

# VERIFICATION OF TIST PROGRAM IN UGANDA – CCB 002



**EPIC Sustainability**

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## Summary

Clean Air Action Corporation has appointed EPIC Sustainability Services Private Limited to perform the third periodic verification under third edition of the CCB standards. The assessment covered the scope of verification of the sustainable benefits achieved for the project titled "TIST Program in Uganda, CCB-002" for the period from 08 July 2017 – 17 April 2019.

The verification was based on the project description (PD), CCB PIR reports and previous validation and verification reports, monitoring report and other supporting documents made available to the assessment team by the client.

UG-CCB-002 corresponds to PD UG-VCS-005 (grouped project) and UG-VCS-006 (not a grouped project). UG-CCB-002 was first validated and verified under the 2nd Edition of CCB. The first validation and verification applied to 341 of the Small Groups, 2,093 members, 973 project areas and 1,005.7 ha. During the Gap validation, the assessment was done based on third edition, the updated CCB PDD added 1,755 new instances to PD UG-VCS-005, expanding the PD to 676 Small Groups, 4,270 members, 2,725 Project Areas and 2,663 ha. During the current (third) verification the monitoring demonstrated 680 Small Groups, 4,253 members, 2,730 project areas, 2,334 ha and 2,268,119 trees.

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. GHG certification for the same monitoring period has been undertaken under the VCS standard and the CCB 002 is inclusive of the projects, UG -005 and UG -006 respectively.

The scope of this assessment is defined as a periodic independent review and ex post determination by EPIC, of the proposed and monitored CCBA indicators during defined verification period, and consisted of the following three phases

1. Desk review of the project documents and supporting evidences;
2. Physical site inspection and follow-up interviews with project stakeholders;
3. Resolution of outstanding issues and the issuance of the final report

The overall verification, from Contract Review to Verification Report & Opinion, was conducted using EPIC's internal procedures.

The assessment team identified, through the assessment process, Corrective Action Requests (CAR) and Clarification Requests (CL). A total of 02 CARs and 01 CL were identified in the current assessment. The client has taken actions and submitted to EPIC the revised reports and supporting evidence. The assessment team, through the verification process, confirmed that the project is implemented based on the validated project design and the newly added instances meet the CCB requirements and is able to record real and quantifiable sustainable benefits.

On the basis of the physical site inspection of the project activity and review of the documents submitted by the project participant, the assessment team confirms that for verification period from 08 July 2017 – 17 April 2019, the CCB indicators have been monitored in line with CCBA requirements

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## 1 INTRODUCTION

### 1.1 Objective

EPIC Sustainability Services Private Limited (EPIC) has been contracted by Clean Air Action Corporation to undertake the third periodic independent verification of the CCB project activity titled “TIST Program in Uganda, CCB-002”.

- 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 CCB requirements;
- Identification of social economic and environmental impacts as well the presentation of the results obtained in accordance to the CCBA indicators.

### 1.2 Scope and Criteria

The CCB Standard for this project activity being complimentary to the VCS, does not in itself set the criteria regarding the project type, location, and size, crediting period or baseline and monitoring methodologies; it covers only criteria of climate community and biodiversity impact of the project but not for emission reduction itself.

The scope of the verification covers the independent evaluation of this specific project activity by a certifying entity against the requirements of the CCB Standard and its indicators, on the basis of the registered Project Design (PD) and Project Implementation Report (PIR) report and CCB monitoring report submitted. UG-CCB-002 corresponds to PD UG-VCS-005 (grouped project) and UG-VCS-006 (not a grouped project). UG-CCB-002 was first validated and verified under the 2nd Edition of CCB. The first validation and verification applied to 341 of the Small Groups, 2,093 members, 973 project areas and 1,005.7 ha. During the Gap validation, the assessment was done based on third edition, the updated CCB PDD added 1,755 new instances to PD UG-VCS-005, expanding the PD to 676 Small Groups, 4,270 members, 2,725 Project Areas and 2,663 ha. During the current (third) verification the monitoring demonstrated 680 Small Groups, 4,253 members, 2,730 project areas, 2,334 ha and 2,268,119 trees.

### 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

UG-CCB-002 corresponds to PD UG-VCS-005 (grouped project) and UG-VCS-006 (not a grouped project). UG-CCB-002 was first validated and verified under the 2nd Edition of CCB. The first validation and verification applied to 341 of the Small Groups, 2,093 members, 973 project areas and 1,005.7 ha. During the Gap validation, the assessment was done based on third edition, the updated CCB PDD added 1,755 new instances to PD UG-VCS-005, expanding the PD to 676 Small Groups, 4,270 members, 2,725 Project Areas and 2,663 ha. During the current (third) verification the monitoring demonstrated 680 Small Groups, 4,253 members, 2,730 project areas, 2,334 ha and 2,268,119 trees. 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. Certification for the emission reductions achieved is undertaken under the VCS for UG VCS 005 and UG VCS 006.

## 2 VERIFICATION PROCESS

The overall verification process, beginning from the Contract Review to Verification report, certification statement & opinion, was conducted using internal procedures of EPIC Sustainability Services Pvt. Ltd. (ESSPL). As part of this assessment, verification of the project activity was performed.

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 CCB which included the CCB Climate, Community & Biodiversity Standards, v3.1, Rules for the Use of the Climate, Community & Biodiversity Standards, v3.0 and CCB Program Rules, v3.1.

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

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

The Clarification Requests (CL) 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 next verification of the project activity. The list of the CARs and CLs are summarised in Appendix 1.

### 2.1 Audit Team Composition (*Rules 4.3.1*)

The following team members from EPIC were involved in the assessment:

Name	Role	Components reviewed
Mr A. Prabu Das	Lead Auditor	Completeness check, desk review, onsite inspection, Interview with project representatives, issuance of findings, report preparation.
Mr. Mugaju Robert	Host Country Expert	Interviews with community and forestry land use patterns
Dr Vishnu	Technical Reviewer	Checking and verifying of information related to draft final report.

Mr. A Prabu Das holds a Masters Degree in Energy management and is a qualified Energy auditor. He has around 13 years of experience in the field of energy auditing and GHG project development and consulting. He has more than 10 years' experience in validation and verification of more than 200 CDM and VCS projects and has undergone extensive training on GHG validation and verification and has been qualified as Lead Auditor for various technical areas. He is also an ISO 26000 lead auditor certified by Professional Evaluation and Certification Board (PECB). He is a Certified Sustainability Assurance Practitioner (CSAP) from AccountAbility, UK. He has successfully completed the e-course on Carbon Monitoring in CDM Afforestation and Reforestation projects conducted by World Bank Institute. He has participated in forestry projects across various regimes such as such as VCS, CCB, GS, REDD and has

undergone training in methodologies and processes related to forestry auditing and is a qualified forestry auditor.

