

VERIFICATION REPORT FOR THE COMMUNITY BASED AVOIDED DEFORESTATION PROJECT IN GUINEA- BISSAU



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Summary:

This report describes the verification audit of the Community Based Avoided Deforestation Project in Guinea-Bissau (“the project”), a Reduced Emissions from Deforestation and Degradation (REDD) project located in Guinea-Bissau, that was conducted by SCS. The purpose of the verification audit was to conduct, in accordance with the VCS rules, an ex-post independent assessment of the GHG emission reductions and removals that have occurred as a result of the project during the monitoring period from 31 March 2011 to 30 March 2016 (“the verification period”). The verification audit was performed through a combination of document review, interviews with relevant personnel and on-site inspections. As part of the verification 25 findings were raised: 22 Non-Conformity Reports, three New Information Requests and no Observations. These findings are described in Appendix A of this report. The project complies with all of the verification criteria, and the assessment team has no restrictions or uncertainties with respect to the compliance of the project with the verification criteria.

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1 INTRODUCTION

1.1 Objective

In accordance with Section 4.1 of the VCS Standard (see Section 1.2 below for full reference), SCS carried out an ex-post independent assessment of the GHG emission reductions and removals that have occurred as a result of the project during the verification period, conducted in accordance with the VCS rules. In accordance with Section 2.1.2 of the VCS Validation & Verification Manual, V3.1, the objectives of the verification engagement were to evaluate the monitoring report and assess the following:

- The extent to which methods and procedures, including monitoring procedures, have been implemented in accordance with the validated project description. This includes ensuring conformance with the monitoring plan.
- The extent to which GHG emission reductions and removals reported in the monitoring report are materially accurate.

The other objective of the verification engagement was to assess the non-permanence risk analysis.

1.2 Scope and Criteria

In accordance with Section 4.3.4 of ISO 14064-3:2006, the scope was defined as follows:

- The project and, where relevant, its baseline scenarios
- The physical infrastructure, activities, technologies and processes of the project
- The GHG sources, sinks and/or reservoirs that are applicable to the project
- The types of GHGs that are applicable to the project
- The verification period, as discussed in Section 5 of this report

In accordance with Section 4.1.8 of the VCS Standard (see below for full reference), the criteria for verification was the VCS Version 4, including the following documents:

- VCS Program Guide, V4.0
- VCS Standard, V4.0
- VCS Non-Permanence Risk Tool, V4.0
- The VCS-approved methodology VM0007 (“the methodology”), as applied to the project, consisting of the following methodology elements (as identified in Section 2.1 of the VCS PD, except that the latest version of any tools and modules was referenced, as required):
 - REDD Methodology Framework (REDD-MF), V1.4
 - Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB), V1.1
 - Estimation of baseline carbon stock changes and greenhouse gas emissions from unplanned deforestation (BL-UP), V3.2
 - Estimation of emissions from activity shifting for avoided unplanned deforestation (LK-ASU), V1.1
 - Estimation of greenhouse gas emissions from biomass burning (E-BB), V1.1
 - Methods for monitoring of greenhouse gas emissions and removals (M-MON), V2.1
 - Methods for stratification of the project area (X-STR), V1.1
 - Estimation of uncertainty for REDD project activities (X-UNC), V2.1
 - AFOLU Non-Permanence Risk Tool (T-BAR), V4.0

In addition, the assessment was performed against the requirements of the validated project description (“PD”), which can be downloaded from the project’s webpage on <https://www.vcsprojectdatabase.org/>.

1.3 Level of Assurance

In accordance with Section 4.1.8 of the VCS Standard, the level of assurance of this verification is reasonable.

1.4 Summary Description of the Project

The project is located within Cacheu Mangrove Forest National Park and Cantanhez Forest National Park in Guinea-Bissau, and is aimed at reducing emissions from unplanned deforestation and degradation.

2 VERIFICATION PROCESS

2.1 Method and Criteria

The verification was performed through a combination of document review and interviews with relevant personnel, as discussed in Sections 2.2 through 2.4 of this report. At all times, the monitoring report and non-permanence risk analysis were assessed for conformance to the criteria described in Section 1.2 of this report. As discussed in Section 2.5, findings were issued to ensure conformance to all requirements.

The audit team created a sampling plan following a proprietary sampling plan workbook developed by SCS. Per Section 4.4.3 of ISO 14064-3:2006, the audit team identified possible risks of errors, omissions and misrepresentations with respect to the verification criteria. For each identified risk, the audit team assessed the likelihood of the material discrepancy occurring, the likelihood of the material discrepancy not being prevented or detected by the controls of the project and the likelihood of the material discrepancy not being detected by the audit team. Sampling and data testing activities were planned to address any risk where the likelihood of a material discrepancy not being detected by the audit team was judged to be unacceptably high. The audit team then created a verification plan that took the sampling plan into account.

In some cases, the audit team relied on conclusions and information provided in the validation report for this project (“the validation report”), also produced by SCS, which can be downloaded from the project’s webpage on <https://www.vcsprojectdatabase.org/>.

2.2 Document Review

The monitoring report (“Monitoring_REDD-GB_v03.3”, dated 20 December 2019) (“MR”) and non-permanence risk report (included as Appendix 1 to the MR) (“NPRR”) were carefully reviewed for conformance to the verification criteria. The following additional documentation, provided by the project personnel in support of the aforementioned documents, was also reviewed by the audit team:

Document	File Name	Ref.
Report on allometric equation validation	Equations_Report_23.01.2018	/1/
Evidence of validation of the equation used for mangrove forest	VCS_Monitoring_MangroveValidation_23.01.2018	/2/
Evidence of validation of the equation used for terrestrial forest	VCS_Monitoring_TerrestrialValidation_23.01.2018	/3/

Document	File Name	Ref.
Response to NIR 14 (containing detail later placed in forest mapping report)	Finding_NIR-14	/4/
Forest mapping report	FMReport_11.11.2019	/5/
Confusion matrix and accuracy assessment data for 2011 land cover classification	NO8_3_ConfusionMatrix_2011_Final	/6/
Confusion matrix and accuracy assessment data for 2016 land cover classification	NO16_3_ConfusionMatrix_2016_Final	/7/
PRA report (not fully up-to-date)	PRAreport_23.01.2018	/8/
Supplemental calculations for PRA report (updated)	VCS_Monitoring_PRA_05.09.2019	/9/
Monitoring workbook	MONITORING_GB-REDD_ER_20191111	/10/
Revised baseline workbook (updated from "WB2 - C assessment and emission baseline v2.3 20140722", as approved at validation)	WB2 - C assessment and emission baseline v2.5 20190819	/11/
Project area shapefiles	NO3_PA_Cacheu; NO3_PA_Cantanhez	/12/
Leakage belt shapefiles	NO4_LK_Cacheu; NO4_LK_Cantanhez	/13/
Land classification layer reviewed validation, assessed in concert with project area and leakage belt shapefiles to perform checks on 2011 accuracy assessment	GB_10class_LC_2010_MaskedWater_3class_Filtered	/14/
Project and Leakage Belt Forest Cover Benchmark/Monitoring Maps (3-class)	NO11_PA_Cacheu_LC_2016_3classes_MMU_Final; NO11_PA_Cantanhez_LC_2016_3classes_MMU_Final; NO12_LK_Cacheu_LC_2016_3classes_MMU_Final; NO12_LK_Cantanhez_LC_2016_3classes_MMU_Final	/15/
Project and Leakage Belt Forest Cover Benchmark/Monitoring Maps (2-class)	NO13_PA_Cacheu_LC_2016_2classes_MMU_Final; NO13_PA_Cantanhez_LC_2016_2classes_MMU_Final; NO14_LK_Cacheu_LC_2016_2classes_MMU_Final; NO14_LK_Cantanhez_LC_2016_2classes_MMU_Final	/16/
Deforestation maps (directly showing transitions)	NO17_PA_Cacheu_Deforestation_2011_2016; NO17_PA_Cantanhez_Deforestation_2011_2016; NO18_LK_Cacheu_Deforestation_2011_2016; NO18_LK_Cantanhez_Deforestation_2011_2016	/17/
Financial Information Spreadsheets	1-BUSINESS PLAN GLOBAL REALISTA - 2016 2022	/18/
Management Committee Meeting Minutes - 2014	Acta da reunião Cantanhez FINAL FINAL2	/19/
Management Plan Validation Meeting Discussion Documentation	ACTA DE VALIDACAO DO PLANO DE GESTAO	/20/
Summary of the PTNC Management Council Meeting - 2014	ATA SINTE CG PNTC 2014	/21/
Summary of the PTNC Management Council Meeting - 2015	Ata sintese CG PNTC 2015	/22/

Document	File Name	Ref.
Park Guard Training Document on Problematic Species	formação GP 2014	/23/
Park Guard Monitoring and Ecological Security Training Documentation	Formação guarda parques sobre Monitoria e Seguimento Ecologico -2014	/24/
Secretary of State for Environment and Sustainable Development - Second National Communication on Climate Changes in Guinea-Bissau	gnbnc2e	/25/
Documentation of Patrolling Incident	infracção	/26/
Workbook for calculation of governance score	POLITICAL-RISK_REDD_20191205	/27/
Park Guard GPS Training Module	Relatorio_formação_GPS	/28/
IBAP ¹ Annual Reports (2012-2017)	Relatorio_IBAP_2012; Relatorio_IBAP_2013; Relatorio_IBAP_2014; Relatorio_IBAP_2015; Relatorio_IBAP_2016; Relatorio_IBAP_2017	/29/
Report on a Park Guard Incident	ZECA DJU mod	/30/
Updated project area KML file	ProjectArea	/31/
Report detailing implications of project area/leakage belt revision for spatial requirements of BL-UP	Finding 2019.16	/32/
Supplemental calculations for report	Justification_PA_RRD_LK_Cacheu_Cantanhez_UPDATE D	/33/

2.3 Interviews

2.3.1 Interviews of Project Personnel

The process used in interviewing project personnel was a process wherein the audit team elicited information from project personnel regarding (1) the work products provided to the audit team in support of the MR and NPRR, (2) actions undertaken to ensure conformance with various requirements and (3) implementation status of the project activities.

The following personnel associated with the project proponent and/or implementing partner were interviewed.

15 July 2019:

Justino Biai, General Director, IBAP

Leonildo Alves Cardoso, Head of Monitoring, IBAP

Fenosoa Andriamahenina, Director, BioGuinea Foundation

16 - 18 July 2019:

Henrique de Almeida Pereira, CEO, WayCarbon

¹ Instituto da Biodiversidade e das Áreas Protegidas da República da Guiné-Bissau

Ines Melo, Consultant, Remote Sensing, Environment and Technology for Development (RSeT)
Ana Leite, Biologist, RSeT
Catarina Gouveia, Environmental Engineer, RSeT

17 July 2019:

Queba Quecuta, Director, Parque Nacional de Cantanhez (PNC)
Chuchu Samba, Park Guard, PNC
Jibi N'Jai, Park Guard, PNC
Dunsal N'Boudai, Park Guard, PNC
Idriss Casaman, Park Guard, PNC
Sabou Sarjou, Park Guard, PNC
Briama S.Viera, Park Guard, PNC
Lamine Sanni, Park Guard, PNC
Ze Cada, Park Guard, PNC
Mamdou Jallow, Marine Park Guard, PNC
Umaru Barri, Marine Park Guard, PNC

2.3.2 Interviews of Other Individuals

The process used in interviewing individuals other than project personnel was a process wherein the audit team made inquiries to confirm the validity of the information provided to the audit team. The audit team conducted group interviews with members of the communities listed below within PNC. These interviews included between 5 and 20 individuals, almost always including the leader of the community. These communities reflect the ethnic diversity within the project area, and were sampled from the list of communities where PRA surveys were conducted.

15 July 2019: Ponta Yalla

16 July 2019: Gansala, Bala Balanta, Ntugha, Sincha Ntoma

17 July 2019: Camacote, Cambeque, Caiequene, Missara, Sincha Suleiman

2.4 Site Inspections

The objectives of the on-site inspections performed were to:

- Select samples of data and information from field observations in order to meet a reasonable level of assurance and to meet the materiality requirements of the project, as required by Section 4.1.2 of the VCS Standard;
- Perform a risk-based review of the project area and project activities to ensure that the project conformed to the requirements of the verification criteria throughout the verification period;
- Confirm the validity of information presented in the non-permanence risk report; and
- Assess the extent to which any monitoring was conducted in accordance with the requirements of the validated monitoring plan.

In fulfilment of the above objectives, the audit team performed an on-site inspection of the project area on the dates 15-18 July 2019. The main activities undertaken by the audit team were as follows:

- Interviewed project personnel (see Section 2.3 of this report) to gather information regarding the monitoring procedures and project implementation
- Carried out on-site inspections of the project's monitoring methodologies through re-measurement of a number of skid trails and roads and located within the project area

2.5 Resolution of Findings

Any potential or actual discrepancies identified during the assessment process were resolved through the issuance of findings. The types of findings typically issued by SCS during this type of verification engagement are characterized as follows:

- **Non-Conformity Report (NCR):** An NCR signified a discrepancy with respect to a specific requirement. This type of finding could only be closed upon receipt by SCS of evidence indicating that the identified discrepancy had been corrected. Resolution of all open NCRs was a prerequisite for issuance of a verification statement.
- **New Information Request (NIR):** An NIR signified a need for supplementary information in order to determine whether a material discrepancy existed with respect to a specific requirement. Receipt of an NIR did not necessarily indicate that the project was not in compliance with a specific requirement. However, resolution of all open NIRs was a prerequisite for issuance of a verification statement.
- **Observation (OBS):** An OBS indicates an area where immaterial discrepancies exist between the observations, data testing results or professional judgment of the audit team and the information reported or utilized (or the methods used to acquire such information) within the GHG assertion. A root cause analysis and corrective action plan are not required, but highly recommended. Observations are considered by the audit team to be closed upon issuance, and a response to this type of finding is not necessary.

