

THE INTERNATIONAL SMALL GROUP AND TREE PLANTING PROGRAM, UGANDA, VCS-005 VALIDATION REPORT



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Summary:

Environmental Services, Inc., (ESI) was contracted by Clean Air Action Corporation (CAAC) on 15 November 2012 to conduct the project validation of *The International Small Group and Tree Planting Program (TIST)*, Uganda, VCS-005 [Project Description (PD) dated 04 March 2013].

As stated in the PD, "TIST is a combined reforestation and sustainable development project in Uganda 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, and 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 an award winning monitoring system based on hand-held computers and Global Positioning Systems (GPS)."¹

This PD is for a subset of the TIST project in Uganda and initially applies to 301 of the Small Groups; 1,799 members; 953 project areas; and 722.6 hectares (ha). The main species planted are *Pinus patula*, *Eucalyptus* spp., and *Cupressus* spp.

The validation objective included an assessment of compliance with Verified Carbon Standard (VCS) (Version 3) and the likelihood that implementation of the planned Greenhouse Gas (GHG) project will result in the GHG emission removal enhancements as stated by the project developer (ISO 14064-3:2006). This validation assessed the GHG emission removals through Agriculture, Forestry and Other Land Use (AFOLU) Requirements (Version 3.3), specifically Afforestation, Reforestation and Revegetation (ARR).

The scope of the validation 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 GHGs; and time periods covered. The geographic validation scope was defined by the project boundary, which included multiple project areas (grouped), the carbon reservoir types, management activities, growth and yield models, inventory program, and contract periods.

The validation criteria followed the guidance documents provided by VCS and included the following: VCS Program Guide (04 October 2012, v3.4), VCS Standard (04 October 2012, v3.3), Program Definitions (04 October 2012, v3.4), Agriculture, Forestry and Other Land Use (AFOLU) Requirements (04 October 2012, v3.3), AFOLU Non-Permanence Risk Tool (04 October 2012, v3.2), the grouped project PD entitled *The International Small Group and Tree Planting Program, Uganda, VCS-005* (dated 04 March 2013), and Clean Development Mechanism (CDM) Methodology AR-AMS0001 Version 06.

A summary of all findings is included in Appendix A. There are no restrictions of uncertainty.

ESI confirms all validation activities, including objectives, scope and criteria, level of assurance, and the PD are complete and in adherence to the VCS Version 3 and all associated updates as documented in this report. ESI concludes without any qualifications or limiting conditions that the PD *The International Small Group and Tree Planting Program, Uganda, VCS-005* (dated 04 March 2013) meets the requirements of VCS Version 3 and all associated updates.

¹ Clean Air Action Corporation, *The International Small Group and Tree Planting Program, Uganda, VCS-005*, Version 01, 04 March 2013.

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1 INTRODUCTION

1.1 Objective

The validation objective for this project included an assessment of compliance with the Verified Carbon Standard (VCS) (Version 3) and the likelihood that implementation of the planned Greenhouse Gas (GHG) project would result in the GHG emission removal enhancements as stated by the project developer (ISO 14064-3:2006). This validation assessed the GHG emission removals through an Agriculture, Forestry and Other Land Use (AFOLU) project – specifically, an Afforestation, Reforestation and Revegetation (ARR) grouped project.

1.2 Scope and Criteria

The scope of the validation 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 GHGs
- time periods covered

The geographic validation scope was defined by the project boundary, which will include multiple project areas (grouped), the carbon reservoir types, management activities, growth and yield models, inventory program, and contract periods. The scope of *The International Small Group and Tree Planting Program, Uganda, VCS-005* was outlined by the project developer prior to the validation initiation and is re-defined as follows:

Baseline Scenario	The baseline field observation as detailed in the "Grove Summary" worksheet indicates the project areas are grassland and cropland prior to implementation of the project activity
Activities/Technologies/Processes	ARR Grouped Project
Sources/Sinks/Reservoirs	Above- and below-ground living tree biomass
GHG Type	CO ₂
Time Period	30 years, beginning on 01 January 2003 and ending on 31 December 2032
Project Boundary	Bushenyi, Kabale, Kanungu, Kisoro, Mbarara, Ntungamo, and Rukungiri Districts of Uganda Small Groups: 301 Members: 1,799 Groves: 953 Hectares (ha): 722.6

1.3 Level of assurance

The level of assurance was used to determine the depth of detail that the validator placed in the Validation and Sampling Plan to determine if there are any errors, omissions, or misrepresentations (ISO 14064-3:2006). Environmental Services, Inc., (ESI) assessed the project (general principles, data, sampling descriptions, documentation, calculations, etc.) to provide *reasonable assurance* to meet the project level requirements of the VCS Program. The evidence used to achieve a *reasonable* level of assurance is specified in the following sections.

1.4 Summary Description of the Project

As stated in the Project Description (PD), “The International Small Group and Tree Planting Program (TIST) is a combined reforestation and sustainable development project in Uganda 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 and Uganda 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 64,000 subsistence farmers. Carbon credit sales generate participant income and provide project funding to address agricultural, HIV/AIDS, and 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 Global Positioning Systems (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

This PD is for a subset of the TIST project in Uganda and initially applies to 301 of the Small Groups; 1,799 members; 953 project areas; and 722.6 ha. The main species planted are *Pinus patula*, *Eucalyptus* spp., and *Cupressus* spp.

2 VALIDATION PROCESS

2.1 Method and Criteria

The validation process closely followed ESI’s procedures for VCS validations outlined within our Management System Manual. In addition, the validation process was detailed in a separate Validation and Sampling Plan, which was approved by the Project Proponent on 21 November 2012.

For this validation, the sample size for the desktop portion of the validation included a complete review of the PD and supporting documents.

The field validation included an onsite review of a sample of initial groves³, or initial instances, within the Grouped Project geographic boundary. A risk-based approach was used to select the groves in order to review multiple small groups and TIST members across 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 Validator.

² Clean Air Action Corporation, *The International Small Group and Tree Planting Program, Uganda*, VCS-005, Version 01, 04 March 2013.

³ Note that groves can be either plantations or shambas.

Twenty-one (21) groves were selected for field validation during the site visit⁴. These groves contained a total of 60,954 trees, which is a 7.3% sample. This exceeded our established minimum field validation sampling threshold of 5% of the stated number of trees planted by the project developer in the PD. Each grove was visited and photographed to ensure tree planting activities occurred as stated in the PD.

The validation criteria followed ISO 14064-3, the guidance documents provided by VCS, and included the following:

- VCS Program Guide (04 October 2012, v3.4)
- VCS Requirements Document (04 October 2012, v3.3)
- Program Definitions (04 October 2012, v3.4)
- AFOLU Requirements (04 October 2012, v3.3)
- AFOLU Non-Permanence Risk Tool (04 October 2012, v3.2)
- Grouped Project Description (PD) entitled *The International Small Group and Tree Planting Program (TIST), Uganda, VCS-005* (dated 04 March 2013)
- Clean Development Mechanism (CDM) Methodology AR-AMS0001 Version 06 (17 September 2010)

2.2 Document Review

A detailed review of all project documentation was conducted to ensure consistency with, and identify any deviation from, VCS program requirements (VCS Version 3 and associated updates) and the CDM methodology (AR-AMS0001, v6). Initial review focused on the PD and included an examination of the project details, data and parameters, quantification of GHG emission reductions and removals, and supporting documents.

Please see Appendix C for a complete list of documents and files provided by the client during validation, including any items associated with the risk analysis.

2.3 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 PD. Interviews included discussions with CAAC senior management, TIST field managers, trainers, auditors, quantifiers, Information Technology (IT) staff and program members, as well as local stakeholders affected by the project. During all interviews, generally positive comments were received and the information provided in the PD was supported. The following is a list of the main interviewees:

Name	Title
Charlie Williams	CAAC vice president and project developer
Christine Yankel	TIST field manager

⁴See Appendix B for a list of groves sampled during the field validation.

Quantifier 1	TIST quantifier
Quantifier 2	TIST quantifier
Quantifier 3	TIST quantifier
Quantifier 4	TIST quantifier
David Murungi	TIST quantifier
Michael Nuwagira	TIST quantifier
Atungye Fidel	TIST member
Eliphaz Rukuuta Bazira	TIST member
Ellen Namara	TIST member
Tumwekwase	TIST member
Bashaasha Willis	Bushenyi District Chairman
Perzi Kakumu	Bushenyi District Forest Officer

2.4 Site Inspections

Site inspections occurred on 26 November 2012-03 December 2012. A total of 7.3% of the project trees were validated in the field and 2.2% of the initial groves were visited. During the field review, the following aspects of the project were assessed:

- pre-project conditions, as evidenced by condition of adjacent or nearby non-project areas, site-preparation activities, and related
- current project conditions, including reported tree species, reported planting density, appropriate application of SOP's and related

Direct field observation of tree density (tree spacing), species, and appropriate application of SOP's was performed at each grove, sufficient to satisfy the professional discretion of the Lead Validator.

2.5 Resolution of Any Material Discrepancy

During the validation process, there was a risk that potential errors, omissions, and misrepresentations would be found. The actions taken when errors, omissions, and misrepresentations were found included: notifying the client of the issue(s) identified, and expanding our review to the extent that satisfied the Lead Validator's professional judgment.

During the course of the validation, thirty-three (33) Non-conformance Reports (NCRs) /Clarifications (CLs) were identified. One Opportunity for Improvement (OFI) was also identified.

All NCRs/CLs were satisfactorily addressed. The NCRs/CLs provided necessary clarity to ensure the project was in compliance with the requirements of the VCS for GHG projects. For a complete list of all NCRs/CLs and their resolutions, please refer to Appendix A.

3 VALIDATION FINDINGS

3.1 Project Design

The scope of *The International Small Group and Tree Planting Program, Uganda, VCS-005* was outlined in Section 1.2 of this report. This grouped project is seeking registration under the VCS Version 3 as an ARR grouped project and has been developed in compliance with the AFOLU Requirements (04 October 2012, v3.3). Additionally, the project is in compliance with the CDM Methodology AR-AMS0001 V 6.

3.1.1 Project Proponent and Other Entities

This grouped project will be implemented by CAAC. Information regarding the project proponent is included below:

Project Proponent	Point of contact	Roles/ Responsibility	Contact Details
Clean Air Action Corporation (CAAC)	Charles E. Williams, Vice President	Project developer, implementer, manager	Clean Air Action Corporation 7134 South Yale Ave, Suite 310 Tulsa, Oklahoma 74136 United States of America (USA) Phone: +1-918-747-8770

In addition to the project proponents, there are other individuals and organizations that will play an operative role in the project. These parties are presented below:

Other Entities	Point of contact	Roles/ Responsibility	Contact Details
Institute for Environmental Innovation (I4EI)	Vannesa Henneke, Executive Director	Manages sustainable development components of TIST	Institute for Environmental Innovation 7134 South Yale Ave, Suite 310 Tulsa, Oklahoma 74136 United States of America Phone: +1-918-712-1866
Berkeley Reafforestation Trust	Rodney Portman, Trustee	Berkeley Reafforestation Trust provides funding for sustainable development components of TIST	The Berkeley Reafforestation Trust 3 Harley Gardens London SW10 9SW United Kingdom Phone: 020 7373 6801

3.1.2 Project Start Date

The project start date is 01 January 2003.

3.1.3 Project Crediting Period

The project crediting period for this grouped project is 30 years, beginning on 01 January 2003 and ending on 31 December 2032.