Dr. G. Vishnu holds a Masters and Doctorate in Environmental Science. He has around 16 years of experience in the field of research and consultancy related to water, wastewater, solid waste management systems, implementation of new, Cleaner Production technologies and biomass assessment studies. He has more than four years' experience in validation verification of more than thirty CDM and VCS projects and has undergone extensive training on GHG validation and verification and has been qualified as Lead Auditor for various technical areas. He is also an ISO 26000 lead auditor certified by Professional Evaluation and Certification Board (PECB). He is a Certified Sustainability Assurance Practitioner (CSAP) from AccountAbility, UK. He has successfully completed the e-course on Carbon Monitoring in CDM Afforestation and Reforestation projects conducted by World Bank Institute. He has participated in forestry projects across various regimes and has undergone training in methodologies and processes related to forestry auditing. He has experience in community forestry projects under VCS, CCB and Plan Vivo in African region.

## **2.2 Method and Criteria**

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 covering at least 1.5% sample size. For this verification, 48 samples were visited during the site visit and the farmers owning the properties were interviewed, which amounted to almost 1.5 % of the sample size considering that the active samples numbered less than 1952 members. 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.

## **2.3 Document Review**

The verification was performed primarily based on the review of the monitoring report submitted 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,
3. verification of the quantification of sustainable benefits achieved.

The documents submitted were 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 CLs 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 2.0 dated 09th Jan 2020 to confirm that all changes agreed had been incorporated. The entire list of documents reviewed is summarized in Section 6.0.

## 2.4 Interviews

The following persons were interviewed:-

Name Designation	Company	Interview Topics
Ms. Pamela Barigye	TIST	Project design, Project implementation, Procedures, Monitoring plan and Procedures
Mr. Apollo	TIST	Monitoring plan and Procedures, Training details, field measurement
Mr. Bachwa Hakim	TIST	
Mr. David	TIST	
Mr. Edward	TIST	
Mr Joshua	TIST	
10 members	TIST Quantifiers	Field measurements, Species identification, data entry
48 PA members (Kabale, Kanungu, Bushenyi, Rukungiri Counties)	TIST Program members	Farming practices followed, Knowledge of TIST policies, Attendance at cluster meetings

## 2.5 Site Inspections

After the review of the monitoring report and supporting documents a site visit was carried out from 15th to 20th July 2019, as part of the common site visit for six TIST projects (TIST Program in Uganda, VCS-001 to VCS-006). 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 sampling criteria were 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 CCB 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 PD, PIR and data from other sources
- 5) Observations of monitoring practices against the requirements of the PD and the applied methodology
- 6) Interviews with local stakeholders to confirm that the project meets the sustainability benefits criteria as defined by CCB.
- 7) An identification of QA/QC procedures in place to prevent, or identify and correct, any errors or omissions in the reported monitoring parameters.



## **2.6 Resolution of Findings**

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 02 CARs and 01 CL were raised.

All the findings were resolved during this phase. In order to ensure the transparency of the verification 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 reports. 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.

### **2.6.1 Forward Action Requests**

There is no FAR raised during this verification process.

## **2.7 Eligibility for Validation Activities**

Not applicable, as no validation activity is involved as part of this verification.

## **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 review of the 'program/standards' websites confirming that the project is not claiming any other environmental credits. The GHG certification is only under VCS which quantify GHG credits generated for the same monitoring period. 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**

Not applicable, as no methodology deviations found in this monitoring period.



### 3.3 Project Description Deviations (*Rules 3.5.7 – 3.5.10*)

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

Original description in PD	Revised description in MR	Verification team's opinion
<p>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.</p>	<p>The entire TIST program in Uganda 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 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 neighbour's 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>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 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>
<p>Not Addressed (applicable to both UG-VCS-005 and UG-VCS-006)</p>	<p><u>Removing Project Activity Instances:</u> While it was expected that there would be loss of trees from the PD due to harvest, etc. the loss of PAs was not addressed. When a member or Small Group quits or harvests their trees, or if a PA is found to fall within one of the "remove" categories 'l' through 'v' in section 2.1 of the VCS MR, they are no longer active in the PD. The name of the grove is kept on the monitoring spreadsheet (Appendix 11), the reason for the removal is given in the "Status V3" column of the "PA Summary"</p>	<p>The deviation is acceptable as the loss of the PA has occurred due to valid reasons which are described in the monitoring report. Also it is observed that as per policies of TIST, the PAs are removed and the status of the PAs is indicated in the worksheet, Appendix 14. The carbon is taken as zero and is not counted.</p>

	<p>worksheet of Appendix 14, and the carbon sequestered from the PA is zeroed out. By zeroing the carbon, all of the carbon credits previously issued from the PA is replaced.</p>	
<p>Not Addressed (applicable only to UG-VCS-005)</p>	<p>During the (current) third verification, a GIS review of the KML files showed numerous instances of Project Area overlaps that indicated the same area was being counted twice. Some of these areas were spatial duplicates in this PD and others were spatial duplicates with PAs in other PDs. There are several reasons that the overlaps happened:</p> <p>Small Group members may not be familiar the name means that the Quantifier cannot</p> <p>he new and old areas as one new one.</p> <p>cters caused the same PA to be tracked as</p> <p>None of these are acceptable and has resulted in a reissuance of the KLM files. The duplicate registrations were identified and the appropriate ones were marked "removed" in the waypoint name of the KML file. The tracks were reduced to a single point so that the track is no longer visible when viewed on Google Earth. This approach was taken so that there would be a history of the removals. There were 69 PAs marked removed in the KML file.</p> <p>The double registrations were also addressed in the monitoring spreadsheet. PAs with double registration were marked "Remove-Double Registration" in the "Status V2" column of the PA Summary worksheet. As with any removal, the carbon sequestered from the PA is zeroed out. By zeroing the carbon, all of the carbon credits previously issued from the PA is replaced with growth from the existing trees in the PD.</p>	<p>The deviation is acceptable, as the PP has provided adequate explanation on instances how the duplicate registration has occurred, and how the existing Desk Audit tool has proved to be effective in identifying the duplicate registrations.</p> <p>As a result the duplicate registration is identified, and the wrong ones are removed. In total 69 PAs are marked 'removed' in the new KML file. PAs with double registration were marked "Remove-Double Registration" in the "Status V2" column of the PA Summary worksheet. The PP provided the new KML file and has also notified the VCS of the change.</p> <p>Further, all of the credits issued for these wrong PAs were set to zero and previously issued credit s have been replaced by new removals.</p>

### **3.4 Minor Changes to Project Description (*Rules 3.5.6*)**

Not applicable, as no minor changes to project description is found in this monitoring period.

### **3.5 Grouped Project (*G1.13 – G1.15, G4.1*)**

Not applicable, there have been no new project instances to this grouped project (UG-VCS-005) during the current verification.

