

VALIDATION REPORT FOR THE COMMUNITY BASED AVOIDED DEFORESTATION PROJECT IN GUINEABISSAU



Document Prepared By Zane Haxtema

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Summary:

This report describes the validation audit of the Community Based Avoided Deforestation Project in Guinea-Bissau ("the project"), a Reduced Emissions from Deforestation and Degradation (REDD) project located in the Guinea-Bissau, that was conducted by SCS. The purpose of the validation audit was to conduct an independent assessment of the project to determine whether the project complies with the VCS rules. The criteria for the validation audit was the VCS Version 3. The validation audit was performed through a combination of document review, interviews with relevant personnel and on-site inspections. A total of 124 findings were issued during the validation process. The project complies with all of the validation criteria, and the assessment team has no restrictions or uncertainties with respect to the compliance of the project with the validation criteria.



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1 INTRODUCTION

1.1 Objective

Per Section 5.1.1 of the VCS Standard, SCS carried out an independent assessment of the project by a validation/verification body to determine whether the Community Based Avoided Deforestation Project in Guinea-Bissau ("the project"), as described in its project description (PD), complies with the VCS rules. Per Section 2.1.1 of the VCS Validation & Verification Manual, additional objectives of the validation engagement were to conduct an assessment of the PD wherein the following were assessed:

- Project conformance to VCS rules;
- Project conformance to the applied methodology, including the procedure for the demonstration of additionality specified in the methodology; and
- Likelihood that methods and procedures set out in the project description will generate verifiable GHG data and information when implemented.

The other objective of the verification engagement was to assess the non-permanence risk analysis, as required by Section 3.7.3 of the AFOLU Requirements.

1.2 Scope and Criteria

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

- The project and 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; and
- The project crediting period, as discussed in Section 3.1.4 of this report.

Per Section 5.3.1 of the VCS Standard, the criteria for validation was the VCS Version 3, including the following documents:

- VCS Program Guide
- VCS Standard
- VCS AFOLU Requirements
- VCS AFOLU Non-Permanence Risk Tool

Unless otherwise indicated, the assessment was performed against the most recent version of the relevant VCS guidance document. It should be noted that, while the project complies with the prevailing versions of the VCS guidance documents as of the issuance of this report, the assessment criteria changed during the course of the provision of assessment services, and therefore some findings (described in Section 2.5 below) refer to previous versions of various VCS guidance documents.

1.3 Level of Assurance

Per Section 5.3.1 of the VCS Standard, the level of assurance of this report is reasonable.



1.4 Summary Description of the Project

The project seeks to avoid deforestation within two national parks, Parque Natural dos Tarrafes do Rio de Cacheu National Park ("Cacheu National Park") and Parque Nacional de Cantanhez ("Cantanhez National Park"), within the country of Guinea-Bissau.

2 VALIDATION PROCESS

2.1 Method and Criteria

The validation was performed through a combination of document review, interviews with relevant personnel and on-site inspections, as discussed in Sections 2.2 through 2.4 of this report. At all times, the project was 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 that the project was in full conformance to all requirements.

Prior to conducting site visit activities and meetings with project personnel, the audit team created a sampling plan to determine the areas with the greatest risk of material error. The audit team then created a validation agenda that took the sampling plan into account. The sampling plan was amended, as needed, where new risks or material concerns that could potentially lead to errors, omissions and misrepresentations were identified.

2.2 Document Review

The project description (version 01.12, dated 13 February 2015) was carefully reviewed for conformance to the validation criteria. The following additional documentation, provided by project personnel in support of the aforementioned documents, was also reviewed by the audit team:

| Document | File Name | Ref. |
|---|---|------|
| KML file showing delineation of project area in Cacheu National Park | PA_Cacheu | /1/ |
| KML file showing delineation of project area in Cantanhez National Park | PA_Cantanhez | /2/ |
| Screenshot showing a page from the World Bank's intranet as evidence of closure of the Coastal and Biodiversity Management Project in Guinea-Bissau | SCREEN_CBMP | /3/ |
| Internal regulation for Cacheu National Park | REGULAMENTO INTERNO DO PNTC APROVADO EM 2011 | /4/ |
| Internal regulation for Cantanhez National Park | Regulamento interno do PNCJOSOCO FINAL Abril 2014 | /5/ |



| Document | File Name | Ref. |
|---|----------------------------|------|
| Bulletin with text of "land law" (Lei No. 5/98) | Lei_5-98_Lei_terra_BO | /6/ |
| Bulletin with text of "protected area law" (Lei No. 3/97) as revised in 2011 | Lei-Quadro das AP's - 2011 | /7/ |
| Bulletin with text of decree creating Cacheu National Park (Lei No. 12/2000) | Decreto Cacheu | /8/ |
| Bulletin with text of decree creating Cantanhez National Park (Lei No. 14/2011) | Decreto Cantanhez | /9/ |
| KML file showing delineation of Cacheu National Park boundary | Cacheu_park | /10/ |
| KML file showing delineation of Cantanhez National Park boundary | Cantanhez_park_201305 | /11/ |
| Soils map for Guinea-Bissau, produced by Teixeira (1962) | solosGB_Teixeira1962 | /12/ |
| "Field Mission Report" from participatory rural appraisal field mission, 8 February to 2 March 2013 | Finding 2012.35 - PRA | /13/ |
| Shapefile showing delineation of reference region for Cacheu National Park | RRD_Cacheu | /14/ |
| Shapefile showing delineation of reference region for Cantanhez National Park | RRD_Cantanhez | /15/ |
| Shapefile showing delineation of project area in Cacheu National Park | PA_Cacheu | /16/ |



| Document | File Name | Ref. |
|--|--|------|
| Shapefile showing delineation of project area in Cantanhez National Park | PA_Cacheu | /17/ |
| Workbook containing calculation of minimum required size of reference region and leakage belt | Areas_PA_RRD_LK_Cacheu_Cantanhez | /18/ |
| Workbook containing calculations pertaining to conformance with Section 5, Steps 1.1.1.1(b)-(c) and 1.1.3(d)-(e) of BL-UP | Justification_PA_RRD_LK_Cacheu_Cantanhez | /19/ |
| "Assessment of REDD Baseline Scenarios in Guinea-Bissau Revision and Update" (updated July 2012) | WB_revisionupdate_Final_Report_v2 | /20/ |
| Letter from Luis Ulundo Mendes, General Director of Forests and Fauna (within Ministry of Agriculture) of Guinea-Bissau, attesting to absence of planned deforestation within reference region (dated 13 August 2013) | Declara ç ão DGFF-REDD* | /21/ |
| Shapefile showing delineation of leakage belt for Cacheu National Park | LK75_Cacheu | /22/ |
| Shapefile showing delineation of leakage belt for Cantanhez National Park | LK_Cantanhez | /23/ |
| Shapefile showing navigable rivers | Navigable_Rivers | /24/ |
| Shapefile showing roads | Roads | /25/ |
| "Memorandum and Recommendation of the President of the International Development Association to the Executive Directors on Assistance to the Republic of Guinea-Bissau Under the Enhanced Heavily Indebted Poor | HIPC MOP IDA11 | /26/ |



| Document | File Name | Ref. |
|--|--|------|
| Countries Initiative and the Multilateral Debt Relief Initiative" (Report No. 57893-GW; dated 23 November 2010) | | |
| Letter from Agostinho da Costa, Secretary of State of Environment and Tourism (dated 17 June 2014) | GAB_SEC_EST | /27/ |
| Letter from Nelson Gomes Dias, Head of the Bureau Program for the International Union for Conservation of Nature (dated 19 June 2014) | IUCN_STATEMENT | /28/ |
| Land-cover classification for 2002 | GB_10class_LC_2002_MaskedWater_3class_Filtere d | /29/ |
| Land-cover classification for 2010 | GB_10class_LC_2010_MaskedWater_3class_Filtere | /30/ |
| Workbook showing accuracy assessment results | Confusion_Matrix | /31/ |
| Workbook containing a list of accuracy assessment sample points | Confusion_Matrix_Raw_Data | /32/ |
| Workbook containing calculation of baseline emissions | WB2 - C assessment and emission baseline v2.3 20140722 | /33/ |
| FIAL evaluation report (2011) | Relatório final Avaliação Independente FIAL 2011 | /34/ |
| Workbook containing calculation of exante emission reductions | GB-REDD_ER_v6 | /35/ |
| Curriculum vitae for Alfredo Simão da Silva, General Director of Instituto da Biodiversidade e das Áreas Protegidas da República da Guiné-Bissau (IBAP) | CV-A_SIMAO_fr | /36/ |



| Document | File Name | Ref. |
|--|---|------|
| Curriculum vitae for Justino Blai, Program Manager of IBAP | CV-J_Biai_fr | /37/ |
| Financial model workbook | RISK_REDD_20140622 | /38/ |
| Financial study on costs of management of protected areas in Guinea-Bissau | Vreugdenhil_2007_COST_IBAP | /39/ |
| Meeting minutes for meeting approving Cantanhez internal regulation | Acta da reuni ⊢úo Cantanhez FINAL FINAL2* | /40/ |
| Signature list for meeting approving Cantanhez internal regulation | Assinantes da Acta CG Cantanhez | /41/ |

^{*}The file names give for documents /21/ and /40/ are as they appear on the computers in possession of the audit team. The file names in question were likely intended to display differently, and may display as indicated above due to an issue with the character set installed on the computers in possession of the audit team.

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 the project and its compliance with the validation criteria. Some meetings were held concurrently with site inspections (see Section 2.4 below). Other meetings were held remotely via Skype connection.

The following personnel associated with the project proponent and/or other entities involved in the project were interviewed.

| Individual | Affiliation | Role | Date(s) Interviewed |
|------------------------|---|------------------|---------------------------------------|
| Alfredo Simão da Silva | Instituto da Biodiversidade e das Áreas Protegidas da República da Guiné- Bissau (IBAP) | General Director | 13 November 2012, 18 February 2013 |



| Individual | Affiliation | Role | Date(s) Interviewed |
|---------------------|-------------|---|---------------------------------------|
| Justino Blai | IBAP | Program Manager | 13 November 2012, 18 February 2013 |
| Leonildo A. Cardoso | IBAP | Planning Manager | 13 November 2012 |
| Fernando Biag | IBAP | Director, Cacheu National Park | 18-22 February 2013 |
| João Sousa Cordeiro | IBAP | Fundo de Iniciativas Ambientais Locais (FIAL) Coordinator | 18 February 2013 |
| Mauricio Ensumbo | IBAP | Coordinator for Community Sustainable Development | 18 February 2013 |
| Ana Cristina Vaz | IBAP | Communications Officer | 18 February 2013 |

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. All interviews were held via telephone. The following personnel not associated with the project proponent and/or implementing partner were interviewed.

| Individual | Affiliation | Role | Date(s) Interviewed |
|----------------------|---|---------------------------------------|---------------------|
| Tanya Yudelman-Bloch | World Bank | Task Team Leader/CZM Specialist | Throughout audit |
| Henrique Pereira | WayCarbon | Managing Director | Throughout audit |
| Joana B. Melo | Portuguese Tropical Research Institute (IICT) | Research Assistant / Scholar | Throughout audit |
| João Carreiras | IICT* | Research Fellow* | Throughout audit |
| Maria J. Vasconcelos | IICT | Research Fellow | Throughout audit |
| Felipe M. Casarim | Winrock International | Carbon Specialist | Throughout audit |



| Individual | Affiliation | Role | Date(s) Interviewed |
|--------------------------------|-------------------------|---------------------------|---------------------|
| Timothy Pearson | Winrock International | Senior Program Officer | Throughout audit |
| Viriato Luis Soares Cassaná | Ministry of Environment | Forest Technician | 18-22 February 2013 |
| António Pansau N'Dami | Self-employed | N/A | 18-22 February 2013 |

^{*}The information given for the affiliation and role for Mr. Carreiras was correct at the time that he was last interviewed by the audit team (as of the issuance of this report, Mr. Carreiras holds the position of Research Associate at the University of Sheffield).

Residents of the following villages located within and near Cacheu and Cantanhez National Parks (termed "local residents" within this report) were also interviewed:

- Farim
- Jemberem
- Mejio
- Bolihados Dois
- Campada Namoante
- Cacheu
- Cajebe
- Jopa

An unidentified lawyer was also interviewed and provided assistance with legal determinations made by the audit team.

2.4 Site Inspections

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

- Ensure that the geographic area of the project, as reported in the project description and the
 accompanying KML files for Cacheu National Park /1/ and Cantanhez National Park /2/, is in
 conformance with Section 3.11.1 of the VCS Standard;
- Select samples of data from on-the-ground measurements for validation in order to meet a
 reasonable level of assurance and to meet the materiality requirements of the project, as required
 by Section 5.1.3 of the VCS Standard;
- Perform a risk-based review of the project area to ensure that the project is in conformance the eligibility requirements of the VCS rules and the applicability conditions of the methodology; and
- Perform a risk-based review of the project area to ensure that the project conforms to all other requirements of the VCS rules and the methodology.

In fulfilment of the above objectives, the audit team performed an on-site inspection of the project area and nearby locations on the dates 18 February 2013 through 22 February 2013. 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 design of the project;
- Interviewed project personnel (see Section 2.3 of this report) for the purpose of seeking evidence of conformance with respect to the specific requirements of the methodology and the VCS rules;
- Interviewed residents of communities near the project boundary (termed "local residents" within this report) to confirm the claims of the project proponents with respect to the extent of community engagement, the determination of the baseline scenario and the demonstration of additionality.
- Viewed project personnel conducting re-measurements on inventory plots (project personnel
 were asked to replicate the measurement protocol that was applied, for the purpose of providing
 the audit team with reasonable assurance that the measurements were collected to appropriate
 quality standards)

2.5 Resolution of Findings

Any potential or actual material discrepancies identified during the assessment process were resolved through the issuance of findings. The types of findings issued by SCS were characterized as follows:

Non-Conformity Report (NCR): An NCR signified a material 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 validation statement. A total of 91 NCRs were issued during the validation engagement.

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 validation statement. A total of 32 NIRs were issued during the validation engagement.

Opportunity for Improvement (OFI): An OFI indicated an area that should be monitored or ideally, improved upon. OFI's were considered to be an indication of something that could become a non-conformity if not given proper attention, and were sometimes issued in the case that a non-material discrepancy was identified. OFIs were considered to be closed upon issuance. A total of one OFI was issued during the validation engagement.

All findings issued by the audit team during the validation process have been closed. In accordance with Section 5.3.6 of the VCS Standard, all findings issued during the validation process, and the impetus for their closure, are described in Appendix A of this report.

2.6 Forward Action Requests

No formal forward action requests were raised during the validation. However, the attention any validation/verification bodies providing verification services during the initial verification audit is drawn to methodology deviations 2 and 3, as described in Section 2.6 of the PD, which will require action to be undertaken prior to the initial verification audit.



3 VALIDATION FINDINGS

3.1 Project Details

The audit team can confirm, as further justified below, that the description in the project description is accurate, complete, and provides an understanding of the nature of the project.

3.1.1 Project type, technologies and measures implemented, and eligibility of the project

The project exists under sectoral scope 14 (AFOLU). The project falls under the category of Reduced Emissions from Deforestation and Degradation (REDD), as described in Section 4.2 of the AFOLU Requirements. Discussion regarding the project's eligibility under the VM0007 methodology (and, thus, as a REDD project under the VCS Program, as the VM0007 methodology is a methodology for such projects) can be found in Section 3.2.1 below. The technologies and measures implemented, as described in Section 2 of the PD, are likewise eligible under the VCS Program.

3.1.2 Project proponent and other entities involved in the project

The project proponent has been identified in Section 1.3 of the project description as IBAP. The audit team agrees with the identification of IBAP as the project proponent. IBAP is the entity charged with oversight and management of the Cacheu and Cantanhez National Parks (see Section 3.1.9.1 below for discussion of IBAP's authority to carry out the project activities within the parks), in which the project is located. The audit team confirmed, through interviews with IBAP personnel, the active engagement of IBAP with the project. The audit team agrees that IBAP is the organization that has overall control and responsibility for the project.

3.1.3 Project start date

The project start date is given in Section 1.5 of the PD as 31 March 2011. The audit team has been provided with evidence, in the form of a screenshot showing a page from the World Bank's intranet, showing that the loan associated with the Coastal and Biodiversity Management Project (CBMP) was fully disbursed and closed on 31 March 2011. This date was independently substantiated by the audit team through review of page i of the World Bank document "Implementation Completion and Results Report (IDA-39970 TF-90557 TF-53348) on an International Development Association Credit in the Amount of SDR 2.1 million (US\$ 3.0 Million Equivalent) and a Global Environment Facility Grant in the Amount of US\$ 4.8 million to the Republic of Guinea-Bissau for a Coastal and Biodiversity Management Project" (Report No. ICR00001684, dated 26 October 2011; accessed 11 February 2015 from http://transparentsea.co/images/5/57/WB GB end of project document.pdf).

The closure of this loan represented the end of the major source of non-REDD funding for the project activities, and thus marks the beginning of project activities that lead to GHG emission reductions (since the activities prior to this date had been equivalent to the activities under the baseline scenario, and so did not lead to GHG emission reductions). Therefore, the audit team agrees that it is appropriate for this date to signify the date on which "the project began generating GHG emission reductions or removals" (VCS Standard, Section 3.7.1) and "the date on which activities that lead to the generation of GHG emission reductions or removals are implemented" (AFOLU Requirements, Section 3.2.1).

Therefore, the audit team agrees that the project start date complies fully with the VCS rules.



3.1.4 Project crediting period

The project crediting period, as stated in Section 1.6 of the PD, is 20 years, beginning on the project start date. This period complies with all requirements of Section 3.8 of the VCS Standard, as the project crediting period start date is not before 1 January 2002 (Section 3.8.2) and the crediting period is between 20 and 100 years (Section 3.8.1).

The project proponent is a government entity, and the audit team agrees that various planning documents are in place to govern operation of the project area by the project proponent, and that these documents together comprise a "credible and robust plan for managing and implementing the project over the project crediting period" as required by Section 3.3.1 of the AFOLU Requirements. In particular, internal regulations have been approved for both Cacheu National Park /4/ and Cantanhez National Park /5/. Both regulations govern the day-to-day management in the two parks, including assignment of roles and responsibilities for various personnel. In addition, as documented in Section 1.8 of the PD, a plan exists for revenue to be transferred through the Bio-Guinea Foundation, an independent non-profit entity that was set up with the assistance of the World Bank (information regarding the Bio-Guinea Foundation was independently confirmed by the audit team through review of the World Bank report discussed in Section 3.1.3 above). The project activities also involve a funding mechanism, FIAL, that already has provided substantial benefits to local residents (as observed by the audit team during site inspections), thus providing, at validation, additional evidence of the long-term viability of the management structure (it is understood that the integrity of the management structure, and ability of project personnel to adequately carry out project activities, will also be assessed during future verification audits).

3.1.5 Project scale and estimated GHG emission reductions or removals

Per Section 3.9.1 of the VCS Standard, the project scale has been correctly indicated in Section 1.7 of the PD to be a "project", as its estimated annual GHG emission reductions, over the crediting period, are less than 300,000 tonnes of CO2e per year.

3.1.6 Project location

The project location is described in Section 1.9 of the PD. Through site inspections of the project area, and overview of the project area maps using GIS and Google Earth software, the audit team can confirm that the depiction given in the PD, and as shown in Figures 1 and 2, is generally correct.

3.1.7 Conditions prior to project initiation

A detailed description of conditions prior to project initiation is given in Section 1.10 of the PD. The information provided is generally consistent with the knowledge gained by the audit team during site inspections.

3.1.8 Project compliance with applicable laws, statutes and other regulatory frameworks

The project activities, as described in Section 1.8 of the PD, do not (per Section 3.1.5 of the AFOLU Requirements) involve the violation of any applicable laws. A key underlying reason for this is that IBAP has complete authority to develop and manage the project area, as discussed more fully in Section 3.1.9.1 below. During site inspections and interviews with local residents, the audit team identified no violations of applicable laws.



3.1.9 Ownership and other programs:

3.1.9.1 Right of use

The audit team agrees that the project proponent holds right of use per Section 3.11.1 of the VCS Standard, as further justified below.

As established in the preamble of the "land law" (Lei No. 5/98) /6/, all land within Guinea-Bissau is considered to belong to the state. Article 13 of the 2011 revision of the "protected area law" (Lei No. 3/97), first published in 1997 /7/, provides IBAP with authority to administer protected areas. The decrees for the Cacheu /8/ and Cantanhez /8/ National Parks specifically indicate that those areas are to be governed in accordance with the protected area law. Therefore, IBAP retains authority to administer the Cacheu and Cantanhez National Parks and, thus, the unconditional, undisputed and unencumbered right of use over the Cacheu and Cantanhez National Parks. As the project area is defined as a subset of the land within the boundaries of the Cacheu and Cantanhez National Parks, audit team can confirm that IBAP holds right of use over the entire project area. The audit team confirmed this understanding through conversations with a practicing lawyer in Guinea-Bissau.

The audit team confirmed that the project area, as defined within the project area KML files /3/ /4/, is a subset of the land within the boundaries of the Cacheu and Cantanhez National Parks through visual comparison of these products against KML files showing the boundaries of the Cacheu /10/ and Cantanhez /11/ National Parks. The audit team confirmed that the KML files showing the park boundaries were fully reflective of the legally defined areas for those boundaries, as set out in the decrees, by walking with project personnel through the entire process used to delineate the boundaries and confirming that every effort was made to follow the descriptions set out in the decrees and that any changes necessary to conform fully to the descriptions within the decrees were duly carried out.

3.1.9.2 Emissions trading programs and other binding limits

As the project does not reduce GHG emissions from activities that are included in an emissions trading program or any other mechanism that includes GHG allowance trading (as reported in Section 1.12.2 of the PD), this section is not applicable.

3.1.9.3 Other forms of environmental credit sought or received and eligible to be sought or received

As the project has not sought or received another form of GHG-related environmental credit (as reported in Section 1.12.3 of the PD), this section is not applicable.

3.1.9.4 Participation under other GHG programs

As the project is not registered under another GHG program (as reported in Section 1.12.4 of the PD), this section is not applicable.

3.1.9.5 Rejection by other GHG programs

As the project has not been rejected by any other GHG programs (as reported in Section 1.12.5 of the PD), this section is not applicable.



3.1.9.6 Eligibility criteria for grouped projects

As the project is not a grouped project, this section is not applicable.

3.1.9.7 Leakage management for AFOLU projects

The anticipated leakage management activities are outlined in Section 1.13 of the PD. From conversations with project personnel, the audit team can confirm that a high level of technical capacity exists to support the identified activities. Some of the activities under the FIAL program have already begun, and the audit team was able to confirm, during site inspections, that, in some cases, these activities have already changed the perceptions of local residents toward the remaining forested areas and led to the voluntary protection of forests outside the park boundaries (and, thus, outside the project area). The audit team hopes that, if these activities are maintained and strengthened, they will substantively decrease the leakage that might otherwise occur.

3.1.9.8 Commercially sensitive information

As commercially sensitive information has not been withheld from the PD (or withheld, in any other form, from the audit team), this section is not applicable.

3.2 Application of Methodology

3.2.1 Title and Reference

The project has applied the following:

- VCS-approved methodology VM0007 ("REDD Methodology Modules (REDD-MF)", referred to as "the methodology" in this report), V1.4
- VCS-approved tool VT0001 ("Tool for the Demonstration and Assessment of Additionality in VCS AFOLU Project Activities"), V3.0
- CDM "Tool for testing significance of GHG emissions in A/R CDM project activities", V1.0

The audit team confirmed, through review of the respective web pages for the above methodology elements (http://www.v-c-s.org/methodologies/redd-methodology-modules-redd-mf-v14, https://cdm.unfccc.int/methodologies/ARmethodologies/tools/; all accessed 11 February 2015) that the version of each methodology element referenced above was valid at the time of validation (in the case of the methodology and VT0001) or was the "latest CDM-EB approved version", as required by the methodology (in the case of the CDM tool). While the CDM website indicated above states that the CDM tool is no longer "effective", it is the tool that is required to be used by the methodology (and, therefore, its use is consistent with the VCS rules).

The justification of the choice of modules and why they are applicable to the project is provided, as required by the methodology, in the PD.

3.2.2 Applicability

The project complies with each applicability condition of the REDD-MF methodology framework, as justified below. In accordance with Section 2.2 of the VCS Project Description Template, Section 2.2 of the PD contains a description of how the project complies with each condition.



| Condition | Steps taken to assess compliance |
|---|--|
| "Land in the project area has qualified as forest at least 10 years before the project start date." | Confirmation that project area is limited to area defined as "forest" 10 years prior to project start date (as described further in Section 3.2.3.1.2 below) |
| "The project area can include forested wetlands (such as bottomland forests, floodplain forests, mangrove forests) as long as they do not grow on peat. Peat shall be defined as organic soils with at least 65% organic matter and a minimum thickness of 50 cm3. If the project area includes a forested wetlands growing on peat (e.g. peat swamp forests), this methodology is not applicable." | Assessment of professional expertise to confirm that "peat" soils are histosols; review of soils map produced by Teixeira (1962) /12/ to confirm that histosols are not depicted as occurring in Guinea-Bissau |
| "Project proponents must be able to show control over the project area and ownership of carbon rights for the project area at the time of verification." | Activities described in Section 3.1.9.1 above |
| "Baseline deforestation and baseline forest degradation in the project area fall within one or more of the following categories" | Confirmation, through site inspections and review of remote sensing products (see Section 3.2.6.1 below), that baseline activities fall under category of unplanned deforestation |
| "Baselines shall be renewed every 10 years from the project start date." | Review of PD, which contains a commitment to carry out this action |
| "All land areas registered under the CDM or under any other carbon trading scheme (both voluntary and compliance-orientated) must be transparently reported and excluded from the project area. The exclusion of land in the project area from any other carbon trading scheme shall be monitored over time and reported in the monitoring reports." | Review of VCS Project Database website (http://www.vcsprojectdatabase.org/; accessed 11 February 2015) to confirm absence of any other VCS project in Guinea-Bissau; application of understanding that REDD projects are not accepted under CDM and that risk of project having been registered under any other carbon trading scheme is exceedingly low |
| "If land is not being converted to an alternative use but will be allowed to naturally regrow (i.e. temporarily unstocked), this framework shall not be used." | Interviews with local residents during site inspections, which confirmed that common practice is to carry out a cycle with each plot of land, wherein the land is cleared and planted, used to grow food for 2-10 years, and left fallow for 20-70 years before being cleared and planted again; application of professional judgment to determine that, as areas are most typically cleared again after being first |



deforested (i.e., they are not typically allowed to naturally regrow in perpetuity), land is in fact converted to an alternative use when deforestation occurs, and is not allowed to revert back to a natural forest

"Leakage avoidance activities shall not include: Agricultural lands that are flooded to increase production (e.g. paddy rice); Intensifying livestock production through use of "feed-lots" and/or manure lagoons." Application of professional judgment and knowledge gained through site inspections and documentation of predominant agricultural practices to confirm that, while leakage avoidance activities do include activities pertaining to building and maintenance of dykes used in rice production, these dykes do not flood land but, rather, serve to control entry of seawater into fields; review of leakage management activities described in Section 1.13 of PD; interviews with project personnel and on-site observations of project activities during site inspections to confirm that leakage avoidance activities do not pertain to intensification of livestock production

"Baseline agents of deforestation shall: (i) clear the land for settlements, crop production (agriculturalist) or ranching, where such clearing for crop production or ranching does not amount to large scale industrial agriculture activities; (ii) have no documented and uncontested legal right to deforest the land for these purposes; and (iii) are either resident in the reference region (cf. section 1 below) or immigrants. Under any other condition this framework shall not be used."

Confirmation that each element of condition has been complied with, as follows:

- Interviews with local residents to confirm that clearing is not carried out for purposes of agricultural activities that could be defined, by any reasonable standard, as "large scale"
- Review of legal documentation discussed in Section 3.1.9.1 above to confirm that all land within Guinea-Bissau is in government ownership and, while individuals may hold customary and traditional use rights over certain areas of land, these rights are certainly not "uncontested" legal rights; review of internal regulations /4/ /5/ to confirm that, as discussed more fully in Section 3.2.4 below, these regulations effectively forbid deforestation within project area
- Review of "Field Mission Report" from participatory rural appraisal /13/ to confirm that, while most deforestation agents are resident in the reference region, some are immigrants



| "Where, pre-project, unsustainable fuelwood | See below regarding compliance to BL-UP module |
|--|--|
| collection is occurring within the project | conditions |
| boundaries modules BL-DFW and LK-DFW | |
| shall be used to determine potential leakage." | |
| | |

The project complies with each applicability condition of the BL-UP module, as justified below. In accordance with Section 2.2 of the VCS Project Description Template, Section 2.2 of the PD contains a description of how the project complies with each condition.

| Condition | Steps taken to assess compliance |
|---|--|
| "The module shall be applied to all project activities where the baseline agents of deforestation: (i) clear the land for settlements, crop production (agriculturalist) or ranching, where such clearing for crop production or ranching does not amount to large scale industrial agriculture activities; (ii) have no documented and uncontested legal right to deforest the land for these purposes; and (iii) are either resident in the region (reference region—cf. section 1 below) or immigrants." | See above regarding compliance to REDD-MF conditions |
| "Where, pre-project, unsustainable fuelwood collection is occurring within the project boundaries modules BL-DFW and LK-DFW shall be used to determine potential leakage". | Confirmation that each criterion in footnote 3 was met, as follows: Confirmation that, as of project start date, project area was, by definition, forested Review of "Field Mission Report" from participatory rural appraisal /13/ which documents that the vast majority of interviewees collect fuelwood from the ground or from standing dead trees; corroboration of this from interviews with local residents and observations during site inspections, which showed that a long-standing customary practice exists of collecting fuelwood from the ground or from standing dead trees and that commercial charcoal production is minimal or non-existent; application of professional judgment to confirm that the long-term existence of this practice is self-evident evidence that it ensures that "the level of" |



|--|

3.2.3 Project Boundary

Overall, the project boundary and selected sources, sinks and reservoirs are justified for the project. A further discussion of this is given below.

3.2.3.1 Spatial Boundaries

The audit team assessed the boundaries of the reference region, project area and leakage belt using the procedures described below. It should be noted that, as described in methodology deviation #4 in Section 2.6 of the PD, and discussed in further detail in Section 3.2.7 below, two distinct project area polygons were delineated (one for Cacheu National Park and one for Cantanhez National Park) and distinct reference regions and leakage belts were delineated for the two project area polygons. Each of the respective polygons identified above was individually assessed by the audit team for conformance to the validation criteria. However, in order to maintain consistency with the terminology of the methodology, the terms "reference region", "project area" and "leakage belt" will be used in the singular throughout this report.

3.2.3.1.1 Reference Region

Because location analysis was not elected, a reference region for projecting location of deforestation was not delineated. All references to the "reference region" below refer solely to the reference region for projecting rate of deforestation (termed the "RRD" by the BL-UP module).

During interviews with project personnel, the audit team undertook a detailed review of procedures used to delineate the reference region, including observation of replication of analyses, in order to assess the information system used to delineate the reference region. The audit team confirmed that the reference region, as described by the shapefiles for Cacheu /14/ and Cantanhez /15/ National Parks and maps included in the PD, is fully compliant with each requirement of Section 5, Step 1.1.1.1 of the BL-UP module, as discussed in detail below.

| Requirement | Step(s) taken to assess compliance |
|---|---|
| "The reference region for projecting rate of deforestation does not need to be contiguous with and shall not encompass the project area or the leakage belt." | Carried out independent intersection of project area shapefiles /16/ /17/ (see Section 3.2.3.1.2 below for more information on these) and reference region shapefiles /14/ /15/ in ArcGIS in order to confirm absence of overlap between these products |



| Requirement | Step(s) taken to assess compliance |
|---|---|
| "The area shall be equal to or greater than MREF" | Assessed calculation workbook used to calculate minimum required size of reference region /18/ and confirmed that calculations and inputs were correct; confirmed through interviews with project personnel that, because insufficient area exists within Guinea-Bissau to equal MREF while meeting criteria a through f (as set out in BL-UP), project personnel have taken all practicable steps to make reference region as large as possible while also conforming to criteria a through f as closely as possible; this is not, in and of itself, a methodology deviation because a deviation has been applied regarding criteria a through f specifically (see Section 3.2.7 below for more on this) |
| "The RRD can be composed of several parcels that do not have to be contiguous; however, the total area of RRD must be forested at the start of the historical reference period (section 1.2)." | Confirmed, through independent clipping operation in ArcGIS, that area delineated by reference region shapefiles /14//15/ includes only land classified as forest, as of start of historical reference period (i.e., acquisition of first Landsat imagery in 2002), by land classification analysis discussed in Section 3.2.6 below |
| "The main agent(s) of deforestation in the RRD at the start of the historical reference period must be the same as those expected to cause deforestation in the project area during the project term" | Confirmed, through site inspections, that main agents of deforestation within reference region (long-time residents who convert land to agricultural use in order to practice subsistence agriculture at start of historical reference period are same as those agents currently existing within project area |
| "Landscape factors of forest types, soil types, slope and elevation classes" | Not technically applicable, as project does not comply with this requirement (as discussed more fully in Section 3.2.7 with respect to deviation #7); however, audit team did review workbook used to carry out these calculations /19/ and process used to generate inputs to this workbook and confirm that process used to generate information provided was technically sound |
| "Transportation networks and human infrastructure, such as roads, navigable rivers and settlements, that increase the likelihood of deforestation and that exist historically in the RRD must be directly comparable to those that are expected to exist within the project area during the project term" | Same as directly above |



| Requirement | Step(s) taken to assess compliance |
|---|---|
| "Social factors having an impact on land-use change patterns within the RRD and the project area must be the same or have the same effect at the start of the historical reference period. Examples can include presence of gangs or guerillas, or the ethnic composition of local populations." | Confirmed, through site inspections, that social factors are similar between project area and reference region; confirmed, through review of reference region shapefiles /14//15/ and project area shapefiles /16//17/ against maps shown in "baseline report" /20/, that ethnic groups existing within project area in Cacheu National Park are similar to those existing within reference region near Cacheu National Park, and likewise for Cantanhez National Park |
| "Policies and regulations having an impact on land-use change patterns within the RRD and the project area must be of the same type or have an equivalent effect at the start of the historical reference period, taking into account the current level of enforcement. This means that where sub-national administrative units are governed by a different set of land-use regulations, it is necessary to ensure that the boundary of the RRD does not cross into another sub-national unit that does not have equivalent policies or regulations." | Independent review of regulatory framework as of start of historical reference period, including conversations with a lawyer in Guinea-Bissau, to confirm that same regulatory framework existed throughout Guinea-Bissau as of start of historical reference period (namely, land was and is in government ownership, per land law /6/, but customary use of land was permitted and no laws acted as constraints on deforestation); conversations with project personnel who indicated that any other protected areas within Guinea-Bissau are located outside of reference region |
| "Exclusion of planned deforestation. Areas of planned deforestation shall be excluded from the reference region boundaries where evident." | Review of a letter from the General Director of Forests and Fauna of Guinea-Bissau /21/ attesting to the absence of any concessions for exploitation or management of forests within the reference region |

3.2.3.1.2 Project Area

The audit team reviewed the project area shapefiles /16/ /17/ to confirm that all requirements of Section 5, Step 1.1.2 of the BL-UP module were complied with, as described below.

| Requirement | Step(s) taken to assess compliance |
|--|---|
| | |
| "The project area is the discrete | Through site inspections, audit team confirmed that Cacheu |
| parcel(s) of land that are under threat | and Cantanhez National Parks are the areas that are under |
| of deforestation on which the project | threat of deforestation and where project activities will be |
| developers will undertake the project | carried out; audit team confirmed that project area comprises |
| activities and that are forest land at the | |
| start date of the REDD project activity. | |



| Requirement | Step(s) taken to assess compliance |
|--|--|
| Lands on which the REDD project activities will not be undertaken or that have not entered in the baseline assessment are not to be included in the project area." | a subset of Cacheu and Cantanhez National Parks as discussed in Section 3.1.9.1 above |
| "The project area itself shall be 100% forested at time zero." | Confirmed, through visual observation of shapefiles showing project area in Cacheu /16/ and Cantanhez /17/ National Parks in comparison with respective KML files /1//2/, that the same area is depicted, for each park, in these work products; confirmed, through independent clipping operation in ArcGIS, that area delineated by reference region shapefiles /16/ /17/ includes only land classified as forest at project start date (i.e., through classification of Landsat imagery acquired in 2010, the year closest to the project start date), by land classification analysis discussed in Section 3.2.6 below; also confirmed that project area was 100% forested 10 years prior to project start date by carrying out same clipping operation with respect to land classification using 2002 imagery (year closest to date 10 years before project start date) |

Similarly, the audit team reviewed the project area shapefiles /16/ /17/ to confirm that all requirements of Section 5, Step 1(a) of REDD-MF methodology framework were complied with, as described below.

| Requirement | Step(s) taken to assess compliance |
|---|--|
| "To be eligible for VCS crediting, land defined as "forest" shall meet the VCS definition of forest and shall be under the control of the project proponent at the time of verification." | See Section 3.1.9.1 above regarding "control of project area; in addition, audit team confirmed, through review of Section 2.1.2 of baseline report /20/ that mangrove and terrestrial forest classes meet Food and Agriculture Organization's definition of forest, which is an "an internationally accepted definition (eg, UNFCCC, FAO or IPCC) of what constitutes a forest" as required by VCS definition of "forest" (as given in VCS Program Definitions) |
| "The boundary of the REDD activity shall be clearly delineated and defined and include only land qualifying as "forest" for a minimum of 10 years prior to the project start date." | See discussion regarding BL-UP module requirement "The project area itself shall be 100% forested at time zero" above |



| Requirement | Step(s) taken to assess compliance |
|--|--|
| "When describing physical project boundaries, the following information shall be provided per discrete area" | See directly below |
| "Name of the project area (e.g., compartment number, allotment number, local name); Unique ID for each discrete parcel of land" | Confirmed that, as described in PD, two areas exist (Cacheu and Cantanhez) |
| Map(s) of the area (preferably in digital format) | Assessed KML files /1/ /2/ to confirm that they can be considered "maps" (maps are also present in PD) |
| Geographic coordinates of each polygon vertex along with the documentation of their accuracy (from a geo-referenced digital map – data must be provided in the format specified / required by the VCS) | Assessed KML files /1/ /2/, and corresponding shapefiles /16/ /17/, to confirm that they contain geographic coordinates of each polygon vertex; project area is a subset of area in Cacheu and Cantanhez National Parks, and vertices of corresponding KML files /10/ /11/ were confirmed to be highly accurate, as described in Section 3.1.9.1 above |

3.2.3.1.3 Leakage Belt

In accordance with Section II of the LK-ASU module, a leakage belt was defined. The audit team reviewed the shapefiles showing the areas of the leakage belt in and near the Cacheu /22/ and Cantanhez /23/ National Parks to confirm that all requirements of Section 5, Step 1.1.3 of the BL-UP module were complied with, as described below.

| Requirement | Step(s) taken to assess compliance |
|---|--|
| 100% forested at start of project | Confirmed, through independent clipping operation in ArcGIS, that area delineated by leakage belt shapefiles /22//23/ includes only land classified as forest as of start of project (using imagery acquired in 2010) by land classification analysis discussed in Section 3.2.6 below |
| "The leakage belt area must be the forest areas closest to the project area meeting the minimum area requirement and meeting the criteria listed here." | Confirmed, through visual observation of leakage belt shapefiles /22/ /23/ against project area shapefiles /16/ /17/, that leakage belt consists of forested areas closest to project area that |



