

Verified Carbon Standard Project Verification Report v3

The International Small Group and Tree Planting Program, Kenya VCS-005



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Summary:

Environmental Services, Inc., (ESI) was contracted by Clean Air Action Corporation (CAAC) to conduct the project verification of their validated International Small Group and Tree Planting Program (TIST), Kenya, VCS-005 dated 2 Nov 2011. This project is for a subset of the TIST project in Kenya and initially applies to 1,179 of the Small Groups, 8,692 members, 6,710 project areas and 2,556.1 ha. The main species planted are Eucalyptus spp., Grevillea robusta and Cupressus spp. The baseline scenario is grassland and cropland. The project falls within the Agriculture, Forestry and Other Land Use (AFOLU) category (Scope 14).

The International Small Group and Tree Planting Program, Kenya is a combined reforestation and sustainable development project in Kenya carried out by subsistence farmers. The farmers plant trees on their land and retain ownership of the trees and their products. They receive training from TIST and a share of the carbon revenues from CAAC. Carbon credit sales generate participant income and provide project funding to address agricultural, HIV/AIDS, nutritional and fuel challenges.

TIST provides an administrative backbone that supplies training in building nurseries, tree planting, conservation farming, building fuel-efficient stoves and malaria and HIV/AIDS prevention. Part of the backbone is a two-way communications network that includes newsletters, weekly meetings at the Small Group level, monthly meetings where groups of Small Groups receive training, periodic seminars at the national level and a monitoring system based on hand-held computers and GPS. The rotating leadership and the Small Group rules empower women and the undereducated. Those who are the most successful, regardless of education levels or gender, become mentors and leaders.

The verification was intended to assess the likelihood that implementation of the project will result in the greenhouse gas emission removal enhancement as stated by the project developer and to ensure that the project complies with VCS Standard (v3.1, 15 July 2011) criteria. The methodology employed in the verification process was derived from all items in our verification process. This included utilizing VCS documents and ISO 14064-3 to develop and implement a sampling plan. A total of 2.5% of the project area was reviewed in the field.

The scope of the verification included the GHG project and baseline scenarios; physical infrastructure, activities, technologies and processes of the GHG project; GHG sources, sinks and/or reservoirs; types of GHG's; and time periods covered. The geographic validation scope was defined by the project boundary, which included aggregated parcels (grouped), the carbon

reservoir types, management activities, growth and yield models, inventory program, and contract periods.

The verification criteria followed the guidance documents provided by VCS and included the following: VCS Program Guide (8 March 2011), VCS Standard (15 July 2011, v3.1), Program Definitions (8 March 2011, v3.0), Agriculture, Forestry and Other Land Use (AFOLU) Requirements (8 March 2011, v3.0), AFOLU Non-Permanence Risk Tool (8 March 2011, v3.0), CDM AR-AMS0001 Version 06, Procedures for the demonstration of land eligibility, AR-AMS0001, Procedures for the assessment of additionality, AR-AMS0001.

ESI confirms all verification activities including objectives, scope and criteria, level of assurance, monitoring and project documentation adherence to VCS Standard v3.1 as documented in this report are complete. ESI concludes without any qualifications or limiting conditions that the International Small Group and Tree Planting Program, Kenya meets the requirements of VCS.

The GHG assertion provided by Clean Air Action Corporation and verified by ESI has resulted in the GHG emission reduction or removal of 68,636 tCO₂ equivalents by the project during the verification period/reporting period. This is calculated based on a total of 68,636 tCO₂ equivalents sequestered as of the date of monitoring/verification. As permitted by the methodology, emissions are reported as zero. This does not include the 10% buffer withholding. A total of 61,772 VCUs are tradable once the buffer withholding is included.

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1 INTRODUCTION

1.1 Objective

The verification objective included an assessment of compliance with the VCS Standard (v3.1, 15 July 2011) and the likelihood that implementation of the planned GHG project will result in the GHG emission removal enhancements as stated by the project developer (ISO 14064-3:2006). This verification assessed the GHG emission removals through AFOLU projects, specifically Afforestation, Reforestation, and Revegetation (ARR).

1.2 Scope and Criteria

The scope of the verification included the GHG project and baseline scenarios; physical infrastructure, activities, technologies and processes of the GHG project; GHG sources, sinks and/or reservoirs; types of GHG's; and time periods. The geographic validation scope was defined by the project boundary, which included aggregated parcels (grouped), the carbon reservoir types, management activities, growth and yield models, inventory program, and contract periods.

