

# THE INTERNATIONAL SMALL GROUP AND TREE PLANTING PROGRAM, KENYA, VCS-001



Document Prepared By: EPIC Sustainability

<b>Project Title</b>	The International Small Group and Tree Planting Program, Kenya, VCS-001
<b>Version</b>	01
<b>Report ID</b>	<i>ESSPL/VCS/2015/022a</i>

<b>Report Title</b>	Verification report of "The International Small Group and Tree Planting Program, Kenya, VCS-001"
<b>Client</b>	Clean Air Action Corporation
<b>Pages</b>	36
<b>Date of Issue</b>	<b>10<sup>th</sup> February 2016</b>
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<b>Summary:</b>
<p>Clean Air Action Corporation has appointed EPIC Sustainability Services Private Limited to perform the second periodic verification of the emission reductions reported for the project titled “The International Small Group and Tree Planting Program, Kenya, VCS-001” (Project ID: 594) for the period from 01-January-11 to 11-August-2015. The verification was based on the validated project description (PD) corresponding validation report, first monitoring and verification reports and other supporting documents made available to the verification team by the client.</p> <p>The project activity is a AFOLU project, eligible under the Afforestation, Reforestation and Revegetation (ARR) category. It is a subset of the TIST project in Kenya and initially applied to 117 of the Small Groups, 853 members, 484 project areas and 354 ha. The PD was validated and first verified on 11 April 2011 and the first verification has been completed up to 31- December-2010. At that time all of the Project Areas were established and the monitoring systems were in place. The project Combines sustainable development with carbon sequestration and supports the reforestation and biodiversity efforts of the subsistence farmers. Carbon credit sales generate participant income and provide project funding to address agricultural, HIV/AIDS, nutritional and fuel challenges. Additional certification includes CCBA.</p> <p>The verification team identified, through the verification process, Clarification and Information requests. The client has taken actions and submitted to EPIC the revised monitoring report and supporting evidence. The verification team, through the verification process, confirmed that the emission reductions achieved by the project activity during the monitoring period are correctly calculated in the monitoring report, Version 2, dated 21-December-2015. Therefore, EPIC certifies the emission reductions amounting to 30,628 tCO<sub>2</sub>e for the period 01-January-11 to 11-August-2015 (both days inclusive).</p>

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## 1.0 INTRODUCTION

### 1.1 Objective

EPIC Sustainability Services Private Limited (EPIC) has been contracted by Clean Air Action Corporation to undertake the second periodic independent verification of the project activity titled “The International Small Group and Tree Planting Program, Kenya, VCS-001”.

- To verify that the actual monitoring system and procedures are in full compliance with the system and procedures described in the monitoring plan of validated PD as well as with the applicable methodology;
- To verify the monitoring report with deviations are in compliance with monitoring plan and VCS rules
- To verify that the data reported were accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation; and
- To verify and certify GHG emission reduction reported for the project for the period from 01-January-11 to 11-August-2015.

### 1.2 Scope and Criteria

The scope of the verification was the independent and objective review and ex-post determination of the monitored reductions in GHG emissions from “The International Small Group and Tree Planting Program, Kenya, VCS-001”. The verification of this project was based on the validated and validated project description (PD)<sup>B1/</sup>, validation report<sup>B1/</sup>, first monitoring and verification reports and supporting documents made available to the verification team. These documents were reviewed against the requirements of the VCS standard version 3.5, VCS guidelines, the CDM Modalities and Procedures, related rules and guidance, and the VCS Validation and Verification manual Version 3.1<sup>B2/</sup>.

The verification is not meant to provide any consulting towards the client. However, stated request for clarifications and/or corrective actions may provide input for improvement of the project design.

### 1.3 Level of Assurance

In line with VCS requirements and as per ISO 14064-3:2006 para A.2.3.2, a reasonable level of assurance is defined for the verification of the project. This implies that based on the process and procedures conducted EPIC should state whether the information in the monitoring report is materially correct and is a fair representation of the actual project details, and is prepared in accordance with the VCS requirements and the applied CDM methodology for information pertaining to additionality, GHG quantification, monitoring and reporting.

### 1.4 Summary Description of the Project

The project activity is a grouped AFOLU project, eligible under the Afforestation, Reforestation and Revegetation (ARR) category. It is a subset of the TIST project in Kenya and initially applied to 117 of the Small Groups, 853 members, 484 project areas (out of which 92 were active during this verification) and 354 ha. The PD was validated and first verified on 11-April-2011 and the first verification has been completed up to 31- December-2010. At that time all of the Project Areas were established and the

monitoring systems were in place. The project Combines sustainable development with carbon sequestration and supports the reforestation and biodiversity efforts of the subsistence farmers. Carbon credit sales generate participant income and provide project funding to address agricultural, HIV/AIDS, nutritional and fuel challenges. Additional certification includes CCBA.