As part of the verification process, 22 NCRs, three NIRs and no OBS were issued. All findings issued by the audit team during the verification process have been closed. In accordance with Section 4.1.13 of the VCS Standard, all findings issued during the verification process, and the impetus for their closure, are described in Appendix A of this report.

2.5.1 Forward Action Requests

This section is not applicable, as no forward action requests have been issued.

2.6 Eligibility for Validation Activities

This section is not applicable, as SCS holds accreditation for validation for the relevant sectoral scope (scope 14; AFOLU).

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

This section is not applicable, as the project is not currently registered under or seeking registration under another GHG program.

3.2 Methodology Deviations

The below table identifies each methodology deviation applied to the project that was validated as part of the verification engagement described in this report. The audit team concludes, in summary, that all such deviations are valid.

Identification of deviation	Assessment column 1*	Assessment column 2**
Deviation from requirement of M-MON to monitor parameter $ARRL_{forest,t}$ prior to any verification event (where verification is more frequent than every five years)	Audit team agrees that deviation pertains solely to criteria and procedures for monitoring, as set out in M-MON	Audit team agrees that deviation has no impact on quantification of reported GHG emission reductions (and so does not negatively impact conservativeness of said quantification)
Deviation from requirement of M-MON to repeat the PRA every two years	Audit team agrees that deviation pertains solely to criteria and procedures for monitoring, as set out in M-MON	Audit team agrees that, given that fuelwood is primarily collected from dead and down wood (as documented in Section 2.2 of the PD and generally confirmed by the audit team’s on-site interviews), the deviation has no impact on the quantification of reported GHG emission reductions

- *Assessment column 1 contains information regarding assessment of whether the deviation meets with the criteria and specifications for permitted methodology deviations.
- **Assessment column 2 contains information regarding assessment of whether the deviation does not negatively impact the conservativeness of the quantification of GHG emission reductions or removals (except where it results in increased accuracy)

3.3 Project Description Deviations

The below information identifies each project description deviation applied by the project that was validated as part of the verification engagement described in this report. Each of the deviations identified below is appropriately described and justified and, in respect of each of the above deviations, the project remains in compliance with the VCS rules.

Deviation to prescribed timeline for validation of allometric equations

This deviation was approved as a methodology deviation at validation (see items 2 and 3 in Section 3.2.7 in the validation report) and is also approved here. It has no impact on the applicability of the methodology; rather, it resolves a methodology deviation that was noted at validation. It has no bearing on the additionality of the project, as it pertains solely to quantification procedures. This change also has no bearing on the baseline scenario, for the same reason.

In order to check that the allometric equations were appropriately validated per the guidance of CP-AB, the audit team observed the project personnel, specifically those who lead the measurement processes, re-measure trees as consistent with their inventory manual. The inventory manual has detailed guidance regarding each step of the process for measuring the trees, with specific guidance on how to approach various measuring challenges. In the field, the project personnel displayed competence with the Haglof tool to measure various tree limb shapes and lengths, as well as with the laser used to record the tree heights. The audit team observed the remeasurement process for a mangrove tree and for two terrestrial trees included in the data collection process by the project personnel (numbers 17 and 42). The audit team prompted the project personnel to re-measure the tree height and re-measure long tree limb sections, and there was little variation between the initial and subsequent measurements.

Subsequently, the audit team undertook desk-based calculation checks of the quantification in the reporting workbooks /2/ /3/ and confirmed the results presented in the report /1/ to be accurate. The allometric equations were confirmed to have been duly validated in accordance with the requirements of CP-AB. In conclusion, the project description deviation is valid.

Deviation to prescribed timeline for PRA data collection

This change has no impact on the applicability of the methodology. Through application of professional judgment, the audit team agrees that the likelihood of degradation within the project area is relatively rare, given the other fuel sources readily available to local communities. In conclusion, the project description deviation is valid. Note that this project description also constitutes a methodology deviation, as discussed under Section 3.2 above.

Deviation to delineation of project areas and leakage belts

This change has no impact on the applicability of the methodology, as it does not result in non-conformance to any requirements of the methodology, as confirmed by a thorough review against relevant requirements. Through review of the documentation provided, the audit team has reasonable assurance that no new methodology deviations have been invoked by the change in project areas and leakage belts, above and beyond those methodology deviations already approved at validation. The evidence provided by project personnel /32/ /33/ suggests that the settlement density in the Cacheu leakage belt is slightly outside the required thresholds established by BL-UP. However, this is not a new methodology deviation because it is simply a new expression of the same general trend that the leakage belts are slightly outside the range of parameters set by BL-UP, for the reasons that were approved as a methodology deviation at validation. Therefore, the audit team agrees that the project remains in conformance with the methodology to the extent that such conformance was maintained at validation. In order to confirm that the deviation was appropriately implemented, the audit team performed spot checks on the revised project boundary /12/ and leakage belt /13/ shapefiles to confirm that:

- The project areas, as delineated in the revised project boundary shapefiles /12/, did not increase in size relative to the boundaries that were approved at validation.
- The removal of any area excised from the project area and leakage belt boundaries, relative to the boundaries approved at validation, was justified (the audit team was concerned about the possibility that certain areas could be removed from the project boundary due to deforestation that occurred after the project start date, which could have resulted in corruption of the principle that carbon stock change occurring in the project boundary during the project crediting period

must be duly accounted for; the audit team was able to confirm that a sound basis existed to excise areas from the project areas and leakage belts due to those areas having been nonforest as of the project start date).

- The accuracy assessment for the 2011 classification, as used to identify the boundaries of the revised project areas and leakage belts, was correctly performed and its results are accurately summarized in the forest mapping report /5/.
- Baseline carbon stock changes in the project areas and leakage belts, as reported in Tables 14 and 15 of the MR, respectively (and repeated in Table 23 as pertains to the leakage belts), are correctly recalculated in the revised baseline workbook /11/ based upon the quantification approved at validation, but with the calculation of Equations 5 and 6 of BL-UP updated to reflect the sizes of the revised project areas and leakage belts.

This change has no bearing on the additionality of the project, as the modest reduction in the size of the project areas has not had any impact on the claims of the project proponent relating to the additionality of the project, as documented in Section 2.5 of the PD. This change also has no bearing on the baseline scenario, as the same baseline scenario documented in Section 2.5 of the PD exists within the revised project areas as existed within the original project areas. In conclusion, the project description deviation is valid.

Change to quantification of post-deforestation carbon stock

This change has no impact on the applicability of the methodology, as it does not result in non-conformance to any requirements of the methodology, as confirmed by a thorough review against relevant requirements. The audit team can confirm that it is stated in the parameter table for $C_{AB_nontree,i}$ on p. 42 of BL-UP that "Herbaceous vegetation considered de minimis in all instances". This requirement to consider herbaceous biomass to be zero in the baseline was missed during the validation audit.

The following is indicated in Section 3.1.5 of the PD: "As previously mentioned, the main agents of deforestation in GB are the local population, who clear land for subsistence agriculture. The main agricultural product is rice, which is planted in two different systems: dry land rice and wetland rice. Therefore, subsistence agriculture from both dry land and wetland is the only post-deforestation land-use mapped." The audit team agrees that rice is not a woody plant and so would be considered "herbaceous" in the GHG accounting sense of the word. Therefore, the audit team agrees that post-deforestation carbon stock should be considered de minimis and assumed to be zero in both the baseline and project scenarios.

This change has no bearing on the additionality of the project, as it pertains solely to quantification procedures. This change also has no bearing on the baseline scenario, for the same reason. In conclusion, the project description deviation is valid.

3.4 Grouped Project

This section is not applicable, as the project is not a grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

4.1.1 Implementation Status of the Project Activity(s)

The steps taken by the audit team to assess each of the following items is specified below.

Item	Verification findings
Existence of any material discrepancies between project implementation and the project description	<ul style="list-style-type: none"> Through interviews with project personnel and local communities (see Section 2.3 above) and on-site inspections (see Section 2.4 above), the audit team confirmed the absence of any material discrepancies (aside from the duly reported project description deviations discussed in Section 3.3 above) between the PD and implementation of the project
The implementation status of the monitoring plan and the completeness of monitoring, including the suitability of the implemented monitoring system (i.e., process and schedule for obtaining, recording, compiling and analyzing the monitored data and parameters)	<ul style="list-style-type: none"> Through interviews with project personnel (see Section 2.3 above) and independent checks of the monitoring process, audit team confirmed that monitoring plan is fully complete and operating on planned intervals, excepting the deviation to the timeline for the PRA (see Section 3.3 above)
The existence of any material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology	<ul style="list-style-type: none"> Through interviews with project personnel (see Section 2.3 above) and independent checks of the monitoring process, audit team confirmed that the monitoring process has been implemented as planned in the PD
Whether the GHG emission reductions or removals generated by the project have become included in an emissions trading program or any other mechanism that includes GHG allowance trading	<ul style="list-style-type: none"> Through the application of professional judgment, the audit team is reasonably assured that the GHG emission reductions reported in the MR have not been included in an emissions trading program or any other mechanism that includes GHG allowance trading
Whether the project has received or sought any other form of environmental credit, or has become eligible to do so since validation or previous verification	<ul style="list-style-type: none"> Through the application of professional judgment, the audit team is reasonably assured that project has not received or sought any other form of environmental credit, or has become eligible to do so since validation or previous verification

Whether the project has participated or been rejected under any other GHG programs since validation or previous verification	<ul style="list-style-type: none"> Through the application of professional judgment, the audit team is reasonably assured that the project has not participated or been rejected under any other GHG programs since validation or previous verification
Sustainable development contributions	<ul style="list-style-type: none"> Audit team reviewed information in Section 1.10 of MR to confirm that it made sense; audit team agrees that the project, by design, would likely contribute to any sustainable development goals

4.1.2 Previously Validated Methodology Deviations

See Section 3.2.7 of the validation report for a description of appropriateness of each of the below methodology deviations. The numbering of the deviations below follows the numbering used in Section 2.6 of the PD.

Number	Verification Findings
01	This deviation continues to be applicable because the Delaney equation has been used to calculate palm biomass for purposes of production of the MR.
02	This deviation continues to be applicable because the Chave equation has been used to calculate mangrove biomass for purposes of production of the MR. See Section 3.3 above regarding actions undertaken by the audit team to confirm that the equation has been successfully “validated” per the requirements of CP-AB.
03	This deviation continues to be applicable because the Chave equation has been used to calculate terrestrial forest biomass for purposes of production of the MR. See Section 3.3 above regarding actions undertaken by the audit team to confirm that the equation has been successfully “validated” per the requirements of CP-AB.
04	This deviation continues to be applicable because distinct carbon stock estimates are applied to the portions of the project areas and leakage belts within the respective parks for purposes of calculating carbon stock changes in the said areas during the monitoring period. In addition, the project areas and leakage belts were separated into different national parks for purposes of calculating baseline emissions.
05	This deviation no longer applies because it pertained strictly to the ex-ante calculation procedure in LK-ASU and does not pertain to ex-post quantification.
06	This deviation no longer applies because, as documented in Annexes I-III of the PRA report /8/, the sampling frame for the most recent PRA included all villages within two kilometers of either the project areas or the leakage belts (as opposed to the prior PRA which, as

	documented in Section 2.6 of the PD only included villages within two kilometers of the project areas in the sampling frame).
07	This deviation continues to be applicable insofar as the quantification of baseline, project and/or leakage emissions continues to utilize boundaries for the leakage belts and RRDs that are, in some cases, not compliant with the relevant criteria from BL-UP.

4.1.3 Previously Validated Project Description Deviations

This section is not applicable, as no project description deviations have previously been validated.

4.1.4 Overall Conclusion

In summary, with the exception of the deviations to the project description as discussed above, the audit team can confirm that the project has been implemented as described in the validated project description.

4.2 Accuracy of GHG Emission Reduction and Removal Calculations

The GHG emission reductions and/or removals have been quantified correctly in accordance with the project description and (with the exception of the methodology deviations discussed in Section 3.2 above) with the applied methodology.

The GHG emission reductions and/or removals have been quantified correctly in accordance with the project description and with the applied methodology.

For all instances in which values were transcribed between datasets (e.g., transcription from the project description to reporting workbooks, or between reporting workbooks), the audit team carefully traced values to ensure the absence of manual transposition errors.

An identification of the data and parameters used to calculate the GHG emission reductions and/or removals, and a description of the steps taken to assess each of them, follows.