3.1.4 Project Scale and Estimated Net GHG Emission Reductions or Removals

Project	Yes
Large Project	No

Estimated net GHG emission reductions for *The International Small Group and Tree Planting Program, Uganda, VCS-005* are listed below (includes 953 groves or project areas):

Years	Estimated GHG Emission Reductions or Removals (tCO₂e)
Year 2003	44
Year 2004	640
Year 2005	1,947
Year 2006	5,061
Year 2007	9,946
Year 2008	13,860
Year 2009	19,104
Year 2010	24,364
Year 2011	26,636
Year 2012	26,228
Year 2013	24,523
Year 2014	23,049
Year 2015	23,834
Year 2016	21,769
Year 2017	21,206
Year 2018	22,846
Year 2019	24,105
Year 2020	23,744

Year 2021	23,979
Year 2022	23,743
Year 2023	24,355
Year 2024	24,393
Year 2025	24,393
Year 2026	24,370
Year 2027	24,095
Year 2028	23,467
Year 2029	20,192
Year 2030	17,840
Year 2031	19,629
Year 2032	16,886
Total Estimated ERs	580,246
Total Number of Crediting Years	30
Average Annual Emissions Reductions	19,342

3.1.5 Project Activities

The validation affirmed the following project activity assertions of the PD. “The TIST Uganda project will achieve GHG removals through reforestation/revegetation and sequester atmospheric CO₂ in live aboveground and belowground biomass.” The initial project instances include 722.6 ha comprised of multiple project areas (or groves) in the Bushenyi, Kabale, Kanungu, Kisoro, Mbarara, Ntungamo, and Rukungiri Districts of Uganda.

TIST project areas are located on lands that have been used for cropland and grassland and are owned and controlled by subsistence farmers. The species to be planted are selected by the Small Groups based on their needs and the benefits. A list of suitable species is prepared based on input from local experts, the Uganda Forestry Department (UFD) and TIST members, and the benefits of suitable species are discussed at TIST training meetings prior to planting implementation. As a result, numerous species and varieties have been selected (see PD Table 1.8). Additional species may be added over the 30-year life of the project as additional plantings take place.

The technologies associated with the tree planting activities have been developed with input from UFD and through the use of existing literature. TIST also works with the Small Groups and local experts to develop best practices that are recommended to the members for adoption. The technologies employed by the project are described below:

“Nurseries: TIST best practices call for Small Groups to acquire seeds and develop their own nurseries using either seedbeds or pots made from plastic bags. Some Small Groups acquire seedlings from other groups, other individuals and local forest services.

Tree Planting: Tree planting is accomplished by manual methods using hand tools. TIST best practices call for farmers to dig individual holes that are 45 cm wide, 45 cm deep, spaced 2.5 m to 3.5 m apart for each seedling and fertilized using natural fertilizers. TIST does not own any fossil fuel vehicles or equipment to be used for tree planting.

Monitoring: TIST has deployed an innovative and award-winning data collection system that consists of battery-operated palm computers, GPS receivers, data and image uploads through laptops or internet access points to monitor project activities. The data collection is conducted by trained local representatives, called Quantifiers, who are often Small Group members. They travel to each specific project area by walking, bikes, and local buses. TIST does not own any vehicles.

Internet: TIST uses Internet technology to make program results available transparently to a worldwide audience. It is also used to transfer field data collected with the palm computers to the TIST database server located in the USA.

Pest Management: Small Groups are trained to use local natural techniques to manage pests. For example:

- Neem seeds are ground and added to boiling water. The mixture is left overnight and then applied to seedlings when cool.
- Neem leaves, washing soap, salt and red pepper (chili) are mixed together, then added to water and covered with the pan (this is a dangerous mixture!) and then boiled. The cooled mixture is applied to the seedlings.
- Ash is added to the area with seedlings.
- The area is well weeded to avoid encouraging pests.
- Neem leaves are boiled in water to make ‘bitter water’ and then applied to the seedlings.

Ongoing management: Long-term management of the trees rests with the Small Groups. However, due to the ongoing tree payment based on live tree counts and the long-term profit sharing arrangement with the Small Groups, there are ample incentives for the groups to maintain healthy long-term stands. All species will be maintained for the 30-year life of the project. Small Groups have contracted to replant trees that die in the first 20 years.

Management of the trees is dependent on the species. For example:

- *Pinus patula*: Initial spacing can be planted in rows, at a spacing of 2-2.5m. Selective harvesting will be ongoing, with a goal of achieving a 250 trees/ha, with stem density, with a mean Diameter at Breast Height (DBH) of 45 cm, at 45 years.
- *Eucalyptus* (spp.): Branches are trimmed and used for fuel wood. Stands planted closer than 3m x 3m should be thinned to that spacing within two to five years. Additional thinning will take place every year to provide fuel wood and/or a cash crop to the Small Groups.
- *Cupressus* (spp.): Cypress (common name) can be planted in wood lots at an initial density of 1,100/ha, but should be thinned to 300 trees/ha for saw wood production. Weeding is essential for the first two years to produce maximum growth. Optimal

spacing is 2-3m X 2-3m, where thinning inferior trees should occur after 4-5, and pole production can occur after ten years. Trees should be regularly pruned for maximum stem growth and to reduce risk of toppling over in strong wind or storms.”⁵

3.1.6 Project Location

The initial project activity instances include 722.6 ha comprised of multiple project areas (or groves) in the Bushenyi, Kabale, Kanungu, Kisoro, Mbarara, Ntungamo, and Rukungiri Districts of Uganda. “Most of the project activity is centered around Bushenyi, Kabale and Kanungu generally around latitude 0.5 S, longitude 30 E (see PD Figure 1.9).”⁶

As required by the VCS, both the project area boundaries and the grouped project geographic boundary were presented to the validator in Google Earth KML files. Boundaries were confirmed during the site visit for the project areas, or groves, that were sampled. Additionally, the grouped project geographic area boundary was confirmed and is consistent with the requirements for VCS grouped projects. All future project activity instances will be implemented in the geographic region represented by the districts listed above (the grouped project geographic boundary). The general location of the project areas, as well as the grouped project geographic boundary, is shown in the PD (see Section 1.9).

3.1.7 Project Compliance with Applicable Laws, Statutes, and other Regulatory Frameworks

All relevant information on CAAC and TIST’s compliance with laws, statutes, and other regulatory frameworks can be found in the PD (Section 1.11) and referenced supporting documents. CAAC declares that all of the laws, rules, and decrees mentioned in PD Section 1.11 are applicable to the entire geographic region (districts listed above) considered for the initial project activities, as well as future project instances.

Compliance with these laws was confirmed (with *reasonable* assurance) during validation for the initial instances.

3.1.8 Ownership and other Programs

3.1.8.1 Right of Use

As stated in the PD, “Each project area is a tree grove planted by a Small Group. It is named using a unique combination of the TIST number for that Small Group and the grove name.

- The landowner is a small hold farmer who is one of the TIST Small Group members. Uganda is going through a transition from customary tenure to land registry. The ownership of TIST project areas is both through customary tenure and registered land deeds.
- The Project Participants do not own any of the land. TIST is a project name, not a legal entity, and does not own, control or have any rights to any of the land.
- The landowner covenants together with other farmers to form a Small Group. The Small Groups own the trees that they plant and determine how tree products and carbon revenues are divided among themselves.

⁵Clean Air Action Corporation, *The International Small Group and Tree Planting Program, Uganda, VCS-005*, Version 01, 04 March 2013.

⁶Ibid

- Host Country land law is silent as to the ownership of carbon and carbon pools. However, the Small Groups own the trees that they plant together and grant the rights to all carbon associated with TIST to CAAC under a “Carbon Credit Sale Agreement.”
- Under Paragraph 4 of the “Carbon Credit Sale Agreement,” the members affirm their ownership or rights to the land designated as project areas.
- CAAC is registered as a branch in Uganda under the Companies Act and is a legal entity in Uganda.
- Under this PD, VERs shall be issued to CAAC.
- The current land use is agricultural.

The status of the contractual relationship between the land owner and TIST will be monitored. This will include changes in ownership of the land and changes in Small Group membership.”⁷

Validators have reviewed sample contracts and found them to be adequate and accurate. Further, site visits have confirmed the right of use for the project areas visited. This occurred through discussions with project participants and local chiefs and authorities.

3.1.8.2 Emission Trading Programs and other Binding Limits

No emission reductions generated by the project are part of an emissions trading program.

3.1.8.3 Participation under other GHG Programs

The project has not been registered and is not seeking registration under any other GHG programs.

3.1.8.4 Other Forms of Environmental Credit Sought or Received

The project has not created wetland mitigation, water quality, air pollution, other non-VCS GHG emission reduction, or any another form of environmental credit.

3.1.8.5 Rejection by other GHG Programs

The project has neither applied to receive credits from, nor has it been rejected by any other GHG program.

3.1.9 Additional Information Relevant to the Project

3.1.9.1 Eligibility Criteria for Grouped Projects

As stated in the PD, “Eligibility of this project is assessed at two levels. The first is based on the CDM methodology used and the second as a VCS grouped project.

CDM Methodology Eligibility Requirements: Regarding the former, the eligibility for a small-scale A/R CDM reforestation project is assessed using CDM Executive Board Report 35, Annex

⁷ Clean Air Action Corporation, *The International Small Group and Tree Planting Program, Uganda*, VCS-005, Version 01, 04 March 2013.

18, "Procedures to define the eligibility of lands for afforestation and reforestation project activities." To qualify as a CDM reforestation project, the project must meet the host country definition of a forest. Uganda defines the minimum area of a "forest" as 1.0 hectare with a minimum tree crown cover of 30%, with trees having the potential to reach a minimum height of five meters at maturity *in situ*. As a VCS project, however, this aspect of eligibility does not apply. VCS allows the use of smaller project areas and captures them as Afforestation, Reforestation and Revegetation projects. This PD includes discrete project areas that are less than the minimum area to allow the inclusion of even the smallest small-hold farmer. It also deviates from the 30% crown cover requirement to allow continued subsistence farming in the project areas.

The additional demonstrations required by Annex 18 are based on the results of TIST's baseline monitoring of each project area and are presented on the "Grove Summary" worksheet. The information is collected on-site, through direct observation and measurement and through direct discussion with the landowner and members of his/her Small Group. Additional evidence is based on information discussed below and demonstrates adherence to these requirements.

a) *Demonstrate that the land at the moment the project starts does not contain forest by providing transparent information that:*

(i) *Vegetation on the land is below the forest thresholds (tree crown cover or equivalent stocking level, tree height at maturity in situ, minimum land area).*

The physical survey of each parcel taken during the baseline monitoring indicates the lands were barren, cropland and/or covered with grass, shrub or litter and therefore did not meet the requirements for crown cover or height. Existing trees were identified by species and counted. As shown in the Section 3.1, the average stem density is well below the forest threshold.

(ii) *All young natural stands and all plantations on the land are not expected to reach the minimum crown cover and minimum height chosen by the host country to define forest.*

As shown in Section 3.1, there were relatively few existing trees when project activities began and most were found as isolated trees along the border of individual parcels. Given the history of continued deforestation, as indicated by the maps and satellite images and described in Section 2.4, and continued use of the land by the project members, it is not expected that this area will revert to natural forest without intervention.

(iii) *The land is not temporarily unstocked, as a result of human intervention such as harvesting or natural causes.*

The baseline monitoring indicates these areas have a history of cultivation ("Grove Summary" worksheet).

b) *Demonstrate that the activity is a reforestation or afforestation project activity:*

(i) *For reforestation project activities, demonstrate that the land was not forest by demonstrating that the conditions outlined under (a) above also applied to the land on 31 December 1989.*

The project areas did not contain a forest on 31 December 1989. This is demonstrated by the "Grove Summary" worksheet. As part of collecting the baseline information, the landowners are questioned about whether their project area was forested in 1990. 100% of them responded that it was not forested. In addition, baseline monitoring was conducted on each individual project area to confirm that there had not been deforestation of a parcel since that time. This generally included looking for stumps or evidence of recent harvest activity and looking at the surrounding lands to see if there were indications that the project areas were cleared of native ecosystems

within the ten-year period prior to the proposed Project Start Date. Nothing was observed to indicate there had been deforestation activity.

Historical imagery from 1990 and 2000 was also looked at. Because the discrete project areas tend to be very small, the resolution is too coarse on both images to conduct a detailed analysis of each project area. However, both images confirm that the project areas are situated on lands that have a history of human occupancy and farming. The protected forests can be seen on both images, to contrast with the areas where the project areas are located. These observations support the statements by the landowners and field observations by TIST personnel that the project areas were not deforested since 31 December 1989, or that project areas were cleared of native ecosystems within the ten-year period prior to the proposed Project Start Date.