The criteria follow the verification guidance provided by VCS located at <http://www.v-c-s.org/program-documents>, and include the following: VCS Program Guide (8 March 2011); VCS Standard v.3.1 (15 July 2011); Agriculture, Forestry, and Other Land Use Requirements v3.0 (8 March 2011); Program Definitions v3.0 (8 March 2011); AFOLU Non-Permanence Risk Tool v3.0 (8 March 2011), Verification Report v3.0 template (8 March 2011); and Verification Representation template v3.0 (8 March 2011).

1.3 Level of Assurance

For this project the assessment was conducted to provide reasonable assurance, in compliance with the VCS Program requirements (VCS Standard v3.1).

1.4 Summary Description of the Project

Environmental Services, Inc., (ESI) was contracted by Clean Air Action Corporation (CAAC) to conduct the project verification of their validated International Small Group and Tree Planting Program, Kenya, VCS-005. This project is for a subset of the TIST project in Kenya and initially applies to 1,179 of the Small Groups, 8,692 members, 6,710 project areas and 2,556.1 ha. The main species planted are Eucalyptus spp., Grevillea robusta and Cupressus spp. The baseline scenario is grassland and cropland. The project falls within the Agriculture, Forestry and Other Land Use (AFOLU) category (Scope 14).

The International Small Group and Tree Planting Program (TIST) is a combined reforestation and sustainable development project in Kenya carried out by subsistence farmers. The farmers plant trees on their land and retain ownership of the trees and their products. They receive training from TIST and a share of the carbon revenues from CAAC.

TIST empowers Small Groups of 6-to-12 subsistence farmers in India, Kenya, Tanzania, Uganda Honduras and Nicaragua to combat the devastating effects of deforestation, poverty and drought. Combining sustainable development with carbon sequestration, TIST already supports the reforestation and biodiversity efforts of over 65,000 subsistence farmers. Carbon credit sales generate participant income and provide project funding to address agricultural, HIV/AIDS, nutritional and fuel challenges. As TIST expands to more groups and more areas, it ensures more trees, more biodiversity, more climate change benefit and more income for more people.

TIST provides an administrative backbone that supplies training in building nurseries, tree planting, conservation farming, building fuel-efficient stoves and malaria and HIV/AIDS prevention. Part of the backbone is a two-way communications network that includes newsletters, weekly meetings at the Small Group level, monthly meetings where groups of Small Groups receive training, periodic seminars at the national level and an award winning monitoring system based on hand-held computers and GPS. TIST is available to everyone and all are considered equal. The rotating leadership and the Small Group rules empower women and the undereducated. Those who are the most successful, regardless of education levels or gender, become mentors and leaders.

2 VALIDATION PROCESS, FINDINGS AND CONCLUSION

2.1 Validation Process

Please refer to the VCS Validation Report dated 16 December 2011 prepared by ESI and submitted to VCSA.

2.2 Verification Findings

2.2.1 Gap Validation

Not Applicable

2.2.2 Methodology Deviations

The project and project monitoring plan meet all of the requirements of the methodology and does not deviate from the baseline scenario, additionality determination or inclusion of project GHG sources, sinks and reservoirs.

2.2.3 New Project Activity Instances

Although this is a grouped project, at this time there have been no new project activity instances.

2.3 Validation Conclusion

ESI confirms all validation activities including objectives, scope and criteria, level of assurance and the PDD adherence to the VCS Standard (v3.1, 15 July 2011) as documented in ESI's validation report (dated 16 December 2011) are complete and concludes without any qualifications or limiting conditions that the project documentation TIST Program in Kenya, VCS-005 dated 28 June 2011 meets the requirements of the VCS Standard (v3.1, July 2011).

3 VERIFICATION PROCESS

3.1 Method and Criteria

The verification process closely followed the system outlined in the following: Agriculture, Forestry, and Other Land Use Requirements v3.0 (8 March 2011), ISO 14064-3, ISO 14065, and the ESI Management System and Management Systems Manual v11, Section V.2. As defined by ISO 14064-3:2006 (E), "verification is the systematic, independent and documented process for

the evaluation of a greenhouse gas assertion against agreed verification criteria verification criteria”.

The criteria followed the guidance documents provided by VCS located at <http://www.v-c-s.org/program-documents>, including the following: VCS Program Guide (8 March 2011); VCS Standard v3.1 (15 July 2011); Agriculture, Forestry, and Other Land Use Requirements v3.0 (8 March 2011); Program Definitions v3.0 (8 March 2011); AFOLU Non-Permanence Risk Tool v3.0 (8 March 2011); CDM AR-AMS0001 Version 06: Simplified baseline and monitoring methodologies for small-scale A/R CDM project activities implemented on grasslands or croplands with limited displacement of pre-project activities; VCS Version 3 Verification Report Template; and VCS Version 3 Verification Representation.