## **4 VERIFICATION FINDINGS**

### **4.1 Public Comments (*Rules 4.6*)**

The project monitoring report was posted to the CCBA website for the formal 30-day public comment period. No comments were received during the public commenting period which was open until 14<sup>th</sup> June 2019.

#### **Public meeting**

The Public Meeting was held between 10:00 AM and 12:00 PM on 12 June, 2019 at the Kanungu Holly Cross Guest House Uganda. Notice was given in leading SW Uganda Radio (Kanungu Broadcasting Station (KBS))

During the meeting generally only positive comments were received. The comments were mainly of appreciative of in nature, sharing the success stories and how the TIST program is benefitting the livelihood of the farmers, and how the soil erosion and landslides have been reduced and how the community development is taking place due to the project activity.

### **4.2 Summary of Project Benefits**

The total TIST members for this monitoring period are 4253. The total carbon payments in TIST Uganda are calculated as \$837,737 (cum) of which \$287,974 corresponds to this period. Monetized benefits from CF, fruits, nuts, fodder, firewood have also recorded an increase in this period. Capacity building initiatives have been initiated and training in subjects such as conservation farming, nursery development reforestation, climate change, biodiversity, building and using more fuel-efficient stoves have been provided to up to a level of 95%.

#### **Biodiversity Benefits**

The project comprises of 2,334 hectares in which there are 11,895 cum indigenous trees planted over an area of 20.1 hectares. Exceptional Community Benefits as confirming to Gold Level have been demonstrated as the project has net positive impacts on community in a poor area. Survey results show that participants experience a range of economic benefits and positive social impacts, regardless of socioeconomic status, gender or part of more vulnerable groups. The Total monetized benefits to the average TIST member are \$4,39 during this monitoring period and \$4,938 since the project began.

The information provided is in line with the requirements related to monitoring of the data and has been identified accordingly. The achievements reported have been verified based on information provided in the monitoring report.

## 4.3 General

### 4.3.1 Implementation Status (G1.9)

Following aspects were assessed according to the requirement of Section G.1.9:

The current verification have not identified existence of any material discrepancies between project implementation and the project description. Compared to the previous period, there have been no material changes to the implementation status of the monitoring plan and the completeness of monitoring, including the suitability of the implemented monitoring system except for a minor deviation, which does not affect the overall monitoring or results. The project start date is January 1, 2003. The CCB project life is 60 years. The GHG crediting period is 30 years, with the option of renewal. A number of Gantt Charts indicate the timing of events for the project – already completed and planned such as:

- Main planting schedule (project).
- Replacement planting schedule (project).
- Monitoring (project).
- Verification (project).
- Thinning (project area).
- Fruit and nut harvest (project area).
- Deadwood harvest (project areas).

It was verified that there the information provided for this indicator in the project zone has been updated for the current period.

The project is currently under VCS certification and additionally certified under CCB. The GHG emission reductions or removals generated by the project have not become included in any other emissions trading program or any other mechanism that includes GHG allowance trading. The project has not received nor sought any other form of environmental credit, or has become eligible to do so since validation or previous verification. The project also has not participated or been rejected under any other GHG programs since validation or previous verification.

There have not been any previously validated methodology deviations, project description deviations, and minor changes to the project description. It has also been verified that overall the project has been implemented as described in the project description.

### 4.3.2 Risks to the Community and Biodiversity Benefits (G1.10)

As inferred in the PIR and the registered PDD this is unchanged from the previous validation and the assessment was done as follows:

1. Risks due to the uncertainties of the carbon market is mentioned referring to the acceptance of credits from AR projects in future
2. Risk of farmers leaving the program is also mitigated as there are thousands of farmers who have joined the programme which continue to grow
3. Natural risks such as drought, pestilence and fire are mitigated by the fact there are thousands of individual project areas spread over thousands of square kilometres and the loss is not significant.

A risk analysis for the PIR period was conducted for the project using AFOLU tool specified by VCS and the risk was verified by EPIC indicating a low level of risk to project. The risk assessment is further added to this report as Appendix B. Assessment was done by review of the PIR, PDD and the MR, site visit interviews and document review. Findings were raised based on which the information pertaining to the indicator was adequately addressed. As part of the VCS requirements, a risk analysis was conducted. Based on the VCS tool, this project has a risk ranging from 1.5 (UG VCS 005) to 2.0 (UG VCS 006), which is exceptionally low and verified to be appropriate.

#### **4.3.3 Community and Biodiversity Benefit Permanence (G1.11)**

As inferred from the registered PDD and monitoring report this is unchanged from the validation and the following information is provided as below:

- Training in the benefits of specific tree species such as macadamia trees for their nuts, citrus trees for their fruits and *Croton megalocarpus* as a source for biofuels.
- Training in the maintenance of a sustainable woodlot not limited to project lifetime.
- Training in the benefits of biodiversity include more productive soil, return of edible indigenous plants, enhanced area ecotourism, and return of native wildlife that is useful to them personally (e.g. bees).

These benefits apart from the carbon revenues have helped in providing long lasting measures beyond project lifetime. Assessment was done by review of the PIR, PDD and the MR, site visit interviews and document review. Findings were raised based on which the information pertaining to the indicator was adequately addressed. Refer Appendix 1 for details.

#### **4.3.4 Stakeholder Access to Information (G3.1- G3.3)**

TIST consults community leaders, village heads/village leaders, local NGOs and local government officials to determine if there is an interest in the program. If there is an interest, TIST holds a public seminar to present the program, answer questions, address concerns and receive comments. This is followed by regular and ongoing meetings where the public is invited to attend. TIST representatives have met with numerous State, District and Village officials seeking comment and showing them the project. In addition to the meetings, information about TIST is disseminated by word of mouth; and direct contact with community leaders and government officials.

At the Small Group level, member farmers meet with TIST representatives regularly at Cluster meetings, where they have an opportunity to ask more questions and make more comments. Since one of TIST's main focuses is adopting best practices, these are forums to review what is working about the program and how it can be improved. The result of this stakeholder process has led to numerous invitations for TIST to come to new villages and numerous positive comments about TIST. There have been no negative comments received. Based on the comments and responses above, no changes were necessary for the project.

The information presented is verified to be sufficient for the indicator. Assessment was done by review of the PIR, MR and PDD submitted, site visit interviews and document review. Findings were raised based on which the information pertaining to the indicator was adequately addressed. Refer Appendix 1 for details.

#### **4.3.5 Stakeholder Consultation (G3.4 – G3.5)**

TIST announced the intent to verify this project in an email to non-TIST stakeholders on 06<sup>th</sup> June 2019. The TIST stakeholders were intimated on the visit from the Cluster Servants at Cluster meeting and also through email dated 04<sup>th</sup> June 2019 and on 13<sup>th</sup> June 2019 (due to change in field visit schedule). The intent to verify this PD and the date of the field visit was also announced in the Tree newsletter.