## 2.0 VERIFICATION PROCESS

### 2.1 Method and Criteria

The verification process consisted of the following phases:

- a document review of the project design documents, monitoring reports and preparation of verification protocol;
- on-site visit to the project activity and interviews with project developer and project consultant;
- and resolution of outstanding issues and the issuance of final verification report and opinion

The Verification was based on the guidance documents provided by VCS which included the following: VCS Standard version v3.5 Issued: 25 March 2015, Agriculture, Forestry, and Other Land Use Requirements v3.0 Current Version: v3.4 Issued: 8 October 2013, Simplified baseline and monitoring methodologies for small-scale afforestation and reforestation project activities under the clean development mechanism implemented on grasslands or croplands AR-AMS0001, Ver 05 and AFOLU Non-Permanence Risk Tool 3.2 Issued: 4 October 2012 and latest valid version of VCS verification template. The verification and sampling plan methodology was based on VCS guidance documents and ISO 14064-3. For this monitoring period, sampling was based upon the active samples with minimum criteria of at least visiting 3% of the samples. For this verification, 12 samples were visited during the site visit which amounted to >3 % of the sample size considering that the active samples numbered 92. The number of trees were sampled such that a 5% tree size overall was reached. At each site, strata based sampling – Indigenous and Eucalyptus was followed across the different ages for the trees. For the desktop verification, equivalent samples were chosen. A risk based approach was used to select the samples to allow a review of members targeted to represent a wide geographic range of sites; sufficient to provide the necessary sample size and to meet a reasonable level of assurance.

During the verification, non-fulfillment of the verification protocol criteria or identified risks to the fulfilment of project objectives were raised as either CAR or CR. Corrective Action Requests (CAR) were issued, where:

- mistakes had been made that directly impacted on the project results; or
- VCS requirements had not been met; or
- there was a risk that the project would not be accepted as a VCS project or that emission reductions will not be certified.

The Clarification Requests (CR) were issued where additional information was needed to clarify issues, and Forward Action Requests (FAR) for issues relating to project implementation that required review

during the first verification of the project activity. The IRs (Information Requests) were requested when additional information was required. The list of the CARs, CRs and IRs are summarised in Appendix 1.

The following team members from EPIC were involved in verification process:

Name	Role	Components reviewed
Dr G Vishnu	Lead Auditor	Completeness check, desk review, onsite inspection, Interview with project representatives, issuance of findings, report preparation.
Dr R Madhukar	Auditor	Completeness check, desk review, onsite inspection, Interview with project representatives, issuance of findings.
Mr Misheck Kaburi Kamau	Host Country Expert	Interviews with community and forestry land use patterns
Mr R Vijaya Raghavan	Technical Reviewer	Checking and verifying of information related to draft final report.
Mr Sai Kishore	Expert assisting Technical review	Assisting the technical review

## 2.2 Document Review

The verification was performed primarily based on the review of the monitoring report<sup>1/2</sup> and the supporting documentation. This process included:-

1. review of data and information presented to verify their completeness
2. review of the Monitoring Plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the QA/QC procedures, and
3. an evaluation of data management and the QA/QC system in the context of their influence on the generation and reporting of ERs.

The monitoring report, Version 01, dated 13<sup>th</sup> August 2015 was initially reviewed and further EPIC requested the PP to present the supporting evidences. Additional background information and documents related to the project performance were also reviewed by EPIC. Through the process of the verification, the revised monitoring report and the supporting documents were evaluated to confirm the actions taken

by the PP to the CARs and CRs issued by EPIC. The documents reviewed by EPIC are listed in References section of this report. EPIC reviewed the final version of the monitoring report Version 02.0 dated 21<sup>st</sup> December 2015 to confirm that all changes agreed had been incorporated. The entire list of documents reviewed is summarised in Section 6.0.

## 2.3 Interviews

After the review of the Project description and documents a site visit was carried out from 19<sup>th</sup> to 24<sup>th</sup> October 2015. During the site visit physical inspection of the project components followed by interviews with the on-site personnel was carried out to verify the project details. A follow-up meeting was also conducted with the project representatives. The following persons were interviewed.

Name Designation	Company	Interview Topics
Mr. Ben Henneke President	Clean Air Action Corporation	Project design, Project implementation, Procedures, Monitoring plan and Procedures
Mr. Martin Weru	TIST Field Manager	Monitoring plan and Procedures, Training details, field measurement
Mr. Charles Iberere	TIST Field Manager	Monitoring plan and Procedures, Training details, field measurements
Josephine Mwangi Moses Mwaingi Mary Wanthira Rosemary Githanga James Njogi Chanty Wanderi Patrich Wachura Virgini Warima Joseph Thita Eunice Wambui	TIST Quantifiers	Field measurements, Species identification, data entry
Mr Evans Maneno	Meru County Ecosystem Manager	Procedures and policies of Kenyan government for forestry conservation and community forestry
Catherine gakii Cecilia Muwiti Irene Kuri a Karambu Naguru Mary werina Mukiri	TIST Program members	Farming practices followed, Knowledge of TIST policies, Attendance at cluster meetings

Doris kigetu Dounglas mukaria Harrison mutethia James bundi Moffat kinyua Simon kariuki John mwenda		
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## 2.4 Site Inspections

An onsite visit was conducted during the period 19<sup>th</sup> – 24<sup>th</sup> October 2015. The sampling criteria was based on the total active number of samples as described in section 2.1.