Grouped Project Eligibility Criteria: Each instance, present and future, will meet the CDM requirements. This includes eligibility (PD Section 1.13.1), applicability (PD Section 2.2), additionality thresholds (PD Section 2.5), the technologies and measures used (PD Section 1.8), baseline scenario and determination (PD Section 2.4), boundary determination (PD Section 2.3) and monitoring (PD Section 4.0), all as described, herein.

In addition to the above, there are two other eligibility criteria for inclusion of new instances of each project activity. The first is that it must be in the geographic area defined in PD Section 1.9.

The second is that the *ex ante* carbon estimates for each project area (i.e. instance) must be below the pertinent capacity limits. In this case, the CDM small scale AR methodology has a 16,000 tonne per year average limit on a project. This equates to 480,000 tonnes CO₂e for a 30-year project life. VCS places a one percent limit on each instance and requires instances that exceed this limit to be divided into clusters. To be eligible for this PD, each project area shall either be at or below the one percent level (4,800 tonnes CO₂e) or will meet the requirements for inclusion as a cluster.

For the subset of TIST project areas that are in this PD, all of the instances are less than the one percent threshold. This is documented in the "Proj Life Ex ante CO₂e" column of the "Grove Summary" worksheet. The calculations are based on the *ex ante* estimates for each stratum in the "Strata" worksheet. The results were further modified to adjust for project areas that because of the area (ha) exceeded the *ex ante* estimates, but because of the stem density does not. All of the documentation is presented in a transparent and verifiable manner in the worksheets."⁸

For the sites visited, all eligibility criteria were reviewed and found to be in conformance. Eligibility is confirmed for the instances included in the grouped project PD.

3.1.9.2 Leakage Management for AFOLU Projects

As stated in the PD, "Leakage will be minimized as follows:

Fossil fuel emission: TIST owns no fossil fuel vehicles or equipment. Quantifiers and staff use public transport, walking and bicycles to go to various project areas. Use of palm computers and the Internet allows Quantifiers to upload their data at local Internet cafés or by using mobile phone technology, reducing travel and use of public transportation back to TIST offices.

Displacement of people: TIST member's plant trees, on their own lands. The Greenhouse Gas Agreement among the Small Group members and the Project Participant does not give the

⁸ Clean Air Action Corporation, *The International Small Group and Tree Planting Program, Uganda, VCS-005, Version 01, 04 March 2013.*

Project Participant any right to the Small Group's land or require that they leave. TIST does not displace any people.

Displacement of farming activities: TIST small hold farmers only plant trees to the extent that they can afford to, given their reliance on the remainder of their land for subsistence agriculture. The value of their crops far exceeds the GhG revenues that are available. In addition, where Small Groups have adopted conservation farming, the applicable crops have yielded over twice that of traditional farming.

Displacement of primary fuel supply: TIST tree growing activities do not cause leakage in the form of harvesting wood outside the project area. First, a large numbers of the residents in the subject districts already use wood as their primary source of fuel, an activity that has resulted in regional deforestation. Second, TIST best practices call for the planting and management of sustainable woodlots that allows for the continuing growth of carbon stocks and the use of deadfall, or tree wood, available through managed thinning. TIST will not cause leakage from this activity; it helps mitigate it.”⁹

Leakage was evaluated by the validation team at every opportunity during the site visit and through interviews with project participants and local authorities. Leakage was determined to not be an issue and can be considered to be negligible.

3.1.9.3 Commercially Sensitive Information

The following documents were reviewed by ESI during the validation. These documents are considered by CAAC to be confidential and commercially sensitive and will be excluded from the publicly issued PD:

- “The International Small Group and Tree Planting Program, Carbon Credit Sale Agreement, Exhibit 03: TIST UG PD-VCS-Ex 03 GhG Contract UG 051014.doc”
- “The International Small Group and Tree Planting Program, Carbon Credit Sale Agreement, Exhibit 04: TIST UG PD-VCS-Ex 04 GhG Contract UG 080319.doc”
- “CAAC's proprietary financial model, Exhibit 09: TIST UG PD-VCS-Risk Ex09 Financial Plan.xls (referenced in Non-Permanence Risk Report)”

3.1.9.4 Further Information

There is no further additional information, which would have a bearing on the eligibility of the project relating to net GHG emissions reductions or removals, or quantification of net GHG emissions reductions or removals, that has not been included in the PD and its supporting documentation.

3.2 Application of Methodology

3.2.1 Title and Reference

The project is applying the CDM Methodology AR-AMS0001: “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” v06 (17 September 2010). The project is also using the following tools:

⁹ Clean Air Action Corporation, *The International Small Group and Tree Planting Program, Uganda, VCS-005, Version 01, 04 March 2013.*

- “Procedures for the demonstration of land eligibility, AR-AMS0001, Appendix A.”
- “Procedures for the assessment of additionality, AR-AMS0001, Appendix B.”

3.2.2 Applicability

The validation confirmed the project met the following applicability conditions of AR-AMS0001:

“1. Project activities are implemented on grasslands or croplands.”

Survey information and baseline field observations contained within PD Appendix 04: “Excel spreadsheet of data with referenced worksheets, TIST UG PD-VCS-005e App04 Data 130208 Group.xlsx” demonstrates that all instances can be classified as either croplands or grasslands. The validation team confirmed this during the site visit.

“2. Project activities are implemented on lands where the area of the cropland within the project boundary displaced due to the project activity is less than 50 per cent of the total project area.”

Survey information and baseline field observations contained within PD Appendix 04 demonstrates that project activities will result in displacement of cropland on approximately 0.7% of the total project area (less than six ha). The validation team confirmed this during the site visit.

“3. Project activities are implemented on lands where the number of displaced grazing animals is less than 50 per cent of the average grazing capacity of the project area.”

Survey information and baseline field observations contained within PD Appendix 04 demonstrates that 88.1% of the project participants indicated they rarely or never grazed their land. Additionally, Appendix 04 indicates project activities will result in displacement of grazing activities on approximately 0.7% of the total project area (less than six ha). During the site visit, the validation team confirmed that grazing is not significant in either the individual project areas or the project as a whole. As stated in the PD, “Some farmers do keep a few head of cattle, but they are typically confined to pens and fed fodder.”

“4. Project activities are implemented on lands where $\leq 10\%$ of the total surface project area is disturbed as result of soil preparation for planting.”

This project does not employ site preparation practices. This was confirmed by the validation team during the site visit. The only project activity that results in soil disturbance is the act of planting itself. As recommended by the TIST Tree Planting Standard Operating Procedures (SOPs) (see “TIST UG PD-VCS-Ex 30 Tree Planting SOPs.pdf”¹⁰), the minimum planting spacing should be two meters x two meters, or four square meters with a planting hole size of 0.3 meters in diameter, or 0.07 square meters. Based on these recommendations, the total area of soil disturbance equates to approximately 1.8% of the total project area (approximately 13 ha). As stated in the PD, “plowing does take place for intercropping, as part of the baseline activity and is not considered by the CDM AR Working Group to be part of the project activity.”

Additionally, the validation confirmed that the project areas included in the PD are eligible for the A/R project activity based on the procedures contained in Appendix A of AR-AMS0001.

¹⁰TIST’s tree planting SOPs are part of the training curriculum given to project participants.

3.2.3 Project Boundary

The appropriate carbon pools and GHG emission sources (as specified by AR-AMS0001) are accounted for and included in the project boundary. As shown in the PD, the project and baseline GHG sources included in or excluded from the project boundary, and justification, are shown below:

Source		Gas	Included?	Justification/Explanation
Baseline	Baseline tree growth	CO ₂	n/a	Not required by methodology, see PD Section 3.1
		CH ₄	n/a	Not required by methodology
		N ₂ O	n/a	Not required by methodology
		Other	n/a	
Baseline	Baseline non-woody growth	CO ₂	n/a	Not required by methodology, see PD Section 3.1
		CH ₄	n/a	Not required by methodology
		N ₂ O	n/a	Not required by methodology
		Other	n/a	
Project	Trees	CO ₂	Yes	Above and below ground biomass, see PD Section 3.2
		CH ₄	n/a	Not required by methodology
		N ₂ O	n/a	Not required by methodology
		Other	n/a	

While no test or analysis of project GHG emission sources are required under AR-AMS0001, the following comments are provided in the PD:

- **"Fertilizers:** The policy of TIST is for the farmers to refrain from using chemical fertilizers and instead to rely on dung and plant material. Neither of these is the result of project activity and need not be considered. However, if considered, the nitrogen emissions from natural fertilizers are estimated to be less than 0.1% of the actual net greenhouse gas removal by sink and may be considered de minimis. See "Misc Calc" worksheet (in Appendix 04).

- **Nitrogen-fixing species:** Emissions from nitrogen fixing species are also insignificant. Though present, the nitrogen-fixing trees are a minor component of the overall tree inventory. Because any deadwood will be used for domestic fuel, the trees will not be left to rot or decay. The lands where the trees are being planted are degraded and likely have a nitrogen deficit.
- **Fossils Fuels:** There will be no burning of fossil fuels or biomass for site preparation, monitoring, tree harvesting, or wood transportation; nor does TIST involve any industrial processes, as all labor is manual. Thus, no other GHGs are expected to be emitted as a result of the implementation of the proposed project.”¹¹

Thus, project emissions are considered insignificant and therefore neglected. Research and the findings of validation site visit support this information.

3.2.4 Baseline Scenario

Based on validator research, review of project documents, and site visits conducted, the findings support the justification that the baseline land use scenario without the project will be continuation of pre-project land-use, including grasslands and croplands. The lands are owned by subsistence farmers and have undergone historic forest clearing to allow land uses that are more financially attractive than natural forest cover or long-term forestry (i.e. farming). Wood use, agriculture and increasing population have been key factors in historical deforestation (see PD Section 2.4, Literature Regarding Changes in Baseline Carbon Stocks). As stated in the PD, “there is little reason to believe that the project areas will revert to forest without intervention and there are no alternative uses of this land that can be reasonably expected.”

3.2.5 Additionality

The validator confirmed that the project activity is additional based on the procedures contained in Appendix B of AR-AMS0001. The PD (Section 2.5) explains several barriers that have, and will continue to, inhibit reforestation on project areas and similar lands:

“Investment Barrier: Tree plantations require investment to obtain seedlings and, in the case of TIST farmers, to take land out of current revenue production activities, such as cropland, for long-term gain. Investment requires access to credit. However, due to their low income, the farmers participating in TIST have little opportunity for investment loans or capital.

Barriers due to Social Conditions, Lack of organization: Planting large plantations requires more than a single individual. The local communities lack the organizational structure to put together a volunteer effort to plant trees.

Laws and Regulations Requiring Tree Planting: The trees are planted on private lands and there are no laws or regulations that require the TIST farmers to plant them.

Common Practice: There are cases in the area where farmers have planted fast rotation trees without the carbon incentive. These farmers have no incentive to maintain the trees; indeed, their incentive is to harvest them as soon as possible to get the revenue.”¹²

¹¹ Clean Air Action Corporation, *The International Small Group and Tree Planting Program, Uganda*, VCS-005, Version 01, 04 March 2013.

¹² Clean Air Action Corporation, *The International Small Group and Tree Planting Program, Uganda*, VCS-005, Version 01, 04 March 2013.

The project activities implemented by TIST will allow the project participants to overcome these barriers. In addition, implementation of the project activities that allow the barriers to be overcome would not be possible without revenues from carbon finance. TIST's operational budget for the project is funded through an investment from CAAC, which is contingent on returns of future GHG revenues. Moreover, incentive payment from CAAC to the project participants is also depended on carbon finance. Ultimately, the TIST project, or any other proposed tree planting project by subsistence farmers in Uganda, without the implementation of a VCS ARR project is neither viable nor sustainable.

