



Voluntary Carbon Standard 2007

Validation and Verification Report:

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Validation and Verification Report – Natural High Forest Rehabilitation Project on Degraded Land of Kibale National Park	Christie Pollet-Young
Client:	Project Title:
Face the Future B.V.	Natural High Forest Rehabilitation Project on Degraded Land of Kibale National Park
Summary:	

This report documents the validation and verification of the Natural High Forest Rehabilitation Project on Degraded Land of Kibale National Park project against the Verified Carbon standard 2007.1 and its supporting documents, including the approved methodology CDM methodology AR-ACM0001, version 05.0.0 "Approved consolidated afforestation and reforestation baseline and monitoring methodology: Afforestation and reforestation of degraded land." The validation and verification activities included desk review of project design documentation and supporting documents, a field visit to the project area, interviews with relevant personnel, re-measurement of forest carbon plots, and review of calculations of the project's net carbon benefits. The project seeks to reforest and regenerate approximately 10,000 ha of degraded land located within Kibale National Park in Western Uganda. The review of Project documentation, the site visit, and subsequent follow-up interviews have provided SCS with sufficient evidence to determine the fulfilment of the stated criteria. The Project correctly applies the selected methodology element and is in conformance with all applicable requirements of the Verified Carbon Standard (VCS). The Project is designed to lead to reductions of GHG emissions that are real, measurable and give long-term benefits to the mitigation of climate change. In summary, it is the opinion of SCS that the Project, as described in the project description (PD) document version 1.2 dated September 5, 2011, meets all relevant Verified Carbon Standard 2007.1 requirements and correctly applies the selected methodology. SCS has verified that the project has generated 372,381 t CO₂ equivalents of emissions reductions, after subtraction of leakage and buffer pool deductions.

Work carried out by:	Number of pages:
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1 Introduction

1.1 Objective

The purposes of this validation/verification assessment were to review and confirm the project's conformance with all relevant requirements of the Voluntary Carbon Standard, supporting AFOLU guidance documents, and the selected methodology, the approved CDM methodology AR-ACM0001/Version 05.0.0.

Validation/Verification activities included the following:

- Evaluate the validation/verification scope, including the GHG project and baseline scenario; GHG sources, sinks, and reservoirs; and the physical infrastructure, activities, technologies and processes of the GHG project.
- Evaluate the monitoring plan and develop conclusions regarding the monitoring methodology and the collection and archiving of data relevant to GHG emissions estimation and baseline emissions.
- Evaluate the calculation of GHG emissions, including appropriateness of source, sink, and reservoirs; the correctness and transparency of formulae and factors used; assumptions related to estimating GHG emission reductions; and uncertainties.
- Develop conclusions based on validation/verification standards, submitting any corrective action requests, as applicable.

1.2 Scope and Criteria

SCS assessed the completeness of the Project Description (PD) provided by the Project Proponent (Face the Future B.V.) to ensure that all requirements of the VCS standards have been addressed. SCS assessed whether or not the PD respects the principles of the VCS standards.

Assessment included but was not limited to evaluation of additionality, project design, baseline, monitoring plan, and calculation of GHG emissions.

SCS assessed whether the project itself meets all of the requirements laid out in the VCS standards and is consistent with the PD.

The scope of this report encompasses desk and site assessment activities for the Kibale Project against the following requirements of the Voluntary Carbon Standard:

- VCS 2007.1
- VCS Program Guidelines 2007.1
- VCS Guidance for Agriculture, Forestry and Other Land Use Projects (AFOLU)
- VCS Program Normative Document: Double Approval Process, Version 1.1
- AFOLU Non-Permanence Risk Tool
- VCS Tool for AFOLU Methodological Issues
- VCS Program Updates: Updates to the Tool for AFOLU Methodological Issues and Guidance for AFOLU Project: Insignificant Emissions Sources and Pools,

Carbon Pools, Avoided Planned Deforestation, Definition of Mosaic and Frontier Deforestation, Market Leakage

- Approved CDM methodology AR-ACM0001/Version 05.0.0.

The assessment was performed using the client-supplied Project Description and other supporting documentation.

The validation and verification process involved:

- Assessment of the management systems, data handling and estimation methods used in calculating and reporting emissions data;
- Assessment of baseline methodology and determination;
- Assessment of and issuance of an opinion on issues of leakage and additionality;
- Assessment of data accuracy and any assumptions made in the manipulation of that data;
- Validation that the organization is operating according to the methodology approved by VCS; and
- A determination as to whether the Project could reasonably be expected to achieve the claimed GHG reduction/removals.

1.3 VCS Project Description

The Project activity in Kibale National Park (KNP) is located in western part of Uganda and is implemented by Uganda Wildlife Authority (UWA) in cooperation with Face the Future (FtF). Due to the high precipitation, complex landform and undulating valleys, as well as continual human disturbance (fire, grazing, charcoal production and cultivation) and poor land management, the area has been subjected to severe degradation of the surrounding vegetation as well as soil erosion. The project contributes to climate change mitigation by sequestering GHGs in sinks through assisted natural regeneration activities.

The Kibale National Park is considered to contain some of the highest biological diversity in Uganda. There are at least 372 bird species, 4 species of wild cats and contains at least 351 tree species (Howard, 1996). This national park also supports an exceptionally diverse and abundant primate fauna: 13 species of primates are found within the park, which is 67 % of the country's total species (IUCN, 1988). Kibale may contain the only viable population of red colobus monkey in Uganda. Furthermore, Kibale National Park is home to one of the largest chimpanzee populations in the world. The park is also home to a high number of butterfly and night moth species. Other prominent animal species are bushbucks and African elephants, as well as many reptile species such as the African rock python.

The purpose of the proposed ARR VCS project activity is to realize multiple socio-economic and environmental benefits (local community development, climate change mitigation, biodiversity conservation and soil erosion control) through restoring forest vegetation on degraded lands.

Specific project objectives are to:

- Restore the integrity of the degraded forest ecosystems in the National Park and thereby enhance biodiversity conservation and control of soil erosion. This is achieved by replanting the degraded areas with locally occurring indigenous trees species.
- Transfer forestry knowledge and skills to the local communities with an aim to make them environmental ambassadors of the project.
- Provide employment opportunities to the communities adjacent to the park.
- Provide income generating opportunities by encouraging the establishment of locally owned and operated nurseries where seedlings are raised and later sold to the ARR VCS project.
- Promote regeneration of natural vegetation in the forest interior areas by creating a forested zone around the edge of the park which will act as a buffer to relieve the interior areas of pressure from agents of deforestation and degradation (i.e. anthropogenically caused fires).

To achieve these objectives, the following VCS ARR project activity is proposed:

Rehabilitation of 10,000 ha of degraded forest inside Kibale National Park through reforestation using model indigenous species such as *Albizzia qummifera*, *Bridelia micrantha*, *Cordia africana*, *Cordia millenii*, *Croton macrostachyus*, *Croton megalcarpus*, *Erythrina abyssinica*, *Ficus natalensis*, *Mimusopsis bagshawei*, *Prunus africana*, *Spathodea campanulata*, *Sapium ellipticum*, and *Warburgia ugandensis*. These are fast growing species and have been proven to outgrow the grasses to avoid being suffocated and are resistant to grass root competition.

[Text Taken from section 1.4 of the project document (PD).]

1.4 Level of assurance

SCS maintains a reasonable level of assurance that the emission reduction estimations for the project. This conforms to section 7.3.1 of the VCS standard (“VCS 2007.1”) which states the level of assurance is reasonable for validation and verification. To ensure complete transparency, SCS has included any clarification or corrective actions that were raised during the validation at the end of this report.

2 Methodology

2.1 Review of Documents

SCS received and reviewed the PD, Monitoring Report, Leakage Assessment, Risk Assessment and supporting documentation to assess initial conformance with the requirements of the VCS standard. Key factors that impact the reported emission reductions and removals were identified, and a Verification Plan was created to focus on the critical elements presenting potential risk for errors. These elements included inventory data collection and handling, assumptions underlying the baseline characterization, and assessing relevant applicability and eligibility criteria.

The verification team conducted a desk review of the documentation provided by the Project Proponent. These documents included the project design document, which includes a monitoring plan, a monitoring report, a risk assessment, and a leakage assessment. The Project Proponent provided extensive supporting documentation in addition to these primary documents. Supporting documentation included spatial data of the project boundaries, and monitoring plot locations; a number of contracts, annual reports, records of correspondence, and standard operating procedures related to project implementation; records of project land area land ownership; management plans developed for the project area; scientific literature presented by the Project Proponent in support of assumptions made in project documentation; financial and operational records; and spreadsheets used to make project calculations. During the review, findings were issued as discussed in Section 2.6 and the Project Proponent updated the PD and monitoring report to address the findings by the audit team.

2.2 Site Visit

Following the desk review, the auditors conducted an on-site audit of the project area on June 15-19, 2011. The site visit was used to assess the application of the PD, visit random portions of the ownership for reconnaissance and ground-truthing, and to conduct a field review of the Project Proponent's sampling methodology. During the site visit, nine inventory plots were re-measured by the audit team. The collected data was used to confirm whether proper field measurement techniques were used in project monitoring. Various planted areas as well as naturally regenerated areas were visited and sampled. Stand typing and general descriptions of the forested area, both within and adjacent to the project, were also confirmed as part of the general reconnaissance of the project area. Additionally, the audit team assessed fire control measures such as fire breaks, fire towers and vegetation control.

2.3 Quantitative Analysis

The third step of the verification process focused on the quantitative analyses undertaken by the Project Proponent to perform the calculations required by the methodology to estimate the net carbon benefits of the project. This included a comparison of inventory data measured during the site visit portion of the audit to that presented by the Project Proponent. Additionally, calculations made by the Project Proponent were reviewed by the audit team. Assessment was made of the baseline determination and of the calculation of VCUs.

2.4 Final Review and Report Drafting

The last step in the verification process included a final review of the submitted data, and drafting of the Verification and Validation Opinion and supporting Validation/Verification Report. These documents were based on the results of the verification assessment. The draft Validation/Verification Report was presented to an internal SCS Technical Reviewer who determined the Verification Opinion to be justified given the evidence presented. The report and opinions were then presented to the Project Proponent for review and comment.

2.5 Follow-up Interviews

The following personnel were interviewed during the audit process:

- Tasila Banda, PhD., Face the Future
- Frederick Wanyama, Uganda Wildlife Authority
- Chemutai Wilfred, Uganda Wildlife Authority
- Richard Kigenyi, Uganda Wildlife Authority
- Edward Asalu, Uganda Wildlife Authority
- Richard Muhabwe, Uganda Wildlife Authority
- Radek Russ, IFER

Many of the staff members listed in Table 3.3.7 of the Monitoring Report were present during the on-site audit as well, but were not directly interviewed.

2.6 Resolution of any material discrepancy

Throughout the validation/verification process, there was an iterative exchange between SCS and the Project Proponent to gather additional information for review and examination. This exchange includes Findings—New Information Requests (NIR), Non-Conformity Reports (NCR) and Opportunities for Improvement (OFI)—that are issued by SCS to the Project Proponent. The Project Proponent must respond to NIRs and NCRs in order for SCS to render a verification opinion. At this time, all findings have been appropriately addressed by the Project Proponent and subsequently closed by SCS.

The Findings from the validation/verification of Natural High Forest Rehabilitation Project on degraded land of Kibale National Park are compiled in Appendix I.

3 Validation Findings

3.1 Project Design

Technology Used

The project sequesters carbon through reforestation of degraded lands and through the regeneration of degraded natural forest. The project makes use of Approved CDM methodology AR-ACM0001/Version 05.0.0. Section 1.9 of the PD describes the technology used in detail. Activities include identification of suitable lands, seed collection, tree nurseries, land preparation, planting, and maintenance. The technology employed has been demonstrated to be effective on this and other forest carbon projects. The validation team observed that the project team had been successfully executing these activities for many years as evidenced by large tracks of reforested land with healthy trees up to 16 years old. The impact of protection from fire and incursion in the naturally regenerated areas was also evident. The project team clearly demonstrated strong competence in carrying out the planting, maintenance, forest treatment and monitoring tasks required for implementing the project activities.