Requirement Step(s) taken to assess compliance "All parts of the leakage belt must, at a Confirmed, through review of shapefiles showing navigable minimum, be accessible and reachable rivers /24/ and roads /25/ against shapefiles showing leakage by project baseline deforestation belt /22/ /23/ that all portions of leakage belt are fully agents with consideration of agent accessible to deforestation agents by foot or boat; assessed mobility." processes used to create these shapefiles /24/ /25/ through interviews with project personnel and visual observation in Google Earth (where roads and rivers could be clearly seen) in order to confirm that processes were appropriate to deliver accurate products "The belt must not be spatially biased Confirmed that leakage belt near Cantanhez National Park is in terms of distance of edge of belt not spatially biased, but exists in a more-or-less even band from edge of project area without around edge of project area, except that it is clipped to justification based on agent mobility or national boundary to the east (consistent with criterion e); criteria for landscape and confirmed in conversation with project personnel that, while transportation listed below." leakage belt near Cacheu National Park is spatially biased with respect to distance from edge of project area, but this was necessary in order to make proportion of forest classes in leakage belt as similar to those within project area as possible (namely, it was necessary to specifically delineate leakage belt so as to include more area in mangrove forest class in order to match, as closely as possible, high proportion of mangrove forest class in project area) "Landscape factors - These factors can Not technically applicable, as project does not comply with be determined by analysis of spatial this requirement (as discussed more fully in Section 3.2.7 with respect to deviation #7); however, audit team did review data bases (e.g. vegetation map, soil suitability map, DEM [Digital Elevation workbook used to carry out these calculations /19/ and Model] for slope and elevation) in a process used to generate inputs to this workbook and confirm GIS for both the project area and that process used to generate information provided was reference region." technically sound "Transportation factors - The following Same as directly above conditions shall be met..." "Policies and regulations having an Independent review of regulatory framework, including impact on land-use change patterns conversations with a lawyer in Guinea-Bissau, to confirm that within the leakage belt and the project same regulatory framework exists within both project area area must be of the same type or have and leakage belt (namely, land was and is in government the same effect, taking into account ownership, per land law /6/, but customary use of land was the current level of enforcement. This permitted and no laws acted as constraints on deforestation) means that where sub-national administrative units are governed by a different set of land-use regulations, it is necessary to ensure that the



| Requirement | Step(s) taken to assess compliance |
|---|--|
| boundary of the leakage belt does not cross into another sub-national unit that does not have equivalent policies or regulations." | |
| "Social factors having an impact on land-use change patterns within the leakage belt and the project area must be the same or have the same effect. Examples can include presence of gangs or guerillas, or the ethnic composition of local populations." | Confirmed, through site inspections, that social factors are similar between project area and reference region; confirmed, through review of leakage belt shapefiles /22/ /23/ and project area shapefiles /16/ /17/ against maps shown in "baseline report" /20/, that ethnic groups existing within project area in Cacheu National Park are similar to those existing within reference region near Cacheu National Park, and likewise for Cantanhez National Park |
| "The minimum leakage belt area shall be equal to at least 90% of the area of the project. However, if identification of a forested area of this size (meeting criteria a to g) is impossible then the following guidelines shall be followed" | Confirmed, through review of calculation workbook and its inputs /18/, that leakage belt area is at least 90% of project area |

3.2.3.2 Temporal Boundaries

The project complies with all requirements of Step 1.2, Part 2 of the BL-UP module regarding temporal boundaries, as discussed below.

| Requirement | Steps taken to assess compliance |
|--|---|
| "For the simple historic approach to project rate of deforestation, the historical reference period shall at a minimum be defined by the years between the three spatial data points (see 2.1.1)." | Confirmed that historical reference period is defined by years of acquisition of Landsat imagery; confirmed that these dates are provided in Section 2.3(b) of PD |
| "Start date and end date of the REDD project crediting period" | Confirmed that these dates are provided in Section 1.6 of PD |
| "Date at which the project baseline will be revisited." | Confirmed that date of baseline revision, and commitment to revise baseline every 10 years, is located in Section 1.6 of PD |



Similarly, the audit team confirmed that all requirements of Section 5, Step 1(b) of the REDD-MF methodology framework were complied with, as described below.

| Requirement | Steps taken to assess compliance |
|--|---|
| "Start date and end date of the "historical reference period" The historical reference period is the temporal domain from which information on historical deforestation is extracted, analyzed and projected into the future. A historical reference period shall be defined for all eligible REDD categories. The starting date of this period shall be between 9 and 12 years in the past and the end date shall be within two years of project start." | Confirmed that start date of historical reference period, 2002, was approximately nine years prior to project start date and end of historical reference period, 2010, was within two years of project start date; confirmed that dates are provided in PD as indicated above |
| "Start date and end date of the "project crediting period" The project crediting period is the period of time for which the net GHG emissions reductions or removals will be verified, which under the VCS is equivalent to the project lifetime. The project must have a robust operating plan covering this period. | Confirmed that project crediting period of 20 years is consistent with these requirements; confirmed that dates are provided in PD as indicated above; confirmed that projections of baseline emissions are provided in PD for duration of project crediting period, thus exceeding requirement |
| The project crediting period for REDD projects shall be between 20 and 100 years. The duration of the project activity/crediting period shall be reported in the VCS PD. | |
| Projections of baseline emissions shall be presented in the PD for the first 10 year period after the start of the project. VCUs will only be issued for 10-year periods for which the baseline is fixed and a monitoring plan has been implemented." | |



| Requirement | Steps taken to assess compliance |
|--|--|
| "Date at which the project baseline will be revisited For unplanned deforestation, the project baseline shall be revised every 10 years from the project start date The date of the next scheduled revision shall be specified in the VCS PD." | Confirmed that first date of baseline revision is 10 years from project start date and is located in Section 1.6 of PD |

3.2.3.3 Carbon Pools

The steps taken to assess whether each carbon pool has been selected (or not selected) correctly in accordance with Table 1 of the REDD-MF methodology framework are described below.

| Carbon Pools | Included/Excluded | Steps(s) Taken to Assess Compliance |
|--------------|--------------------|--|
| Above Ground | Tree: Included | Check against Table 1 to confirm that module CP-AB is mandatory; check against Section 4 of CP-AB to confirm that inclusion is mandatory |
| | Non-tree: Excluded | Check against Table 1 to confirm that module CP-AB is mandatory; check against Section 4 of CP-AB to confirm that pool does not need to be included where stocks are greater in project scenario than in baseline; conversations with project personnel and review of pictures provided by project personnel to confirm that this is generally the case, as non-tree woody crops are not typically cultivated in Guinea-Bissau |
| Below Ground | Included | Check against Table 1 to confirm that module CP-AB is mandatory; check against Section 4 of CP-AB to confirm that inclusion is permissible |
| Deadwood | Excluded | Check against Table 1 to confirm that pool must be included where "this carbon pool is greater in baseline (post-deforestation/degradation) than project scenario and significant"; conversations with project personnel and on-site observations during site inspections to confirm that dead wood is not generally retained in post-deforestation land uses (and so, while a pulse of dead wood may exist in conversion to non-forest land uses, this pulse can be expected to be short-lived) |



| Harvested Wood Products | Excluded | Check against Table 1 to confirm that pool must be included where "the process of deforestation involves timber harvesting for commercial markets"; interviews with project personnel and local residents during site inspections to confirm that process of deforestation does not typically involve process of commercial timber harvesting (while illegal logging is sometimes a problem, this practice appears more linked to degradation within forested areas than to conversion of forestland to other uses) |
|----------------------------|----------|---|
| Litter | Excluded | Check against Table 1 to confirm that pool is optional |
| Soil Organic Carbon | Excluded | Check against Table 1 to confirm that pool is optional |

3.2.3.4 Sources of Emissions of Greenhouse Gases (GHGs)

The steps taken to assess whether each carbon pool has been selected (or not selected) correctly in accordance with Table 2 of the REDD-MF methodology framework are described below.

| Sour | ce | Gas | Included? | Steps(s) Taken to Assess Compliance |
|----------|---|------------------|---|---|
| | Biomass | CO ₂ | Excluded | Check against Table 2 to confirm that source is required to be excluded |
| | Burning | CH ₄ | Excluded | Check against Table 2 to confirm that source may be excluded in baseline scenario |
| | | N ₂ O | Excluded | Check against Table 2 to confirm that source may be excluded in baseline scenario |
| Scenario | CO ₂ | Excluded | Check against Table 2 to confirm that fuel emissions "can be neglected if excluded from | |
| | | CH ₄ | Excluded | baseline" and that fertilizer emissions "can be |
| Baseline | Combustion of fossil fuels, Use of fertilizers | N ₂ O | Excluded | neglected if excluded from baseline accounting except in the situation where fertilizer use is enhanced as a leakage avoidance mechanism"; interviews with project personnel and on-site observations of project activities during site inspections to confirm that leakage avoidance activities do not pertain to enhanced fertilizer use (as affirmed in Section 2.3 of PD) |



| Sourc | ce | Gas | Included? | Steps(s) Taken to Assess Compliance |
|------------------|--|------------------|-----------|---|
| | | CO ₂ | Excluded | Check against Table 2 to confirm that source is required to be excluded |
| | Biomass | CH ₄ | Included | Check against Table 2 to confirm that source " |
| enario | Burning | | | must be included in the project case if fire occurs" |
| Sce | | N ₂ O | Included | Check against Table 2 to confirm that source " |
| Project Scenario | | | | must be included in the project case if fire occurs" |
| _ | Combustion of | CH ₄ | Excluded | Same as for baseline |
| | fossil fuels, Use of fertilizers | N ₂ O | Excluded | Same as for baseline |

3.2.4 Baseline Scenario

Overall, the identified baseline scenario, as described in Section 2.4 of the PD, is justified. The audit team's assessment of the baseline scenario is included in the table below.

| Item assessed | Step(s) taken to assess item |
|--|--|
| Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable | Assumption that insufficient resources exist within Guinea-Bissau to support project activities within project area has been provided in form of evidence of recommendation of classification of Guinea-Bissau as "Heavily Indebted Poor Country" by World Bank /26/ (independently confirmed by audit team through review of http://data.worldbank.org/income-level/HPC; accessed 12 February 2015) Confirmed that data on historical deforestation rates, as used in identification of baseline scenario, is derived from high-quality land classification analysis and that processing to extract deforestation rates for each stratum was conducted correctly As discussed with project personnel, assumption that any grant funding is likely to be short-term in nature and insufficient to finance sustained conservation efforts and other project activities |



| Item assessed | Step(s) taken to assess item |
|--|---|
| Documentary evidence used in determining the baseline scenario is relevant, and correctly quoted and interpreted in the project description | Documentary evidence provided to audit team is relevant to Guinea-Bissau |
| Relevant national and/or sectoral policies and circumstances have been considered and are listed in the project description | National circumstances are appropriately considered in PD; clarification is provided that, while additional financing has been provided to "fill the gaps" since closure of CBMP, this financing is temporary and is still insufficient to fully fund IBAP; these assertions were supported by World Bank personnel interviewed by audit team |
| The procedures for identifying the baseline scenario have been correctly followed and the identified scenario reasonably represents what would have occurred in the absence of the project | As discussed more fully in Section 3.2.5 below, all procedures for identifying baseline scenario have been correctly followed Audit team agrees that baseline scenario reasonably represents what would have occurred in absence of project |

3.2.5 Additionality

Overall, additionality is justified for the project. In accordance with the methodology, and as well-documented within Section 4.6 of the PD, the tool Version 3.0 (the most recent version) of the VCS-approved "Tool for the Demonstration and Assessment of Additionality in VCS AFOLU Project Activities" has been used to demonstrate additionality. The audit team's findings regarding the application of this tool are as follows.

3.2.5.1 Sub-step 1a

The identified land use scenarios identified in Section 2.5 of the project description include those scenarios required by VT0001. The audit team's findings regarding the identified alternative scenarios are as follows:

| Alternative | Audit Findings |
|-------------|---|
| | |
| I | In support of assertions regarding declining funding levels, audit team carried out conversations with project personnel to better understand funding situation, wherein project personnel information regarding past donors and reasons for declining funding levels Based on analysis undertaken, and as discussed in Section 3.2.4 above, audit team agrees this scenario is credible |



| Alternative | Audit Findings |
|-------------|--|
| II | Scenario is not necessarily credible, but required to be present by requirement that "The identified land use scenarios shall at least include Project activity on the land within the project boundary performed without being registered as the VCS AFOLU project" |

3.2.5.2 Sub-step 1b

Both alternatives (including alternative I, which has been selected as the baseline scenario) are claimed to be consistent with applicable laws and regulations. The audit team agrees with this assessment, keeping in mind that the assessment of additionality must be made as of the project start date. At the time of the project start date, the internal regulations /4/ /5/ were not yet in force. The decrees for the parks /8/ /9/ contain some information regarding uses that are allowed and not allowed. However, even within the zones where activities are most restricted (the "preservation zones"), the decrees do not specifically outlaw deforestation (Article 6 of the Cacheu decree /8/ allowed agricultural activities consistent with the relevant internal regulation and Article 6 of the Cantanhez decree does not specifically outlaw deforestation within the preservation zone either). As discussed below, the internal regulations /4/ /5/ do prohibit deforestation. However, as they were not in force as of the project start date, the audit team agrees that they are not relevant for purposes of Sub-step 1b. The audit team confirmed this understanding with a practicing lawyer in Guinea-Bissau.

3.2.5.3 Step 2

Step 2 was not required by the additionality tool, as investment analysis was not elected, and was not completed.

3.2.5.4 Step 3

The audit team agrees that all of the barriers identified within the PD are real, significant and prevent alternative scenario II from carried out while not proving a barrier to alternative scenario I. Further comments are provided by barrier below.

| Barrier | Audit Findings |
|-----------|---|
| Financial | Through conversations with project personnel, on-site observations during site inspections, and experience from residence within Guinea-Bissau, audit team can confirm that Guinea-Bissau lacks resources to adequately undertake project activities (this is also shown by the fact that funding from CBMP was required to finance creation of IBAP and system of protected areas, as independently confirmed through review of http://documents.worldbank.org/curated/en/2002/10/2038224/guinea-bissau-coastal-biodiversity-management-project ; accessed 11 February 2015) |



| Barrier | Audit Findings |
|----------------------|---|
| | Through conversations with project personnel and application of professional judgment, audit team confirmed that information provided regarding constraints associated with private-sector donor financing is credible and consistent with similar constraints that have been observed in other contexts |
| Institutional | Through experience from long-term residence within Guinea-Bissau and observation of events within Guinea-Bissau (including a coup d'état) during provision of validation services, audit team can confirm that IBAP faces significant institutional constraints that undermine its ability to effectively implement project activities (although they do not completely preclude it, as discussed elsewhere in this report) |
| First if Its Kind | Audit team can confirm, through review of VCS Project Database website (http://www.vcsprojectdatabase.org/; accessed 11 February 2015) that no other VCS project exists in Guinea-Bissau While other protected areas exist within Guinea-Bissau, audit team understands that all experience similar constraints in implementation of project activities (see Section 3.2.5.5 below) |

3.2.5.5 Step 4

The audit team's independent investigations support the assertion that a number of protected areas exist within Guinea-Bissau, and thus "similar" activities currently occur elsewhere within Guinea-Bissau. However, the audit team notes that the discussion of additionality and the baseline scenario, as provided in Sections 2.4 and 2.5 of the PD and discussed in Section 3.2.4 above and this Section 3.2.5, are not specific to the Cacheu and Cantanhez National Parks. Rather, the constraints discussed above occur with respect to Guinea-Bissau as a whole. Therefore, as the conduct of the project activity within the Cacheu and Cantanhez National Parks is precluded by the barriers discussed in Section 3.2.5.4 above, the audit team agrees that the conduct of such activity is also precluded within the other protected areas. In further support of this assertion, and as documented in the PD, the audit team reviewed letters from the Secretary of State of Environment and Tourism, Agostinho da Costa, and the Nelson Gomes Dias, Head of the Bureau Program for the International Union for Conservation of Nature, affirming that the planned project activities are unprecedented and go beyond current practices within protected areas in Guinea-Bissau. Therefore, the audit team agrees that the project activity is not common practice and, therefore, per the above, the project activity is additional.

3.2.6 Quantification of GHG Emission Reductions and Removals

Overall, the methodology and any referenced tools have been applied correctly to calculate baseline emissions, project emissions, leakage and net GHG emission reductions and removals for the baseline period. The quantification of such is described in greater detail below.

The audit team can confirm that the PD contains a very high level of detail regarding the calculation of GHG emission reductions, such that the following are true:



- All relevant assumptions and data are listed in the project description, including their references and sources: the PD is reasonably well-documented, although full references to referenced literature are not always provided
- All data and parameter values used in the project description are considered reasonable in the context of the project, as described more fully in Section 3.2.6.4 below
- All estimates of the baseline emissions can be replicated using the data and parameter values
 provided in the project description: the methodology requires reporting of all such values in
 data/parameter tables, and the baseline emissions themselves are also clearly stated in the PD
 (such that there should be no need to replicate them).

3.2.6.1 Baseline Emissions

The specific steps taken to assess the calculation of baseline emissions for the baseline period against each relevant requirement of Steps 2-4 of Section 5 of the BL-UP module are stated below.

| Step | Step(s) taken to assess compliance |
|-------|--|
| 2 | Confirmed that simple historic approach was undertaken, as permitted |
| 2.1.1 | Confirmed, through interviews with project personnel and observation of remotely sourced imagery, that 30-meter medium-resolution images (complying with the methodology resolution requirements) were appropriately acquired and used Confirmed, through assessment of accuracy assessment (see description under Step 2.1.5 below), that high-resolution data were appropriately accessed and used Confirmed, through review of Tables 4 and 5 of PD, that data cover a period of less than 12 years, with most recent date of acquisition being within two years of project start date |
| 2.1.2 | Interviewed project personnel to confirm that cloud cover was not an issue with imagery used, as it was acquired in dry season Confirmed, through interviews with project personnel and review of baseline report /20/, that classification was carried out using qualified personnel and in accordance with standard good practice for remote sensing analysis Reviewed land-cover classifications for 2002 /29/ and 2010 /30/ to confirm their validity Confirmation that, per the BL-UP module, it is allowable to differentiate the forest class into sub-classes if accuracy requirements are met Additional actions described under Step 2.1.4 below |
| 2.1.3 | Independently carried out clipping operations with land-cover classifications to and recalculated area in each stratum in 2002 and 2010; re-calculated "eligible" deforestation during these steps (resulting values were very similar to those reported by project personnel) Confirmed that, while gross deforestation has been measured, approach described in Section 3.1.2 of PD to determine (and report baseline emissions attributable to) "eligible" deforestation is conservative given that baseline deforestation is |



| Step | Step(s) taken to assess compliance |
|-------|---|
| | sometimes followed with establishment of fruit or nut tree plantations (which could be identified as forest in land-cover classification), and therefore reporting of baseline emissions on basis of gross deforestation would result in overestimation of GHG emission removals |
| 2.1.4 | Re-calculated values in accuracy assessment results workbook /31/ to confirm that overall accuracy of map was over 90% and that producer's accuracy for each class (terrestrial forest, mangrove and non-forest) was over 90% Exercised professional judgment to determine that, as producer's accuracy is a very commonly reported accuracy metric, and in absence of clarification from BL-UP module regarding what type of accuracy must exceed 90%, it is acceptable to have a classification where producer's accuracy is over 90% Replicated analysis on a sample of points using Google Earth data, as provided in a separate workbook /32/, and confirmed that, where discrepancies occurred, they were either (a) attributable to the length of time between collection of field data and acquisition of data as viewed in Google Earth or (b) related to quality-control errors that consistently led to under-estimation of accuracy (and were thus "conservative" in the general sense) |
| 2.2 | Interviews with project personnel who suggested that, as a regression of land-cover change would only have two data points, it would not be feasible to implement or significant (this argument appears sound to audit team) Review of calculations in baseline emissions workbook /33/ to confirm that Equation 3 of BL-UP module has been correctly implemented and that the same mean rate has been used for each year of the baseline period |
| 2.3 | Re-calculation of areas in project area, leakage belt and reference region, as used in Equations 5-8 of BL-UP module, from respective shapefiles /16/ /17/ /22/ /23/ /14/ /15/ Review of calculations in baseline emissions workbook /33/ to confirm that Equations 5-8 of BL-UP module have been correctly implemented |
| 3.0 | Confirmation that Part 3 of Section 5 is not required, as location analysis is not required Review of Section 3 of baseline report /20/ to confirm that, as baseline deforestation can be stated to be in a frontier configuration (as the majority of "edge" in the project area is in direct proximity to recent deforestation except where project area borders a neighboring country, where land-cover classification was not conducted, or a body of water), location analysis is not required |
| 3.4.1 | Confirmed, through review of baseline emissions workbook /33/ that, for each year of baseline period, stratum with lowest carbon stock in terrestrial forest class (savannah stratum) was assumed to be deforested (area deforested in terrestrial forest class in first 10 years of baseline period did not exceed area of savannah |



| Step | Step(s) taken to assess compliance |
|-------|--|
| | stratum); this requirement was not relevant for mangrove class (since it only contained one stratum) Confirmed that resulting values were appropriately used in Step 4.3 |
| 4.1 | Confirmed that project area and leakage belt areas have been stratified, using results from land-cover classification, according to methods of X-STR module Reviewed a map showing inventory plots, stratification and per-plot carbon stocks as evidence that "within the project area there are no unidentified (i.e. not previously stratified) discrete clusters of sample plots/points representing >10% of samples in the project area that consistently differ (i.e. each sample plot/point estimate) from the overall project mean by ±20%" Confirmed that a map of stratification is shown in Figures 12 and 13 of PD Confirmed, through assessment of baseline emissions workbook /33/, that areas of strata sum to project area Confirmed, through conversations with project personnel and on-site observations during site inspections, that a single, broadly defined post-deforestation land use (shifting cultivation) is prevalent, and that to attempt to segregate landscape into more narrowly defined uses would not likely lead to greater accuracy |
| 4.2.1 | Confirmed that all requirements of CP-AB module were met, as follows: Confirmation, through review of inventory data, that measurement of initial stocks took place less than five years prior to project start date Observation of measurement procedures, as carried out by project personnel, in order to assess processes and quality-control procedures used in collection of field data and ensure that measurement processes were sufficient to ensure a high degree of accuracy Detailed review of calculations within baseline emissions workbook /33/ in order to confirm that calculations are free of material error (i.e., any differences identified were highly unlikely to exceed materiality threshold) and consistent with requirements of Part 1, Option 1 and Part 2, Option 1 of CP-AB |
| 4.2.2 | Confirmed that Option 1 is applicable, as a single post-deforestation land use has been identified (as discussed regarding Step 4.1 above) Confirmed that, per BL-UP, " where stocks are in a cycle such as in shifting cultivation, the time-weighted average of C stocks in a cycle shall be used in option 1 and 2" Confirmed that assumptions regarding the number of years in crop land and fallow land, as drawn from Temudo (1988), are locally appropriate (and the relative proportions are roughly similar to estimates given to audit team by local residents) Confirmed that estimate of rice carbon stocks is appropriate, as it is derived from a source (2006 IPCC Guidelines for National Greenhouse Gas Inventories) that complies with both BL-UP and Section 4.5.6 of VCS Standard |



| Step | Step(s) taken to assess compliance |
|-------|---|
| | Confirmed that equation from Silva et al. (2011) is locally appropriate and conforms with all requirements for models in Section 4.1.6(2)-(6) of VCS Standard (as referenced in Section 3.1.4), as follows: (2) model authors are appropriately qualified experts, as evidenced by their placement at prominent academic institutions, as noted on first page of study, and growth of natural vegetation is well-known to be related to temperature, growing-season duration and time in which vegetation is allowed to grow; (3) Silva et al. (2011) study has been published in "Journal of Geophysical Research", a peer-reviewed publication, and (4)-(6) are not relevant given the relative "simplicity" of the model Confirmed that all calculations were appropriately carried out in baseline emissions workbook /33/ |
| 4.2.3 | Confirmed, through review of baseline emissions workbook /33/, that Equations 16 and 18 of BL-UP were correctly implemented |
| 4.3 | Confirmed, through review of baseline emissions workbook /33/, that Equations 23 and 24 of BL-UP were correctly implemented |
| 4.4 | Confirmed that this step is not applicable, given exclusion of GHG sources in question from baseline accounting |
| 4.5 | Confirmed, through review of baseline emissions workbook /33/, that Equations 26- 28 of BL-UP were correctly implemented |

3.2.6.2 Project Emissions

As required by the methodology, the M-MON module has been used to carry out an ex-ante estimate of project emissions. These emissions have been accounted as zero (see Section 3.2.8 below regarding choice of ex-ante values used).

3.2.6.3 Leakage Emissions

The specific steps taken to assess the calculation of leakage emissions for the baseline period against each relevant requirement of the LK-ASU module are stated below.

| Step(s) | Step(s) taken to assess compliance |
|---------|---|
| 3(a) | Confirmed that ex-ante factor appears reasonable, based on FIAL evaluation report /34/, and that calculations have been appropriately implemented in emission reduction workbook /35/ |
| 4(a) | Confirmed that AFVOR has been correctly calculated as equal to TOTFOR (in absence of documented information on "the area of forest within 5km of a road |



| Step(s) | Step(s) taken to assess compliance |
|------------|---|
| | or river that is suitable for conversion to agriculture or raising livestock" and evidence that protection is in place for protected and managed forests, this is an appropriately conservative course of action, and is not specifically prohibited by methodology) |
| 4(c) | Confirmed, through review of Table 11 Second National Communication on Climate Change from Guinea-Bissau (most recently accessed 12 February 2015), that country is stratified according to same stratification system used for project area and leakage belt Confirmed that Second National Communication constitutes a "peer-reviewed" assessment Confirmed, through review of Table 33 of Second National Communication, that aboveground carbon stocks in each stratum have been appropriately transferred to emission reduction workbook /35/ and area-weighted carbon stocks outside leakage belt have been appropriately calculated Confirmed that area-weighted carbon stocks in leakage belt have been appropriately calculated within emission reduction workbook /35/ using areas of strata in leakage belt and measured aboveground carbon stocks in each stratum, as discussed in Section 3.2.6.2 above |
| 4(d). 4(e) | Confirmed that required calculations were correctly carried out through data checks of emission reduction workbook /35/ |
| 5 | Confirmed this step is not applicable, as emissions are not expected from leakage prevention activities |
| 6 | Confirmed that Equation 13 was correctly implemented through data checks of emission reduction workbook /35/ |

3.2.6.4 Net GHG Emission Reductions

Through data checks of the emission reduction workbook /35/, the audit team confirmed that all calculations were carried out per Step 5, Section 5 of the REDD-MF Methodology Framework.

In addition, the audit team has the following findings regarding those parameters that are available at validation (and contained within Section 4.1 of the PD) and that were not discussed above.

| Parameter | Step(s) taken to assess whether parameter values are considered reasonable in the context of the project | |
|-----------|--|--|
| CF | Checked stated value against the 2006 IPCC Guidelines for National | |
| | Greenhouse Gas Inventories, which indicates (throughout) that value of | |
| | 0.47 is an acceptable default value | |



| Parameter | Step(s) taken to assess whether parameter values are considered reasonable in the context of the project | |
|-------------|---|--|
| | Confirmed, through check against Section 4.5.6 Standard (as linked through Sections 3.1.5 and 4.1.7(1)), that IPCC values are automatically considered compliant with criteria 2, 5, 6 and 8 (criteria 1, 4 and 9 are not applicable here) and that a globally applicable default value automatically complies with criteria 3 and 7 | |
| COMFi | Checked stated values against Chapter 2, Table 2.6 of 2006 IPCC Guidelines for National Greenhouse Gas Inventories Confirmed, through check against Section 4.5.6 Standard (as linked through Sections 3.1.5 and 4.1.7(1)), that IPCC values are automatically considered compliant with criteria 2, 5, 6 and 8 (criteria 1, 4 and 9 are not applicable here) and that a globally applicable default value automatically complies with criteria 3 and 7 Confirmed that stated values are also referenced in Annex 1 of E-BB module | |
| Ggi | Checked stated values against Chapter 2, Table 2.5 of 2006 IPCC Guidelines for National Greenhouse Gas Inventories Confirmed, through check against Section 4.5.6 Standard (as linked through Sections 3.1.5 and 4.1.7(1)), that IPCC values are automatically considered compliant with criteria 2, 5, 6 and 8 (criteria 1, 4 and 9 are not applicable here) and that a globally applicable default value automatically complies with criteria 3 and 7 Confirmed that stated values are also referenced in Annex 1 of E-BB module | |
| Dj | Confirmed, through review of sources and interviews with project personnel, that all sources for default factors comply with Section 4.5.6 Standard (as linked through Sections 3.1.5 and 4.1.7(1)), as they are available from recognized, credible sources and that are also peerreviewed (i.e., through scientific peer-review process) and that they are appropriate to geographic scope of project Confirmed, through interviews with project personnel, that procedures used to obtain project-specific density factors were appropriate and sufficient to deliver high-quality data | |
| fpalm (X,Y) | Confirmed that equation from Delaney et al. (1999) is appropriate and conforms with all requirements for models in Section 4.1.6(2)-(6) of VCS Standard (as referenced in Section 3.1.4), as follows: (2) Matt Delaney and Sandra Brown are internationally known experts on forest carbon stock estimation and relationship between biomass and height of palms is wellestablished; (3) equation was reprinted in IPCC Good Practice Guidance for LULUCF and thus can be considered "appropriately reviewed and" | |



| Parameter | Step(s) taken to assess whether parameter values are considered reasonable in the context of the project |
|-----------|--|
| | tested by a recognized, competent organization"; and (4)-(6) are not relevant given the relative "simplicity" of the model Confirmation that a deviation to requirements of CP-AB module was appropriate, as set out in Section 3.2.7 below Confirmed that equation was successfully validated using the "limited measurements" approach, as set out in CP-AB module |
| R | Checked stated value for terrestrial forest biomass against Table 4.4, Chapter 4, Volume 4 of 2006 IPCC Guidelines for National Greenhouse Gas Inventories to confirm that it is stated value for "Tropical dry forest" and thus appropriate to project area Confirmed, through check against Section 4.5.6 of VCS Standard (as linked through Sections 3.1.5 and 4.1.7(1)), that IPCC values are automatically considered compliant with criteria 2, 5, 6 and 8 (criteria 1, 4 and 9 are not applicable here) and that selected value complies with criteria 3 and 7 as described above Carried out conversations with project personnel to confirm that locally specific ratios for mangrove do not exist Confirmed that ratio derived from Komiyama et al. (2008) study is appropriately conservative in that a significant uncertainty deduction is taken to account for wide variation in input values Confirmed, through review of Komiyama et al. (2008) study, that it conforms with all requirements in Section 4.5.6 of VCS Standard (as linked through Sections 3.1.5 and 4.1.7(1)) given that (2) it is collected from a secondary source that is a peer-reviewed publication (Aquatic Botany) and thus a "recognized, credible source" and (7) data are appropriate to geographic scope of project (see below) As documented fully in NIR 2012.47 (see Appendix A), audit team confirmed that ratio for mangrove biomass is appropriately conservative in light of uncertainties, such that it provides conservative estimates of belowground biomass of mangroves in project area (and is thus appropriate to project's geographic scope) |

3.2.6.5 Uncertainties

As required by Step 5(b), Section 5 of the REDD-MF methodology framework, the X-UNC module was applied to calculate uncertainty. In the context of the project (where the population driver approach has not been implemented), the only relevant equations for ex-ante estimation are Equations 4, 5, 6 and 9 and 10. The guidance boils down to a requirement that, where the total uncertainty (as measured via a 95% confidence interval) in forest carbon stock estimation is greater than 15% of the estimate, a deduction must be applied. Through review and recalculation of uncertainty calculations within the



baseline emissions workbook, the audit team confirmed that uncertainty was less than 15% and, therefore, an uncertainty deduction is not required at this time.

3.2.7 Methodology Deviations

Seven methodology deviations are described in Section 2.6 of the PD. All deviations applied to the project are valid and conform fully with Section 3.5.1 of the VCS Standard. The assessment of these deviations is described more fully for each deviation (numbered as in the PD) below.

| | Steps taken by audit team to assess | |
|-----|--|---|
| No. | whether deviation meets with the criteria and specifications for permitted methodology deviations | Whether deviation negatively impacts conservativeness of quantification of GHG emission reductions or removals |
| 1 | Reviewed methodology to confirm that deviation impacts only criteria and procedures for measurement of palm biomass (used in measurement of baseline emissions and, perhaps, ex-post monitoring of project emissions | Reviewed results of "limited measurements" validation procedure, which was undertaken using a comparison of biomass as measured using procedure specified by CP-AB module and biomass as estimated by Delaney et al. (1999) equation (as shown in graph in PD) and confirmed that Delaney et al. (1999) equation underestimates biomass and therefore underestimates GHG emission reductions in comparison to a project-specific equation that could be developed that more accurately estimates palm carbon stocks Review of Section 2.4.1 of VCS Standard which states that "conservativeness may serve as a moderator to accuracy in order to maintain the credibility of project and program GHG quantification" |
| 2 | Reviewed methodology to confirm that deviation impacts only criteria and procedures for measurement of mangrove biomass (used in measurement of baseline emissions and, perhaps, ex-post monitoring of project emissions | Applied understanding of VCS rules to confirm that decision to validate equation subsequent to project validation will have absolutely no impact (and certainly not a negative impact) on ex-post quantification of GHG emission reductions |
| 3 | Reviewed methodology to confirm that deviation impacts only criteria and procedures for measurement of terrestrial forest biomass (used in measurement of baseline | Applied understanding of VCS rules to confirm that decision to validate equation subsequent to project validation will have absolutely no impact (and certainly not a |



| | Steps taken by audit team to assess | |
|-----|---|---|
| No. | whether deviation meets with the criteria and specifications for permitted methodology deviations | Whether deviation negatively impacts conservativeness of quantification of GHG emission reductions or removals |
| | emissions and, perhaps, ex-post monitoring of project emissions | negative impact) on ex-post quantification of GHG emission reductions |
| 4 | Reviewed methodology to confirm that deviation only impacts criteria for delineation of reference region (in Step 1.1.1, Section 5 of BL-UP module) and leakage belt ((in Step 1.1.3, Section 5 of BL-UP module), which are used to measure and monitor carbon stock changes in these areas | Applied professional judgment to confirm that, given that locally-specific circumstances impact baseline carbon stock changes, project carbon stock changes and leakage, and given that Cacheu and Cantanhez National Parks are located at opposite ends of country of Guinea-Bissau, delineation of separate reference regions and leakage belts for respective project areas will result in more accurate measurement and monitoring of GHG emission reductions and will thus not impact conservativeness of quantification |
| 5 | Reviewed methodology to confirm that deviation only impacts criteria and procedures for measurement and monitoring of leakage emissions, and does not impact any other part | Applied understanding of methodology to confirm that approach is technically correct and, therefore, will result in more accurate quantification of GHG emission reductions; confirmation that it will also result in more conservative quantification than approach required by methodology |
| 6 | Reviewed methodology to confirm that deviation only impacts criteria and procedures for measurement of parameters PROPIMM and PROPRES in LK-ASU module | Applied professional judgment to determine that, given low level of immigration or transience anywhere in vicinity of project areas, as documented in field mission report /13/ and as confirmed by audit team during interviews with local residents, deviation is highly unlikely to negatively impact conservativeness of quantification |
| 7 | Reviewed methodology to confirm that deviation only impacts criteria for delineation of reference region (in Step 1.1.1, Section 5 of BL-UP module) and leakage belt ((in Step | Application of professional judgment to confirm that, due to project-specific circumstances, leakage belt and reference region were delineated in a manner that complied with all |



| No. | whether deviation meets with the criteria and specifications for permitted methodology deviations | Whether deviation negatively impacts conservativeness of quantification of GHG emission reductions or removals |
|-----|--|--|
| | 1.1.3, Section 5 of BL-UP module), which are used to measure and monitor carbon stock changes in these areas | requirements as fully as possible while still complying with spirit of methodology and that, while a leakage belt and reference region fully complying will all requirements might be technically possible, it would be impossible to delineate such an area without moving far away from project area or outside country, which would violate spirit of these requirements, which clearly intend to result in a reference region and leakage belt as similar to project area as practicable; therefore, deviation results in increased accuracy of quantification |

3.2.8 Monitoring Plan

Section 4 of the PD contains a detailed monitoring plan that is organized in the manner required by the methodology (including use of all headings and sub-headings required by Step 3, Section 5 of the REDD-MF methodology framework) and also meets all requirements of the VCS Project Description Template.

The audit team can confirm that monitoring procedures are described with an appropriate degree of certainty, but with some flexibility allowed to allow for decisions to be made according to situations that may arise in the future. All monitoring procedures are appropriate to the stated task.

An identification of the parameters to be monitored, and a description of the steps taken to validate the suitability and eligibility of monitoring equipment and procedures, is provided below. Unless otherwise stated, references to "PD" in the below table should be read as referring to the specific section or subsection that is referred to in the parameter tables in Section 4.2 of the PD.

| Parameter(s) | Step(s) taken to validate suitability and eligibility of monitoring equipment and procedures |
|--------------|---|
| COLB | Confirmed that parameter table in PD, in combination with LK-ASU module, contains all necessary information to monitor this parameter Confirmed correctness of ex-ante default value |
| CLB | Same as for COLB above |



| Parameter(s) | Step(s) taken to validate suitability and eligibility of monitoring equipment and procedures |
|--|---|
| MANFOR | Confirmed that parameter table in PD, in combination with LK-ASU module, contains appropriate guidance for referring to peer-reviewed literature or government publications Confirmed appropriateness of ex-ante default value |
| PROPIMM | Confirmed that field mission report /13/ constitutes an appropriate PRA and that a similar study will likewise yield appropriate results Confirmed correctness of ex-ante default value |
| PROPRES | Same as for PROPIMM above |
| PROTFOR | Same as for MANFOR above |
| TOTFOR | Same as for MANFOR above |
| fterrestrial_forest (X,Y) | Confirmed that parameter table in PD, in combination with CP-AB module, contains all necessary information to carry out validation of selected equation Confirmed that Chave et al. (2005) equation is appropriate in all respects except that it has not yet been validated |
| fmangrove (X,Y) | Same as for fterrestrial_forest (X,Y) above |
| ARRD,unplanned,hrp | Confirmed that data/parameter table and text of PD (Sections 3.1 and 4), in combination with BL-UP module, contains all necessary information to monitor this parameter |
| Ai | Confirmed that data/parameter table and text of PD (Sections 3.1 and 4), in combination with X-STR module, contains all necessary information to monitor this parameter Confirmed correctness of ex-ante default values |
| Regional Forest Cover / Non-Forest Cover Benchmark Map | Same as for ARRD,unplanned,hrp above |
| Project Forest Cover Benchmark Map | Same as for ARRD,unplanned,hrp above |
| Leakage Belt Forest Cover Benchmark Map | Same as for ARRD,unplanned,hrp above |



| Parameter(s) | Step(s) taken to validate suitability and eligibility of monitoring equipment and procedures |
|--|---|
| Project Forest Cover Monitoring Map | Confirmed that data/parameter table and text of PD (Sections 3.1 and 4), in combination with M-MON module, contains all necessary information to monitor this parameter |
| Leakage Belt Forest Cover Monitoring Map | Same as for Project Forest Cover Monitoring Map above |
| Degradation PRA Results | Confirmed that data/parameter table and text of PD (Sections 3.3 and 4), in combination with M-MON module, contains all necessary information to monitor this parameter Confirmed that field mission report /13/ constitutes an appropriate PRA and that a similar study will likewise yield appropriate results Confirmed appropriateness of default value |
| Result of Limited Degradation Survey | Confirmed that data/parameter table and text of PD, in combination with M-MON module, contains all necessary information to monitor this parameter |
| ADefPA, i, u, t | Same as for Project Forest Cover Monitoring Map above |
| ADefLB, i, u, t | Same as for Project Forest Cover Monitoring Map above |
| ADegW, i | Same as for Result of Limited Degradation Survey above |
| ADistPA, q, i, t | Confirmed that data/parameter table and text of PD, in combination with M-MON module, contains all necessary information to monitor this parameter |
| APi,; CDegW, i, t; CAB,tree,i; DBHtree, i; H; CBB,tree,i; CAB,tree,post,i; Asp; N | Confirmed that data/parameter tables and text of PD (Sections 3.1 and 4), in combination with M-MON and CP-AB module, contain all necessary information to monitor these parameters Confirmed correctness of any default values applied |
| Aburn, i, t | Same as for Project Forest Cover Monitoring Map above |

3.3 Non-Permanence Risk Analysis

In accordance with Section 3.7.3 of the VCS AFOLU Requirements, the project's non-permanence risk report was assessed by the audit team. The risk analysis assessment was based on the non-permanence risk report that was included as Appendix 1 of the PD. The findings and conclusion regarding the non-permanence risk analysis undertaken for the project are summarized below for each risk category and factor. In conclusion, the determined value of the overall risk rating, 10%, has been determined in accordance with the AFOLU Non-Permanence Risk Tool.