3.2.6 Quantification of GHG Emission Reductions and Removals

3.2.6.1 Quantification of Baseline Emission Reductions and Removals

The validator confirmed that baseline GHG removals by sinks have been estimated in accordance with AR-AMS0001. The procedure for quantifying baseline emission reductions or removals entails sampling woody biomass within the project boundary to estimate total carbon stocking and then estimating change over the crediting period following the procedure detailed in Section II. As per AR-AMS0001 Section II.6.a, the changes in carbon stocks shall be assumed to be zero in the absence of the project activity if changes in the carbon stocks in the living biomass of woody perennials and the belowground biomass of grasslands are expected not to exceed 10% of *ex ante* actual (with project) GHG removals by sinks.

As shown in the PD (see Section 3.1.3), the Project Proponent conducted an analysis showing that if the project areas were to continue as croplands and grassland under active human intervention, the carbon stock in the living biomass pool of woody perennials and below-ground biomass of grassland is not expected to exceed 10% of the *ex ante* actual GHG removals by sinks. The validator confirmed this analysis to be appropriate, and it adequately demonstrates that the project meets the requirements of AR-AMS0001 Section II.6.a that allow the net change in carbon stocks in the baseline be equal to zero. Thus, the baseline GHG removals for the project equal zero throughout the life of the project.

3.2.6.2 Quantification of Project Emission Reductions and Removals

The validator confirmed that project emission reductions have been estimated in accordance with the AR-AMS0001 Section III. Similar to the baseline, the procedure for quantifying project emission reductions or removals entails estimating the change in carbon stocking of woody biomass over the project crediting period. Because the baseline GHG removals for the project equal zero (see Section 3.2.6.1 above), project emissions are insignificant/neglected (see Section 3.2.3 above), and an *ex ante* leakage estimate is not required (see Section 3.2.6.3 below), project emission reductions are equal to the net GHG emission reductions. Project emission reductions for the 30-year project crediting period (totaling 580,246 tCO₂e) are presented in Section 3.1.4 above.

3.2.6.3 Quantification of Leakage

As per AR-AMS0001 Section IV, quantification of leakage is not required, or can be considered to be equal to zero, if:

- “Project participants demonstrate that the small-scale afforestation or reforestation project activity under the CDM does not result in the displacement of activities or people, or does not trigger activities outside the project boundary, that would be attributable to

the small-scale afforestation or reforestation project activity under the CDM, such that an increase in greenhouse gas emissions by sources occurs”¹³ and

- “Evidence can be provided that there is no displacement, or the displacement of pre-project activities will not cause deforestation attributable to the project activity, or the lands surrounding the project activity contain no significant biomass (i.e. degraded land with no or only a few trees or shrubs per hectare) and if evidence can be provided that these lands are likely to receive the shifted activities. Such evidence can be provided by scientific literature or by experts’ judgment.”¹⁴

As discussed in Section 3.1.9.2 above, the *The International Small Group and Tree Planting Program, Uganda, VCS-005* does not cause fossil fuel emissions and does not result in the displacement of people. Further, as discussed in Section 3.2.3 above, project emissions that could cause leakage are considered insignificant and therefore neglected.

Finally, “TIST farmers are small hold farmers that rely on their land for subsistence agriculture. Since they need most of their land to grow foods and because the value of their crops and livestock far exceeds the GHG revenues that are available, displacement of farming activities is limited. As part of the data collection for the baseline activity, Small Groups are asked, “Will any activities be displaced?” This question is asked in the context of the CDM Executive Board’s interpretation that if moving to one’s own existing farm plots “does not trigger activities outside the project boundary that would be attributed to the small-scale afforestation or reforestation project activity under the CDM, such that the increase in greenhouse gas emissions by a source occurs, a leakage estimation is not required.” A survey of TIST members controlling the project areas indicated that activities were displaced on 5.3 hectares.”¹⁵

These assertions were confirmed during the validation event. Thus, an *ex ante* leakage calculation is not necessary.

3.2.6.4 Summary of Net GHG Emission Reductions or Removals

The validator confirmed that net GHG emission reductions and removals have been estimated in accordance with AR-AMS0001 Section V. As described in Section 3.2.6.2 above, the net GHG emission reductions are equal to the calculated project emission reductions. The net GHG emission reductions for the 30-year project crediting period (totaling 580,246 tCO₂e) are presented in Section 3.1.4 above.

3.2.6.5 Uncertainties Associated with the Calculation of Emission Reductions or Removals

The validator confirmed there are no deductions associated with uncertainty. CAAC used appropriately conservative data, factors, assumptions, and equations in the estimation of net GHG removals by sinks.

¹³ AR-AMS0001, Section IV. Leakage (ex-ante)

¹⁴ Ibid

¹⁵ Clean Air Action Corporation, *The International Small Group and Tree Planting Program, Uganda, VCS-005*, Version 01, 04 March 2013.

3.2.7 Methodology Deviations

The validation confirmed that there are no deviations from the methodology. As noted in Section 3.1.9.1 above, several of the TIST project areas do not meet Uganda's definition of a forest as required by the CDM. However, this requirement does not apply to VCS ARR projects.

3.2.8 Monitoring Plan

The following are the primary data and parameters that were monitored prior to, and made available and assessed during validation:

- Location of project area
- Boundary of project area
- Area of project area
- Ownership of project area
- Baseline trees
- Baseline tree circumference
- Baseline strata
- Project trees
- Number of trees
- DBH
- Total CO₂e

The monitoring plan procedures and equipment were comprehensive and were found to be applicable to the parameters monitored. They were appropriately designed and provided reasonable assurance that the sequestration occurring from GHG sources, sinks, and reservoirs was (baseline) and will be (project scenario) accurately assessed. In accordance with the conditions of AR-AMS0001, project emissions were considered insignificant and therefore neglected.

The monitoring plan includes a Quality Assurance/Quality Control (QA/QC) plan to control for errors in measurement and data analysis. Application of the QA/QC plan will provide documentation and consistency in data archiving to permit efficient third-party auditing and evaluation against measurement and quantification standards over the life of monitoring.

CAAC is responsible for the registration, monitoring, measurement, and reporting of sequestration within the timeframe required by VCS-AFOLU-ARR requirements.

3.3 Environmental Impact

In addition to the sequestration of carbon, *The International Small Group and Tree Planting Program, Uganda, VCS-005* creates several environmental co-benefits.

CAAC conducted an environmental screening for the TIST program in Uganda (see "TIST UG PD-VCS-Ex 01 Environmental Screening 060803.pdf"). The environmental screening report was submitted to the National Environmental Management Authority (NEMA) of Uganda for review on 03 August 2006. On 15 May 2007, NEMA provided a letter to CAAC stating that "there are no anticipated adverse environmental impacts and therefore, there is no need for further environmental assessment at this stage."¹⁶

¹⁶ TIST UG PD-VCS-Ex 02 NEMA EA Approval 070515.pdf

Additionally, a third party consulting firm (NAREDA Consultants of Nanyuki, Kenya), was contracted by CAAC to investigate the TIST program's environmental impact in Kenya (which has very similar operational conditions to Uganda). The report produced by NAREDA Consultants¹⁷ outlines several existing positive impacts (e.g. increased tree cover, improved soil fertility, reduced erosion and sedimentation), potential positive impacts (e.g., enhanced biodiversity, heightened populations of native species, improved farm productivity), as well as existing and potential negative impacts (e.g., high expectations from farmers, inadequate information dissemination, farmer's dissatisfaction due to delayed payment) and their mitigation measures.

It is clear that the positive environmental impacts produced by the TIST program are much more numerous than the negative impacts. In their report, NAREDA concluded, "drawing from the positive and negative impacts as highlighted above, the former outweighs the latter by far, an observation clearly pinpointed by community, especially during the focused group discussions."

Validators and TIST program managers have reviewed the mitigation measures for addressing negative impacts and found that they are part of the existing program in both Uganda and Kenya. As stated in the PD, "Most refer to constant outreach to the member to increase awareness. TIST provides regular training in the abovementioned activities through seminars, cluster meetings, Small Group meetings and the newsletter. In addition, TIST Quantifiers are trained in most aspects of the program and they try to visit each Small Group once a year. While their primary purpose is quantification, they can also provide answers to some questions while on site."¹⁸

This information was confirmed during the validation event through documentation review, interviews, and site visits.

3.4 Comments by stakeholders

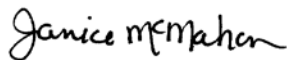
Comments from stakeholders were appropriately documented and were found to be overwhelmingly positive. The few exceptions included requests for higher payments on a per tree basis and more timely delivery of payments. Where concerns have been identified, CAAC has made tangible efforts to resolve any issues or concerns. The stakeholder input was confirmed through interviews with a sample of stakeholders conducted during validation.

¹⁷ TIST KE PD-VCS-Spt 06 EIA Report NAREDA 100506.doc. Available at TIST.org.

¹⁸ Clean Air Action Corporation, *The International Small Group and Tree Planting Program, Uganda*, VCS-005, Version 01, 04 March 2013.

4 VALIDATION CONCLUSION

ESI confirms all validation activities including objectives, scope and criteria, level of assurance and the PD are complete and in adherence to the VCS Version 3 and all associated updates as documented in this report. ESI concludes without any qualifications or limiting conditions that the PD *The International Small Group and Tree Planting Program, Uganda, VCS-005* (dated 04 March 2013) meets the requirements of VCS Version 3 and all associated updates.

Report Submitted to:	Voluntary Carbon Standard Association 1730 Rhode Island Ave. NW, Suite 803 Washington, D.C. 20036 Clean Air Action Corporation (CAAC) 7134 South Yale Avenue, Suite 310 Tulsa OK, USA 74136
Report Submitted by:	Environmental Services, Inc. Corporate Office 7220 Financial Way, Suite 100 Jacksonville, FL 32256
ESI Lead Validator Name and Signature:	 Shawn McMahon Lead Validator
ESI Division Regional Technical Manager Name and Signature:	 Janice McMahon Vice President and Forestry, Carbon and GHG Division Regional Technical Manager
Date:	07 March 2013

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APPENDIX A – NCR/CL/OFI SUMMARY

Summary - Project Validation/Verification Non-Conformance Reports (NCR) / Clarification (CL) Requests

1. Clarification

VCS Standard 3.3 Criteria: 3.4.2 Grouped projects shall have one or more clearly defined geographic areas within which project activity instances may be developed. Such geographic areas shall be defined using geodetic polygons as set out in Section 3.10 below.	
Evidence Used to Assess Conformance: TIST UG PD VCS 005a Section 1.9 and 1.13.1	
Clarification (CL): CL: Please clarify in PD Sections 1.9 and 1.13.1 the grouped project's geographic boundary.	
Date issued:	11 January 2013
Project proponent response/actions and date: Both sections of the PD were modified to refer to the areas within the kml file defining the area of the grouped project rather than the country of Uganda.	
Evidence used to close CL: TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed modifications to PD as indicated. This item has been satisfactorily addressed.	
Date closed:	21 February 2013

2. Clarification

VCS Standard 3.3 Criteria: 3.10.3 Project location for AFOLU projects shall be specified using geodetic polygons to delineate the geographic area of each AFOLU project activity and provided in a KML file.	
Evidence Used to Assess Conformance: Section 1.9 of PD; Monitoring report Section 1.7; Appendix 06; Appendix 03; tist.org	
Clarification (CL): CL: Please clarify the Districts of Uganda where project areas are located in PD Sections 1.9 and Monitoring Report Section 1.7. There are discrepancies in those listed and where the project areas fall according to Appendix 03.	
Date issued:	11 January 2013
Project proponent response/actions and date: This was resolved in a telephone discussion with ESI, and no action is required.	
Evidence used to close CL: Conference call on 17 January 2013: Client described how the project is designed to allow for inclusion of future instances within the defined grouped project geographic boundary. This is permitted under VCS, and the PD text is written in a way that will allow the addition of future instances. This item was addressed in satisfactory detail that allows this issue to be closed.	
Date closed:	21 February 2013

3. Non-Conformance Report

VCS Standard 3.3 Criteria:

3.11.1 The project description shall be accompanied by documentary evidence establishing conclusively one or more of the following rights of use (see VCS document Program Definitions for definition of right of use) accorded to the project proponent(s):

- 1) A right of use arising or granted under statute, regulation or decree by a competent authority.
- 2) A right of use arising under law.
- 3) A right of use arising by virtue of a statutory, property or contractual right in the plant, equipment or process that generates GHG emission reductions and/or removals (where such right includes the right of use of such reductions or removals and the project proponent has not been divested of such right of use).
- 4) A right of use arising by virtue of a statutory, property or contractual right in the land, vegetation or conservational or management process that generates GHG emission reductions and/or removals (where such right includes the right of use of such reductions or removals and the project proponent has not been divested of such right of use).
- 5) An enforceable and irrevocable agreement with the holder of the statutory, property or contractual right in the plant, equipment or process that generates GHG emission reductions and/or removals which vests the right of use in the project proponent.
- 6) An enforceable and irrevocable agreement with the holder of the statutory, property or contractual right in the land, vegetation or conservational or management process that generates GHG emission reductions or removals which vests the right of use in the project proponent.
- 7) A right of use arising from the implementation² or enforcement of laws, statutes or regulatory frameworks that require activities be undertaken or incentivize activities that generate GHG emission reductions or removals.