Conformance:

Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NCR 2010.17

Opportunities for Improvement: None

Project Duration, Crediting Time, and Project Start Date

The project was initiated on May 15, 1994. The execution of contracts and MOUs for the reforestation of lands within Kibale National Park constitute the initiation of the project. These contracts were made available to the audit team for verification of the project start date. According to these contracts, the project end date is December 31, 2068.

The project was initially registered, validated, and verified, under the Carbon Offset Verification Standard of SGS. Under this standard, the project was issued credits until 2006. Although the VCS 2007.1 standard states that "In cases where the Project Proponent has applied for emission credits from another GHG Program, the VCS PD shall include proof of registration of the project through the GHG Program. The GHG Program operator shall provide a written guarantee to be included with the Project Proponent's VCS PD that any GHG emission reductions or removals shall not have been previously retired within the operator's GHG Program and that the reductions shall be cancelled so that they can no longer be used within the operator's GHG Program. Hence they shall only be accounted for under a VCS Registry," the VCSA later clarified that this rule applies only when the same emissions reductions are credited under multiple programs. In the case of this project, the emissions reductions are temporally distinct in each program; there is not a risk of double counting. Hence, it was determined that the project met the requirements of the standard.

The contracts reviewed as well as reports from initial project verification by SGS documented that the project was designed and implemented as a climate change mitigation project, and that prior to January 1, 2002, the project applied an externally reviewed methodology and engaged independent carbon monitoring experts to assess and quantify the project's baseline scenario and net emissions reductions and removals. Additionally, this report documents that the project has completed validation and verification by September 8, 2011, as required by the section 5.2.1 of the VCS 2007.1 standard as amended by the VCS program updates. The project start date and crediting period are consistent with the requirements of the VCS.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NCR 2010.3, NCR 2010.38

Opportunities for Improvement: None

Project Location

Section 1.5 of the PD describes the location of the project. The project area is 10,000 hectares located within a larger area of 15,973 set aside for project activities within Kibale National Park in the counties of Burahya, Kibale and Mwenge in Uganda. Of the greater 15,973 hectare area, only 10, 000 hectares will be included in the project.

Of the total project area, approximately 3400 hectares have already been planted and an additional 2600 hectares have been naturally regenerated. Additional areas will be planted and regenerated until the final project size of 10,000 hectares has been reached. The location of the Project in the form of maps, shape files containing specific coordinates, and other descriptions were provided to the audit team. This information is in conformance with the requirements of the VCS standards.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.01

Opportunities for Improvement: None

Ownership - Proof of Title

The details of ownership and proof of title for the project are discussed in section 8 of the PD. The project land is owned by the Government of Uganda and is managed by the Uganda Wildlife Authority (UWA). The land is wholly owned by the Government of Uganda and there are no overlapping claims to the land. Contracts are in place between UWA and Face the Future which transfer ownership rights of carbon credits to Face the Future. These contracts and MOUs were made available to the audit team and confirmed with UWA representatives. The contracts meet the VCS requirement for proof of title that a “contractual arrangement with the owner of the plant, equipment or process that grants all reductions/removals to the proponent” be provided with the PD. Based on this documentation, the project area is within the Kibale National Park (owned by the Government of Uganda), and Face the Future holds ownership of carbon sequestration within the project area.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NCR 2010.37

Opportunities for Improvement: None

Double Counting and project participation in another emission trading program

The project has participated in another emission trading program. The project was issued credits under the SGS Climate Change Program for vintage years 1995 to 2006. The audit team initially expressed concern that, as a result, the project may not meet the requirements of sections 5.2.2 VCS and 5.7 of the VCS standard. NCR 2010.3 was issued as a result. Carolyn Ching of the VCSA later clarified to the audit team that the intent of the standard is to restrict any single emission reduction or removal from being counted in two different GHG programs, and that the standard does not restrict a project from being registered in one GHG program, then registering in another. The complete text of this email can be found in the list of findings. As a result of this clarification, NCR 2010.3 was closed.

SCS can verify that no double counting of emissions reductions has occurred because all emissions reductions reported in the monitoring report associated with this validation and verification report occurred after the project start date in 2009 or were not included in the areas that generated credits under the SGS program. The previously issued credits were associated with emissions reductions that occurred in 1995-2006, as documented by "greenhouse gas credits registration documents" issued by SGS and examined by the audit team.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NCR 2010.3

Opportunities for Improvement: None

Project applicability to the VCS for projects rejected under other GHG programme

The project has not been rejected from any other GHG programs.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

Project eligibility

The Project Proponent demonstrated that the project area meets all the applicability requirements of the selected methodology (discussed in detail in section C.2).

Applicability Condition	Evidence Used to Demonstrate Conformance
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The chosen CDM methodology requires the project to <i>(a) Demonstrate that the land at the moment the project starts does not contain forest by providing transparent information that:</i> <i>(i)Vegetation on the land is below the forest national thresholds (crown cover, tree height and minimum land area) for the forest definition under decisions 11/CP.7 and 19/CP.9 as communicated by the respective DNA.</i> <i>(ii) The land is not temporarily unstocked as a result of human intervention such as harvesting or natural causes or is not covered by young natural stands or plantations which have yet to reach a crown density or tree height in accordance with national thresholds and which have the potential to revert to forest without human intervention.</i>	A land evaluation map was provided based upon a Land-TM Image from 1995. This map indicates that the project did not contain forest at project initiation. Though the map is from 1995 and the official start date is May 1994, the map is deemed acceptable because actual planting within the project area did not commence until 1995. Further evidence was also provided indicating that clearing of forest within the project area took place long before 1995. As the land at project start consisted of grassland and cropland, it was also shown that the land did not meet the definition of forest in Uganda. Moreover, the baseline study carried out indicated that the land was not temporarily unstocked nor likely to revert to forest without human intervention.
The chosen CDM methodology requires the project to: <i>(b) Demonstrate that the activity is a reforestation or afforestation project activity as follows:</i> <i>(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.</i>	A Land Cover Map based on SPOT XS images of 1989-1990 by National Biomass Study of the National Forest Authority's GIS and Mapping/Inventory and Survey Units was provided demonstrating that the land in question was not forest in 1989.
VCS AFOLU Guidance requires that project activities must meet the VCS definition of reforestation i.e. "The direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural	The project meets this definition as evidenced by the pre-project conditions, project activities, and conditions at verification.

seed sources, on land that was forested but that has been converted to non-forested land."	
VCS AFOLU Guidance requires that "documented evidence shall be provided in the VCS PD that no ARR or ALM project areas were cleared of native ecosystems within the ten year period prior to the proposed Project Start Date."	The evidence provided by the Project Proponent along with testimonial evidence gathered during the audit suggests that the project land was cleared by encroachers for agriculture prior to project initiation. It was not cleared in order to provide lands for project implementation. It was also likely cleared prior to 1984. As evidence suggests the land was cleared in the late 1970's and early 1980's ending around 1985. The audit team is of the opinion that the VCS guidance which states that "Project Proponents must demonstrate that the project area was not cleared of native ecosystems, such as forests, grasslands, scrublands or wetlands, to create VCUs." has been met. Additionally, as markets for carbon credits did not exist at project initiation, it is unlikely that there would have been a motive to clear land in order to generate credits.
VCS AFOLU Guidance states that "The Project Start Date for AFOLU projects can be earlier than 1 January 2002, provided the following conditions are met: • project validation and verification against the VCS has been completed by 1 October 2010; • the Project Proponent can verifiably demonstrate that the project was designed and implemented as a climate change mitigation project from its inception; and • prior to 1 January 2002, the project applied an externally reviewed methodology and engaged independent carbon monitoring experts to assess and quantify the project's baseline scenario and net emissions reductions or removals."	As the Kibale project has a start date earlier than January 1, 2002 these conditions must be met by the project. The first condition is not applicable as the date of completion has been extended to September 8, 2011 by VCS. The project intends to complete validation and verification by this date. The second condition was met and demonstrated through the provision of contracts from 1994 indicating that the project was being implemented to sequester CO2 (see MOU 1994.PDF). The third condition was also met. Evidence of employment of an externally reviewed methodology and engagement of independent carbon monitoring experts to assess and quantify the project's baseline scenario and net

	emissions reductions was presented in the form of various studies and reports that were conducted prior to 2002. See NCR 2010.38 and the subsequent response for further detail.
The project must also meet the applicability conditions set out in the methodology.	Section 2.2 of the PD outlines how the project meets the various applicability conditions of the project. The auditor has confirmed that the project area meets the various applicability conditions set out in the methodology. See section 3.2 below.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.4, NCR 2010.34, NCR, 2010.35

Opportunities for Improvement: None

Methodology Deviation

No methodology deviations were employed for this project.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

Chronological plan for Project initiation and monitoring

The standard (2007.1, Section 5.7) requires a chronological plan for the date of initiating Project activities, date of terminating the Project, frequency of monitoring and reporting, and the Project period, including relevant Project activities in each step of the GHG Project cycle.

Section 7.0 of the PD presents the Project schedule for the initial Project Instance. This schedule provides an adequate guide for establishing the chronological schedule for additional Project instances in the grouped project.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NCR 2010.36

Opportunities for Improvement: None

Roles and responsibilities

The standard (VCS2007.1, Section 5.7) states that a PD must contain “roles and responsibilities, including contact information of the Project Proponent, other Project participants, relevant regulator(s) and/or administrators of any GHG Program(s) to which the GHG Project subscribes.”

Section 1.15 of the PD describes the Project Proponent’s roles and responsibilities, including contact information of the Project Proponent and other project participants. This section appears to adequately cover all stakeholders in the grouped project at the time of the initial Project Instance.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NCR 2010.36

Opportunities for Improvement: None

Compliance with relevant laws and regulations

The standard (2007.1, Section 5.7) states that a PD must contain “notification of relevant local laws and regulations related to the Project and demonstrate compliance with them.” Section 1.10 lists relevant local laws and regulations.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

3.2 Baseline

Approval of the Baseline Methodology

The project uses the approved baseline methodology AR-ACM0001, Version 5.0.0, “Afforestation and reforestation of degraded land”.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

Correct Application and Justification of the Selected Baseline Methodology

The project has met all of the applicability conditions of the methodology. These include the following:

- *The A/R CDM activity is implemented on degraded lands, which are expected to remain degraded or to continue to degrade in the absence of the project; hence the land cannot be expected to revert to a non-degraded state without human intervention.*

The Project Proponent used the “Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities” to demonstrate that the project was implemented on degraded lands. Sufficient evidence was provided to the audit team to support this.

- *If at least a part of the project activity is implemented on organic soils, drainage of these soils is not allowed and not more than 10% of their area may be disturbed as a result of soil preparation for planting.*

The Project Proponent provided evidence that was supported by on site reconnaissance to confirm that the project was not implemented on organic soils or wetlands.

- *Litter shall remain on site and not be removed into the A/R CDM project activity.*

Site reconnaissance by the audit team confirmed that litter was left on site. The fact that the project is within a national park where collection activities are not permitted also bolster this claim.

- *Ploughing/ripping/scarification attributable to the A/R CDM project activity if any, is*
 - *Done in accordance with appropriate soil conservation practices, e.g. follows the land contour.*
 - *Limited to the first five years from the year of initial site preparation; and*
 - *Not repeated, if at all, within a period of 20 years.*

Interviews with the site preparation team and on the ground evidence confirmed that there was no ploughing/ripping/scarification attributable to the project activity.