3.3.1 Internal Risk - Project Management

| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|------|---|--|--|
| (a) | As tree planting is not included in project activities as described in Section 1.8 of PD, risk score is justified | N/A | Risk rating is appropriate |
| (b) | As no credits have previously been issued, risk score is justified | N/A | Risk rating is appropriate |
| (c) | 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) | CVs of key personnel /36/ /37/ are assumed to be of high quality | Risk rating is appropriate |
| (d) | 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 | NA | Risk rating is appropriate |
| (e) | - | - | N/A |
| (f) | - | - | N/A |



3.3.2 Internal Risk – Financial Viability

| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|------|---|--|--|
| (a) | - | - | N/A |
| (b) | - | - | N/A |
| (c) | | - | N/A |
| (d) | Audit team reviewed financial model workbook /38/ to confirm that cash flow breakeven point is less than 4 years from current risk assessment, as most costs attributable to measurement and monitoring for foreseeable future have already been incurred (and are considered "sunk costs") Audit team checked financial model workbook /38/ against a financial study /39/ and confirmed that per-hectare cost values have been correctly transferred While some assumptions regarding revenue flows within financial model workbook /38/ are no longer valid, given changes, since production of workbook, audit team performed an updated analysis using more current values and confirmed that cash flow breakeven point remains less than 4 years from current risk assessment | Financial model workbook /38/ appears to be of adequate quality Financial study /39/ was commissioned by a third party (World Institute for Conservation and Environment), is well-documented and appears to present best available information on this topic (although information provided therein is, at time of issuance of this report, almost eight years old and may need to be updated in future risk analysis) | Risk rating is appropriate |
| (e) | - | - | Risk rating is appropriate |
| (f) | - | - | N/A |
| (g) | - | - | N/A |



| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|------|---|--|--|
| (h) | Audit team confirmed, through review of website link provided, (last accessed 13 February 2015), that Guinea-Bissau will receive amounts stated in risk report; amounts stated in risk report are fully sufficient to cover cash out Audit team is reasonably assured that funds received by government of Guinea-Bissau, and earmarked for "Biodiversity" and "Climate Change", will be made available to project | - | Risk rating is appropriate |
| (i) | - | - | N/A |

3.3.3 Internal Risk – Opportunity Cost

| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|------|--|--|--|
| (a) | - | - | |
| (b) | - | - | N/A |
| (c) | | - | N/A |



| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|------|---|---|--|
| (d) | 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 See Section 3.3.5 below for comments regarding demonstration of net positive community impacts | See Section 3.3.5 below for comments regarding demonstration of net positive community impacts | Risk rating is appropriate |
| (e) | - | - | N/A |
| (f) | - | - | N/A |
| (g) | - | - | N/A |
| (h) | See comments in Section 3.3.4 below regarding existence of legally binding commitment | See comments in Section 3.3.4 below regarding existence of legally binding commitment | Risk rating is appropriate |



3.3.4 Internal Risk – Project Longevity





| Risk | Assessment of rationale, assumptions | Assessment of quality of | Conclusion |
|------|--------------------------------------|--------------------------|--------------|
| | and justification | documentation and data | regarding |
| | | provided | appropriaten |
| | | | ess of the |
| | | | risk rating |
| | | | |



- Through review of internal regulations for Cacheu /4/ and Cantanhez /5/ National Parks, audit team confirmed that these documents constitute a "legal agreement or requirement to continue the management practice" in perpetuity, as follows:
 - Audit team confirmed, through conversations with project personnel, review of protected area law /7/ and independent consultation with a practicing lawyer in Guinea-Bissau, that internal regulations, once approved, hold full force and effect of law indefinitely
 - During site inspections, audit team confirmed that internal regulation for Cacheu /4/ had been approved through conversation with project personnel
 - Following site inspections, audit team received meeting minutes /40/ and a list of signatures of attendees /41/ as evidence of approval of internal regulation for Cantanhez /5/
 - o Through review of internal regulations /4/ /5/, audit team confirmed that they constitute a commitment to continue manage practice that avoids emissions (i.e., deforestation); this can be seen throughout internal regulations but most specifically in Articles 34 and 29 for Cacheu and

 Internal regulations are official documentations and can thus be assumed to be of high quality Risk rating is appropriate



| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|------|--|--|--|
| | Cantanhez, respectively, where cutting of mangroves is forbidden and cutting of other trees is also forbidden) Therefore, per Section 2.2.4(5) of AFOLU Non-Permanence Risk Tool, audit team agrees a score of 0 for project longevity is warranted | | |

3.3.4.1 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 appropriaten ess of the risk rating |
|------|---|--|--|
| (a) | - | - | N/A |
| (b) | As discussed in Sections 3.1.9.1 and 3.2.2 above, land law /6/ vests ownership of land in government but individuals are commonly understood to hold traditional/customary use rights | N/A | Risk rating is appropriate |
| (c) | As discussed in Section 3.1.9.1 above, ownership of project area is undisputed | N/A | Risk rating is appropriate |
| (d) | 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 | N/A | Risk rating is appropriate |



| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|------|---|--|--|
| (e) | Not applicable, as this is not a WRC project | N/A | N/A |
| (f) | Same as for Section 3.3.3(h)—as project is "is protected by legally binding commitment (eg, a conservation easement or protected area) to continue management practices that protect carbon stocks over the length of the project crediting period", the score is appropriate | N/A | Risk rating is appropriate |
| (g) | - | - | N/A |



3.3.5 External Risk – Community Engagement

| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|------|--|--|--|
| (a) | Through on-site observations and interviews during site inspections, audit team can confirm that a mechanism exists to carry out regular "community meetings" with those residents living inside Cacheu and Cantanhez National Parks (and, potentially, inside project area) and that this consultation mechanism has included at least those individuals recognized to represent households (i.e., local government officials); audit team confirmed that knowledge of project was reasonably high among people living within park boundaries | N/A | Risk rating is appropriate |
| (b) | Audit team agrees 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 (including those individuals potentially dependent upon project area) | N/A | Risk rating is appropriate |



| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|------|--|---|--|
| | As a validation audit against Climate, Community & Biodiversity Standards is currently in progress, audit team can confirm that PD constitutes a "current participatory assessment of the positive and negative impacts of the project activities on the local communities who derive livelihoods from the project area" Audit team can confirm, through interviews with local residents during site inspections, that project activities, as described Section 1.8, will yield net positive benefits on social and economic well-being of communities living within park boundaries (in fact, audit team | PD constitutes a thorough participatory assessment of the positive and negative impacts of the project activities on the local communities who derive livelihoods from the project area | Risk rating is appropriate |



3.3.6 External Risk – Political Risk

| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|------|--|---|--|
| (a) | - | - | N/A |
| (b) | - | - | N/A |
| (c) | - | - | N/A |
| (d) | - | - | N/A |
| (e) | Data from years 2007-2011 were downloaded from the World Bank Institute Worldwide Governance Indicators website (these constituted the most recent five years for which data were available, as of time of initial completion of the risk report); on 12 November 2012, audit team independently downloaded the dataset replicated analysis undertaken by project proponent. | The dataset used is required by the AFOLU Non-Permanence Risk Tool, and can be considered high quality. | Risk rating is appropriate |
| (f) | - | - | N/A |



3.3.7 Natural Risk

| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|----------------------------------|---|--|--|
| Fire | 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 Information from IBAP personnel (which has derived from personnel experience of IBAP personnel with project as well as knowledge shared by community members) is considered "documented local knowledge" by audit team | N/A | Risk rating is appropriate |
| Pest and Disease Outbreaks | During interviews with IBAP personnel, it 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 Information from IBAP personnel (which has derived from personnel experience of IBAP personnel with project as well as knowledge shared by community members) is considered "documented local knowledge" by audit team | N/A | Risk rating is appropriate |



| Risk | Assessment of rationale, assumptions and justification | Assessment of quality of documentation and data provided | Conclusion regarding appropriaten ess of the risk rating |
|--------------------------|---|--|--|
| Extreme Weather | The audit team confirmed, through interviews with community members, that extreme weather events are not a factor in the project area Information from IBAP personnel (which has derived from personnel experience of IBAP personnel with project as well as knowledge shared by community members) is considered "documented local knowledge" by audit team | N/A | Risk rating is appropriate |
| Geological Risk | The audit team confirmed, through interviews with community members, that geological risk is not a factor in the project area. Information from IBAP personnel (which has derived from personnel experience of IBAP personnel with project as well as knowledge shared by community members) is considered "documented local knowledge" by audit team | N/A | Risk rating is appropriate |
| Other natural risk | Audit team is aware of no risks that could be present in project area apart from above | N/A | Risk rating is appropriate |

3.4 Environmental Impact

This section is not applicable, as no environmental impact assessments were conducted with respect to the project.

3.5 Comments by Stakeholders

While interviews with local residents were carried out by the audit team no formal stakeholder consultations were held, and therefore this section is not applicable.



4 VALIDATION CONCLUSION

In conclusion, the project complies with the validation criteria for projects set out in VCS Version 3. The audit team holds no qualifications or limitations regarding the above statement. While only time will tell whether the project is able to achieve the estimated GHG emission reductions, it should be noted that fairly conservative methodological choices have been voluntarily elected by project personnel in quantifying estimated GHG emission reductions for the baseline period. These conservative methodological choices make it fairly likely that the project will meet or exceed the estimated GHG emission reductions, at least for the baseline period.



APPENDIX A: LIST OF FINDINGS

The following tables include all issues raised during the validation audit. It should be noted that all language under "Client Response" is a verbatim transcription of responses to findings as provided by project personnel.

NCR 2012.1 dated 10-12-2012

Standard Reference: VCS Standard V3.3, Sec. 3.18.1; Project Description Template, V3.1

Document Reference: PD REDD v1 00.docx

Finding: The VCS Standard requires that "The project and its context shall be described in the project description using the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program)". A new version of the Project Description Template (V3.1) was released on 4 October 2012 and is effective immediately. Therefore, use of the out-of-date template constitutes a non-conformity with respect to the VCS rules. **Client Response**: [No formal response from the client was received with respect to this finding.]

Auditor Response: Subsequent to the issuance of this finding, VCSA instituted a six-month grace period for use of the updated Project Description Template, and therefore the continued use Version 3.0 does not, at the time of writing of this response (21 December 2012), constitute a non-conformity with respect to the VCS rules. Therefore, the finding is no longer relevant and can be closed.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.2 dated 10-12-2012

Standard Reference: VCS Standard V3.3, Sec. 3.18.2(1)(c) **Document Reference**: PD_REDD_v1_00.docx, Sec. 1.4

Finding: The VCS Standard requires that "the project description shall include the following... The names, roles and responsibilities of the project proponent(s) and any other entities involved in the project." While WayCarbon is an entity involved in the project, that entity is not listed within the relevant section of the PD.

Client Response: The World Bank is the entity financing the development of the REDD Project (PD development and validation). Mr. Henrique Pereira is a partner in WayCarbon and was hired as a technical expert to support the development of the PD and validation. The existing contract is between The World Bank and Mr. Henrique Pereira as an individual. Therefore, there is no formal relationship between The World Bank and WayCarbon to the development of this REDD Project.

Auditor Response: The information provided in the Client Response section is sufficient to justify the closure of this finding.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.3 dated 10-12-2012

Standard Reference: VCS Standard V3.3, Sec. 3.9.1

Document Reference: PD REDD v1 00.docx, Sec. 1.7

Finding: The VCS Standard indicates that "Projects are categorized by size according to their estimated average annual GHG emission reductions or removals, as set out below...

- 1) Projects: Less than or equal to 300,000 tonnes of CO2e per year.
- 2) Large projects: Greater than 300,000 tonnes of CO2e per year."

While the project is stated to result in average annual GHG emission reductions or removals of 347,398 tonnes of CO2e per year, the project is stated to be a "project" instead of a "large project".

Client Response: The PD was updated (PD_REDD_v1_10.docx) and now states that the project is a "Large Project".

Auditor Response: As indicated, the revised PD submitted to the audit team correctly indicates that the project is a "large project". Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.4 dated 10-12-2012

Standard Reference: VCS Standard V3.3, Sec. 3.1.3 **Document Reference**: PD_REDD_v1_00.docx, Sec. 2.1

Finding: The VCS Standard requires that "Projects shall apply methodologies eligible under the VCS Program... The list of methodologies and their validity periods is available on the VCS website." The PD states that the project applies the methodology "VM0007 – REDD Methodology Framework (REDD-MF). Version 1.2". The webpage for the VM0007 methodology (http://v-c-s.org/methodologies/VM0007), accessed on the date of issuance of this finding, states "As of 30 September 2012, VM0007, v1.1 and v1.2 are no longer valid. Projects that have not completed validation by 30 September can no longer apply either version." Therefore, at this time, V1.2 of the VM0007 methodology is not an eligible methodology under the VCS Program.

Client Response: [No formal response from the client was received with respect to this finding.] **Auditor Response**: This finding is no longer relevant, as V1.3 of the VM0007 methodology was approved by VCSA on 20 November 2012. The VM0007 methodology is now an eligible methodology under the VCS Program, and the project will be assessed against V1.3 of that methodology. Therefore, the finding can be closed.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.5 dated 10-12-2012

Standard Reference: REDD-MF V1.2, Sec. 4

Document Reference: PD_REDD_v1_00.docx, Sec. 2.1

Finding: The REDD-MF methodology framework states that "The justification of the choice of modules and why they are applicable to the proposed project activity shall be given in the VCS PD." The PD does not contain a justification of the choice of modules and why they are applicable to the proposed project activity.

Client Response: The PD was updated (PD_REDD_v1_10.docx) and now section 2.1 presents a clear justification of choice and applicability of modules used. Justification of choice is presented on section 2.1 and the justification on applicability presented on section 2.2. Please note that modules are applied for two reasons: (i) the module is ALWAYS MANDATORY, this is the case of REDD-MF, M-MON, T-ADD, T-BAR, X-UNC, X-STR, CP-AB and E-BB or (ii) the module is MANDATORY FOR UNPLANNED DEFORESTATION projetcs, this is the case of BL-UP and LK-ASU. In addition T-SIG is applied to justify selection of carbon pools and emissions sources.

Auditor Response: The audit team agrees that the revised PD contains a clear justification of the choice and applicability of the modules selected. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.6 dated 10-12-2012

Standard Reference: REDD-MF V1.2, Sec. 5, Step 1b **Document Reference**: PD_REDD_v1_00.docx

Finding: The REDD-MF methodology framework states that "The date of the next scheduled revision shall be specified in the VCS PD." The date of the next scheduled revision is not specified in the PD. **Client Response**: Section 1.6 of the PD was updated to present the date of the next schedule revision of the baseline. The PD was updated (PD_REDD_v1_10.docx). Next baseline revision to take place on 31st December 2021.

Auditor Response: The date of the next scheduled baseline revision has been indicated in the revised PD. This date conforms to the applicability condition of the REDD-MF methodology framework, V1.4, which states that "Baselines shall be renewed every 10 years from the project start date."

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.7 dated 10-12-2012

Standard Reference: REDD-MF V1.2, Sec. 5, Step 1d

Document Reference: PD_REDD_v1_00.docx, Sec. 2.3, Step 1d

Finding: The REDD-MF methodology framework states that "The selection of sources and the appropriate justification shall be presented in the VCS PD." The selection of sources is presented in the PD with respect to the project scenario. However, the selection of sources is not presented in the PD with respect to the baseline scenario.

Client Response: Section 2.3, step 1.d of the PD was updated and now presents the sources of GHG for the Baseline Scenario. The PD was updated (PD REDD v1 10.docx).

Auditor Response: As indicated, the revised PD includes a description of GHG sources for the baseline scenario, and review of these sources indicate that they conform to the guidance for selection of the project boundary in Version 1.4 of the REDD-MF methodology framework. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.8 dated 10-12-2012

Standard Reference: REDD-MF V1.2, Sec. 5, Step 1d, Table 3 **Document Reference**: PD_REDD_v1_00.docx, Sec. 2.3, Step 1d

Finding: The PD states that "Non-CO2 emissions from biomass burning are conservatively omitted, because such emissions are expected to be greater in the baseline than in the project scenario, as deforestation followed by agricultural practices is expected to decrease." This is not consistent with the guidance of the REDD-MF methodology framework, which requires that "It is conservative to exclude in the baseline but [CH4 and N2O emissions] must be included in the project case if fire occurs."

Client Response: Section 2.3, step 1.d of the PD was updated and now Non-CO2 gases are included as Biomass Burning in the Project Scenario in case fire occurs. The PD was updated (PD REDD v1 10.docx).

Auditor Response: As indicated, the revised PD clarifies that emissions due to burning are conservatively excluded from the baseline scenario, but that these emissions must be included in the project scenario if fire occurs. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.9 dated 10-12-2012

Standard Reference: REDD-MF V1.2, Sec. 5, Step 2; T-ADD V3.0, Sec. 2.1.2

Document Reference: PD REDD v1 00.docx, Sec. 2.5

Finding: The REDD-MF methodology framework requires that "Project participants shall use T-ADD to identify credible alternative land use scenarios and to evaluate both the alternatives and the proposed project scenarios and to demonstrate the additionality of the project scenario. The assessment and demonstration of additionality shall be presented in the VCS PD."

The PD does not contain any information with respect to the assessment and demonstration of the requirements of sub-step 1b (Section 2.1.2) of the T-ADD tool.

Client Response: Section 2.5 of the PD was updated to include Sub-step 1b (Section 2.1.2) of T-ADD. The PD was updated (PD_REDD_v1_10.docx).

Auditor Response: The PD now contains an indication of how the relevant Sub-step of the T-ADD tool was followed. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.10 dated 10-12-2012

Standard Reference: REDD-MF V1.2, Sec. 5, Step 2; T-ADD V3.0, Sec. 2.3.2

Document Reference: PD_REDD_v1_00.docx, Sec. 2.5

Finding: The REDD-MF methodology framework requires that "Project participants shall use T-ADD to identify credible alternative land use scenarios and to evaluate both the alternatives and the proposed project scenarios and to demonstrate the additionality of the project scenario. The assessment and demonstration of additionality shall be presented in the VCS PD."

The PD does not contain any information with respect to the assessment and demonstration of the requirements of sub-step 3b (Section 2.3.2) of the T-ADD tool.

Client Response: Section 2.5 of the PD was updated to include Sub-step 3b (Section 2.3.2) of T-ADD. The PD was updated (PD REDD v1 10.docx).

Auditor Response: The PD now contains an indication of how the relevant Sub-step of the T-ADD tool was followed. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.11 dated 10-12-2012

Standard Reference: REDD-MF V1.2, Sec. 5, Step 2; T-ADD V3.0, Sec. 2.4

Document Reference: PD REDD v1 00.docx, Sec. 2.5

Finding: The REDD-MF methodology framework requires that "Project participants shall use T-ADD to identify credible alternative land use scenarios and to evaluate both the alternatives and the proposed project scenarios and to demonstrate the additionality of the project scenario. The assessment and demonstration of additionality shall be presented in the VCS PD."

Step 4 (Section 2.4) of the T-ADD tool requires that "The previous steps shall be complemented with an analysis of the extent to which similar activities have already diffused in the geographical area of the proposed VCS AFOLU project activity... Provide an analysis to which extent similar activities to the one proposed as the VCS AFOLU project activity have been implemented previously or are currently underway... Other registered VCS AFOLU project activities shall not be included in this analysis." The T-ADD tool explicitly requires the user to assess whether any other activities similar to the project activity (but not including activities that are implemented as part of VCS AFOLU projects) have been previously implemented or are currently underway. As the user is explicitly instructed to exclude registered VCS AFOLU projects from the analysis, the evidence that no other VCS AFOLU projects exist in the country, as stated within the PD, is not relevant. On the contrary, the T-ADD tool requires the user to assess whether any similar project activities are underway that are not linked to VCS AFOLU projects. Client Response: Section 2.5 of the PD was updated to better reflect on Step 4 the similar activities to the proposed project activity in the country. The PD was updated and Step 4 revised accordingly (PD_REDD_v1_10.docx)

Auditor Response: The PD now contains an indication of how the relevant Sub-step of the T-ADD tool was followed. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.12 dated 10-12-2012

Standard Reference: REDD-MF V1.2, Sec. 5, Step 3 **Document Reference**: PD_REDD_v1_00.docx, Sec. 4.3

Finding: The PD states that "The description of the monitoring plan is presented in Appendix I." This is not consistent with the REDD-MF methodology framework, which requires that "Project proponents shall include a single monitoring plan in the VCS PD."

Client Response: Section 4.3 of the PD was revised and the Monitoring Plan is now part of the PD template. The PD was updated (PD REDD v1 10.docx).

Auditor Response: As indicated in the Client Response, Section 4.3 of the PD now contains a

monitoring plan. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.13 dated 10-12-2012

Standard Reference: M-MON V2.0, Sec. 6.3

Document Reference: PD_REDD_v1_00.docx, Sec. 3.1

Finding: The parameter table for parameter A(BSL,PA,unplanned,t) in the M-MON module states "Corresponding information shall be included in the VCS PD". While estimates of deforestation are presented in Table 4 of the PD, they are not presented for each year, as required by the M-MON module. **Client Response**: Table 4 (section 3.1) was revised and now presents the annual deforestation in the

Project Area (ha) and Leakage Belt (ha). The PD was updated (PD_REDD_v1_10.docx).

Auditor Response: As indicated in the Client Response, Table 4 of the PD now contains estimates of deforestation in the project area and leakage belt for each year of the baseline period. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.14 dated 10-12-2012

Standard Reference: M-MON V2.0, Sec. 6.3

Document Reference: PD_REDD_v1_00.docx, Sec. 3.1

Finding: The parameter table for parameter A(planned,i,t) in the M-MON module states "Corresponding information shall be included in the VCS PD". While estimates of deforestation are presented in Table 4 of the PD, they are not presented for each year, as required by the M-MON module.

Client Response: Table 4 (section 3.1) was revised and now presents the annual deforestation in the

Project Area (ha) and Leakage Belt (ha). The PD was updated (PD_REDD_v1_10.docx).

Auditor Response: This finding should not have been issued, as parameter A(planned,i,t) is not relevant to the project. Therefore, the finding is withdrawn.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.15 dated 10-12-2012

Standard Reference: M-MON V2.0, Sec. 6.3

Document Reference: PD REDD v1 00.docx, Sec. 3.1

Finding: The parameter table for parameter C(BSL,i) in the M-MON module states "Corresponding information shall be included in the VCS PD". Average carbon stocks for each park are presented in the PD, but average carbon stocks for each stratum are not presented in the PD.

Client Response: Section 3.1 of the PD was revised and now Table 5 presents the average carbon stock per stratum (CBSL,i) in Cantanhez and Cacheu. The PD was updated (PD_REDD_v1_10.docx).

Auditor Response: As indicated in the Client Response, Table 5 of the PD now contains values for parameter C(BSL,i) for each stratum in Cantanhez and Cacheu. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.16 dated 10-12-2012

Standard Reference: M-MON V2.0, Sec. 6.3 Document Reference: PD REDD v1 00.docx

Finding: The parameter tables for the following parameters in the M-MON module state "Corresponding information shall be included in the VCS PD", yet no information regarding the parameters is contained within the PD.

- C(AB,tree,I) - C(BB.tree.I)

Client Response: Section 4.1 of the PD was revised and now Data and Parameters Available at Validation include C(AB) and C(BB) for all strata (Mangrove, Closed Forest, Open Forest and Savanna) in Cantanhez and Cacheu. Data is sourced from field campaign and registered in the report prepared by Winrock and IICT (2012). Both the report and the excel with GPS coordinates of the sample plots as well as the values obtained had been made available to SCS. The PD was updated (PD REDD v1 10.docx). Auditor Response: As indicated in the Client Response, Section 4.1 of the PD now contains values for parameter C(AB,tree,i) and C(BB,tree,i) for each applicable strata. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.17 dated 10-12-2012

Standard Reference: X-STR V1.0, Sec. II Document Reference: PD REDD v1 00.docx

Finding: The X-STR module requires that "A map displaying the final delineation of strata must be included in the VCS PD." The PD does not contain a map displaying the final delineation of strata. Client Response: Section 3.1 of the PD was revised and the maps displaying the final delineation of strata in Cacheu and Cantanhez are presented (Figure 9 and Figure 10). The PD was updated (PD REDD v1 10.docx).

Auditor Response: As indicated in the Client Response, Figures 9 and 10 now display the final delineation of strata for Cacheu and Cantanhez, respectively, as required by the X-STR module. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NIR 2012.18 dated 10-12-2012

Standard Reference: NA

Document Reference: PD REDD v1 00.docx, Sec. 4.3

Finding: Section 4 of the PD makes numerous references to an Appendix I. However, it does not appear

that the audit team has been provided with this document. Please provide this document.

Client Response: Section 4.3 of the PD was revised and the Monitoring Plan is now part of the PD template. The PD was updated (PD REDD v1 10.docx).

Auditor Response: As indicated in the Client Response, the PD now contains the monitoring plan as Section 4.3, and all references to "Appendix I" have been removed. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.19 dated 10-12-2012

Standard Reference: VCS Standard V3.3, Sec. 3.18.2(2) **Document Reference**: PD_REDD_v1_00.docx, Sec. 2.2

Finding: The VCS Standard requires that the PD contain "a demonstration that the project activity or activities meet the applicability conditions of the methodology(s) applied to the project". The most relevant definition of "demonstrate", as set out by the website http://www.dictionary.com, is "to describe, explain, or illustrate by examples, specimens, experiments, or the like". While the PD does briefly attest that the project activity meets some applicability conditions, this does not constitute a demonstration of such. Furthermore, the following applicability conditions are not discussed in the PD:

- From REDD-MF: "Baselines shall be renewed every 10 years from the project start date."
- From REDD-MF: "If land is not being converted to an alternative use but will be allowed to naturally regrow (i.e. temporarily unstocked), this framework shall not be used."
- From REDD-MF: "Where post-deforestation land use constitutes reforestation this framework shall not be used."
- From REDD-MF: "Baseline agents of deforestation shall: (i) clear the land for settlements, crop production (agriculturalist) or ranching, where such clearing for crop production or ranching does not amount to large scale industrial agriculture activities; (ii) have no documented and uncontested legal right to deforest the land for these purposes; and (iii) are either resident in the reference region (cf. section 1 below) or immigrants. Under any other condition this framework shall not be used."
- From REDD-MF: "Where, pre-project, unsustainable fuelwood collection is occurring within the project boundaries modules BL-DFW and LK-DFW shall be used to determine potential leakage"

Client Response: The PD was updated (PD_REDD_v1_10.docx) and now section 2.1 presents a clear justification of choice and applicability of modules used. Justification of choice is presented on section 2.1 and the justification on applicability presented on section 2.2.

Auditor Response: The PD has been modified to contain a demonstration that the project meets each of the applicability conditions of the methodology. It should be noted that some of the statements made within the demonstrations (such as the assertion that fuelwood collection is sustainable) are currently related to open findings, and may need to be revised in the future. However, to the extent that a demonstration that the project meets the applicability conditions has been provided, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.20 dated 12-21-2012

Standard Reference: VCS Standard V3.3, Sec. 3.7.1 and Sec. 3.18.2(1)(a) **Document Reference**: PD_REDD_v1_00.docx, Sec. 1.5; Timeline v2.xlsx

Finding: Section 3.7.1 of the VCS Standard requires that "The project start date is the date on which the project began generating GHG emission reductions or removals". According to Section 3.18.2(1)(a) of the VCS Standard, the start date must be provided in the PD. While a start of "01/January/2013" is indicated in the PD, it was indicated to the audit team during office meetings, and documented in the Excel workbook "Timeline v2.xlsx", that a start date of 31 March 2011 is actually correct. The correct start must be reflected in the PD.

Client Response: The PD was updated (PD_REDD_v1_10.docx) and now section 1.5 has the correct start date of 31st of March 2011.

Auditor Response: As has been indicated, the project start date of 31 March 2011 has been indicated within the revised PD. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.21 dated 12-21-2012

Standard Reference: VCS Standard V3.3, Sec. 3.7.1

Document Reference: NA

Finding: Section 3.7.1 of the VCS Standard requires that "The project start date is the date on which the project began generating GHG emission reductions or removals". It was indicated to the audit team during the office meeting that the start date is the date on which funding for the Coastal Biodiversity Management Project (CBMP) expired. How, documentary evidence to substantiate the claimed start date was not provided to the audit team during the office meeting. Please provide documentary evidence to indicate that funding for CMBP ended on the date in question.

Client Response: Evidence of the date of closure of CBMP is submitted with the Findings Log to SCS audit team (file: SCREEN_CBMP.gif). The evidence present the screen shot of The World Bank project management systems and shows the closing date of the project (31st of March 2011)

Auditor Response: The screenshot provided, which appears to be a completely authentic representation of the World Bank management software, clearly indicates that funding to the Coastal Biodiversity and Management Project has been completely dispersed, with a closing date of 31 March 2011. The evidence provided is sufficient to substantiate the project start date that was selected. Therefore, the information request has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NIR 2012.22 dated 12-21-2012

Standard Reference: AFOLU Non-Permanence Risk Tool V3.2, Sec. 2.2.1

Document Reference: PD_REDD_v1_00.docx, Sec. 7.1

Finding: As seen within the non-permanence risk report enclosed within the PD, a risk score of 0 has been claimed for factor c of the project management sub-category. The AFOLU Non-Permanence Risk Tool permits such a score to be claimed if the management team includes "individuals with significant experience in all skills necessary to successfully undertake all project activities" and any area of required experience is covered by at least one individual with at least 5 years experience in the area. During the office meetings, it was indicated to the audit team that Alfredo Simão da Silva and Justino have the required experience between the two of them. However, documentary evidence of the experience of Alfredo and Justino has not been provided. Please provide this evidence.

Client Response: The Project Proponent is sending to SCS the CV of Justino Biai (Program Coordinator) and Alfredo Simão da Silva (Director). As can be seen both have +10 years of experience in complementary fields necessary to the management of the REDD Project. Justino holds a PhD in Agronomy and Alfredo a MSc in Geography. The files CV-A_SIMAO_fr.pdf and CV-J_BIAI_fr.pdf are provided to SCS audit team.

Auditor Response: The provided CVs are sufficient evidence that Alfredo Simão da Silva and Justino Blai, of IBAP, possess the necessary expertise in all skills necessary to successfully undertake all project activities. During on-site audit activities, the audit team observed that the project was very well-managed, particularly in comparison to other initiatives in the host country. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.23 dated 12-21-2012

Standard Reference: AFOLU Non-Permanence Risk Tool V3.2, Sec. 2.2.1

Document Reference: PD_REDD_v1_00.docx, Sec. 7.1

Finding: As seen within the non-permanence risk report enclosed within the PD, a risk score of -2 has been claimed for factor f of the project management sub-category. The AFOLU Non-Permanence Risk Tool permits such a score to be claimed if an adaptive management plan is in place. With respect to adaptive management plans, the AFOLU Non-Permanence Risk Tool states "Adaptive management plans are those that identify, assess and create a mitigation plan for potential risks to the project. including those identified in this document, and any other obstacles to project implementation. They include a process for monitoring progress and documenting lessons learned or corrections that may be needed, and incorporating them into project decision-making in future monitoring periods." During the office meetings, it was indicated to the audit team that, for each of the parks contained within the project area, the communities meet twice a year to discuss park management issues, and that the framework such meetings constitutes an adaptive management plan, as described above. However, documentary evidence to demonstrate such has not been provided. Please provide sufficient evidence to provide the audit team with assurance that a plan is in place, and that such a plan complies with the definition of an adaptive management plan as provided within the AFOLU Non-Permanence Risk Tool. Client Response: Although the project developer understands that the Community Management Comitte consitute an Adaptative Management team able to respond promptly to any issue within the project area the project is still on early stages and not capable of presenting at this time a documented lessons or corrections undertaken. The Internal Risk Analysis - Project Management - was revised and the mitigation score removed. This item now totals a Risk Rating of 2. The PD was revised (PD_REDD_v1_10.docx) and the Risk Analysis updated (Risk_REDD_080413.xlsx).

Auditor Response: As indicated in the Client Response, the risk report has been modified to remove the mitigation risk score, and therefore the information request is no longer relevant. Therefore, the finding can be closed.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.24 dated 12-21-2012

Standard Reference: REDD-MF V1.3, Sec. 4

Document Reference: PA_Cacheu.shp; PA_Cantanhez.shp

Finding: As an applicability condition, the REDD-MF methodology framework requires that "Land in the project area has qualified as forest at least 10 years before the project start date." During the office meeting, it was revealed to the audit team that, while all of the project area within the Cacheu Mangrove Forest National Park was forested as determined using imagery from 2010, 75,082 pixels (approximately 7.8% of the project area within the Cacheu Mangrove Forest National Park) were not forested in 2002. It was also revealed to the audit team that, while all of the project area within the Cantanhez Forest National Park was forested as determined using imagery from 2010, 28,552 pixels (approximately 1.9% of the project area within the Cantanhez Forest National Park) were not forested in 2002. Therefore, the project area does not comply with the applicability condition of the REDD-MF methodology framework.

Client Response: A complete revision of the spatial analysis had to be carried out and the RRD, Project Area and Leakage belt revisited and ajusted to comply with REDD-MF requirements. The following documents explaining the adjustments and the new results are being submmited to SCS: Finding 2012.24 - boundaries revision.docx, Confusion_Matrix.xlsx, Areas_PA_RRD_LK_Cacheu_Cantanhez.xlsx, Justification_PA_RRD_LK_Cacheu_Cantanhez.xlsx, Deforestation_3class.xlsx, PA_Cacheu.shp and PA_Cantanhez.shp. The (PD_REDD_v1_30.docx) was revised accordingly.

Auditor Response: Given the claim that the project area has been corrected to address the non-conformity, the NCR can be closed. However, as the audit team has not received the materials necessary to confirm that the project boundary has been appropriately revised, NIR 2013.62 has been issued. **Closing Remarks**: The Client's response adequately addresses the finding.



NCR 2012.25 dated 12-21-2012

Standard Reference: VCS Standard V3.3, Sec. 3.18.2(7)

Document Reference: Decreto Cantanhez.pdf; Cantanhez_park.shp

Finding: The VCS Standard requires that the PD contain "evidence of right of use". Evidence of right of use, with respect to the Cantanhez Forest National Park, has been provided in the form of the "Boletim Oficial Numero 8", dated 22 February 2011, which set out the formation of the Cantanhez Forest National Park. However, the audit team has noted a discrepancy between "Artigo 3, Limites" of the Boletim and the boundary shapefile that is the basis for the identification of the project area. In one section of Artigo 3, the Boletim states that the boundaries of the park are set out as follows: "...muda de direcção e seque o rio Balanazhino, desce paralelamente a estrada de Cacine e contorta a monte de areia "Vendue Nudere Morso"), atravesse o rio Gaduar e chega a fronteira com a Guine-Conakry..." This can be translated roughly as stating that the boundary "follows the river Balanazhino, then descends parallel to the road to Cacine, going around the sand mound "Vendue Nudere Morso", crossing the river Gaduar and reaching the border with Guine-Conakry". However, the audit team has discovered that the boundary within the shapefile falls goes outside of these boundaries by proceeding at a heading of approximately 115 degrees for approximately 3.86 kilometers from the point where the river Balanazhino crosses the road to Cacine, then at that point bending southwest to meet with the Guine-Conakry border. Therefore, the project area, as utilized in the calculations reported in the PD, includes area over which the project proponent does not have right of use, in nonconformance to the VCS Standard.

Client Response: The Cantanhez Park's boundaries were adjusted following closely the description in the boletim. For that we used the 1:50,000 scale Geographic map of Guinea-Bissau (Source: Junta das Missões Geográficas e de Investigações do Ultramar, Portugal, 1953). The project proponent is submitting with this findings log (120713) a report demonstrating the revised boundaries and a *.kmz file to be visualized on Google Earth.

Auditor Response: The information provided is sufficient to confirm that the boundary for Cantanhez National Park has been revised in order to fully reflect the legal description in the decree. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.26 dated 12-21-2012

Standard Reference: CP-AB V1.0, page 12

Document Reference: NA

Finding: The CP-AB module requires that each allometric equation linking measured tree variables to aboveground biomass of living trees "must be based on statistically significant regressions and must have an r2 that is ≥ 0.8." During the office meeting, it was indicated to the audit team that an equation from Chave et al. (2005) was used to estimate the aboveground biomass of living trees in the closed forest, open forest, and savanna strata. However, it is not apparent from the Chave et al. (2005) publication that the dry forest equation that was used conforms to the above requirement. Please provide evidence that the Chave et al. (2005) equation for dry forest conforms to the above requirement.

Client Response: The predictive model (AGB=0.112 x (p x DBH2 x h)0.916) from Chave et al. (2005) used to estimate the AGB of each live forest tree in all strata (closed forest, open forest and savanna) was developed based on a datafet that comprises 316 trees and has R2=0.99. Thus, compying with the requirements of the CP-AB module. The validation of the equation and the evidences provided in reply to NCR_2012.27 demonstrates the statistical significancy of the equation and that it is above 0.8.

Auditor Response: Unfortunately, the information provided is insufficient to satisfy the information request. Please provide a reference to the specific page, figure or table number in the Chave et al. (2005) publication where evidence is provided that the equation meets the cited requirements of the methodology.

Client Response 2: The project team got in contact with Jerome Chave by e-mail and the author confirmed that the allometric equation comply with the cited requirements of the methodology. A copy of the e-mail is being provided to SCS.

Auditor Response 2: The audit team can confirm, through review of a PDF of an email exchange, that Dr. Chave confirmed, in an email dated 12 May 2013, that the sample size and R2 requirements for the dry forest equation have been met. Therefore, the information request has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.27 dated 12-21-2012

Standard Reference: CP-AB V1.0, pages 12-14

Document Reference: NA

Finding: Pages 12-14 of the CP-AB module require that the allometric equations that are used to predict aboveground biomass of living trees be validated, and provide two options (the "Limited Measurements" and "Destructive Sampling" options) for doing so. However, it was revealed to the audit team that the Chave et al. (2005) equation for dry forest, which was used to predict aboveground biomass of living trees in the closed forest, open forest, and savanna strata, was not validated in accordance with the requirements of the CP-AB module.

Client Response: The Project Proponent is presenting an assessment report that demonstrates the validation of Chave et al. equation using the Limited Measurement approach (Finding 2012.27 - Validation of Chave Allometric Equation.docx). The analysis revealed that Chave et al. (2005) presents conservative estimates of AGB.

Auditor Response: As indicated in the Client Response, the document "Finding 2012.27 - Validation of Chave allometric equation" presents results of a study indicating that the Chave et al. (2005) equation results in a systematic underestimation of biomass and, thus, the use of the equation is in conformance with the requirements of the CP-AB module. In order to allow the audit team to confirm the conformance of the Chave et al. (2005) equation to the CP-AB module, please provide the following information:

- Please provide a demonstration that the selection of measured trees conformed to the requirement of CP-AB that "if validating forest type-specific equation, selection should be representative of the species composition in the project area, i.e. species representation in roughly in proportion to relative basal area".
- Please provide a demonstration that the maximum diameter of measured trees reflected "the largest trees present or potentially present in the future in the project area (and/or leakage belt)", as required by CP-AB.
- Please provide evidence (as in a spreadsheet) of the analytical steps undertaken to produce the results shown in Figure 2 of the document "Finding 2012.27 Validation of Chave allometric equation".
- Please provide scanned copies of all field notes from the measurement effort (or, if this is too difficult, please provide the audit team with a list of trees measured so that the audit team can randomly select a sample of records for which field notes can be requested).

Client Response 2: After running some tests for data verification prior to data processing, on the GB collected data and different models, the project team concluded that the best fit for estimating aboveground biomass (AGB) of trees was the pantropical allometric equation formulated by Chave et al. (2005). The detailed procedures and results are presented to SCS (Findining 2012.27_v2.docx). The field sheets and the calculation workbook is also provided.

Auditor Response 2: All of the requested information has been provided to the audit team. However, in review of the worksheet "equation validation Chave TF" within the workbook "NCR 27 Chave_etal2005 dry forest equation validation - field campaign 02.2013", it appears that a consistent error has been made in the calculation of carbon stocks using the chave equation. The equation that has been implemented within that worksheet is:

Biomass=0.112*(DBH*(height^2)*density)^0.996

However, the equation presented for dry forests within the Chave et al. (2005) paper, as correctly reproduced as Equation 1 within the document "NCR 27 Chave_etal2005 dry forest equation validation field campaign 02.2013", is:

Biomass =0.112*(density*(DBH^2)*height)^0.996

Thus, the biomass values as calculated with the Chave equation have been underreported for purposes of the equation validation. It appears that, when the error is corrected, the Chave equation results in a consistent overestimate of biomass, compared to the estimate produced using the "limited measurements" procedure.

Please reassess the information submitted in response to this finding and take any necessary corrective action.