The on-site assessment which was conducted as a part of verification activity involved:

- 1) An assessment of the implementation and operation of the VCS project activity as per the registered PD
- 2) A review of information flows for generating, aggregating and reporting of the monitoring parameters
- 3) Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the Monitoring Plan
- 4) A cross-check between information provided in the MR and data from other sources
- 5) A check of the monitoring equipment including calibration performance, and observations of monitoring practices against the requirements of the PD and the applied methodology
- 6) A review of calculations and assumptions made in determining the GHG data and ERs, and
- 7) An identification of QA/QC procedures in place to prevent, or identify and correct, any errors or omissions in the reported monitoring parameters.

## 2.5 Resolution of Findings

### Resolution of Clarification and Corrective Action Requests

The objective of this phase of the verification was to resolve the corrective action requests and clarifications and any other outstanding issues which needed to be clarified prior to EPIC positive conclusion on the monitoring report and the project design. During the verification process Eleven CRs and four IRs were raised.

All the CARs and IRs were resolved during this phase. In order to ensure the transparency of the validation process, the concerns raised and responses that were given are summarized in Appendix 1 of this report and documented in more detail in the Verification in Appendix 1. All the corrective actions have been incorporated into the monitoring report.



**Internal quality control**

A Technical Reviewer is appointed to review the final draft verification report and the final verification report. The comments made by the Technical Reviewer are taken into consideration and incorporated in the final report. The final report (after resolutions of all findings) is then submitted to the Head – Operations for review and approval.

**Forward Action Requests**

There are no FAR raised during this verification process.

**2.6 Eligibility for Validation Activities**

EPIC is accredited for validation and verification for the scopes 1-11 and 13-15 by CDM UNFCCC and as well as by the VCS board.

**3 VALIDATION FINDINGS**

**3.1 Participation under Other GHG Programs**

The project has not applied for other GHG programs such as CDM, GS, etc. The same is verified through the declaration letter from PP confirming that the project is not claiming any other environmental credits. The additional certification is under CCBA which does not quantify GHG credits by itself and is rather used as a qualitative aspect for the community and social aspects. The verification team also checked the national as well as international credits trading systems to assess double counting risks and the web links for the same have been listed in the appendix of this report.

**3.2 Methodology Deviations**

No methodology deviations found in this monitoring period.

**3.3 Project Description Deviations**

The following deviations from project descriptions are found in the monitoring report:

Original description in PD	Revised description in MR	Verification team’s opinion
The operational processes for monitoring the actual GhG removal by the sinks are for TIST Quantifiers to visit each grove once per year and, at minimum, once every five years to count trees and collect circumference, GPS and other data" (Section 4.1.3). TIST Quantifiers are not visiting each PA (grove) once per year.	The entire TIST program in Kenya was modified and centered on a "Cluster" administrative structure. A Cluster is a group of Small Groups within walking distance that has their own local leadership. It is where Small Groups receive training, voucher payment, share "best practices," share	The deviation is within the permissible limits of the applied methodology and does not impact the monitoring of the emission reductions significantly. Rather the approach was an internal goal of TIST which was not practically implantable due to logistical constraints and now the cluster approach replaces the annual

	<p>news and newsletters and discuss quantification issues. A Quantifier is assigned to each Cluster and their scope has been broadened to include training and assisting Cluster leaders as they rotate into new positions. The Cluster provides an alternate method of gathering intelligence about what is happening at the Small Group level and to individual groves including information that might assist in monitoring the actual GhG removal. This allows us to get the same information that a Quantifier might get on a non-quantification visit (i.e. the annual visit) by asking members and their neighbors about changes, at a more sustainable cost. The ideal schedule for Cluster meetings is one per month, increasing the frequency of opportunity to learn about changes at the grove level.</p>	<p>quantification. The verification team has through onsite visit, observations and interviews with both cluster servants and farmers identified this approach to be acceptable and implementable.</p>
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As explained above, these changes are minor corrections which do not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario of the project.

**3.4 Grouped Project**

The project activity is not a grouped project.

**4 VERIFICATION FINDINGS**

**4.1 Project Implementation Status**

The verification based on the onsite observation, found that there is no material discrepancies between the project implementation and the project description. The verification team checked the status of monitoring plan the completeness of monitoring system and found no discrepancies between the actual monitoring system and the monitoring plan set in the validated project description except the deviations mentioned in section 2.2.2 of MR which are not significant in the view of VCS applicability. The project is not applied for under any other GHG scheme and there will not be any double counting. The verification

team was able to conclude the project has been implemented as described in the validated project description.

#### 4.2 Accuracy of GHG Emission Reduction and Removal Calculations

The verification of all the data ex-ante and data ex-post (monitoring parameters) including data measurement, data transfer, data archiving, aggregation and calculation of baseline emissions, project emissions and leakage emissions are tabulated below.