The validation team reviewed the application of the baseline methodology for the project and found the baseline applicability conditions were met.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

Assessment of additionality

The project used the approved CDM tool “Combined tool to identify the baseline scenario and demonstrate additionality in ARR CDM project activities” to demonstrate the additionality of the project. The details of the application of this tool are discussed in section 2.5 of the project document. The validation team reviewed this analysis and cross checked the assumptions of the analysis against third party references provided by the Project Proponent. The validation team concluded that the additionality assessment was well documented, and that, when compared against potential alternative land uses the project activity faces investment barriers, institutional barriers, technological barriers, first of kind project barrier that makes its implementation in the absence of carbon finance unlikely. Analysis of similar activities within Uganda shows that the project activity is not a common practice. The validation team agrees with the Project Proponent’s assessment that the project is additional.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

Carbon stock changes in above-ground and below-ground tree biomass in baseline

In the absence of project activities, the project area would suffer a recurring fire regime which would suppress tree regeneration. Observations from 2005 to 2011 confirm little if any changes in tree biomass in areas subject to repeated burning. In areas under a steady state regime, changes in biomass are zero. As indicated in the methodology the baseline may be modeled in a steady state if adequate evidence is provided. This evidence was provided and the audit team confirmed that it was sufficient.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.27, NCR 2010.39

Opportunities for Improvement: None

Quantification of baseline carbon stocks

The baseline scenario is identified in section 2.4 of the PD. The most likely and conservative baseline scenario, as identified by the Project Proponent, is Scenario 2: less encroachment. The “Combined tool to identify the baseline scenario and demonstrate additionality in ARR CDM project activities” provides the specific steps for establishing the appropriate baseline. The Project Proponent provided supporting documentation, much of which was prepared independently from the project that met these requirements including a “baseline evaluation report” by Meijer (1999).

The actual quantification of baseline carbon stocks is described in detail in section 2.5 of the PD. This includes carbon stock changes that result from continued but less intensive encroachment. This would mean that fires continue to roam the formerly encroached land and the carbon stock would be the result of a mix between agricultural activities, fire and partial regeneration of pioneer vegetation (grass, shrubs and bananas). To quantify the carbon stock associated with the baseline scenario, retrospective analysis of the vegetation was conducted. Satellite imagery combined with the quantification of the biomass stocks per vegetation type was established. Field inventory plots were also installed and the data gathered was used to come up with the ex-post baseline estimate.

Specifically, in order to arrive at a verifiable starting value for carbon stocks, the Project Proponent calculated carbon stocking for each of the 5 degraded land classes resulting from the imagery analysis: tall grass, medium height grass, mix of grass, mix of shrub and banana. Fresh (wet) biomass for each tree record collected in the field was calculated based on National Biomass Study (NBS) equations that predict biomass as a function of tree diameter, height, and crown diameter. Wet biomass was then converted to air dry biomass based on conversion factors also from NBS, which is then converted to oven dry basis by multiplying oven dry weight by .853. The calculations were verified for all trees in the “m” (matooke) strata based on the 1999 inventory data available in the Kibale_Baseline Data.accdb database and air dry conversion factors in the Kibale Baseline Recalculation_082411.xlsx spreadsheet on sheet FW-ADW. Of the 5 degraded strata, matooke (banana plantation) has the highest carbon stocking; 5.21 t/ha, which the Project Proponent has conservatively adopted as the initial carbon stocking value for the project area.

The audit team reviewed all calculations and methods to quantify the baseline and came to the conclusion that the baseline was ultimately quantified correctly and in line with the chosen methodology.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.27, NCR 2010.39

Opportunities for Improvement: None

Application of Allometric method to calculation of tree biomass

The Project Proponent's use of allometric equations to predict biomass of individual trees for ex ante and ex post estimations of actual GHG removals is consistent with the requirements of the methodology and was found to be accurate.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.18, NIR 2010.19, NIR 2010.20

Opportunities for Improvement: None

Ex ante estimation of Net GHG reductions

Section 5.1.1 of the methodology outlines the procedure for calculation of ex ante actual GHG reductions under the Allometric method. The Project Proponent provided spreadsheets demonstrating use of the CO2Fix model to estimate carbon stock changes over time. Carbon stock estimates from CO2Fix output are calculated using the same allometric equations as are used to calculate both the baseline carbon stocks and the ex post carbon stocks.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

Ex post estimation of Net GHG reductions

Section 3.4.4.9 of the PD states that changes in carbon stocks in tree biomass are estimated on the basis of field measurements carried out in permanent plots. This is in accordance with the requirements of the methodology. All calculations were

checked and found to be implemented correctly. Field data was also checked through a verification inventory and found to be accurate.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIRs 2010.21-2010.25, NIRs 2010.28-32, NIR 2010.33, NIR 2010.11, NIR 2010.15

Opportunities for Improvement: OFI 2010.32

Estimation of GHG emissions associated with project activities

Under the methodology, GHG emissions due to project activity are calculated as a function of biomass burned due to clearing, burning, and decay of existing vegetation attributable to project activity. With the exception of minor clearing of grass and shrubs to promote tree growth, none of these activities are included in the project, therefore emissions from project activity will be negligible.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

3.3 Monitoring Plan

Approval of the monitoring methodology

The Project applies the UNFCCC-approved CDM A/R baseline and monitoring methodology AR-AM0002 V5.0.0 for the project. The VCS accepts methodologies approved under the Clean Development Mechanism.

The monitoring plan is described in section 3 of the PD and supplemental standard operating procedures, which were provided to the audit team. The monitoring plan for biomass change uses a stratified sample of nested fixed area permanent plots arranged as a cluster of four circles located at random locations on a 500mx500m grid superimposed over the project area. In the naturally regenerated areas, the same grid was employed; however, clusters of three permanent sampling plots were randomly located instead of four. In total there were 283 plots in 71 clusters established or re-measured in reforested areas. The naturally regenerated areas were sampled with 66 plots within 22 clusters. SOPs reviewed by the audit team were of sufficient detail to accurately repeat measurements on each plot with consistent results.

Measurements taken from the permanent sample plots are converted to carbon stocks using the allometric equation approach described in section 5 of the methodology. This approach estimates the carbon stock of each sampled tree using volume equations taken from the literature. The volume equations used in the project area were derived from destructively obtained data specific to Uganda. Literature documenting these equations was provided to the audit team, to verify that locally appropriate equations were chosen. The estimated volume is then used in conjunction with wood density, biomass expansion factors, and an estimated carbon fraction, and a root to shoot ratio to estimate whole tree biomass. Each of these parameters was obtained from scientific literature, which was reviewed during the audit and found to be appropriate to the project area.

In addition to monitoring of biomass change, the monitoring plan requires the monitoring of project boundaries, forest establishment, and forest management. The recordkeeping specified in the monitoring plan included in the PD are sufficient to provide the data required for the calculations described in the methodology.

Overall, the audit team found the monitoring plan adequate for providing high quality data that meets the requirements of the selected methodology.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.11, NIR 2010.16

Opportunities for Improvement: OFI 2010.32

Correct application and justification of selected monitoring methodology

The monitoring plan presented by the Project Proponent contained the requisite monitoring parameters and frequency of monitoring required by the methodology.

To assess correct application of the selected monitoring methodology, SCS visited and re-measured a total of 9 monitoring plots using the same methods as the Project Proponent. These plots were selected with a random element, but were not selected completely at random. During each day of the audit, the auditor chose random plots that were located in portions of the project in which visits were planned. This allowed the audit team to cover a large portion of the total area of the project in a time-efficient manner.

The fundamental pieces of data collected in field measurements were tree diameter, tree height, crown width and species. While in the field, the technical expert expressed no concerns about adequate identification of tree species. Project staff exhibited a high level of skill and training in such species identification and tree

measurement. SCS subsequently compared the data collected in the field to data provided by the Project Proponent. In all plots measured except one, the total number of trees in the plot, as determined by the audit team, exactly matched the total number of trees reported by the Project Proponent. Re-location of individual trees was possible based on the stem map data collected during the initial inventory, and showed very high correspondence with field observations. In total, 83 trees were re-measured by the audit team. Measurements taken by the audit team were consistent with those of the Project Proponent.

The audit team also observed the protocol by which inventory teams performed the plot measurements and found execution of the plot measurement methodology to be systematic and meticulous, resulting in high quality data.

The accuracy of spatial data, including the project boundary, was assessed by collecting GPS coordinates while in the field and overlaying those coordinates with spatial data files provided by the Project Proponent. The spatial data presented by the Project Proponent is consistent with that collected during the site visit.

The methodology also requires the quantification of project activity emissions. The Project Proponent provided evidence that these emissions were minimal and could be considered insignificant according the CDM guidance on project activity emissions. The audit team confirmed that most of the project activities involved manual labour, required little transportation, and that these emissions could be considered insignificant.

Based on these observations, the audit team came to the conclusion that the monitoring methodology was correctly applied and that the data upon which the project's carbon stock benefits are based is sound. Furthermore, the field teams responsible for collecting monitoring data and the office teams responsible for processing the data were found to be competent and experienced. Specific roles and responsibilities for monitoring are detailed in section 3 of the PD and in the monitoring report section 3.3.4.6. Quality Assurance protocols and SOPs are included as supporting documents to the PD.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.11, NIR 2010.16

Opportunities for Improvement: OFI 2010.32

Conformance with VCS specific criterion related to monitoring

From VCS 2007.1 Section 5.11: The Project Proponent shall establish and maintain criteria and procedures for obtaining, recording, compiling and analyzing data and information important for quantifying and reporting GHG emissions and/or removals

relevant for the Project and baseline scenario (i.e. GHG information system). Monitoring procedures should include the following:

VCS Required Monitoring Procedures	Findings
Purpose of monitoring	The purpose of the monitoring is clearly presented in Section 3 of the PD.
Types of data and information to be reported - including units of measurement	The parameters and their units are correctly reported in Section 3.3 of the PD.
Monitoring methodologies, including estimation, modeling, measurement or calculation approaches	Covered in Section 3 of the PD and in SOP.
Monitoring times and periods, considering the needs of intended users	Covered in Section 3 of the PD.
Monitoring roles and responsibilities	Covered in Section 1.15 of the PD.
GHG information management systems, including the location and retention of stored data	Covered in SOP.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

3.4 Calculation of GHG Emissions

Appropriateness of sources, sinks and reservoirs

The project accounts for carbon in the above-ground tree biomass and below ground tree biomass. Dead wood is conservatively ignored. Non-tree biomass, litter, and soil organic carbon are conservatively excluded from the project, in accordance with the methodology.

The sources, sinks and reservoirs selected are consistent with VCS guidelines and the requirements of the selected methodology.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.12, NIR 2010.13 NIR 2010.14 NIR 2010.24

Opportunities for Improvement: None

The correctness and transparency of formulas and factors used

The formulas used to estimate project greenhouse gas emissions are taken directly from the approved CDM methodology. Formulas for estimating volume of sampled trees come from scientific literature relevant to the project area, which was provided to the audit team and reviewed during the validation process. SCS reviewed the computer code used to process inventory data, as well as all calculations presented in project documents and accompanying spreadsheets to verify that the calculations are free of errors and that they have been implemented as described in the approved methodology.

Factors and parameters used in calculations come from various peer reviewed publications or published third party reports. The source of each factor is documented in the PD and all sources were made available to the audit team. These sources were cross-checked during the validation audit.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.31

Opportunities for Improvement: None

3.5 Environmental Impact

The Project Proponent conducted environmental impact assessment in 1999. The EIA found project activities to have a positive environmental impact overall. Section 5 of the PD also summarizes additional environmental impacts. After visiting the project site, the audit team did not express any concerns about negative environmental impacts of the project.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

3.6 Comments by stakeholders

SCS received no specific feedback from stakeholders regarding the validation of the project. However, section 6 of the PD documents feedback received from stakeholders and the way in which it has impacted the project. As the project area is FSC certified, additional stakeholder input was provided in the form of the assessments done during the FSC audits that took place.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

3.7 Risk Assessment

The project applied the risk tool from the VCS version 3 standard to determine the required non-permanence buffer contribution. The Project Proponent presented extensive documentation in support of the claimed risk level, including management plans; contracts and agreements, project implementation details, and access to funds; financial records; evidence of world bank governance indicators; results of previous audits; reports on fire risks; and state level forest department reports. The assessment resulted in a total project management risk score of -2, a total financial viability risk score of 0, a total opportunity cost risk score of 6, and a project longevity score of 0, giving the project a total internal risk score of 4. The assessment resulted in a total land tenure risk score of 0, a total community engagement risk score of -5, a total political risk score of 2, giving the project a total external risk score of 2. The assessment resulted in fire risk score of .5, a pest and disease risk score of .5, an extreme weather risk score of 1, a geological risk score of .5, giving the project a total natural risk score of 2.5. Thus the overall risk score is 8.5. Based on this score, the project is assigned the minimum risk rating of 10, as described in the VCS version 3 AFOLU Non-Permanence Risk Tool. The audit team found the claimed level of risk to be well supported by the documentation provided and determined that conservative assumptions were in determining the risk level appropriate to the project. The individual risk components and justification for the risk score assigned are summarized in the table below:

Risk Category		Score Applied	Evidence reviewed
Project Management	(a)	0	All species used are native. The Project Proponent provided a full list of species used which were confirmed to be native. Additionally, the technical expert contracted by the audit team verified that the species listed and observed in the field are native to the area.