The verification and sampling plan methodology was derived from all items in our verification process stated above. Specifically, the sampling plan utilized the VCS guidance documents and ISO 14064-3. Sample size and techniques were based on the project parameters and best professional judgment. Tracts (groves) selected for detailed review were chosen at the discretion of the verifier. For this verification, the sample size for the desktop and field verification was a minimum of 1.5% and 2.5% of the groves were visited in the field. A risk based approach was used to select the tracts to allow a review of multiple small groups and members targeted to represent a wide geographic range of sites; sufficient to provide the necessary sample size to meet a reasonable level of assurance; as directed by the professional judgment of the Lead Verifier.

3.2 Document Review

A detailed review of all project documentation was conducted to ensure consistency with, and identify any deviation from, VCS program requirements, the methodology (CDM AR-AMS0001 Version 06: Simplified baseline and monitoring methodologies for small-scale A/R CDM project activities implemented on grasslands or croplands with limited displacement of pre-project activities), and the PD. Initial review focused on the validated PD and monitoring report and included an examination of the project details, implementation status, data and parameters, and quantification of GHG emission reductions and removals. Along with a review of the monitoring report, documentation for the selected sample was requested, provided and subsequently reviewed for consistency, accuracy, and appropriateness with regard to VCS program requirements, methodological requirements, and the PD. Documents reviewed include land ownership documentation, legal support for customary tenure, carbon rights contracts, property boundaries, maps and arials, data from monitoring, biomass and carbon calculation spreadsheets, and responses to corrective action/clarification requests.

The verification included a review of the validated Project Description (PD) and Monitoring Report, relative to the field conditions observed and interviews with project management staff. Approximately 2.5% of the groves were visited during the field verification.

3.3 Interviews

Interviews were conducted at multiple levels of the TIST program to assess understanding of program requirements and to determine if monitoring conducted in the field was implemented in accordance with the validated PD. Interviews included discussions with CAAC senior management, TIST field managers, trainers, auditors, quantifiers, IT staff and program members, and local stakeholders affected by the project. The following is a list of the main interviewees:

- Charlie Williams – CAAC vice president and project developer
- Charles Ibeere – TIST field manager
- Peter Hinga – TIST field manager

- Allen Koome – TIST IT manager
- Martin Weru – TIST field manager
- Mary Gichuru – TIST quantifier trainer/program member
- Jennifer Kithure – TIST quantifier trainer
- Joseph Kiogora – TIST quantifier
- Duncan Murimi – TIST quantifier
- Lawi Imathiu – Methodist Bishop/stakeholder
- Erustus Karamiti – Chief/stakeholder
- David Wamae – Sr. Chief/stakeholder
- Margret Mwangi – District Forest Officer/stakeholder
- Erestus Munene – Chief/TIST project member
- Agnes Kari – TIST program member
- Alexander Mbaya – TIST program member

In addition, interviews were conducted with 77 TIST program members. The names of the groves where interviews were conducted are included below:

- Faith Kairuthi
- Joseph Magiri
- Joseph Magiri B
- Kenneth Mutua
- Martha Nkatha
- Harrison kaima B
- Irene Kaburo
- Irene Kaburo B
- Irene Kaburo C
- Joyce Kaigongi
- Michael Murithi A
- Michael Murithi B
- Nathaniel Muchai
- Patrick Gitonga A
- Patrick Gitonga B
- Douglas magiri
- Murithi s. Rugoji
- Ringera m'athamba
- Samson kimathi
- Ayub b
- Ayub mwenda
- Evangeline nkatha
- Jenet kiriinya
- Joseph maina
- Charles mwangi Maina
- Hellen wanjiku
- Jane mumbi road
- Jecinta Wamuchii
- Mary Goreti Farm
- Gakubi fence
- Karimi fence
- Matumbi forest a
- Muthuri farm
- Muthuri farm 2
- Nkanka home
- Nkatha farm

- Catherine-road
- Kiogora home
- Charles kimondo
- Wamwarania
- Akwalu Itirikia
- ARON
- JULIAS
- Nelisah Ncekei
- Godfrey
- Ndiritu
- Ndiritu B
- Ann-farm
- Faith-home
- Florence.farm
- Josphen-fence
- Lydia-fence
- Mukiri-home
- Mutui
- Mwangi
- Thaithi
- Loyd B
- Loyd Kiambi
- Mwandiki Mutunga
- Basilio Kamundi
- Eustus Mundi
- Linus Nyaga
- Hudson Mbaya
- Cecilia Gacheri Mbui
- Edward mbaabu
- Gabriel Kagane
- Josphat marangu
- Josphat upper
- Magiri mburugu
- Patrick Ramare
- Agnes Titus
- Monicah Mugambio
- Eustas Ntmungania
- Mercy Nkonge
- Francis Gitonga
- Fredric B nkonge
- Japhet Kibaara