Comments on behalf of CCB were solicited. In addition, a publicly accessible webpage that lists and contains all of the documents associated with this and the associated VCS project are available. It includes the PDDs, PIRs, maps, KML files, risk reports, spreadsheets, monitoring reports, verification reports and appendices. No negative comments were received during the comment period.

The e-mail to stakeholders was also marked to EPIC and further the announcement in public radio and public notice were verified. Hence, the requirements relating to the public commenting have been sufficiently addressed as relevant for the indicator. Assessment was done by review of the PDD, PIR and MR, e-mail to stakeholders, announcement in public radio and public notice, publically available documents and the submitted Exhibit 14.

#### **4.3.6 Stakeholder Participation in Decision-making and Implementation (G3.6)**

TIST consults community leaders, village heads/village leaders, local NGOs and local government officials to determine if there is an interest in the program. If there is an interest, TIST holds a public seminar to present the program, answer questions, address concerns and receive comments. This is followed by regular and ongoing meetings where the public is invited to attend. TIST representatives have met with numerous State, District and Village officials seeking comment and showing them the project. In addition to the meetings, information about TIST is disseminated by word of mouth; and direct contact with community leaders and government officials.

At the Small Group level, member farmers meet with TIST representatives regularly at Cluster meetings, where they have an opportunity to ask more questions and make more comments. Since one of TIST's main focuses is adopting best practices, these are forums to review what is working about the program and how it can be improved. The result of this stakeholder process has led to numerous invitations for TIST to come to new villages and numerous positive comments about TIST. There have been no negative comments received. Based on the comments and responses above, no changes were necessary for the project. The information presented is verified to be sufficient for the indicator. Findings were raised based on which the information pertaining to the indicator was adequately addressed. Refer Appendix 1 for details.

#### **4.3.7 Anti-discrimination (G3.7)**

The sexual harassment policy, and non-discrimination policy, is posted on the TIST Mobile website, where it is accessible by members with a mobile phone. In addition, article on sexual harassment, discrimination and the grievance procedure appears in the Tree newsletter

A member that has been found to discriminate or sexually harass can be removed from TIST. A TIST worker that discriminates or sexually harasses can be dismissed. The information presented is verified to be sufficient for the indicator. Assessment was done by site visit interviews and document review.

#### **4.3.8 Stakeholder Feedback and Grievance Redress Procedure (G3.8)**

The process of addressing grievances and conflicts is described in the PIR as follows:

1. Internal process where TIST policies and Values are used as the basis.
2. For new issues beyond the policies, it is brought to the next seminar or Leadership Council meeting, where decisions are made by representatives of the Small Groups, Uganda Staff and TIST Management
3. If conflicts or grievances cannot be resolved internally, CAAC will submit to arbitration in through the Chartered Institute of Arbitrators, Uganda Branch within 30 days for notice by the aggrieved party indicating they wish to appeal the internal process.

It was verified that TIST has not received any formal grievances during this verification period. Assessment was done by review of the PIR, MR and PDD submitted, site visit interviews and document review. No findings were raised as the information pertaining to the indicator was adequately addressed.

#### **4.3.9 Worker Relations (G3.9 – G3.12)**

The following assessment was done to verify the project proponent has taken actions and implemented measures to ensure that the relationship between the project and workers meet the requirements of G3.9 – G3.12.

Build the capacity of the communities through job training and employment.

The PIR summarises the local expertise and experience of TIST. Almost complete localisation is achieved as both TIST quantifier and managers are Ugandans and are adequately trained at the various annual



seminars and events organised. Hence it is verified that the information provided is sufficient to address the indicator.

*Ensure people from the communities are given an equal opportunity to fill work positions.*

The PIR describes that the 23 Cluster Servants (formerly termed Quantifiers) are TIST farmers trained to use the monitoring system and hired based on ability, not gender, religion or tribal affiliation. TIST farmers are trained as trainers. TIST holds regular training seminars and makes a concerted effort to make sure attendance has a gender balance. Almost 43% of our Cluster Servants/Quantifiers, Auditors, Cluster Leaders and Leadership Council are female

Hence it is verified that the information provided is sufficient to address the indicator.

Ensure the project is in compliance with all relevant laws and regulations regarding worker's rights and workers are informed of their rights.

The relevant host country laws as applicable for the project are:

- The Employment Act, 2006
- National Social Security Fund Act, Cap 222

Most of the Ugandans working for TIST are aware of their rights before starting employment. However CAAC uses an employment contract that was vetted by local counsel that reiterates the more important parts of the relevant employment law such as salary, types of leave, rest days and termination. Quantifiers are contracted independently and their contract has been reviewed by local counsel. Candidates are given the contract to read well in advance of signing and given the opportunity to ask any questions about the terms.

Hence it is verified that the information provided is sufficient to address the indicator as TIST operations is in conformance to applicable laws and regulations.

Inform workers of risks and how to minimize risk. Minimize workplace risk using best work practices. TIST has a safety manual for Quantifiers which addresses the occupational risks sufficiently. Hence it is verified that the information provided is sufficient to address the indicator.

Assessment was done by review of the PIR, TIST documents (exhibit 16) on employment policy, agreement templates, recent appointments, site visit and interviews.

Minimize workplace risk using best work practices.

Include details of documentation assessed and observations made on the site visit. Provide and justify an overall conclusion as to whether the relationship between workers and the project upholds the intent and design presented in the validated project description.

#### **4.3.10 Management Capacity (G4.2 – G4.3)**

The following assessment was done to verify that the project proponent has taken actions and implemented measures to ensure the capacity exists to implement the project over the project lifetime.

- The project demonstrates the project possesses or is acquiring the key technical and management skills required to implement the project successfully. The PIR summarises the local expertise and experience TIST. Almost complete localisation is achieved as both TIST quantifier and managers are from Uganda and are adequately trained at the various annual seminars and events organised. Hence it is verified that the information provided is sufficient to address the indicator.
- The project demonstrates the financial health of the implementing organization is adequate to support project implementation, and in the case of grouped projects, the ability of the implementing organization(s) to provide adequate financial support at this verification event is also verified. The process of financial funding for the project is summarised in the PIR. From the



time USAID cash funding ended in June 2013 TIST has been operating the project solely from carbon revenues. Confidential internal financial projections indicate the rate of TIST tree growth and sequestration is sufficient to provide enough credits over the life of the project to fund the project. The financial plan and the prices received in the carbon market for the credits generated indicate that the project is on target to achieve financial stability and sustainability. In addition, TIST has several issued VCUs in inventory and over the years it is expected to create several others under VCS. I4EI has provided sustainable development funding that offsets much of the project cost, obtaining funding through USAID (Kenya and Tanzania) and private donors. The fact that TIST is in its 19th year further demonstrates its longevity.