	(b)	0	The Project Proponent has stated that ongoing enforcement is not required to protect more than 50% of stocks because the project is well established, falls within a national park, and has the full support of local communities who benefit from the project. Moreover, within the larger national park, there are multi-use areas that are used by local communities for the selective use of natural resources. These areas take pressure of the protected resources of the project. The Project Proponent provided numerous “Collaborative Resource Management Agreements” which enable community groups to conduct such activities as bee keeping, fishing, and other selective resource extraction within the park. The audit team confirmed that ongoing enforcement is not required.
	(c)	0	The Project Proponent provided biographies of Face the Future and UWA staff members that demonstrate that the management team has more than 5 years experience in each of the skills necessary to undertake project activities.
	(d)	0	The project is managed from an on-site office, which was visited by the audit team.
	(e)	0	The project team’s experience does not qualify for this mitigation score.
	(f)	-2	The Project Proponent provided a copy of the management plan for the national park that includes the project area. Review of this plan indicated that it meets the requirements of an adaptive management plan as defined by the VCS.
Total Project Management: -2			
Financial Viability	(a-d)	0	The Project Proponent provided financial records that show that the project has already broken even in terms of cash flow by previously selling GHG credits verified under another standard and by obtaining funds for specific planting campaigns. A cost benefit analysis was also provided.
	(e-h)	0	As the project has already reached the

			break-even point as described above, the project has secured 100% of funding required to cover the total cash out up to the break even point.
	(i)	-2	The Project Proponent supplied evidence, in the form of a letter from a letter from the provider of a line of credit that the project has access to additionally callable financial resources.
Total Financial Viability: 0			
Opportunity Cost	(a-f)	8	The Project Proponent conducted and NPV analysis of the most profitable land use scenario and compared it to the project scenario. Evidence was provided that the most profitable alternative land use scenario (banana farming) is more than 100% more profitable than in the project scenario. Thus, the project has conservatively assigned the highest risk rating associated with opportunity cost to the project.
	(g)	0	The project does not qualify for this mitigation score because the Project Proponents are not non profit organizations.
	(h)	-2	The Project Proponent provided a series of contracts and agreements that demonstrate that the project is protected by a legally binding commitment to to secure long term management and conservation of carbon sequestered by the project for a period of 99 years. These documents were reviewed by the audit team. This qualifies the project for a mitigation score of -2
	(i)	0	The project does not reach the 100 year duration required for a mitigation score of -8.
Total Opportunity Cost: 6			

Project Longevity	(a-b)	-19	As discussed above, a legal agreement is in place to continue management practices for a duration of 99 years. Using the formula given in Table 4 of the VCS Non-Permanence Risk Tool, this results in a project longevity score of $30-(99/2) = -19.5$, which the Project Proponents have rounded to -19. A total project longevity risk score of 0 is applied, as the VCS standard does not allow scores in the category to be less than zero.
Total Project Longevity:0			
Total Internal Risk: 4			

Land Ownership and Resource Access/Use Rights	(a-d)	2	Ownership and resource access/use rights are held by the same entity- the Government of Uganda and administered by Uganda Wildlife Authority. Evidence was provided to the audit team in the form of government regulations describing ownership.
	(e)	-2	The project falls within a protected area (national park). Evidence was provided to the audit team showing that there is a legally binding commitment to continue management practices that protect carbon stocks over the length of the crediting period.
	(f)	0	NA
Total Land Ownership: 0			

Community Engagement	(a-b)	0	There are no communities reliant on the project area due to the fact that it falls within a national park where resource use is restricted. However, evidence was provided showing that communities have been consulted and do participate in project activities. Moreover, local communities are provided access to park resources in special use zones and with special permission. According to the VCS risk tool, "Where local populations are not reliant on the project area, the risk is not relevant to the project and the risk rating for community engagement (CE) shall be zero." Thus zero is a justified risk rating.
	(c)	-5	The Project Proponent has demonstrated that the project provides net positive impacts on the social and economic well being of the local communities who derive livelihoods from the project area. Evidence was presented to the audit team showing how community members benefit from revenue sharing, employment, and other project activities.
Total Community Engagement: -5			
Political Risk	(a-e)	4	The governance score was calculated from the World Bank Indicators as -0.6. The audit team independently calculated the score from the indicators as published by the World Bank and arrived at the same conclusion as the Project Proponent.
	(f)	-2	Uganda qualifies for mitigation because it receives REDD+ Readiness funding from the World Bank Forest Carbon Partnership Facility. Review of the respective websites for these organizations by the audit team confirm that these requirements have been met.
Total Political Risk: 2			
Total External Risk: 2			

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Natural Risks	(F)	2 (LS) * 0.25 (Mitigation) = .5	The assessment of the likelihood and significance of potential natural disturbance events is subjective in nature. The audit team reviewed the Project Proponent's rationale for each of these elements, which is documented in a risk assessment document that accompanies the PD, and determined that the risk assessments made were reasonable and conservative. The likelihood of fires was shown to be "less than every ten years" due to the fact that the project has witnessed multiple small fires within a ten year period. However the significance was shown to be "insignificant" due to the fact that the fires affected less than 5% of carbon stocks. Mitigation measures were presented and observed during the audit including fire look out towers, fire breaks, fire trainings etc. Additionally, due to the fragmented nature of the project the risk of devastating fire is decreased. The high species diversity of species used in the project area and fragmented nature of the project limits the risk of pest and disease attacks. Thus the significance is deemed minor. To date no pest outbreaks have affected the project. Thus the likelihood is every 25 to 50 years. Mitigation of pest out break occurring is implemented in the form of training of project staff to monitor and identify cases of pest outbreak. The risk of extreme weather in the project area was shown to be very low. The local technical expert on the audit team confirmed that extreme weather is highly unlikely in the project area. Thus the score is insignificant. The likelihood is every 10 to 25 years as the project has been in
	(PD)	1(LS)* 0.5 (Mitigation) = 0.5	
	(W)	1(LS)	
	(G)	1(LS)*.5 (Mitigation) =0.5	

			existence for 16 years and has not lost any carbon stocks due to extreme weather. The site visit confirmed that the topography of the project area limits its susceptibility to flood damage. Landslides are a risk in the project area, but it appears very unlikely, based on the fact that the land within the project area is not steep and consists of flat land or rolling hills. The significance is low and the likelihood is every 10 to 25 years. Mitigation measures are in place in the form of avoiding landslide prone areas for planting. The local technical expert hired by the audit team confirmed that no known substantial geological risks are present in the project area.
	ON	0	The local technical expert hired by the audit team confirmed that there are no other substantial natural risks that the project's risk analysis must consider.
Total Natural Risk: 2.5			

OVERALL RISK: 8.5

3.8 Leakage

This section outlines the audit team's findings associated with the leakage assessment provided by Face the Future. The methodology used requires that leakage caused by the displacement of human activities be quantified and deducted from GHG removals being claimed. It also requires that project activity emissions be quantified and deducted from GHG removals being claimed. The project proponent asserts in the PDD that the project does not result in any leakage and that project activity emissions are insignificant. The project proponent provided justification for these assertions in the PDD.

Initially the audit team had had questions in regards to assertion of no leakage due to the apparent re-location of those people who had been the deforestation agents prior to the project (agriculturalists who had converted forest land for agriculture and illegally used park land). The verification team thought that, if the project had caused these people to simply move elsewhere and repeat the process of deforestation and agriculture, then leakage as defined by the methodology would

have occurred and that this leakage would have had to be accounted for. Thus, New Information Request 2010.09 was issued in this regard.

However, upon further investigation during the course of the audit, it was learned that the relocation of the people occurred prior to the start of the project. When the project started, the people had long been relocated. Thus, project activities did not include any relocation of people. The people were relocated in the course of re-establishing the national park (prior to the project being conceived). Once they were relocated and park boundaries were re-established, persistent fire in the elephant grass that colonized the abandoned agricultural land threatened park resources. The carbon project was initiated in part, in order to reforest areas of the park that could serve as a buffer to the national park that could prevent fires from spreading into the park. It was concluded that for these reasons, leakage from the relocation of deforestation agents did not occur (and leakage was therefore zero). The project proponent further clarified this point in their response to NIR 2010.09 and the lead verifier concurred with this assessment that there was no leakage from the relocation of people because this occurred prior to the project start date. As such, this finding was closed.

An additional feature of the project which limits any potential leakage is the multi-use zones found in the park. These areas have been reforested and zoned for multiple land uses by various groups including local villagers, a prison and other groups. Fuel wood collection, the collection of non-timber forest products, and other similar activities are permitted. By allowing them controlled access to the resources of the multiple use zones, pressure on other forests in the region is reduced. The multiple use zones fall outside the boundaries of the project and thus do not result in degradation within project boundaries.

The methodology requires that leakage from activity displacement be calculated and accounted for in the quantification of VCUs. As no displacement occurred due to the project, the calculations were not required and leakage was set at zero for the quantification of VCUs. The methodology also requires that emissions from project activity be accounted for. The project proponent stated the following in regards to project activity emissions:

"The labor force used for the proposed ARR VCS project activity is from local villages; hence transportation for workers is not needed. All seedlings will be raised on or near the site and will be transported to the project sites by manpower and project vehicles, whose emissions are insignificant. No harvesting or thinning of the forest expected to take place as the project area wholly contained within the national park. Hence, the project does not anticipate any leakage (project activity emissions) from the project implementation..."

During the course of the audit, it was determined that these statements were accurate and that the emissions associated with project activity were insignificant. Most of the work done in project development is done with manual labor. For example, fire breaks are maintained using field crews with machetes. It was not observed that any heavy machinery was used or needed to carry out project activities. The CDM Executive Board

has provided guidance (EB 42 paragraph 35) that confirms transportation emissions can be considered insignificant and do not need quantification.

4 Verification Findings

4.1 Remaining issues, including any material discrepancy, from previous validation

This is the first verification of the project, and is performed concurrently with validation. No additional issues remain from a previous validation or verification.

4.2 Project Implementation

No discrepancies were found between the PD and the actual project implementation. As this is the initial verification of the project and was conducted concurrently with validation, the Project Proponent had the opportunity to modify the PD throughout the audit process to ensure that it was consistent with the findings of the auditors regarding the actual project implementation. The final version of the document is, to the best of the knowledge of the audit team, free of material misstatements. Materiality is defined as 5%, as described by VCS 2007.1, section 7.3.1.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

4.3 Completeness of Monitoring

See section E.4 for a discussion of the correct application of the monitoring methodology. The audit team found that the methodology had been applied correctly, and that all required pools were monitored. All other emissions sources were monitored as described in the methodology.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

4.4 Accuracy of Emission Reduction Calculations

The audit team reviewed all calculations used to estimate the change in carbon stocks resulting from project implementation, as well as calculations used in estimating the baseline and leakage. Additionally, project sampling was compared to a sample by the audit team. The calculations presented in the current monitoring report are, to the best of the audit team's knowledge, free of errors, omissions, or material misstatements.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.28

Opportunities for Improvement: None

4.5 Quality of Evidence to Determine Emission Reductions

SCS assessed the quality of evidence collected by the Project Proponent used to determine emissions reductions as described in section 3 of the PD.