Parameter	Source considered	Conclusion by the verification team
<b>Ex- ante:</b>		
<b>Location of project area</b>	As verified from the TIST website and VCS project website based on following documents  Georeference file for Landsat image  Landsat 4/5 image with project area locations  Georeference file for Landsat image  Landsat 7 image with project area locations  Project boundaries for use with Google Earth	The location of the project area is verified to be consistent with the project design. In the samples visited, the GPS reading taken were found to corroborate with the data made available.
<b>Boundary of project area</b>	Landsat 7 image with project area locations  Project boundaries for use with Google Earth	The boundary of the project area is verified to be consistent with the project design. In the samples visited, the GPS reading taken were found to corroborate with the data made available.
<b>Area of project area</b>	Appendix 11	The area of the project was verified from the available data and confirms with the project design. In the samples visited, the area surveyed were found to corroborate with the data made available.
<b>Ownership of project area</b>	Sample of ownership records.	The ownership records were verified to confirm with the available data. In the samples visited, the interview with the farmers confirmed the same.

<b>Baseline trees</b>	Previous validation and verification report and project design and monitoring reports.	The baseline tree data was verified from the earlier monitoring and verification reports and was found to be in conformance with the project design
<b>Baseline tree circumference</b>	Appendix 11	The data was verified to be in conformance with project design
<b>Baseline strata</b>	Appendix 11	The data was verified to be in conformance with project design
<b>Project trees</b>	Appendix 11	The data was verified to be in conformance with the monitoring data and was further verified with the samples visited
<b>Ex- post</b>		
<b>Number of trees</b>	Appendix 11	The data was verified to be accurate with errors within the acceptable limits. The samples visited were also subject to circumference measurement to both cross check the field measurement practices and the recording which was found to conform with the verification plan and TISTs procedures.
<b>DBH</b>	Appendix 11	The data was verified to be accurate with errors within the acceptable limits. The samples visited were also subject to circumference measurement to both cross check the field measurement practices and the recording which was found to conform with the verification plan and TISTs procedures.

The PP submitted emission reduction calculation in a excel sheet<sup>/P2/</sup>. The excel sheet is clear, un-protected and easily viewable. The calculation in the excel sheet is verified and found be correct. The methods and formulae set out in the project description for calculating baseline emissions, project emissions and leakage are correctly followed in the monitoring report and ER calculation sheet.

All the values are provided in the MR and ER calculation sheet are cross verified with its sources and confirmed no manual transposition errors between data sets have occurred. Also the consistency of values within MR is checked and found to be OK.

Hence verification team conclude that the GHG emission reductions and removals have been quantified correctly in accordance with the project description and applied methodology.

#### 4.2 Quality of Evidence to Determine GHG Emission Reductions and Removals

The GHG removals for the project reporting period are based on forest inventory measurements and calculation procedures and factors that have been assessed by the verification team, as described in Section 4.2 of this report. The verification team has attained a reasonable level of assurance that these measurements and procedures, including the internal quality control measures such as check plots, were designed and have been implemented to the highest level of quality. The verification team interviewed personnel from TIST relevant to the project and confirmed their qualifications and expertise. Further the QA/ QC procedures adopted by TIST for the monitoring of the GHG emission reductions were found to conform with the project design and monitoring plan which ensured a high degree of data reliability.

#### 4.3 Non-Permanence Risk Analysis

The verification team reviewed the Non-Permanence Risk Assessment provided at project validation. There has been no change regarding the status or applicability of any of the risk factors since project validation, including political factors, socio-economic factors, environmental factors, or factors relating to implementation of project activities. The non-permanence risk rating is 2.5 and the required buffer is 10%. The verification team therefore concludes that the default minimum 10% risk rating is appropriate for the current reporting period. Please refer Appendix 09 for a detailed description of the steps taken to assess the non-permanence risk rating determined by the project proponent.

## 5 VERIFICATION CONCLUSION

EPIC Sustainability Services Private Limited has been engaged by Clean Air Action Corporation to perform the second periodic verification of the emission reductions reported for the project titled “The International Small Group and Tree Planting Program, Kenya, VCS-001” (Project ID:594) for the period from 01-January-11 to 11-August-2015.

The verification was based on the validated PD, the baseline and monitoring methodology, validation reports, emission reduction spread sheets and other supporting documents made available to EPIC verification team by the project participant. The management of project proponents are responsible for the preparation and reporting of GHG emissions data, and the reported GHG emissions reduction on the basis set out within the project monitoring plan.

It is the responsibility of EPIC verification team to express an independent GHG verification opinion on the GHG emissions from the project for the monitoring period starting from 01-January-11 to 11-August-2015 and on the calculation of GHG emission reductions from the project based on the verified emissions for the same period.

The verification was carried out in accordance with the requirements of the VCS Validation and Verification manual Version 3.1 and VCS Standard 3.5. As a result of the verification, the verification team confirms that for the reporting period:

- the project is implemented as described in the validated PD except the deviations mentioned in section 2.2.2 of MR,



- the monitoring plan is in accordance with the approved monitoring methodology applied by the project activity except the deviation mentioned in section 2.2.2 of the MR.
- the deviations in the project deception & monitoring plan are not significant which does not impact applicability of methodology, baseline and additionality of the project
- the monitoring has been carried out in accordance with the validated PD version 2.0 dated 11<sup>th</sup> April 2011.
- the monitoring aspects (i.e. additional monitoring parameters, monitoring frequency and calibration frequency) were in place and functional, with the installed equipment essential for generating emission reduction operating appropriately and the calibration of all the equipment had been carried out accordingly, and
- the GHG emission reductions achieved were calculated correctly on the basis of approved monitoring methodology.