Evidence Used to Assess Conformance:

PD Section 1.12.1. Exhibit 03, Exhibit 04, and contracts.

Non-Conformance report (NCR):

NCR	Information	Request:
Please provide individual completed contract samples for the following small groups as demonstration of control over right to use project areas for carbon sequestration:		
MuhendeTreePlanting		
kabakomba		
TUKWATANISE		
MuroleGoodSamaritan		
Nyabwina .Twimukye		

Date issued:	11 January 2013
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Project proponent response/actions and date:

MuhendeTreePlanting:	Online	at	http://www.tist.org/i2/blobs/bin_contract/16/16C9.PDF
kabakomba:	Online	at	http://www.tist.org/i2/blobs/bin_contract/12/12E8.PDF
TUKWATANISE:	Online	at	http://www.tist.org/i2/blobs/bin_contract/07/07A8.PDF
MuroleGoodSamaritan:	Online	at	http://www.tist.org/i2/blobs/bin_contract/1F/1F90.PDF
Nyabwina .Twimukye:	Online	at	http://www.tist.org/i2/blobs/bin_contract/1D/1D66.PDF

Evidence used to close NCR:

Completed contract samples were reviewed and found to be adequate and satisfactory. The documents adequately demonstrate control over right to use project areas for carbon sequestration. Item is addressed.

Date closed:	21 February 2013
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4. Non Conformance Report
VCS Standard 3.3 Criteria:

3.16.6 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:

Evidence Used to Assess Conformance: TIST UG PD-VCS-005h App07 Monitoring Rpt 121112.doc	
Non Conformance Report (NCR): NCR: Please revise PD Section 4.3.3 to include calculation assumptions presented in the Monitoring Report Sections 3.3.1 and 3.3.2. See Monitoring report with highlighting.	
Date issued:	11 January 2013
Project proponent response/actions and date: The PD and Section 3.3.1 are correct. Section 3.3.2 was changed to indicated the setting the circumference of all one year old strata is temporary. "The project counts all trees, but no circumference measurements are taken if the trees are less than breast height. It was identified in a previous verification (TIST has multiple PDs) that the Quantifiers were leaving the circumference blank and not entering a zero. The Quantifiers have been trained on the difference between entering a zero and leaving the circumference blank and new data for one year old trees is now being collected. However, to make sure this issue does not bias the results, the circumference of all one-year-old trees was set at zero. When the data set is corrected, in subsequent verifications the one year old trees will be added back to the he monitoring system."	
Evidence used to close NCR: TIST UG PD-VCS-005i App08 Monitoring Data 130208 Group.xlsx: The setting of the circumference of all one year old trees was confirmed by reviewing the monitoring data. TIST UG PD-VCS-005h App07 Monitoring Rpt 130208.doc: Section 3.3.2 of the Monitoring report was confirmed as now including an explanation of the temporary 0 circumference value and that it will be updated in subsequent verifications as the trees grow to a height that allows for a measurement of circumference. Issue is addressed.	
Date closed:	21 February 2013

5. Opportunity for Improvement

VCS Standard 3.3 Criteria: 4) The calculation of net GHG emission reductions and removals.	
Evidence Used to Assess Conformance: Monitoring Report Section 3	
Opportunity for Improvement (OFI): OFI: Include the step-by-step procedures for quantification of project removals (in Section 3.3.1) and Section 3.3.2 in Section 4 2 of Monitoring Report	
Date issued:	11 January 2013
Project proponent response/actions and date: We disagree with this suggestion. The template says that the monitoring system is to be described in Section 3 and the results reported in Section 4. We have 10 other successfully validated and verified PDs that have described the monitoring system in Section 3 and wish to stay consistent.	
Evidence used to close NCR: Disagreement accepted. This was a suggested OFI, and does not representing any calculation errors or deviations from the methodology or VCS requirements.	
Date closed:	21 February 2013

6. Clarification

VCS Standard 3.3 Criteria:

3.1.1 As set out in the VCS Standard, standards and factors used to derive GHG emissions data as well as any supporting data for establishing baseline scenarios and demonstrating additionality shall be publicly available and derived from a reputable and recognized source, such as IPCC 2006 Guidelines for National GHG Inventories or the IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry.

Evidence Used to Assess Conformance:

TIST UG PD VCS 005a and supporting documents

Clarification (CL):

CL: Please indicate in the PD and/or Appendix 04 the source of the baseline increment growth factor of .5 cm per year as stated in the assumptions on page 31, Section 3.1.3 Assumptions

Date issued:

11 January 2013

Project proponent response/actions and date:

"David Shoch, TerraCarbon LLC, personal communication, 2009" was added as a footnote.

Evidence used to close NCR:

TIST UG PD-VCS-005a PD Text 130208.doc (Section 3.1.3): Confirmed the footnote was added to PD Section 3.1.3 as indicated. This reference is consistent with previously verified projects and Mr. Shoch is a reputable source. Issue is addressed.

Date closed:

21 February 2013

7. Clarification

VCS Standard 3.3 Criteria:

3.2.1 As set out in the VCS Standard, the project start date of an AFOLU project shall be the date on which activities that lead to the generation of GHG emission reductions or removals are implemented. Such activities may include preparing land for seeding, planting, changing agricultural or forestry practices, rewetting, restoring hydrological functions, or implementing management or protection plans.

Evidence Used to Assess Conformance:

PD Section 1.5; TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx

Clarification (CL):

CL: Please make the necessary correction in the Grove Summary Worksheet of Appendix 04 to indicate that all instances were planted on or after the project start date.

Date issued:

11 January 2013

Project proponent response/actions and date:

Grove Summary worksheet was reviewed and the corrections were made.

Evidence used to close NCR:

TIST UG PD-VCS-005e App04 Data 130208 Group.xlsx: Grove summary worksheet was reviewed and it is confirmed to have no instances that were planted before 01 January 2003. Issue is addressed.

Date closed:

21 February 2013

8. Clarification

VCS AFOLU Non-Permanence Risk Tool, Version 3.2 Criteria:

Species planted (where applicable) associated with more than 25% of the stocks on which GHG

credits have previously been issued are not native or proven to be adapted to the same or similar agro-ecological zone(s) in which the project is located.	
Evidence Used to Assess Conformance: Appendix 05; TIST UG PD-VCS-005i App08 Monitoring Data 121112 Group.xlsx	
Clarification (CL): CL: Please include in the Risk Report a valid link for reference number 2	
Date issued:	11 January 2013
Project proponent response/actions and date: A new reference has been added: "Uganda National Forestry Authority website. TIST UG PD-VCS-Ex 28 Uganda NFA Pinus Patula.pdf"	
Evidence used to close NCR: TIST UG PD-VCS-005f App05 Risk Analysis 130208.doc: Confirmed that the new reference was added as indicated. TIST UG PD-VCS-Ex 28 Uganda NFA Pinus Patula.pdf: Exhibit 28 has been provided to verifiers and is available on the TIST website. This is a pdf of one of the Uganda NFA web pages and indicates that <i>Pinus patula</i> is one of Uganda's primary timber species. Issue is addressed.	
Date closed:	21 February 2013

9. Clarification

VCS AFOLU Non-Permanence Risk Tool, Version 3.2 Criteria: Project cash flow breakeven point is less than 4 years from the current risk assessment	
Evidence Used to Assess Conformance: Appendix 05; TIST UG PD-VCS-Ex 09 Financial Plan.xls	
Clarification (CL): CL: Please indicate what is included in project management costs	
Date issued:	11 January 2013
Project proponent response/actions and date: These are costs not incurred in the host country and include the US staff, rent, international travel, hosting and maintaining the TIST website, programming and technical support for the monitoring system, purchase of the monitoring system equipment, phone, internet, legal, accounting, rent, cost of validation and verification (both internal and external), development to training curricula.	
Evidence used to close NCR: Response above and TIST UG PD-VCS-Ex 09 Financial Plan.xls: The items identified as project management cost appear to be reasonable. Further, their values, as shown in the TIST Financial Plan, also appear to be reasonable. Issue addressed.	
Date closed:	21 February 2013

10. Non-Conformance Report

VCS AFOLU Non-Permanence Risk Tool, Version 3.2 Criteria: Project has secured 80% or more of funding needed to cover the total cash out before the project reaches breakeven	
Evidence Used to Assess Conformance: Appendix 05; TIST UG PD-VCS-Ex 09 Financial Plan.xls	
Non-Conformance report (NCR):	

NCR: Please provide evidence that the funding is secured as per VCS AFOLU Risk tool Section 2.2.2.4. Also, please document carbon credit pricing assumptions.	
Date issued:	11 January 2013
Project proponent response/actions and date:	
Note: The project financial plan is for the entire TIST program, all countries, all PDs and all project areas whether in a PD or not. Revenues are shared to operate the program. Funding: Confidential. Modification 4 from USAID indicating an aggregate award of \$7.4 million under the current award (Mar 2009 to Mar 2014) was forwarded to Stewart McMorrow Feb 06. Pricing Assumptions: See row 15, Finance worksheet.	
Evidence used to close NCR: USAID KE Award 2009-2014 Mod 04 120109.pdf: This document was reviewed and suffices as appropriate evidence showing that the project has secured 80% or more of funding needed to cover the total cash out before the project reaches breakeven. TIST UG PD-VCS-Ex 09 Financial Plan.xls: The TIST financial plan was revisited and it is confirmed that carbon credit pricing assumptions are documented in row 15 of the "Finance Worksheet." Further, they are conservative considering projected market conditions.	
Date closed:	21 February 2013

11. Non-Conformance Report

VCS AFOLU Non-Permanence Risk Tool, Version 3.2 Criteria: Mitigation: Project has available as callable financial resources at least 50% of total cash out before project reaches breakeven	
Evidence Used to Assess Conformance: Appendix 05; TIST UG PD-VCS-Ex 09 Financial Plan.xls	
Non-Conformance report (NCR): NCR: Please identify callable financial resources and provide evidence of access to such resources as per VCS AFOLU Risk Tool Section 2.2.2.5.	
Date issued:	11 January 2013
Project proponent response/actions and date:	
Note: The project financial plan is for the entire TIST program, all countries, all PDs and all project areas whether in a PD or not. Revenues are shared to operate the program. Confidential: See NCR 10. The most recent \$1,460,000 shown in 13.A (Funding History) exceeds the 50% level.	
Evidence used to close NCR: USAID KE Award 2009-2014 Mod 04 120109.pdf: This document was reviewed and suffices as appropriate evidence showing that the project has available as callable financial resources at least 50% of total cash out before project reaches breakeven as identified in TIST UG PD-VCS-Ex 09 Financial Plan.xls. The project has already reached breakeven (2009) and the funding award from USAID exhibits callable financial resources available to expand the TIST program. Issue is addressed.	
Date closed:	21 February 2013