- The PDD and MR affirm that the Project Proponent, or any of the other entities involved in project design and implementation, are not involved in, or are not complicit in any form of corruption such as bribery, embezzlement, fraud, favoritism, cronyism, nepotism, extortion, or collusion. CAACs top management, CEO and Vice President are active in the day to day operation and are very familiar with the financial aspects of CAAC and TIST and are aware of no instances of the aforementioned types of corruption within either organization. The USAID grants also contained prohibitions of these types of corruption. USAID has completed an audit of TIST Kenya in 2016 and found no evidence that these have occurred.

Hence it is verified that the information provided is sufficient to address the indicator. Assessment was done by review of the PIR, MR, TIST documents, site visit and interviews..

#### **4.3.11 Commercially Sensitive Information (Rules 3.5.13 – 3.5.14)**

There were no commercially sensitive information except the financial statements that were reviewed during this assessment.

#### **4.3.12 Rights Protection and Free, Prior and Informed Consent (G5.1-G5.5)**

The PIR describes the land use practices and legal property rights which is in line with the description in the PD. Most of the PAs (90%) are under the category of Customary Tenure, and under this system, the owner of land has rights to use and may dispose of it at will, including passing it on to his sons and daughters. This type of ownership was legally recognized in the Constitution (1995) of Uganda. The Small Groups own the trees that they plant together and grant the rights to all carbon associated with TIST to Clean Air Action Corporation (CAAC) under a “GHG Contract.” Under the agreement the members affirm their ownership or rights to the land designated as project areas. The current land is used for agricultural purposes.

The PIR describes that TIST takes place on the existing land of farmers and their families whom participate voluntarily. CAAC enters into contracts with the Small Group members. In the contract, the members attest in that they have the rights to plant on these lands.

Hence, it is verified that the information provided is sufficient to address the indicator. The PIR infers that CAAC and TIST do not own or lease any of the project lands. Participation is strictly voluntary on lands owned by farmers. CAAC has no authority or desire to relocate any of the members or land owners. No Illegal activities such as logging exist in the project as it is in violation of TIST policy and such incidents result in removal of PA from the project as verified during this monitoring period.

Hence it is verified that the information provided is sufficient to address the indicator that the following is being complied with:

- There is no change in the land use and legal property rights in the project zone since the validation of the project.
- Existing property rights are recognized, respected and supported
- The project does not encroach uninvited on private, community or government property.

- The free, prior and informed consent has been obtained of those whose property rights are affected by the project.
- Appropriate restitution or compensation has been allocated to any parties whose lands have been or will be affected by the project.
- Project activities do not lead to the involuntary removal or relocation or property rights holders from their lands or territories, and does not force them to relocate activities important to their culture or livelihood.
- Actions have been taken, if necessary, to reduce illegal activities that could affect the project's impacts.
- No activities are undertaken by the project that could prejudice the outcome of an unresolved dispute relevant to the project over lands, territories and resources in the project zone.

Hence it is verified that the information provided is sufficient to address the indicator. Assessment was done by review of the PIR, TIST documents, GHG contracts, site visit and interviews.

#### **4.3.13 Legal Status (G5.6)**

TIST is subject to laws and regulations of Uganda as applicable which are listed below:

- The employment laws listed in G4.5 of the PDD and PIR - CAAC uses local counsel to advise on issues relating to employment.
- Companies Act, Cap. 110 - CAAC is registered as a branch and is in good standing to operate in Uganda.
- The Constitution of the Republic of Uganda of 1995 - It empowers Parliament to enact laws to protect, preserve and manage the environment. It does not contain any language that would have a specific impact on the project.
- The National Environmental Act of 1996 - It establishes the National Environment Management Authority (NEMA). In accordance with the Act, TIST submitted an Environmental Screening to NEMA. Because of the multiple benefits of the project for forests and people, NEMA waived the requirement for an environmental impact assessment for the TIST tree planting activities in Uganda.
- The National Forestry and Tree Planting Act, 8/2003. The Act provides for the conservation, sustainable management and development of forests for the benefit of the people of Uganda. While it promotes tree planting, it specifically states that the national and/or local government have "no ownership over trees or forest produce situated on private land."

Hence it is verified that the information provided is sufficient to address the indicator. Assessment was done by review of the PIR, TIST documents (exhibit 01 and 02), site visit and interviews.

## **4.4 Climate**

### **4.4.1 Accuracy of GHG Emission Reduction and Removal Calculations**

The monitoring plan is based on the validated and verified VCS PDs, VCS PD-UG-005 and VCS PD-UG-006, which in turn is based on CDM methodology AMS0001. Further the implementation of the monitoring plan was verified during the VCS certification submitted along with this CCB report.

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 Appendix 14	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>	Appendix 3	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 14	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 04	The data was verified to be in conformance with project design
<b>Baseline strata</b>	Appendix 04	The data was verified to be in conformance with project design
<b>Project trees</b>	Appendix 04	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 14	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 14	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>Total CO2</b>	Appendix 14	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. 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.

PP has described the reasons with justification for omission and inclusion of certain parameters with respect to the project monitoring:

1. The project does not monitor "height of tree" data or "basic wood density." As noted in paragraph 42, Step 2 of the methodology CDM AR-AMS0001, option is provided to monitor DBH which is implemented by the project and considered as appropriate.
2. Project monitoring relies solely on allometric equations that only require DBH and not the other parameters as mentioned above.
3. Each project area is considered as permanent sample plot as all trees are counted per project area and hence this is not considered as separate monitoring parameter which is an acceptable justification.
4. Ownership of project was a new parameter added as considering the large number of farmers, the verification is done with the carbon credit agreement to monitor any occurrence of ownership change.

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

#### **4.4.2 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 4.4.1 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.

#### **4.4.3 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 ranging from 1.5 (UG VCS 005) to 2.0 (UG VCS 006), 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 and the same is applied in the calculations.

#### **4.4.4 Dissemination of Monitoring Plan and Results (CL4.2)**

The parameters as monitored for this period has been assessed based on the process described in section 4.4.1. Further the operational processes for monitoring the actual GHG removal by the sinks is described in the VCS MR. TIST Quantifiers visit each grove, at minimum, once every five years, to count trees and collect circumference, GPS, and other data. 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. CAAC is responsible for tabulating carbon stocks. The TIST Data System stores all of the current and archived data. CAAC managers use customized reports to analyze the data and look for trends, missing data or obvious errors. TIST managers visit selected project areas and observe quantifications and audits. Quantifiers are also audited by the TIST Uganda staff. Hence, the gross reductions as estimated for this assessment for the period from 08 July 2017 – 17 April 2019, are calculated as 171,605 to which a 10 % buffer is applied.

Hence, it is verified that the information provided is sufficient to address the indicator. Assessment was done by review of the MR, TIST documents, Excel calculation sheet Appendix 14, site visit and interviews.