All other factors used in estimating emissions reductions come from approved methodologies, CDM sources and tools, peer-reviewed scientific literature, or third party reports such as those produced by the UNFAO. Each of the sources that form the basis for the emission reductions was made available to the audit team, and it was confirmed that these sources were used appropriately.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: NIR 2010.5, NIR 2010.6, NIR 2010.8, NIR 2010.26

Opportunities for Improvement: None

4.6 Management and Operational System

The structure of the management and operational system in place for the Kibale project is described in sections 1.15 of the PD and 3.3.4.6 of the Monitoring Report. Thorough standard operating procedures were presented to the audit team in parallel with other project documentation. Quality control procedures for monitoring are described in PD Annex 6 and in section 3.3.4.9 of the monitoring report and are consistent with best practices in forest carbon project development. The project has been in place since 1994 and has well trained, dedicated, and competent staff available for all aspects of project implementation. Based on observations on the project site and the thorough nature of documentation

presented during the validation process, the audit team has a high level of confidence in the team's ability to continue project implementation and monitoring as described in the PD.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: None

New Information Requests: None

Opportunities for Improvement: None

5 Validation and Verification conclusion

SCS was able to arrive at an opinion regarding the accuracy of the calculated emission reductions and removals from the Natural High Forest Rehabilitation Project on Degraded Land of Kibale National Park project through a review of the Project Description and provided supporting information, additional requested information, a site visit, and interviews with the project development team. SCS confirmed the soundness of the data regarding project eligibility, inventory procedures, baseline and project characterization, and methodologies related to the calculation of carbon stocks and GHG reductions and removals. Through the risk based validation assessment, SCS has determined that the Natural High Forest Rehabilitation Project on Degraded Land of Kibale National Park project, developed by Face the Future, is in conformance with the Verified Carbon Standard and meets the minimum quality standard. Thus, it is SCS's opinion that the project is eligible for validation under the Verified Carbon Standard.

Furthermore, all issues identified during the verification were resolved and found to be in conformance with VCS standards. The monitoring report and data are considered accurate, complete, transparent, and free of material misstatements. Therefore, SCS is able to issue a positive Verification Opinion for emission reductions and removals by the project for the monitoring period from 1 January, 2009 to 1 January, 2011. While 413,757 VCUs will be issued, 10% of the project's Net CO₂e carbon stock benefits (41,376 metric tonnes CO₂e) will be set aside in the VCS's buffer pool. Additionally, as listed in section 4.3 of the monitoring report, 0 tonnes are deducted from carbon sequestration to account for leakage. As such, the project will be issued a total of 372,381 VCUs. The VCUs in this Verification Report are consistent with those claimed in the 2011 monitoring report.

Reporting period: From January 1, 2009 to January 1, 2011

Verified emission reductions in the above reporting period:

Project emissions 0 t CO₂ equivalents

Project Change in Carbon Stock	413,757	t CO ₂ equivalents
Baseline emissions	0	t CO ₂ equivalents
Baseline Change in Carbon Stock	0	t CO ₂ equivalents
Emission reductions	413,757	t CO ₂ equivalents
Estimated Leakage	0	t CO ₂ equivalents
Buffer Pool Contribution	41,376	t CO ₂ equivalents

Net Emission reductions, after subtraction of buffer pool contribution and leakage **372,381 t CO₂ equivalents**



Todd Frank
Lead Verifier
Scientific Certification Systems

6 September 2011



Christie Pollet-Young
Senior Verification Forester
Scientific Certification Systems

5 September 2011



Carbon Offset Project Verification:

List of Findings

Verification under the Verified Carbon Standard (VCS)

Reporter/Member:

Face the Future, B.V.

Project:

Natural High Forest Rehabilitation Project on
Degraded Land of Kibale National Park

Non-Conformity Reports:

NCR Number 3 of 40 dated 6/13/11

Standard Reference: VCS 2007.1

Document Reference: PD Section A.9

Finding: The VCS 2007.1 standard states "Project Proponents shall not claim GHG credits from one project under more than one GHG Program." (section 5.2.2, Page 13). Section A.9 of the PD describes past credit issuance under the SGS Standards. The project is therefore out of conformance with the VCS standard. If a resolution has been reached with VCS, please provide the auditor an official correspondence from VCS that describes the resolution of this issue.

Proponent Response: Not required.

Auditor Response: VCS had provided written guidance sufficient to close this finding. On August 17, 2011, Carolyn Ching, Senior Program Officer at the VCSA sent the following email regarding this issue:

Dear Todd and Ryan,

I have recently been in communication with Face the Future with about the validation of the Kibale ARR project and the Infapro REDD project. Both projects currently have open NCRs about how a project cannot register emission reductions in two GHG programs. For the Infapro project, the NCR Finding Numbers are 2011.9, 05/25/2011 and 2011.14, 05/25/2011. Similar NCRs exist for the Kibale project, though I do not have the associated Finding Numbers.

For both projects, SCS has issued NCRs with regard to the Section 5.2.2 and 5.7 of the VCS 2007.1 Standard. For the NCR related to claiming credits from one project under more than one GHG Program (Section 5.2.2), the VCS issued a Policy Announcement on this issue in March 2008 (see attached). The intent of the statement, "The VCS standard requires that Project Proponents may not claim GHG credits from one project under more than one GHG program", is to restrict any single emission reduction or removal from being counted in two different GHG programs. It does not restrict a project from being registered in one GHG program, then registering under another. We do in fact allow projects that have been registered in another GHG program to also register under the VCS (e.g., pre-CDM projects).

For the other NCR, as you can see from the above clarification and the attached document, the intent of that section in the VCS 2007.1 is to prevent a single emission reduction from being credited in two GHG programs. Since the intent of both Kibale and Infapro projects is to register and issue credits on different emission reductions than those issued under the SGS program, there should be no issue.

Please let me know if you need further clarification on this issue or if you would like to further discuss.

Kind regards,
Carolyn

Based on the clarifications provided in this email, NCR 2010.3 was closed.

NCR Number 14 of 40 dated 6/13/11

Standard Reference: AR-ACM0001

Document Reference: MR

Finding: The methodology AR-ACM0001-Version 05.0.0, page 16 requires that 'the decomposition class of the dead tree and the diameter at breast height shall be recorded and the standing wood is categorized under the following four decomposition classes: 1, 2, 3, 4". Please provide information to show compliance with this requirement.

Proponent Response: Deadwood was not included in the calculation of VCUs and all references to deadwood have been removed from the monitoring report and PD.

Auditor Response: Deadwood was not included in the calculation of VCUs. Thus this finding is no longer applicable and is closed. However please refer to NIR 29.

NCR Number 15 of 40 dated 6/13/11

Standard Reference: AR-ACM0001

Document Reference: MR

Finding: If lying dead wood was considered in the project, the methodology AR-ACM0001 Version 05.0.0, page 17 step 1: states that "lying wood should be sampled using the line intersect method". Please provide more information as to how you conformed with this requirement.

Proponent Response: Deadwood was not included in the calculation of VCUs and all references to deadwood have been removed from the monitoring report and PD.

Auditor Response: Deadwood was not included in the calculation of VCUs. Thus this finding is no longer applicable and is closed. However please refer to NIR 29.

NCR Number 16 of 40 dated 6/13/11

Standard Reference: AR-ACM0001

Document Reference: MR

Finding: The methodology AR-ACM0001-Version 05.0.0 requires that the plots where measurements were taken are PSP. Although the MR mentions that they are PSPs, there is no mention of how they have been monumented. Therefore clarify and update the MR to reflect monumentation.

Proponent Response: The Project Proponent acknowledges that the monumentation of plot centers can be improved by labeling them with a permanent visible item. Our goal is to have each plot circle marked with a concrete marker by the end of 2011.

Auditor Response: A full description of plot monumentation has been added to section

E.2.3. This information is sufficient to close the finding. The Proponent's response adequately addresses the finding in accordance with the Voluntary Carbon Standard and applicable approved methodology elements.

NCR Number 17 of 40 dated 6/13/11

Standard Reference: MR3.5

Document Reference: MR

Finding: Please provide evidence to show that the field-map technology was reliable, given its being new in Uganda.

Proponent Response: The use of Field-Map in the Kibale project is not completely new as this was the 3rd campaign where the monitoring teams have been trained and successfully used the equipment. After using the Field-Map equipment in the field and comparing it with their own data, Auditors found Field-Map reliable.

Auditor Response: Sufficient practical evidence was provided during the field visit to demonstrate the reliability of Field Map technology. Thus the finding was closed.

NCR Number 33 of 40 dated 8/23/11

Standard Reference:

Document Reference: PD

Finding: In the response to NIR 2010.28, requesting code or Access queries to allow the audit team to replicate the calculation of carbon at the tree and plot levels, the Project Proponent's response indicated that the queries were in a file called Kibale 2011 and that a detailed description of the procedure used to compute carbon for each pool is to be found in the file "CarbonStockCalculation_FromIFER.doc". Upon examining the individual tree records in the trees_2011 Table in Kibale_2011.mdb, the values for fresh biomass in the table do not seem to coincide with calculations based on the information provided in the CarbonStockCalculation_FromIFER.doc.

For example

Plot 1051, tree ID 2, dbh= 285 mm, height =14.5 m, crownwidth =2.652 m, species =Dombeya mukole

The resulting total fresh weight for that tree is FWAB_t column = .679 tons, i.e. 679 kg

When these data are independently run through equation 1 on page 67 of the PD using parameters for trees 20 – 60 cm, the value returned is approximately 527 kg. This does not match the 679 number from the database. We are not sure what is missing/different for us to get the 527 number.

Please provide an explanation why these values are different. Also, calculating the ratio ADWAB_t / FAWAB_t, i.e., air dry biomass to fresh biomass, generates values for several species that are different from those in the AirDryFreshWeights_Uganda.xls. It is our understanding that the ratios in the spreadsheet are the basis for converting fresh biomass to air dry biomass. Please explain the discrepancy. Please ensure that the ratios for this conversion are correct.

Proponent Response:

1. Regarding the discrepancy in total fresh weight for single tree- it is true that there was a discrepancy between what the Auditors calculated for a Dombeya mukole and what was provided in the database. PPs tried replicating the calculation and also got the value the Auditors got. This turned out to be because both the Auditors and PPs where provided a wrong database from IFER. Kindly find attached the latest version of the database which should match the results of carbon calculations. File name is now **Kibale_August2011.mdb**.

2. The step by step calculation example can be found in **Test_Kibale_200110823.xls** attached.
3. The ratios provided during the second round of findings were in *Appendix 6.xls* file which is attached here again as **Fresh_Air Dry Weight Factors.xls**. The use of the old database could also explain the discrepancy.
4. The Queries in the Access database include information that went into development of each table. These can be viewed under the "Design View" option. No command exist about actual calculations are contained in Access because all calculations are done in Field Map Analyst and imported into Access database for viewing. The **Test_Kibale_200110823.xls** attached provides a good step-by-step explanation of what went on with the calculations.

Auditor Response: The updated documentation provided was confirmed to contain the correct tree level data. The auditor was able to independently calculate tree level biomass and arrive at the same value as the Project Proponent for the selected trees. The updated ratios were also found to be accurate. Thus the finding was closed.

NCR Number 34 of 40 dated 8/30/11

Standard Reference: AR-ACM0001

Document Reference: PD

Finding: The CDM tool "PROCEDURES TO DEMONSTRATE THE ELIGIBILITY OF LANDS FOR AFFORESTATION

AND REFORESTATION CDM PROJECT ACTIVITIES" requires the Project Proponent to demonstrate that the land at the moment of project start does not contain forest. The Project Proponent has included lands that did include forest at the project start. Please remove these areas from the project and demonstrate that no forest lands were included at project initiation. This will require a re-casting of the baseline and a revision of the subsequent calculation of VCUs.

Proponent Response:

1. The file called **Natural Regeneration Area Reduction.pdf** contains a step by step explanation of how formerly encroached banana plantations were isolated from the rest of the natural regeneration area on the basis of the 1995 land evaluation map by Jugerius. Shapefiles for the new natural regeneration area are also attached as **Kibale Natural Regeneration Shapefiles.zip**.
2. Both the planted and smaller natural regeneration area have a common baseline of 5.21tC/ha as presented in **Kibale Baseline Recalculation_082711.xls**.

Auditor Response: The forested areas have been removed from the project and the additional calculations, maps, and information provided are sufficient to close this finding.