4.2.1 Data and Parameters Available at Validation

	Steps taken by audit team to assess...		
Data/Parameter	Accuracy of GHG emission reductions and removals	Whether methods/formulae set out in project description have been followed	Appropriateness of default values
CF	N/A (this parameter was not used to directly produce any input assessed at	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained	N/A (this parameter was not used to directly produce any input assessed at verification; it

	Steps taken by audit team to assess...		
Data/Parameter	Accuracy of GHG emission reductions and removals	Whether methods/formulae set out in project description have been followed	Appropriateness of default values
	verification; it pertained solely to quantification that was assessed at validation)	solely to quantification that was assessed at validation)	pertained solely to quantification that was assessed at validation)
COMF _i , G _{g,i}	N/A (these parameters not directly used; no emissions from burning during monitoring period)	N/A (these parameters not directly used; no emissions from burning during monitoring period)	N/A (these parameters not directly used; no emissions from burning during monitoring period)
D _j	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was assessed at validation)	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was assessed at validation)	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was assessed at validation)
f _{palm} (X,Y), f _{terrestrial_forest} (X,Y), f _{mangrove} (X,Y)	Calculation checks and on-site inspections to confirm that these equations were duly validated per the requirements in C-AP (see Section 3.3 above)	Confirmation that these same equations were contained in the PD and assessed at validation	N/A
R	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was assessed at validation)	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to

	Steps taken by audit team to assess...		
Data/Parameter	Accuracy of GHG emission reductions and removals	Whether methods/formulae set out in project description have been followed	Appropriateness of default values
	assessed at validation)		quantification that was assessed at validation)

4.2.2 Data and Parameters Monitored

	Steps taken by audit team to assess...		
Data/Parameter	Accuracy of GHG emission reductions and removals	Whether methods/formulae set out in project description have been followed	Appropriateness of default values
COLB	<ul style="list-style-type: none"> Confirmed that the value used was the same value approved at validation (as indicated in Section 3.3 of PD) Conducted internet searches to confirm that, as of 8 August 2019, the most recent national communication on climate change from Guinea-Bissau was still the Second Communication and, therefore, the validated value continued to be the most up-to-date 	N/A (no updates were made to the value approved at validation)	N/A (value was approved at validation)
CLB	<ul style="list-style-type: none"> Undertook calculation checks to confirm this parameter was correctly recalculated, in the "Leakage 	Undertook calculation checks to confirm that a weighted average, as set out in Section 3.3 of PD, was applied	N/A (no default values used)

	Steps taken by audit team to assess...		
Data/Parameter	Accuracy of GHG emission reductions and removals	Whether methods/formulae set out in project description have been followed	Appropriateness of default values
	Emissions” worksheet in the monitoring workbook /10/, on the basis of the revised leakage belt shapefiles /13/		
MANFOR, PROTFOR, TOTFOR	<ul style="list-style-type: none"> N/A (values not used) 	N/A (values not used)	N/A (values not used)
PROP _{IMM} , PROP _{RES}	<ul style="list-style-type: none"> Conducted interviews with groups of community members in a sample of the communities interviewed by project personnel. These interviews were conducted in a manner which replicated the questions asked by project personnel, and specifically addressed whether community members were aware of increased immigration. The audit team interviewed project personnel regarding the community interview processes and results included in the PRA, and reviewed interview sheets for a sample of communities. The audit team’s community 	Interviews, document review and on-site inspection to confirm that the methods set out in Sections 4.3.2 (under “Emissions due to Illegal Degradation”) and 4.3.3 of PD have been duly utilized	N/A (no default values used)

	Steps taken by audit team to assess...		
Data/Parameter	Accuracy of GHG emission reductions and removals	Whether methods/formulae set out in project description have been followed	Appropriateness of default values
	interview results were consistent with the PRA analysis of deforestation caused by immigrating populations.		
ARRD,unplanned,hrp	<ul style="list-style-type: none"> N/A (value not monitored until baseline renewal) 	N/A (value not monitored until baseline renewal)	N/A (value not monitored until baseline renewal)
A _i	<ul style="list-style-type: none"> Independent recalculation of area based on the project area /12/ and leakage belt /13/ shapefiles and the land-class file assessed at validation /14/ and comparison with reported results to confirm that reported results accurately characterize the condition of the project areas as of the beginning of the verification period 	Independent recalculation using the land-cover classification confirmed at validation to confirm that the same methods have been used	N/A (no default values used)
Regional Forest Cover / Non-Forest Cover Benchmark Map	<ul style="list-style-type: none"> N/A (value not monitored until baseline renewal) 	N/A (value not monitored until baseline renewal)	N/A (value not monitored until baseline renewal)
Project Forest Cover Benchmark Map, Leakage Belt Forest Cover Benchmark Map,	<ul style="list-style-type: none"> Review of forest mapping report /5/ and interviews with project personnel to confirm that good practices in remote sensing (for radiometric 	Reviewed the process, as documented in the forest mapping report /5/, against Sections 4.3.2 (under "Emissions due to deforestation and natural disturbances") and 4.3.3 in	N/A (no default values used)

	Steps taken by audit team to assess...		
Data/Parameter	Accuracy of GHG emission reductions and removals	Whether methods/formulae set out in project description have been followed	Appropriateness of default values
Project Forest Cover Monitoring Map, Leakage Belt Forest Cover Monitoring Map	<p>correction, image interpretation, etc.) were followed</p> <ul style="list-style-type: none"> Independent check on accuracy assessment of the mapping products /15/ /16/, based on review of high-resolution imagery, to confirm that the outcome of the accuracy assessment is accurately reported 	the PD to confirm consistency	
Degradation PRA Results	<ul style="list-style-type: none"> Conducted interviews with groups of community members in a sample of the communities interviewed by project personnel. These interviews were conducted in a manner which replicated the questions asked by project personnel, and specifically addressed the potential for illegal extraction of trees. Community members were interviewed regarding the prevalence of trees being cut for firewood, charcoal, and timber. The audit team interviewed project personnel regarding the 	Interviews, document review and on-site inspection to confirm that the methods set out in Sections 4.3.2 (under “Emissions due to Illegal Degradation”) and 4.3.3 of PD have been duly utilized	N/A (no default values used)

	Steps taken by audit team to assess...		
Data/Parameter	Accuracy of GHG emission reductions and removals	Whether methods/formulae set out in project description have been followed	Appropriateness of default values
	community interview processes and results included in the PRA, and reviewed a sample of interview sheets. The audit team's community interview results were consistent with the PRA analysis of deforestation caused by illegal extraction of trees.		
Result of Limited Degradation Survey	N/A (not relevant; a limited degradation survey was not triggered by the PRA results)	N/A	N/A
A _{DefPA,i,u,t} , A _{DefLB,i,u,t}	<ul style="list-style-type: none"> Independent recalculation in order to confirm that activity data estimates were accurately calculated from the Project Forest Cover Monitoring Map and Leakage Belt Forest Cover Monitoring Map 	Reviewed the process, as documented in the forest mapping report /5/, against Sections 4.3.2 (under "Emissions due to deforestation and natural disturbances") and 4.3.3 in the PD to confirm consistency	N/A
A _{DegW,i}	<ul style="list-style-type: none"> N/A (the PRA did not indicate a need for a degradation survey) 	N/A	N/A
A _{DistPA,q,i,t}	N/A (not relevant; no disturbances detected through monitoring of project areas; see "Project Forest Cover Monitoring Map" above)	N/A (not relevant; no disturbances detected through monitoring of project areas; see "Project Forest Cover Monitoring Map" above)	N/A (not relevant; no disturbances detected through monitoring of project areas; see "Project Forest Cover Monitoring Map" above)

	Steps taken by audit team to assess...		
Data/Parameter	Accuracy of GHG emission reductions and removals	Whether methods/formulae set out in project description have been followed	Appropriateness of default values
AP _i	<ul style="list-style-type: none"> N/A (the PRA did not indicate a need for a degradation survey) 	N/A	N/A
C _{DegW,i,t}	<ul style="list-style-type: none"> N/A (the PRA did not indicate a need for a degradation survey) 	N/A	N/A
C _{AB_tree,i}	N/A (assessed at validation)	Confirmed that values reported in Section 3.2 of MR and used in quantification have been correctly transcribed from Section 4.2 of PD	N/A
DBH _{tree,l, H}	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was assessed at validation)	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was assessed at validation)	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was assessed at validation)
C _{BB_tree,i}	N/A (assessed at validation)	Confirmed that values reported in Section 3.2 of MR and used in quantification have been correctly transcribed from Section 4.2 of PD	N/A
C _{AB_tree_post,i}	Audit team confirmed that value of 0 is derived in conformance with the methodology (see discussion under “Change to quantification of post-deforestation carbon stock” in Section 3.3 above)	N/A; a project description deviation was applied (see Section 3.3 above)	N/A
A _{burn,i,t}	N/A (not relevant; no biomass burning detected through monitoring of project areas; see “Project Forest Cover Monitoring Map” above)	N/A (not relevant; no biomass burning detected through monitoring of project areas; see “Project Forest Cover Monitoring Map” above)	N/A (not relevant; no biomass burning detected through monitoring of project areas; see “Project Forest Cover Monitoring Map” above)

	Steps taken by audit team to assess...		
Data/Parameter	Accuracy of GHG emission reductions and removals	Whether methods/formulae set out in project description have been followed	Appropriateness of default values
Asp, N	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was assessed at validation)	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was assessed at validation)	N/A (this parameter was not used to directly produce any input assessed at verification; it pertained solely to quantification that was assessed at validation)

4.3 Quality of Evidence to Determine GHG Emission Reductions and Removals

The evidence used to determine the GHG reductions and removals was of sufficient quantity and appropriate quality. An identification of the categories of evidence used to determine the GHG emission reductions and removals, and a description of the steps taken to assess the sufficiency of quantity, and appropriateness of quality, of each category of evidence, follows.

	Steps taken by audit team to assess...		
Category	Reliability of the evidence, and source and nature of evidence (external or internal, oral or documented) for determination of GHG emission reductions or removals	Information flow from data generation and aggregation, to recording, calculation and final transposition into the MR	Appropriateness of implemented calibration frequency of monitoring equipment
Calculation workbooks /6/ /7/ /10/ /11/ /27/	Replication of calculations to verify that workbooks are free of material error and, thus, reasonably reliable	Tracing of information through workbooks to source data	N/A
Revised project area and leakage belt boundary shapefiles /12/ /13/	Detailed assessment using high-resolution imagery; checks on accuracy assessment	Recalculation of accuracy assessment results and comparison to data reported in	

	Steps taken by audit team to assess...		
Category	Reliability of the evidence, and source and nature of evidence (external or internal, oral or documented) for determination of GHG emission reductions or removals	Information flow from data generation and aggregation, to recording, calculation and final transposition into the MR	Appropriateness of implemented calibration frequency of monitoring equipment
	(see Section 3.3 above)	forest mapping report /5/ and MR	
Analysis of remotely sensed imagery /14/ /15/ /16/	Through review of procedures and independent review of satellite imagery, audit team can confirm this evidence is highly reliable	Through review of spatial analysis processes, audit team confirmed that data were appropriately transcribed into the calculation workbooks (see above)	Audit team confirmed that source data for this analysis is the Landsat program, an official program of the United States government that can be assumed to have industry-standard calibration procedures in place to ensure high-quality data
PRA report and supporting calculations /8/ /9/	The audit team interviewed project personnel regarding the community interview processes and results included in the PRA, and reviewed a sample of interview sheets. These showed detailed documentation of who was interviewed, by whom, when, and the results of the interview. These community interview results were accurately described in the PRA, and the audit team reviewed compared individual community	They audit team reviewed sets of community interview sheets used by project personnel, and compared the results to those included in the monitoring and calculations sheet, which then informed the PRA report. The same project personnel involved in conducting the interviews also completed the calculations and reporting requirements. Interviews with these personnel demonstrated their competency with	N/A

	Steps taken by audit team to assess...		
Category	Reliability of the evidence, and source and nature of evidence (external or internal, oral or documented) for determination of GHG emission reductions or removals	Information flow from data generation and aggregation, to recording, calculation and final transposition into the MR	Appropriateness of implemented calibration frequency of monitoring equipment
	<p>survey results with those in the PRA monitoring excel sheet /9/. The audit team conducted interviews with groups of community members in a sample of the communities interviewed by project personnel. These interviews were conducted in a manner which replicated the questions asked by project personnel. The audit team's community interview results were consistent with the PRA analysis.</p>	<p>the data collection and calculation processes.</p>	
<p>Results of allometric equation validation /1/ /2/ /3/</p>	<p>Observation of independent remeasurement by project personnel to confirm that personnel were duly qualified and that measurement data were carefully obtained (see Section 3.3 above)</p>	<p>As with the PRA processes, the same project personnel were involved in data collection and analysis. In the field re-measurement activities project personnel demonstrated competency with a systematic process for measuring and recording tree section data. The data sheets</p>	<p>The audit team observed the project personnel, specifically those who lead the measurement processes, calibrate their tools appropriately and re-measure trees as consistent with their inventory manual. The project personnel demonstrated competency with the Haglof tool and laser</p>

	Steps taken by audit team to assess...		
Category	Reliability of the evidence, and source and nature of evidence (external or internal, oral or documented) for determination of GHG emission reductions or removals	Information flow from data generation and aggregation, to recording, calculation and final transposition into the MR	Appropriateness of implemented calibration frequency of monitoring equipment
		for individual trees could then be compared with the data input into their allometric equation validation spreadsheets. These measurements were shown to be consistent for a sample of sheets reviewed. The volume and carbon calculations were reviewed and deemed appropriate, and as such the allometric equations were found to be valid.	for height measurement, and in using these tools for some challenging measurements and under challenging conditions.

Overall, the evidence used to determine the GHG reductions and removals is of sufficient quantity (i.e., all necessary information has been provided to allow the audit team to trace and, as necessary, recalculate the quantification of GHG reductions and removals), and of appropriate quality (i.e., information presented is free of misstatements, whether material or immaterial) to allow the audit team to render a verification opinion.