#### **4.4.5 Optional Gold Level: Climate Change Adaptation Measures (GL1.3)**

Not applicable.

#### **4.4.6 Optional Gold Level: Climate Change Adaptation Benefits (GL1.4)**

Not applicable.

### **4.5 Community**

#### **4.5.1 Community Impacts (CM2.1)**

The MR list a number of positive community impacts which might not have occurred in the absence of the project:

- New job opportunities
- Direct Effects to Small Groups
- Small Group Structure
- Fruits and nuts from tree plantings
- Wood products and limited timber from trees
- Natural medicines, insecticides and other benefits from trees
- Capacity building on agricultural improvements, business skills, nursery development, and reforestation

- Small Groups organize to deal with other social and economic problems such as famine and AIDS
- Improved beauty of the landscape

Hence, it is verified that the information provided is sufficient to address the indicator. Assessment was done by review of the MR, TIST documents, site visit and interviews. Findings were raised based on which the information pertaining to the indicator was adequately addressed. Refer Appendix 1 for details.

#### **4.5.2 Negative Community Impact Mitigation (CM2.2)**

During this assessment no significant negative community impacts have been identified for the verification. However, it TIST has been clear about some of the negative effects of eucalyptus trees which are a popular choice. In order to reduce the number of eucalyptus trees, TIST has been requiring all Small Groups to keep their percentage of eucalyptus under 33% of their total trees.

Lack of timely payment is reported by 7% of the members and 3% expect higher incentives. These are some of the negative impact identified in the project and is transparently reported in the monitoring report which the TIST management is committed to resolve.

#### **4.5.3 Net Positive Community Well-being (CM2.3)**

A number of initiatives have been ongoing as part of positive community impact as listed in Section CM1.2 which itemizes the positive benefits of TIST programs and trainings. Hence it has been demonstrated that the project has a net well-being impact compared to the “without project” land use scenario.

#### **4.5.4 Protection of High Conservation Values (CM2.4)**

The MR describes that the project does not have a negative effect on the HCV areas as it has been implemented on private lands that have been under human habitation and agriculture for generations. Further, the activities under this program does not cause displacement or move activities to the HCV areas. Hence it is verified that the information provided is sufficient to address the indicator.

#### **4.5.5 Other Stakeholder Impacts (CM3.2-CM3.3)**

There will be more local food from TIST implemented Conservation Farming and fruit and nut trees which demonstrate increased food security. Further benefits from the cluster meetings and trainings are Conservation Farming, successful tree planting, construction tree nurseries, building and using more fuel efficient stoves, indoor cooking pollution, use of trees for stabilizing soil and water courses, using mosquito nets, increase of locally sourced fuel wood. All these impacts summarizes to a positive net impact on other stakeholders.

The information presented is verified to be sufficient for the indicator. PDD and previous Monitoring period PIR, current PIR, site visit interviews and document review were assessed. Findings were raised based on which the information pertaining to the indicator was adequately addressed. Refer Appendix 1 for details.

#### **4.5.6 Community Monitoring Plan (CM4.1, CM4.2, GL2.2, GL2.3, GL2.5)**

The MR list parameters for community monitoring which is a part of the monitoring plan. Further the Quantifiers collect all field level information from the cluster meetings and the records are available at the



administrative level. In addition, more program components, such as GPS tracts of all the Project Areas, are being obtained in the climate change monitoring plan.

The information presented is verified to be sufficient for the indicator. The indicators which have been quantified for this monitoring period are as follows:

- Number of community members in TIST Uganda:
- Number of Small Groups in TIST Uganda:
- Number of community members adopting natural resource management practices
- Number of community members with greenhouse gas agreements with TIST
- Total payments to community for the period
- Number of TIST tree groves planted by community members.
- Number of person-training sessions on TIST and TIST components.
- Number of live trees planted by TIST Small Groups in Uganda
- Number of fruit or nut trees in TIST PD for this period
- Number of eucalyptus trees in TIST PD
- Number of people employed by TIST or under contract to deliver services

PDD and previous Monitoring period PIR, current PIR, site visit interviews and document review were assessed. Findings were raised based on which the information pertaining to the indicator was adequately addressed. Refer Appendix 1 for details.

#### **4.5.7 Community Monitoring Plan Dissemination (CM4.3)**

All of the CCB and VCS documents, including the monitoring data, are made available to the public on a dedicated web page. Stakeholders have been informed of this when they receive the email advising them of the public meeting, at the public meeting, through reading this report that will be made public on the CCB project page and through reading the VCS registry posting. The information presented is verified to be sufficient for the indicator.

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

Though net positive benefits have been demonstrated at the community level, survey has been conducted twice in Uganda to evidence this. The first was of 46 random TIST members between June and August 2011. The second was of 120 random TIST members conducted in August and September 2016.

The four main topic areas of the survey were:

1. Demographic/basic information (including literacy, income);
2. TIST membership and participation information (including barriers to participation);
3. benefits from TIST activities (economic, environmental, and social, quantitative and perceptual) and negative impacts; and
4. Conservation Farming and food security.

The survey results indicated that the income level for abject poverty varies between US\$1.00 per day and US\$2.00 per day, which indicates that most of the members of TIST are poor.

Both these survey results indicated that the project is pro poor and provides exceptional community benefits across a range of criteria by means of trainings, social awareness and cash benefits as indicated in the comparative table in section GL 2.2 of the PIR and PDD.

While the Negative Impact section indicated that there is a perception among a few that there are some negative impacts, they were a minority. Furthermore, all groups reported more perceived benefits than negative impacts from their participation. Combining this with some of the benefits noted in the climate, community and biodiversity sections of the monitoring report, it is clear that TIST has established that no



member of a poorer, or more vulnerable, social group will experience a net negative impact on their well-being or rights.

#### **4.5.9 Optional Gold Level: Smallholder/community member Risks (GL2.3)**

Some of the perceived risks as indicated in the MR are:

- The farmers could use too much of their farm land for tree planting and jeopardize their food security.
- They could spend money on seedlings but have their trees die. We do not want them spending money on seedlings. .
- Their trees could die. Early mortality is the biggest problem and it requires that the farmers follow the Conservation Farming method for their trees.

These risks are largely avoided by training the farmers in good farming practices.

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

Results show that the identified vulnerable households based on the two surveys experienced a range of benefits from sales and savings. Notably, incremental livestock and their products and harvesting tree products such as fruit, nuts, fodder and firewood was important for this sub-group, with the new survey showing it has higher values than the cash payments. Comparing the benefits reported by the vulnerable members with the average received by all the members, the surveys indicated a range of benefits from 42% to 87% which demonstrate that positive benefits are available to the vulnerable members.

#### **4.5.11 Optional Gold Level: Net Impacts on Women (GL2.5)**

The Survey results indicated that women made up of 21 to 30 % of the respondents and when the benefits were monetized and the results indicated that there is net positive impact on women.