NCR Number 35 of 40 dated 8/30/11

Standard Reference: VCS AFOLU Requirements

Document Reference: PD

Finding: Please demonstrate that forest land was not converted to non-forest land within 10 years of project start. Also demonstrate that no native ecosystems were cleared per the VCS AFOLU requirements for ARR projects

Proponent Response: In the 'Guidance for AFOLU projects' document, it states on p.7 following:
 "The VCS does not wish to provide potential perverse incentives for the clearing of native ecosystems in order to generate carbon credits from AFOLU activities. Therefore, in order to be eligible for crediting under the VCS, ARR and ALM Project Proponents must demonstrate that the project area was not cleared of native ecosystems, such as forests, grasslands, scrublands or wetlands, to create VCUs. Such proof is not required if such clearing or conversion took place at least ten years prior to the proposed VCS project start. The burden of proof rests with the Project Proponent."

In the UWA-Face project area no clearing of forest for creation of VCU's happened. At the time the project started, in 1995, carbon credits were not a commodity and the concept was unheard of. Face became involved in 1994 and did not invest in forest destruction but in forest restoration. Instead, deforestation that took place in the UWA-Face project area is caused by encroachment of communities. This mainly took place in the 1970s and early 1980s.

The **General Management Plan of Kibale National Park 2003 – 2013** states (page 7):
 "In areas adjacent to the park, high increase in human population, poor farming practices and the breakdown of law and order in the 1970's and early 1980's created intense pressure on the forest. This resulted in the encroachment of the former Kibale Forest Corridor Game Reserve. By 1992, there were approximately 13,000 people living inside the Corridor. In 1992, these people were evicted and relocated to Kibaale District."

Auditor Response: The evidence provided by the Project Proponent in response to this finding along with testimonial evidence gathered during the audit suggests that the project land was cleared by encroachers for agriculture prior to project initiation. It was not cleared in order to provide lands for project implementation. It was also likely cleared prior to 1984. As evidence suggests the land was cleared in the late 1970's and early 1980's ending around 1985. The audit team is of the opinion that the VCS guidance which states that "Project Proponents must demonstrate that the project area was not cleared of native ecosystems, such as forests, grasslands, scrublands or wetlands, to create VCUs." has been met. Additionally, as markets for carbon credits did not exist at project initiation, it is unlikely that there would have been a motive to clear land in order to generate credits. Thus the finding has been closed.

NCR Number 36 of 40 dated 8/30/11

Standard Reference: VCS 2007.1 Section 5.7

Document Reference: PD

Finding: Please ensure that all requirements of section 5.7 of the VCS standard are included in the PD

Proponent Response: All requirements of section 5.7 of the VCS 2007.1 standard have been included in the VCS 2007.1 PD.

Auditor Response: These items have been added to the PD. Thus the finding has been closed.

Standard Reference: VCS 2007.1

Document Reference: PD

Finding: Please demonstrate how the project meets all VCS requirements for proof of title including a discussion of any overlapping claims to project lands

Proponent Response: The land is owned by the Ugandan Government, therefore there are no overlapping claims. All resources, below or above the surface belong to the government, except for those which have been agreed otherwise, for example the carbon ownership by Face the Future in the following signed agreements:

1. The MoU between Face and the Government of Uganda (1994), see article 2.e.
2. Form of Agreement contract example, the contract of the first area, 1994. This contract refers to the General conditions of Contract .
3. The General conditions of Contract (1992), see article 33.

Auditor Response: The contracts provided meet the VCS requirement for proof of title that a “contractual arrangement with the owner of the plant, equipment or process that grants all reductions/removals to the proponent” be provided with the PD. As indicated in the email below from the UWA, the land in the national park is set aside as wildlife conservation area and no other land uses are permitted. Thus there are no overlapping rights. Additional documentation has also been provided to this effect.

Dear Tasila,

I am attaching to this e-mail a scanned copy of the Statutory Instrument gazettement Kibale Forest a National Park for only wildlife conservation. This Instrument is a Parliamentary Resolution to indicate that the government has set aside this piece of land (Kibale National Park) as a protected area for wildlife conservation only. All other activities not compatible with wildlife conservation are therefore not allowed inside Kibale National Park. The Statutory Instrument is derived from the provisions of the Wildlife Act (Formerly Uganda Wildlife Statute). By providing this Statutory Instrument, we as Uganda Wildlife Authority attest to the fact that there are no overlapping land (both surface and sub-surface rights) in the Face Project area of Kibale National Park that might affect the Face Project now and/or in the future. The area is secured by the Parliamentary declaration as a wildlife protected area.

Best Regards

Charles Tumwesigye
Ag. Chief Conservation Area Manager

Uganda Wildlife Authority
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NCR Number 38 of 40 dated 8/30/11

Standard Reference: VCS 2007.1

Document Reference: PD

Finding: Please clarify how the project meets the VCS definitions and requirements for project start date and crediting period.

Proponent Response: Four documents are hereby provided to prove that the PPs had prior to 2002 utilised an externally reviewed methodology and engaged independent carbon monitoring experts:

1. The SGS main assessment report (2001)
2. A Land evaluation study (1996)
3. Baseline study report on carbon sequestration (1999)
4. The IFER carbon monitoring report (2002).

Auditor Response: The SGS assessment report from 2001 along with the baseline study conducted in 1996 are clear evidence that the project utilized an externally reviewed methodology and engaged independent monitoring experts to quantify the baseline and GHG reductions prior to 2002. Thus the finding has been closed.

NCR Number 39 of 40 dated 8/30/11

Standard Reference: AR-ACM0001

Document Reference: PD

Finding: In reference to NCR 33, please ensure that the CDM requirements for baseline selection are followed. Additionally, ensure that the requirements of sections 4.1 and 4.3 of the methodology are met.

Proponent Response: In reference to NCR 33, the baseline calculations were redone based on the data provided by the 1999 study of Meijer. The results of the baseline recalculation are contained in *Kibale Baseline Recalculation_082711.xls*. This file contains an introduction to all the sheets that follow and how the carbon calculations were carried out. Most important to note is that there are about 5 degraded state categories namely tall grass, medium height grass, mix of grass, mix of shrub and banana plantations. Their average tree carbon stocks range from 1.12, 2.54, 3.56, 4.39 and 5.21 respectively. As a result, PPs adopted the most conservative value of 5.21tC/ha from the banana plantations as new baseline value for both the planted and natural regeneration areas.

Auditor Response: The recalculation of the baseline has been done in accordance with the requirements of the methodology and was found to be accurate. Thus the finding has been closed.

NCR Number 40 of 40 dated 8/30/11

Standard Reference: VCS Program Guidelines

Document Reference: PD

Finding: The VCS requires that Project Proponents use the VCS PD Template. Please use this template instead of the CDM template previously used.

Proponent Response: The VCS Template has now been used and is provided to the Auditors with the name of **110830 VCS PD KNP 1.0.doc**.

Auditor Response: The Project Proponent has used the VCS PD template. Thus the finding is closed.

New Information Requests:

NIR Number 1 of 40 dated 6/13/11

Standard Reference: AR-ACM0001

Document Reference: PD Section A.4.2

Finding: In the PD section A.4.2 and Table A.4.2.1, please provide more information on the coordinate systems for easy identification of these points on the ground.

Proponent Response: The PD has been updated with the following clarification:

Table A.4.2.1. Unique identification of the polygons for the KNP project (coordinates in UTM ARC 1960 Zone 36N).

Auditor Response: The updated PD has been provided with information required. Thus the finding has been closed.

NIR Number 2 of 40 dated 6/13/11

Standard Reference: AR-ACM0001

Document Reference: PD Section A.4.2

Finding: In line with the methodology AR-ACM0001 Version 05.0.0, page 3, section II subsection 1 on project boundary and eligibility of land states that the latest version of "Guidance on application of the definition of the project boundary to A/R CDM project activities may be applied in the identification of areas of land planned for an A/R CDM project activity." The "Guidance on application of the definition of the project boundary to A/R CDM project activities (Version 01)" requires that "At validation Project Proponents shall demonstrate that, for all areas of land planned for A/R CDM project activity, the control over afforestation or reforestation as required by modalities and procedures for the A/R CDM activity is already established or is expected to be established." In addition to the "Letter to UWA_Transfer_Signed" submitted with the PD as part of the Risk Assessment Supporting Documents, can more evidence be provided to demonstrate how this condition was met?

Proponent Response: The land planned for the A/R CDM project activity is wholly contained within a national park. Based on the Sections 3,4 and 5 of the Uganda Wildlife Statute, the national park is fully owned by the government of Uganda under the UWA Act and mandated by Uganda Wildlife Authority on behalf of Uganda government and all Ugandans. Therefore, UWA has full control over the entire project lands.

Auditor Response: The response is sufficient to close the finding. The Proponent's response adequately addresses the finding in accordance with the Voluntary Carbon Standard and

applicable approved methodology elements.

NIR Number 4 of 40 dated 6/13/11

Standard Reference: AR-ACM0001

Document Reference: PD Section C.2

Finding: In line with the methodology AR-ACM0001 Version 05.0.0, page 2, section 4 on applicability requires that “the latest version of the tool for identification of degraded or degrading lands for consideration in implementing CDM A/R project activities shall be applied for demonstrating that lands are degraded or degrading.”

According to the A/R methodological Tool “Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities” (Version 01), EB 41 Report Annex15 Page 2,

The procedure to implement the two-stage approach for the identification of degraded or degrading lands for the purpose of application of A/R CDM methodologies states:

“ (a) Provide documented evidence that the area has been classified as “degraded” under verifiable local, regional, national or international land classification system or peer-review study, participatory rural appraisal, satellite imagery and/or photographic evidence in the last 10 years. If the documented evidence of degradation is older than ten years then: (i) Provide evidence that the natural or anthropogenic degradation drivers and pressures that led to the land becoming “degraded” are still present and/or that there are no insufficient land management interventions to reverse degradation.”

Since the Project start date is 1st January 1995 (PD Section B, Subsection B.1), and the satellite imagery provided in Section A.7 of the PD is of 1960 and 1990, please provide more information to show how compliance with this requirement was met.

Proponent Response: The most basic cause for the NIR is that in Section A.7, a wrong map is being referenced to.

1. Section A.7 should instead make reference to the 1996 map by Ancker and Jungerious developed specially during the land evaluation study.
2. In response to the procedure to implement the two-stage approach for the identification of degraded or degrading lands for the purpose of application of A/R CDM methodologies which states:

“ (a) Provide documented evidence that the area has been classified as “degraded” under verifiable local, regional, national or international land classification system or peer-review study, participatory rural appraisal, satellite imagery and/or photographic evidence in the last 10 years. If the documented evidence of degradation is older than ten years then: (i) Provide evidence that the natural or anthropogenic degradation drivers and pressures that led to the land becoming “degraded” are still present and/or that there are no insufficient land management interventions to reverse degradation.”

An international objective map (Figure C.2.1) developed by FAO was utilized to fulfill this requirement in section C.2.

Auditor Response: The PD has been clarified to ensure correct references are included. This information is sufficient to close the finding.

NIR Number 5 of 40 dated 6/13/11

Standard Reference: AR-ACM0001

Document Reference: AR-ACM0001

Finding: The methodology AR-ACM0001 Version 05.0.0, page 28 section 1(c) states that “The forest planting and management plan, together with a record of the plan as actually

implemented during the project, shall be available for validation and /or verification". Please make these plans available to the auditor.

Proponent Response: Forest plans were made available to the Auditors during the opening meeting at Mainaro office.

Auditor Response: Documented evidence was provided to the auditor during the office visit. Thus the finding has been closed.

NIR Number 6 of 40 dated 6/13/11

Standard Reference:

Document Reference: PD Section C.6

Finding: The PD makes reference to "Emmer, 2004". This document is not found in the PD References section. Please provide this document to the auditor.

Proponent Response:

Reference has been included in the PD as:

Emmer, I.M. 2004. Carbon modeling of the UWA-Face Kibale Project.

1. An electronic copy of this document has been made available to the Auditors.

Auditor Response: This document has been provided to the auditor. Thus the finding has been closed.

NIR Number 7 of 40 dated 6/13/11

Standard Reference: Baseline Report

Document Reference: PD Section C.6

Finding: The PD states "...the vegetation in areas not yet reforested still consists of elephant grass and does not show the development towards a shrub vegetation with 26.5 Mg/ha (Emmer, 2004)." However, the baseline report by Meijer (section 4.3) states "In particular grass vegetation has decreased while shrubs have increased." Please explain this discrepancy and justify the baseline selection in terms of shrub regeneration.