12. Non-Conformance Report

VCS AFOLU Non-Permanence Risk Tool, Version 3.2 Criteria: Less than 50 percent of households living within the project area who are reliant on the project area,	
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have been consulted	
Evidence Used to Assess Conformance: Appendix 05	
Non-Conformance report (NCR): NCR: Please indicate in Risk Report (and provide the verifier) the evidence that supports the statement for Table 7, Item A.	
Date issued:	11 January 2013
Project proponent response/actions and date: The project area as used in the tool is the aggregate of each discrete project area of the TIST PDD. In order for them to be in the PDD, they had to join TIST, sign a GhG contract and allow our quantifiers to enter their lands. Therefore 100% have been consulted and chose to join TIST. The evidence is the GhG contracts which you have requested under NCR 3.	
Evidence used to close NCR: Justification for this score of 0 for this item is confirmed through past experience with TIST program operations, the project site visit, as well as interviews and observations. Further, completed contract samples provided in response to Item #3 above provide adequate and satisfactory evidence supporting the justification. Item is addressed.	
Date closed:	21 February 2013

13. Non Conformance Report

VCS AFOLU Non-Permanence Risk Tool, Version 3.2 Criteria: Mitigation: The project generates net positive impacts on the social and economic well-being of the local communities who derive livelihoods from the project area	
Evidence Used to Assess Conformance: Appendix 05	
Non Conformance Report (NCR): NCR: Please only refer to appropriate evidence that supports the claims for mitigation under Table 7, Item C. Also, please provide evidence that the CDM Sustainable Development Criteria Report was accepted by the DNA office.	
Date issued:	11 January 2013
Project proponent response/actions and date: The External Risk, Community Engagement Table was changed. The previous references, including the CDM, were removed and replaced with: This is a true statement as supported by verification of a similar subset of the TIST Uganda program under the CCB standard. The following reverence was added: TIST UG PD-VCS-Ex 29 ESI Val-Ver Report 120511.pdf	
Evidence used to close NCR: TIST UG PD-VCS-005f App05 Risk Analysis 130208.doc: Confirmed that the External Risk, Community Engagement Table was changed as indicated. TIST UG PD-VCS-Ex 29 ESI Val-Ver Report 120511.pdf serves as appropriate evidence supporting the claim for mitigation under Table 7, Item C of the VCS AFOLU Non-Permanence Risk Tool. Item is addressed.	
Date closed:	21 February 2013

14. Clarification

VCS AFOLU Non-Permanence Risk Tool, Version 3.2 Criteria: Governance score of -0.79 to less than -0.32	
Evidence Used to Assess Conformance:	

Appendix 05 ; Exhibit 11	
Clarification (CL): CL: Please confirm that the most recent five years of data were used to quantify the governance score	
Date issued:	11 January 2013
Project proponent response/actions and date: The text has been corrected to match with the Exhibit 11, i.e. 2006-2010	
Evidence used to close NCR: TIST UG PD-VCS-005f App05 Risk Analysis 130208.doc: Confirmed that the text was corrected to match with Exhibit 11(TIST UG PD-VCS-Ex 11 Governance Indices.xls) as indicated. The fundamental issue with this CL was that the most recent five years of available data (2007-2011) was not used to quantify the governance score. However, the verifiers independently calculated the governance score using the 2007-2011 data, and the results were equivalent (a mean governance score of -0.58). Additionally, the Project Developer updated to 2007-2011 in later correspondence. This, combined with the updated text in the Non-Permanence Risk Report, indicates this item is addressed.	
Date closed:	04 March 2013

15. Clarification

VCS AFOLU Non-Permanence Risk Tool, Version 3.2 Criteria: Fire Risk	
Evidence Used to Assess Conformance: Appendix 05	
Clarification (CL): CL: Please identify/provide the baseline data used to justify the likelihood category chosen for Risk of Fire	
Date issued:	11 January 2013
Project proponent response/actions and date: Reference has been made in Appendix 5 to Appendix 1, Land Sat 1990 imagery.	
Evidence used to close NCR: TIST UG PD-VCS-005f App05 Risk Analysis 130208.doc: Confirmed that reference to Appendix 01 (1990 Landsat Imagery) has been made as indicated. The Landsat imagery (dated 1990 and 2000) does not indicate that there have been issues related to fire and justifies the likelihood category chosen (every 10 to less than 25 years). Item is addressed.	
Date closed:	21 February 2013

16. Clarification

VCS AFOLU Non-Permanence Risk Tool, Version 3.2 Criteria: Pest/Disease Risk	
Evidence Used to Assess Conformance: Appendix 05; Exhibit 12	
Clarification (CL): CL: Please include in Risk Report the source of pest/disease info for <i>Pinus patula</i> . Also, please confirm that 1 is the correct Risk value for Pest/Disease Risk.	
Date issued:	11 January 2013

Project proponent response/actions and date:	
The source is TIST UG PD-VCS-Ex 12 Pests and Diseases 2008.pdf. Reference has been made.	
One appears to be correct. The LS is listed as 2 and the migration allows us to reduce it by half.	
Evidence used to close NCR:	
TIST UG PD-VCS-005f App05 Risk Analysis 130208.doc: Confirmed that reference to TIST UG PD-VCS-Ex 12 Pests and Diseases 2008.pdf has been made as indicated. It is confirmed that this is a reliable reference. Further, the risk value (1) for Pest/Disease Risk is calculated and reported correctly. Based on the verifier's personal experience in the region and observations made while on the site visit, the mitigation is applicable. Item is addressed.	
Date closed:	21 February 2013

17. Clarification

VCS AFOLU Non-Permanence Risk Tool, Version 3.2 Criteria:	
Geologic Risk	
Evidence Used to Assess Conformance:	
Appendix 05	
Clarification (CL):	
CL: Please include information supporting the claim that the active volcanoes listed are not close enough to affect TIST trees	
Date issued:	11 January 2013
Project proponent response/actions and date:	
The paragraph was changed to:	
There are three active ones in DRC. ¹⁹ May-Ya-Moto is a thermal area about 30 km from the nearest TIST grove. Thermal areas do not erupt or make cones. Mount Nyamuragira is a shield volcano 75 km from the nearest TIST grove. It is currently erupting but too far from TIST groves to have an effect. Mount Nyiragongo is a stratovolcano 73 km from the closest TIST groves. It erupted in 2002 but was too far away to have an effect on the TIST project areas.	
Evidence used to close NCR:	
TIST UG PD-VCS-005f App05 Risk Analysis 130208.doc: Confirmed the paragraph was modified as indicated. This supplemental information adequately supports the claim that the active volcanoes listed are not close enough to affect TIST trees. Item is addressed.	
Date closed:	21 February 2013

18. Non-Conformance Report

AR-AMS0001 Criteria:
(a) Project activities are implemented on grasslands or croplands;
(b) Project activities are implemented on lands where the area of the cropland within the project boundary displaced due to the project activity is less than 50 per cent of the total area;
(c) Project activities are implemented on lands where the number of displaced grazing animals is less than 50 per cent of the average grazing capacity ¹ of the project area;
(d) Project activities are implemented on lands where $\leq 10\%$ of the total surface project area

¹⁹ Ibid.

is disturbed as result of soil preparation for planting.	
Evidence Used to Assess Conformance: PD Section 2.2; TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx; TIST UG PD-VCS-Ex 23 Best Forest Practices 130110.doc	
Non-Conformance report (NCR): NCR: Please provide evidence of surveys supporting the statements and data indicating that the project meets the requirements of AR-AMS0001 Sections I.1.b and I.1.c. Please provide individual completed survey samples for the following groves: 2007UG266-Petience A 2007UG204-Mercy 2005UG46-Agaba10 2010UG157-MuhumuzaW02 2010UG103-KinyagiFrancis Also, CL: please provide evidence that Landowners/Farmers were given a recommended hole size for planting as stated in PD Section 2.2.	
Date issued:	11 January 2013
Project proponent response/actions and date: The surveys are collected electronically using Palm PDAs, relayed to the TIST website through the internet and stored on the database for retrieval. There are no hard/paper copies of the surveys. What is presented in the PD is what is downloaded from the database. See Grove Summary Work sheet for the survey results for each Project Area. For recommended hole size, please see "TIST UG PD-VCS-Ex 30 Tree Planting SOPs.pdf" which is part of the TIST training curriculum.	
Evidence used to close NCR: This issue was discussed in person with project developers during development of the NCRs. This NCR was issued but later addressed as indicated by the responses above.	
Date closed:	21 February 2013

19. Clarification

AR-AMS0001 Criteria: (b) The project activity is additional, using the procedures for the assessment of additionality contained in Appendix B.	
Evidence Used to Assess Conformance: PD Section 2.5; TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx	
Clarification (CL): CL: A. Please identify in Appendix 04 and/or PD what organization the individual identified as the reference for seedling costs is associated with. B. Also, please discuss the UWESO and BSF and how it relates to additionality in PD Section 2.5. C. Lastly, Information Request: please provide the verifiers with the data used to construct Table 2.5.A.	
Date issued:	11 January 2013
Project proponent response/actions and date: A. See cell A18, worksheet 2.5 Plantation Costs, Appendix 04. Ara Banyanga is the UG director of TIST and got the information from seedling sellers.	

B. A discussion of UWESO and BSF is beyond the scope of the PD because the case for additionality is based on the conclusion cited by the reference document and their conclusion already takes UWESO and BSF into consideration.

C. Two emails to Stewart McMorow on Jan 15, 2013 to address this request.

Evidence used to close NCR:

A. TIST UG PD-VCS-005e App04 Data 130208 Group.xlsx: Confirmed that Ara Banyanga is referenced regarding seedling costs as indicated. Confirmed that Mr. Banyanga is the Director of TIST in Uganda and that the seedling prices are plausible.

B. Project proponent's response above and in-person discussions with project developer: The arguments and included references justify that the project is additional. The discussion contained in the PD regarding additionality is sufficient and no further corrective actions are necessary.

C. TIST UG PD-VCS-005e App04 Data 130208 Group.xlsx and INCOME LEVEL.doc: Data was provided (based on a sample of 4400 farmers) and reference is given to the average monthly income (from the Bushenyi District Planner). Further, interviews conducted during the site visit confirmed the difficulty in acquiring and maintaining seedlings in the absence of the TIST program. While the incomes may have changed in the last several years, observations and interviews indicate that the problem remains.

All items here have been adequately addressed.

Date closed:	21 February 2013
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20. Clarification

AR-AMS0001 Criteria:

8. Baseline carbon stocks will be determined by the equation:

Evidence Used to Assess Conformance:

PD Section 3.1.1

Clarification(CL):

CL: Please indicate in the PD, where the application of Equation 1 of AR-AMS0001 can be found in the supporting documents

Date issued:	11 January 2013
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Project proponent response/actions and date:

TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx, worksheet "Table 3.3.B", columns D and E. The Area is pulled in from the Grove Summary worksheet and the carbon comes from "3.1 Baseline Trees" column D. Since the formula in column D is combined AG and BG biomass, the addition step was not necessary.

Evidence used to close NCR:

TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that the project proponent's response above was added as a footnote in Section 3.1.1 of the PD. Item is addressed.