Client Response 3: After correcting the error identified by the audit team, Chave equation consisten overestimate biomass. The file Finding 2012.27 - Validation of Chave allometric equation v3_20140912.docx presents a detail justification why the equation can be considerated conservative for ex ante quantification and presents a Corrective Action Plan (CAP) so further field measurement can be conducted and the equation validated prior to the first project verification.





Auditor Response 3: The audit team agrees that the evidence presented shows that the Chave et al. (2005) equation appears to overestimate biomass within the project area. However, the audit team also agrees with the corrective action plan to retain use of the Chave et al. (2005) equation for validation purposes and validate the equation with further field measurements prior to the first verification audit, as set out within the text of methodology deviation #2 in Section 2.6 of the updated PD (entitled "pd_redd_v1_90"). Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.28 dated 12-21-2012

Standard Reference: CP-AB V1.0, pages 12-14

Document Reference: NA

Finding: Pages 12-14 of the CP-AB module require that the allometric equations that are used to predict aboveground biomass of living trees be validated, and provide two options (the "Limited Measurements" and "Destructive Sampling" options) for doing so. However, it was revealed to the audit team that the Fromard et al. (1998) equations for Avicennia sp. and Laguncularia racemosa, which were used to predict aboveground biomass of living trees of the above species in the mangrove stratum, were not validated in accordance with the requirements of the CP-AB module.

Client Response: A Corrective Action Plan (CAP) was submitted to SCS (Corrective Action Plan Mangrove - Finding 2012 28-29 - revised20130625). The CAP presents a new equation (Chave et al. 2005) that comply with methodological requirements (n=30 and r2>0.80) and is the most conservative equation that could be identified in the literature. The conservativeness was tested by demonstrating that Chave et al. (2005) equation deliver, consistently, lower carbon stocks than other available equations. Given timing constraints, since the country is entering the rainy season which does not permit the imidiate completion of additional field work, the Project Proponent is requesting that the limited measurement approach, following the procedure established in the CAP, be performed in the interval between validation and verification.

Auditor Response: As indicated in the Client Response, the selected allometric equation for mangrove trees (which is different from the equations referred to in the text of this finding) has not yet been validated. The client has proposed a methodology deviation that has been approved by the validation body, as will be discussed in the validation report.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.29 dated 12-21-2012

Standard Reference: CP-AB V1.0, pages 12-14

Document Reference: NA

Finding: Pages 12-14 of the CP-AB module require that the allometric equations that are used to predict aboveground biomass of living trees be validated, and provide two options (the "Limited Measurements" and "Destructive Sampling" options) for doing so. However, it was revealed to the audit team that the Imbert and Rollet (1998) equation for Rizophora mangle, which was used to predict aboveground biomass of living trees of the above species in the mangrove stratum, was not validated in accordance with the requirements of the CP-AB module.

Client Response: A Corrective Action Plan (CAP) was submitted to SCS (Corrective Action Plan Mangrove - Finding 2012 28-29 - revised20130625). The CAP presents a new equation (Chave et al. 2005) that comply with methodological requirements (n=30 and r2>0.80) and is the most conservative equation that could be identified in the literature. The conservativeness was tested by demonstrating that Chave et al. (2005) equation deliver, consistently, lower carbon stocks than other available equations. Given timing constraints, since the country is entering the rainy season which does not permit the imidiate completion of additional field work, the Project Proponent is requesting that the limited measurement approach, following the procedure established in the CAP, be performed in the interval between validation and verification.

Auditor Response: As indicated in the Client Response, the selected allometric equation for mangrove trees (which is different from the equations referred to in the text of this finding) has not yet been validated. The client has proposed a methodology deviation that has been approved by the validation body, as will be discussed in the validation report.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.30 dated 12-21-2012

Standard Reference: CP-AB V1.0, pages 12-14

Document Reference: NA

Finding: Pages 12-14 of the CP-AB module require that the allometric equations that are used to predict aboveground biomass of living trees be validated, and provide two options (the "Limited Measurements" and "Destructive Sampling" options) for doing so. However, it was revealed to the audit team that the equation developed to predict aboveground biomass of palm trees was not validated in accordance with the requirements of the CP-AB module.

Client Response: A Corrective Action Plan (CAP) was submitted to SCS (Corrective Action Plan Palms - Finding 2012 30 - revised20130625.docx). The CAP applies the Limited Measurement approach to validate the equation from Delaney et al. 1999 which is used by GPG-LULUCF (IPCC 2003) on Table 4.A.2. WB2 - C assessment and emissions baseline.xlsx will be updated accordingly.

Auditor Response: As a different equation for has been used for palm biomass than was referred to in this finding, the finding is no longer relevant and will be closed. It should be noted that the equation from Delaney et al. (1991) has been successfully validated using the "limited measurements" procedure. **Closing Remarks**: The Client's response adequately addresses the finding.



NCR 2012.31 dated 12-21-2012

Standard Reference: BL-UP V3.1, Sec. 4.2.3 and 4.3

Document Reference: WB2 - C assessment and emission baseline.xlsx

Finding: The BL-UP module requires that Equations 16-24 be used to quantify the sum of the baseline carbon stock change in all pools up to time t* for the project area and leakage belt. As indicated in the "baseline C stock changes" worksheet of the "WB2 - C assessment and emission baseline.xlsx" workbook, Equations 16-24 have not been used for quantification of the parameter in question for the project area and leakage belt.

Client Response: From equations 16 to 24, only equations 16, 18, 23 and 24 were used since they are the ones relevante to the project activity. Equations 16 and 18 were used to calculate the baseline carbon stock change in aboveground tree biomass (ΔCAB_tree,i) and belowground tree biomass (ΔCBB_tree,i) in each stratum, respectively. The estimated values are annual values in t CO2-e ha-1 and are the same for the Project Area (PA) and the Leakage Belt (LB). The calculated values are presented in the updated "baseline C stock changes" worksheet in cells A29:D40. Equations 23 and 24 present the sum of the baseline carbon stock change in all pools in each stratum at time t (ΔCBSL), and up to time t* (ΔCTOT), calculated separately for the PA and the LK. The revised worksheet and a detailed explanation is being submitted to SCS (WB2 - C assessment and emissions baseline v2.xls and Findings 2012.31.docx)

Auditor Response: Through review of the workbook "WB2 - C assessment and emission baseline v2", the audit team has confirmed that the equations from the BL-UP module have been correctly implemented to calculate baseline carbon stock changes. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.32 dated 03-08-2013

Standard Reference: AFOLU Non-Permanence Risk Tool V3.2, Section 2.4.1(1)

Document Reference: PD_REDD_v1_00.docx, Sec. 7.3

Finding: The AFOLU Non-Permanence Risk Tool requires that "Natural risk is based on likelihood (ie, the historical average number of times the event has occurred in the project area over the last 100 years) and significance (ie, the average significance of each event). Any significant natural risk (ie, a risk affecting more than 5% of the project area) that has occurred over the past 100 years in the project area shall be considered applicable to the project." For fire, the non-permanence risk report indicates that significance is "Insignificant or transient" and likelihood is "less than every 10 years". However, it has been indicated that the claims regarding the significance and likelihood of fire claim were made on the basis of an understanding that the risk of fire includes all fire (whether natural or human-caused). It is the understanding of the audit team, based on communication with VCSA, that the risk is only intended to apply to fire ignited by natural sources. Conversations with IBAP personnel and local community members have indicated that such natural fires do not exist within the project area. Therefore, the risk of fire is not applicable to the project.

Client Response: The PD was updated (PD_REDD_v1_10.docx), section 7.3 was revised and Natural Risks are not applicable to the project.

Auditor Response: The risk report has been modified such that all natural risks are considered to be not applicable to the project area. This assertion is consistent with the understanding of the audit team. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.33 dated 03-08-2013

Standard Reference: AFOLU Non-Permanence Risk Tool V3.2, Section 2.4.1(4)(b)

Document Reference: PD_REDD_v1_00.docx, Sec. 7.3

Finding: This NCR is additional to, but does not replace, NCR 2012.32.

The AFOLU Non-Permanence Risk Tool requires that "Likelihood and significance (LS) and mitigation (M) (if any) shall be assessed for each risk factor identified as set out in the Likelihood and Significance and Mitigation tables below, and multiplied to determine the risk score for each natural risk applicable to the project (ie, $LS \times M$)." The risk score for fire has been incorrectly calculated, as the score has been calculated through the formula (LS + M) rather than the formula ($LS \times M$).

Client Response: The PD was updated (PD_REDD_v1_10.docx), section 7.3 was revised and Natural Risks are not applicable to the project.

Auditor Response: The risk report has been modified such that all natural risks are considered to be not applicable to the project area. Therefore, this finding is no longer relevant, and will be withdrawn.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.34 dated 03-08-2013

Standard Reference: REDD-MF V1.3, Sec. 4; Program Definitions V3.4, definition of "Reforestation" and "Forest"

Document Reference: WB_revisionupdate_Final_Report_v6.pdf.pdf, Sec. 2.1.2

Finding: An applicability condition of the REDD-MF methodology framework states that "It shall be demonstrated that post-deforestation land use shall not constitute reforestation." The Program Definitions defines reforestation as "The direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources on land that was once forested but has been converted to non-forested land." The Program Definitions defines forest as "Land with woody vegetation that meets an internationally accepted definition (eg, UNFCCC, FAO or IPCC) of what constitutes a forest, which includes threshold parameters, such as minimum forest area, tree height and level of crown cover, and may include mature, secondary, degraded and wetland forests". The baseline report states that "Given that Guinea-Bissau has not yet adopted an official forest definition, the FAO Forest definition was used, which includes all parcels of land with an area greater than 0.5 hectares, with trees reaching a height greater than 5 meters, and a canopy cover of more than 10 percent".

The audit team observed that the planting of cashew plantations, which meet the above definition of forest, has historically been quite common in the area surrounding the Cacheu and Cantanhez National Parks. In particular, near Cachew National Park, the audit team observed that a severe shortage of available farmland exists, as much of the previously available land has been planted with cashew trees. A variety of other fruit and nut trees, including lemon, orange, mango, kola and banana trees, are also being planted. While not all trees are being planted in such a way as to constitute reforestation (e.g., some trees may not be capable of reaching a height greater than 5 meters and, in some cases, trees may be intercropped with other crops such that they never reach a canopy cover of more than 10 percent), it is clear that a substantial quantity of reforestation has occurred in the area surrounding the Cacheu and Cantanhez National Parks. Fruit and nut crops (particularly cashew) are commercially valuable at this time, and therefore it appears quite likely that the trend of planting such trees will continue. As the post-deforestation land use frequently does constitute reforestation, the project does not comply with the applicability condition quoted above.

Client Response: [No formal response from the client was received with respect to this finding.] **Auditor Response**: This finding was rendered irrelevent through release of Version 1.4 of the REDD-MF methodology framework and Version 3.2 of the BL-UP module, both of which were revised to remove the applicability condition in question. Therefore, it will be withdrawn.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.35 dated 03-08-2013

Standard Reference: BL-UP V3.1, Sec. 4

Document Reference: NA

Finding: The BL-UP module requires that "Where, pre-project, unsustainable fuelwood collection is occurring within the project boundaries modules BL-DFW and LK-DFW shall be used to determine potential leakage". A footnote then indicates the following:

"Where a project claims no fuelwood collection was occurring this shall be evidenced through a PRA process. Where fuelwood collection is claimed to be sustainable, the following criteria must in the absence of the project be met:

- a. The land area remains a forest; and
- b. Sustainable management practices are undertaken on these land areas to ensure, in particular, that the level of carbon stocks on these land areas does not systematically decrease over time (carbon stocks may temporarily decrease due to harvest); and
- c. Any national or regional forestry and nature conservation regulations are complied with."

 It was previously communicated to the audit team, and confirmed through observations made by the audit team during the site visit, that members of the local communities collect dead wood from the forest for their own fuelwood use. It was confirmed by the audit team that live trees are not cut for use as fuelwood. However, the audit team has not observed anything to suggest that sustainable management practices were undertaken, within the project area and before the project start date, to ensure, in particular, that the level of carbon stocks on these land areas does not systematically decrease over time. Please provide evidence of such.

Client Response: The Project Proponent understands that fuelwood collection is sustainable and linked to small scale energy supply for cooking. Sustainability, in this case, relates to the fact that the area remains a forest, carbon stocks in the project area do not systematically decrease due to fuelwood collection, therefore, degradation is not occurring in the project area due to fuelwood collection. This is supported by the following:

- 1. FAO (2013): the Yearbook of Forest Products 2011 presents data series for forest products production, consumption, imports and exports in all countries in the world. Amongst these products the report presents data for fuelwood production and consumption. This aggregated data demonstrate that between 2007 and 2011 production and consumption of fuelwood in Guinea-Bissau is in equilibrium and stable. This is the first indication that no relevant degradation pressure exists in the country as a result of fuelwood collection.
- 2. To complement this analysis, a PRA was prepared in Cacheu Park in order to gather specific data from the Project Area. IICT (2013) Project Report: Quantification of Forest Degradation Research Mission in Guinea Bissau demonstrates that fuelwood collection is sustainable. Per capita fuelwood consumption in Cacheu is 1.21 kg, very close to FAO national number (1.75 kg) and sourced mainly from deadwood (93.8%). Informal sustainable management practices are demonstrated by the fact that 62.9% (n=134) of the respondents demonstrate consciousness about environmental issues and are aware they are living inside a National Park. Furthermore, 70% (n=150) of the respondents are familiar with the rules of the Park and 96.7% (n=145) agree with the enforcement of Park rules. It is also interesting to notice that fuelwood collection is mainly performed by women. 50% of the fuelwood is collected at a distance of up to 500 m from the villages and 32.5% in a range between 501 and 2000 m. Only 17% travel more than 2km to collect fuelwood. This data clearly demonstrate that fuelwood collection is geographcally restricted around the villages and not widespread.

In addition, fuelwood collection does not breach park rules. It is a small scale activity, related to the livelihood of the local communities and does not cause felling of live trees. These facts were attested by the valiadation field team.

Project proponent is providing thefollowing two reports to SCS: FAO_2013.pdf and Finding 2012 35 - PRA.pdf





Auditor Response: As indicated in the Client Response, a participatory rural appraisal was undertaken in order to gather additional information on the sustainability of fuelwood collection. In addition to the information previously provided to the audit team (that fuelwood is collected predominately from the dead wood carbon pool), the results of the appraisal have also found that people typically travel only a short distance to collect fuelwood, and that the majority of fuelwood appears to come from cashew plantations. The information provided is sufficient to justify that the specific practices that have been implemented (i.e., collecting fuelwood from dead trees and fallen branches, collecting fuelwood from cashew plantations) ensures the sustainability of the fuelwood resource even in the absence of the project. Therefore, the information request has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NIR 2012.36 dated 03-08-2013

Standard Reference: AFOLU Non-Permanence Risk Tool V3.2, Section 2.2.4(3)

Document Reference: NA

Finding: The AFOLU Non-Permanence Risk Tool requires that "For all AFOLU project types, the entire project longevity shall be covered by management and financial plans as submitted to local government or financial institutions, or otherwise made public, in which the intention to continue management practices is stated and planned for, and may include external evidence such as municipal land-use plans, institutional structures, or tools such as ecological-economic zoning." It is the judgment of the audit team that the internal regulation for the Cacheu and Cantanhez National Parks constitutes a management and financial plan. The audit team has reviewed the approved internal regulation for Cacheu National Park (approved 19 December 2011). However, the audit team has not yet been provided with evidence that an internal regulation has been approved for Cantanhez National Park. Please provide evidence of the approval of the internal regulation for Cantanhez National Park.

Client Response: The internal regulation for Cantanhez is being provided to the audit team (Regulamento Interno do PNTC aprovado em 2011.docx)

Auditor Response: The document "Regulamento Interno do PNTC aprovado em 2011.docx" contains the internal regulation for Cacheu ("PARQUE NATURAL DOS TARRAFES DO RIO CACHEU (PNTC)"), which was already provided to the audit team. Please provide the internal regulation for Cantanhez.

Client Response 2: The internal regulation for Catanhez is now provided to SCS.

Auditor Response 2: As indicated in the Client Response, the internal regulation for Cantanhez has been provided in the document "Regulamento interno do PNC". However, the audit team has not yet been provided with evidence that the internal regulation within the document "Regulamento interno do PNC" has been formally approved. This finding will remain open pending submission of such evidence. **Client Response 3**: On the 17th and 18th of April of 2014, the Park Comitee met to discuss and aprove the final version of the Internal Regulation of Catanhez National Park. The Project Proponent is providing the approved Internal Regulation and the Meeting Procedures together with the Signature List from the representatives of the Community and IBAP.

Auditor Response 3: The information provided is sufficient as evidence that the internal regulation for Cantenhez National Park has been approved. Therefore, the information request has been satisfied. **Closing Remarks**: The Client's response adequately addresses the finding.



NIR 2012.37 dated 03-08-2013

Standard Reference: NA

Document Reference: APPENDIX III - C stocks v3.pdf, Figure 8; WB2 - C assessment and emission baseline.xlsx

Finding: With respect to the scaling factor assigned to the trees measured in the inventory, discrepancies exist between the report "Appendix III: Carbon Stock Estimation", and worksheet

"Trees_Biomass_Test_Scenarios" of workbook "WB2 - C assessment and emission baseline.xlsx". Discrepancies also exist within worksheet "Trees_Biomass_Test_Scenarios". These discrepancies are as follows:

- Figure 8 of the report "Appendix III: Carbon Stock Estimation" indicates that trees within the mangrove stratum that were larger than 15 centimeters DBH were measured in the 20-meter radius plot, while trees 10-15 centimeters DBH were measured in the 14-meter radius plot. However, as seen in column Q of worksheet "Trees_Biomass_Test_Scenarios", the following equation is implemented across a wide range of cells for plots with a project assignment of WB1 or WB2 (the example below is for row 2 of the worksheet):

=IF(O2 = "PALM", 7.96, IF(E2="M",IF(I2<10, 198.94, IF(AND(I2>=10, I2<=20),16.24, IF(I2>20,7.96))),IF(I2<20, 198.94, IF(AND(I2>=20, I2<=50),16.24, IF(I2>50,7.96))))

The above equation assigns the corresponding scaling factor for the 20-meter radius plot (7.96) to trees within the mangrove stratum that are larger than 20 centimeters DBH. It also assigns the corresponding scaling factor for the 14-meter radius plot (16.24) to trees within the mangrove stratum that are 10-20 centimeters DBH.

- The scaling factor for some trees with a project assignment of WB1 is "hard-coded" into the workbook. Many of the scaling factor assignments are inconsistent with the above formula.
- A scaling factor of 7.96 is always assigned to palm trees within column Q of worksheet "Trees_Biomass_Test_Scenarios". However, the report "Appendix III: Carbon Stock Estimation" contains no indication that palm trees were always measured within the corresponding 20-meter radius plot. Please explain each of the above discrepancies.

Client Response: All discrepancies are discussed and explainned in the file Findings 2012.37.docx. The revised Appendix III and worksheet are being presented to SCS (Appendix III - C stocks v2 08.2013.docx and WB2 - C assessment and emissions baseline v2.xls)

Auditor Response: The document "Findings 2012.37" contains a clear description of the differences in measurements systems used between the "WB1" and "WB2" measurement campaigns, which has assisted the audit team in reconstructing the approach used to assign the scaling factor. The audit team can confirm that the determination of the scaling factor, as implemented in worksheet "Tree_Biomass" of workbook "WB2 - C assessment and emission baseline v2.1 20140522", is consistent with the description in the document "Findings 2012.37". Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.38 dated 03-08-2013

Standard Reference: REDD-MF V1.3, Sec. 5, Step 3 **Document Reference**: PD_REDD_v1_00.docx, Sec. 4.3

Finding: The REDD-MF methodology framework requires the following:

"The monitoring plan shall address the following monitoring tasks, which must be standard headers in the Monitoring Plan:

- Revision of the baseline
- Monitoring of actual carbon stock changes and greenhouse gas emissions
- Monitoring of leakage carbon stock changes and greenhouse gas emissions
- Estimation of ex-post net carbon stock changes and greenhouse gas emissions.

For each of these tasks, the monitoring plan shall include the following sections:

- a. Technical description of the monitoring task.
- b. Data to be collected. The list of data and parameters to be collected shall be given in VCS PD.
- c. Overview of data collection procedures.
- d. Quality control and quality assurance procedure.
- e. Data archiving.
- f. Organisation and responsibilities of the parties involved in all the above.

A description of the monitoring plan including the items "c" to "f" listed above shall be given in the VCS PD."

While the monitoring plan does address the four monitoring tasks described by REDD-MF, the monitoring plan does not include the five required sections for each monitoring task described by REDD-MF. In addition, a description of the monitoring plan for items "c" to "e" is not given in the PD. For each monitoring task, the monitoring plan states "The technical description of the monitoring task is presented in Appendix I. Section 4.2 presents all data to be collected, including procedures, quality control and quality assurance (QC/QA) and data archiving". This is not sufficient to constitute a description of the monitoring plan for "c" to "e" above, as required by REDD-MF.

Client Response: The PD was revised (PD_REDD_v1_10.docx) and section 4.3 now follows the estructure required by REDD-MF.

Auditor Response: Review of the revised monitoring plan, as indicated in the Client Response section, confirms that it is now organized according to the structure required by the REDD-MF methodology framework. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding

NIR 2012.39 dated 03-08-2013

Standard Reference: BL-UP V3.1, Sec. 5, Part 1.1.1.1(f)

Document Reference: NA

Finding: The BL-UP module requires that, with respect to the delineation of the reference region for projecting rate of deforestation (RRD), "Areas of planned deforestation shall be excluded from the reference region boundaries where evident", with examples of planned deforestation being provided in footnote 8 as "mining concessions, industrial agriculturalists, large-scale public works".

During interviews with project personnel, it was indicated that no areas of planned deforestation exist within the RRDs that have been delineated for the Cacheu and Cantanhez National Parks. However, the audit team was not provided with any evidence that this is the case. Please provide evidence that no areas of planned deforestation exist within the RRDs.

Client Response: The Project Proponent is sending to SCS a Declaration from the General Director of Forest and Fauna evidencing that no areas of planned deforestation exist within the RRDs (Declaracao DGFF-REDD.pdf).

Auditor Response: As indicated in the Client Response, the audit team has received official documentation indicating that no areas of planned deforestation exist within the reference regions. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.40 dated 03-08-2013

Standard Reference: VCS Standard V3.3, Sec. 3.18.2(4); REDD-MF V1.3, Sec. 5, Step 5 **Document Reference**: PD_REDD_v1_00.docx, Sec. 3.4; WB2 - C assessment and emission baseline.xlsx

Finding: The VCS Standard requires that the PD include "A calculation of baseline emissions, project emissions, leakage emissions (if applicable) and net GHG emission reductions and removals". According to the REDD-MF methodology framework, "The total net greenhouse gas emissions reductions of the REDD project activity are calculated" according to Equation 1 of REDD-MF.

The baseline emissions as set out in Table 8 of the PD are not consistent with those calculated in worksheet "baseline C stock changes" of workbook "WB2 - C assessment and emission baseline.xlsx", which total 3,865,053 tonnes CO2e over the baseline period (with estimated annual baseline emissions of 386,505 tonnes CO2e/year). Therefore, the net GHG emission reductions and removals are not presented in the PD.

While it is noted that, as stated by the PD, "...in Cacheu uncertainty was 16% (CI 95%) and the total baseline was adjusted accordingly", the adjustment for uncertainty, as set out in REDD-MF, affects only the calculation of Verified Carbon Units (as set out in Equation 8 of REDD-MF) and does not affect the calculation of net greenhouse gas emission reductions.

Client Response: The PD was revised (PD_REDD_v1_30.docx) and section 3.4 ajusted according the revised version of the worksheet (WB2 - C assessment and emissions baseline v2.xls).

Auditor Response: The audit team can confirm that the quantification of GHG emission reductions, as carried out in workbook "WB2 - C assessment and emission baseline v2" and reported in Version 1.30 of the PD, does not include an adjustment for uncertainty. Therefore, the non-conformity has been resolved. **Closing Remarks**: The Client's response adequately addresses the finding.



resolved.

NCR 2012.41 dated 03-08-2013

Standard Reference: VCS Standard V3.3, Sec. 5.3.1(4) and Sec. 3.9.1 **Document Reference**: WB2 - C assessment and emission baseline.xlsx

Finding: Section 5.3.1(4) of the VCS Standard requires that "The threshold for materiality with respect to the aggregate of errors, omissions and misrepresentations relative to the total reported GHG emission reductions and/or removals shall be five percent for projects and one percent for large projects." As the project's reported GHG emission reductions are greater than 300,000 tonnes of CO2e per year, the project must be considered a "project", in accordance with Section 3.9.1 of the VCS Standard. Several errors in the quantification of GHG emission reductions have been noted. These errors are as follows:

- Due to many individual errors in the cluster-level calculation of above-ground biomass within worksheet "Plot_Biomass_Test_Scenarios" of workbook "WB2 C assessment and emission baseline.xlsx", the overall carbon stock in the mangrove stratum in the Cacheu National Park has been overestimated by approximately 14.2%. Observation indicates that many of the errors are due to incorrect assignment of individual plots to clusters for plots measured as part of the WB1 project.
- Systematic errors are evident in the quantification of pre-deforestation baseline carbon stocks in the project area and leakage belt in Cacheu National Park, as seen in cells I33:R33 and I44:R44 for the project area and leakage belt, respectively, in worksheet "baseline C stock changes" of workbook "WB2 C assessment and emission baseline.xlsx". In these calculations, the baseline area of deforestation in the terrestrial forest stratum is mistakenly multiplied by the carbon stock in the mangrove stratum, and the baseline area of deforestation in the mangrove stratum is mistakenly multiplied by the carbon stock in the savannah stratum.

Preliminary calculations indicate that the cumulative effect of these errors is equal to an error of over 1% of the GHG emission reductions for the baseline

period. Therefore, the errors are collectively considered material. They must be resolved before a positive validation opinion can be granted.

Client Response: In the 2010 field campaign (WB1) an accessibility sampling and a cluster-plots method was followed, i.e., the sampled plots were randomly selected for each stratum within a buffer area around roads and rivers and three plots were randomly located and measured in the field for each pre-selected point at the office. This method was not followed in the remaining field campaigns (CARBOVEG and WB2). While compiling all the data, the project team decided that to ensure data consistency, and in order to prevent eventual spatial correlation among the data, the mean of each of the three plots measured in a cluster in a given location was used in the calculations as one single observation (with each plot contributing with a weight of 1/3 for the average biomass). This procedure guarantees the independence of all data plots, avoids spatial correlation among plots in a cluster, and thus makes the field data more robust. Therefore, no changes were made in the workbook. On the second point, all systematic errors identified during the audit meetings were corrected in the updated workbook (version 2), worksheet "baseline C stock changes". Conservatively, only the sub-stratum with the lower carbon stock (savanna) is used to estimate the sum of the baseline carbon stock change within the terrestrial forest stratum for the Cacheu PA and LB. The following additional evidences are being provided to SCS the file Findings 2012.41.docx and the revised worksheet WB2 - C assessment and emissions baseline v2.xls Auditor Response: Through review of the revised workbook entitled "WB2 - C assessment and emission baseline v2.1 20140522", the audit team has been able to confirm that the errors in question have been fixed. Biomass values for individual plots within each cluster are correctly averaged together, and the identified errors in the quantification of pre-deforestation baseline carbon stocks in the project area and

leakage belt in Cacheu National Park are no longer present. Therefore, the non-conformity has been

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.42 dated 03-08-2013

Standard Reference: BL-UP V3.1, Sec. 5, Part 3.4.1

Document Reference: WB2 - C assessment and emission baseline.xlsx

Finding: The BL-UP module requires that, where location analysis is not elected, "Future deforestation is assumed to happen first in the strata with the lowest carbon stocks". Review of the quantification of baseline emissions in worksheet "baseline C stock changes" of workbook "WB2 - C assessment and emission baseline.xlsx" indicates that this procedure has not been implemented within cells I34:R34 and I45:R45 for the Cantanhez National Park project area and leakage belt, respectively. The terrestrial forest stratum with the lowest carbon stocks is the savannah stratum, but the open forest carbon stocks have been used to quantify emissions from the terrestrial forest stratum instead.

Client Response: These errors identified during the audit meetings were corrected in the updated workbook (version 2), worksheet "baseline C stock changes". Conservatively, only the sub-stratum with the lower carbon stock (savanna) is used to estimate the sum of the baseline carbon stock change within the terrestrial forest stratum for the Cantanhez PA and LB. The revised worksheet WB2 - C assessment and emissions baseline v2.xls is presented to SCS.

Auditor Response: The audit team was able to confirm, through review of the updated workbook, "WB2 - C assessment and emission baseline v2", that the savannah sub-stratum does contain the lowest carbon stock, and that this stock has been used to quantify the baseline carbon stock change within the terrestrial forest stratum. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NIR 2012.43 dated 03-08-2013

Standard Reference: LK-ASU V1.0, Sec. II, Step 3

Document Reference: PD_REDD_v1_00.docx, Sec. 3.3 and Sec. 3.4

Finding: The LK-ASU module requires that "Based on the expected effectiveness of the proposed REDD project activities, conservatively estimate the carbon stock changes and greenhouse gas emissions in the Leakage Belt that are expected to occur due to the implementation of the REDD project activity and that would not occur in the baseline case. This shall be done by multiplying the estimated baseline carbon stock changes and greenhouse gas emissions for the project area by a factor < 1.0 representing the % of deforestation expected to be displaced into the Leakage Belt".

Section 3.3 of the PD indicates that "For the ex ante leakage estimation it is considered a 20% failure rate of FIAL based on independent evaluations of the 129 projects historically financed by the mechanism, totaling a factor of 0.037 (3.7%). However, 0.037 * 3,859,056 (the cumulative estimated baseline carbon stock changes over the baseline period) equals 142,785, rather than 72,464, as reported in Table 8 of the PD.

Please explain the discrepancy noted above and clarify how ex-ante estimation of leakage emissions was accomplished.

Client Response: SCS identified a miscalculation on the ex ante Leakage Emissions quantification. The corrected value for the first crediting period is 142,785 tCO2e. PD was revised (PD_REDD-v1_20.docx) and the value corrected.

Auditor Response: As indicated in the Client Response, the PD has been revised to include the corrected ex-ante estimate of leakage emissions. Therefore, the non-conformity has been resolved. **Closing Remarks**: The Client's response adequately addresses the finding.



NCR 2012.44 dated 03-08-2013

Standard Reference: AFOLU Non-Permanence Risk Tool V3.2, Sec. 2.2.3 and Sec. 2.2.4

Document Reference: RISK REDD.xlsx

Finding: In Section 2.2.3, the AFOLU Non-Permanence Risk Tool permits a mitigation score to be applied for item (h) of the Opportunity Cost sub-category in the event that "Project is protected by legally binding commitment (see Section 2.2.4) to continue management practices that protect the credited carbon stocks over the length of the project crediting period". Similarly, in Section 2.2.4, the AFOLU Non-Permanence Risk Tool states that "Any project with a legally binding agreement that covers at least a 100 year period from the project start date shall be assigned a score of zero for project longevity." The project has claimed a score of zero for the Project Longevity sub-category, with the claim (as stated in worksheet "INTERNAL RISKS" of workbook "RISK_REDD.xlsx") that "The project has a legally binding

in worksheet "INTERNAL RISKS" of workbook "RISK_REDD.xlsx") that "The project has a legally binding agreement that covers at least 100 year period and if financial resurces [sic] are secured the project is expected to have a duration above 100 years." However, the project does not claim the mitigation score for item (h) of the Opportunity Cost sub-category, with the stated claim (as indicated in the same worksheet as above) that "Although the project is protected by legally binding commitment it is very unlikelly [sic] that those law [sic] will be enforced."

As both of the items discussed above refer to the same legally binding agreement (as defined in Section 2.2.4 of the AFOLU Non-Permanence Risk Tool, the conflicting claims made by the risk report have resulted from inconsistent (and, thus, inappropriate) use of the AFOLU Non-Permanence Risk Tool. **Client Response**: The RISK_REDD.xlsx spreadsheet was revised and the inconsistency corrected (RISK_REDD_091013.xlsx) the mitigation score is now applied. The result is the same since the item "Opportunity Cost" total may not be less than zero.

Auditor Response: Through review of the revised PD (PD_REDD_v1_30), it is clear that, as noted, the mitigation scores are now applied consistently. It is understood that the risk score for the "Opportunity Cost" sub-category has not changed.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.45 dated 03-08-2013

Standard Reference: AFOLU Non-Permanence Risk Tool V3.2, Sec. 2.2.4

Document Reference: RISK REDD.xlsx

Finding: In Section 2.2.4, the AFOLU Non-Permanence Risk Tool states that "Any project with a legally binding agreement that covers at least a 100 year period from the project start date shall be assigned a score of zero for project longevity."

The project has claimed a score of zero for the Project Longevity sub-category, with the claim (as stated in worksheet "INTERNAL RISKS" of workbook "RISK_REDD.xlsx") that "The project has a legally binding agreement that covers at least 100 year period and if financial resurces are secured the project is expected to have a duration above 100 years." During discussions with project personnel, it was indicated to the audit team that the decrees for establishment of the Cacheu and Cantanhez National Parks collectively constitute the required "legally binding agreement", as they prohibit deforestation within the project area and, thus, "require the continuation of the management practice that sequesters carbon or avoids emissions for the entire project longevity".

Review of both decrees indicates that they do indeed fulfill the stated purpose with respect to the "zona de preservacao", or "preservation zones". However, it is not clear that they also afford the necessary level of protection for the other zones that are defined by the decrees. In addition, it is not clear to the audit team that the project area is comprised exclusively of the area within the preservation zones within each park.

Please provide evidence of one of the following:

- a) A legally binding agreement exists that prohibits deforestation in all areas of the parks
- b) The project area is comprised exclusively of land that has been allocated to the "preservation zone" of each respective park

Client Response: The Project Proponent understands that the existing legally binding agreements prohibit deforestation in all areas of the parks. All laws, decrees, management plants and internal regulations have already been provided to the audit team. The project proponent is provinding a detailed reply referencing specific sections of laws, regulation and other normative documente in the file Findings 2012.45.docx

Auditor Response: As indicated in the text of the finding, the audit team understands that existing regulations do prohibit deforestation in the preservation zones. At issue is whether any existing rules or regulations expressly prohibit deforestation in the other zones of the parks. The audit team agrees that the cited language from the internal regulation for Cacheu National Park appears sufficient to prohibit deforestation within that park. However, in the absence of any corresponding regulation for Cantanhez National Park, it remains unclear whether any legally binding agreements or requirements prohibit deforestation within that park. Therefore, the information request has not been fully satisfied.

Client Response 2: The internal regulation for Catanhez is now provided to SCS.



Auditor Response 2: As indicated in the Client Response, the internal regulation for Cantanhez National Park has been provided in the document "Regulamento interno do PNC". However, the internal regulation for Cantanhez National Park is not equivalent to the internal regulation for Cacheu National Park. In some cases, it is unclear that the internal regulation for Cantanhez National Park affords the same level of protection as the internal regulation for Cacheu National Park. For the differences quoted below, please provide a justification that the internal regulation for Cantanhez National Park requires "the continuation of the management practice that sequesters carbon or avoids emissions for the entire project longevity". (All of the text quoted below is from the article entitled "Utilização dos recursos florestais — Agricultura", which is numbered as Article 34 and Article 29 in the internal regulations for Cacheu and Cantanhez National Parks, respectively.)

- The internal regulation for Cacheu National Park states "É proibida a desmatação para cultivo de arroz de m'pam—pam nas áreas centrais do Parque", which is understood to mean that deforestation for rice cultivation in the interior of the park is forbidden. The internal regulation for Cantanhez National Park states "É proibida a desmatação para cultivo de arroz de m'pam pam nas áreas centrais das grandes 14 florestas que constituem o parque". This presumably indicates deforestation is forbidden in the "áreas centrais das grandes 14 florestas", but it is unclear what the "large 14 forests" are and what the relationship is between the areas of these forests and the area of the park. Therefore, it is unclear that deforestation for rice cultivation is forbidden throughout Cantanhez National Park.
- The internal regulation for Cacheu National Park states "É proibido o corte de madeiras no PARQUE", which is understood to mean that cutting trees in the park is forbidden. The internal regulation for Cantanhez National Park states "É proibido o corte de madeiras por pessoas não residentes no PARQUE", which is understood to forbid only the cutting of trees by non-residents. It is unclear that there is any prohibition of cutting of trees within the park by residents.

Client Response 3: On the 17th and 18th of April of 2014, the Park Comitee met to discuss and aprove the final version of the Internal Regulation of Catanhez National Park. The Project Proponent is providing the approved Internal Regulation and the Meeting Procedures together with the Signature List from the representatives of the Community and IBAP. Traditionaly, the communities split the territory of the park in "14 Forests", so the 14 forests is equivalent to the entire area of the park. In spite of this, the final version had simplified the language as much as possible and substituted almost all references to the 14 forests to Cantanhez National Park or simply park. In addition, the final Regulation forbids tree cut in the Park, as Cacheu Regulation did. Other minor revisions were also done in the final version.

Auditor Response 3: The information provided is sufficient as evidence that the internal regulation for Cantenhez National Park has been approved. In addition, the audit team was able to confirm that the language for the internal regulation for Cantenhez National Park has been modified so as to be equivalent to the corresponding language for the internal regulation for Cacheu National Park that was quoted in the text of this finding. Therefore, it is clear that there is a "legally binding agreement" to prohibit deforestation throughout both parks, and the information request has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.46 dated 03-08-2013

Standard Reference: LK-ASU V1.0, Sec. II, Step 2

Document Reference: NA

Finding: The LK-ASU module requires that the user complete the following task: "Using a participatory rural appraisal (PRA) approach, existing studies and other verifiable sources of information, determine the proportion of area deforested by the population that has been resident in and around the Leakage Belt and project area for ≥ 5 years (PROPRES) and the proportion of area deforested by population that has migrated into the area in the last 5 years (PROPIMM)."

In discussions with project personnel, it was indicated to the audit team that an existing study has been used to estimate the proportion of area deforested by the population that has been resident in and around the Leakage Belt and project area for < 5 years, and that this study indicated that only 2% of the population within a 2-kilometer buffer around Cacheu National Park are recent immigrants, while only 3% of the population within 2-kilometer buffer around Cantanhez National Park are recent immigrants. However, it was found by the audit team that the definition of "immigrant", as used in the study above, considers only those individuals who have migrated to the area from outside the country. This is not consistent with the following definition of "immigrant" as set out by LK-ASU: "population that has migrated into the area in the last 5 years".

Please provide evidence that "a participatory rural appraisal (PRA) approach, existing studies and other verifiable sources of information" was used to determine the proportion of area deforested by immigrants, as defined by the LK-ASU module.

Client Response: To complement this analysis, a PRA was prepared in order to gather specific data from the Project Area. IICT (2013) Project Report: Quantification of Forest Degradation - Research Mission in Guinea Bissau demonstrates that immigrants in and around the park (2km buffer) correspond to a neglegible part of the population. The explanation for this arises from the fact that land is owned by the state and, in the project area, managed under traditional community systems. Land can be given by the traditional authorities or inherited which poses a significant barrier to new immigrants. The PRA demonstrates that 9.3% of the park population are immigrants of which 2.3% are foreign origin and 7% are national. The study considers an immigrant any individual living in the project area for less than 5 years. It should also be born in mind that, although no data was collected during this PRA, this immigration is likelly to be offset to a degree by outmigration. The INEC census (2007) states that [in the parks] man between 24-54 years has a strong outmigration tendency seeking jobs and better life condition in the urban areas.

Auditor Response: As indicated in the Client Response, a participatory rural appraisal was conducted. However, the LK-ASU module requires that, when a participatory rural appraisal is conducted, "At least 10% of communities shall be sampled. If 10% of communities is less than 10 communities then the sample size shall be set as 10 (or 100% of the communities). If 10% is more than 30 communities then the sample size shall be set as 30." It is unclear if this requirement has been met. Please provide evidence that this requirement has been met. In providing a response, please note that the above requirements refer to the total number of communities within a 2-kilometer buffer around the project area and leakage belt (which is a larger area than the area within a 2-kilometer buffer around the park boundaries).

In addition, the participatory rural appraisal reports that an estimated 9.3% of the population are immigrants (as defined by the LK-ASU module). However, the project description continues to assume (in Section 3.3) that PROP(IMM) is zero. Please provide a rationale for the assumption that PROP(IMM) is zero, when the best available information from the participatory rural appraisal indicates that the proportion of immigrants is 9.3%.