Proponent Response: Failure to recognize the establishment of new baseline terminology in 2004 by Emmer.

1. Submission of the Emmer 2004 report as an update for Meijer (1999) baseline study in order to be consistent with evidenced elephant grass (2004, 2008 and 2011 Photos) in just planted and unplanted areas within the project activity lands as well as outside the national park where fires are rampant.
2. In response to the query regarding the discrepancy between Emmer (2004) and Meijer (1999), it is clear that Meijer was referring to areas that had been protected from fire and vegetation was naturally moving from grass dominated areas to shrubs while Emmer was concerned with only the baseline area before protection it be in the project area or outside in community lands as shown in the photos provided in the PD.

Auditor Response: The discrepancy between the statements was clarified during the site visit. It is understood that Meijer was referring to areas within the project that were protected from fire while Emmer was referring to areas outside the project where fire continued. The response by Face has also clarified this. Thus the finding has been closed.

NIR Number 8 of 40 dated 6/13/11

Standard Reference:

Document Reference: PD Table C.6.1.1

Finding: Table C.6.1.1 contains several astericks (*). Please explain what is implied by the descriptions associated with "(*) small sample size." and "(**)(corrected value of that reported by Meijer". Please provide the auditor with further explanation of these statements and how they relate to the justification of baseline selection.

Proponent Response: The astericks (*) in Table C.6.1.1 were borrowed from Emmer 2004 report. For copyright reasons, PPs can not alter the statements listed there. Furthermore, the Lead Auditor indicated during the opening meeting in the Mainaro office that he had understood what the astericks meant after a second read through.

Auditor Response: The use of the asterisk values are now understood by the auditor. Moreover as those values were not used in carbon calculations, the issue is immaterial. Thus the finding has been closed.

NIR Number 9 of 40 dated 6/13/11

Standard Reference: AR-ACM0001

Document Reference: PD Section D.2

Finding: Please provide further justification for the decision not to include and calculate leakage. The displacement of deforestation agents (agriculture, grazing, firewood collection) due to project activities is very likely to result in those activities occurring elsewhere. As such, a robust defense of leakage being zero is required. Please provide a conservative, plausible, defensible justification for leakage not to be included and calculated.

Proponent Response: Basic reason is omission of a statement indicating why leakage was not included.

According to the methodology, leakage is included in the calculation when there is displacement of human activities. No displacement actually took place in the project area due to project activity. Earlier evictions were carried out due to Ugandan national park policy to conserve the entire park well before the project was conceived. In addition, the project activity area is only a small proportion of the entire Kibale National Park. Within this project area, the most plausible baseline scenario in Kibale involve "no human encroachment, assuming that the park would have some success in protecting the area, but no investment in forest rehabilitation, while widespread and frequent perturbations by fire continue; the carbon stock is determined by the presence of elephant grass that is the result of a fire regime favoring elephant grass and thwarting the natural regeneration of trees "as stated in Section C.6. Sub-step 2C. Since fire would be the main determining factor under this scenario, there would be no displacement of agricultural and grazing activities, therefore, no leakage from within project boundary to the neighboring lands hence no reason for the inclusion and calculation of leakage. This statement has been added to section D.2 of the PD.

Auditor Response: The evictions that occurred in order to re-establish the national park predated the project activities. By the time the project was conceived and implemented, the evictions had already taken place. Thus there was no displacement as a result of the project. The Project Proponent clarified this during the office visit and has added clarification to section D.2 of the PD. Thus the finding has been closed.

NIR Number 10 of 40 dated 6/13/11

Standard Reference: Monitoring_Report (MR)3

Document Reference: MR

Finding: Reference is made in the MR to the methodology for carbon stock monitoring of Cerny et al., 2002. Please provide this document to the auditor.

Proponent Response: Cerny et al., 2002 document has been provided to the Auditors.

Auditor Response: This document has been provided to the auditor. Thus the finding has been closed.

NIR Number 11 of 40 dated 6/13/11

Standard Reference: MR3.1

Document Reference: MR

Finding: In the sampling scheme, clusters of 3 and in other instances 4 plots were used. Please provide information to justify the choice between 3 and 4 plots.

Proponent Response:

The number of plots in a cluster differs between planted and natural regeneration areas. The former has 4 plots in a cluster while the later has 3 plots in a cluster. The numbers of plots in clusters were chosen on the basis of practical feasibility for monitoring teams to handle and complete the work during one working day. Clusters in "Natural regeneration area" are generally further and thus the teams need more time to reach the area. Therefore, only 3 plots were allocated to these areas. The planted areas were allocated 4 plots per cluster. From the data processing point of view, the difference between 3 and 4 plots is does not affect the integrity of the results because all statistics were carried out on a stratified sample. In fact both areas are processed separately (planting year was used as one strata and the entire naturally regenerated area was considered to be another strata) and therefore the sampling intensity could differ.

Auditor Response: After discussion during the office visit, the sampling scheme and stratification was better understood by the auditors. The plot allocation is acceptable and statistically valid. Thus this finding has been closed.

NIR Number 12 of 40 dated 6/13/11

Standard Reference: AR-ACM0001

Document Reference: MR

Finding: In the MR, it is stated that "Dead wood and stumps were described on the key circle of each plot. Dead wood with a diameter larger than 20cm and stumps with a surface diameter larger than 30 cm were recorded." In line with AR-ACM0001 Version 05.0.0, pages 15-17, please clarify what you considered: standing dead wood and or lying dead wood in addition to updating your MR to reflect the clarifications. Please also confirm that all deadwood measurements conform to pages 15-17 of the methodology.

Proponent Response: Deadwood was not included in the calculation of VCUs and all references to deadwood have been removed from the monitoring report and PD.

Auditor Response: Deadwood was not included in the calculation of VCUs. Thus this finding is no longer applicable and is closed. However please refer to NIR 29.

NIR Number 13 of 40 dated 6/13/11

Standard Reference: MR3.3

Document Reference: MR

Finding: In the MR, it is stated that deadwood was recorded. Please clarify and update your MR to reflect exactly what measurements were taken and what other information was recorded.

Proponent Response: Deadwood was not included in the calculation of VCUs and all references to deadwood have been removed from the monitoring report and PD.

Auditor Response: Deadwood was not included in the calculation of VCUs. Thus this finding is no longer applicable and is closed. However please refer to NIR 29.

NIR Number 18 of 40 dated 6/13/11

Standard Reference: MR4.6.1

Document Reference: MR

Finding: Please provide the source of the allometric equation used for carbon stock calculation on page 10 in the Monitoring Report.

Proponent Response: The equations were prepared by National Biomass Study as they participated in the first and second monitoring campaign (Mt Elgon 2002 and Kibale 2003). There is an internal NBS report called "The National Biomass Study, Phase I, November 1991-December 1992, Technical Report. Forest Department, Uganda. " PPs have a hardcopy of it and the equation is taken from Page 46 of this report.

Auditor Response: The reference has been provided to the auditor. Thus the finding has been closed.

NIR Number 19 of 40 dated 6/13/11

Standard Reference: MR4.6.1

Document Reference: MR

Finding: The allometric equation used for calculating carbon stock held in trees includes crown width as one of the input variables. However, the MR does not have a clear description of how crown width was obtained. Please provide more information.

Proponent Response: Crown width was measured directly in the field. Field-Map provides functionality for mapping the horizontal crown projection. If projection was circular then only one point was measured (x, y co-ordinates in relation to the tree stem center), if horizontal projection was irregular then two points were taken to map the shortest and longest distance of crown circumference.

Auditor Response: The updated PD has been provided with information required. The information was evaluated and deemed acceptable. Thus the finding has been closed.

NIR Number 20 of 40 dated 6/13/11

Standard Reference: MR4.6.1

Document Reference: MR

Finding: Please provide copies of references used with regard to the measurement of carbon stock held in trees (section 4.6.1).

1. **Proponent Response:** *Cerny et al., 2002.*

2. The National Biomass Study, Phase I, November 1991-December 1992, Technical Report. Forest Department, Uganda.

Auditor Response: The references have been provided. Thus the finding has been closed.

NIR Number 21 of 40 dated 6/13/11

Standard Reference: MR4.6.1

Document Reference: MR

Finding: The MR mentions a range of conversion factors for wet to dry air weight. However some factors such as 1.28 seem to suggest that some trees are heavier when dry than when wet. Please provide more information justifying the conversion factors used.

Proponent Response: IFER admits to a typo in their report which indicated that a factor as high as 1.28 was used in their calculation. Again IFER report to FACE was not officially submitted to the Auditors for the purpose of verification. On the next page is an excerpt of an email from IFER indicating that they made a mistake only in their report. Furthermore, Appendix 6 from IFER lists all the relevant factors for wet to air dry weights applied in their biomass assessment.

From: Emil Cienciala [mailto:Emil.Cienciala@ifer.cz]

Sent: dinsdag 28 juni 2011 11:17

To: Tasila Banda

Cc: 'Radek Russ'; 'Petr Vopenka'; 'Jana Beranová IFER'

Subject: RE: Fresh weight and air dry weight factor question

Dear Tasila,

For some mysterious reasons unclear to me, the previous report of IFER indeed contained a false range that you mentioned. It was, however, never used in any calculations. The correct range used is exactly that as follows from the excel file that we prepared based on the local data from NBS, namely 0.31 to 0.74.

Please do change it accordingly, thanks.

BR,

Emil

From: Tasila Banda [mailto:Tasila.Banda@face-thefuture.com]

Sent: Monday, June 27, 2011 12:04 PM

To: Emil Cienciala

Cc: Radek Russ; Petr Vopenka; Jana Beranová IFER

Subject: Fresh weight and air dry weight factor question

Dear Emil,

It seems I missed one question in relation to item 6 which reads as follows:

The Monitoring Report mentions a range of conversion factors for wet to dry air weight. However some factors such as 1.28 seem to suggest that some trees are heavier when dry than when wet. Please provide more information justifying the conversion factors used.

I have looked at a copy of the ADW factors (attached, receive by Martijn from Radek after the 2008 campaign) and non go to even a 1.0 which makes me also agree with the Auditors because when moisture is taken out of the tree material, it wouldn't be heavier than it was with the moisture since the factor is a result of dividing fresh weight by dry weight.

Was the 1.28 included as a mistake, if so, can we change it?

Thanks

Tasila Banda, PhD.

Carbon Project Manager

Auditor Response: A revised set of factors has been provided to the audit team. It has been confirmed that these factors are accurate and were used for the calculations. Thus the

finding has been closed.

NIR Number 22 of 40 dated 6/13/11

Standard Reference: MR4.6.1

Document Reference: MR

Finding: The MR states " If a factor for particular species was unknown, a default value of 0.56 was applied. This corresponds to a mean value of the available factors for common tree species in Uganda. An additional factor of 0.853 was used to account for differences between-dry weight and oven-dry weight. This corresponds to a moisture content of 14.7 % in dry matter. This is the average value found in the local experiments (NBS, unpublished material). Oven-dry matter was converted to carbon stock using a factor of 0.50, which is a commonly used value elsewhere (Matthews 1993, Schelhaas 2002, Kort 1999) and also recommended by the IPCC (1995 a, b). Please provide more information to justify the conservativeness of these factors.

Proponent Response: PPs choice of ADW/FW factor of 0.56 was selected from the extensive dataset available at NBS is conservative because it is further reduced by applying the constant of 0.853 (discounting 14.7 % moisture). For example, 0.56×0.853 gives a final factor of 0.47 which is certainly more conservative than the 0.58 factor used by Brown (1997) who collected an extensive data of wood densities for tropical forests on different continents, including Africa. As for C wood content in dry woody mass, none questions the commonly adopted standard of 50 % content in oven-dry mass (see IPCC 2003, 2006).

Reference:

Brown S. Estimating biomass and biomass change of tropical forests. FAO Forestry Paper 134, 1997.

Auditor Response: The information provided in the response is sufficient. Thus the finding has been closed.