#### **4.5.12 Optional Gold Level: Benefit Sharing Mechanisms (GL2.6)**

The benefits from this program are mutual as carbon credits are generated of which the project proponent is the beneficiary. In exchange, the farmers get a prepayment based on tree count and will ultimately receive 70% of the profits. The farmers maintain ownership of their land, the trees and the tree products. They get 100% of any firewood, fodder, fruits or nuts that come from the trees. They receive training in many life improving topics at no cost. They choose which program is best for them and keep all the benefits derived from their adoption.

#### **4.5.13 Optional Gold Level: Governance and Implementation Structures (GL2.8)**

The governance and implementation structure as defined in the PDD and PIR describes the management team based in the US, the local operations team based in Uganda and the quantifiers and also the cluster members. The chain of governance and responsibilities has been verified by means of interviews and it is demonstrated that the requirements related to the indicator are met.

#### **4.5.14 Optional Gold Level: Smallholders/Community Members Capacity Development (GL2.9)**

The Host Country is managed by the Leadership Council. It is made up of six to eight TIST farmers and full time managers (Ugandan). They oversee day-to-day operations. Leadership is internally rotational and several of the positions are externally rotational. There are about 70 people that serve as Quantifiers,

trainers and liaison for one or more Clusters. The team is comprised of 47% women which maintains gender balance

The chain of governance and responsibilities has been verified by means of interviews and it is demonstrated that the requirements related to the indicator are met.

## **4.6 Biodiversity**

### **4.6.1 Biodiversity Changes (B2.1)**

PIR describes the historical scenario as grasslands or croplands on private lands owned by subsistence farmers. Natural wildlife populations were eliminated or driven off long ago and are currently restricted to transient animals. Hence the approach to improving biodiversity in the project was limited to planting indigenous trees. Isolated woodlots with indigenous trees also improve the connectivity of wildlife habitat between natural forests. This third verification lists the following:

- 11,895 indigenous trees
- 20.1 ha of indigenous trees

Further, by providing fuel wood from sustainable wood lots and improving livelihoods, the project has a positive effect on biodiversity. In addition, there are 8,067 fruit and nut trees covering 26.9 ha. These provide a source of food and nectar for bees, birds, small animals. PDD and previous Monitoring period PIR, current PIR, monitoring report, site visit interviews and document review were assessed. Findings were raised based on which the information pertaining to the indicator was adequately addressed. Refer Appendix 1 for details.

### **4.6.2 Mitigation Actions (B2.3)**

Compared to the baseline scenario, the negative impacts on biodiversity are minimum. As such, the only negative impacts identified are species selection, for which mitigation actions are proposed. TIST activities do not take place inside those areas and TIST trees are being planted where deforestation has taken place.

### **4.6.3 Net Positive Biodiversity Impacts (B2.2)**

TIST has planted 11,895 indigenous trees covering 20.1 ha. These are islands of biodiversity in a degraded landscape matrix that provide connectivity among the three aforementioned HCV areas and other natural forests. There are over significant Project Areas operated by farmers that are receiving ongoing training in biodiversity and natural resource management. In addition, there are fruit and nut trees which provide a source of food and nectar for bees, birds, small animals living on, or around, the farms and larger animals when present.

Hence, comparing the without-project scenario and with-project conditions, it has been demonstrated that the project has a net positive impact on biodiversity. The information presented is verified to be sufficient for the indicator. PDD and previous Monitoring period PIR, current PIR, monitoring report, site visit interviews and document review were assessed.

### **4.6.4 High Conservation Values Protected (B2.4)**

No HCVs are affected and as such TIST does not have a negative effect HCV areas. TIST activities do not take place inside those areas and TIST trees are being planted where deforestation has taken place.

#### **4.6.5 Invasive Species (B2.5)**

As the farmers own the trees that they plant, the species are selected by the Small Groups based on their needs and the benefits, which they desire to obtain. As a result, numerous species and varieties have been selected. Table B1.3 of the PIR has listed the species present in the project areas. The species are also screened against the global database of invasive species which indicates that there are no invasive species. On site visit conforms the same.

#### **4.6.6 Impacts of Non-native Species (B2.6)**

Training, monitoring, and incentives are all structured to encourage farmers to plant diverse trees with diverse benefits. Because of all of these active steps taken to safeguard against deleterious environmental effects, negative impacts are not expected. The use of non-native species is left to the choice of the farmers. Any negative effect of non-native species such as Eucalyptus is already made aware to farmers.

#### **4.6.7 GMO Exclusion (B2.7)**

The Project Proponent has guaranteed that no GMOs have been used or will be used by the project to generate GHG emissions reductions or removals. Hence this requirement is not applicable.

#### **4.6.8 Inputs Justification (B2.8)**

From the project description and site visit, it is verified that there are no adverse effects of any inputs used by the project. It is TIST's policy to not use chemical fertilizers and pesticides. Farmers are trained to make and use their own compost and to use dung. In addition, the cost of chemical fertilizers and pesticides is prohibitive. Also there is no generation of waste products. Fallen leaves are left to decay back into the soil. Fallen woody material, from twigs to trees, are consumed as fuelwood, or used as construction material.

#### **4.6.9 Negative Offsite Biodiversity Impacts (B3.1) and Mitigation Actions (B3.2)**

No negative impacts have been identified and therefore no mitigation is needed. The information presented is verified to be sufficient for the indicator. PDD and Previous Monitoring period PIR, current PIR, site visit interviews and document review were assessed.

#### **4.6.10 Net Offsite Biodiversity Benefits (B3.3)**

There are no offsite biodiversity benefits identified during this period. Hence there are no net offsite biodiversity benefits applicable for this period.

#### **4.6.11 Biodiversity Monitoring Plan (B4.1, B4.2, GL3.4)**

As per the PIR, the biodiversity monitoring plan is described to be in operation from 2003 and is being implemented with no deviations. Annual monitoring of each site is the goal and a minimum of every five years is achieved.

The following are the results of the Monitoring Plan:

- Number of trees in PDD: 2,268,119 (PA Summary, App 14)
- Total hectares of the project: 2,334 (PA Summary, App 14)
- Number of Project Area: 2,730 (PA Summary, App 14)

- Number of trees and hectares by species: See Ex-Post Strata, App 14.<sup>1</sup>
- Number of indigenous trees: 11,895 (Ex-Post Strata, App 14)
- Hectares of indigenous trees: 20.1 (Ex-Post Strata, App 14)
- Number of Project Areas with indigenous trees: 188 (Strata Pivot, App 14)
- Number of indigenous trees and hectares by species: See Table 5.1.1, above
- The area and location of each Project Area: See "PA Summary" worksheet, Appendix 14.
- A KML file that displays the name, location and boundary of each Project Area on Google Earth: See Appendix 03<sup>2</sup>
- The tree inventory of each Project Area: See "Ex-Post Strata" worksheet, Appendix 14

Overall the biodiversity monitoring plan is verified to be implemented in accordance to the validated project description. As there is no direct interaction with HCV areas, the monitoring is indirect. PDD and Previous Monitoring period PIR, current PIR, site visit interviews and document review were assessed.