3.4 Site Inspections

Site inspections were performed to verify existence of sites, confirm boundaries, corroborate baseline, and confirm tree age, species and density of plantings. Site inspections were also conducted to assess the consistency of the quantifiers sampling technique with the PD. When possible, on-site interviews were conducted with landowners to confirm ownership, substantiate their support for the project and assess their comprehension of project requirements. GPS was utilized to confirm project location and boundaries. Inventory data (both digital and hard copy) were utilized to confirm the age, species, and density of plantings. As indicated previously, approximately 2.5% of the project groves were visited in the field verification.

3.5 Resolution of Any Material Discrepancy

When potential material discrepancies/non-conformities were identified during the verification process, a corrective action request (CAR) or request for clarification (CL) was issued. Clean Air Action Corporation was given up to 30 days to respond to the CAR or CL list. The ESI verification team identified 8 CARs. The main discrepancy was the result of a data sorting error which had the effect of counting some groves more than once. To address this discrepancy a script was written by TIST to identify and remove any potential grove overlaps. This process is now included in the PDD and the corrections verified. All CAR's were addressed satisfactorily by Clean Air Action Corporation during the project verification process. These CARs provided necessary clarity to ensure the project was in compliance with VCS program requirements for GHG projects and the validated PD. All issues and their resolutions are attached (Attachment A).

VERIFICATION FINDINGS

3.6 Project Implementation Status

The project activities and monitoring plan, as described in the validated PD, has been fully implemented. There are no remaining issues from the previous validation, and this is the initial verification.

3.7 Accuracy of GHG Emission Reduction or Removal Calculations

ESI conducted an intensive review all input data, parameters, formulas, connections, conversions, statistics and resulting uncertainties and output data to ensure consistency with the VCS standard, the project PD and the methodology. Further, ESI reproduced calculations for selected samples to ensure accuracy of the results. All data, conversion factors, formulas, and calculations were provided by the project proponent in spreadsheet format to ensure all formulas were accessible for review. The project proponent also provided a step-by-step overview of calculations to ensure ESI understood the approach and could confirm its consistency with the methodology and PD.

ESI also conducted a comprehensive assessment of all data collection and storage procedures to ensure all opportunities for error in transposition of data between data were minimized.

Uncertainty was assessed as required. ESI recalculated the statistics independently to confirm the accuracy of the reported precision.

Field data collection utilized appropriate principles of forestry data collection, including appropriate tools and methods. Collected data was handled appropriately, including a structured process for quality check. Analysis of collected data used appropriate formulas, conversions, and parameters, supported by scientific literature. Where ranges of parameters exist, or other types of formulaic uncertainty, appropriately conservative values were used in data analysis.

3.8 Quality of Evidence to Determine GHG Emission Reductions or Removals

During ESI's verification the evidence provided by the project proponent was more than sufficient in both quantity and quality to support the determination of GHG emission removals reported by the project. Throughout the verification, Clean Air Action Corporation demonstrated a strong commitment toward conservativeness and took all measures appropriate to ensure the reliability of all evidence provided. Interviews conducted (oral evidence) are outlined in Section 3.3, and the final documents received from Clean Air Action Corporation supporting the determination of GHG removals included:

- *TIST KE PD-CCB-002a PD Text 111102.doc*

- *TIST KE PD-CCB-002b App01 LSat1990 Map.jpg*
- *TIST KE PD-CCB-002c App02 LSat2000 Map.jpg*
- *TIST KE PD-CCB-002d App03 PA Plots 111102.kml*
- *TIST KE PD-CCB-002e App04 Data 111102.xls*
- *TIST KE PD-CCB-002f App05 Implementation Rpt 111102.doc*
- *TIST KE PD-CCB-002g App06 Monitoring Plan 111102.doc*
- *TIST KE PD-CCB-002h.App07 Monitoring Report 111102.doc*

3.9 Management and Operational System

The management system employed by Clean Air Action Corporation utilizes appropriate field measurement methods (systematic, appropriate measurement tools and techniques), high quality data collection and management techniques (web-based, controlled data entry system; clearly identified responsibilities for data accuracy; appropriate data quality control), and data analysis (web-based calculation system). Staff is thoroughly familiar with their responsibilities and is appropriately trained for these responsibilities. Accordingly, in the process of the verification, ESI confirmed the suitability and appropriateness of Clean Air Action Corporation's management system for monitoring and reporting.