Date closed:	21 February 2013
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21. Clarification

AR-AMS0001Criteria:

9. For above-ground biomass BA(t) is calculated per stratum i as follows:

Evidence Used to Assess Conformance:

PD Section 3.1.1

Clarification (CL): CR: Please indicate in the PD where the application of Equation 2 of AR-AMS0001 can be found in the supporting documents	
Date issued:	11 January 2013
Project proponent response/actions and date: Please see TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx, worksheet "3.1 Baseline Trees," column E.	
Evidence used to close NCR: TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that the project proponent's response above was added as a footnote in Section 3.1.1 of the PD. Item is addressed.	
Date closed:	21 February 2013

22. Clarification

AR-AMS0001 Criteria: If living biomass carbon pools are expected to be constant according to paragraph 6.a and 6.c, the average below-ground carbon stock is estimated as the below-ground carbon stock in grass and in biomass of woody perennials:	
Evidence Used to Assess Conformance: PD Section 3.1.1	
Clarification(CL): CI: Please indicate in the PD where the application of Equation 6 of AR-AMS0001 can be found in the supporting documents	
Date issued:	11 January 2013
Project proponent response/actions and date: The BG biomass of the woody stocks is calculated in TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx, worksheet "3.1 Baseline Trees," column D. It is the factor 1.48, where 0.48 is the belowground component. See seventh assumptions for PDD Table 3.1.A Baseline Strata.	
Evidence used to close NCR: TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that the project proponent's response above was added as a footnote in Section 3.1.1 of the PD. Item is addressed.	
Date closed:	21 February 2013

23. Non Conformance Report

AR-AMS0001 Criteria: 17. The carbon stocks for the project scenario at the starting date of the project activity (t=0) shall be the same as the baseline stocks of carbon at the starting date of the project (t=0). Therefore:	
Evidence Used to Assess Conformance: PD Section 3.2.4; TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx	
Non Conformance Report (NCR): NCR: As per AR-AMS0001 Section III.17, please include in the PD the estimated initial baseline carbon stocks as the carbon stocks for the project scenario at project start date.	
Date issued:	11 January 2013
Project proponent response/actions and date:	

From PD "Table 3.1.B Change in Baseline Carbon Stocks" the baseline values for cropland and grassland have been added and the total shown. That number has been placed before the table.

Evidence used to close NCR:

TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that the total initial baseline carbon stocking was added to Section 3.1.3 of the PD, just before Table 3.1.B. As the net change in carbon stocks in the baseline are assumed to be zero, the total initial baseline carbon stocking does not affect the quantification of net GHG emission reductions and removals. This item has been adequately addressed.

Date closed: 21 February 2013

24. Clarification

AR-AMS0001 Criteria:

For all other years, the carbon stocks within the project boundary ($N(t)$) at time t shall be calculated as follows:

Evidence Used to Assess Conformance:

PD Section 3.2.1; TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx - Ex Ante Strata Est Tab

Clarification (CL):

CL: Please clarify in the PD that Equation 3.2a provides estimates of total carbon stocks. Also, please indicate in the PD where the application of the equation can be found in the supporting documents.

Date issued: 11 January 2013

Project proponent response/actions and date:

Equation 3.2a: The text was changed to "The carbon stock within the project boundary is calculated using the following equation."

The application of Equation 3.2a takes place in the worksheets "3.2 Ex-Ante Carbon Est" and "3.2 Ex-Ante Strata Est" of TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx. N_A and N_B are derived in 3.2 Ex-Ante Carbon Est (example see columns E, F and G). The area is applied in "3.2 Ex-Ante Strata Est".

Evidence used to close NCR:

TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that the text was modified in PD Section 3.2.1 as indicated above. Also, the project proponent's response above regarding the application of Equation 3.2a was appropriately added as a footnote in Section 3.2.1 of the PD. Item is addressed.

Date closed: 21 February 2013

25. Clarification

AR-AMS0001 Criteria:

18. For above-ground biomass $NA(t)$ i is calculated per stratum i as follows:

Evidence Used to Assess Conformance:

PD Section 3.2.1; TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx - Ex Ante Carbon Est Tab

Clarification (CL):

CL: Please indicate in the PD, where the application of Equation 3.2b (Equation 13 of AR-AMS0001) can be found in the supporting documents

Date issued: 11 January 2013

Project proponent response/actions and date:

See worksheet 3.2 Ex-Ante Carbon Est, column E	
Evidence used to close NCR: TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that the project proponent's response above was added as a footnote in Section 3.2.1 of the PD. Item is addressed.	
Date closed:	21 February 2013

26. Clarification

AR-AMS0001 Criteria: 19. If biomass tables or equations are available then these shall be used to estimate $T(t)_i$ per stratum i . If volume table or equations are used then	
Evidence Used to Assess Conformance: PD Section 3.2.1; TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx - Ex Ante Carbon Est Tab	
Clarification (CL): CL: Please indicate in the PD, where the application of Equation 3.2c (Equation 14 of AR-AMS0001) can be found in the PD or supporting documents. Also, please ensure consistency in WD value reported in the PD for Other Africa, Dry Tropical Species and that which was used in Appendix 04.	
Date issued:	11 January 2013
Project proponent response/actions and date: See referenced Excel sheet, "3.2 Ex-Ante Carbon Est" worksheet. Different columns for different species groups. $T(t)_i$ = example column D $SV(t)_i$ = example column B BEF = example column C WD = example column D The WD value reported in the PD for Other Africa has been changed to 0.61.	
Evidence used to close NCR: TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that the project proponent's response above regarding the application of Equation 3.2c was appropriately added as a footnote in Section 3.2.1 of the PD. The WD value was appropriately updated in the PD as well. Item is addressed.	
Date closed:	21 February 2013

27. Clarification

AR-AMS0001 Criteria: 20. Values for $SV(t)_i$ shall be obtained from national sources (such as standard yield tables). Documented local values for BEF should be used. In the absence of such values, national default values should be used. If national values are also not available, the values should be obtained from Table 3A.1.10 of the IPCC good practice guidance for LULUCF. If national default values for wood density are not available, the values should be obtained from Table 3A.1.9 of the IPCC good practice guidance for LULUCF.	
Evidence Used to Assess Conformance: PD Section 3.2.3; TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx - Ex Ante Carbon Est Tab	
Clarification (CL): CL: Please include the correct R value for <i>Pinus patula</i> in PD Section 3.2.3. Also, the footnote reference for <i>Pinus patula</i> should indicate the use Conifer Forest/Plantation values. Also, please	

clarify in the PD the sources of WD values for <i>Maesopsis eminii</i> and <i>Symphonia globilifera</i> .	
Date issued:	11 January 2013
Project proponent response/actions and date:	
a) We believe the R value is correct. b) The footnote reference for <i>Pinus patula</i> has been corrected to refer to "Conifer Forest/Plantation." c) The reference code is 5, Browne, Sandra. Estimating biomass and biomass change in tropical forests, FAO Forestry Paper 134, Appendix 1 - List of wood densities for tree species from tropical America, Africa, and Asia, 1997. Accessed October 24, 2011 at http://www.fao.org/docrep/W4095E/W4095E00.htm. The link works and the WD is there.	
Evidence used to close NCR:	
a). This CL was miss-stated on the part of the verifier. It should have stated "Please include the correct BEF value for <i>Pinus patula</i> in PD Section 3.2.3." The project proponent was informed of this via email on 22 February 2013. The project proponent immediately included the correct value for <i>Pinus patula</i> BEF in the PD and provided the verifiers with the updated version. b). TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that the footnote reference for <i>Pinus patula</i> has been updated appropriately in PD Section 3.2.3. c). http://www.fao.org/docrep/W4095E/W4095E00.htm: This reference was revisited and WD values for <i>Maesopsis eminii</i> and <i>Symphonia globilifera</i> were located. The WD values presented in this reputable source for these species are presented appropriately in the PD. Further, the WD values are used accordingly in the <i>ex ante</i> calculations. All items here have been adequately addressed.	
Date closed:	22 February 2013

28. Clarification

AR-AMS0001Criteria:	
21. For below-ground biomass, NB(t) is calculated per stratum i as follows:	
Evidence Used to Assess Conformance:	
PD Section 3.2.1; TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx - Ex Ante Carbon Est Tab	
Clarification (CL):	
CL: Please indicate in the PD, where the application of Equation 3.2d (Equation 15 of AR-AMS0001) can be found in the PD or supporting documents	
Date issued:	11 January 2013
Project proponent response/actions and date:	
See referenced Excel sheet, "3.2 Ex-Ante Carbon Est" worksheet. The factors are in different columns for different species groups. $T_{(t)}$ = example column F R = example column F 0.5 = example column E	
Evidence used to close NCR:	
TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that the project proponent's response above was added as a footnote in Section 3.2.1 of the PD. Item is addressed.	

Date closed:	22 February 2013
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29. Clarification

AR-AMS0001 Criteria:	
24. The removal component of actual net GHG removals by sinks can be calculated using Equation 17.	
Evidence Used to Assess Conformance:	
TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx - Ex Ante Carbon Est Tab	
Clarification(CL):	
CL: Please indicate in the PD, where the application of Equation 17 of AR-AMS0001 can be found in the supporting documents	
Date issued:	11 January 2013
Project proponent response/actions and date:	
Equation 17 was added as Equation 3.2.e.	
To determine ΔC_{PROJ} see referenced Excel sheet. The value for N_t comes from column G of worksheet "3.2 Ex-Ante Carbon Est." It is transferred to the appropriate cell in the strata array set up in work sheet "3.2 Ex-Ante Strata Est." The values for similar age strata are summed in (example) column L. The values of the age strata of the species are summed in column AY. This is still N_t but now summed. N_{t-1} is to symbolize time difference and is not needed because all this is done on an annual basis. $(44/12)$ is multiplied in column AZ. Δt is done in column BA. The value for ΔC_{PROJ} is cell BA35.	
Evidence used to close NCR:	
TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that Equation 17 of AR-AMS0001 was included in the PD in Section 3.2.1 as indicated. Also, the project proponent's response above regarding the application of this equation was appropriately added as a footnote. Item is addressed.	
Date closed:	22 February 2013

30. Clarification

AR-AMS0001 Criteria:	
26. The <i>ex ante</i> actual net greenhouse gas removals by sinks in year t are calculated using Equation 18.	
Evidence Used to Assess Conformance:	
PD Section 3.2.5	
Clarification (CL):	
CL: Please indicate in the PD where the application of Equation 18 of AR-AMS0001 can be found in the supporting documents.	
Date issued:	11 January 2013
Project proponent response/actions and date:	
Equation 18 was added to PD Section 3.2.1 as equation 3.2. f. Reference was made to PD Section 3.2.5, where $GHG_{PROJ} = \text{zero}$. And therefore $C_{ACTUAL} = \Delta C_{PROJ}$ which is in cell BA35, "3.2 Ex-Ante Strata Est."	
Evidence used to close NCR:	
TIST UG PD-VCS-005a PD Text 130208.doc: Confirmed that Equation 18 of AR-AMS0001 was included in the PD in Section 3.2.1 as indicated. Also, the project proponent's response above	

regarding the application of this equation was appropriately added as a footnote. Item is addressed.	
Date closed:	22 February 2013

31. Non-Conformance Report

AR-AMS0001 Criteria: 27. According to decision 6/CMP.1, annex, Appendix B, paragraph 9: "If project participants demonstrate that the small-scale afforestation or reforestation project activity under the CDM does not result in the displacement of activities or people, or does not trigger activities outside the project boundary, that would be attributable to the small-scale afforestation or reforestation project activity under the CDM, such that an increase in greenhouse gas emissions by sources occurs, a leakage estimation is not required. In all other cases leakage estimation is required."	
Evidence Used to Assess Conformance: PD Section 3.3	
Non-Conformance report (NCR): NCR: Please provide evidence of surveys used to demonstrate the project meeting requirement IV.27 of AR-AMS0001. Note that the surveys are also requested under Item 18 above	
Date issued:	11 January 2013
Project proponent response/actions and date: As noted, in response to NCR 18, the surveys were collected electronically and the data only exists on the TIST data base. The results of the survey were provided in the Grove Summary worksheet of TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx.	
Evidence used to close NCR: As noted under Item #18 above, this issue is addressed.	
Date closed:	22 February 2013

32. Clarification

AR-AMS0001 Criteria: (i) For reforestation project activities, demonstrate that the land was not forest by demonstrating that the conditions outlined under (a) above also applied to the land on 31 December 1989.	
Evidence Used to Assess Conformance: PD Section 1.13.1; TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx	
Clarification (CL): CL: Please clarify what question landowners were asked in order to provide evidence of meeting the requirement of 1.b.i of this tool	
Date issued:	January 11 2013
Project proponent response/actions and date: The question asked are: Was this grove ever a forest? (Yes / Not to my knowledge) If "Yes" then: When were the trees cut down? (year) (free form numeric field) The answers in the Grove Summary sheets are derived as follows: If the answer to the first question is Not to my knowledge, a "No" is displayed.	