Client Response 2: As demonstrated on the PRA the sample size is accordance with methodological requirements. Section 2 of the PRA describes the targeted population and sample procedure, according to the report 14 villages/communities were sampled. Data from the socio-economic survey and census done as part of FIAL preparation established an eligible target population of 70,000 people already within the PAs and the 2 km outside radius (buffer zone) of each PA tottalling 111 villages in and around Cantanhez and 23 villages in and around Cacheu. Therefore, the 10% sample size shall be at least 13 villages/communities and 14 were sampled. The PD consideres PROP(IMM) = 9.3% and the related potential leakage caused bu immigrant population is calculated.



Auditor Response 2: As indicated in the Client Response, the updated version of the PD (Version 1.5) indicates a value for PROP(IMM) equal to 9.3%, and therefore the request for "a rationale for the assumption that PROP(IMM) is zero" is no longer relevant.

In reviewing Section 2 of the report entitled "Project report – Quantification of forest degradation: research mission to Guinea- Bissau – RSET – IICT", contained within the document "Finding 2012.35 - PRA", it continues to be unclear that the cited requirements of the LK-ASU module have been met. For purposes of full transparency, please provide the information requested below.

- A list of the villages within 2 km of the leakage belt and project area (noting, again, that a 2 km buffer around the leakage belt and project area may or may not coincide with a 2 km buffer around the area of each park) and a citation of any source data that will allow the audit team to replicate the determination of which communities are located within 2 km of the leakage belt and project area
- A list of the villages from which the sample of villages, as described in Section 2.3 of the report, was selected
- A more complete description of the sampling procedure that was described briefly in Section 2.3 of the report, and a justification that communities were "randomly" sampled, as required by the LK-ASU module
- Complete documentation to support the assertion that "Data from the socio-economic survey and census done as part of FIAL preparation established an eligible target population of 70,000 people already within the PAs and the 2 km outside radius (buffer zone) of each PA tottalling 111 villages in and around Cantanhez and 23 villages in and around Cacheu" (with specific reference to source documents and any other information required to allow the audit team to easily replicate the analysis undertaken), and a clarification as to whether the above assertion is made with respect to the number of villages within 2 km of the park boundary or (as required by the LK-ASU module) the above assertion is made with respect to the number of villages within 2 km of "the boundaries of the Leakage Belt and project area", as required by the LK-ASU module

Client Response 3: The PRA was not developed fully in accordance with the requiremenst of LK-ASU since the sample design does not fully comply with the module. However, the project proponent is confident it does not negativaly impact the conservativeness of GHG emissions reduction as will be demonstrated. According to the VCS Standard V3.4, Section 3.5, this situations can be subjected to methodology deviations.

The project proponent is submiting a detailed reply (NIR 2012.46_PRA_DEVIATION.docx) that presents answers and evidences to all questions listed by SCS (a) list of the villages, (b) the villages sampled, (c) sampling procedures and (d) supporting documentation (INEC, 2006).

In relation to the sampling design, the project proponent requests for a methodology deviation since the parameter impacted (PROP IMM) relates to a data available at validation, a criteria related to the measurement set ou in the methodology module. The request for deviation (NIR 2012.46_PRA_DEVIATION.docx) presents evidence that the sample design in the PRA, although not fully in compliance with LK-ASU, does not negatively impact the conservativeness of GHG emissions reduction or removals. The main justification is data availability. Guinea-Bissau does not have official national information on villages, therefore, the PRA was designed based on reliable information provided by IBAP. Since IBAP manage the protected area network, data availability is restricted to such boundaries and its surroundings. In summary, the PRA uses the best available information, collected by IBAP on other projects, like the CBMP financed by the World Bank and the European Comission.

After verifying the consistency of the sample against LK-ASU requirements, it was noticed that 36.5% of the households sampled outside the park area are, in fact, in the 2 km buffer of the leakage belt. Given the proximity, and often, overlaping of the actual sampled area (2 km of the park boundary) and the desired sampling area (2 km of the leakage belt), please see Figure 1 of NIR 2012.46_PRA_DEVIATION.docx, the project proponent understands that the results presented are very similar to the ones following the 2km buffer around the leakage belt.





Auditor Response 3: Through review of the document "NIR 2012.46_PRA_DEVIATION", the audit team can confirm that all of the information requested by the audit team has been provided. The information provided is sufficient to provide the audit team with reasonable assurance that a stratified sample was carried out according to standard best practices. Therefore, the information request has been satisfied. The audit team agrees that, as the requirement of the LK-ASU module to "Randomly sample communities living within 2km of the boundaries of the Leakage Belt and project area (defined in BL-UP – Part 1)" was not complied with in full, it is appropriate to apply a methodology deviation regarding this aspect of the process.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.47 dated 03-08-2013

Standard Reference: VCS Standard V3.3, Sec. 3.1.5, Sec. 4.1.7(1), Sec. 4.5.6

Document Reference: APPENDIX III - C stocks v3.pdf

Finding: Section 3.1.5 of the VCS Standard requires that "Where projects apply methodologies that permit the project proponent its own choice of third party default factor or standard to ascertain GHG emission data and any supporting data for establishing baseline scenarios and demonstrating additionality, such default factor or standard shall meet with the requirements set out in Section 4.1.7(1)". Section 4.1.7(1) requires that "Where the methodology uses third party default factors and/or standards, such default factors and standards shall meet with the requirements for data set out in Section 4.5.6, mutatis mutandis." Item (7) under Section 4.5.6 requires that "Data shall be appropriate to the methodology's geographic scope and the project activities applicable under it."

With respect to the default factor used to estimate belowground biomass (i.e., the "root-to-shoot ratio") in the mangrove stratum, Appendix III states that "To estimate BGB in mangroves, we compiled AGB and BGB data reported by Komiyama et al. (2008) (including data for Indonesia, Australia, Thailand, Panama, and Puerto Rico) and an average RSR of 0.61 was calculated across all available values." However, Table 5 of Appendix III, which presents the individual values that were averaged to produce the value of 0.61, indicates wide variation in root-to-shoot ratio across different studies, with a range from 0.23 to 1.10. During discussions with project personnel, it was unclear that any due diligence was undertaken to ensure that the proposed value of 0.61 is applicable to the geographic scope of the project. Please present evidence that such is the case, and that the proposed value will not result in non-conservative quantification of the GHG emission reductions attributable to the project.

Client Response: Data reported in Komyiama et al. (2008) were averaged and resulted in a RSR value of 0.61. Conservatively, the half-width of the 95% confidence interval of these data was used to estimate the RSR (0.46), and subsequently used to obtain the BGB of mangroves (worksheet "Plot Biomass", column R). All calculations are presented in the worksheet "mangrove RSR" added to the latest version of the workbook WB2 - C assessment and emissions baseline v2.xls.

Auditor Response: The audit team agrees that the procedure described in the "Client Response" section has resulted in a root-to-shoot ratio for the mangrove stratum that is less likely to overestimate GHG emission reductions. However, this does not necessarily mean that the root-to-shoot ratio for the mangrove stratum will not overestimate GHG emission reductions. As required by the VCS Standard, please present evidence that that the proposed value is applicable to the geographic scope of the project, and that the proposed value will not result in non-conservative quantification of the GHG emission reductions attributable to the project.

Client Response 2: The project proponent is providing a detail explanation and evidences demonstrating that the proposed RSR value used will not result in non-conservative quantification of GHG emission reductions (Finding 2012.47 v2.docx)



Auditor Response 2: The information provided by the client in the document entitled "Response to finding 2012.47 - RSR Mangroves v2_20140702" is sufficient to allow the audit team to arrive at a determination regarding whether the proposed approach is applicable to the geographic scope of the project and whether the proposed approach will result in non-conservative quantification of the GHG emission reductions attributable to the project.

The audit team concluded, with a reasonable level of assurance, that the proposed approach is appropriate and will result in conservative quantification of the GHG emission reductions attributable to the project, for the following reasons:

- 1. It results in a value that is substantially lower than the mean of the values reported for Avicennia sp. and Rhizophora sp. in the Komiyama et al. (2008) study, especially considering that some relatively low values were reported for these genuses that could arguably have been removed for purposes of the analysis.
- 2. The source of the values used, the Komiyama et al. (2008) study, noted that different measurement process have been used, stating the following:

"We should note that different extraction methods were used in the different studies. Tamai et al. (1986) physically pulled out the roots of individual trees of Rhizophora and Bruguiera species. In soft mud substrates, loss with this method would mainly be in the fine-root fraction, unless large roots snap in the process of being pulled out. Komiyama et al. (2000) used the trench method for analyzing horizontal distribution of root density for Ceriops tagal. Ong et al. (2004) followed loosened individual roots into the mud using jets of water for R. apiculata, which resulted in minimal loss of recovered roots. Finally, in Comley and McGuinness (2005), a "root ball" within a 2 m radius and up to 1 m in depth around the sample tree, was mechanically excavated. With this method, the possibility exists of root contamination from neighboring trees."

Data from Tamai et al. (1986) was included in Table 2 of the Komiyama et al. (2008) study. Data from Comley and McGuinness (2005) was not included. Data from Komiyama et al. (1987) is specifically stated in Table 2 of the Komiyama et al. (2008) study to exclude the fine-root fraction. Thus, it appears that the measurement processes for the values included in Table 2 of the Komiyama et al. (2008) study appear to err on the site of underestimating belowground biomass.

3. The audit team agrees, based on the information and literature provided, that root-shoot ratios for mangrove species will tend to be significantly larger than for the non-mangrove species that exist in the project area. A number of physiological explanations for this have been provided in the literature and cited in the document entitled "Response to finding 2012.47 - RSR Mangroves v2_20140702"

Therefore, the information request has been resolved. A small discrepancy concerning the approach is addressed in NCR 2012.122.

Closing Remarks: The Client's response adequately addresses the finding.



OFI 2012.48 dated 03-08-2013

Standard Reference: BL-UP V3.1

Document Reference: PD_REDD_v1_00.docx, Sec. 2.6

Finding: Throughout the BL-UP module, references are made to a single "reference region for projecting rate of deforestation (RRD)". Although BL-UP does indicate that "the RRD can be composed of several parcels that do not have to be contiguous" (page 8), there is no mention of the possibility that multiple distinct RRDs may be defined. Similarly, references are always made to a single "leakage belt", although it is implied within BL-UP that multiple discrete areas may comprise a single leakage belt (e.g., page 11 refers to "the forest areas closest to the project area").

In conversation with project personnel, it was revealed to the audit team that two separate RRDs and leakage belts have been delineated and that the entire baseline analysis required by BL-UP has been conducted separately for each RRD and leakage belt. The audit team agrees that this modified approach will result in more accurate estimation of baseline emissions by ensuring that the estimated baseline emissions for each of the Cacheu and Cantanhez National Parks are fully reflective of historical deforestation in the immediate vicinity of said parks. Therefore, the audit team finds the proposed deviation to be justified as a deviation to the criteria and procedures for measurement, in accordance with Section 3.5.1 of the VCS Standard.

However, the PD states that "No methodology deviation is applied or requested by the project." While the VCS rules do not, strictly speaking, require proposed methodology deviations to be identified within the PD, a failure to identify the proposed deviation within the PD could result in confusion regarding the conformance of the project to the VCS rules. The opportunity to identify the proposed deviation within the PD constitutes an opportunity to assist with greater compliance with the VCS rules, both at this time and into the future.

Client Response: The PD was revised (PD_REDD_v1_10.docx) and Section 2.6 now presents the deviation to the methodology requested by the project.

Auditor Response: As indicated in the Client Response section, the PD now contains a description of the methodology deviation employed by the project.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.49 dated 05-17-2013

Standard Reference: AFOLU Non-Permanence Risk Tool V3.2, Section 2.2.1

Document Reference: PD_REDD_v1_10.docx, Section 7.1

Finding: The AFOLU Non-Permanence Risk Tool indicates that a score of 2 should be applied for item (b) of the project management sub-category in the event that "Ongoing enforcement to prevent encroachment by outside actors is required to protect more than 50% of stocks on which GHG credits have previously been issued." This score has been applied by the risk report. However, GHG credits have not previously been issued on the carbon stocks within the project area, and therefore the risk item is not applicable to the project.

Client Response: The PD was revised (PD_REDD_v1_20.docx) was revised and the risk removed from the analysis.

Auditor Response: As the risk report was revised as indicated in the Client Response, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.50 dated 05-17-2013

Standard Reference: VCS Standard Version 3.3, Sec. 3.18.2(2): T-ADD V3.0, Sec. 2.4

Document Reference: PD_REDD_v1_10.docx, Sec. 2.5, Step 4

Finding: The VCS Standard requires that the PD contain "a demonstration of additionality", further stating that "With respect to the demonstration of additionality, sufficient information shall be provided so that a reader can reproduce the analysis and obtain the same results."

Step 4 (Section 2.4) of the T-ADD tool requires that "The previous steps shall be complemented with an analysis of the extent to which similar activities have already diffused in the geographical area of the proposed VCS AFOLU project activity... Provide an analysis to which extent similar activities to the one proposed as the project activity have been implemented previously or are currently underway." If any "similar activities" to the proposed VCS AFOLU project activity have been implemented previously or are currently underway, the tool requires the user to compare the proposed project activity to the other similar activities and assess whether there are essential distinctions between them."

The PD does not clearly state whether the activities undertaken on the other parks within Guinea-Bissau are considered to be "similar" to the proposed project activity. The PD must clearly identify any "similar" activities. If any similar activities exist, they must be compared to the project activity to determine whether there are any "essential distinctions" between them. Such an analysis has not been clearly documented within the PD.

Client Response: The PD was revised (PD REDD v1 30.docx) and section 2.5 now better explains why the project is not common practice in the country. The principle aspects that differentiate the project from other previous and on-going conservation initiatives in the country's National Parks are threefold: (1) the source and sustainability of financing - it is the first REDD initiative in Guinea-Bissau. To date, all conservation projects have been forced to rely on short term donor grant financing (1-5 yrs), which inhibits the planning and attainment of long term park conservation objectives. This project will, for the first time, tap into a long term market based initiative (30 years) thus allowing for long term planning and execution. Furthermore, the project design linking the REDD initiative with the BioGuine Foundation will allow a portion of the carbon revenues accrued during the 30 year crediting period to be converted into a sustainable flow of financing able to support forest conservation in the project areas in perpetuity; (2) currently the effectiveness of park management activities is monitored based on proxy data, the project will produce for the first time actual field data for tracking and evaluating the impact of forest management activities. This will greatly strengthen the on the ground capacity to conserve these resources; and, additionally, (3) to date evaluation of community micro scale projects has been done on a case-by-case basis, project ecosystem level monitoring will enable a broader park level impact assessment to be executed. The predictability of long term financing together with actual field monitoring of ecosystem health trends will thus transform the ability to manage and preserve this forest resources.

Auditor Response: The updated PD ("PD_REDD_v1_30") contains additional information regarding conservation activities with respect to other national parks in Guinea-Bissau. However, the PD still does not clearly state whether any activities undertaken on the other parks within Guinea-Bissau are considered to be "similar" to the proposed project activity. Therefore, the finding remains open.

Client Response 2: The project proponent understands that the project's objective is to provide intensive monitoring and full conservation of the Project Area. Thus, although a network of protect areas exist none of them can be considered similar to the proposed project activity as no other area can provide the same level of monitoring and enforcement as to pursue full conservation of forests. The project is unique and no other similar activities exist in Guinea-Bissau. The PD (PD_REDD_v1.40.docx) was revised to clarify this situation

Auditor Response 2: As indicated in the "Client Response" section, some information has been added to the PD regarding the assertion that no activities exist with respect to the other national parks in Guinea-Bissau that are "similar" to the proposed project activity. However, documentation and evidence to support the claims made is lacking. Please provide the following:

- A very specific and detailed description of the aspects of the project activity, as proposed to be carried out within the project area, that are currently not being carried out within the other national parks within
- Documentary evidence, from credible sources (e.g., official reports, peer-reviewed journals), to support the assertion that the activities listed in response to the above request are not effectively carried out within the other national parks within Guinea-Bissau





Client Response 3: The project proponent is presenting documentary evidance to support the assertion that the activities implemented by the project activity cannot be considered common practice. Two files are provided to SCS (1) GAB_SEC_EST.pdf and (2) IUCN_STATEMENT.jpg

Auditor Response 3: The information provided to SCS, in the form of attestations from interested parties related to the project activity not being common practice in Guinea-Bissau, is helpful in providing the audit team with reasonable assurance regarding the additionality of the project activity. However, it does not, strictly speaking, satisfy the requirement for additional documentation within the project description. For administrative reasons, this finding will be closed and a new finding, NCR 2012.103, will be opened. **Closing Remarks**: The Client's response adequately addresses the finding.

NCR 2012.51 dated 05-17-2013

Standard Reference: REDD-MF V1.4, Sec. 5, Step 3; M-MON V2.1, Sec. 5, Step 2

Document Reference: PD_REDD_v1_10.docx, Sec. 4.3.2

Finding: The REDD-MF methodology framework requires that "The monitoring plan shall address the following monitoring tasks... Monitoring of actual carbon stock changes and greenhouse gas emissions." The monitoring plan does not address the task of monitoring degradation through extraction of trees for illegal timber or fuelwood and charcoal within the project area (as required by the M-MON module), which is a subset of the task "monitoring of actual carbon stock changes and greenhouse gas emissions". **Client Response**: The PD was revised (PD_REDD_v1_30.docx) and section 4.3.2 ajusted accordingly. **Auditor Response**: As indicated in the Client Response section, Section 4.3.2 of the updated PD ("PD_REDD_v1_30") now contains a plan for monitoring of carbon stock changes from illegal degradation, and therefore the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.52 dated 05-17-2013

Standard Reference: REDD-MF V1.4, Sec. 5, Step 3; M-MON V2.1, Sec. 5, Step 2

Document Reference: PD_REDD_v1_10.docx, Sec. 4.3.2

Finding: The REDD-MF methodology framework requires that "The monitoring plan shall address the following monitoring tasks... Monitoring of actual carbon stock changes and greenhouse gas emissions." The monitoring plan does not address the task of monitoring areas undergoing natural disturbance (as required by the M-MON module) which is a subset of the task "monitoring of actual carbon stock changes and greenhouse gas emissions".

Client Response: The PD was revised (PD_REDD_v1_30.docx) and section 4.3.2 ajusted accordingly. Auditor Response: As indicated in the Client Response section, Section 4.3.2 of the updated PD ("PD_REDD_v1_30") now contains a plan for monitoring areas under natural disturbance. However, the monitoring procedures are identical for monitoring areas under deforestation and natural disturbance, and the monitoring plan does not provide additional clarity regarding how natural disturbance events are to be distinguished or handled separately from deforestation events when remote sensing is undertaken. Therefore, the non-conformity has not been resolved.

Client Response 2: The PD was revised (PD_REDD_v1_50.docx) and section 4.3.2 ajusted accordingly.

Auditor Response 2: As indicated in the "Client Response" section, additional procedures have been added to specify how natural disturbance events are to be differentiated from deforestation events. The additional guidance provide will be very helpful in establishing a system for reporting of emissions in the project scenario. However, while the guidance specifies that "identification and geographical location of the disturbance events are performed randomly, and the locations to be surveyed are selected from a grid of points over the monitoring deforestation map" the guidance does not clarify what the resolution of the grid of points is to be, of provide any other indication regarding how the sample size is to be determined. Therefore, the procedures for monitoring of natural disturbance are still not completely clear.

Client Response 3: The PD was revised (PD_REDD_v1_90.docx) and section 4.3.2 ajusted accordingly.

Auditor Response 3: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that Section 4.3.2 contains an indication of the resolution of points to be used for monitoring purposes, stating that " To keep consistency, a 250x250 meters grid of points shall be used, and 10% of the points over the deforested area under inspection for natural disturbance shall be visited." Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.53 dated 05-17-2013

Standard Reference: REDD-MF V1.4, Sec. 5, Step 3; M-MON V2.1, Sec. 5, Step 2

Document Reference: PD_REDD_v1_10.docx, Sec. 4.3.3

Finding: The REDD-MF methodology framework requires that "The monitoring plan shall address the following monitoring tasks... Monitoring of leakage carbon stock changes and greenhouse gas emissions." The monitoring plan does not address the task of monitoring leakage emissions from unplanned deforestation displaced from the project area to outside the Leakage Belt (as required by the LK-ASU module) which is a subset of the task "monitoring of leakage carbon stock changes and greenhouse gas emissions". While it is understood that such leakage is not anticipated at this time, it is possible that leakage attributable to this source may be produced over the course of the crediting period. Therefore, the monitoring plan must address the task of monitoring such leakage.

Client Response: The PD was revised (PD_REDD_v1_30.docx) and section 4.3.3 ajusted accordingly. Auditor Response: As indicated in the Client Response section, Section 4.3.3 of the updated PD ("PD_REDD_v1_30") now contains a plan for monitoring of carbon stock changes due to leakage, and therefore the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.54 dated 05-17-2013

Standard Reference: REDD-MF V1.4, Sec. 5, Step 3; M-MON V2.1, Sec. 5, Step 2

Document Reference: PD_REDD_v1_10.docx, Sec. 4.3.1

Finding: The REDD-MF methodology framework requires that "The monitoring plan shall address the following monitoring tasks... Revision of the baseline." While items (a)-(c) of Section 4.3.1 of the PD do contain information on the collection of carbon stock data for the initial baseline analysis, these items do not contain any information on how such information is to be collected in the future for purposes of baseline revision. In addition, Section 4.3.1 of the PD does not contain any information on how other aspects of the baseline analysis (such as the remote sensing of deforestation during the historical reference period) are to be carried out in the course of baseline revision.

Client Response: The PD was revised (PD_REDD_v1_30.docx) and the monitoring section ajusted accordingly.

Auditor Response: As indicated in the Client Response section, Section 4 of the updated PD ("PD_REDD_v1_30") now contains a plan for re-measurement of carbon stocks. In addition, the introduction to Section 4 states that "The methodological procedure used to update the baseline shall be the same as used in the definition of the baseline according to this PD." However, the monitoring plan does not provide a detailed description of how this task will be done with headings (a)-(f) as required by the REDD-MF methodology framework. Therefore, the non-conformity has not been resolved. **Client Response 2**: The PD was revised (PD_REDD_v1_50.docx) and the monitoring section ajusted accordingly.

Auditor Response 2: The audit team can confirm that Section 4.3.1 of Version 1.5 of the PD contains appropriate procedures for carrying out many of the baseline update procedures. However, the guidance provided in this section does not completely conform to the requirements of the methodology in the following instances:

In Section 6 of the BL-UP module, it is indicated that the following parameters must be monitored or updated "at least once every 10 years (when the baseline is revisited)". However, the PD does not contain procedures for monitoring or updating the below parameters.

- LB
- PA
- P(LK)
- P(PA)
- RRD
- T(hrp)

Section 4.3.1(b) of the PD states that "For the reassessment of the carbon stocks of each stratum, new plots shall be established and measured. The field measurements used for the carbon stock assessment shall me collected in minimum 5 years and no more than 10 years before the baseline renewal." It is unclear what this sentence means. The sentence appears to imply that field measurements much be taken at least 5 years prior to the baseline renewal, which does not make sense in the context of the overall monitoring task. It is also unclear that allowing measurements to take place up to 10 years prior the date of baseline renewal is constistent with the requirement of the CP-AB module that carbon stock estimates "must be re-estimated from new field measurements" after 10 years.

Client Response 3: LB, PA and RRD are physical boundaires that must be updated at least once every 10 years (when the baseline is revisited). P(LK) and P(PA) are ratios derived from LB, PA and RRD. The updated PD version (PD_REDD_v_1_80.docx) now includes on section 4.3.1 (Revision of the Baseline) the procedure for updating LB, PA, P(LK), P(PA) and RRD. The section also clarifies that T(hrp) is the duration of the historical reference period and must always be between 10 and 15 years. The paragraph related to the update of carbon stocks was also revised to clarify that new field measurements must be undertaken at least onde every 10 years (when the baseline is revisited).

Auditor Response 3: The audit team can confirm, through review of Section 4.3.1 of the updated PD (entitled "PD_REDD_v1_80"), that the updated PD contains criteria and procedures for updating the parameters LB, PA, RRD, P(LK), P(PA), RRD and T(hrp). The updated PD also contains clearer language regarding the updating of carbon stock estimates that resolves the confusion caused be the previous language. Therefore, the non-conformity has been fully resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.55 dated 05-17-2013

Standard Reference: REDD-MF V1.4, Sec. 5, Step 3

Document Reference: PD_REDD_v1_10.docx, Sec. 4.3

Finding: The REDD-MF methodology framework states that "All relevant parameters from the modules are to be included in the monitoring plan." The following relevant parameters from the modules are not included in the monitoring plan:

- Project Forest Cover Monitoring Map (M-MON)
- Leakage Belt Forest Cover Monitoring Map (M-MON)
- Degradation PRA Results (M-MON)
- Result of Limited Degradation Survey (M-MON)
- A(DegW,i) (M-MON)
- A(DistPA,q,i,t) (M-MON)
- AP(i) (M-MON)
- C(DegW,i,t) (M-MON)
- MANFOR (LK-ASU)
- PROP(IMM) (LK-ASU)
- PROP(RES) (LK-ASU)
- PROTFOR (LK-ASU)
- TOTFOR (LK-ASU)

Client Response: The PD was revised (PD_REDD_v1_30.docx) and section 4.3 ajusted accordingly. Auditor Response: As indicated in the Client Response section, Section 4.2 of the updated PD ("PD_REDD_v1_30") now includes all of the required parameters, and the guidance provided for monitoring of said parameters is consistent with the M-MON and LK-ASU modules. Therefore, the nonconformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.56 dated 08-01-2013

Standard Reference: REDD-MF V1.4, Sec. 2

Document Reference: PD_REDD_v1_20.docx, Sec. 2.1

Finding: The REDD-MF methodology framework requires that "The reference to this Framework and the modules used to construct the project-specific methodology shall be given in the VCS Project Description (VCS PD)." While the project description does reference the REDD-MF methodology framework, it refers to Version 1.3 of the methodology framework, which is not consistent with the prevailing version of the REDD-MF methodology framework at the time of this assessment.

Client Response: The PD was revised (PD_REDD_v1_30.docx) and section 1.4, Sec. 2 ajusted accordingly.

Auditor Response: As indicated in the Client Response section, the table in Section 2.1 of the updated PD (PD_REDD_v1_30) now indicates that Version 1.4 of the REDD-MF methodology framework is being used. However, this is not consistent with the information provided immediately above the table, which indicates that Version 1.3 of the REDD-MF methodology framework is being used. Therefore, the non-conformity has not been fully resolved.

Client Response 2: The PD was revised (PD REDD v1 40).

Auditor Response 2: Through review of Version 1.4 of the PD, the audit team was able to confirm that the prevailing version of the REDD-MF methodology framework is consistently indicated throughout the PD. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.57 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.16.2

Document Reference: WB2 - C assessment and emission baseline; WB2 - C assessment and emission baseline v2

Finding: The VCS Standard requires that "Quality management procedures to manage data and information shall be applied and established."

In response to NIR 2012.37, and as documented in the response to that finding, several changes were made in the calculation of biomass at the tree level, as evidenced through comparison of worksheet "Trees_Biomass_Test_Scenarios" from workbook "WB2 - C assessment and emission baseline" and worksheet "Tree_Biomass" from workbook "WB2 - C assessment and emission baseline v2". However, none of the information provided in response to NIR 2012.37 indicates that the number of tree records should have changed. However, discrepancies in the number of tree records between the two datasets have been identified. Examples of specific discrepancies are as follows.

- Plot FA111_08, which was present in "Trees_Biomass_Test_Scenarios", is missing from "Tree_Biomass"
- Plot MCC32 is shown to have 19 trees in "Trees_Biomass_Test_Scenarios" but is shown to have 18 trees in "Tree Biomass"

Please identify and justify each of the discrepancies between the dataset of

"Trees_Biomass_Test_Scenarios" and the dataset of "Tree_Biomass". Please explain, in particular, why quality management procedures to manage data and information have been applied and established in light of the identified discrepancies.

Client Response: The Project Proponent provides the formal reply (Finding 2012.57.docx) clarifying that some tree records were removed due to internal procedures for quality control.

Auditor Response: The response provided to the audit team documents the following changes that were made to worksheet "Tree_Biomass" from workbook "WB2 - C assessment and emission baseline v2":

- All tree records from plot FA111_08 were removed, as that plot is located outside of the RRD, leakage belt and project area
- One tree, from plot MCC32 and with a DBH of 4.5 cm, was removed from worksheet
- "Trees_Biomass_Test_Scenarios" (from "WB2 C assessment and emission baseline v2"), as it fell below the 5-cm DBH threshold

However, it appears that a change was also made to the tree records for plot M11_07, as found in rows 1720-1735 of worksheet "Trees_Biomass_Test_Scenarios" (from "WB2 - C assessment and emission baseline") and in rows 1008-1015 of worksheet "Tree_Biomass" (from "WB2 - C assessment and emission baseline v2"), respectively. The former worksheet contains 16 records for this plot, while the latter worksheet contains 8 records. Please provide an explanation for the discrepancy and a justification for any changes made to the tree records for plot M11_07.

In addition, the audit team has noted other within worksheet "Tree_Biomass" from workbook "WB2 - C assessment and emission baseline v2" where trees with a DBH below 5 cm were not excluded from the dataset. A non-exhaustive list of examples is as follows:

- A tree from plot FD18 07 has a DBH of 4.0 cm
- A tree from plot OFW_C_82A has a DBH of 4.0 cm
- A tree from plot SACC46 has a DBH of 3.6 cm

Please describe the quality control procedures undertaken to identify and remove all trees with a DBH below 5 cm from the analysis. Please identify all instances where trees with a DBH below 5 cm were included in the calculation of carbon stocks and provide clarification as to why they were included in the calculations.

Client Response 2: The project proponet is submitting a revised version of the Carbon Assessment and Baseline Workbook (20140522) and a new version of the file Finding 2012.57 v2.docx. The identified inconsistency on tree records and on samples with treed with DBH < 5 cm are clearly justified and the workbook revised.

Auditor Response 2: The revised documentation submitted is sufficient to clarify that trees with DBH less than 5 cm should not have been included in the project boundary. Through review of the revised workbook entitled "WB2 - C assessment and emission baseline v2.1 20140522", the audit team has been able to confirm that all trees with DBH less than 5 cm have been removed from the project inventory. Therefore, no unexplained discrepancies exist with respect to the number of tree records in the project inventory, and the information request has been satisfied.



Closing Remarks: The Client's response adequately addresses the finding.

NIR 2012.58 dated 04-21-2014

Standard Reference: AFOLU Requirements V3.4, Sec. 3.4.1

Document Reference: PD_REDD_v1_40, Sec. 1.9; Finding 2012.24 - boundaries revision, Sec. 2.3.1 **Finding**: The AFOLU Requirements states that "The project location description shall include the following information... Total size of the project area."

The revised PD states that "Cacheu Mangrove Forest National Park (Cacheu Park) has 74,700 hectares, of which 52,543 comprises the Project Area" and that "Cantanhez Forest National Park (Cantanhez Park) has 106,500 hectares, of which 88,913 comprises the Project Area". This is not consistent with the description of the revised project area as provided in response to NIR 2012.24, which states that "The new areas of the Project Areas for the Cacheu and Cantanhez Protected Areas are 55,247 ha and 90,451 ha respectively." Review of workbook "WB2 - C assessment and emission baseline v2" indicates that the latter set of values are used in the quantification of baseline carbon stock changes. Please clearly identify which of the two values are correct and ensure that the correct values are indicated in the project description and used for the quantification of baseline carbon stock changes.

Client Response: The values presented in the Workbook are the corrected values after the necessary boundaries revision. The PD was wrong and is now revised to reflect the correct Project Area.

Auditor Response: The audit team was able to confirm, through review of Section 1.9 of the updated PD ("PD_REDD_v1_70"), that the updated PD contains information regarding the size of the project area that is consistent with the other information presented to the audit team. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.59 dated 04-21-2014

Standard Reference: NA

Document Reference: WB2 - C assessment and emission baseline; WB2 - C assessment and emission

baseline v2; Finding 2012.24 - boundaries revision

Finding: As documented in "Finding 2012.24 - boundaries revision", and as evidenced through comparison of the "deforestation_baseline" worksheet in the workbooks "WB2 - C assessment and emission baseline v2", the areas of the reference regions for projecting deforestation rate (RRDs) have changed substantially for both Cacheu and Cantanhez since procedures for delineation of the RRDs were reviewed during the office meeting. The RRDs for Chacheu and Cantanhez have decreased by 28,968 ha and 1,232 ha for Cacheu and Cantanhez, respectively. In no case was modification to, or revision of, the RRDs directly requested by SCS. Please provide a detailed explanation for the changes made in the areas of the RRDs for Cacheu and Cantanhez and the justification or rationale for said changes. Please provide spatial files showing the RRDs prior to, and subsequent to, the changes.

Client Response: The Project proponent provides the formal reply (Finding 2012.59 60 61 62 63.docx) and all supporting documentation and evidences in a compresseded file (NIR_2012.59to63.zip) to SCS. As mentioned in our reply to NCR 2012.24, the 2012 audit meetings identified various non-conformities in the analysis that was carried out. According to the VM0007 (REDD-MF) v1.4 framework, and corresponding VMD0007 (BL-UP) module, land in the project area should be forest at least 10 years before the project start date and should be 100% forested at the start of the project. The final report stated that the project area (PA) was defined only with the criterion of being 100% forested at the start of the project. Also, the limits of the Cantanhez Protected Area were not correctly delineated. Following the audit meetings and the correction of the mentioned non-conformities, an improved quality control was implemented where a thorough assessment of all spatial datasets was conducted. The following issues were identified and corrected:

- a) The minimum mapping area (MMA) of the land cover maps mentioned in the report (0.5 ha) was not in agreement with the MMA of the land cover maps (1.0 ha). Therefore, the minimum mapping area of all land cover maps was changed to 0.5 ha.
- b) A spatial overlap between the Cacheu RRD and the Cantanhez RRD was identified (around 27,300 ha). The overlapping area occurred along the region of Quinara, mainly in the sectors of Tite and Empada, close to the Cantanhez protected area.
- c) As a consequence of the GIS operations used to generate the various types of boundaries (i.e., PA, RRD and LK), the set of spatially non-connected polygons composing these boundaries often had areas lower than the MMA. In the older version of these boundaries several polygons had areas lower than the MMA. In the new version of the boundaries all polygons with an area less than 0.5 ha were discarded. Although the change in the Cantanhez RRD was almost negligible (around 0.6%), in the Cacheu RRD there was a reduction on the area of approximately 14% (28,968 ha). The main reason for this significant decrease is associated with the extent of spatial overlap between the Cacheu RRD and the Cantanhez RRD. As mentioned above, those overlapping areas were located in the region of Quinara, mainly in the sectors of Tite and Empada, closest to the Cantanhez than the Cacheu protected area, and therefore in this revision those areas were assigned to the Cantanhez RRD and eliminated from the Cacheu RRD. Also, the correct delineation of the Cacheu PA and the process of implementing a MMA of 0.5 ha in the land cover maps also had influence on the subsequent spatial analysis, namely on the criteria to delineate the RRD and LK as a function of the new PA values (VMD0007 BL-UP module). However, one should note that both RRDs' areas were in compliance with the VMD0007 (BL-UP) module, which states that "where insufficient forest area exists in the country to equal MREF while meeting criteria a through f, then MREF shall be made equal to the area that meets criteria a through f".

Auditor Response: The information provided includes a description of the extent of the changes made to the RRDs as well as the reason for those changes. In addition, the audit team has been provided with spatial products showing the extents of the old and new RRDs. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.60 dated 04-21-2014

Standard Reference: BL-UP V3.2, Sec. 5, Step 1.1.1.1 **Document Reference**: Finding 2012.24 - boundaries revision

Finding: The BL-UP module has many requirements for the determination of the shape and area of the RRD. As documented in NIR 2012.59, substantive changes have been made to the RRDs for Chacheu and Cantanhez. The conformance of the RRDs, in the form which they took prior to the office meetings, was confirmed during those meetings. However, the conformance of the revised RRDs has not been confirmed. Please provide evidence that the revised RRDs meet each of the criteria (a)-(f) of Step 1.1.1.1. Section 5 of the BL-UP module. Section 3 of the document "Finding 2012.24 - boundaries revision" states that "A Microsoft® Office Excel® file named "Justification PA RRD LK Cacheu Cantanhez.xlsx" is embedded in the end of this section, with all the calculations that were carried out to assess the various criteria. In this file there is a column (named Notes) with the identification of those criteria that were slightly outside the required limits." However, the audit team was unable to find "all the calculations that were carried out to assess the various criteria" in the workbook embedded in the document "Finding 2012.24 - boundaries revision". Please provide this document directly to the audit team to reduce the possibility for technical difficulties in this regard. Finally, the audit team understands that the neither of the RRDs is equal to or larger than the MREF (as defined in Equation 1 of the BL-UP module). The audit team understands that the BL-UP module states that "Where insufficient forest area exists in the country to equal MREF while meeting criteria a through f, then MREF shall be made equal to the area that meets criteria a through f." However, a justification that "insufficient forest area exists in the country to equal MREF while meeting criteria a through f" has not been provided to the audit team. In addition, a justification that MREF has been made equal to "the area that meets criteria a through f" has not been provided. Please provide the information required above.

Client Response: The Project proponent provides the formal reply (Finding 2012.59 60 61 62 63.docx) and all supporting documentation and evidences in a compresseded file (NIR_2012.59to63.zip) to SCS. As mentioned in our reply to NCR 2012.24 a file named

"Justification_PA_RRD_LK_Cacheu_Cantanhez.xlsx" was embedded in the word document and had all the calculations that were carried out to verify that the delineation of the RRD and LK for both PAs (Cacheu and Cantanhez) were in compliance with the VMD0007. Also, the spatial products used in the modification of the RRD were the same as those showed during the previous audit meetings, with the exception of the land cover maps, which were modified to accommodate a MMA of 0.5 ha:

- Land cover map of 2002 and 2010
- Soil types map
- Elevation and slope classes maps
- Navigable rivers
- Road network
- Settlements

The justification for a RRD lower than the MREF was mainly related to the difficulty in identifying enough forest area meeting the criteria set in the VMD0007 (e.g. mangrove areas outside the PA and LK of the Cacheu Protected Area and closed forest areas outside the PA and LK of the Cantanhez Protected Area). One should note that the previous Cacheu and Cantanhez RRDs also had an area lower than the MREF, a fact that was acknowledged and accepted by the audit team during the 2012 office meetings. The file entitled "Justification_PA_RRD_LK_Cacheu_Cantanhez.xlsx" has all the calculations that were

carried out to assess the compliance of "criteria a through f" laid out in VMD0007. The file has separate sheets for Cacheu and Cantanhez. The approach followed was:

- 1) Calculate the values of all criteria for the PA;
- 2) Calculate the ± 20% or, in case of the LK, the relaxation to ±50% of the values computed in 1);
- 3) Calculate the values of all criteria for the RRD and LK;
- 4) Assess the compliance of the RRD (or LK) values against the \pm 20% or \pm 50% interval calculated from the PA;
- 5) If all criteria are in compliance then the RRD and LK can be made final. Otherwise, change the RRD and/or the LK and start again from 3) until all criteria are met.

One should note that some deviations were identified as some of the criteria were outside the allowed range of variation, although the majority just by a small amount (1-4%).



Auditor Response: The audit team has been provided with evidence (where applicable) of conformance of the RRDs and leakage belts to the assessment criteria, including work products ("Justification_PA_RRD_LK_Cacheu_Cantanhez" and "Areas_PA_RRD_LK_Cacheu_Cantanhez") containing the calculations. The information request has been satisfied. **Closing Remarks**: The Client's response adequately addresses the finding.

NIR 2012.61 dated 04-21-2014

Standard Reference: NA

Document Reference: APPENDIX I - Methodology.pdf; WB2 - C assessment and emission baseline v2 **Finding**: The conversion of remotely sensed areas from pixels to hectares, as carried out in cells 4 through 30 in columns F, O, X, AG, AP and AY of worksheet "deforestation_baseline" of workbook "WB2 - C assessment and emission baseline v2", uses a formula that is appropriate where the remotely sensed imagery used for the analysis has a spatial resolution of 25 meters. However, Tables 1 and 2 of Appendix I to the "Assessment of REDD Baseline Scenarios in Guinea-Bissau Revision and Update" report indicates that the imagery used had a spatial resolution of either 28.5 meters or 30 meters. Please provide an explanation for this apparent discrepancy.

