024

Priya Suman
Ms. Priya Suman
Compliance Officer

Sanjay Agarwalla
Mr. Sanjay Kumar Agarwalla
Technical Director

Revision History of the document:

Revision date	Summary of changes
Dec 2023	Initial Adoption

CCIPL_FM 7.9 Certificate of Competency_V4.0_112023
[1] Please refer to previous version of FM 7.9 for the revision history

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Vempally Prashanth

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☒ Validator	☒ Verifier	☒ Team Leader	☒ Technical Expert
☐ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☐ Plastic Waste Expert
☐ CCB Expert	☐ Legal Expert	☐ Financial Expert	☐ Environmental, Health and Safety financial matters
☐ SDG+	☐ Social no-harm(S+)	☐ Environment no-harm(E+)	
☒ Local Expert for India			

in the following Technical Areas:

☐ TA 1.1	☐ TA 1.2	☐ TA 2.1	☐ TA 3.1	☐ TA 4.1
☐ TA 4. n	☐ TA 5.1	☐ TA 5.2	☐ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☐ TA 13.1	☐ TA 13.2
☒ TA 14.1	☐ TA 15.1	☐ TA 16.1		

Issue Date

5th December 2023

Expiry Date

31st December 2024

Priya Suman

Ms. Priya Suman
Compliance Officer

Sanjay Agarwalla

Mr. Sanjay Kumar Agarwalla
Technical Director

Revision History of the document:

Revision date	Summary of changes
Dec 2023	Initial Adoption

CCIPL_FM 7.9 Certificate of Competency_V4.0_112023

[1] Please refer to previous version of FM 7.9 for the revision history

Carbon CHECK

Carbon Check (India) Private Limited

Certificate of Competency

Mr. Vikash Kumar Singh

has been qualified as per CCIPL's internal qualification procedures in accordance with the requirements of CDM AS (V7.0), ISO/IEC14065:2020, ISO/IEC 17029:2019 and other applicable GHG programs:

for the following functions and requirements:

☒ Validator	☒ Verifier	☒ Team Leader	☒ Technical Expert
☒ Technical Reviewer	☐ Health Expert	☐ Gender Expert	☒ Plastic Waste Expert
☒ CCB Expert	☐ Legal Expert	☒ Financial Expert	☒ Environmental, Health and Safety financial matters
☒ SDG+	☒ Social no-harm(S+)	☒ Environment no-harm(E+)	

☒ Local Expert for India/RSA and Spanish speaking countries

in the following Technical Areas:

☒ TA 1.1	☒ TA 1.2	☐ TA 2.1	☒ TA 3.1	☒ TA 4.1
☒ TA 4. n	☐ TA 5.1	☐ TA 5.2	☒ TA 7.1	☐ TA 8.1
☐ TA 9.1	☐ TA 9.2	☐ TA 10.1	☒ TA 13.1	☒ TA 13.2
☒ TA 14.1	☒ TA 15.1	☐ TA 16.1		

Issue Date

5th December 2023

Expiry Date

31st December 2024

Priya Suman

Ms. Priya Suman
Compliance Officer

Sanjay Agarwalla

Mr. Sanjay Kumar Agarwalla
Technical Director

Revision History of the document:

Revision date	Summary of changes
2022[1]	Annual revision
Jan 2023	Annual revision
Dec 2023	Change in the template due to revision in TA and function

CCIPL_FM 7.9 Certificate of Competency_V4.0_112023

[1] Please refer to previous version of FM 7.9 for the revision history