4 VERIFICATION CONCLUSION

After review of all project information, procedures, calculations, and supporting documentation and selected site visits, ESI confirms that the monitoring conducted by Clean Air Action Corporation, along with the supporting monitoring report, are accurate and consistent with all aforementioned VCS criteria, the validated PD, and the selected methodology. ESI confirms that the International Small Group and Tree Planting Program, Kenya has been implemented in accordance with the validated PD.

ESI confirms all verification activities, including objectives, scope and criteria, level of assurance, monitoring and project documentation adherence to the VCS Standard v3.1, as documented in this report are complete. ESI concludes without any qualifications or limiting conditions that The International Small Group and Tree Planting Program, Kenya meets the requirements of the VCS Standard (v 3.1).

The GHG assertion provided by CAAC and verified by ESI has resulted in the GHG emission reduction or removal of 68,636 tCO₂e equivalents by the project during the verification period/reporting period (1 January 2004 – 8 June 2011). This does not include the 10% deduction based on the non-permanence risk assessment tool.

GHG Emission Reductions or Removals	tCO ₂ e
Baseline Emissions	0
Project Emissions	0
Leakage	0
Net GHG emission reductions or removals	68,636

ATTACHMENT A

TIST KE 005 - VCS Version 3 - Verification Non-Conformity Report 15 December 2011							
Item #	VCS Standard 3.1 Requirements (15 July 2011)	Applicability to the Project (Y or N/A)	Requirement Met (Y or N)	Location in PD or Supporting Documents	Non-Conformity Report (NCR) or Opportunity for Improvement (OFI)	Response from Client	NCR /OFI Satisfied (Y or N)
1	The project proponent shall establish a GHG information system for obtaining, recording, compiling and analyzing data and information important for quantifying and reporting GHG emissions and/or removals relevant for the project (including leakage) and baseline scenario.	Y	Y	TIST KE PD-VCS-000h App07 Monitoring Rpt Page 46	In the process of the site verification the client made ESI aware of a double counting issue. In an email dated 8/12/11 TIST provided a detailed GIS overlap analysis to ensure all sites within the overlap areas were identified. To be conservative TIST removed all sites (both original instances and overlap instances) from the current project. This issue has been adequately addressed and is provided here for recording purposes.	Email dated 8/12/11	Y
2	The monitoring report shall include all the data and information as set out in the monitoring requirements of the project description and the applied methodology. It shall be prepared using the VCS Monitoring Report Template and shall include the following:	Y	N	TIST KE PD-VCS-000h App07 Monitoring Rpt 110704.doc	Please provide an updated monitoring report which reflects the corrections from the duplicate issue. Please explain why the source of data changed from "carbon credit sale agreements" to "project registration data" under the "Ownership of project area." Please clarify the statement "a 85% confidence interval of 1.0% of the mean" in the Accuracy section. Under the "Data and Parameters" section, it does not appear the table formats were followed from Section 3.2 (Data and Parameters Monitored) of the Monitoring Template. Please revise.	Revised Monitoring Report	Y
3	1) A summary of the project details.	Y	N	TIST KE PD-VCS-000h App07 Monitoring Rpt 110704.doc	Please provide an updated monitoring report.	Revised Monitoring Report	Y
4	2) The implementation status of the project.	Y	N	TIST KE PD-VCS-000h App07 Monitoring Rpt 110704.doc	Please provide an updated monitoring report.	Revised Monitoring Report	Y
5	3) The data and parameters (both available at validation and monitored) and a description of the monitoring plan.	Y	N	TIST KE PD-VCS-000h App07 Monitoring Rpt 110704.doc	Please provide an updated monitoring report.	Revised Monitoring Report	Y

6	4) The calculation of net GHG emission reductions and removals.	Y	n	TIST KE PD-VCS-000h App07 Monitoring Rpt 110704.doc	Please provide an updated monitoring report.	Revised Monitoring Report	Y	Revised monitoring report provided. Issue addressed.
7	5) Any additional information relevant to monitoring.	Y	n	TIST KE PD-VCS-000h App07 Monitoring Rpt 110704.doc	Please provide an updated monitoring report.	Revised Monitoring Report	Y	Revised monitoring report provided. Issue addressed.
8	Where a monitoring report and associated verification report divide a verification period into vintages, separate VCU issuance records in accordance with vintage periods may be issued, as set out in the VCS document Registration and Issuance Process.	Y	n	TIST KE PD-VCS-000h App07 Monitoring Rpt 110704.doc	Please provide an updated monitoring report.	Revised Monitoring Report	Y	Revised monitoring report provided. Issue addressed.