We have verified that the information included in the final monitoring report (Version 2, dated 21-December-2015) was correct and that the emission reductions achieved had been determined correctly. In our opinion, the GHG emission reductions for the period from 01-January-11 to 11-August-2015 in the latest revised monitoring report (Version 2, dated 21-December-2015) for the project are fairly stated.

The verifier confirms that the GHG emission reductions were calculated without material misstatements for the whole monitoring period. Our opinion is based on the project’s GHG emissions and resulting GHG emission reductions reported, and, to the valid and validated project baseline and monitoring documents. We confirm the following:

Verified GHG emission reductions and removals in the above verification period:

Net GHG emission reductions or removals (tCO <sub>2</sub> e)	Risk rating	Buffer pool (VCUs)	Tradable VCUs
<b>34,032</b>	<b>10%</b>	<b>3,403</b>	<b>30,628</b>

Prepared by:	Approved by:
	
Dr. G. Vishnu Verification Team Leader	Mr. K. Sudheendra Head-Operations

**6 LIST OF DOCUMENTS REVIEWED**

<b>S.No.</b>	<b>Document details</b>
1	PD version 2.0 dated 11 <sup>th</sup> April 2011
2	Georeference file for Landsat image
3	Landsat 4/5 image with project area locations
4	Georeference file for Landsat image
5	Landsat 7 image with project area locations
6	Project boundaries for use with Google Earth
7	Excel spreadsheet with all project data
8	Standalone VCS risk analysis
9	List of project areas for risk analysis
10	First Monitoring report text
11	First Monitoring report data
12	Validation Report
13	Validation Statement & Validator's Risk Assessment
14	Second Risk Assessment
15	Verifiers Report
16	Verification Representation
17	VCS risk analysis for Verification 02 (Appendix 09)
18	Monitoring Report for Verification 02 (Appendix 10) Version 2, dated 21-December-2015
19	Monitoring Data for Verification 02 (Appendix 11)
20	Auditors Manual
21	Cluster Audit Schedule



22	Connect Palm to Internet Manual
23	Zip file with GhG Contracts
24	Kenya Weekly Audit Report
25	PD Grove Status Spreadsheet
26	Quantifier Training 120507
27	Quantifiers Training Attendance
28	Sample Desk Audit Page
29	TIST Baseline SOP 100425
30	TIST Circumference Quantification SOP
31	TIST Grove selection
32	Tract System SOP
33	Cluster Best Practices
34	Cluster Checklists
35	Newsletter Jan 2010- April 2012
36	Quantifier Manual

**APPENDIX I: RESOLUTION OF CARS & CLS**

Category*	Finding	Code	Reply by PP	Final Opinion of verification team
CR	<p>For all VCS projects, the document “App11 Verif 02 Monitor Data 150811” indicates the ver 02 monitoring date in the PA summary worksheet to range from even earlier than this verification period. Clarify on the appropriateness of the monitoring dates with reference to the monitoring period for this verification which ranges from January 2011 to August 2015.</p>	CR/01/25/11/2015	<p>It is correct that some of the Ver 02 monitoring goes back to more than 5 years prior to the end date of this verification period, 11 August 2015. Each of those PAs have been marked as Pending-Needs Requantification and their entire carbon inventory reduced to zero.</p> <p>Regarding the monitoring information that is dated between Aug 2010 and the beginning of the respective start dates of these second verifications, they are within an appropriate time frame.</p> <ol style="list-style-type: none"> <li>1. The PD states we will use the most current data. When we pulled the data from the database on 11 August 2015, it was the most current data.</li> <li>2. The PD states that we will visit at a PA a minimum of once every five years, to count trees and collect</li> </ol>	<p>The justification by the PP is accepted as the monitoring data in the excel worksheets indicated that the valid data confirmed with the monitoring requirements of once in five years and are not older than August 2010. For the older date dated prior to this, the carbon inventory is indicated as zero which is conservative.</p>

			<p>circumference, GPS, and other data. This has been followed.</p> <p>3. There is nothing in the VCS rules, VCS guidance, methodology or PD that restricts the use of data from outside the verification period or that equates the verification period and the monitoring period.</p>	
CR	In the document “App11 Verif 02 Monitor Data 150811” clarify the source for the data “CO2 in stratum check” in ex-post strata worksheet and its usage in the calculations.	CR/02/25/11/2015	It is just a mathematical check to make sure there are no errors in the main calculation. It does not participate in the calculation of credits.	The justification by the PP is acceptable as the data indicate is not used in the actual calculation.
CR	Section 2.2.2 of the MR indicates that monitoring of “actual GHG removal by sinks is to be done annually”. Further the Monitoring report indicates a deviation from this aspect and indicates that the annual visit is replaced by monthly cluster meetings and that this does not impact the additionality, applicability or baseline scenario. Clarify on the difference between the “monitoring of	CR/03/25/11/2015	For clarity, the quote “actual GHG removal by sinks is to be done annually” is a paraphrase. The full quote is "the operational processes for monitoring the actual GhG removal by the sinks are for TIST Quantifiers to visit each grove once per year and, at minimum, once every five years to count trees and collect circumference, GPS and other data" (PD Section 4.1.3)". The full quote is from the PD and was restated in the MR for reference.	Section 2.2.2 of the MR is now revised to reflect the practice and use of the cluster meeting as part of the periodic monitoring which is accepted.