Client Response: The Project proponent provides the formal reply (Finding 2012.59 60 61 62 63.docx) and all supporting documentation and evidences in a compresseded file (NIR_2012.59to63.zip) to SCS. Tables 1 and 2 of Appendix I to the "Assessment of REDD Baseline Scenarios in Guinea-Bissau Revision and Update" report indicates that the imagery used had a spatial resolution of either 28.5 meters or 30 meters. This is the spatial resolution of the original Landsat data that was either purchased (Eurimage) or downloaded free of charge (USGS database) for the purpose of this assessment. However, in the same Appendix I (page 4, under IMAGE PRE-PROCESSING, i. Geometric Corrections) it is mentioned that "Using the nearest neighbor resampling technique (which preserves the maximum raw spectral information) the images were resampled into the Universal Transverse Mercator projection (UTM, Zone 28 North, WGS84) with a 25m grid". Therefore, the images that were classified had in fact a 25-m spatial resolution and consequently the conversion from pixels to hectares was done correctly.

Auditor Response: The audit team can confirm that the cited language is in Appendix I of the baseline report. In addition, the audit team can confirm, through re-calculation of total area in both the Cacheu and the Cantanhez RRDs, that the grid cell size is 25 meters. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.

NIR 2012.62 dated 04-21-2014

Standard Reference: NA

Document Reference: Finding 2012.24 - boundaries revision

Finding: The response to NCR 2013.24 states that "The following documents explaining the adjustments and the new results are being submmited to SCS: Finding 2012.24 - boundaries revision.docx, Confusion Matrix.xlsx, Areas PA RRD LK Cacheu Cantanhez.xlsx,

Justification_PA_RRD_LK_Cacheu_Cantanhez.xlsx, Deforestation_3class.xlsx, PA_Cacheu.shp and PA_Cantanhez.shp." Please provide all of the indicated documents directly to SCS (i.e., do not provide them as embedded within a Microsoft Word document). In addition, please provide the following files:

- Raster files of land cover classification which were used for "a series of GIS operations as to guarantee that the project area was indeed 100% forest in 2002 and 2010", as mentioned in Section 2.3.1 of the document "Finding 2012.24 boundaries revision"
- The coordinates of the 93 non-forest points used for validation of the land-cover classification, as mentioned in Section 2.2 of the document "Finding 2012.24 boundaries revision" (these can be provided in Excel or text format, but a shapefile or KML file showing the locations is preferred)

Client Response: The Project proponent provides the formal reply (Finding 2012.59 60 61 62 63.docx) and all supporting documentation and evidences in a compresseded file (NIR_2012.59to63.zip) to SCS. Auditor Response: The audit team can confirm that all of the work products requested in the text of the finding have been provided. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.63 dated 04-21-2014

Standard Reference: NA

Document Reference: Finding 2012.24 - boundaries revision

Finding: Section 2.3.3 of the document "Finding 2012.24 - boundaries revision" states that "As mentioned in section 2.3.1., the areas in the previously defined project areas that were forest in 2010 but non-forest in 2002 could then be moved to the Leakage Belt, as the criterion for this boundary requires it to be 100% Forest at the beginning of the project (2010)." From review of this text, it would be expected that the area of the leakage belt have increased, for the exact reason specified in the text. However, the area of the leakage belt appears to have decreased since the time of the office meetings, from 38,132 ha to 31,188 ha. It is not clear why this decrease has occurred. As with NIR 2013.60, please provide a detailed description of any and all changes made to the boundary of the leakage belt, and the rationale for those changes. Where changes have been made, please provide a detailed justification for why the leakage belt is currently in conformance with the requirements of the BL-UP module. Please provide shapefiles showing the previous and current leakage belts and any spatial products used in the modification of the leakage belt since the time of the office meetings.

Client Response: The Project proponent provides the formal reply (Finding 2012.59 60 61 62 63.docx) and all supporting documentation and evidences in a compresseded file (NIR_2012.59to63.zip) to SCS. The decrease mentioned by the audit team refers to changes in the Cacheu LK (from 38,132 ha to 31,188 ha). However, one should note that the area of the Cacheu LK presented during the 2012 audit meetings (38,132 ha) was already below the 90% threshold (54,178 ha). At the time, it was explained to the audit team that the reason for that was mainly due to the fact that the Cacheu Protected Area was initially established with the objective of preserving extensive areas of mangroves. This particularity of the Cacheu PA renders that some of the requirements of the VMD0007 are almost impossible to achieve, namely those concerning proportionality of land cover types, settlements, road network and navigable rivers density in and out of the Cacheu PA.

One should also note that the area of the Cacheu PA decreased from 60,198 ha to 55,247 ha to accommodate the non-conformity identified during the 2012 audit meetings (i.e., non-forested areas at the beginning of the reference period were being included in the Cacheu PA). As mentioned before (Client Response to NIR 2012.59) this lead to a change of the values of the list of criteria (VMD0007) inside the Cacheu PA that were used to delineate the RRD and LK.

Therefore, in order to comply with one of the VMD0007 requirements , the project team decided to eliminate areas that were originally in the Cacheu LK but were located farther from the Cacheu PA (as shown in the available spatial data, by comparing the old and current Cacheu LK shapefiles). By excluding these areas (from 38,132 ha to 31,188 ha) the criteria (with the 50% allowed relaxation) were met.

Auditor Response: The requested information has been provided, as have the requested spatial products. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.64 dated 04-21-2014

Standard Reference: REDD-MF V1.4, Sec. 5, Step 4

Document Reference: GB-REDD_ER_v2

Finding: Equation 1 of the REDD-MF methodology framework requires that the "Net greenhouse gas emissions under the baseline scenario" at time t be used in the calculation of the "Total net greenhouse emission reductions at time t". As calculated in worksheet "NET Emission Reduction" of workbook "GB-REDD_ER_v2", net emissions under the baseline scenario have been calculated, for each of the Cacheu and Cantanhez project areas, by taking the cumulative net emissions under the baseline scenario in year 2022 and dividing by 10. This is not an appropriate calculation procedure because the yearly net emissions under the baseline scenario are not equal from years 2013-2022.

Similarly, it is not correct to source the values for the baseline emissions within the project area and leakage belts, as shown in cell ranges C6:C15 and F6:F15 of worksheet "Ex-ante Leakage Emissions" of workbook "GB-REDD_ER_v2", respectively, from the cumulative net emissions in year 2022 divided by 10, for the same reason.

Client Response: The emission reduction calculation was updated. The new version of the spreadsheet (GB-REDD_ER_v3.xlsx) now applies yearly values according to the yearly variations observed in the baseline and leakage emissions calculations.

Auditor Response: The audit team can confirm, through review of the workbook "GB-REDD_ER_v3", that yearly emissions values under the baseline scenario (for both the project area and the leakage belt) have been used for quantification of emission reductions, and therefore the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.65 dated 04-21-2014

Standard Reference: LK-ASU V1.0, Sec. II, Step 4

Document Reference: PD REDD v1 40

Finding: The LK-ASU module requires the user to "Define the total available national forest area (TOTFOR). This can be assessed with a coarse-scale imagery (e.g. using MODIS imagery or similar), or with official government statistics on forest area. The total national forest area should be reduced to just the area of forest within 5km of a road or river that is suitable for conversion to agriculture or raising livestock."

The PD states "TOTFOR is derived from the national forest cover analysis undertaken by CARBOVEG-GB Project. The value applied is 2,566,789 ha." Please provide evidence that the value applied has been "assessed with a coarse-scale imagery (e.g. using MODIS imagery or similar), or with official government statistics on forest area". Also, please either provide evidence that the forested area considered has been "reduced to just the area of forest within 5km of a road or river that is suitable for conversion to agriculture or raising livestock" or provide an appropriate justification for why this has not been done.

Client Response: Question 1) The data is from CARBOVEG-GB Project which quantified the forest cover in GB and evaluated land cover transitions and related carbon emissions. CARBOVEG-GB processed and classified satellite imagery (Landsat) from 1986, 1990, 1994, 1998, 2002, 2006 and 2008, therefore complying with the coarse-scale imagery requested by LK-ASU. A summary presentation is provided to SCS (Carboveg-GB.pdf). The project proponent also reminds SCS that the current baseline analysis of this REDD project is derived from CARBOVEG-GB data.

Question 2) Since data of forested areas within 5 km of roads or rivers are not readly available, the project proponent decided to consider all standing forests in the country suitable to agriculture or rising livestock, and therefore, potential areas for leakage outside the leakage belt. This is conservative as increases the available area for leakage. In addition, this situation also reflects the country reality since population have been living under traditional ways of life inside forested areas all around the country (as in our project area case where Cantanhez and Cacheu National Parks are inhabitated and accessible to deforestation).

Auditor Response: The audit team can confirm, through review of the presentation entitled "Quantifying the carbon stocks and sink effects in the forests of Guinea - Bissau: A baseline for clean development mechanism projects" (with the file name "Carboveg-GB"), that the value 2,566,789 ha is the sum of the values for forest in the different forest types, as found under "Preliminary Results" in that document. Based on the assertion that the values were determined using the same methods as the baseline methodology for the project, the audit team agrees that they were determined using "coarse-scale imagery", as required by the LK-ASU module. Finally, an appropriate justification has provided for using the total forested area of Guinea-Bissau rather than "the area of forest within 5km of a road or river that is suitable for conversion to agriculture or raising livestock".

However, it should be noted that the values contained within the presentation are different from the values reported for 2007 in Table 11 of the report "Second National Communication on Climate Changes in Guinea-Bissau: Final Report" (accessed 14 August 2014 from

http://unfccc.int/resource/docs/natc/gnbnc2e.pdf), which sum to 2,683,290 hectares across all forest cover types. Since both sets of values were derived from CARBOVEG-BG data and are reported for the year 2007, it is not clear that there should be differences between them. Please explain the discrepancy between the two sets of values and explain why the values reported in the workbook "GB-REDD_ER_v3" represent the best available information regarding forested area in Guinea-Bissau.

Client Response 2: [A response to this finding was provided outside the cover of the findings workbook.] Auditor Response 2: An updated workbook, entitled "GB-REDD_ER_v5", was provided in response to this finding. Through review of that workbook, the audit team has been able to confirm that the values from Table 11 of the report "Second National Communication on Climate Changes in Guinea-Bissau: Final Report" (accessed 16 December 2014 from http://unfccc.int/resource/docs/natc/gnbnc2e.pdf) have been appropriately transferred to cell range D49:D52 of worksheet "Ex-ante Leakage Emissions". These values sum (in cell D53) to 2,683,290 hectares, the value noted in Table 11 of the report. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.66 dated 04-21-2014

Standard Reference: LK-ASU V1.0, Sec. II, Step 4

Document Reference: PD_REDD_v1_40

Finding: The LK-ASU module requires that "If boundaries are available then area of protected forests (PROTFOR) and the area of managed forests (MANFOR) may be excluded from the total forest area calculated in this step." In footnote 5, it is clarified that "Protected forests should be defined as forests with active protection in place including forest guards and policies to evict squatters. The effectiveness of protection must be demonstrable for areas to be excluded from total available forest area".

The PD states "The total area of fully protected forest nationally (PROTFOR) is equal to the area of the National System of Protect Areas (Sistema Nacional de Áreas Protegidas – SNAP) under IBAP responsibility, which totals 470,000 ha." Please provide evidence for the source of this value. In addition, please provide evidence that all forests included in the applied value for protected forests comply with the requirements of footnote 5.

Client Response: Since effectiveness of the National System of Protected Area (SNAP) cannot be demonstrated, this area is no longer excluded from TOTFOR.

Auditor Response: The audit team can confirm, through review of the workbook "GB-REDD_ER_v3", that no protected forest area (PROTFOR) is subtracted from the total forest area (TOTFOR) to determine available forest area (AVFOR). Therefore, this information request is no longer relevant and will be withdrawn

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.67 dated 04-21-2014

Standard Reference: LK-ASU V1.0, Sec. II, Step 4

Document Reference: PD REDD v1 40

Finding: The LK-ASU module requires the following with respect to the quantification of parameter

C(OLB):

"Stratify AVFOR by carbon stock. The stratification shall use peer-reviewed assessments of forest carbon stocks across the country in combination with coarse forest type maps. An initial stratification should be derived from biophysical parameters (e.g. soil type, elevation, precipitation regime, temperature, slope and aspect, tree species composition, age class/disturbance history). Carbon stocks data shall be associated with each of the strata either through limited field measurements or through values derived from the peer-reviewed literature. Carbon stock shall include only live above-ground tree biomass (CAB_tree – see Module CP-AB). AVFOR shall be separated into different strata where contiguous areas of at least 100 ha differ in stocks by ≥20%."

The PD states "The mean aboveground live tree carbon stock outside the leakage belt (COLB) was calculated based on CARBOVEG-GB data, using area weighted average AGB for open forest, closed forest, savannah and mangroves." Please provide a justification regarding the conformance of the calculated value with each of the requirements quoted above.

Client Response: Stratification is based on CARBOVEG-GB, a peer-reviewd study, and on landsat cover maps. CARBOVEG-GB was officially used by Guinea-Bissau on its national communication to UNFCCC. The study pre processed and classified satellite imagery from 1986, 1990, 1994, 1998, 2002, 2006 and 2008 and sampled 168 forest inventory plots in the entire country (Carboveg-GB.pdf); Only AGB is included in the calculation; Stratification follows CARBOVEG-GB field work and map classification validation. The maximum allowed error was 10% at 95% of confidence interval, and mean carbon stocks were calculated based on limited measurement for the four forest classes during the CARBOVEG-GB field campaing. The revised spreadsheet GB-REDD ER v3.xlsx details all inputs and calculations. Auditor Response: The audit team can confirm, through review of the presentation entitled "Quantifying the carbon stocks and sink effects in the forests of Guinea - Bissau: A baseline for clean development mechanism projects" (with the file name "Carboveg-GB"), that the values reported in the workbook "GB-REDD_ER_v3" are sourced from the findings, as presented under "Preliminary Results", within that document. However, the audit team also found that that the values contained within the presentation are different from the values reported in Table 33 of the report "Second National Communication on Climate Changes in Guinea-Bissau: Final Report" (accessed 14 August 2014 from http://unfccc.int/resource/docs/natc/anbnc2e.pdf). Since both sets of values were derived from CARBOVEG-BG data, it is not clear that there should be differences between them. Please explain the discrepancy between the two sets of values and explain why the values reported in the workbook "GB-REDD ER v3" represent the best available information regarding carbon stocks outside the leakage belt in Guinea-Bissau.

In addition, please provide a requirement-by-requirement justification for how the data source utilized complies with the requirements on page 11 of the LK-ASU module.



Client Response 2: Information from the team in charge of CARBOVEG-GB and the National Communication clarified that the results in the file Carboveg-GB.pdf are the original results dated from 2009. The project extended from 2007-2009 as evidenced by

http://www2.iict.pt/?idc=232&unid=3&atr=5&idt=28 (Project 4 - 2007-2009 Carboveg-GB, financed by Instituto do Ambiente de Portugal e a Direcção Geral do Ambiente da Guiné-Bissau). On the other hand, the National Communication is dated from 2011. The team in charge of the communication informed that Carboveg-GB data is being updated using the field work collected for this REDD initiative. Therefore, given tha fact that the National Communication (i) is an official governmental document and (ii) applies more recent data the Project Proponent updated C(OLB) according to the carbon stock data provided in the Second National Communication (Table 33, http://unfccc.int/resource/docs/natc/gnbnc2e.pdf). The file GB-REDD_ER was updated to its version 4 (GB-REDD_ER_v4.xlsx).

Following the requirements on page 11 of LK-ASU for the parameter C(OLB): the data use numbers derived from oficial government publication, peer-reviewed following UNFCCC requirements, that are nationally appropriate. Further, there is no justification for area exclusion since the geomorphology of Guinea-Bissau is basically plain, with most of the country being below the elevation of 50 meters and suitable for agriculture in all country. 62% of the soil type is ferralsoils where much of the shifting farming system is done, including upland rice, 17% are plinthosoils and, although they largely have low agricultural capability, in Guinea-Bissau are often cultuvated as dry arable land for rice, corn and peanuts (open forest and wooded savanna are more common in natual vegetation of plinthsoils), 20% are hidromirticsoils, made of gleisoil and riverine, this organic rich land evolve under temporaru swamping and used for irrigated rice cultivation, the remaining 1% are sandysoils which cannot be cultivated and are occupied mostly by wooded savannah. Therefore, it is realistic to state that all forest areas outside the leakage belt are suitable for agriculture or livestock ranching. (all information from Second National Communication on Climate Changes in Guinea-Bissau, 2011, page 30).

Auditor Response 2: The audit team can confirm that values of aboveground biomass per hectare, as provided in cells D60:D63 of worksheet "Ex-ante Leakage Emissions" of workbook "GB-REDD_ER_v4", have been sourced from the Second National Communication. In addition, the audit team agrees, given the information provided, that the Second National Communication complies with the criteria of page 11 of the LK-ASU module with respect to the C(OLB) parameter. However, it appears that values of area, as provided in cells D60:D63 of worksheet "Ex-ante Leakage Emissions" of workbook "GB-REDD_ER_v4", have not been sourced from the most recent information from the Second National Communication (the values for year 2007 in Table 11). Please provide a justification for why area values from the presentation entitled "Quantifying the carbon stocks and sink effects in the forests of Guinea - Bissau: A baseline for clean development mechanism projects" have been used in favor of the values from Table 11 of the Second National Communication.

Client Response 3: GB-REDD_ER was updated to the version 5 (GB-REDD_ER_v4.xlsx). For consistency, all data is now sourced from the Second National Communication to UNFCCC since it is an official governmental report and, therefore, complying with LK-ASU requirements. Cells D49:D52, where TOTFOR is inputed in the spreadsheet, were updated following the data on Table 11 of the Second National Communication, please note that Herbaceous Savanna is not included since it is not considered a forest class (Non-Forest Class). This lead to the automatic update of cells G60:G63 in the calculation of C(OLB). This results in an updated value for PROP(CS) = 0,828.

Auditor Response 3: Through review of the workbook "GB-REDD_ER_v5", the audit team has been able to confirm that the values from Table 11 of the report "Second National Communication on Climate Changes in Guinea-Bissau: Final Report" (accessed 16 December 2014 from

http://unfccc.int/resource/docs/natc/gnbnc2e.pdf) have been appropriately transferred to cell range D49:D52 of worksheet "Ex-ante Leakage Emissions". In addition, the audit team agrees that herbaceous savanna is considered a non-forest class. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.68 dated 04-21-2014

Standard Reference: LK-ASU V1.0, Sec. II, Step 4

Document Reference: PD_REDD_v1_40

Finding: The LK-ASU module requires the user to "Take the area weighted average carbon stock across the Leakage Belt (CLB)..." Worksheet "Ex-ante Leakage Emissions" of workbook "GB-REDD_ER_v2" contains a calculation of this value. However, the source for the values used in this calculation is not clear.

With respect to the carbon stock values in cells E41 through E44, please provide an explanation for the origin of these values. With respect to the area values in cells D41 through D44, it appears that these values may be mistakenly derived from out-of-date information regarding the project area. Please provide information regarding the derivation of these values and provide any intermediate work products as necessary to allow the audit team to replicate the analysis.

Client Response: The spreadsheet was updated (GB-REDD_ER_V2.xlsx), carbon stocks for outside the leakage belt are derived from CARBOVEG-GB (Carboveg-GB.pdf)

Auditor Response: The audit team can confirm, through review of the workbook "GB-REDD_ER_v3", that the values used for this parameter are derived from measured data, consistent with the values in workbook "WB2 - C assessment and emission baseline v2.1 20140722". However, the audit team notes that some of the values that have been used are from Cantanhez and some are from Cacheu, as follows:

The value of 306.112973014275, for closed forest, is from Cantanhez

The value of 127.012996502136, for open forest, is from Cantanhez

The value of 97.6958264341587, for savannah, is from Cacheu

The value of 72.8867550299371, mangrove, is from Cacheu

Please explain why the values have been sourced from the different parks in the manner described above.

Client Response 2: After evaluating the last comment, the project proponent decided that the weighted average carbon stock values considering strata area and carbon stock on each park (Cantanhez and Cacheu) is the most appropriate value to be used. The value is now calculate as ((Area Stratum(i, Cacheu)*tCO2ha(i, Cacheu))+(Area Stratum(i, Cantanhez)*tCO2ha(i, Cantanhez))/(Area Stratum(i, Cacheu)+Area Stratum(i, Cantanhez). Since Closed Forest only exist in Cantanhez, this value is applied. The new calculated values are as follows:

The value of 306.112973014275, for closed forest is from Cantanhez (only data available)
The value of 128.428626260704, for open forest, is the area weighted carbon stock in Cacheu and

Cantanhez

The value of 100.539587196347, for savannah, is the area weighted carbon stock in Cacheu and Cantanhez

The value of 83.8368895884958, for mangrove, is the area weighted carbon stock in Cacheu and Cantanhez

The Emission Reduction spreadsheet was updated to GB-REDD ER v4.xlsx

Auditor Response 2: The audit team can confirm that the updated values stated in the Client Response 2 have been included in worksheet "Ex-ante Leakage Emissions" of workbook "GB-REDD_ER_v4". Given the explanation provided, the audit team has been able to replicate the calculation of all values except the value of 83.8368895884958, for the mangrove stratum. Please provide evidence of this calculation or provide clarification regarding the source of the carbon stock and area values that were used in the calculation, in order to assist the audit team in replicating the analysis.

Client Response 3: All values are sourced from the same workbook (WB2 - C assessment and emissions baseline v2.3 20140722.xlsx) and apply the same method. Mangrove Stratum average carbon stock was calculated using data from cells C7, E7 (Cacheu) and C11, E11 (Cantanhez) of the above mentioned workbook. The assist SCS team in replicating the calculation, the full values are shown: ((33596*72.8867550299371)+(22144*100.450000166049))/(33596+22144). The result of the equation is 83.8368895884958, the same value applied in the current version of the workbook GB-REDD ER v5.xlsx





Auditor Response 3: The audit team has been able to trace the area values used to cells C7 and C11 of worksheet "baseline C stock changes" of workbook "WB2 - C assessment and emission baseline v2.3 20140722". Therefore, the information request has been satisfied. However, it has become apparent to the audit team that the calculation of 83.8368895884958 tCO2e/ha for the mangrove stratum has been carried out using the areas of the mangrove stratum in the project area (which are 33596 ha and 22144 ha for Cacheu and Cantanhez, respectively). As this is a non-conformity with respect to the LK-ASU module, NCR 2012.118 has been opened.

Closing Remarks: The Client's response adequately addresses the finding.

NIR 2012.69 dated 04-21-2014

Standard Reference: LK-ASU V1.0, Sec. II, Step 4

Document Reference: PD_REDD_v1_40

Finding: The LK-ASU module requires the user to "Calculate the area of forest in the Leakage Belt as a proportion of the total available national forest area. Note that if areas of protected forests and/or areas of managed forests are excluded from the total available national forest area they must also be excluded from the Leakage Belt forest area (LBFOR)."

Please describe how the value 130,975 was derived and how the area of protected forests was excluded from this value. Please provide any work products necessary to allow the audit team to replicate the analytical steps undertaken.

Client Response: AVFOR now considers only TOTFOR derived from the national land cover study under CARBOVEG-GB (Carboveg-GB.pdf). PROTFOR is no longer excluded since the project proponent cannot demonstrate effectiveness of protection on such areas. Therefore, this NCR is no longer relevant. Auditor Response: The audit team agrees that, since the area of protected forest is no longer subtracted from the area of total forest to determine the area of available forest in workbook "GB-REDD_ER_v3", this finding is no longer relevant. Therefore, it will be withdrawn.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.70 dated 04-21-2014

Standard Reference: REDD-MF V1.4, Sec. 5, Step 4

Document Reference: GB-REDD_ER_v2

Finding: Equation 5 of the REDD-MF methodology framework requires that the number of buffer credits be calculated by taking the difference between carbon stock changes in the project area in the baseline and project scenarios and multiplying the resulting value by the buffer withholding percentage. In cells H5 through H14 of worksheet "NET Emission Reduction" of workbook "GB-REDD_ER_v2", the calculation of the number of buffer credits includes a deduction for leakage emissions, which is not allowed by Equation 5. Therefore, the calculation of the number of buffer credits does not conform to the REDD-MF methodology framework.

Client Response: The emission reduction calculation was updated (GB-REDD_ER_v2.xlsx) and the buffer withholding is calculated according to Equation 5 of the REDD-MF methodology framework just considering the Net GHG emission in the baseline from unplanned deforestation and the net GHG emission within the project area under the project scenario.

Auditor Response: The audit team can confirm, through review of the workbook "GB-REDD_ER_v3", that leakage emissions are no longer accounted for in the calculation of the number of buffer credits. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.71 dated 04-21-2014

Standard Reference: AFOLU Non-Permanence Risk Tool V3.2, Section 2.2.1

Document Reference: PD REDD v1 50, Sec. 7

Finding: This finding is a re-issuance of NCR 2012.49, since the non-conformity reported therein has reemerged.

The AFOLU Non-Permanence Risk Tool indicates that a score of 2 should be applied for item (b) of the project management sub-category in the event that "Ongoing enforcement to prevent encroachment by outside actors is required to protect more than 50% of stocks on which GHG credits have previously been issued." This score has been applied by the risk report. However, GHG credits have not previously been issued on the carbon stocks within the project area, and therefore the risk item is not applicable to the project.

Client Response: The PD was revised (PD_REDD_v1_70.docx) and the Appendix 1: Non Permanence Risk Report does not include the score of 2 on section Project Management, item b. Project Management Risk assessment now totals a score of 0.

Auditor Response: The audit team was able to confirm, through review of Appendix 1 of the updated PD ("PD_REDD_v1_70"), that the risk score in question is no longer applied. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.72 dated 04-21-2014

Standard Reference: AFOLU Requirements V3.4, Sec. 3.7.3; VCS Non-Permanence Risk Report

Template V3.1

Document Reference: PD REDD v1 50, Sec. 7

Finding: The AFOLU Requirements states that "Projects shall prepare a non-permanence risk report in accordance with VCS document AFOLU Non-Permanence Risk Tool at both validation and verification... 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 contains the following requirements for the Internal Risk and External Risk categories: "Document and substantiate the risk and/or mitigation for each risk factor applicable to the project. Include any relevant documentary evidence." The non-permanence risk report included as Section 7 of Version 1.5 of the PD does not comply with the above requirements.

Client Response: The PD was revised (PD_REDD_v1_70.docx) and the Appendix 1: Non Permanence Risk Report now follows the template and present, on each risk table a description that substantiate the risk and mitigation for each risk factor. Documented evidences are provided to SCS. In some cases SCS already had access to the evidence that supports the assigned score, in which case, the project proponent only mention the relevant documentation.

Auditor Response: The audit team can confirm, through review of the updated PD ("PD_REDD_v1_70"), that additional information has been added to Appendix 1 to substantiate the risk and mitigation for each risk factor. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.73 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.9.1 **Document Reference**: PD_REDD_v1_50.docx, Sec. 1.7

Finding: The VCS Standard indicates that "Projects are categorized by size according to their estimated average annual GHG emission reductions or removals, as set out below...

- 1) Projects: Less than or equal to 300,000 tonnes of CO2e per year.
- 2) Large projects: Greater than 300,000 tonnes of CO2e per year."

While the project is stated to result in average annual GHG emission reductions or removals of 82,320 tonnes of CO2e per year, the project is stated to be a "large project" instead of a "project".

Client Response: The PD was revised (PD REDD v1 60.docx) and Section 1.7 revised.

Auditor Response: The audit team can confirm, through review of Section 1.7 of the updated PD ("PD_REDD_v1_70"), that the project is now correctly indicated to be a "project". Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.74 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 1.7 **Document Reference**: PD REDD v1 50.docx, Sec. 1.7

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the user to "Indicate... the estimated annual GHG emission reductions or removals for the project crediting period." The PD indicates the estimated annual GHG emission reductions for the 10-year baseline period, but does not indicate the estimated annual GHG emission reductions for the project crediting period.

Client Response: The PD was revised (PD_REDD_V1_80.docx) and section 1.7 adjusted. The table now encompasses 20 years, according to the crediting period, and all values were updated (yearly, average and total emission reduction).

Auditor Response: The audit team can confirm, through review of the updated PD ("PD_REDD_v1_80"), that Section 1.7 contains estimated annual GHG emission reductions or removals for all 20 years of the project crediting period. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.75 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 1.8 **Document Reference**: PD_REDD_v1_50.docx, Sec. 1.8

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the user to include "a description of how the various organizations, communities and other entities are involved." The PD indicates the various organizations involved with the project but does not specifically describe how each organization is involved in carrying out the project activity. For example, the PD mentions "the FIAL" several times but does not specifically describe the role of the FIAL in carrying out the project activity. Similarly, the roles of IBAP, The World Bank and BioGuinea Foundation in carrying out the project activities are not specifically described. Client Response: The PD was revised (PD REDD v1 70.docx) and clarify the roles of IBAP, the BioGuinea Foundation and communities. The project proponent would like to clarify that (i) The World Bank will have no role in carrying out project activitites. The bank is acting as financial and technical supporter, paying for the VCS development costs and providing staff to support IBAP in the development of the PD and response to the validation process, and (ii) FIAL (Fundo para Iniciativas Ambientais Locais) is a financial instrument, not an institution. Therefore, FIAL is mechanism to be used by IBAP to finance micro-scale projects at community level.

Auditor Response: The audit team can confirm, through review of the updated PD ("PD_REDD_v1_70"), that additional information has been added to Section 1.8 of that document regarding the involvement of IBAP, the BioGuinea Fund, and the local communities are involved. The audit team agrees that, because the FIAL is not an organizations, communities or other entities, the requirement quoted in the text of the finding is not applicable to the FIAL. However, while the World Bank may not have a role in carrying out the project activities, the World Bank is listed in Section 1.4 as an entity involved with the project. Therefore, it is the understanding of the audit team that the requirement quoted in the text of the finding is applicable to the World Bank. As information regarding how the World Bank is involved has not been provided within Section 1.8 of the PD, the non-conformity has not been fully resolved.

Client Response 2: The PD was updated (PD_REDD_v1_80.docx) and a new paragraph added on section 1.8. The role of the World Bank is clarified, as follows: "The project was developed with financial and technical assistance from the World Bank. All fieldwork for the establishment of the baseline, the PD development and the validation of this REDD project activity was supported by the World Bank and its partners".

Auditor Response 2: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that a description of how the World Bank is involved has been added to Section 1.8. Therefore, the non-conformity has been fully resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.76 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 1.8 **Document Reference**: PD REDD v1 50.docx, Sec. 1.8

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the user to "state if the project is located within a jurisdiction covered by a jurisdictional REDD+ program". The PD does not contain a statement of such. **Client Response**: Section 1.8 was revised on the PD version 1.7 (PD_REDD_v1_70.docx) and the first paragraph now states that the project is not located within a jurisdiction covered by a jurisdictional REDD+ program.

Auditor Response: The audit team can confirm, through review of the updated PD ("PD_REDD_v1_70"), that Section 1.8 of that document does contain the information required by the VCS Methodology Template. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.77 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2

Document Reference: PD REDD v1 50.docx

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires that "All sections must be completed using Arial 10pt, black, regular (non-italic) font." The figure and table headings have been completed using Calibri blue, bold font and are therefore not compliant with the requirement of the VCS Project Description Template. **Client Response**: The PD was revised (PD_REDD_v1_70.docx) and all captions on tables and figures are now formated Arial, 10pts. Black.

Auditor Response: The audit team can confirm, through review of the updated PD ("PD_REDD_v1_70"), that the figure and table captions have been revised to be set in the required font. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.78 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2 **Document Reference**: PD REDD v1 50.docx

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires that "All sections must be completed using Arial 10pt, black, regular (non-italic) font." While many of the equations are compliant with this requirement, one or more equations is not. As an example of a noncompliant equation, the equation in Section 3.2 is in the Cambria Math font.

Client Response: [No formal response from the client was received with respect to this finding.]

Auditor Response: Subsequent to the issuance of this finding, the audit team received guidance from VCSA (via email from Elizabeth Silverstein received on 16 July 2014) the following: "As stated in the VCS templates, the use of Arial, black 10pt regular font should be throughout the documents and as such you are correct in that this should be interpreted as a requirement. However, with respect to figures and diagrams as well as equations we realize that some flexibility is required considering that figures and equations used are often references from other documents or software that utilized different fonts. Therefore as long as the text used is clear and correct and the VVB in its judgment do not consider the format to be inappropriate then we would generally accept documents where the figures and equations are not in Arial, black 10pt." The audit team agrees that the equations within the PD are "clear and correct" and are not in an inappropriate format. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.79 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 1.10

Document Reference: PD_REDD_v1_50.docx, Sec. 1.10

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the user to "Describe the conditions existing prior to project initiation and demonstrate that the project has not been implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction", and also "For AFOLU projects, include the present and prior environmental conditions of the project area, including as appropriate information on the climate, hydrology, topography, relevant historic conditions, soils, vegetation and ecosystems."

The PD does not demonstrate that the project has not been implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction. The PD also does not describe the present and prior environmental conditions of the project area.

Client Response: The PD was revised (PD_REDD_v1_80.docx) and section 1.10 complemented with the necessary information as requested in the VCS PD Template v3.2

Auditor Response: Through review of Section 1.10 of the updated PD (entitled "PD_REDD_v1_80"), the audit team can confirm that the PD contains a thorough description of the present and prior environmental conditions of the project area. Although the descriptions of present and prior environmental conditions are not separated in the PD, it is clear to the audit team that no significant difference exists between present and prior environmental conditions, and therefore the information provided (which generally covers the present and recent past) is sufficient to satisfy the requirement. The updated PD also contains a demonstration that the project has not been implemented to generate GHG emissions for the purpose of their subsequent reduction, stating that "As can be demonstrated, the project has not been implemented to generate GHG emissions for the purpose of their subsequent reduction since, in spite of IBAP efforts, baseline historical deforestation remain relevant." The audit team agrees that deforestation occurred during the historical reference period in spite of the efforts of IBAP, and that the reasoning provided within the PD is therefore valid.

Therefore, the non-conformities have been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.80 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 1.11

Document Reference: PD_REDD_v1_50.docx, Sec. 1.11

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the user to "Identify and demonstrate compliance of the project with all and any relevant local, regional and national laws, statutes and regulatory frameworks." The PD identifies some relevant laws governing the project activity. However, the PD focuses on environmental and land-use laws and does not contain any information on labor laws (pertaining to treatment of employees) and/or laws pertaining specifically to regulatory enforcement. The PD also does not mention the internal regulations for the Cacheu and Cantanhez National Parks. Finally, the PD states that "The project fully complies with all relevant national laws", but does not demonstrate compliance with said laws. A statement of compliance does not constitute a demonstration of compliance.

Client Response: Section 1.11 was revised in the new version of the PD (PD_REDD_v1_70.docs). After extensive research the project proponent concluded that the relevant laws and regulations are the Constitution, the Forestry Law, the Land Law, the Protected Areas Law, Cacheu Park Establishment Decree, Cacheu Park Internal Regulation, Cantanhez Park Establishment Decree, Cantanhez Park Internal Regulation, IBAP Establishment Decree and the General Labor Law. All laws and regulations are presented and the PD demonstrates compliance with each one. The Project Proponent is also submitting to SCS all relevant laws and regulations mentions, including those that had been presented for other purposes.

Auditor Response: The audit team can confirm, through review of the updated project description ("PD_REDD_v1_70"), that the list of "relevant local, regional and national laws, statutes and regulatory frameworks" is accurate and complete to the best of the knowledge of the audit team. Furthermore, a brief demonstration of the project's compliance with all laws has been added to the project description. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.81 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 1.12.1

Document Reference: PD_REDD_v1_50.docx, Sec. 1.12.1

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the user to "Provide evidence of right of use, in accordance with the VCS specifications on right of use." The PD contains information regarding the mandate of IBAP. However, the PD does not provide evidence that IBAP specifically holds right of use over the project area.

Client Response: As discussed with SCS, communitites holds traditional land use in Guinea-Bissau since private ownership of land is now allowed by law. IBAP has, legal rights over National Park areas. These rights are established by the Protected Area Law (Decree 5/2011) and reiterated by the Internal Regulations of Cacheu and Cantanhez. IBAP has rights to control land use and resources access, monitor and enforce the law and establish penalties. The PD was updated (PD_REDD_v1_80.docx) and section 1.12.1 revised to clarify this situation explaining that IBAP has legal rights over Cacheu and Cantanhez, controling activities undertaken in the PA areas and restricting access to natural resources. Auditor Response: Through review of Section 1.12.1 of the updated PD (entitled "PD_REDD_v1_80"), the audit team can confirm that the PD contains evidence that right of use has been vested in the project proponent, and that the information presented in the PD is consistent with the information previously presented to the audit team. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

v3.3



NCR 2012.82 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2 **Document Reference**: PD_REDD_v1_50.docx, Sec. 1.12.3, Sec. 1.12.4, Sec. 1.12.5, Sec. 1.12.6 **Finding**: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Because of a blank section (Section 1.12.3) in the PD, there is a discrepancy in section numbering between the PD and the VCS Project Description Template in the case of the following sections (using the numbering system required by the VCS Project Description Template): 1.12.3, 1.12.4, 1.12.5. **Client Response**: The PD was updated (PD_REDD_v1_80.docx). A problem in the word file made the PD numbering lose the format. Section 1.12 now has the same section number and headings as presented in the VCS PD Template v3.2.

Auditor Response: Through review of Section 1.12 of the updated PD (entitled "PD_REDD_v1_80"), the audit team can confirm that the section headings within the PD are now consistent with those in the VCS Methodology Template. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.83 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 1.13

Document Reference: PD_REDD_v1_50.docx, Sec. 1.13

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Under the sub-section entitled "Eligibility Criteria", the VCS Project Description Template states "For grouped projects, specify the eligibility criteria for inclusion of new instances of each project activity." Thus, the sub-section is applicable only to grouped projects. As the project described in the PD is not a grouped project, it is not correct to fill out the sub-section in question.

Client Response: The project proponent understand SCS is miss-interpreting the sub-section requirement. The Elegibility Criteria is a methodological requirement (Step 0 of REDD-MF v1.4) and, therefore, the VCS PD Template reflects the necessity to demonstrate that the Project Activity is Elegible under one of the VCS-elegible activitites. In our case a REDD project activity (AFOLU Project), that aims at avoiding Unplanned Deforestation.

The project proponent understanding of the sub-section is that For grouped project, one must demonstrate the elegibility criteriia not only for the project activity (as the PD is currently doing), BUT ALSO, the elegibility criteria for inclusion of new instances of each project activity. Once this REDD initiative is not a grouped project such detail is nor provided, only the general elegibility criteria.

The sub-section was not revised as the project proponent understands the PD is in accordance with the VCS PD Template v3.2.

Auditor Response: The audit team does not hold the same understanding of the VCS Project Description Template as that stated in the Client Response section. It is the understanding of the audit team is that the sub-section entitled "Eligibility Criteria" exists as a specific location in which information may be provided to satisfy the requirements of Section 3.4.9 of the AFOLU Requirements. The audit team understands that a distinction exists between the terms "eligibility criteria" and "applicability conditions". Conformance to each of the applicability conditions has already been demonstrated, as required, in Section 2.2 of the PD.

That said, the audit team understands that the finding was inappropriately issued. The reason for this is because, while the VCS Project Description Template does state that "the eligibility criteria for inclusion of new instances of each project activity" must be described for grouped projects under the sub-section entitled "Eligibility Criteria", the VCS Project Description Template does not preclude other information from being provided. Therefore, is the audit team now understands that no non-conformity exists, the finding is withdrawn.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.84 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2 **Document Reference**: PD REDD v1 50.docx

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires that "All sections must be completed using Arial 10pt, black, regular (non-italic) font." Not all body text in the PD complies with the font requirements. For example, the first sentence of Section 2.3 contains text in fonts that do not comply with the font requirements.

Client Response: The PD was updated (PD_REDD_v1_80.docx) and the VCS formating requirements were adjusted.

Auditor Response: While some changes have been made to the formatting of the updated PD (entitled "PD_REDD_v1_80"), non-conformities to the font requirements of the VCS Project Description Template continue to be noted, as described below. Therefore, the non-conformity has not been fully resolved.