4.4 Non-Permanence Risk Analysis

The reported value of the overall risk rating, as determined based on the risk analysis documented in the NPRR, was 10%.

The audit team did not perform a re-assessment of the risk analysis from first principles, but did assess the following:

- Whether any circumstances or conditions may have transpired since the previous risk analysis such that a previous determination having bearing on the risk rating is no longer valid
- Whether items meant to address certain risks are in place and functioning as intended

The audit team's conclusions regarding the risk analysis are two-fold. The audit team concludes that:

- The assignment of risk scores to risk factors that did not change from the previous risk analysis remains appropriate and in conformance to the AFOLU Non-Permanence Risk Tool, to the extent that such assignment was appropriate and in conformance to the AFOLU Non-Permanence Risk Tool at the time of the prior risk analysis.
- The assignment of risk scores to risk factors that did change from the previous risk analysis is appropriate and in conformance to the AFOLU Non-Permanence Risk Tool.

A detailed review of the audit team's conclusions may be found below.

4.4.1.1 Internal Risk - Project Management

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(a)	<ul style="list-style-type: none"> • Audit team reviewed validation report to confirm that it was indicated (p. 47) that “tree planting is not included in project activities as described in Section 1.8 of PD” • Audit team observed nothing while on-site to suggest that tree planting had been adopted as a project activity, so the audit team agrees that risk score is justified 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(b)	<ul style="list-style-type: none"> • As no credits have previously been issued, risk score is justified 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(c)	<ul style="list-style-type: none"> • Audit team reviewed validation report to confirm that it was indicated (p. 47) that “From site inspections, review of CVs of key personnel /36/ /37/, and interviews with project personnel, audit team can confirm that project proponent possesses all key technical skills required to carry out project activities as defined in Section 1.8 of PD (specifically, project personnel have demonstrated that they have all skills necessary to carry out management activities within Cacheu and Cantanhez National Parks and to assist with administration of FIAL program) • The project management team for IBAP, in the capital of Bissau, has extensive experience in conservation and community engagement within the country. The PNTC Park Director, Queba Quecuta, demonstrated an extremely detailed understanding of the activities and communities within the project area. 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(d)	<ul style="list-style-type: none"> • Audit team reviewed validation report to confirm that it was indicated (p. 47) that “From site inspections, audit team can confirm that project proponent management team maintains a presence at IBAP’s headquarters in Bissau, which is located less than a day’s drive from project area, as well as field offices located nearer to project area” • From on-site observations during the site visit, audit team was able to confirm that the above continues to be correct. Management at the IBAP headquarters has regular communication with the Park Directors. 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(e)	<ul style="list-style-type: none"> As management team has not yet managed the project through verification and issuance of GHG credits under the VCS Program, audit team agrees that the mitigation is not applicable 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(f)	<ul style="list-style-type: none"> As the presence of an adaptive management plan was not demonstrated to the audit team, audit team agrees that this mitigation is not applicable 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate

4.4.1.2 Internal Risk – Financial Viability

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(a)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(b)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(c)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(d)	<ul style="list-style-type: none"> Audit team reviewed validation report to confirm that it was indicated (p. 48) that “cash flow breakeven point is less than 4 years from current risk assessment” Project personnel maintain a detailed spreadsheet /18/ of the project’s finances. This sheet includes appropriate references to project expenses which are consistent with the project activities, as well as appropriate assumptions on revenue generated. 	<ul style="list-style-type: none"> The information sheet provide includes appropriate historical and projected parameters, as well as details on the sources of financing/revenue. 	Risk rating is appropriate

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(e)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(f)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(g)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(h)	<ul style="list-style-type: none"> Audit team reviewed validation report to confirm that it was indicated (p. 49) that this risk score was applicable Project personnel maintain a detailed spreadsheet /8/ of the project's finances. This sheet includes appropriate references to sources of funding, which are consistent with description in the PD, as well as appropriate assumptions on revenue generated. 	<ul style="list-style-type: none"> The information sheet provided includes appropriate historical funding information and reasonable projections of continued funding sources. Assumptions on the sources of revenue are based on Ecosystem Marketplace analysis, and considered reasonable. 	Risk rating is appropriate
(i)	<ul style="list-style-type: none"> As the presence of callable financial resources was not demonstrated to the audit team, audit team agrees that this mitigation is not applicable 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate

4.4.1.3 Internal Risk – Opportunity Cost

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(a)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(b)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(c)	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(d)	<ul style="list-style-type: none"> • Audit team reviewed validation report, which affirms that “Through interviews with local residents and on-site observations during site inspections, audit team confirmed that baseline activities are subsistence-driven and do not involve cash-crop agriculture” • The audit team confirmed that the project provides net positive benefits on the social and economic well-being of the local communities who derive livelihoods from the project areas; see Section 4.4.1.6 below for more information 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(e)	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(f)	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(g)	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(h)	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(i)	<ul style="list-style-type: none"> • The audit team confirmed the presence of a legally binding commitment to continue management practices that protect the credited carbon stocks over at least 100 years; see Section 4.4.1.4 below for more information 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate

4.4.1.4 Internal Risk – Project Longevity

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(a)	<ul style="list-style-type: none"> • Audit team reviewed validation report to confirm that it was indicated (p. 53) that the internal regulations for the national parks constitute the “legal agreement or requirement to continue the management practice” in perpetuity • Through interviews with Dr. Justino Biai, IBAP General Director, and Leonildo Alvese Cardoso, IBAP’s Head of Monitoring, the (see Section 2.3 above), audit team confirmed that these regulations continue to be in full force and effect. • Based on review of the decrees establishing both parks, the audit team confirmed that the legal establishment for the parks has not changed. • From on-site review of the Internal Regulations for the parks and interview with personnel, the audit team confirmed all appropriate laws and regulations are being followed. 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate

4.4.1.5 External Risk – Land Tenure and Resource Access/Impacts

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(a)	<ul style="list-style-type: none"> • Audit team reviewed validation report to confirm that it was indicated (p. 54) that “land law /6/ vests ownership of land in government but individuals are commonly understood to hold traditional/customary use rights” • During on-site inspections and interviews, audit team observed nothing that would suggest the legal status of the project areas has changed, relative to what was confirmed at validation. • Community members interviewed consistently confirmed the land ownership conditions described by project personnel. 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(b)	<ul style="list-style-type: none"> • See item (a) above 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(c)	<ul style="list-style-type: none"> • Audit team reviewed validation report to confirm that it was indicated (p. 54) that “As discussed in Section 3.1.9.1 above, ownership of project area is undisputed” • Interviews with community members throughout the project area did not reveal any disputes over land tenure. In general the community members had a detailed understanding of ownership rights and land use boundaries which are consistent with what is described in project documentation. 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(d)	<ul style="list-style-type: none"> • Audit team reviewed validation report to confirm that it was indicated (p. 54) that “During conversations with project personnel and interviews with local residents during site inspections, no disputes over access/use rights or overlapping rights within park boundaries (and, thus, within project area) were identified” • While in two community interviews there was some concern about the possibility of insufficient land area for farming in the future, with increased population, community members were generally satisfied with their land use rights. There was some concern about limited amounts of timber to be harvested for construction, but this was also countered by an understanding of the value of limiting harvesting, and there weren’t cases of official or significant disputes. 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(e)	<ul style="list-style-type: none"> • Not applicable, as this is not a WRC project 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(f)	<ul style="list-style-type: none"> • See Section 4.4.1.4 above 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate
(g)	<ul style="list-style-type: none"> • As no disputes have been identified, audit team agrees this mitigation is not applicable 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate

4.4.1.6 External Risk – Community Engagement

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(a)	<ul style="list-style-type: none"> • Audit team reviewed validation report, which affirms that the consultation of over 50 percent of households living within the project area who are reliant on the project area was confirmed at validation (p. 56) • During the verification site visit the audit team interviewed communities regarding the extent of consultation by IBAP and involvement by families within the community. Communities within the project area reported having meetings which were consistent with the timing and extent of meetings reported by IBAP. Through review of these meeting reports and demographic information of the communities the audit team gained a reasonable level of assurance that over 50 percent of the households within the project area have been consulted. 	<ul style="list-style-type: none"> • Project personnel provided documentation of meeting records, including subjects discussed and attendees. 	Risk rating is appropriate
(b)	<ul style="list-style-type: none"> • Audit team reviewed validation report to confirm that it was indicated (p. 56) that "...this rating is appropriate and conservative, as experience of audit team during site inspections was that knowledge of project was considerably lower among individuals living outside Cacheu and Cantanhez National Parks..." • Audit team identified nothing during on-site inspections to conclusively demonstrate that over 20 percent of households living within 20 km of the project boundary outside the project area, and who are reliant on the project area, have been consulted, so audit team agrees that risk rating continues to be appropriate and conservative. 	<ul style="list-style-type: none"> • N/A 	Risk rating is appropriate

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(c)	<ul style="list-style-type: none"> Interviews with community members addressed the question of whether the overall impact of the project was positive. Communities were asked to consider whether there have been negative impacts to social or economic wellbeing, while there were some examples of frustration with slower than expected benefits, even in those cases the benefits were deemed to outweigh any perceived negative effects. 	<ul style="list-style-type: none"> 	Risk rating is appropriate

4.4.1.7 External Risk – Political Risk

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(a)	<ul style="list-style-type: none"> Through independent recalculation of the governance score from the World Bank Institute’s Worldwide Governance Indicators for 2014-2018, as downloaded from http://info.worldbank.org/governance/wgi/ on 5 December 2019, audit team can confirm that the score has been correctly calculated /27/ 	<ul style="list-style-type: none"> The Worldwide Governance Indicators are required for use by the AFOLU Non-Permanence Risk Tool and are thus considered to be of high quality 	Risk rating is appropriate
(b)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(c)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(d)	<ul style="list-style-type: none"> N/A` 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
(e)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
(f)	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate

4.4.1.8 Natural Risk

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
Fire			
L	<ul style="list-style-type: none"> Audit team reviewed validation report to confirm that it was indicated (p. 59) that “During interviews with IBAP personnel, it was indicated to the audit team that there is no evidence of natural fires having occurred in the project area; this attestation was confirmed independently through interviews with community members, who indicated the same”. In on-site interviews, some community members, as well as the PNTC Park Director, suggested that in an area north of the park where there had been deforestation, there had been an increased fire risk due to a drier and hotter microclimate. Within the project area there were no reports or signs of natural fires, though. 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
S			
M			
Pest and Disease Outbreaks			
L	<ul style="list-style-type: none"> Audit team reviewed validation report to confirm that it was indicated (p. 59) that “During interviews with IBAP personnel, it 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
S			

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
M	<p>was indicated to the audit team that there is no evidence of pest and disease outbreaks having occurred in the project area. This attestation was confirmed independently through interviews with community members, who indicated the same".</p> <ul style="list-style-type: none"> Interviews with community members, as well as the PNTC Park Director, did not reveal any examples of pest or disease outbreaks in the project area. 		
Extreme Weather			
L	<ul style="list-style-type: none"> Audit team reviewed validation report to confirm that it was indicated (p. 60) that "The audit team confirmed, through interviews with community members, that extreme weather events are not a factor in the project area" The audit team interviewed community members regarding extreme weather events, and while there was some concern about climate change leading to hotter temperatures, less consistent rains, and flooding, overall there was not any example of extreme weather events. In two communities there was some concern about increased sea level harming rice paddies, and as with the fire discussion there were references to weather impacting the deforested area north of the project area. 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
S			
M			
Geological Risk			
L	<ul style="list-style-type: none"> Audit team reviewed validation report to confirm that it was indicated (p. 60) that "The audit team confirmed, through 	<ul style="list-style-type: none"> N/A 	Risk rating is appropriate
S			

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriateness of risk rating
M	<p>interviews with community members, that geological risk is not a factor in the project area”</p> <ul style="list-style-type: none"> No interviews with community members during verification revealed geological events had occurred. 		

5 SAFEGUARDS

5.1 No Net Harm

Not applicable, as no potential negative environmental and/or socio-economic impacts have been identified by the project proponent (see Section 2.4.1 of the MR).

5.2 Local Stakeholder Consultation

During the community interviews the audit team received a range of comments regarding the project and its implementation. In some cases there were community members who thought IBAP had not visited enough, but in general communities had a positive and productive relationship with IBAP staff. In the case of PNTC, the Park Director, Mr. Quecuta demonstrated a detailed understanding of input received by community members. Similarly, IBAP management in the Bissau headquarters had been familiar with the comments received during community interviews, and were actively working to address them. As described above, one of the concerns cited was over the limited harvesting of timber for construction, and Mr Quecuta described in interviews the process for addressing this issue with communities and educating on the rules and their importance. He similarly had been aware of the issue of wild animals damaging crops and taking fruit from people’s trees, and was working on options to mitigate this, including electrification.

6 VERIFICATION CONCLUSION

The audit team asserts, with no qualifications or limitations, that:

- The project complies with the verification criteria for projects set out in VCS Version 4.
- The project has been implemented in accordance with the validated project description and any subsequently validated changes.
- To the extent that the verification engagement described in this report included validation activities, the project complies with the validation criteria for projects set out in VCS Version 4.