#### **4.6.12 Biodiversity Monitoring Plan Dissemination (B4.3)**

All of the CCB and VCS documents including the monitoring data have been verified to be available to the public on a dedicated web page. Stakeholders have been informed of this when they receive the email advising them of the public meeting, at the public meeting, through reading this report that will be made public on the CCB project page and through reading the VCS registry posting. The information presented is verified to be sufficient for the indicator. PDD and Previous Monitoring period PIR, current PIR, site visit interviews, Exhibit 14 and emails were assessed.

#### **4.6.13 Optional Gold Level: Trigger Species Population Trends (GL3.3)**

This indicator is not applicable for this period.

#### **4.6.14 Optional Gold Level: Effectiveness of Threat Reduction Actions (GL3.4)**

This indicator is not applicable for this period.

### **4.7 Additional Project Implementation Information**

There is no additional project implementation information identified during the current period.

### **4.8 Additional Project Impact Information**

There is no additional project impact information identified during the current period.

## **5 VERIFICATION CONCLUSION**

Clean Air Action Corporation has appointed EPIC Sustainability Services Private Limited to perform the third periodic verification under the third edition of the CCB standards. The assessment covered the

<sup>1</sup> Appendix 14: TIST UG PD-VCS-005o App14 Verif 03 Monitor Data 190417.xlsx and TIST UG PD-VCS-006o App14 Verif 03 Monitor Data 190417.xlsx at <http://www.tist.org/PD-UG-VCS-005-006%20Documents.php>.

<sup>2</sup> Appendix 03: TIST UG PD-VCS-005d App03 PA Plots.kml and TIST UG PD-VCS-006d App03 PA Plots.kml at <http://www.tist.org/PD-UG-VCS-005-006%20Documents.php>.

scope of verification of the net sustainable benefits achieved for the project titled “TIST Program in Uganda, CCB-002” for the period from 08 July 2017 – 17 April 2019.

The project “TIST Program in Uganda, CCB-002”, complies with the verification criteria for projects set out in CCB Version 3. It has been verified that the project has been implemented in accordance with the validated project description.

The net community and biodiversity benefits achieved by the project during the project implementation period has been verified with the actual implementation and verified to be a valid estimate. Further, the newly added instances are on track to achieve its stated net community and biodiversity benefits and community and biodiversity objectives.

The verification of the GHG emission reductions 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 is 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 verification opinion on the quality of emissions from the project for the monitoring period starting from 08 July 2017 – 17 April 2019 in terms of the net climate, community and biodiversity benefits achieved by the project. EPIC confirms that all verification activities including objectives, scope and criteria, level of assurance, the project’s adherence to the validated PDD, and implementation as outlined in the PIR adhere to the CCB Project Design Standards, Third Edition, as documented in this report.

Monitoring Period: From [08-07-2017] to [17-04-2019]

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

Year	Baseline emissions or removals (tCO <sub>2</sub> e)	Project emissions or removals (tCO <sub>2</sub> e)	Leakage emissions (tCO <sub>2</sub> e)	Net GHG emission reductions or removals (tCO <sub>2</sub> e)
08 July 2017 to 17 April 2019	0	171,605	0	171,605
<b>Total</b>	0	171,605	0	171,605

**APPENDIX 1: < LIST OF DOCUMENTS >**

<b>S.No.</b>	<b>Document Details</b>
1	PD version 1.0
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 spread sheet with all project data
8	Standalone VCS risk analysis
9	List of project areas for risk analysis
10	Previous Monitoring reports text
11	Previous Monitoring reports data
12	Validation Report
13	Validation Statement & Validator's Risk Assessment
14	Third Risk Assessment
15	Verifiers Report
16	Verification Representation
17	VCS risk analysis for Verification 03 (Appendix 12)
18	Monitoring Report for Verification 03 (Appendix 10)
19	Monitoring Data for Verification 03 (Appendix 11)
20	Auditors Manual
21	Cluster Audit Schedule
22	Connect Palm to Internet Manual
23	Zip file with GHG Contracts
24	Uganda Weekly Audit Report
25	PD Grove Status Spreadsheet
26	Quantifier Training
27	Quantifiers Training Attendance
28	Sample Desk Audit Page
29	TIST Baseline SOP
30	TIST Circumference Quantification SOP
31	TIST Grove selection

32	Tract System SOP
33	Cluster Best Practices
34	Cluster Checklists
35	Quantifier Manual
36	<a href="https://mer.markit.com/br-reg/public/index.jsp?name=TIST&amp;entity=project&amp;entity_domain=Markit,GoldStandard">https://mer.markit.com/br-reg/public/index.jsp?name=TIST&amp;entity=project&amp;entity_domain=Markit,GoldStandard</a> <a href="https://cdm.unfccc.int/">https://cdm.unfccc.int/</a> <a href="https://globalgoals.goldstandard.org/">https://globalgoals.goldstandard.org/</a>
37	Public comment and public meeting documents



**APPENDIX 2: RESOLUTION OF FINDINGS**

<b>Classification and ID of findings</b>	<b>Corrective action request / Clarification Request/ Request for Information</b>	<b>Response by the PP</b>	<b>EPICs Assessment of Response</b>
<b>CL 01</b>	In sec 1.1 of the CCB MR, clarify the following:- <ul style="list-style-type: none"> <li>• What is meant by 'undifferentiated'</li> <li>• Members in PD receiving Carbon payments is indicated as 4,253, clarify whether it include drop-out numbers as well?</li> </ul>	<ul style="list-style-type: none"> <li>• Undifferentiated means the member did not mark down their gender in the application form.</li> <li>• It includes all active members in a small group that is in the PD. If they completely quit TIST and are marked inactive in the database, they will not be included in this count. If a PA is removed from the PD, but the SG remains active, they will be included in this count</li> </ul>	The explanation provided by PP is accepted.  <b><u>CL 01 closed</u></b>
<b>CAR 01</b>	The MR start date indicated in the CCB MR, is not as per VCS MR and as per previous verification report it should be 08th July 2017	Monitoring Period of this Report is Fixed now.	The MR start date in the revised MR is now corrected to reflect the correct date and it is as per the VCS MR.  <b><u>CAR 01 closed</u></b>
<b>CAR 02</b>	The emission reductions value is not as per the submitted VCS MR and ER spreadsheet	ER value for this Monitoring Period is updated in the Report now.	The ER value in the CCB MR is now made consistent with the VCS MR and ER spreadsheet.  <b><u>CAR 02 closed</u></b>
<b>FAR's from validation/previous verification – NA</b>			