- 1. The text in the table of contents is in Arial 12pt font.
- 2. The numbers in the table of contents are in Times New Roman 12pt font.
- 3. The information provided under "Vegetation and Ecosystems" in Section 1.10 of the PD contains species names in italicized text.
- 4. The references to Figure 1 (Section 1.9), Figure 6 (Section 2.3) and Figure 7 (Section 2.3) are in Times New Roman font.
- 5. Footnotes 24 and 25 are in Calibri font.
- 6. Numerous additional instances of italic font usage have been noted. Some examples are: the word "financing" on page 4, the phrase "ex-ante" on page 25 and the phrase "ex-ante" on page 49.
- 7. The heading entitled "Table of Contents" is in regular Arial 11pt font (not bolded) in the PD, whereas it is specified as being in Arial Bold 11pt font in the VCS Project Description Template.

Client Response 2: The PD was updated (PD_REDD_v1_90.docx) and the VCS formating requirements were adjusted. All 7 mentioned issues were corrected. Moreover, all text was again revised. For the italic issue and Arial font, all text in the PD and footnotes were selected and the italic formating removed.

Auditor Response 2: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that all of the noted instances of incorrect font usage have been corrected. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.85 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 2.3 **Document Reference**: PD_REDD_v1_50.docx, Sec. 2.3

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the user to "provide a diagram or map of the project boundary, showing clearly the physical locations of the various installations or management activities taking place as part of the project activity based on the description provided in Section 1.8... For AFOLU projects, include in the diagram or map the locations of where the various measures are taking place, any reference areas and leakage belts."

Figures 3 and 4 of the PD do indicate the locations of the project area, reference area and leakage belt. However, these figures contain no features would orient the user and assist the user in locating the various features in space. Therefore, these figures do not show clearly the required information.

Client Response: The Project Proponent provides the formal reply (Finding 2012.85.xlsx) with the revised figures. The PD was updated and now Figures 3 and 4 are adherent to the VCS Project Description Template.

Auditor Response: The audit team can confirm, through review of Figure 3 and 4 of the updated PD ("PD_REDD_v1_70"), that Figures 3 and 4 of the updated PD constitute a map of the project boundary compliant with the requirements of the VCS Project Description Template. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.86 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 3.2 **Document Reference**: PD_REDD_v1_50.docx, Sec. 3.2

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the following: "Describe the procedure for quantification of baseline emissions and/or removals in accordance with the applied methodology. Include all relevant equations, and explain and justify all relevant methodological choices (eg, with respect to selection of emission factors and default values)."

The PD does not comply with the above requirements. As a non-exhaustive list of information that is missing from the PD:

- The PD does not clarify which of the three approaches in Step 2.2, Sec. 5 of the BL-UP module were selected
- The PD does not contain any relevant equations
- The PD does not clarify that the "simple historic" approach was used for estimation of annual areas of unplanned deforestation

Client Response: Section 3.1 (Baseline) was revised to fully comply with the requirements of the VCS Template v3.2. All relevant equations, and all relevante methodological choices are included and explained.

Auditor Response: Through review of Section 3.1 of the updated PD (entitled "PD_REDD_v1_80"), the audit team can confirm that some of the required information is clearly presented within that section. However, the procedure for quantification of baseline emissions and/or removals has not been described in full, and all relevant methodological choices have not been explained and justified. The methodology does not describe how each step of the procedure for quantification of baseline emissions, as set out in the BL-UP module, has been carried out. A non-exhaustive list of further examples of missing information follows.

The PD does not describe the data sources collected for the historical deforestation analysis.

The PD does not describe how historical deforestation was mapped or how the historical deforestation rate in each stratum was calculated.

The PD does not describe the methodological choice made to divide the mapped forest class "in subclasses representing different carbon densities", as allowed for in footnote 12 of BL-UP.

The PD does not describe how post-deforestation carbon stocks were estimated.

Client Response 2: The PD was updated (PD_REDD_v1_90.docx) and Section 3 adjusted to fully comply with BL-UP.



Auditor Response 2: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that a large amount of additional helpful information has been added. However, the quantification of baseline emissions is still not clearly and/or completely documented in the PD in the following instances:

- 1. The quantification of "eligible deforestation", as distinct from "gross deforestation" is not clearly documented. The PD states the following in Section 3.1.2: "Only areas that were permanently deforested were accounted as deforestation, i.e. where post-deforestation land use constitutes reforestation this area is not included in the deforestation estimates. Thus, any areas in the baseline where forest is converted to any other reforestation activity (e.g. cashew, natural regrowth) are not eligible, and were excluded from the baseline deforestation." However, the PD does not clearly explain how "any areas in the baseline where forest is converted to any other reforestation activity... were excluded from the baseline deforestation". The PD presents the results of the process in Table 10, but does not clearly define the difference between "gross" and "eligible" deforestation.
- 2. The PD contains values for the category "F" in Tables 10 and 11. This category is not used in the quantification of baseline emissions. The inclusion of information for this category is likely to be a source of confusion to the reader.
- 3. It is not clarified that the carbon stock value for fallow land was calculated by independently carrying out the Silva et al., 2011 equation across a range of values for FP (from 1 to 6) and dividing by 6; this methodological choice is not justified.
- 4. Values for T and L, as used in the calculation of the Silva et al., 2011 equation, are not provided.
- 5. The equations from Parts 1 and 2 of Section II are relevant to the quantification of baseline emissions, but are not included.
- 6. Table 12 has not been updated to contain the aboveground and belowground carbon stock values that are shown in cell range E5:F11 of worksheet "baseline C stock changes" of workbook "WB2 C assessment and emission baseline v2.3 20140722".
- 7. The cumulative baseline carbon stock changes, as presented in Table 13, are not completely consistent with the values that are shown in cell range J53:S58 of worksheet "baseline C stock changes" of workbook "WB2 C assessment and emission baseline v2.3 20140722". For example, the value for the first year in the TF stratum in Cacheu is shown as 11,675 ha in Table 13, but 12,949 ha in cell J53 of worksheet "baseline C stock changes" of workbook "WB2 C assessment and emission baseline v2.3 20140722".
- 8. Table 16 is not consistent with Table 15.
- 9. Table 17 is not completely consistent with the values that are shown in cell range J94:S97 of worksheet "baseline C stock changes" of workbook "WB2 C assessment and emission baseline v2.3 20140722"

Therefore, the non-conformity has not been fully resolved.

Client Response 3: The PD was revised (PD_REDD_v1_100.docx) and section 3.2 updated. In order to facilitate the audit tracking of all revisions and text additions the file NCR 2012.86.docx is provided to SCS.



Auditor Response 3: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that all of the discrepancies noted in the previous auditor response have been effectively addressed, as follows:

- 1. The terms "gross deforestation" and "eligible deforestation" are clearly defined and the distinction between them is appropriately clarified.
- 2. Information from the irrelevant category "F" has been removed from Tables 10 and 11.
- 3. It has been clarified that the carbon stock value for fallow land was calculated by independently carrying out the Silva et al., 2011 equation across a range of values for FP (from 1 to 6) and dividing by 6; while the justification for this has not been explicitly provided, the audit team agrees that the justification is self-evident
- 4. While values for T and L have not been provided independently, the value for the product (T*L/365) has been provided; the audit team agrees that this value is sufficient to facilitate a transparent understanding of the process undertaken.
- 5. The equations from Parts 1 and 2 of Section II of CP-AB have been included and their application has been explained in full.
- 6. The values in Table 12 have made consistent with the values that are shown in cell range E5:F11 of worksheet "baseline C stock changes" of workbook "WB2 C assessment and emission baseline v2.3 20140722".
- 7. The cumulative baseline carbon stock changes, as presented in Table 13, have been corrected to be completely consistent with the values that are shown in cell range J53:S58 of worksheet "baseline C stock changes" of workbook "WB2 C assessment and emission baseline v2.3 20140722".
- 8. Table 16 is now consistent with Table 15 (and both tables contain correct values).
- 9. Table 17 is now completely consistent with the values that are shown in cell range J94:S97 of worksheet "baseline C stock changes" of workbook "WB2 C assessment and emission baseline v2.3 20140722".

Therefore, the non-conformity has been completely resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.87 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 3.2 **Document Reference**: PD_REDD_v1_50.docx, Sec. 3.2

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the following: "Describe the procedure for quantification of project emissions and/or removals in accordance with the applied methodology. Include all relevant equations, and explain and justify all relevant methodological choices (eg, with respect to selection of emission factors and default values)."

The PD does not include all relevant equations. The PD does justify methodological choices, such as the specific values assigned, ex-ante, to parameters such as A(DefPA,i,u,t) from the M-MON module. **Client Response**: Section 3.2 (Project Emissions) was revised to fully comply with the requirements of the VCS Template v3.2. All relevant equations, and all relevante methodological choices are included and explained.

Auditor Response: Through review of Section 3.2 of the updated PD (entitled "PD_REDD_v1_80"), the audit team can confirm that a great deal of useful information regarding the quantification of project emissions has been added. However, the description is not completely clear, or completely compliant with the requirements of the methodology, in the following instances:

- 1. Section 3.2 implies that emissions from degradation (through extraction of trees for illegal timber or fuelwood and charcoal) in the project area do not need to be accounted for in the calculation of project emissions, and does not include procedures and equations for accounting for emissions from degradation (through extraction of trees for illegal timber or fuelwood and charcoal) in the project area. This is inconsistent with Section 4.3.2 of the PD, which describes a procedure for accounting for these emissions. While the audit team understands that the initial PRA indicated no potential for said emissions, the M-MON module requires the PRA to be repeated every two years. If a future PRA reveals potential for degradation (through extraction of trees for illegal timber or fuelwood and charcoal), it may be necessary to account for said emissions.
- 2. Section 3.2 does not include equations 20 through 24 of the M-MON module, which are relevant to the project.
- 3. Section 3.2 provides a description of how emissions from fire are accounted for, but does not clarify how emissions from other natural disturbances are accounted for. The procedures set out in Section 5 of the M-MON module are applicable to other natural disturbances besides fire.

Therefore, the non-conformity has not been completely resolved.

Client Response 2: Section 3.2 was revised in the latest version of the PD (PD_REDD_v1_90.docx). Item 1 was solved by clarifying that the PRA will be updated every two years and methods are now detailed to calculate potential degradation due to fire according to Step 2 of M-MON equation 8. Iitem 2 was solved by the inclusion of equations 20-24 of the M-MON module detailing how other natural disturbances are accounted for (item 3).

Auditor Response 2: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that a large amount of additional helpful information has been added. However, the quantification of project emissions is still not clearly and/or completely documented in the PD in the following instances:

- 1. Equations 5 and 6 from the M-MON module, which are relevant to the quantification of project emissions, have not been included.
- 2. The values provided for use in calculating "the average aboveground biomass stock before burning for a particular stratum" are not consistent with the values from cell range E5:E11 of worksheet "baseline C stock changes" of workbook "WB2 C assessment and emission baseline v2.3 20140722".

Client Response 3: Section 3.2 (Project Emissions) was revised to include both equations 5 and 6 of M-MON module. Also, the table containing the mean aboveground biomass carbon stock before burning for a particular stratum was revised according to the values presented in the latest version (2.3) of the workbook WB2 - C assessment and emission baseline.



Auditor Response 3: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that all of the discrepancies noted in the previous auditor response have been effectively addressed, as follows:

- 1. Equations 5 and 6 from the M-MON module have been included and their application has been described in full.
- 2. The values provided for use in calculating "the average aboveground biomass stock before burning for a particular stratum" are now consistent with the values from cell range E5:E11 of worksheet "baseline C stock changes" of workbook "WB2 C assessment and emission baseline v2.3 20140722".

Therefore, the non-conformity has been completely resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.88 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 3.3 **Document Reference**: PD_REDD_v1_50.docx, Sec. 3.3

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the following: "Describe the procedure for quantification of leakage emissions in accordance with the applied methodology. Include all relevant equations, and explain and justify all relevant methodological choices (eg, with respect to selection of emission factors and default values)."

The PD does not explain and justify all methodological choices. For example, the PD does not explain specifically how the requirement to "Stratify AVFOR by carbon stock", as set out in the LK-ASU module, was carried out.

Client Response: Section 3.3 Leakage Emissions) was revised to fully comply with the requirements of the VCS Template v3.2. All relevant equations, and all relevante methodological choices are included and explained.

Auditor Response: Through review of Section 3.3 of the updated PD (entitled "PD_REDD_v1_80"), the audit team can confirm that most of the required information is clearly presented within that section. However, the procedure for quantification of leakage emissions is not clearly presented in the instances noted below. Therefore, the non-conformity has not been fully resolved.

- 1. The PD states that "To stratify AVFOR, forest carbon stocks across de country from the Second National Communication of Guine-Bissau do UNFCCC and forest cover maps from Carboveg-GB were used." This does not constitute a clear citation of the "Second National Communication on Climate Changes in Guinea-Bissau: Final Report." In addition, a justification for sourcing information from this document has not been provided.
- 2. The approach undertaken to calculate a weighted average carbon stock between the Cacheu and Cantanhez areas for each stratum, in the calculation of parameter C(LB), is not explained or justified. Client Response 2: Section 3.2 was revised in the latest version of the PD (PD_REDD_v1_90.docx) to clarify that 1. the Second National Communication of Guinea-Bissau to UNFCCC is the only document used to stratify AVFOR. This is an official governmental document complying with the module requirement. Furthermore, a full citation and reference is now provided including a link to the public version of the report on the UNFCCC website; and 2. the approach used to calculated the weighted avergae carbon stock is now clarified in the text and the reference to the original values on WB2 C assessment and emissions baseline v2.3.xlsx made. The explanation given is the same provided to SCS in reply to the NIR 68.

Auditor Response 2: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that the necessary information has been added to clarify the procedure for calculation of leakage emissions. Therefore, the non-conformity has been resolved. The audit team notes that it may be necessary for additional changes to be made to the PD to document any modifications made to the process as required by NCR 2012.118.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.89 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 3.4 **Document Reference**: PD_REDD_v1_50.docx, Sec. 3.4

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the following: "Describe the procedure for quantification of net GHG emission reductions and removals. Include all relevant equations. For AFOLU projects, include equations for the quantification of net change in carbon stocks. For data and parameters monitored, use estimates. Document how each equation is applied, in a manner that enables the reader to reproduce the calculation. Provide example calculations for all key equations, to allow the reader to reproduce the calculation of estimated net GHG emission reductions or removals."

The PD does not describe the procedure for quantification of net GHG emission reductions and removals and quantification of net change in carbon stocks, nor does it include all equations relevant to such procedures. Documentation of how equations are applied is missing, as is example calculations for key equations.

Client Response: Section 3.4 (Net GHG Emissions Reductions and Removals) was revised to fully comply with the requirements of the VCS Template v3.2. All relevant equations, and all relevante methodological choices are included and explained.

Auditor Response: Through review of Section 3.4 of the updated PD (entitled "PD_REDD_v1_80"), the audit team can confirm that the procedure for quantification of net GHG emission reductions and removals, including the quantification of net change in carbon stocks, has been described. However, the PD does not clarify how baseline emissions from the Cacheu and Cantanhez areas has been combined for purposes of quantification of net GHG emission reductions and removals. In addition, example calculations for key equations have not been included. Therefore, the non-conformity has not been fully resolved.

Client Response 2: Section 3.4 was revised in the latest version of the PD (PD_REDD_v1_90.xlsx). The text was revised to clarify that the total estimated baseline emissions is the sum of the estimated baseline emissions in Cacheu and Cantanhez. Therefore, the Tables on page 69 present each individual baseline emissions per year, whilst the Table 25 sum these values in one single value for calculation. Further, the text was improved to better detail calculations (i) exemplifying the sum of values to agregate to yearly baseline emissions value as mentioned, (ii) to clarify the calculation of the VCS Buffer both explaining why the Risk Buffer applied is 10%, according to Appendix I of the PD and exemplifying the buffer account calculation, clarifying that leakage emissions are not considered in these case, and the 10% value is applied to the total estimated GHG baseline emissions or removals. The project proponent understand that now, any reader can understand and replicate the calculations also noticing that the workbook GB-REDD_ER_v5.xlsx is a component of the documents of the REDD Project.

Auditor Response 2: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that a large amount of additional helpful information has been added. However, Equation 8 of the REDD-MF methodology framework, which is a relevant equation, has not been included. In addition, example calculations for Equations 1 and 8 have not been provided, and information about the calculation of Equation 4 has been provided in narrative format rather than presented as a calculation. Therefore, the non-conformity has not been fully resolved.

Client Response 3: Section 3.4 (Net GHG Emissions Reductions and Removals) was revised to present example calculations for Equations 1 and 5 (Buffer Unplanned). Equation 8 was included and example calculation was also provided.

Auditor Response 3: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that all of the discrepancies noted in the previous auditor response have been effectively addressed. Equations corresponding to Equations 1, 5 (not 4, as previously indicated) and 8 of REDD-MF have been provided and their application explained, and example calculations for each equation have been provided. Therefore, the non-conformity has been completely resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.90 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 4.1 **Document Reference**: PD_REDD_v1_50.docx, Sec. 4.1

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the following for Section 4.1 of the PD: "Complete the table below for all data and parameters that are determined or available at validation, and remain fixed throughout the project crediting period (copy the table as necessary for each data/parameter). Data and parameters monitored during the operation of the project are included in Section 4.2 (Data and Parameters Monitored) below."

Several parameters are included in Section 4.1 of the PD that may be subject to change during the project crediting period, and thus do not remain fixed throughout the project crediting period. The location of such parameters within Section 4.1 is not compliant with the VCS Project Description Template. Examples of such parameters follow.

- CAB, tree, Mangrove
- CPOST

Client Response: Section 4.1 was updated in the latest version of the PD (PD_REDD_v1_90.docx). The section was revised to present only parameters available at validation or that remain fixed during the first crediting period according to VM0007 and applied modules, those parameters are:

- * CF
- * COMF(i)
- * Gg(i)
- * RRD Forest Benchmark Map, PA Forest Benchmark Map, LK Forest Benchmark Map
- * A(i)
- * A(RRD, unplanned, hrp)
- * D(i)
- * f(j) X,Y for Mangroves, Palm Forest and Terrestrial Forest
- * R
- * C(LB)
- * C(OLB).

Auditor Response: Through review of the updated PD, entitled "pd_redd_v1_90", it appears that the following parameters remain within Section 4.1 that are "monitored during the operation of the project" and therefore are most appropriately included in Section 4.2. These are as follows:

Regional Forest Cover / Non-Forest Cover Benchmark Map (required to be updated "Every 10 years (when the project baseline must be revisited) or every five years where conditions trigger more frequent baseline renewal" by M-MON)

Project Forest Cover Benchmark Map (same as above)

Leakage Belt Forest Cover Benchmark Map (same as above)

Ai (required to be updated "At a minimum every ten years prior to baseline renewal" by M-MON) ARRD, unplanned, hrp (same as above)

fmangrove (X,Y) (as discussed in methodology deviation 2, this equation has not yet been validated and is, therefore, potentially subject to change during the crediting period)

CLB (required to be "recalculated at each monitoring period" by LK-ASU)

COLB (required to be "recalculated at least every 5 years" by LK-ASU)

Client Response 2: All listed parameters in the NCR non-conformity text were changed from section 4.1 to section 4.2.

Auditor Response 2: "Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that the data and parameters listed in the text of the finding have been moved to Section 4.2. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.91 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 4.1 **Document Reference**: PD_REDD_v1_50.docx, Sec. 4.1

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the following for Section 4.1 of the PD: "Complete the table below for all data and parameters that are determined or available at validation, and remain fixed throughout the project crediting period (copy the table as necessary for each data/parameter)." The table included below said text requires completion of the field entitled "Purpose of data", which requires indication of "one of the following:

- Determination of baseline scenario (AFOLU projects only)
- Calculation of baseline emissions
- · Calculation of project emissions
- Calculation of leakage"

The above field is missing from the tables in Section 4.1 of the PD.

The table below said text also includes a field entitled "Comments". This field is missing from the tables in Section 4.1 of the PD (which instead contain a field labeled "Any comment".

Client Response: Section 4.1 was updated in the latest version of the PD (PD_REDD_v1_90.docx). The correct table format is now used for all parameters available at validation fully in accordance with the VCS PD Template.

Auditor Response: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team has confirmed that the "Purpose of data" section has been correctly filled out for all parameters that are currently within Section 4.1. In addition, a section entitled "Comments" has been provided for all parameters that are currently within Section 4.1. Therefore, the non-conformity has been resolved. **Closing Remarks**: The Client's response adequately addresses the finding.



NCR 2012.92 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 4.2 **Document Reference**: PD_REDD_v1_50.docx, Sec. 4.2

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the following for Section 4.2 of the PD: "Complete the table below for all data and parameters that will be monitored during the project crediting period (copy the table as necessary for each data/parameter)." In reviewing Section 4.2 of the PD, it is clear that the required table has not been completed for any of the data and parameters that will be monitored during the project crediting period. Rather, a table from a previous version of the VCS Project Description Template has been used. In addition, with the frequent exception of the "Frequency of monitoring/recording" field (which is often filled out appropriately), the fields in the tables in Section 4.2 are often not filled out in accordance with the gray instructional text within the tables in Section 4.2 of the VCS Project Description Template. For example, the instructional text for the field "Description of measurement methods and procedures to be applied" requires the user to "Specify... the person/entity responsible for the measurement", but such information is not directly provided within the parameter tables.

Client Response: Section 4.2 was updated in the latest version of the PD (PD_REDD_v1_90.docx). The correct table format is now used for all parameter that are monitored during the project crediting period according the lates version of the VCS Project Description Template. All parameters had been revised so the correct information is provided on the tables according to the gray instructions.



Auditor Response: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team has confirmed that a good-faith effort has been made to utilize the table structure in Version 3.2 of the VCS Project Description Template. However, the following non-conformities have been noted with respect to the requirements of the VCS Project Description Template:

- 1. The "equipment used to monitor the data/parameter" has not been provided for the following parameters: Project Forest Cover Monitoring Map, Leakage Belt Forest Cover Monitoring Map, Result of Limited Degradation Survey, ADefPA, i, u, t, ADefLB, i, u, t, ADegW, i, ADistPA, q, i, t, APi, CDegW, i, t, CAB,tree,i, Area burnt at time t (if any occurs). It is the audit team's understanding that each of the above parameters is monitored using specific equipment, and that the requirement to identify the monitoring equipment is therefore applicable. For the other parameters in Section 4.2, the audit team agrees that the requirement to identify the monitoring equipment is not applicable. However, the introductory text of the VCS Project Description Template states 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)." This has not been stated for the corresponding section for many of the parameters in Section 4.2 (rather, they have simply been left blank).
- 2. An "estimated value for the data/parameter" has not been provided for almost all of the parameters within Section 4.2, and neither has it been stated that the "Value applied" section is not applicable for these parameters. The introductory text of the VCS Project Description Template states 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)."
- 3. It is stated that the calculation method for the parameter ADegW, i is "Allometric equations applied in the baseline carbon stock assessment will be used according to the vegetation type where degradation is occurring: Chave et al. (2005) for terrestrial forests and mangroves and Delaney et al. (1999) for palms." This requirement is confusing, as allometric equations are not used in the calculation of area values (such as those related to the parameter ADegW, i).
- 4. In some cases, such as for parameter TOTFOR, other sections (such as "QA/QC procedures to be applied") are not filled out, but it is not clarified that the section is not applicable.
- 5. The parameter CPOST is not used anywhere in the PD or in the methodology. It is understood that the intent was likely to refer to parameter C_(AB_(tree,post),i), as described in Section 3.1.5 of the PD. In this case, however, the requirement is for the "Description of measurement methods and procedures to be applied" to indicate how the value of the parameter will be updated as part of the baseline update process, as opposed to the process used to quantify the parameter as approved at validation. In addition, it is unclear why the "Frequency of monitoring/recording" is stated to be "at least every 5 years or if verification occurs in a frequency of less than every 5 years examination must occur prior to any verification event", when the baseline is scheduled to be "revised every 10 years", as stated in Section 4 of the PD.
- 6. The parameters Asp and N, which are stated to be "Data and Parameters Monitored" in the CP-AB module, are not included in Section 4.2.

Therefore, the non-conformity has not been fully resolved.

Client Response 2: The project team agrees that section 4.2 needed some adjustments and notes that most of the confusion occurred due to the structure of the monitoring variables in the original module. The PD was updated (PD_REDD_v1_100.docx) to correct the following issues:

- 1. all data parameters that incurred in the use of any equipment for monitoring, like diametric tapes, GPS, hypsometers, etc had been revised to clearly present such equipments;
- 2. whenever an value is not applied to a parameter the related field was filled with NOT APPLICABLE;
- 3. Parameter A(DegW, i) was revised as the calculation method was not appropriate;
- 4. whenever QA/QC procedures are not applied to a parameter the related field was filled with NOT APPLICABLE;
- 5. The parameter C(POST) was misused and was substituted for the correct parameter C(AB(tree,post),i)



Auditor Response 2: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that the required information has been provided for most of the data and parameters listed in Section 4.2. However, the following information is missing or incorrect:

- 1. The "value applied" for parameter C(LB) does not reflect the value (124.31) in cell E72 of worksheet "Ex-ante Leakage Emissions" of workbook "GB-REDD_ER_v6".
- 2. The "value applied" for parameter f(terrestrial_forest (X,Y)) is not consistent with the equation, sourced from Chave et al. (2005), that was used to calculate aboveground biomass of trees in the terrestrial forest stratum.
- 3. A parameter has not been added for the equation used to calculate aboveground biomass in palm trees.

Therefore, the non-conformity has not been fully resolved.

Client Response 3: The PD was revised (PD_REDD_v1_110.docx):

- 1. The value applied for C(LB) was updated to 124.31 on section 4.2 (page 96)
- 2. The correct allometric equation is now presented for parameter f(terrestrial_forest (X,Y)) on section 4.2 (page 101)
- 3. The allometric equation for palms is alreadu validated and is already presented on the PD on section 4.1 (page 93)

Auditor Response 3: Through review of the updated PD entitled "PD_REDD_v1_110", the audit team confirmed that the values applied for C(LB) and f(terrestrial_forest (X,Y)) are now correct in Section 4.2. In addition, the audit team acknowledges that the equation for palms was already correctly provided in Section 4.1 of the PD. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.93 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 4.3 **Document Reference**: PD_REDD_v1_50.docx, Sec. 4.3

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the following:

"Describe the process and schedule for obtaining, recording, compiling and analyzing the monitored data and parameters set out in Section 4.2 (Data and Parameters Monitored) above. Include details on the following:

- The methods for measuring, recording, storing, aggregating, collating and reporting data and parameters. Where relevant, include the procedures for calibrating monitoring equipment.
- The organizational structure, responsibilities and competencies of the personnel that will be carrying out monitoring activities.
- The policies for oversight and accountability of monitoring activities.
- The procedures for internal auditing and QA/QC.
- The procedures for handling non-conformances with the validated monitoring plan.
- Any sampling approaches used, including target precision levels, sample sizes, sample site locations, stratification, frequency of measurement and QA/QC procedures."

The PD does not contain all of the required information. The following instances serve as a non-exhaustive list of examples of non-conformities:

- The methods for storing data and parameters are not clearly articulated. The PD typically states "Data will be archived and maintained electronically by IBAP at its headquarter in Bissau", but does not specifically indicate how data will be stored or how the security of data will be safeguarded.
- The methods for aggregating, collating and reporting data and parameters are not clearly articulated. The PD describes the procedures for collection of specific measurements but does not describe how the measured data collected will be aggregated, collated and reported for verification.
- The organizational structure of IBAP is described at a high level, but does not necessarily extent to the responsibilities and competencies of the personnel that will be carrying out monitoring activities. For example, it is not clear which specific roles will be assigned to which specific measurement tasks, and what the required competencies of those roles will be.
- The policies for oversight and accountability of monitoring activities are not described.
- The description of the monitoring task "Emissions due to Illegal Degradation" does not adequately describe procedures for internal auditing.
- No procedures for handling non-conformances with the validated monitoring plan are given.
- The methods for stratification in re-measurement of carbon stocks are not described.
- None of the required information is provided with respect to the monitoring of parameters used to determine emissions from unplanned deforestation displaced from the project area to outside the Leakage Belt (e.g., parameters PROTFOR and TOTFOR).

Client Response: The PD was revised (PD_REDD_v1_90.docx) and section 4.3 ajusted accordingly. **Auditor Response**: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that the discussion of the monitoring plan in Section 4.3 has been greatly expanded to cover the majority of items for which a description is requested by the VCS Project Description Template. However, the audit team notes that the following non-conformities remain:

- 1. While procedures for internal auditing and QA/QC are generally described, the procedures for handling non-conformances with the validated monitoring plan are not explicitly described.
- 2. In describing the methods for stratification, in Section 4.3.4, the PD states that "In case of natural disturbances, a given stratum can be the stratum may be further stratified based on post-natural disturbance carbon stocks." It is unclear what is meant by this.

Therefore, the non-conformity has not been fully resolved.



Client Response 2: Section 4.3 of the PD was revised to include a general description of the procedures for handling non-conformances with the validated monitoring plan:

"The monitor reports will be developed by the head of monitoring and discussed amongst all parts of the monitoring unit. Specific groups of the monitoring team will be responsible for forest monitoring map production, others for ground observations, data compilation, and carbon stock assessments, and others for working mostly with the communities and apply PRA techniques to assess forest degradation risks. The monitoring team reports in each of these components directly to the head of monitoring, receiving feedback from the head of monitoring in order to improve the quality of the data and ensure that the standard operating procedures (SOPs) and QC/QA procedures are followed. The head of monitoring will be responsible for the final compilation of all data, ensure data achieving, and for reporting. He is also responsible for setting up corrective or preventing actions to avoid non-conformances with the validated monitoring plan. The forest monitoring is developed in a process of continuous improvement, which means that all the activities to be monitored by the monitoring team are subject to a report to be revised by the head of monitoring. This process of internal audit shall be used namely to identify deviations or non-conformances, that if occurring shall be recorded/computized and a report shall be developed justifying the conservativeness of the monitoring approach. If deemed necessary, correction action plans (CAPs) are developed and SOPs adjusted in the Monitoring Plan, including if a non-conformance is identified and the justification report fails to prove the conservativeness of the new method, equipment or strategy. SOPs are developed and updated with the assistance of external carbon experts or advisory board and are provided by the head of monitoring to the monitoring field team. The monitoring unit will have the support and guidance of an advisory board in all stages. This advisory board includes carbon and remote sensing experts that will assist with data entry, compilation of inventory results, and remote sensing work. The importance of these experts will gradually diminish and become occasional as IBAP gains technical independence in all monitoring activities. Table 15 synthesizes the responsibilities of each group of the monitoring unit."

2. Through review of the mentioned text regarding stratification, the technical team agrees that the discussion is confusing. The following correction is proposed:

"Forest carbon stock used to calculate emissions will use estimates derived from field measurements less than or equal to 10 years old. In the event that any deforestation is reported, forest carbon stock estimates older than 10 years will be updated for any strata where deforestation is detected (including deforestation resulting from natural disturbances). The same stratification used for the initial baseline (compatible official/government publications) will be used unless significant difference in carbon stock or impacts of natural disturbances are detected. In that case, a given stratum may be further stratified based on post-natural disturbance carbon stocks. Initial above- and belowground biomass stock estimates from the 2011 inventory are valid and treated as constant through 2021, after which they will be re-estimated from new field measurements."

Auditor Response 2: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that the monitoring plan now contains a specific procedure for handling non-conformances with the validated monitoring plan, as quoted in the client response.

In addition, the audit team agrees that the modified language, provided in response to the second point and quoted in the client response, would be sufficient to clear up the potential for confusion and resolve the non-conformity. However, the language in question has not been inserted into the PD. This finding will be left open pending inclusion of the language in question within the PD.

Client Response 3: The PD was revised (PD_REDD_v1_110.docx) and the first paragraph of section 4.3.4 was updated to reflect the language presented in the findings reply.

Auditor Response 3: Through review of the updated PD entitled "PD_REDD_v1_110", the audit team confirmed that the text indicated in the finding response is now present within the PD, and the confusing language previously present within the PD has been removed. Therefore, the non-conformity has been fully resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.94 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2

Document Reference: PD_REDD_v1_50.docx, Sec. 7

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the user to "Use appendices for supporting information. Delete this appendix (title and instructions) where no appendix is required." The non-permanence risk report has been included as Section 7 rather than as an appendix, as required. This does not conform to the requirements of the VCS Project Description Template.

Client Response: The PD was revised (PD_REDD_v1_60.docx) and Section 7 removed. The non-permanence risk report is now presented as Apendix I - Non-Permanence Risk Report.

Auditor Response: The audit team can confirm, through review of Appendix 1 of the updated PD ("PD_REDD_v1_70"), that the non-permanence risk analysis is now presented in an appendix. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.95 dated 04-21-2014

Standard Reference: AFOLU Requirements V3.4, Sec. 3.7.3; VCS Non-Permanence Risk Report

Template V3.1, Sec. 3 **Document Reference**: PD REDD v1 50, Sec. 7

Finding: The AFOLU Requirements states that "Projects shall prepare a non-permanence risk report in accordance with VCS document AFOLU Non-Permanence Risk Tool at both validation and verification... 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 contains the following requirements for the Natural Risk category: "Explain the significance and likelihood of the natural risk and any mitigation activities implemented..." The non-permanence risk report included as Section 7 of Version 1.5 of the PD states that "The project is not subjected to any natural risk", but does not specifically explain the significance and likelihood of each natural risk.

Client Response: The PD was revised (PD_REDD_v1_60.docx), the non-permanence risk report is now presented as Apendix I - Non-Permanence Risk Report and the complete list of Natual Risks, including the explanation of significance and likelihood of each risk is now presented.

Auditor Response: The audit team can confirm, through review of Appendix 1 of the updated PD ("PD_REDD_v1_70"), that Appendix 1 contains an explanation of the significance and likelihood of each natural risk. The information presented is consistent with the understanding of the audit team, as gained through interviews with project personnel and community members. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.96 dated 04-21-2014

Standard Reference: NA

Document Reference: PD_REDD_v1_50, Sec. 7

Finding: The non-permanence risk report in Section 7 of the PD contains many instances of unintended values in the risk tables that are confusing. For example, in Section 7.4, the rating for the Internal Risk category is given as "7.4.1.1 2" (rather than as 2, which is probably the intended value).

Client Response: The PD was revised (PD_REDD_v1_60.docx) and the Non-Permanence Risk Report was revised. The error was caused by a Word automatic numbering feature.

Auditor Response: The audit team can confirm, through review of Appendix 1 of the updated PD ("PD_REDD_v1_70"), that the source of confusion described in the text of the finding has been removed (i.e., there are no longer confusing values inserted in the tables in Appendix 1). Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.97 dated 04-21-2014

Standard Reference: AFOLU Requirements V3.4, Sec. 3.7.3; VCS Non-Permanence Risk Report

Template V3.1, Sec. 3

Document Reference: PD_REDD_v1_50, Sec. 7

Finding: The AFOLU Requirements states that "Projects shall prepare a non-permanence risk report in accordance with VCS document AFOLU Non-Permanence Risk Tool at both validation and verification... 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 table for the "Land Ownership and Resource Access/Use Rights" sub-category in the nonpermanence risk report is not consistent with the corresponding table in the VCS Non-Permanence Risk Report Template. Since it appears that the most up-to-date version of the VCS Non-Permanence Risk Report Template has not been used, it may be that other discrepancies with respect to the prevailing version of the VCS Non-Permanence Risk Report Template are also present.

Client Response: The PD was revised (PD_REDD_v1_60.docx) and the Apendix I - Non-Permanence Risk Report, now applied the latest version of the template and tool (Non-permanence risk report, V.3.1) Auditor Response: The audit team can confirm, through review of Appendix 1 of the updated PD ("PD REDD v1 70"), that Version 3.1 of the VCS Non-Permanence Risk Report Template has been used for preparation of that appendix. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.98 dated 04-21-2014

Standard Reference: AFOLU Requirements V3.4, Sec. 3.7.3; VCS Non-Permanence Risk Report Template V3.1

Document Reference: PD_REDD_v1_50, Sec. 7

Finding: The AFOLU Requirements states that "Projects shall prepare a non-permanence risk report in accordance with VCS document AFOLU Non-Permanence Risk Tool at both validation and verification... 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 states that "Sections which are not applicable may be left blank but should NOT be deleted from the final document." The audit team agrees that Section 4.3 of the VCS Non-Permanence Risk Report Template is not applicable at validation. However, the deletion of said section is not compliant with the requirements of the VCS Non-Permanence Risk Report Template. Client Response: The PD was revised (PD REDD v1 60.docx) and the Apendix I - Non-Permanence Risk Report, now applied the latest version of the template and tool (Non-permanence risk report, V.3.1) and includes all sections presented in the template.

Auditor Response: The text of this finding made a mistaken reference to Section 4.3, which should be read as "Section 4.2". Nonetheless, the audit team can confirm, through review of Appendix 1 of the updated PD ("PD_REDD_v1_70"), that all sections included in the VCS Non-Permanence Risk Report Template are included in Appendix 1. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

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NCR 2012.99 dated 04-21-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 4.3 **Document Reference**: PD_REDD_v1_50.docx, Sec. 4.3

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Section 2.6 of the VCS Project Description Template requires the user to "Describe and justify any methodology deviations" and "Include evidence to demonstrate the following:

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

Several methodology deviations have been proposed during the course of the validation audit. However, not all deviations are described in Section 2.6. For example, the deviation described in Section 3.3 of the document entitled "Corrective Action Plan Mangrove - Finding 2012 28-29 - revised20130625.docx" is not described in Section 2.6 of the PD. In addition, the evidence required by Section 2.6 of the VCS Project Description Template is not provided within Section 2.6 of the PD.

Client Response: The PD was updated (PD_REDD_v1_80.docx) and section 2.6 now reflects the three deviations formally approved by SCS: use of Delaney et al. (1990) equation to calculate palm biomass, validation of the mangrove equation after validation but prior to project verification and the establishment of two distinct RRDS to better reflect baseline emissions. All evidences related to this deviations are now provided on the same section.

Auditor Response: The audit team can confirm, through review of Section 1.7 of the updated PD ("PD_REDD_v1_80"), that an attempt has been made to provide the requested information with respect to all methodology deviations. For administrative reasons, this finding will be closed and individual findings will be opened to address discrepancies with respect to individual methodology deviations.

Closing Remarks: The Client's response adequately addresses the finding.

NIR 2012.100 dated 05-30-2014

Standard Reference: NA

Document Reference: WB2 - C assessment and emission baseline v2.1 20140522

Finding: Review of worksheet "Plot_Biomass" of workbook "WB2 - C assessment and emission baseline v2.1 20140522" indicates that carbon in palm trees has been excluded from the overall calculation of carbon stocks in the project area and leakage belt, as used in the quantification of carbon stocks changes in these areas. In this worksheet, the sum of values in columns T and U are contained within column V. Column T, which references column H, appears to contain aboveground CO2-equivalent mass in trees only (i.e., this column appears not to include aboveground CO2-equivalent in palms). The values in column V are used to calculate the stratum-level CO2-equivalent mass per hectare, which is used in the quantification of carbon stocks changes. None of the documentation submitted for the project indicates that aboveground biomass in palms is excluded from the calculation of carbon stock changes. Please explain the rationale for excluding aboveground biomass in palms from this calculation and ensure that this exclusion is reported transparently throughout the PD and associated documentation.

Client Response: The issue was corrected in a new version of the workbook: WB2 - C assessment and emission baseline v2.2 20140619. The Project Proponet is presenting to SCS the revised version of the workbook (WB2 - C assessment and emission baseline v2.2 20140619.xlsx) and the formal reply to this NIR (Finding 2012.100_101.docx)

Auditor Response: The audit team can confirm that, as described in the finding response, column T of worksheet "Plot_Biomass" of workbook "WB2 - C assessment and emission baseline v2.2 20140619" correctly reference aboveground biomass in all trees, rather than aboveground biomass in non-palm trees only. Therefore, aboveground biomass is included in the quantification of carbon stock changes, and the finding may be withdrawn.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.101 dated 05-30-2014

Standard Reference: VCS Standard V3.4, Sec. 3.16.2

Document Reference: WB2 - C assessment and emission baseline v2.1 20140522

Finding: The VCS Standard requires that "Quality management procedures to manage data and

information shall be applied and established."

Review of worksheets "Tree_Biomass" and "Plot_Biomass" of workbook "WB2 - C assessment and emission baseline v2.1 20140522" indicate a discrepancy in the stratum to which plot SA106_07 has been assigned. This plot appears to be assigned to the "S" stratum in columns E and F of "Tree_Biomass" and the "OF" stratum in column L of "Plot_Biomass". Please provide an explanation for this apparent discrepancy and provide a description of quality management procedures to maintain consistency in the strata to which plots are assigned throughout the calculation chain.