Verification period: From 31 March 2011 to 30 March 2016

The verified GHG emission reductions and removals in the above verification period are:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2012	123,346	64,068	0	59,278
2013	127,267	64,068	0	63,199
2014	131,189	64,068	0	67,121
2015	135,110	64,068	0	71,042
2016	139,031	64,068	0	74,963
Total	655,944	320,341	0	335,603

APPENDIX A: VERIFICATION FINDINGS

Please see Section 2.5 above for a description of the findings issuance process and the categories of findings issued. It should be noted that all language under “Project Personnel Response” is a verbatim transcription of responses provided to the findings by project personnel.

Please note that a number of the below findings were issued prior to the VCS Version 4 update, which took effect in September 2019. The findings issued prior to September 2019 remain relevant to the verification engagement (i.e., there were no findings issued against requirements that were present in VCS Version 3 but were removed from VCS Version 4). For purposes of clarity and transparency, any references to VCS Version 3 documents that existed in the findings when they were issued are retained in this Appendix A.

NCR 1 Dated 16 Aug 2019

Standard Reference: M-MON V2.1, Section 5, Step 2

Document Reference: MONITORING_GB-REDD_ER_20180105

Finding: The following is required by M-MON for calculating carbon stock in all pools in each post-deforestation land use in each stratum: "For each post-deforestation land use (u) estimate the long-term carbon stock. Carbon stocks in the selected pools (must be the same as those used in the baseline modules) must be measured and estimated using the methods given in modules CP-AB, CP-D, CP-L, CP-S." In addition, it is stated in M-MON that "Herbaceous non-tree vegetation is considered to be de minimis in all instances."

The audit team has confirmed, through comparison with cells C35:D36 and C39:D40 in the worksheet "baseline C stock changes" in the workbook "WB2 - C assessment and emission baseline v2.3 20140722", as provided at validation, that the factors for aboveground biomass in cells D18:D21 in the "Project Emissions" worksheet of the "MONITORING_GB-REDD_ER_20180105" workbook are calculated by taking the baseline carbon stock in each respective stratum and subtracting the post-deforestation carbon stock of 28.6 tCO₂e/ha, as calculated according to the requirements of BL-UP for baseline purposes. This is not in conformance with the requirements of M-MON because the estimate of 28.6 tCO₂e/ha is a conservative ex-ante estimate of post-deforestation carbon stock, whereas M-MON requires that such stock "must be measured and estimated using the methods given in modules CP-AB, CP-D, CP-L, CP-S". None of the listed modules (CP-AB, CP-D, CP-L, CP-S) provide for literature-based estimation of carbon stock. In addition, BL-UP is not listed as a module that may be used to quantify ex-post post-deforestation carbon stock.

In addition, it is indicated in PD that "The main agricultural product is rice, which is planted in two different systems: dry land rice and wetland rice." Since rice constitutes "herbaceous non-tree vegetation", it appears to be questionable whether there is any carbon stock in the post-deforestation land use that is eligible for quantification under M-MON.

Project Personnel Response: The project team agrees that post-deforestation land use is rice which constitutes a herbaceous non-tree vegetation and, according to M-MON, carbon stocks should be "considered de minimis". Moreover, the project team noticed that, according to module BL-UP (version 3.2), herbaceous vegetation should also be considered de minimis in the quantification of carbon stock in aboveground non-tree vegetation in the baseline. Further, REDD MF (version 1.5) establishes on section 8.1.1 that for the quantification of baseline emissions "the same procedure must be followed ex ante and ex post" unless specific guidance is given in ex-ante calculations, which is not the case as the same procedure should be followed in the baseline according to BL-UP.

The carbon stock of post-deforestation herbaceous non-tree vegetation was adjusted on both baseline and monitoring period and set as zero (de minimis). The worksheet (MONITORING_GB-REDD_ER_20190819.xlsx) and the Monitoring Report (Monitoring_REDD-GB_v02.0.docx) were revised to reflect the changes.

Auditor Response: Through review of the revised calculation workbook, "MONITORING_GB-REDD_ER_20190819", the audit team can confirm that the emission factors used to calculate carbon stock changes in the project scenario, in cells D8:E11 of the "Project Emissions" worksheet, no longer deduct for post-deforestation carbon stock (i.e., post-deforestation carbon stock in the project scenario is assumed to be zero in the calculations). Therefore, the quantification is in conformance with the relevant requirements from M-MON. A project description deviation, to similarly set post-deforestation carbon stocks to zero in the baseline, was reviewed and deemed to be appropriate. The audit team can confirm that it is stated in the parameter table for C(AB_nontree,i) on p. 42 of BL-UP (Version 3-2) that "Herbaceous vegetation considered de minimis in all instances". This requirement to consider herbaceous biomass to be zero in the baseline was missed during the validation audit. As previously noted, rice is not a woody plant and so would be considered "herbaceous" in the GHG accounting sense of the word. Therefore, the audit team agrees that post-deforestation carbon stock should be considered de minimis and assumed to be zero in both the baseline and project scenarios. The non-conformity has been resolved.

NCR 2 Dated 16 Aug 2019

Standard Reference: M-MON V2.1, Section 5, Step 2

Document Reference: MONITORING_GB-REDD_ER_20180105

Finding: It is stated in M-MON that "Instead of tracking annual emissions through burning and/or decomposition, this methodology employs the simplifying assumption that all carbon stocks are emitted in the year deforested..." This is reinforced by Equation 5 of M-MON, which indicates that the "Carbon stock in all pools in post-deforestation land use u in stratum i" should be subtracted from the "Carbon stock in all pools in the baseline case in stratum i" to calculate the "Net carbon stock changes in all pools as a result of deforestation in the project case in land use u in stratum i at time t". This is distinct from Equation 24 of BL-UP, in which, as explained in the text above the equation, "Stock changes in belowground biomass and dead wood are emitted at an annual rate of 1/10 of the stock change for 10 years".

In the tables beginning at cell B31 of the "Project Emissions" worksheet and cell B33 of the "Leakage Emissions" worksheet (for carbon stock changes in the project area and leakage belt, respectively) of the "MONITORING_GB-REDD_ER_20180105" workbook, it appears that the intent behind the calculations is to assume an annual emission of 1/10 of the stock change from the belowground biomass pool each year. For example, in the calculations in cell D33 of "Project Emissions", the following code is used to calculate 1/10 of the total carbon stock change from belowground biomass attributable to deforestation under the project scenario in the year ending in 2012:

$(\$E\$18 * \$E\$25 * (1/10))$

The approach undertaken is not in conformance with the cited requirements of M-MON.

Project Personnel Response: The project team agrees the approach applied in the worksheet is not compliant with the requirements of M-MON. The worksheet (MONITORING_GB-REDD_ER_20190819.xlsx) was revised. The baseline quantification remains unchanged following BL-UP (version 3.2) requirements to consider 1/10 of the BGB emissions being released over time, whilst project emissions consider all BGB emissions in the year deforestation happened following the requirements of M-MON (version 2.1).

Auditor Response: Through review of the revised calculation workbook, "MONITORING_GB-REDD_ER_20190819", the audit team can confirm that the calculations of carbon stock changes in the project scenario, in cells D23:H23 and D26:H27 of the "Project Emissions" worksheet, assume instantaneous emission of pre-deforestation carbon stock in belowground biomass, as required by M-MON. Therefore, the non-conformity has been resolved.

NCR 3 Dated 16 Aug 2019**Standard Reference:** LK-ASU V1.1**Document Reference:** MONITORING_GB-REDD_ER_20180105

Finding: This is a follow-up to NCR 1 and NCR 2. Equation 1 of LK-ASU requires a comparison between the carbon stock changes in the leakage belt under the project and baseline scenarios. It is indicated that, where the cumulative carbon stock change under the baseline scenario exceeds that under the project scenario, the "Net CO2 emissions due to unplanned deforestation displaced from the project area to the leakage belt" are quantified as zero. It is indicated that this is the case in cell C47 of the worksheet "Leakage Emissions" of the workbook "MONITORING_GB-REDD_ER_20180105". However, when the errors identified in NCR 1 and NCR 2 are corrected, the quantified carbon stock changes in the leakage belt under the project scenario exceed those under the baseline scenario.

Project Personnel Response: The worksheet (MONITORING_GB-REDD_ER_20190819.xlsx) was revised to adjust the errors identified in NCR 1 and NCR 2 and a new value for Leakage Emissions calculated to comply with LK-ASU requirements. After adjustments, Leakage is still considered zero to avoid negative Leakage.

Auditor Response: Through review of the "Leakage Emissions" worksheet within the revised calculation workbook, "MONITORING_GB-REDD_ER_20190819", the audit team can confirm that, even with the errors identified in NCR 1 and NCR 2 corrected, the cumulative carbon stock change under the baseline scenario exceeds that under the project scenario, and the "Net CO2 emissions due to unplanned deforestation displaced from the project area to the leakage belt" are quantified as zero. This is because a project description deviation was implemented to set post-deforestation carbon stock in the baseline scenario equal to zero (see response to NCR 1). Therefore, there is not currently a non-conformity to the requirements of LK-ASU.

NCR 4 Dated 16 Aug 2019

Standard Reference: VCS Standard V3.7, Section 3.16.6; VCS Monitoring Report Template V3.4

Document Reference: Monitoring_REDD-GB_v01.0; MONITORING_GB-REDD_ER_20180105

Finding: The VCS Standard requires the following in Section 3.16.6: "The monitoring report describes all the data and information related to the monitoring of GHG emission reductions or removals. The project proponent shall use the VCS Monitoring Report Template, VCS Joint Project Description & Monitoring Report Template, VCS & CCB Monitoring Report Template or VCS+SOCIALCARBON Monitoring Report Template, as appropriate, and adhere to all instructional text within the template."

Section 1.1 of the VCS Monitoring Report Template requires that the following be reported: "The total GHG emission reductions or removals generated in this monitoring period."

Section 4.4 of the VCS Monitoring Report Template indicates the following: "Quantify the net GHG emission reductions and removals, summarizing the key results using the table below. Specify breakdown of GHG emission reductions and removals by vintages where the intent is to issue each vintage separately in the VCS registry system. For AFOLU projects, include quantification of the net change in carbon stocks. Also, state the non-permanence risk rating (as determined in the AFOLU non-permanence risk report) and calculate the total number of buffer credits that need to be deposited into the AFOLU pooled buffer account."

The monitoring report indicates in Section 1.1 that "Together, IBAP's efforts were responsible to reduce emissions totalling 880,949 tCO₂e between 2011 and 2016." This calculation is supported by data on the net GHG emission reductions as presented in tabular form in Section 4.4. The audit team was able to trace these calculations to row 25 of the worksheet "Emission Reduction" to the workbook "MONITORING_GB-REDD_ER_20180105". For example, the reported cumulative baseline emissions are calculated in cell C25 as the sum of the quantities in cells C20:C24 of the same worksheet. This calculation would be correct if, for example, the quantities in cells C20:C24 were themselves calculated on an annual basis. However, the quantities in cells C20:C24 are calculated on a cumulative basis, in keeping with the requirements of the BL-UP module. For example, the correct value for the cumulative baseline carbon stock changes in the project area during the monitoring period is 521,632 tCO₂e, not 1,522,358 tCO₂e as represented in the monitoring report. This has led to a significant over-reporting of GHG emission reductions.

Project Personnel Response: The worksheet (MONITORING_GB-REDD_ER_20190819.xlsx) and the Monitoring Report (Monitoring_REDD-GB_v02.0.docx) were revised to reflect the changes.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v02.0", the audit team can confirm that the reporting of GHG emission reductions is consistent with the calculations in the "Emission Reduction" worksheet in the "MONITORING_GB-REDD_ER_20190819" workbook, and that the previously noted double-counting of GHG emission reductions has been resolved. The quantity of 335,603 tCO₂e, which is reported in Sections 1.1 and 4.4 of the revised monitoring report, is calculated in cell F25 of the "Emission Reduction" worksheet. Therefore, the non-conformity has been resolved.

NCR 5 Dated 16 Aug 2019

Standard Reference: VCS Standard V3.7, Section 3.16.6; VCS Monitoring Report Template V3.4

Document Reference: Monitoring_REDD-GB_v01.0

Finding: The VCS Standard requires the following in Section 3.16.6: "The monitoring report describes all the data and information related to the monitoring of GHG emission reductions or removals. The project proponent shall use the VCS Monitoring Report Template, VCS Joint Project Description & Monitoring Report Template, VCS & CCB Monitoring Report Template or VCS+SOCIALCARBON Monitoring Report Template, as appropriate, and adhere to all instructional text within the template."

Section 1.1 of the VCS Monitoring Report Template requires that the following be reported: "Provide a summary description of the implementation status of the project, including the following (no more than one page..." A summary is provided as requested in Section 1.1 of the monitoring report, but it is more than a page.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v02.0.docx) was revised to reflect the changes.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v02.0", the audit team can confirm that the summary description of the implementation status of the project in Section 1.1 has been revised such that it is no more than one page. Therefore, the non-conformity has been resolved.

NCR 6 Dated 16 Aug 2019

Standard Reference: VCS Standard V3.7, Section 3.16.6; VCS Monitoring Report Template V3.4

Document Reference: Monitoring_REDD-GB_v01.0

Finding: The VCS Standard requires the following in Section 3.16.6: "The monitoring report describes all the data and information related to the monitoring of GHG emission reductions or removals. The project proponent shall use the VCS Monitoring Report Template, VCS Joint Project Description & Monitoring Report Template, VCS & CCB Monitoring Report Template or VCS+SOCIALCARBON Monitoring Report Template, as appropriate, and adhere to all instructional text within the template."