If the answer is yes, then the second question is asked.
If the answer is before 1995 the project areas is eligible under the VCS ten year rule and a "No" is displayed.
All other answers result in "Yes" and these project areas are deemed ineligible for the PD and not included.

Evidence used to close NCR:

This answer is consistent with the interviews and discussions with project participants and project developers during the site visit. Item is addressed.

Date closed:	22 February 2013
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33. Non-Conformance Report

Site Visit:

The following Instances had issues that were discovered during the site visit. Each of these instances is listed here along with the issues found.

2007ug270Tumwekwase- This grove was clearly over counted. Farmer admitted he only planted 150 trees, half of which had been harvested recently. Grove was listed as having 591 trees, but the verifier only counted 64. A complete count of all standing trees was performed.

2007ug248Namara 01- Major boundary issues on this grove. The verifier measured a track around this grove that was significantly different, however technical difficulties on site (satellites) made correction of the project area in Ha impossible, and there was not a way to identify the actual area. The grove was well stocked with trees. The boundaries of this grove need to be corrected.

2007ug248Maganyiro 01- Boundary found to be incorrect. Lack of satellites made correction of polygon impossible. Track needs to be corrected and resubmitted.

2007ug248Namara 02- Boundary found to be incorrect. Lack of satellites made correction of polygon impossible. Track needs to be corrected and resubmitted.

2009UG78Mugasha E- This site had a bad track. TIST needs to correct it. The project area was much larger than the polygon submitted. Verifier traced his own track and found that the actual project area was 4.75 ha. Also all Eucalyptus were removed from the project which resulted in the total number of trees being less than the original report. TIST needs to correct the polygon for this grove and resubmit.

General- applies to all instances- During the site visit, it was found that many instances did not have "closed" polygons. Where these sites were visited, most had correct tracks that outlined the grove; however a few (indicated above) had more serious issues with correctness. It appears that several groves within the project need to be quality checked for complete tracks so that all project sites (instances) can be represented with complete polygons.

Evidence Used to Assess Conformance:

Site visit findings

Non Conformance Report (NCR):

Please address the field visit findings by either removing the instances or demonstrate corrective measures for each.

For all instances- Please demonstrate that all project instances now have complete tracks. Please resubmit the project maps and data with corrected polygons.

Date issued:	11 January 2013
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Project proponent response/actions and date:

2007UG270-Tumwekwase: An audit team was sent to the grove on 22 January 2013 and counted 591 trees confirming our database count. We believe the Validator was in 2007ug270Tumwekwase G where 145 trees are listed on the database but only 64 *Pinus* were present during the audit.

2007UG248-Namara 01 (Kabal2, 17367) - The project area was re-tracked and the new area is 1.6698 ha.

2007 UG 248-Maganyiro 01 (Kabal2, 17361) - The project area was re-tracked and the new area is 0.7359 ha.

2007 UG 248-Namara 02 (Kabal2, 17368) - The project area was re-tracked and the new area is 1.2934 ha.

2009UG78-Mugasha E (Bushenyi, Kitag, 31474) – The project area was re-tracked and the new area is 4.4536 ha.

Regarding the polygon issue, the official KML file of the project areas are and were polygons. The issue was raised because we ran special GPX files for your field visit that did not necessarily close the polygons.

Evidence used to close NCR:

Re-tracked files were compared between initial submissions and subsequent submitted KML track files. The updated track files correlate with what was observed during the site visit. Updated area values were confirmed in both ex ante (TIST UG PD-VCS-005e App04 Data 130208 Group.xlsx) and ex post (TIST UG PD-VCS-005i App08 Monitoring Data 130208 Group.xlsx)

Polygons were confirmed to be closed by viewing the KML files and comparing to the GXP files.

Date closed:	01 March 2013
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34. Non Conformance Report

AR-AMS0001 Criteria:

VI. Simplified monitoring methodology for small-scale afforestation and reforestation projects under the clean development mechanism

B. Ex post estimation of the actual net greenhouse gas removals by sinks

42. Estimate of above-ground biomass at time t achieved by the project activity E(t) shall be estimated through the following steps:

(b) Step 2: Measure the diameter at breast height (DBH) or DBH and tree height, as appropriate this measure and document it in the Monitoring Reports;

Evidence Used to Assess Conformance:

PD Section 4.3.3; TIST UG PD-VCS-005i App08 Monitoring Data 121112 Group.xlsx

Non Conformance Report (NCR):

NCR: Please demonstrate how using monitoring data from areas external to the project sites would be in conformance with AR-ASM0001. This relates to the use of project measurements from outside the VCS005 project areas. It appears data from other project areas was used for this calculation. This issue could also be addressed by demonstrating that the statistical requirements of the methodology would be met using only monitoring data from the project sites.

Date issued:	January 11 2013
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Project proponent response/actions and date: The dataset has been replaced and only contains circumference data from project areas in PD 005.	
Evidence used to close NCR: TIST UG PD-VCS-005i App08 Monitoring Data 130208 Group.xlsx: Monitoring data were reviewed and now include only circumference data from project areas included in the PD. Further, the project is still in conformance with the statistical requirements of AR-ASM0001. TIST UG PD-VCS-005h App07 Monitoring Rpt 130208.doc: The Monitoring Report has been updated to reflect the results of the new dataset. Item is addressed.	
Date closed:	22 February 2013

APPENDIX B - GROVES SAMPLED DURING TIST UGANDA VCS 005 VALIDATION

- 2007ug248-Ellen01
- 2003ug328ephance
- 2010ug181 kyabo 01
- 2010UG181 Kyabo 02
- 2007ug270grever T
- 2007ug270 Tumwekwase
- 2007ug248Namara 01
- 2007ug248 maganyiro 01
- 2007ug248namara 02
- 2007ug248Namara03
- 2003UG281 bitarikwata 03
- 2009UG78Mugasha E
- 2009UG78Charity
- 2010UG138 Geoffrey 01
- 2007UG270 Kabakyesha A03
- 2003UG281 Alexb 02
- 2003UG281 Honst B
- 2003UG281 Alex
- 2006UG38Mbonabucha
- 2010UG154 Kampikaho/Rwamutemba
- 2010UG154 Bazira/Rukuta

APPENDIX C – DOCUMENTS REVIEWED

Documents Received 14 November 2012

- TIST UG PD-VCS-006e App04 Data 121112.xlsx
- TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx

Documents Received 20 November 2012

- TIST UG PD-VCS-Ex 21 GL2 Community Survey Template.doc
- TIST UG PD-VCS-Ex 22 GL2 Community Survey Result.doc
- TIST UG PD-VCS-Ex 01 Environmental Screening 060803.pdf
- TIST UG PD-VCS-Ex 02 NEMA EA Approval 070515.pdf
- TIST UG PD-VCS-Ex 03 GhG Contract UG 051014.doc
- TIST UG PD-VCS-Ex 04 GhG Contract UG 080319.doc
- TIST UG PD-VCS-Ex 05 Winrock Report 021215.doc
- TIST UG PD-VCS-Ex 06 KE EIA Report NAREDA 100506.doc
- TIST UG PD-VCS-Ex 07 Mgt Resumes 110215.doc
- TIST UG PD-VCS-Ex 08 Mgt Experience 110215.doc
- TIST UG PD-VCS-Ex 09 Financial Plan.xls
- TIST UG PD-VCS-EX 10 CDM SD Review 060925.pdf
- TIST UG PD-VCS-Ex 11 Governance Indices.xls
- TIST UG PD-VCS-Ex 12 Pests and Diseases 2008.pdf
- TIST UG PD-VCS-Ex 13 Dist Enviro Profile Bushenyi.doc
- TIST UG PD-VCS-Ex 14a Public Comments CCB-001.doc
- TIST UG PD-VCS-Ex 15 Quantifier Safety 110110.doc
- TIST UG PD-VCS-Ex 16 Employee Rights.doc
- TIST UG PD-VCS-Ex 17 UN Human Dev Rpt 2011.pdf
- TIST UG PD-VCS-Ex 18 FAO Enviro Degradation.pdf
- TIST UG PD-VCS-Ex 19 UNEP Tree Benefits.pdf
- TIST UG PD-VCS-Ex 20 Dist Enviro Profile Kabale.pdf

Documents Received 15 January 2013

- INCOME LEVEL.doc

Documents Received 8 February 2013

- TIST UG PD-VCS-005i App08 Monitoring Data 130208 Group.xlsx
- TIST UG PD-VCS-005 NCR Round 1 130207.docx
- TIST UG PD-VCS-005a PD Text 130208.doc
- TIST UG PD-VCS-005b App01 LSat1990 Map.htm
- TIST UG PD-VCS-005b App01 LSat1990 Map.jpg
- TIST UG PD-VCS-005c App02 LSat2090 Map.htm
- TIST UG PD-VCS-005c App02 LSat2090 Map.jpg
- TIST UG PD-VCS-005d App03 PA Plots.kml
- TIST UG PD-VCS-005e App04 Data 130208 Group.xlsx
- TIST UG PD-VCS-005f App05 Risk Analysis 130208.doc
- TIST UG PD-VCS-005g App06 Geo Area of Groups.kml
- TIST UG PD-VCS-005h App07 Monitoring Rpt 130208.doc

Documents Received 04 March 2013

- TIST UG PD-VCS-005a PD Text 130222.doc

Documents Received from TIST Website 04 March 2013

- TIST UG PD-VCS-005e App04 Data 121112 Group.xlsx
- TIST UG PD-VCS-005a PD Text 121112.doc
- TIST UG PD-VCS-005d App03 PA Plots121112.kml
- 2013-01-10
 - o TIST UG PD-VCS-005i App08 Monitoring Data 121112 Group_WithJPChecks.xlsx
 - o TIST UG PD-VCS-005b App01 LSat1990 Map.jpg
 - o TIST UG PD-VCS-005c App02 LSat2090 Map.jpg
 - o TIST UG PD-VCS-005f App05 Risk Analysis 121112.doc
 - o TIST UG PD-VCS-005g App06 Geo Area of Groups.kml
 - o TIST UG PD-VCS-005h App07 Monitoring Rpt 121112.doc

- o TIST UG PD-VCS-005i App08 Monitoring Data 121112 Group.xlsx
- 2013-01-11
 - o TIST UG PD-VCS-Ex 23 Best Forest Practices 130110.doc
- TIST UG PD-VCS-005 GPX Track Files by Center
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Ryeru(175).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Bumbaire(162).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Burere(163).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Bushenyi_Town(164).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kabal1(176).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kabal2(177).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kaka(166).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kambuga(178).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kanug1(179).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kanug2(180).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kanungu(181).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kanyantorogo(182).gpx
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 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kitagata(169).gpx
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 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kyamuhunga(172).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_kyanyenyi(173).gpx
 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Kyeizo(165).gpx
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 - o TIST UG PD-VCS-005 GPX Track Files by Center\pdd_UG_vcs_005_Nyamirama(188).gpx
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- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Bum baire.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Burer e.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Bush enyi Town.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kabal 1.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kabal 2.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kaka. kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kam buga.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kanu g1.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kanu g2.kml
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- Center\pdd_UG_vcs_005_Kayo nza.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kihihi .kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kirim a.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kitag ata.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kitun ga.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kyab ugimbi.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kyam uhunga.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_kyan gyenyi.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Kyeiz o.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Mito ma.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Nya mirama.kml
- o TIST UG PD-VCS-005 KML Track Files by Center\pdd_UG_vcs_005_Rugy eyo.kml

Documents Received from TIST Website 4 March 2013

- TIST UG PD-VCS-005f App05 Risk Analysis 130304.doc
- TIST UG PD-VCS-005a PD Text 130304.doc