	actual GHG sinks” and monitoring of trees, circumference and GPS done atleast every 5 years.		When we wrote the PD, we TIST had two operational goals and one methodological requirement. The operational goals were to 1) visit each project areas every year and 2) include quantification in that visit. The methodological requirement was to "count trees and collect circumference, GPS and other data". In context of the full quote, the annual visits were to collect any information that might assist in "monitoring the actual GhG removal". This includes examples such as if an SG or an SG member has quit or if there has been a major loss from fire, pest, harvest, etc. The type of information collected is reflected in the monitoring spreadsheets where we have indicated an issue with the project area (removed or pending) and zeroed out the carbon for this verification.	
IR	The revised operating procedures (validity, history etc.) and mechanism (circular etc.) of conveying the change in the monitoring frequency to the quantifiers are to be	IR/01/25/11/2015	We have not issued a new Quantifier Manual since 5th February 2007. Changes in SOP have either been via separate SOPs (see link: Verif 2 TIST Baseline SOP 100425.pdf, Verif 2 TIST Circumference Quantification SOP 110307.doc, Verif 2 TIST Grove selection	The quantifiers training evidences, the best practice documents which includes cluster meeting SOPs and the periodic local newsletter indicate that the cluster approach was implemented and in practice from January 2010 onwards and the quantifiers were adequately aware of

	provided.		090221.pdf, Verif 2 Tract System SOP 090422.pdf); changes on the palm forms or at quantifier training (see link: Verif 2 Quantifier Training 120507.docx, Verif 2 Quantifiers Training Attendance.zip). The changes in monitoring frequency have been done at quantifier trainings. However, the changes have been more a reflection of reality, i.e. they have not been able to visit all the PAs and the Cluster system was set up to address this.	the operating procedures.
CR	While cluster meeting schedule is considered as a replacement for the earlier annual visit, the frequency though mentioned as one month as being ideal is not mentioned in absolute terms. As these meetings are to be considered as part of the regular monitoring from this verification onwards, It is requested to clarify the exact frequency of such cluster meetings and under what circumstance they may be subject to	CR/04/25/11/2015	As stated, the goal is to have cluster meetings monthly. However, there are about 200 clusters and not all Clusters achieve this goal. If an absolute minimum is requested for the purpose of strict adherence to the monitoring plan, it shall be "a minimum of one meeting within 12 months prior to the end of the verification period unless there has been a quantification within said 12 month period, in which case, the minimum meeting Cluster is waived.	The periodicity of the cluster meeting is included in the updated MR in section 3.3.2 which is accepted.

	variations.			
CR	Clarify on the aspect of the 20 tree counts and its source. Further clarification is raised in the monitoring sheet for VCS 001, circ spreadsheet for 2005KE294-Joshua kimathi which indicates 40 trees counted for DBH instead of 20 as recommended in the operating procedure.	CR/05/25/11/2015	<p>Regarding the first issue, we designed the monitoring system and procedures with the assistance of Winrock. The 20 tree sampling is from Step 1 (page 5 of link).</p> <p>Regarding 2005KE294-Joshua kimathi, this appears to be the result of having 2 different species/age strata. As noted in the PD, we have 4 "Major Strata" including "Other" and "Grevillea" and two "Allometric Strata", "Eucalyptus" and "Other". Since the "Grevillea" reports as "Other" in the Allometric Strata, the quantifier probably took 20 circumferences from "Grevillea" and 20 from "Other" (Major Strata).</p>	The reply by the PP is accepted. The review of the operating manuals indicate the implementation of the tree count as per TIST procedures and the validated project design and monitoring plan.
CR	Clarify on the statement "Loss of a few PAs was discussed in the External Risk section of the Non-Permanence Risk Report" mentioned in section 2.1 of the MR. Considering that for VCS 001, out of the 484 Project Areas, 392 Project areas have been classified as "inactive"	CR/06/25/11/2015	<p>There are several factors that come in to play regarding this issue. First is that the 392 project areas termed in the "inactive" in the statement of "Finding", is not accurate. They are listed as "Pending-needs requantification". If we thought they were no longer in TIST, they would have been marked "Removed".</p> <p>Second, part of the process of preparing for this verification was to</p>	The justification by PP is acceptable as there is minimal level of risk to community or land tenure as TIST does not own any of the land. Also the large number of PAs categorised as pending are still active and are likely to be included for the revalidation.