Section 1.2 of the VCS Monitoring Report Template requires that the following be reported: "Indicate... whether the project is a grouped project". It is not indicated in Section 1.2 of the monitoring report whether the project is a grouped project.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v02.0.docx) was revised to reflect the changes.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v02.0", the audit team can confirm that it is now clarified in Section 1.1 that the project is not a grouped project. Therefore, the non-conformity has been resolved.

NIR 7 Dated 16 Aug 2019

Standard Reference: VCS Standard V3.7, Section 3.16.6; VCS Monitoring Report Template V3.4

Document Reference: Monitoring_REDD-GB_v01.0

Finding: The VCS Standard requires the following in Section 3.16.6: "The monitoring report describes all the data and information related to the monitoring of GHG emission reductions or removals. The project proponent shall use the VCS Monitoring Report Template, VCS Joint Project Description & Monitoring Report Template, VCS & CCB Monitoring Report Template or VCS+SOCIALCARBON Monitoring Report Template, as appropriate, and adhere to all instructional text within the template."

Section 1.7 of the VCS Monitoring Report Template requires that the following be reported: "Indicate the project location and geographic boundaries (if applicable) including geodetic coordinates. For grouped and AFOLU projects, coordinates may be submitted separately as a KML file." The monitoring report states that "KML files of the project boundaries are provided to the VVB as part of this monitoring report." Please submit the KML files in question.

Project Personnel Response: The KML file of the project boundaries (ProjectArea_LeakageBelt.kml) is being provided to the verification team. The file can be accessed at 20190919_FINDINGS > _07_NIR > ProjectArea_LeakageBelt.kml

Auditor Response: Through review of the provided file, "ProjectArea_LeakageBelt", the audit team can confirm that it contains the geographic boundaries of the project area and leakage belt, as revised in response to NIR 14. However, the specific requirement of the VCS Monitoring Report Template is that the "project location and geographic boundaries (if applicable) including geodetic coordinates" be described. As the provided file contains the geographic boundaries of both the project area and the leakage belt, it provides for an unclear representation as to the specific boundaries of the project area. Therefore, the information request has not been fully satisfied.

Project Personnel Response 2: Two distinct KML files, one of the Project Area Boundary (ProjectArea.kml) and one of the Leakage Belt Boundary (LeakageBelt.kml), are being submitted to SCS. In addition a *.txt file (NIR_7-BOUNDARIES.txt) is provided with a clear description of each kml file. The files can be accessed at 20191101_FINDINGS > _07_NIR

Auditor Response 2: Through spot checks of the project area boundary KML file, entitled "ProjectArea", in comparison to the project area shapefiles, entitled "NO3_PA_Cacheu" and "NO3_PA_Cantanhez", the audit team can confirm that the project area boundary KML file accurately and comprehensively represents the project boundary. Therefore, the information request has been satisfied. The audit team did not review of the leakage belt KML file because the VCS rules do not require a KML file to be provided for the leakage belt boundary.

NCR 8 Dated 16 Aug 2019

Standard Reference: VCS Standard V3.7, Section 3.16.6; VCS Monitoring Report Template V3.4

Document Reference: Monitoring_REDD-GB_v01.0

Finding: The VCS Standard requires the following in Section 3.16.6: "The monitoring report describes all the data and information related to the monitoring of GHG emission reductions or removals. The project proponent shall use the VCS Monitoring Report Template, VCS Joint Project Description & Monitoring Report Template, VCS & CCB Monitoring Report Template or VCS+SOCIALCARBON Monitoring Report Template, as appropriate, and adhere to all instructional text within the template."

Section 1.9 of the VCS Monitoring Report Template requires that the following be reported:

"Other Forms of Environmental Credit: Indicate whether the project has sought or received another form of GHG-related environmental credit, including renewable energy certificates, during this monitoring period. Include all relevant information about the GHG-related environmental credits and the related program. Additionally, provide a list of all and any other programs under which the project is eligible to create another form of GHG-related environment credit."

Participation under Other GHG Programs: Indicate whether the project is registered under any other GHG programs and, where this is the case, provide the registration number and details. Provide details of any GHG credits claimed under such programs."

The required information is not provided in Section 1.9 of the monitoring report.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v02.0.docx) was revised to reflect the changes.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v02.0", the audit team can confirm that most of the required information is now provided within Section 1.9. However, a "list of all and any other programs under which the project is eligible to create another form of GHG-related environment credit" is still not provided. Therefore, the non-conformity has not been fully resolved.

Project Personnel Response 2: The Monitoring Report (Monitoring_REDD-GB_v03.0.docx) was revised to reflect the changes.

Auditor Response 2: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.0", the audit team can confirm that a list of programs under which the project is eligible to create another form of GHG-related environment credit has been provided. Therefore, the non-conformity has been fully resolved.

NCR 9 Dated 16 Aug 2019

Standard Reference: VCS Standard V3.7, Section 3.16.6; VCS Monitoring Report Template V3.4

Document Reference: Monitoring_REDD-GB_v01.0

Finding: The VCS Standard requires the following in Section 3.16.6: "The monitoring report describes all the data and information related to the monitoring of GHG emission reductions or removals. The project proponent shall use the VCS Monitoring Report Template, VCS Joint Project Description & Monitoring Report Template, VCS & CCB Monitoring Report Template or VCS+SOCIALCARBON Monitoring Report Template, as appropriate, and adhere to all instructional text within the template."

Section 2.1 of the VCS Monitoring Report Template requires that the following be reported:

"Describe the implementation status of the project activity(s), include information on the following... Where applicable, describe how leakage and non-permanence risk factors are being monitored and managed for AFOLU projects." Certain leakage and non-permanence risk factors are applicable, but the required information is not provided in Section 2.1 of the monitoring report.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v02.0.docx) was revised and section 2.1 now discusses the non-permanence and risk factors applicable to the project.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v02.0", the audit team can confirm that an appropriate discussion of how the appropriate leakage and non-permanence risk factors are being monitored and managed has been provided in Section 2.1. Therefore, the non-conformity has been resolved.

NCR 10 Dated 16 Aug 2019

Standard Reference: VCS Standard V3.7, Section 3.16.6; VCS Monitoring Report Template V3.4, Section 2.2.1; M-MON V2.1, Section 6.2

Document Reference: Monitoring_REDD-GB_v01.0

Finding: The VCS Standard requires the following in Section 3.16.6: “The monitoring report describes all the data and information related to the monitoring of GHG emission reductions or removals. The project proponent shall use the VCS Monitoring Report Template, VCS Joint Project Description & Monitoring Report Template, VCS & CCB Monitoring Report Template or VCS+SOCIALCARBON Monitoring Report Template, as appropriate, and adhere to all instructional text within the template.”

The VCS Monitoring Report Template requires the following in Section 2.2.1:

“Describe and justify any methodology deviations applied during this monitoring period. Include evidence to demonstrate the following:

- The deviation does not negatively impact the conservativeness of the quantification of GHG emission reductions or removals.
- The deviations relates only to the criteria and procedures for monitoring or measurement, and do not relate to any other part of the methodology.”

It does not appear that the value of parameter A(RRL,forest,t) has not been updated. This deviates from the guidance of the parameter table for this parameter table in Section 6.2 of M-MON, which requires the following: “Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event”. Since verification occurs on a frequency of less than every 5 years (in other words, it occurs more frequently than every 5 years), M-MON states that this parameter must be monitored prior to any verification event. However, the audit team agrees that this deviation is acceptable according to the VCS rules, for the following reasons:

1. It does not negatively impact the conservativeness of the quantification of GHG emission reductions because the parameter A(RRL,forest,t) is not used, either directly or indirectly, in the quantification of GHG emission reductions, and does not need to be monitored until baseline re-assessment.
2. It relates only to the criteria and procedures for monitoring or measurement because it relates to measurement of baseline emissions, as carried out following the BL-UP module.

Nonetheless, there is a non-conformity in that the methodology deviation described above is not reported in Section 2.2.1 of the monitoring report according to the requirements of the VCS Monitoring Report Template.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v02.0.docx) was revised and section 2.2.1 adjusted to include the methodology deviation.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v02.0", the audit team can confirm that a description of the deviation in question has been added that meets all of the requirements of the VCS Monitoring Report Template. Therefore, the non-conformity has been resolved.

NCR 11 Dated 16 Aug 2019

Standard Reference: VCS Standard V3.7, Section 3.16.6; VCS Monitoring Report Template V3.4

Document Reference: Monitoring_REDD-GB_v01.0

Finding: The VCS Standard requires the following in Section 3.16.6: "The monitoring report describes all the data and information related to the monitoring of GHG emission reductions or removals. The project proponent shall use the VCS Monitoring Report Template, VCS Joint Project Description & Monitoring Report Template, VCS & CCB Monitoring Report Template or VCS+SOCIALCARBON Monitoring Report Template, as appropriate, and adhere to all instructional text within the template."

The instructional text at the beginning of the VCS Monitoring Report Template requires the following: "Where a section is not applicable, same must be stated under the section (the section must not be deleted from the final document)." Section 2.2.2 of the VCS Monitoring Report Template has been deleted from the monitoring report.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v02.0.docx) was revised.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v02.0", the audit team can confirm that Section 2.2.2 has been reinstated. Therefore, the non-conformity has been resolved.

NCR 12 Dated 16 Aug 2019

Standard Reference: VCS Standard V3.7, Section 3.16.6; VCS Monitoring Report Template V3.4

Document Reference: Monitoring_REDD-GB_v01.0

Finding: The VCS Standard requires the following in Section 3.16.6: "The monitoring report describes all the data and information related to the monitoring of GHG emission reductions or removals. The project proponent shall use the VCS Monitoring Report Template, VCS Joint Project Description & Monitoring Report Template, VCS & CCB Monitoring Report Template or VCS+SOCIALCARBON Monitoring Report Template, as appropriate, and adhere to all instructional text within the template."

Section 2.4.2 of the VCS Monitoring Report Template requires the following: "Describe the process for, and the outcomes from, ongoing communication with local stakeholders conducted prior to verification. Include details on the following... The procedures or methods used for documenting the outcomes of the local stakeholder communication." While the processes for undertaking the local stakeholder communication are discussed in the monitoring report, the procedures or methods used for documenting the outcomes of the local stakeholder communication are not specifically addressed.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v02.0.docx) was revised to explain how the formal consultation (Community Meetings) are documented using Attendance Lists and Meeting Proceedings. A meeting proceeding example is being provided to SCS as evidence for the verification of the requirement (ACTA DE VALIDACAO DO PLANO DE GESTAO.docx), the document register the presentation and discussion of the Management Plan of PNC and presents all inputs of the consultation meeting.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v02.0", the audit team can confirm that Section 2.4.2 now contains a description of the process for documenting the outcomes of the local stakeholder communication. In addition, the document "ACTA DE VALIDACAO DO PLANO DE GESTAO" was reviewed by the audit team as an example of the process. Therefore, the non-conformity has been resolved.

NCR 13 Dated 16 Aug 2019

Standard Reference: M-MON V2.1, Section 5, Step 2

Document Reference: PRAreport_23.01.2018

Finding: Step 2, Section 5 of M-MON refers to the PRA as an appraisal “of the communities inside and surrounding the project area to determine if there is the potential for illegal extraction of trees to occur.” In Section 6.2 of M-MON, the parameter table for “Degradation PRA Results” states that “If $\geq 10\%$ of those interviewed/surveyed believe that degradation may be occurring within the project boundary then the limited on-the-ground degradation survey shall be triggered”. This implicitly defines the question to be posed by the PRA as whether degradation “may be occurring within the project boundary”.

As documented in Annex II to the PRA report, a 2-km buffer was applied to the project area and leakage belt in order to establish the sampling frame for the survey. This has resulted in an inquiry regarding degradation in the project area being posed to communities that, arguably, are not “surrounding” the project area (i.e., the surveyed communities included communities located 10 km or more from the project area). More relevant is that, as confirmed by the audit team during on-site inspections and interviews, the sampling frame for the survey included communities that are located far enough away from the project area boundaries that they cannot reasonably be expected to have any knowledge of the potential for degradation within the project area. This has likely resulted in an inaccurate determination of the potential for degradation to occur within the project area.

Project Personnel Response: The project team evaluated the enquire made by SCS and decided to adjust the sample to reassess degradation potential in the Project Area. In doing so, the larger sample of communities in the 2 km buffer of the Project Area and Leakage Belt was used to evaluate wood collection behaviour of the communities.

The sample indicates that, on average, women walk 919 mts to collect wood. With this information, only communities living inside and in a 1 km buffer from the Project Area were selected and a new PRA database structured. The new worksheet is being provided to SCS (VCS_Monitoring_PRA_05.09.2019.xlsx).

The adjusted sample has 156 households and 8,97% (14 households) declared in the PRA interviews they collect live biomass as a energy source, therefore still below 10% required by M-MON (version 2.1) to trigger on-the-ground degradation surveys. Considering, on average, 10 people per household (Margarita et al., 2014), a sample with confidence level of 95% (CI-10%) would require that communitied in 94 households be sampled. Therefore, the adjusted sample remains representative and below M-MON 10% treshold.

Auditor Response: Through review of the revised PRA results (the filename is indicated in the project personnel response), the audit team can confirm that the revised PRA appropriately conducts the monitoring required by M-MON. Therefore, the non-conformity has been resolved.