NIR Number 23 of 40 dated 6/13/11

Standard Reference: MR4.6.1

Document Reference: MR

Finding: The MR states "This factor was derived from a CO2FIX model (Mohren et al. 1999) estimation using a default parameter set for tropical evergreen forest ecosystems (Nabuurs and Mohren, 1993)." Since some of the tree species under consideration in the project are not evergreen, please justify the appropriateness of this factor.

Proponent Response: This text refers to "ecosystems" that may naturally contain both non-evergreen and evergreen species. Uganda falls into the tropical evergreen forest geographically, however, the individual natural forest does contain a variety of species that may not necessarily be evergreen even though the ecosystem as a whole is evergreen.

Auditor Response: The information provided in the response is sufficient. Thus the finding has been closed.

NIR Number 24 of 40 dated 6/13/11

Standard Reference: MR4.6.2

Document Reference: MR

Finding: In calculating carbon stock held in dead wood, please provide evidence to show that the equation does not over-estimate the volume and that it is conservative.

Proponent Response: Deadwood was not included in the calculation of VCUs and all references to deadwood have been removed from the monitoring report and PD.

Auditor Response: Deadwood was not included in the calculation of VCUs. Thus this finding is no longer applicable and is closed. However please refer to NIR 29.

NIR Number 25 of 40 dated 6/13/11

Standard Reference: MR4.7

Document Reference: MR

Finding: The MR refers to standard statistics for stratified sampling of Thomson (1992) for extrapolating from plot to project area. Please describe what "standard statistics" refers to, in addition to providing the reference document used.

Proponent Response: Standard statistics followed are those provided in 11 (Stratified Sampling) includes all calculations for population total, population mean, and confidence intervals of the book by Thompson, S.K. (1992): Sampling. John Wiley & Sons, A Wiley - Interscience publication, New York, USA, 343 p.

Auditor Response: The information provided in the response is sufficient. Thus the finding has been closed.

NIR Number 26 of 40 dated 6/13/11

Standard Reference: AR-ACM0001

Document Reference: AR-ACM0001

Finding: The methodology AR-ACM0001 Versionn 05.0.0, page 28 section 1(c) states that "The forest planting and management plan, together with a record of the plan as actually implemented during the project, shall be available for validation and /or verification". Please make these plans available to the auditor.

Proponent Response: These plans were provided to the audit team.

Auditor Response: These plans were provided to and examined by the auditors during the audit. Thus the finding has been closed.

NIR Number 27 of 40 dated 7/12/11

Standard Reference: AR-ACM0001

Document Reference: PD, Baseline Monitoring Report

Finding: Based on the AR-ACM001 methodology in section 4.2 pages 7-9, the following methods for estimation of the carbon stock in living trees at the start of the project activity do exist, namely:

- (i) Use of existing data
- (ii) Default estimation using a parameter ratio

(iii) Complete inventory of trees

(iv) Inventory of trees in the sample plot

Based on the PD, it is understood that data from inventories of trees from sample plots (Meijer and Emmer Reports) was used to quantify the baseline. Data from the Meijer study was used to calculate the figure of 17.3 Mg/ha for the “no human encroachment” scenario described in the PD and accepted by the auditors as the appropriate baseline scenario. The Meijer report does not contain the data used to calculate this figure. The auditors request that Face provide the source inventory data and subsequent calculations used to arrive at the figure of 17.3 Mg/ha. The quantification of baseline stocks should be done in accordance with 4.2.4 of the methodology.

Proponent Response:

1. Baseline inventory data is provided in the ACCESS Database file called “Kibale_Baseline Data”.
2. Subsequent calculation files are also provided as follows:
 - a. Tons per hectare for individual trees in each plot are located in the “Single_tree_ton_ha” table of the ACCESS database.
 - b. “TRECALC.xls” shows the correct use of the allometric equation parameters.
 - c. BASELINE.xls contains:
 - i. A description of the 8 strata in SHEET 1.
 - ii. A link between individual trees in individual plot per strata are contained in SHEET 6.
 - d. “Test biomass. Xls” - Sheet 2 shows the tons of carbon per stratum.
 - e. “Sheet baseline.xls” – sheet named “Blad 2” contains the summary of biomass per stratum. Here, you will find the figure of 17.3Mg/ha.

Auditor Response: The recalculation of the baseline was done in accordance to the methodology and done accurately. See NCR 2010.39

NIR Number 28 of 40 dated 7/12/11

Standard Reference:

Document Reference: PD

Finding: Insufficient evidence has been provided for the auditors to track how field measurements were used to calculate VCUs. Please provide code or Access queries that will allow the audit team to replicate the client’s calculation of carbon at the tree and plot levels. In addition, please provide a detailed description of the procedure used to compute carbon for each pool.

Proponent Response:

1. Access Queries are provided in the file called “Kibale 2011” and can be viewed from Design View in Access.
2. Detailed description of the procedure used to compute carbon for each pool are provided in the file called “CarbonStockCalculation_FromIFER.doc”

Auditor Response: The data and information provided is sufficient to close the finding.

NIR Number 29 of 40 dated 7/12/11

Standard Reference: MR

Document Reference: MR

Finding: The Monitoring Report must be updated to remove reference to dead wood

Proponent Response: Auditors used the IFER version of monitoring report when raising the issue of deadwood. This report is what IFER prepares for FACE

The correct version of the Monitoring Report based VCS 2007.1 has been provided to the Auditors under the name of "VCS Monitoring Report_Kibale_June2011".

Auditor Response: The updated monitoring report has been provided with information required.

NIR Number 30 of 40 dated 7/12/11

Standard Reference: MR

Document Reference: MR

Finding: It was noted in the field that measurements for "bent trees" did not include height or crown measurements. Please provide further information to explain how biomass was calculated for bent trees in the absence of these measurements.

Proponent Response:

To qualify for sampling and carbon stock calculation, only trees with dimensions greater or equal to 5 cm in diameter at breast height were considered. The required input parameters for suitable allometric equations were: tree breast height diameter (D; cm), tree height (HT; m) and crown width (CR; m).

Breast height diameter was measured for all qualified trees, height and crown width were measured whenever it was possible. Heights and crown projections were not measured for bent or slanted trees.

Tree height samples measured in the field were used to parameterize DBH-Height exponential model to fill missing heights:

$$H = 1.3 + \exp(P1 + P2 / DBH) \quad (1)$$

Where H is the modeled height, DBH is breast height diameter in mm and $P1$, $P2$ are the parameters.

If there were enough height sample measured (min. number of height samples per species was set to be 4) on single inventory plot per particular species, then the model was parameterized on the level of plot (i.e. local species model). In case there were not enough samples on the inventory plot the overall species model was adjusted to fit height samples available on particular inventory plot (i.e. adjusted species model). In very rare case when there were not any height sample available on the inventory plot for particular species the general species model was applied (i.e. general species model). Modeled heights were used only for trees with no measured height (e.g. bent or slanted trees). The parameters for all DBH-H models used are in appendix 5.

Tree crown widths measured in the field were used to parameterize regression model:

$$CW = a * DBH^b + H^c \quad (2)$$

Where CW is the crown width in m, DBH is breast height diameter in mm, H is height in m and a , b , c are the parameters. All the trees regardless species with measured crown width

were used for parameterization of the model. Measured crown widths were used in allometric equations. Modeled crown widths were used only for threes with no crown width (e.g. bend or slanted trees) or for outliers. To identify the outliers we calculated difference between measured and modeled crown width S_{xy} and any tree with S_{xy} out of 3 standard deviations was considered to be outlier and its crown width was modeled.

Final parameters of the crown width regression model were:

$$a = 0.27442$$

$$b = 0.57294$$

$$c = -0.00509$$

$$R = 0.716$$

The allometric equations were formed as:

$$\ln(W_{wet}) = a + b * \ln(D) + c * \ln(HT) + d * \ln(CR) \quad (3)$$

Where, W_{wet} is the calculated tree fresh weight (all above-ground components). The parameters a , b , c were established for three tree size classes based on a wealth of destructively obtained data in Uganda (Velle 1997, Begumana 2000, IFER 2002). The parameters a , b , c that were applied in the calculation of W_{wet} : are shown in Table 3 (after Velle 1997 adjusted by Begumana 2000).

Table 3: The set of parameters for Eq. 1 estimated by NBS, Kampala, Uganda.

Diameter range	Parameters			
	a	b	c	d
DBH<20 cm	-0.85989	1.54456	0.50663	0.33335
DBH 20-60 cm	-1.75089	1.94391	0.47373	0.24578
DBH>60 cm	-2.16650	2.03293	0.31292	0.43634

Conversion of W_{wet} to air-dry weight was performed by applying conversion factors that were locally available at NBS, Kampala, Uganda. These conversion factors were species-specific and ranged between 0.32 and 0.75. If a factor for particular species was unknown, a default value of 0.54 was applied. This corresponds to a mean value of the available factors for common tree species in Uganda. The list of conversion factors is in appendix 6.

An additional factor of 0.853 was used to account for differences between air-dry weight and oven-dry weight. This corresponds to a moisture content of 14.7 % in air-dry matter. This is the average value found in the local experiments (NBS, unpublished material).

Oven-dry matter was converted to carbon stock using a factor of 0.50, which is a commonly used value elsewhere (Matthews ,1993; Schelhaas, 2002; Kort, 1999) and also recommended by the IPCC (1995 a, b).

Finally, the below-ground biomass component (root system) was accounted for by multiplying the above-ground carbon stock by a specific root factor of 1.16.

Auditor Response: This information is sufficient to determine how the biomass for bent trees was calculated. The procedure was found to be accurate. Thus the finding has been closed.

NIR Number 31 of 40 dated 7/12/11

Standard Reference: AR-ACM0001

Document Reference: PD

Finding: Please provide evidence that the most appropriate and up to date model parameters for biomass calculation were used. Also revise the baseline calculations to include the same parameters as are used in the project biomass calculations.

Proponent Response: Regarding the first part of the NIR, the National Forest Authority (NFA) of Uganda was contacted to provide the most up-to-date parameters for Uganda. The 2003 National Biomass Study report (provided to the Auditor as "National Biomass Study 2003.pdf") shows that the parameters used by IFER in the biomass calculations for 2011 are the same as those in the report. Below is an accompanying confirmation email from the NFA contact person who actually developed the parameters as follows:

From: Ayongyera John <johnbegu@gmail.com>

To: Edward Senyonjo <senyonjo.edward@gmail.com>

Cc: Wanyama Fredrick <wanyama2008@yahoo.co.uk>

Sent: Thursday, 28 July 2011, 11:41

Subject: Re: Carbon Equation queries

Hello Fred and Edward

Sorry for the delay in getting back to you. Yes the equations and constants used are the ones used in the report. For example, the constants used for the <20 cm dbh are; -0.85989 for a; 1.54456 for b; 0.50663 for c and 0.33335 for d. Note that constant a is presented as denoted as $0.5 \times 0.09937 - 0.909575$ in dBase and the Biomass report but it mathematically means the same as -0.85989. (This is just to work around complications of having negative input values for some applications). Could you also send me a copy for the Elgon report both for confirmation and reference material.

John

With regards to the second part of the NIR about the baseline. It has been discovered by the Author Paula Meijer that the parameters printed in the report are not correct but that the calculations were carried out using the correct NBS parameters which are also the current ones. Proof of this can be seen from the files Ms Meijer shared with FACE on the 3rd of August 2011. Slide 1 of Power Point file called "199 Calculation File Proof" is a print screen of the folder received from Meijer of files saved in 1999. Slide 2 shows her usage of the up-to-date parameters received from NBS for trees with DBH <20 while Slide 3 shows her use of parameters on trees >20DBH.

Auditor Response: The parameters used were the most up to date. They are no consistent in baseline and VCU calculation. Thus the finding has been closed.

Opportunities for Improvement:

OFI Number 32 of 40 dated 7/15/2011

Standard Reference:

Document Reference: Monitoring Report

Finding: It was noted during the audit that the field teams were highly reliant on Field Map for locating plots and conducting the forest inventory. While it was observed that the inventory was of high quality and found to be accurate, it would be good practice for the Project Proponent to develop an alternative method of locating plot centers and inventorying plot data that did not rely exclusively on Field

Map.

Proponent Response: Project Proponents where already planning to carry out research on other alternative monitoring methodologies after the project successfully goes through verification this summer.

Auditor Response: No response required.