	<p>which need requantification there is no sufficient discussion on the loss of a large number of project areas and its impact on external risks such as land tenure and community risk. Further clarify on the risk assessment rating provided to such risks with appropriate justification.</p>		<p>share a list of all the pertinent PD groves with the quantifiers for them to advise us as to whether they were active or should be removed.</p> <p>Of the PAs listed as "Pending-needs requantification", 106 have "x" in the "Verif 2 Monitor Date" column (col AJ, "PA Summary" worksheet). These are not showing up on the "Ex-Post Strata" data dump. They may no longer be in the program or there may have been a name change, or spelling correction or maybe an unprintable character was removed from the name. (Regarding the latter, this was caused when the name was originally entered in the palms by the quantifiers in the field. Though we have tried to scrub these occurrences it was not until we changed the database schema to include a location ID that eliminates this problem in the long run. However we still have some legacy issues that we have to resolve manually). Whatever the case, they need to be reviewed before a final determination can be made.</p>	
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			<p>Regarding the risk, we have been conservative in our approach to the "pending" PAs by zeroing out all the carbon. For clarity, we have not only zeroed the carbon for this verification but we have also zeroed the carbon from the first verification. By doing this, the GhG reductions reported in the second verification report reflect enough new sequestration from the "active" PAs that we still have almost twice the carbon that we had in the first verification. This indicates to us that even in the worst case (all pending PAs are removed), there is still a net gain in credits. We do not believe that this is a worst case situation.</p> <p>We do not see that loss of project areas would cause a risk to either land tenure or the community. As covered in Section 8 of the PDD and in the GhG agreements, TIST does not own any land. Trees are planted on the land owned or controlled by the members. If a member quits TIST, there is no impact on the land tenure associated with the project area and no impact on the community; the impact is to the</p>	
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			Small Group member, but only if they quit. If they are Pending, they are still active in TIST and can still participate in all its features and benefits. If they are Removed, they could still be members if they have other Active or Pending Groves. If the entire SG quits, they are no longer eligible for any of the benefits of the program, but that really has no impact on the community at large	
CR	It was observed during the site visit that field monitoring does not involve any specific marking of the trees for identification with respect to age. Clarify on any operating procedures to address this aspect and how it is ensured that correct tree age is recorded in the data sheets?	CR/07/25/11/2015	1. Specific Marking. That is correct, we do not mark trees. Instead we train our quantifiers to take random samples. Such training includes a discussion on bias to ensure they don't measure large trees. Also, adding to this is that we take a very large volume of data so that if there were to be an introduction of bias by an individual it would not have an impact on the average biomass of a stratum. The fact that we measure both large and small trees in a stratum is evidenced in the Statistics worksheet of the monitoring spreadsheet. For example, in VCS 002, the Other-5 year old stratum has a max biomass of 171 kg and a minimum of 1.6 kg. This overall approach of not taking specific markings was validated and	The reply by the PP and onsite observation of the practices indicate a high degree of precision in tree identification which is acceptable.

			<p>accepted in other verifications.</p> <p>2. Correct tree age. The tree age is established at the first quantification when chance for error in low. This age is maintained for the project areas in the database. Second, the quantifiers have discussions with the farmers when they are present during quantification to assist them in identifying tee age. Third, in most cases the same quantifiers have been the ones conducting subsequent quantification. You may have observed during your field visit that they carry a notebook and rely on it to make sure they are getting the correct age.</p>	
CR	<p>In section 3.1 of the MR, location of project area, the description indicates it to be single point location of latitude and longitude where project activity has been implemented. Further the boundary of a project area indicates multiple points of latitude and longitude. Clarify on</p>	CR/08/25/11/2015	<p>The single point is for ease of location. The official boundaries are set with the GPS and with a multipoint polygon in a GPX format. We have found it useful, however, to supplement our PA locations with a single point identifier. If, for example, you did not have the GPX, you could still navigate to a PA with the single point. Also, it is more convenient and less data intensive</p>	<p>The reply by the PP is accepted as this was verified from the onsite observation and also the project design documents.</p>

	the approach of fixing of a single point location especially in the case of scattered trees in the project area or planted only in the boundaries.		for making overview maps. The single point has not official purpose.	
CR	It was observed during the field visit that skip counting is one of the approaches followed for tree counting. Clarify on the methodology used for skip counting and how it is ensured that both quantifiers and the farmers are made aware of its significance?	CR/09/25/11/2015	Farmer training calls for a minimum initial spacing of 2 meter to promote faster and healthier growth and to not reward farmers for planting trees too close. The GhG contract (Section 8 a of link) states "a minimum spacing of at least 2 metres". The farmers are paid an advance carbon payment for every live tree they maintain. Because 1) farmers will receive 70% of the project profits, 2) the tree payments are expenses that reduce the profit, 3) it is not equitable to pay farmers that plant too closely a higher amount than farmers that are abiding by the contract and 4) it expected that the closer spaced trees will suffer a higher mortality, the Kenya team (leadership council and SG representatives attending seminars) determined that skip counting should be used.  The methodology is for quantifiers to	The reply by the PP, onsite visit observations indicated that the skip counting was implemented as per the procedures of TIST in conformance with the monitoring plan.