NIR 14 Dated 19 Aug 2019

Standard Reference: M-MON V2.1, Section 5, Step 1

Document Reference: Forest Mapping Report_10.10.2017

Finding: Step 1, Section 5 of M-MON requires the following: "At the end of each monitoring period... Update the Forest Cover Benchmark Maps for the project area and leakage belt... The overall classification accuracy of the outcome of the previous steps must be 90% or more."

As reported in Tables 10 and 11 of the Forest Mapping Report, the overall accuracy of the three-class and two-class maps has been 93.4% and 94.6% for the three-class and two-class map, respectively. However, independent analysis by the audit team has revealed a number of errors in the accuracy assessment, in respect of the specific data under review by the audit team. The audit team's independent analysis suggests that, if all such errors in the accuracy assessment were corrected, the results of the accuracy assessment would show that classification accuracy is more on the order of 85%. While the audit team's calculations are an estimate, based only on review of a sample of data, the results cast significant doubt on the assertion that the overall classification accuracy of the Forest Cover Benchmark Maps for the project area and leakage belt is at least 90%. A revised accuracy assessment will, therefore, be necessary in order to provide the audit team with reasonable assurance that the overall classification accuracy is at least 90%. Please provide the audit team with a revised analysis.

Project Personnel Response: The project team identified a problem with the classification algorithm causing some areas to be misclassified. Rice fields (included in the “Non-Forest” class) were classified as savanna (included in the “Terrestrial Forest” class) as a consequence of similar satellite signal (reflectance) between the two. In another areas, wetlands (included in “Non-Forest” class) were classified as mangroves (included in the “Mangrove” class) because of the presence of water signal in the satellite imagery.

The project team decided to prepare a summary report (Finding_NIR-14.docx) that details the error and how it was corrected. The revised Confusion Matrixes and supporting data is also detailed in the document. Because the misclassification impacted the 2011 and 2016 maps an adjustment had to be done at the beginning and ending of the monitoring period to guarantee consistency and to avoid false deforestation to be detected. As a consequence, the initial project area had to be revised to reflect the correct Forest Cover area in the beginning of the monitoring period. The impact was small, the Project Area was reduced in 3.71% and the Leakage Belt in 9.06%. All relevant information, SIG products and maps are made available to SCS in the folder 20190819_FINDINGS > _14_NIR. The Monitoring Report now describe this deviation on section 2.2.2.

The Monitoring and Baseline worksheets (MONITORING_GB-REDD_ER_20190819.xlsx and WB2 - C assessment and emission baseline v2.5 20190819.xlsx) and the Monitoring Report (Monitoring_REDD-GB_v02.0.docx) were revised to reflect the changes. Specifically on the revision of the Baseline worksheet (WB2 - C assessment and emission baseline v2.5 20190819.xlsx) the cells revised were G63, P63 and Y63 (Cacheu PA), G68, P69 and Y60 (Cacheu LK), AH63, AQ63 and AZ63 (Cantanhez PA) and AH69, AQ69 and AZ69 (Cantanhez LK) in the sheet "deforestation_baseline".

Auditor Response: The audit team reviewed the revised accuracy assessment that was carried out in respect of the 2016 classification as well as the accuracy assessment that was carried out in respect of the revised 2010/2011 classification (the classification used to delineate the project area and leakage belt) and confirmed that the determinations reached by said accuracy assessments (that the underlying work products had >90% accuracy) were correct. The audit team also confirmed that the project area and leakage belt were appropriately revised in response to the identified mapping error. Further details are in Section 3.3 of the verification report as well as the audit team's internal working papers.

As the audit team was provided with a revised accuracy analysis that could be confirmed by the audit team, this information request has been satisfied.

NCR 15 Dated 25 Oct 2019

Standard Reference: VCS Standard V4.0, Sections 3.4.3 and 3.18.2; VCS Monitoring Report Template V3.4, Section 2.2.2

Document Reference: Monitoring_REDD-GB_v02.0

Finding: The VCS Standard requires the following in Section 3.4.3: "The project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template."

The VCS Monitoring Report Template requires the following in Section 2.2.2:

"Describe any project description deviations applied during this monitoring period and explain the reasons for the deviation. Identify whether the deviation impacts the applicability of the methodology, additionality or the appropriateness of the baseline scenario and provide an explanation of the outcome." Additionally, Section 3.18.2 of the VCS Standard requires the following: "Where the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology, the deviation shall be described and justified in the monitoring report. This shall include a description of when the changes occurred and the reasons for the changes."

A project description deviation (to set post-deforestation carbon stock to zero in the baseline scenario) was implemented in response to NCR 1. However, this deviation is not described in Section 2.2.2 of the monitoring report following the requirements quoted above.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v03.0.docx) was revised to reflect the changes and Section 2.2.2 now includes the description and justification of the deviation request to set post-deforestation carbon stocks to zero in aboveground non-tree vegetation in the baseline scenario. The requested deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.0", the audit team can confirm that a clear description and justification of the project description deviation, including clarification as to when the deviation occurred and information as to when it occurred, has been provided in Section 2.2.2. Therefore, the non-conformity has been resolved.

NIR 16 Dated 25 Oct 2019**Standard Reference:** VCS Standard V4.0, Section 3.18.2**Document Reference:** Monitoring_REDD-GB_v02.0**Finding:** The VCS Standard requires the following regarding project description deviations:

"Where the deviation impacts the applicability of the methodology, additionality or the appropriateness of the baseline scenario, the deviation shall be described and justified in a revised version of the project description. This shall include a description of when the changes occurred, the reasons for the changes and how the changes impact the applicability of the methodology, additionality and/or the appropriateness of the baseline scenario...

Where the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology, the deviation shall be described and justified in the monitoring report. This shall include a description of when the changes occurred and the reasons for the changes. The deviation shall also be described in all subsequent monitoring reports."

In Section 2.2.2 of the monitoring report, a project description deviation relating to revision of the project area and leakage belt is described. It is stated that "The deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario since the main impact is the revision the project area (ha) and leakage belt (ha)." While the audit team agrees that the deviation does not impact the additionality of the project activity or the appropriateness of the baseline scenario, it is not so clear that the deviation does not impact the applicability of the methodology. Section 5 of the BL-UP module contains the following requirements, conformance to which may be impacted by the change in the project area and leakage belt areas. Please provide a demonstration that the documented changes to the project area and leakage belt areas will not result in noncompliance to said requirements, other than those methodology deviations already approved at validation and documented in Section 2.6 of the project description. If the changes to the project area and leakage belt areas have resulted in nonconformance to said requirements, the VCS Standard requires that the deviation be described and justified in a revised version of the project description.

1. Step 1.1.1.1 provides guidance on selection of the projection of deforestation rate (RRD) on the basis of the project area. A change in project area may have caused nonconformance to requirements for which conformance previously existed.

2. Step 1.3 provides guidance on selection of the leakage belt on the basis of the project area. A change in project area may have caused nonconformance to requirements for which conformance previously existed.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v03.0.docx) was revised to reflect the changes and Section 2.2.2 was revised to include more information to clarify that the deviation does not impact the applicability of the methodology. In fact, the revision is minimal and presents small variations in the criteria defined by BL-UP in the establishment of the LK and RRD. It can be concluded that the documented changes to the PA and LK areas do not result in noncompliance to the BL-UP module requirements, other than those methodology deviations already approved at validation and documented in Section 2.6 of the PD. To guarantee full transparency of this statement, the project team is providing to the VVB the revised assessment of the methodology criteria. The file Finding 2019.16.docx has a broad explanation, justification and results of the implemented changes and the file Justification_PA_RRD_LK_Cacheu_Cantanhez_UPDATED.xlsx has all data and calculations performed. Both files can be assessed at 20191111_FINDINGS > _16_NIR in the provided Dropbox link.

Auditor Response: Through review of the documentation provided, the audit team has reasonable assurance that no new methodology deviations have been invoked by the change in project area and leakage belts, above and beyond those methodology deviations already approved at validation. As documented in the file "Finding 2019.16", the settlement density in the Cacheu leakage belt is slightly outside the required thresholds established by BL-UP. However, this is not a new methodology deviation because it is simply a new expression of the same general trend that the leakage belts are slightly outside the range of parameters set by BL-UP, for the reasons that were approved as a methodology deviation at validation. Therefore, the audit team agrees that the project remains in conformance with the methodology to the extent that such conformance was maintained at validation, and a revised version of the project description is not necessary.

NCR 17 Dated 25 Oct 2019**Standard Reference:** LK-ASU V1.1**Document Reference:** Monitoring_REDD-GB_v02.0

Finding: Section 6.1 of LK-ASU states, in respect of parameter C(LB), that "As forests in the leakage belt are deforested, the area weighted average must be recalculated at each monitoring period." The value for parameter C(LB) is given as 126.64 in Section 3.2 and Table 26 of the monitoring report. Through comparison of the "Leakage Emissions" worksheet in the "MONITORING_GB-REDD_ER_20180105" and "MONITORING_GB-REDD_ER_20190819" workbooks, the audit team has confirmed that this is an out-of-date value because it does not take into account the change in the area of the leakage belt in response to NIR 14.

Project Personnel Response: The emission reduction worksheet was revised (MONITORING_GB-REDD_ER_20191111.xlsx) and the values of forest cover per stratum in the Leakage Belt updated according to the forest cover revision (NIR 14) and C(LB) were updated. The revised value of C(LB) is 97.50. The parameter was also updated on the relevant sections of the Monitoring Report (Monitoring_REDD-GB_v03.0.docx).

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.0", the audit team can confirm that an updated calculation of C(LB) is provided in Section 3.2 and what is now Table 27. The information presented is consistent with the calculations in the table beginning in cell B86 of the "Leakage Emissions" worksheet in the "MONITORING_GB-REDD_ER_20191111" workbook, as well as the audit team's independent calculations. Therefore, the non-conformity has been resolved.

NCR 18 Dated 25 Oct 2019**Standard Reference:** X-STR V1.1**Document Reference:** Monitoring_REDD-GB_v02.0

Finding: Section 6.2 of X-STR indicates that parameter A(i) is monitored "At each monitoring event". The values for this parameter in Section 3.2 of the monitoring report are out-of-date value because they do not account for the change in the area of the project area in response to NIR 14.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v03.0.docx) was revised to reflect the changes.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.0", the audit team can confirm that an updated calculation of A(i), representing the condition of the project area as of the beginning of the monitoring period, is provided in Section 3.2, and that the information is consistent with that presented in Table 9 of the updated forest mapping report, entitled "FMReport_11.11.2019", as well as with the audit team's independent calculations. Therefore, the non-conformity has been resolved.

NCR 19 Dated 25 Oct 2019

Standard Reference: M-MON V2.1, Section 5, Step 3

Document Reference: Forest Mapping Report_10.10.2017; Finding_NIR-14; Monitoring_REDD-GB_v02.0

Finding: M-MON requires the following: "The methodological procedures used in steps 1-2 above must be documented. In particular, the following information must be provided when remotely sensed data are used..." The methodological procedures followed for the original monitoring that occurred prior to the start of verification are very thoroughly documented in the file "Forest Mapping Report_10.10.2017". However, this document was produced prior to the myriad changes that took place in response to NIR 14 and, as such, is significantly out-of-date. A separate document, entitled "Finding_NIR-14", has been provided to the audit team and provides a description of the steps undertaken in response to NIR 14. However, clear and comprehensive documentation of the entire monitoring process does not currently exist, since the document "Finding_NIR-14" is limited in scope to describe the specific actions taken in response to NIR 14 (e.g., it does not include "Type, resolution, source and acquisition date of the remotely sensed data (and other data) used").

As a separate but related issue, some of the references to the "Forest Mapping Report_10.10.2017" document in the monitoring report are out of date. For example, Figure 25 of the document in question is referenced as providing the "Leakage Belt Forest Cover Monitoring Map" in Section 3.2 of the monitoring report; the map in Figure 25 of the document in question is now out-of-date.

Project Personnel Response: An updated Forest Mapping Report (FMReport_11.11.2019.pdf) and a detailed Metadata Archive (Structure_FMdatabase_11.11.2019.xlsx) are being provided to SCS with all methodological procedures, including data type, resolution, sources and acquisitions data. The Monitoring Report (Monitoring_REDD-GB_v03.0.docx) was revised to reflect the changes, particularly, the maps were updated and the reference to the revised Forest Mapping Report in Section 3.2 of the Monitoring Report.

Auditor Response: Through review of the revised forest mapping report, entitled "FMReport_11.11.2019", the audit team can confirm that it provides all of the information on the "methodological procedures" as required by M-MON. However, references to the prior document, entitled "Forest Mapping Report_10.10.2017", continue to exist in the version of the monitoring report entitled "Monitoring_REDD-GB_v03.0". For example, in the parameter table for the parameter A(DefPA,i,u,t), the following information continues to be provided: "For more details, please see Table 12 and Figure 5 of Forest Mapping Report_10.10.2017". Therefore, the non-conformity has not been fully resolved.

Project Personnel Response 2: The Monitoring Report (Monitoring_REDD-GB_v03.1.docx) was revised to reflect the changes. All references were corrected to tables and images numbers and the new version of the Forest Mapping Report (FMReport_11.11.2019.pdf).

Auditor Response 2: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.1", the audit team can confirm that the revised forest mapping report, entitled "FMReport_11.11.2019", is now referenced exclusively and that references to the prior version of the forest mapping report have been removed. Therefore, the non-conformity has been fully resolved.

NCR 20 Dated 25 Oct 2019

Standard Reference: VCS Standard V4.0, Section 3.4.3; VCS Monitoring Report Template V3.4, Section 4.1

Document Reference: Monitoring_REDD-GB_v02.0

Finding: The VCS Standard requires the following in Section 3.4.3: "The project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template."

The VCS Monitoring Report Template requires the following in Section 4.1: "Quantify the baseline emissions and/or removals, providing sufficient information to allow the reader to reproduce the calculation." The quantification of baseline emissions is calculated with a high degree of detail in the monitoring report. However, the following information is out-of-date, as it does not take into account the revisions carried out in response to NIR 14 and documented in "Finding_NIR-14":

1. The confusion matrix in Table 10, which is not consistent with the results in Tables 2-3 of "Finding_NIR-14"
2. The stratum areas in Table 13, which do not sum to the new project areas indicated in Table 1 of "Finding_NIR-14"

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v03.0.docx) was revised to reflect the changes and Tables 10 and 13 were updated.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.0", the audit team can confirm that the stratum areas indicated in Table 13 are now equivalent to the revised stratum areas reported in the updated forest mapping report, entitled "FMReport_11.11.2019". In addition, it appears that a good-faith effort has been undertaken to update the confusion matrix in Table 10 for consistency with Table 15 in "FMReport_11.11.2019". However, the sum of pixels predicted as forest is still reported as 392 in Table 10. In addition, it is stated above Table 10 that "Map accuracy assessment was performed using an independent dataset, including in situ observations, with field data collected in 2007, 2008, 2009 and 2010 (Forest class) and analysis of very high-resolution data (Non-Forest class)." This is inconsistent with the information provided by project personnel, which suggested that the accuracy assessment was primarily performed using very high resolution imagery as accessed through Google Earth (for all classes, not just the non-forest class). Therefore, the non-conformity has not been fully resolved.

Project Personnel Response 2: Section 4.1.3 of the Monitoring Report (Monitoring_REDD-GB_v03.1.docx) was revised to reflect the changes. Both the Confusion Matrix and the text explaining the validation procedure were revised to guarantee consistency with the applied method.

Auditor Response 2: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.1", the audit team can confirm that Table 10 has been corrected for consistency with Table 15 in the revised forest mapping report, entitled "FMReport_11.11.2019". In addition, the description of the accuracy assessment process in Section 4.1.3 has been made corrected. Therefore, the non-conformity has been fully resolved.

NCR 21 Dated 25 Oct 2019

Standard Reference: VCS Standard V4.0, Section 3.4.3; VCS Monitoring Report Template V3.4, Section 4.2

Document Reference: Monitoring_REDD-GB_v02.0

Finding: The VCS Standard requires the following in Section 3.4.3: "The project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template."

The VCS Monitoring Report Template requires the following in Section 4.2: "Quantify project emissions and/or removals providing sufficient information to allow the reader to reproduce the calculation." The quantification of project emissions is calculated with a high degree of detail in the monitoring report. However, the values provided for $A(\text{defPA}, u, i, t)$ and $A(\text{defLB}, u, i, t)$ in Table 18 are not quite correct because they represent the cumulative deforestation during the monitoring period (i.e., over the span of a five-year period), whereas the parameters $A(\text{defPA}, u, i, t)$ and $A(\text{defLB}, u, i, t)$, as used in M-MON, are intended to pertain to "time t", with "t" being defined as "1, 2, 3, ... t* years elapsed since the start of the REDD project activity".

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v03.0.docx) was revised to reflect the changes and the Table presenting the data for $A(\text{defPA})$ and $A(\text{defLB})$ are now reflecting year-by-year information. Please be aware that after the update of the numbering in the Monitoring Report (v3.0) the current table number is Table 19.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.0", the audit team can confirm that the annualized deforestation values for the monitoring period are now provided in what is now Table 19 alongside the cumulative values for the monitoring period. Therefore, the non-conformity has been resolved.

NCR 22 Dated 25 Oct 2019

Standard Reference: VCS Standard V4.0, Section 3.4.3; VCS Monitoring Report Template V3.4, Section 4.3

Document Reference: Monitoring_REDD-GB_v02.0

Finding: The VCS Standard requires the following in Section 3.4.3: "The project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template."

The VCS Monitoring Report Template requires the following in Section 4.3: "Quantify leakage emissions providing sufficient information to allow the reader to reproduce the calculation." There are a number of issues with the presentation of information regarding leakage emissions in Section 4.3. While some of them pre-dated the revisions undertaken in response to NCR 1 and NIR 14, some have been exacerbated by the revisions. Given that an up-to-date quantification of carbon stock changes in the leakage belt under the baseline scenario is no longer contained in the project description, it becomes very important to provide updated information in the monitoring report.

1. Unlike the quantification of carbon stock changes within the project area under the baseline scenario, as documented in Section 4.1, the quantification of carbon stock changes within the leakage belt under the baseline scenario is not presented with sufficient information to allow the reader to reproduce the calculation. A description of mapping processes, accuracy assessment, estimation of the annual areas of unplanned baseline deforestation and estimation of baseline carbon stocks and carbon stock changes is not provided. While it is understood that the information in presented in Section 4.1 has bearing on some of these topics, a clear reference to Section 4.1 is not provided.
2. Similarly, unlike the quantification of carbon stock changes within the project area under the project scenario, as documented in Section 4.2, the quantification of carbon stock changes within the leakage belt under the project scenario is not presented with sufficient information to allow the reader to reproduce the calculation.
3. Regarding emissions attributable to activity-shifting leakage outside the leakage belt, the information in Section 4.3 follows the ex-ante procedure set out in Sections 5.4.1-5.4.5 of LK-ASU. It does not follow the ex-post procedure set out in Section 5.4.6 of the same document. Therefore, it does not present an accurate depiction of the process for quantifying leakage emissions outside the leakage belt.

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v03.0.docx) was revised to reflect the changes. Particularly, the Ex Post quantification requirements in Section 5.4.6 are now fully applied. Leakage remains negative, and therefore is considered zero for emission reduction quantification purpose.

Auditor Response: The audit team reviewed Section 4.3 of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.0", to determine whether this finding could be closed. The audit team's feedback regarding this matter is as follows:

1. A clear reference to Section 4.1 has been provided, so this issue is resolved.
2. It remains the case that the quantification of carbon stock changes within the leakage belt under the project scenario is not presented with sufficient information to allow the reader to reproduce the calculation, as no discernable modification to this portion of Section 4.3 has been made. The monitoring report states that "The next table (Table 22) details the yearly net GHG emissions within the LK in the project case in the first monitoring period". However, no information regarding the calculation of the values in Table 22 is provided.
3. Through review of the information provided, it appears that a description of the ex-post quantification of leakage emissions from outside the leakage belt has been provided. Therefore, this item is resolved.

However, as item 2 has not been fully responded to, the non-conformity has not been resolved.

Project Personnel Response 2: The Monitoring Report (Monitoring_REDD-GB_v03.1.docx) was revised to reflect the changes. Section 4.3 now clearly explains that the quantification follows the procedures and datasets presented in section 4.2 of the monitoring report. Leakage emission in the project case ($\Delta CP, LB$) is equal to the area deforested in the Leakage Belt multiplied by the emission per unit area. The deforested area in Leakage Belt in the project case ($A(DefLB, u, i, t)$) and the emissions per unit area ($C(AB_{tree}, i)$ and $C(BB_{tree}, i)$) are presented in Table 19.

Auditor Response 2: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.1", the audit team can confirm that a complete description of the process for quantifying leakage emissions is now provided in Section 4.3. Therefore, the non-conformity has been resolved.

NCR 23 Dated 25 Oct 2019

Standard Reference: VCS Standard V4.0, Section 3.2.9; VCS Non-Permanence Risk Report Template, V3.1

Document Reference: Monitoring_REDD-GB_v02.0; MONITORING_GB-REDD_ER_20190819

Finding: The VCS Standard requires the following in Section 3.2.9: "The non-permanence risk report shall be prepared using the VCS Non-Permanence Risk Report Template, which may be included as an annex to the project description or monitoring report, as applicable, or provided as a stand-alone document." The VCS Non-Permanence Risk Report Template requires the following in Section 4.2: "Include in this calculation the number of buffer credits to be deposited in the AFOLU pooled buffer account based on the change in carbon stock only. Include any deductions for the AFOLU pooled buffer account, if applicable, to determine the number of GHG credits eligible to be issued as VCUs." While information responsive to this requirement is provided in Section 4.2 of Appendix 1 to the monitoring report, the provided information is not consistent with that shown in the table beginning at cell B27 of the worksheet "Emission Reduction" in the workbook "MONITORING_GB-REDD_ER_20190819".

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v03.0.docx) was revised to reflect the changes.

Auditor Response: Through review of the revised monitoring report, entitled "Monitoring_REDD-GB_v03.0", the audit team can confirm that the calculation of the number of buffer credits to be deposited in the AFOLU pooled buffer account has been revised in Section 4.2 of Appendix 1, and this calculation is consistent with the information provided in the "Emission Reduction" worksheet in the calculation workbook entitled "MONITORING_GB-REDD_ER_20191111". Therefore, the non-conformity has been resolved.

NCR 24 Dated 4 Dec 2019

Standard Reference: VCS Standard V4.0, Section 3.4.3; VCS Monitoring Report Template V3.4, Section 1.8

Document Reference: Monitoring_REDD-GB_v03.1

Finding: This finding was originally issued by email dated 4 December 2019.

The VCS Standard requires the following in Section 3.4.3: “The project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.”

The VCS Monitoring Report Template requires the following in Section 1.8: “Include also the title and version number of any tools applied by the project.” The monitoring report indicates the version number of the AFOLU Non-Permanence Risk Tool (T-BAR) as being Version 3.3. However, with the release of the recent VCS Version 4 update, the AFOLU Non-Permanence Risk Tool was updated to Version 4.0.

Project Personnel Response: [A response has been provided outside the cover of the findings workbook.]

Auditor Response: In response to this finding, the audit team was provided with a revised monitoring report, entitled "Monitoring_REDD-GB_v03.2", in which Version 4.0 of the AFOLU Non-Permanence Risk Tool is correctly indicated. Therefore, the non-conformity has been resolved.

NCR 25 Dated 5 Dec 2019

Standard Reference: AFOLU Non-Permanence Risk Tool V4.0, Section 2.3.3(1)

Document Reference: Monitoring_REDD-GB_v03.2

Finding: This finding was originally issued by email dated 5 December 2019.

Section 2.3.3(1) of the AFOLU Non-Permanence Risk Tool requires that “A governance score (of between -2.5 and 2.5) shall be calculated from the mean of Governance Scores across the six indicators of the World Bank Institute’s Worldwide Governance Indicators (WGI)¹, averaged over the most recent five years of available data.” The non-permanence risk report included as Appendix 1 to the monitoring report indicates the following in Section 2: “The Worldwide Governance Indicator (WGI) was used to calculate the aggregate governance score. GB totaled a negative score of -1.02. The file RISK_REDD_20140622.xlsx presents (worksheet WGI_GB) the detailed calculation of the index.”

The governance score reported in the monitoring report is not consistent with the score recalculated by the audit team for the years 2014-2018, which were the most recent five years of available data as of 5 December 2019. In addition, the file name of the document “RISK_REDD_20140622.xlsx” suggests that the governance score has not been recalculated since validation. As the non-permanence risk analysis is always forward-looking (per Section 2.1.1 of the AFOLU Non-Permanence Risk Tool, “...projects analyzing risk at a subsequent verification event shall assess the potential transient and permanent losses for the next 100 years based on the conditions present and available at the time of risk analysis”), the governance score must be recalculated at each verification event.

Project Personnel Response: [A response has been provided outside the cover of the findings workbook.]

Auditor Response: In response to this finding, the audit team was provided with a revised monitoring report, also entitled "Monitoring_REDD-GB_v03.2", in which the calculation of the governance score was updated to include the most recent five years of available data. The governance score reported in the monitoring report is equivalent to the value calculated by the audit team. Therefore, the non-conformity has been resolved.

NCR 26 Dated 19 Dec 2019

Standard Reference: VCS Standard V4.0, Section 3.4.3; VCS Monitoring Report Template V3.4, Section 2.2.1; M-MON V2.1

Document Reference: Monitoring_REDD-GB_v03.2

Finding: This finding was originally issued by email dated 4 December 2019.

The VCS Standard requires the following in Section 3.4.3: "The project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template."

The VCS Monitoring Report Template requires the following in Section 2.2.1:

"Describe and justify any methodology deviations applied during this monitoring period. Include evidence to demonstrate the following:

- The deviation does not negatively impact the conservativeness of the quantification of GHG emission reductions or removals.
- The deviations relates only to the criteria and procedures for monitoring or measurement, and do not relate to any other part of the methodology."

The second project description deviation described in Section 2.2.2 of the monitoring report is also a methodology deviation, because it deviates from M-MON, which states in Step 2 of Section 5 that "The PRA must to be repeated every 2 years." However, this methodology deviation has not been described and justified in Section 2.2.1 of the monitoring report as required by the VCS Monitoring Report Template .

Project Personnel Response: The Monitoring Report (Monitoring_REDD-GB_v3.3.docx) was updated to include the deviation as a Methodology Deviation.

Auditor Response: In response to this finding, the audit team was provided with a revised monitoring report, also entitled "Monitoring_REDD-GB_v03.3", in which the methodology deviation in question has been appropriately described and justified in a manner that follows all requirements of the VCS Monitoring Report Template. Therefore, the non-conformity has been resolved.