			<p>exclude trees that are closer than 2 meters in their counts. Two meters is not absolute; it is left to the quantifier to make the judgement while on site. The farmers are made aware during registration training, when they sign the GhG contract, at Cluster meetings and are often present on site during quantification.</p>	
CR	<p>Clarify on the project areas under the category "Pending- Needs requantification" and the approach on fixing the baseline for such project areas in subsequent validation.</p>	CR/10/25/11/2015	<p>This is addressed in Section 2.1 of the MR which states "Pending: These are PAs that need to be reviewed to determine if they will continue as TIST PAs or need a current quantification. They will still be listed on the PA Summary sheet to acknowledge they are currently part of the PD but for this verification their trees and carbon are zero. Once their circumstances have been reviewed, they will either be removed or re-listed as active. If they are listed as active, we will re-establish the tree count and carbon in subsequent verifications."</p> <p>The different categories of "Pending" are explained in paragraphs A through K of Section 2.1. It appears to us that it is a very complete description. Please advise if there is</p>	<p>The PPs reply is accepted as the quantification project areas have been excluded in this verification for conservativeness.</p>

			<p>a specific short-fall in this explanation that you wish addressed.</p> <p>TIST is a 30 year project that is only required to be validated once. Each of the projects (VCS 001-009) subject to this verification has been validated and no further action is required.</p> <p>If the verifier means "subsequent verifications", the baseline will be the baseline at validation. The Pending areas have been validated and verified once before. They are not being dropped from the PD, but to be conservative we have removed the carbon associated with the Pending PAs, including from the first verification. If they become active again, we will calculate the carbon at time t and that will be the carbon associated with the PA. Because we have removed all the carbon for this verification, there will be no double counting.</p>	
IR	Provide evidences related to ownership of project area (each year one active	IR/02/25/11/2015	The VCS Standard does not require evidence of ownership only "evidence of right of use" (Sections	The review of the submitted documents sufficiently clarify on the right of use and



	<p>passes away and his family member interested in joining is transferred the rights?</p>			
<p>IR</p>	<p>Section 3.3.1 mentions “Quantifiers are audited by the TIST Kenya staff and by CAAC personnel. Quantifiers transmit the monitoring data via the Internet to the TIST website, where it is managed by CAAC. CAAC oversees the data and conducts QA/QC reviews. Feedback is provided to the TIST's Quantifiers and office staff.” Provide operating procedures for the same and any feedback provided to the quantifiers based on the audits and QA/QC.</p>	<p>IR/03/25/11/2015</p>	<ol style="list-style-type: none"> <li>1. Verif 2 Auditors Manual 070816.doc: The procedures that are used by the TIST Kenya staff and by CAAC personnel. See link.</li> <li>2. Verif 2 Connect Palm to Internet 050404.doc: How the quantifiers transmit monitoring data to the web site. See link.</li> <li>3. Verif 2 Sample Desk Audit.pdf: The quantification data undergoes a Desk Review where new uploads are compared to existing data. Where data is irregular an email is sent to the quantifier requesting corrections. See link.</li> <li>4. Verif 2 PD Grove Status 140925 All.xlsx: This is an example of the spreadsheets we use to review the status of groves between verification. As irregularities are found, the data is shared with Martin and Naman whom contact the quantifiers. See</li> </ol>	<p>The reply by the PP sufficiently addresses the requirements of QA / QC for field measurements.</p>

			<p>link.</p> <p>5. TIST KE PD-VCS-0011 App11 Verif 02 Monitor Data 151126.xlsx: This is one of the spreadsheets that you have received for the verification. This is prepared and shared with Martin and Naman whom contact and discuss it with the quantifiers (PA Summary and Ex Post Strata worksheet. The version you received has been reviewed by Martin and Naman and the appropriate quantifiers. Provided previously.</p> <p>6. Feedback is also given to the Quantifiers during audit. They are present in the field during audit and discuss the results with the auditor. There is every incentive to get that feedback because if they are more than 10% off they are suspended. The audits are recorded on the palm computers and uploaded to the database. A copy of one of the automated weekly reports can be accessed at the link.</p>	
IR	Section 3.1.1 indicates "TIST managers visit selected project areas and observe quantifications and audits". Clarify on the	IR/04/25/11/2015	TIST managers randomly select Quantifiers and Auditor for audit. They go to groves quantified or audited with in the last 30 days to check tree counts, skip counting,	Reply by the PP sufficiently clarifies the selection of the groves for quantification and the process involved.



	basis of selection of the project areas as relevant.		species identification, DBH measurements and any other aspect of a quantification that the manager determines should be reviewed. Current managers are Charles Ibeere and Martin Weru. In the past, Andrew Dismore, EJ Oppenheimer, Christine Yankel, Sarah Abdoulayi and Phil James acted in this role.	
CR	Section 3.3.3 step 5 mentions that “To be conservative, where the strata age was one year, a zero was entered in the column”. Further section 3.3.4 mentions that the project counts all trees, but no circumference measurements are taken if the trees are less than breast height. Clarify on the basis of excluding the DBH measurements – whether all trees below DBH are excluded regardless of age or only if tree age is one year and less than DBH it is excluded or all one year old trees regardless of the DBH were excluded? It was also observed in the	CR/11/25/11/2015	DBH is not taken if a tree is smaller than breast height. If a tree is counted but it is too short for a DBH, the circumference is entered as zero (for example see column Q, Statistics worksheet, VCS 009). The zero is averaged in with the Mean Biomass. When the verification spreadsheet is prepared, the biomass for all one year old tree is set to zero.	The process for the DBH measurement is clarified and is in conformance with the TIST procedures, Monitoring requirements and onsite observations corroborate the same.

	filed visit that quantifiers also tended to exclude trees based on a minimum DBH value.			
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