Client Response: The issue was corrected in a new version of the workbook: WB2 - C assessment and emission baseline v2.2 20140619. The Project Proponet is presenting to SCS the revised version of the workbook (WB2 - C assessment and emission baseline v2.2 20140619.xlsx) and the formal reply to this NIR (Finding 2012.100 101.docx)

Auditor Response: The audit team can confirm that, as described in the finding response, plot SA106_07 has been correctly assigned to the savannah stratum in column L of worksheet "Plot_Biomass" of workbook "WB2 - C assessment and emission baseline v2.2 20140619". However, a "description of quality management procedures to maintain consistency in the strata to which plots are assigned throughout the calculation chain" has not been provided. Therefore, the information request has not been completely satisfied.

Client Response 2: The project proponent is presenting to SCS an updated version of the file "Response document to Finding 2012.100-101 - Workbook discrepancies - v2_20140905.docx". The file now detailes the QC/QA procedures undertaken to maintain consistency in the strata to which plots are assigned throughout the calculation chain. See section 4.2.

Auditor Response 2: The document described in the Client Response 2 was reviewed by the audit team. The audit team can confirm that it appears to be consistent with the information provided during the meetings held in December 2012, and that it provides an adequate demonstration that the discrepancies in the quality control system were isolated to the instance that was noted in the text of the finding. Therefore, the information request has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.102 dated 08-09-2014

Standard Reference: BL-UP V3.2, Sec. 5, Step 2.1.4

Document Reference: Confusion Matrix

Finding: The BL-UP module states that "A verifiable accuracy assessment of the maps (AAU) produced in the previous sub-step is necessary to produce a credible estimate of the historical deforestation rate". The audit team has been provided with a calculation of the accuracy assessment in the workbook "Confusion_Matrix". However, the audit team has been unable to verify that the accuracy assessment has been correctly carried out. In order to assist with this verification, please provide the following for each point used in the accuracy assessment (this information only needs to be provided with respect to the three-class accuracy assessment, since three classes were used to produce the values reported in the PD):

- 1. Coordinate position
- 2. The land-cover type (terrestrial forest, mangrove or non-forest) assigned by the classification
- 3. The land-cover type (terrestrial forest, mangrove or non-forest) determined using high-resolution imagery or direct field observations

Client Response: The project proponent is presenting to SCS a worksheet with the requested information. The file Confusion_Matrix_Raw_Data.xlsx provides coordinate position (UTM 28N, WGS84), observed class (assigned by high-resolution imagery or direct field observation) and mapped class (assigned by classification).

Auditor Response: As indicated, the requested information was provided in the document "Confusion_Matrix_Raw_Data". However, the audit team was unable to replicate the accuracy assessment, using Google Earth, for the following points that were classified as non-forest (identified by latitude and longitude):

(12.26456724, -15.87894257)

(11.21689856, -15.12334734)

(12.41080807, -14.58957541)

All available imagery in Google Earth clearly showed each of the above points to be non-forest. However, each of the above points has been given an "Observed Class" value of 1 (for terrestrial forest). Please provide an explanation (and include any relevant documentary evidence, such as screenshots) of the process used to determine that the above points were terrestrial forest in Google Earth.

Client Response 2: A detailed explanation is provided to the audit team on the word gile Finding 2012.102 Confusion Matrix.docx

Auditor Response 2: Through review of the document "Finding 2012.102 confusion matrix", the audit team agrees that sufficient information has been provided to explain the observed discrepancies. In the case of the coordinates (11.21689856, -15.12334734), it appears that perhaps the area in question was deforested after measurement of plot FD22_08. In the case of the other coordinates listed, the explanation of a possible quality control issue is sufficient to resolve the matter. The audit team agrees that, in all cases, the coordinates in question were correctly identified through the land classification analysis as non-forest and the errors were such that the accuracy of the classification was under-reported rather than over-reported. Therefore, it appears that the conservativeness of the quantification of GHG emission reductions has not been negatively impacted.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.103 dated 08-15-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec.

2.5; T-ADD V3.0, Sec. 2.4

Document Reference: PD_REDD_v1_70.docx, Sec. 2.5, Step 4

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the following: "Provide sufficient information (including all relevant data and parameters, with sources) so that a reader can reproduce the additionality analysis and obtain the same results."

Step 4 (Section 2.4) of the T-ADD tool requires that "The previous steps shall be complemented with an analysis of the extent to which similar activities have already diffused in the geographical area of the proposed VCS AFOLU project activity... Provide an analysis to which extent similar activities to the one proposed as the project activity have been implemented previously or are currently underway... Provide documented evidence and, where relevant, quantitative information".

The project description contains an assertion that the project activity is not similar to any other activities that have been implemented previously or are currently underway, and the project description provides three reasons for the distinctness of the project activity. However, the project description does not provide or reference documented evidence to support the claims that have been made. (It should be noted that the audit team has been provided with documentary evidence to support the claims made, as indicated in response to NCR 2012.50; however, this evidence has not been included in, or referenced by, the project description.)

Client Response: The PD was revised (PD_REDD_v1_80.docx) was revised. A last paragraph was added on Section 2.5, Step 4. Following VCS requirements, the section now makes reference to the documentary evidence provided to SCS. The reference is now clear and support the reasons stated in the section. Since the documentary evidence was already provided as response to NCR 2012.50, it is not being provided again as part of this reply.

Auditor Response: Through review of Section 2.5 of the updated PD (entitled "PD_REDD_v1_80"), the audit team can confirm that the PD contains sufficient information so that a reader can assess the claims regarding the distinctiveness of the project activity and obtain the same results. The information documented in the updated PD has already been reviewed (and found sufficient for the intended purpose) by the audit team in response to NCR 2012.50. Therefore, the non-conformity has been resolved. **Closing Remarks**: The Client's response adequately addresses the finding.



NCR 2012.104 dated 08-15-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 1.6 **Document Reference**: PD REDD v1 70.docx

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires the user to "Indicate the project crediting period, specifying the day, month and year for the start and end dates and the total number of years." While the length of the project crediting period is indicated as being 50 years in Section 1.6 of the project description, this information is inconsistent with other information presented in the project description regarding the length of the crediting period. For example, a "30 year crediting period" is mentioned in Section 2.5, "the 10-year crediting period" is mentioned in the caption for Table 9.

Client Response: The PD was revised (PD_REDD_v1_80.docx) and all inconsistencies revised. The correct crediting period is 20 years, and this can be renewed at most four times (Total Crediting Period is 80 years). This is in accordance with the VCS Standard V3.4, Sec. 3.8. The project proponent would also like to clarify that the baseline is to be revised every 10 years, therefore, information on baseline is valid for 10 years and, sometimes, mistakes in the PD declared this period as the crediting period. This mistakes were also corrected in the updated PD version. Therefore, the crediting period is 20 years, and the baseline is valid for 10 years.

Auditor Response: Through review of the updated PD (entitled "PD_REDD_v1_80"), the audit team can confirm that the duration of the crediting period is now consistently represented throughout the PD. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.105 dated 09-26-2014

Standard Reference: VCS Standard V3.4, Sec. 2.4.1, Sec. 3.1.1

Document Reference: WB2 - C assessment and emission baseline v2.1 20140722; PD_REDD_v1_80 **Finding**: Section 3.1.1 of the VCS Standard requires that "Projects shall be guided by the principles set out in Section 2.4.1." The principle of "consistency" is defined in Section 2.4.1 as the requirement to "Enable meaningful comparisons in GHG-related information".

A carbon fraction value of 0.47 has been used to convert between tons of biomass and tons of carbon mass in the quantification of baseline emissions, as carried out in workbook "WB2 - C assessment and emission baseline v2.1 20140722" and as noted in the PD (version entitled "PD_REDD_v1_80"). However, a carbon fraction value of 0.50 has been used to convert between tons of biomass and tons of carbon mass in the quantification of parameter C(OLB). This discrepancy between carbon fraction values has resulted in a violation of the principle of consistency.

Client Response: Leakage emissions were revised to apply the same caarbon fraction value used in the baseline emissions calculations. The calculation of C(OLB) was updated on the workbook GB-REDD_ER_v5.xlsx and the value 0.47 applied for consistency reasons. The PD was updated (v.1.90). Auditor Response: Through review of the workbook "GB-REDD_ER_v5" (the finding should have referenced version 4 of this workbook, "GB-REDD_ER_v4", rather than workbook "WB2 - C assessment and emission baseline v2.1 20140722"), the audit team has been able to confirm that a value of 0.47 has been applied, as is appropriate, in cell range E60:E63 of worksheet "Ex-ante Leakage Emissions". Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.106 dated 09-26-2014

Standard Reference: NA

Document Reference: GB-REDD_ER_v4; WB2 - C assessment and emission baseline v2.1 20140722 Finding: A value of 127,208 hectares has used for the forest area of the leakage belt in the calculation in cell C56 of worksheet "Ex-ante Leakage Emissions" of workbook "GB-REDD_ER_v4". The explanatory note states: "Calculated. LK area based on WB2 - C assessment and emission baseline v2.3 20140722.xlsx" However, the audit team has been unable to trace this value to the "WB2 - C assessment and emission baseline v2.3 20140722" workbook. The values for the leakage belt in worksheet "deforestation baseline", of that workbook (31,188 and 99,787 hectares for Cacheu and Cantanhez, respectively) sum to 130,975 hectares. Please clarify the source of the value of 127,208 hectares. Client Response: Probably, during the revisions and the update of the workbook this value was corrected and this change was not reflected on the ex-ante leakage emission calculation. The workbook GB-REDD ER v5.xlsx was revised to correct the leakage belt area to 130,975 ha which is the correct value to be applied. All following calculation were updated and this changes also reflected on the lates version of the PD (PD_REDD_v1_90.docx). The updated PROP(LB) value is 0.049. Auditor Response: Through review of the updated workbook entitled "GB-REDD_ER_v5", the audit team has been able to confirm that the values currently summed in the numerator of cell C56 (31188 and 99787) has been correctly sourced from workbook "WB2 - C assessment and emission baseline v2.3 20140722" as the areas of the Cacheu and Cantanhez portions of the leakage belt, respectively. Therefore, the non-conformity has been resolved. Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.107 dated 09-26-2014

Standard Reference: VCS Standard V3.4, Sec. 3.5.1, 5.3.1, 3.18.1; VCS Project Description Template V3.2, Sec. 2.6; LK-ASU V1.0, Equation 6

Document Reference: GB-REDD_ER_v4

Finding: Section 3.18.1 of the VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Section 2.6 of the VCS Project Description Template contains specific instructions for the description and justification of methodology deviations.

Equation 6 of the LK-ASU module requires that the change in carbon stocks in the leakage belt in the project scenario be subtracted from the change in carbon stocks in the leakage belt in the baseline scenario. However, the calculation in cells F79:F98 of worksheet "Ex-ante Leakage Emissions" of workbook "GB-REDD_ER_v4" has reversed the order of the subtraction (subtracting the change in carbon stocks in the baseline scenario from the change in carbon stocks in the project scenario). This constitutes a deviation to the methodology. This deviation appears acceptable to the audit team, as strict compliance with Equation 6 would result in a negative value in the outcome and, thus, erroneous quantification of GHG emission reductions. However, the deviation is not described and justified, as required, in Section 2.6 of the project description.

Client Response: Section 2.6 was updated in the latest version of the PD (PD_REDD_v1_90.docx). The deviation is described and justified. As noticed by the audit team, the strict application of Equation 6 would result in negative values. Therefore, for ex-ante quantification purposes the subtraction was reversed so GHG emission reduction could be calculated.

Auditor Response: Through review of Section 2.6 of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that the PD contains a description of the deviation (as methodology deviation #5). However, while this description contains attestations that the proposed deviation does not negatively impacting the conservativeness of the quantification of GHG emissions reductions and relates to criteria and procedures for measurement of ex ante leakage emissions, these attestations do not constitute a demonstration of the following, as required by the VCS Project Description Template:

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

Therefore, the non-conformity has not been fully resolved.

Client Response 2: The PD was revised (PD_REDD_v1_100.docx) the deviation justification now presents clearly the demonstration that it is related only to the criteria and procedures for monitoring and measurement.

Further, the conservativeness of the approach was clarified, justified and demonstrated.

Auditor Response 2: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that, within the PD, project personnel have adequately demonstrated that the deviation relates only to the criteria and procedures for monitoring or measurement by clarifying the specific procedures within the methodology that have been deviated from. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.108 dated 09-26-2014

Standard Reference: VCS Standard Version 3.4, Sec. 3.18.1; VCS Project Description Template V3.2,

Sec. 1.12.3

Document Reference: PD_REDD_v1_80

Finding: The VCS Standard requires that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Section 1.12.3 of the VCS Project Description Template requires the user to "List all other programs under which the project is eligible to participate (to create another form of GHG-related environmental credit)." Section 1.12.3 of the PD does not contain the required list.

Client Response: Section 1.12.3 was updated in the latest version of the PD (PD_REDD_v1_90.docx). To the best of the project proponent knowledge the project is eligible to participate and generate GHG-related credit on three standards: Plan Vivo, ISO 14.063-2 and ACR Standard. Further, the section clarifies that the project may seek further assurance of its positive social, economical and environmental impacts through a combined certification VCS+CCBA or VCS+SocialCarbon. Such standards as used jointly with the VCS Standard and do not issue environmental credits.

Auditor Response: Through review of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm Section 1.12.3 contains a listing of all other programs under which the project is eligible to participate (to create another form of GHG-related environmental credit). Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.109 dated 09-26-2014

Standard Reference: VCS Standard V3.4, Sec. 2.4.1, Sec. 3.1.1

Document Reference: Response to finding 2012.47 - RSR Mangroves v2_20140702

Finding: Section 3.1.1 of the VCS Standard requires that "Projects shall be guided by the principles set out in Section 2.4.1." The principle of "accuracy" is defined in Section 2.4.1 as the requirement to "Reduce bias and uncertainties as far as is practical."

The document entitled "Response to finding 2012.47 - RSR Mangroves v2_20140702" states that, in order to calculate a root-shoot ratio for use in the quantification of GHG emission reductions from the mangrove stratum, "Data reported in Komyiama et al. (2008) were averaged and resulted in a RSR value of 0.61. Conservatively, the half-width of the 95% confidence interval of these data was used to estimate the RSR (0.46), and subsequently used to obtain the BGB of mangroves (worksheet "Plot Biomass", column R)." However, in review of worksheet "mangrove RSR" of workbook "WB2 - C assessment and emission baseline v2.1 20140722", the audit team has found that the value in cell J9 of that worksheet, for Rhizophora spp. forest in the Thailand (Ranong Southern) area, has been incorrectly transcribed from Table 2 of the Komiyama et al. (2008) study. Therefore, the resulting root-shoot ratio is not as accurate as possible.

Client Response: The value from Table 2 of the Komiyama et al. (2008) study has been incorrectly transcribed from the Tamai et al. (1986) publication. Please see Table 3, page 386. The paper is available online (https://www.jstage.jst.go.jp/article/jjfs1953/68/9/68_9_384/_pdf). Therefore, the value in cell J9 of workbook "WB2 - C assessment and emission baseline v2.1 20140722" is correct, i.e. 117.6 tha-1. Although not relevant in this particular case, please note that the latest version of the referred workbook is "WB2 - C assessment and emission baseline v2.2 20140619" and not "WB2 - C assessment and emission baseline v2.1 20140722".

Auditor Response: Through a cross-check of Table 2 of the Komiyama et al. (2008) study against Table 3 of the Tamai et al. (1986) study, the audit team has been able to confirm that the value in question has been incorrectly transferred to the Komiyama et al. (2008) paper, and that the total belowground biomass reported by Tamai et al. (1986) is 117.634 tonnes/ha. Furthermore, the value of 117.6 is far more consistent with the reported aboveground biomass value of 281.2 tonnes/ha than that reported in the Komiyama et al. (2008) study (i.e., a value of 11.76 tonnes/ha would seem to be a notable outlier in the data). Therefore, the audit team agrees that the value of 117.6 is more accurate than the value reported in the Komiyama et al. (2008) study. As a non-conformity does not exist in this case, the finding will be withdrawn

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.110 dated 09-26-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 2.6 **Document Reference**: PD_REDD_v1_80.docx, Sec. 2.6

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Section 2.6 of the VCS Project Description Template requires the user to "Describe and justify any methodology deviations" and "Include evidence to demonstrate the following:

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

For the first methodology deviation noted in Section 2.6 of the PD, a description has been provided. However, evidence that the deviation will not negatively impact the conservativeness of the quantification of GHG emission reductions or removals, and that the deviation relates only to the criteria and procedures for monitoring or measurement, and does not relate to any other part of the methodology, has not been provided.

Client Response: Section 2.6 was updated in the latest version of the PD (PD_REDD_v1_90.docx). It is clarified that the requested deviation relates only to criteria and procedures for measurement and monitoring related to the validation of the Palm Allometric Equation. The PD now presents the graph that demonstrates the conservativeness of the applicability of Delaney et al. (1999) equation against the values derived from the limited measurement approach. The results validate the equation.

Auditor Response: Through review of Section 2.6 of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that the PD contains an appropriate demonstration that use of the Delaney et al. (1999) equation does not negatively impact the conservativeness of the quantification of GHG emission reductions, as it can be clearly seen from the included graph that the Delaney et al. (1999) equation systematically underpredicted carbon mass for the trees that were measured.

In addition, the PD does contain an attestation that the deviation relates only to the criteria and procedures for monitoring or measurement, and does not relate to any other part of the methodology. However, this is not equivalent to the demonstration that is required by the VCS Project Description Template. The Merriam-Webster dictionary (accessed online at http://www.merriam-webster.com/) defines "demonstrate" as "to show clearly" and "to prove or make clear by reasoning or evidence", and the information provided does not show clearly that the deviation relates only to those criteria and procedures relating to monitoring or measurement. Therefore, the non-conformity has not been fully resolved.

Client Response 2: The PD was revised (PD_REDD_v1_100.docx) the deviation justification now presents clearly the demonstration that it is related only to the criteria and procedures for monitoring and measurement.

Auditor Response 2: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that, within the PD, project personnel have adequately demonstrated that the deviation relates only to the criteria and procedures for monitoring or measurement by clarifying the specific procedures within the methodology that have been deviated from. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.111 dated 09-26-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 2.6 **Document Reference**: PD_REDD_v1_80.docx, Sec. 2.6

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Section 2.6 of the VCS Project Description Template requires the user to "Describe and justify any methodology deviations" and "Include evidence to demonstrate the following:

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

For the second methodology deviation noted in Section 2.6 of the PD, a description has been provided. However, evidence that the deviation will not negatively impact the conservativeness of the quantification of GHG emission reductions or removals, and that the deviation relates only to the criteria and procedures for monitoring or measurement, and does not relate to any other part of the methodology, has not been provided.

Client Response: Section 2.6 was updated in the latest version of the PD (PD_REDD_v1_90.docx). It is clarified that the requested deviation relates only to criteria and procedures for measurement for the validation of the Mangrove Allometric Equation. Moreover, the PD now presents the graphs that demonstrates the conservativeness of the Chave equation for both mangrove species found in Guinea-Bissau. Since the sample size is not sufficient to validate the equation now, the deviation requests that the validation of the Chave equation be carried after validation but prior to the verification of the project, therefore not relating to any other part of the methodology.

Auditor Response: Through review of Section 2.6 of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that the PD contains an appropriate demonstration that use of the Chave et al. (2005) equation does not negatively impact the conservativeness of the quantification of GHG emission reductions, as it can be clearly seen from the included graph that the Chave et al. (2005) equation systematically predicts lower carbon mass values than the Komiyama et al. (2005) equation. In addition, the PD does contain an attestation that the deviation relates only to the criteria and procedures for monitoring or measurement, and does not relate to any other part of the methodology. However, this is not equivalent to the demonstration that is required by the VCS Project Description Template. The Merriam-Webster dictionary (accessed online at http://www.merriam-webster.com/) defines "demonstrate" as "to show clearly" and "to prove or make clear by reasoning or evidence", and the information provided does not show clearly that the deviation relates only to those criteria and procedures relating to monitoring or measurement. Therefore, the non-conformity has not been fully resolved.

Client Response 2: The PD was revised (PD_REDD_v1_100.docx) the deviation justification now presents clearly the demonstration that it is related only to the criteria and procedures for monitoring and measurement.

Auditor Response 2: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that, within the PD, project personnel have adequately demonstrated that the deviation relates only to the criteria and procedures for monitoring or measurement by clarifying the specific procedures within the methodology that have been deviated from. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.112 dated 09-26-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 2.6 **Document Reference**: PD_REDD_v1_80.docx, Sec. 2.6

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Section 2.6 of the VCS Project Description Template requires the user to "Describe and justify any methodology deviations" and "Include evidence to demonstrate the following:

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

For the fourth methodology deviation noted in Section 2.6 of the PD, a description has been provided, but it is unclear from the description exactly what the deviation refers to. In addition, evidence that the deviation will not negatively impact the conservativeness of the quantification of GHG emission reductions or removals, and that the deviation relates only to the criteria and procedures for monitoring or measurement, and does not relate to any other part of the methodology, has not been provided.

Client Response: Section 2.6 was updated in the latest version of the PD (PD_REDD_v1_90.docx). The project proponent understands that the audit team is questioning the third methodology deviation and not the fourth as it is been evaluated on NCR 2012.113. So, It is clarified that the requested deviation relates only to criteria and procedures for measurement for the validation of the Terrestrial Forest Allometric Equation presented by Chave et al. (2005) for ex ante estimation purposes. Moreover, the PD now presents the graph that demonstrates the conservativeness of the Chave et al. (2005) equation in comparission to other equation that could be applied. As conservativeness is demonstrated, Chave et al. (2005) equation is applied for ex-ante estimations. The validation of the equation will be conducted after validation but prior to the verification of the project.

Auditor Response: Through review of Section 2.6 of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that the PD contains an appropriate demonstration that use of the Chave et al. (2005) equation is not likely negatively impact the conservativeness of the quantification of GHG emission reductions, as it can be clearly seen from the included graph that the Chave et al. (2005) equation systematically predicts lower carbon mass values than the other equation that has been considered. In addition, the discussion is confusing because the text references a "Chave et al. (2004)" equation, while the included figure reference a "Chave et al. (2014)" equation.

In addition, the PD does contain an attestation that the deviation relates only to the criteria and procedures for monitoring or measurement, and does not relate to any other part of the methodology. However, this is not equivalent to the demonstration that is required by the VCS Project Description Template. The Merriam-Webster dictionary (accessed online at http://www.merriam-webster.com/) defines "demonstrate" as "to show clearly" and "to prove or make clear by reasoning or evidence", and the information provided does not show clearly that the deviation relates only to those criteria and procedures relating to monitoring or measurement. Therefore, the non-conformity has not been fully resolved.

Client Response 2: The PD was revised (PD_REDD_v1_100.docx) the deviation justification now presents clearly the demonstration that it is related only to the criteria and procedures for monitoring and measurement.

The text of the justification was also revise to clarify that the correct reference is Chave et al. (2014), as shown in the figure.

Auditor Response 2: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that, within the PD, project personnel have adequately demonstrated that the deviation relates only to the criteria and procedures for monitoring or measurement by clarifying the specific procedures within the methodology that have been deviated from. In addition, the incorrect reference to "Chave et al. (2004)" has been corrected, and the text now consistently refers to the Chave equation that was not used as the "Chave et al. (2014)" equation. Therefore, the non-conformity has been resolved. **Closing Remarks**: The Client's response adequately addresses the finding.



NCR 2012.113 dated 09-26-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 2.6 **Document Reference**: PD_REDD_v1_80.docx, Sec. 2.6

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Section 2.6 of the VCS Project Description Template requires the user to "Describe and justify any methodology deviations" and "Include evidence to demonstrate the following:

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

For the fourth methodology deviation noted in Section 2.6 of the PD, a description has been provided. In addition, evidence to demonstrate that the deviation will not negatively impact the conservativeness of the quantification of GHG emission reductions or removals has been provided. However, evidence that the deviation relates only to the criteria and procedures for monitoring or measurement, and does not relate to any other part of the methodology, has not been provided.

Client Response: Section 2.6 was updated in the latest version of the PD (PD_REDD_v1_90.docx). The text now presents evidence that the deviation relates only to the criteria and procedures for monitoring or measurement, and does not relate to any other part of the methodology.

Auditor Response: Through review of Section 2.6 of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that the PD contains an expanded discussion of the fourth deviation. The PD states that "The project understand that such approach results in more accurate estimation of baseline emissions by ensuring that the estimated baseline for each of the Cacheu and Cantanhez National Parks are fully reflective of historical deforestation in the immediate vicinity of said PA", and the audit team agrees that this constitutes an appropriate demonstration that the deviation results in more accurate quantification of GHG emission reductions.

In addition, the PD does contain an attestation that the deviation relates only to the criteria and procedures for monitoring or measurement, and does not relate to any other part of the methodology. However, this is not equivalent to the demonstration that is required by the VCS Project Description Template. The Merriam-Webster dictionary (accessed online at http://www.merriam-webster.com/) defines "demonstrate" as "to show clearly" and "to prove or make clear by reasoning or evidence", and the information provided does not show clearly that the deviation relates only to those criteria and procedures relating to monitoring or measurement. Therefore, the non-conformity has not been fully resolved.

Client Response 2: The PD was revised (PD_REDD_v1_100.docx) the deviation justification now presents clearly the demonstration that it is related only to the criteria and procedures for monitoring and measurement.

Auditor Response 2: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that, within the PD, project personnel have adequately demonstrated that the deviation relates only to the criteria and procedures for monitoring or measurement by clarifying the specific procedures within the methodology that have been deviated from. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.114 dated 09-26-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec.

2.6; BL-UP V3.2, Sec. 5

Document Reference: PD_REDD_v1_80.docx, Sec. 2.6

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Section 2.6 of the VCS Project Description Template requires the user to "Describe and justify any methodology deviations" and "Include evidence to demonstrate the following:

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

The BL-UP module sets out, in Steps 1.1.1.1 and 1.1.3 of Section 5, criteria for selection of the reference region for projecting rate of deforestation (RRD) and leakage belt, respectively. The document "Finding 2012.59 60 61 62 63", provided to the audit team, states, with respect to these criteria, that "The file entitled "Justification_PA_RRD_LK_Cacheu_Cantanhez.xlsx" has all the calculations that were carried out to assess the compliance of "criteria a through f" laid out in VMD0007...One should note that some deviations were identified as some of the criteria were outside the allowed range of variation, although the majority just by a small amount (1-4%)." Through review of the workbook

"Justification_PA_RRD_LK_Cacheu_Cantanhez", the audit team has confirmed this to be the case. Because the selected RRDs and leakage belts do not comply fully with the BL-UP module, a methodology deviation has been applied. However, this deviation has not been described in Section 2.6 of the manner required by Section 2.6 of the VCS Project Description Template.

Client Response: Section 2.6 was updated in the lates version of the PD (PD_REDD_v1_90.docx). A seventh deviation was included to describe, justify and evidence that the variations in forest class (3% above the upper limit) in the RRD in comparission to the PA, the soil class (1% of the area) identified in the RRD and not identified in the PA and the soil class in the LK (1% above the upper limit) in comparission to the PA only relates to the criteria to the establishment of the boundaries of the RRD and the LK and does not relates to any other part of the methodology. The observed variation on these 3 criteria are not material, between 1% and 3%, and does not negatively impact the conservativeness of the quantification of the GHG emissions reductions or removals.

Auditor Response: Through review of Section 2.6 of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that the PD contains an expanded discussion of the deviation relating to the differences between the RRD and the leakage belt (which is currently numbered #7). However, while a thorough description of the deviation is provided, the PD states "The deviation relates only to the criteria for the establishment of the boundaries of the RRD and LK, and does not related to any other part of the methodology" but this is not equivalent to the demonstration that is required by the VCS Project Description Template. The Merriam-Webster dictionary (accessed online at http://www.merriam-webster.com/) defines "demonstrate" as "to show clearly" and "to prove or make clear by reasoning or evidence", and the information provided does not show clearly that the deviation relates only to those criteria and procedures relating to monitoring or measurement.

In addition, the PD states that "The deviation does not negatively impact the conservativeness of the quantification of the GHG emissions reductions or removals because the observed variations in the criteria are insignificant". However, this does not directly address the question of whether or not the proposed deviation negatively impacts the conservativeness of the quantification of GHG emission reductions or removals. The principle of "conservative", as set out in Section 2.4.1 of the VCS Standard, is defined as "Use conservative assumptions, values and procedures to ensure that net GHG emission reductions or removals are not overestimated." The quantitative impact of any discrepancy is not relevant to this definition; an action is either conservative or it is not. Therefore, even if the "observed variations" are insignificant, it must further be demonstrated that they do not lead to a non-conservative impact on the quantification of GHG emission reductions. This further demonstration has not been provided. Therefore, the non-conformity has not been fully resolved.



Client Response 2: The PD was revised (PD_REDD_v1_100.docx) the deviation justification now presents clearly the demonstration that it is related only to the criteria and procedures for monitoring and measurement.

Further, the conservativeness of the approach was clarified, justified and demonstrated. **Auditor Response 2**: Through review of the updated PD entitled "PD_REDD_v1_100", the audit team can confirm that, within the PD, project personnel have adequately demonstrated that the deviation relates only to the criteria and procedures for monitoring or measurement by clarifying the specific procedures within the methodology that have been deviated from. In addition, it has been adequately justified that the deviation is will not negatively impact the conservativeness of the quantification of GHG emission reductions or removals. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.115 dated 09-26-2014

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2, Sec. 2.6; BL-UP V3.2, Sec. 5

Document Reference: PD REDD v1 80.docx, Sec. 2.6; APPENDIX I - Methodology

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." Section 2.6 of the VCS Project Description Template requires the user to "Describe and justify any methodology deviations" and "Include evidence to demonstrate the following:

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

The BL-UP module sets out, in Step 2.1.1 of Section 5, criteria for medium resolution remotely sensed spatial data. The BL-UP module states that these data must be "for three points in time of no less than 3 years apart covering no more than 12 years (with the first point in time being no more than 2 years from the project start date)." As noted during the web-based meetings of November 2012, the first point in time (i.e., the dates of imagery collection in 2010) was more than two years before the project start date.

Client Response: The project proponent clarifies that no methodology deviation was necessary since the Project Starting Date is 31/March/2011 according to section 1.5 and the images aquisition dates are between 01/January/2010 and 01/April/2010 according to Table 5 on section 3.1.1. The starting date was justified evidenced and relates to the closure of the fundings from the CBMP on 2011. Table 5 lists all landsat imagery from 2010, including primary scenes and fill scenes. The 2 years period would limit images older than 31/March/2009 which is not the case.

Auditor Response: Upon further consideration, the audit team agrees that the most recent point in time for which imagery was acquired was less than two years before the project start date. Therefore, the finding was inappropriately issued, and will be withdrawn.

Closing Remarks: The Client's response adequately addresses the finding.



NIR 2012.116 dated 09-26-2014

Standard Reference: E-BB V1.0, Annex 1, Annex 2 Document Reference: PD REDD v1 80.docx, Sec. 3.1

Finding: The E-BB module requires that values for parameter COMFi be sourced from Annex 1, and that values for parameter Gg,i be sourced from Annex 2, respectively, of that module. Annexes 1 and 2 provide values for a range of vegetation types. It is clear that the values provided in Section 3.1 of the PD have been sourced from Annexes 1 and 2, but the rationale for why particular values have been sourced for particular strata is not completely clear. For example, it is not clear why, in Annex 1, the value for "all primary tropical forests" has been sourced for the mangrove stratum. Please provide clarification regarding the rationale for the sourcing of each value that has been sourced from Annexes 1 and 2. **Client Response**: The project proponent undestands that the audit team is mentioning section 3.2 where the mentioned parameters are listed for the calculation of net carbon stock changes in case of fire. Section 3.2 was revised to clarify why each value sourced from Annexes 1 and 2 of E-BB and the rational for applying each value to the forest stratum in the project area on page 65.

Auditor Response: As noted, this finding should have been issued regarding Section 3.2, rather than Section 3.1, of the PD. Through review of Section 3.2 of the updated PD (entitled "PD_REDD_v1_80"), the audit team can confirm that reasonable justification for the use of the various values from Annexes 1 and 2 of the E-BB module. The audit team agrees that, in the absence of further guidance within the E-BB module, appropriate professional judgment was applied regarding the values sourced. Therefore, the information request has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.117 dated 09-26-2014

Standard Reference: REDD-MF V1.4, Sec. 2

Document Reference: PD_REDD_v1_80.docx, Sec. 2.1

Finding: The REDD-MF methodology framework requires that "The reference to this Framework and the modules used to construct the project-specific methodology shall be given in the VCS Project Description (VCS PD)." While Section 2.1 of the PD does include a reference to the modules used to construct the project-specific methodology, the reference to the CP-AB module is out of date. The version of the CP-AB module referenced in Section 2.1 of the PD is Version 1.0, whereas Version 1.1 of the CP-AB module is currently prevailing.

Client Response: Section 2.1 was updated in the latest version of the PD (PD_REDD_v1_90.docx) and the correct version of the CP-AB module applied.

Auditor Response: Through review of Section 2.1 of the updated PD, entitled "pd_redd_v1_90", the audit team can confirm that the currently prevailing version of the CP-AB module is correctly referenced. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.118 dated 12-23-2014

Standard Reference: LK-ASU V1.0, Sec. II, Step 4

Document Reference: GB-REDD ER v5

Finding: The LK-ASU module defines parameter C(LB) as "Area weighted average aboveground tree carbon stock for forests available for unplanned deforestation inside the Leakage Belt". The calculation of area-weighted average aboveground tree carbon stock within the leakage belt, as reported in cell E72 of worksheet "Ex-ante Leakage Emissions" of workbook "GB-REDD_ER_v5", is incorrectly carried out in the following manners:

- 1. As explained in response to NIR 2012.68, the values used in the calculation of the area-weighted carbon stock within the mangrove stratum within the leakage belt, as pasted into cell E71, is incorrect because it has been carried out using the areas of the mangrove stratum within the Cacheu and Cantanhez portions of the project area, rather than using the areas of the mangrove stratum within the Cacheu and Cantanhez portions of the leakage belt.
- 2. The area values directly used in the calculation in cell E72 have not been correctly sourced from cell ranges D8:D10 and D13:D16 for Cacheu and Cantanhez, respectively, within worksheet "forest_area_calibration" of workbook "WB2 C assessment and emission baseline v2.3 20140722". Therefore, the calculation in cell E72 is not the correctly weighted by the total area of each stratum in the leakage belt.

Client Response: The workbook GB-REDD_ER was revised and updated to version 6 (GB-REDD_ER_v6). The area of each stratum on the leakage belt is derived from the spreadsheet "forest_area_calibration" cells V39:V42 and V45:V48. This value is applied because it is the calibrated area of each stratum considering the map error, therefore, the most conservative value. Carbon stocks are derived from the spreadsheet "baseline_C_stock_changes" cells E5:E11.

The ex-ante leakage emissions was revised and all related calculations were updated both in the workbook and in the latest version of the PD.

Auditor Response: Though review of the updated workbook entitled "GB-REDD_ER_v6", the audit team can confirm that the described changes have been made, that the area values and carbon stock values have been correctly transferred to that workbook, and that the average aboveground carbon stock value within the leakage belt has been correctly weighted using these data. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.119 dated 12-23-2014

Standard Reference: M-MON V2.1, Sec. 6.2 Document Reference: pd_redd_v1_90, Sec. 4.3.2

Finding: The PD states the following:

"Although a statistical sampling scheme do not provide delineation of disturbed areas directly, this complementary ancillary method shall be used to assess if a deforested area identified using remote sensing techniques to map deforestation was instead a change triggered by the occurrence of natural disturbance. Following this technique, identification and geographical location of the disturbance events are performed randomly, and the locations to be surveyed are selected from a grid of points over the monitoring deforestation map. To keep consistency, a 250x250 meters grid of points shall be used, and 10% of the points over the deforested area under inspection for natural disturbance shall be visited. In each selected point location the required information to determine if that area was subject to a natural event is registered. If positive, the team shall follow the same procedures described above to gather supporting evidence for the extent and severity of disturbance to allow its delineation over the deforestation map at the office."

A 250x250 meter sampling grid implies that a plot will be located every 6.25 hectares. A random selection of 10% of points from this grid implies that a plot will be located, on average, every 62.5 hectares. If the procedure described above, 62.5 hectares is, therefore, the "minimum mapping unit" used to delineate area subject to disturbance. This does not conform to the M-MON module, which states that, for parameter ADistPA,q,i,t, the "Minimum monitoring unit shall be equal to a minimum of 11 Landsat pixels or one hectare".

Client Response: The PD also states that:

"[...] in Guinea-Bissau the use of fire is closely linked to cultural factors, catastrophic events are also not expected in the Project Area or Leakage Belt. Nevertheless, if by any chance a catastrophic event or a wildfire (break out during a dry season, or due to lightning) occurs during the Project's lifetime, such events will be reported if significant using a hybrid approach. [...] Deforestation and natural disturbance will be distinguished using an hybrid approach of remote sensing with ground data, and a local community alert system with ground observations/measurements to identify and delineate disturbances due to natural events."

The deforestation maps produced with remote sensing data and used as a basis for this assessment have a minimum mapping unit of 1 ha. Ground data will be collected, i.e. some points over the 250x250 grid will be visited, for the purpose of validation of deforestation due to natural disturbances and as part of this "hybrid approach" described in the PD. This ground information collected through systematic random method will also be complemented with information from local communities (alert system) regarding suspicious occurrences (i.e., natural phenomenon or disturbances).

Therefore, the minimum mapping unit is always 1 ha and the quality of the maps is to be assessed using a robust validation protocol of ground data, collected in randomly selected points over the deforested polygons on the maps, and reports from the communities followed by field/validation visits by the monitoring field team.



Auditor Response: The audit team agrees that the minimum mapping unit for monitoring of deforestation is 1 ha and is therefore compliant with the requirements of the M-MON module. The question is whether the minimum mapping unit for natural disturbance is also 1 ha.

The client's response states that "the quality of the maps is to be assessed using a robust validation protocol of ground data, collected in randomly selected points over the deforested polygons on the maps, and reports from the communities followed by field/validation visits by the monitoring field team". If it is true that the quality of maps of natural disturbance (once created) is assessed using a 10% sample of a 250 m x 250 m grid, the audit team agrees that would be appropriate. However, this is not the impression given by the language within the PD. The PD states that "At the office, the deforestation maps shall be carefully examined and the collected ground information used to identify the location of the natural disturbance and assist in the manual delineation of the disturbed areas." This indicates that the collected field data are actually used to delineate the boundaries of a disturbed area. This is very different from using the collected field data to perform an independent assessment of boundaries that have already been mapped.

The precision of any given system is limited to the precision of its least-precise component. Therefore, if natural disturbance is mapped using a combination of remotely sensed data (with a minimum mapping unit of 1 ha) and field data (with a minimum mapping unit, as previously stated, of 62.5 ha), the de facto resulting minimum mapping unit is 62.5 ha.

Because the PD continues to indicate that collected field data are used to map natural disturbance, and because the minimum mapping unit of collected field data (collected using the procedures described within the PD) is 62.5 ha, the non-conformity has not been resolved.

Client Response 2: The PD was revised (PD_REDD_v1_110.docx) and section 4.3.2, item c. now presents the following language, clarifying that the monitoring of natural disturbances will be mapped in a minnimum map unit of 1 ha:

"Ancillary data which may include but is not limited to routine ground-based surveys to local communities, direct communications from local communities to the Park guards and authorities, information from local land manager, and direct ground observations/measurements to assess if, when, and to what extent extreme weather events or insect pests have occurred causing a disturbance in the forest constitute the local community alert system. When a natural event is reported through the system the direct monitoring procedures are triggered. A team of park quards will conduct ground surveys to gather evidence, including the georeferenced location of the occurrence, year and types of disturbances, and gather ground data to determine the extent to what the forests were affected by the reported disturbance. Although a statistical sampling scheme do not provide delineation of disturbed areas directly, this complementary ancillary method shall be used to assess if a deforested area identified using remote sensing techniques to map deforestation (MMU of 1 ha) was instead a change triggered by the occurrence of natural disturbance. To depict natural disturbances, techniques based on repetitive measurements of spectral, spatial and temporal indicators and/or increased spatial or spectral resolution of satellite observations shall be explored (e.g., Verbesselt et al., 2012). A 250x250 meters grid of points shall be used for the validation of the deforestation maps (depicting two different types of disturbance: natural and anthropogenic), and 10% of the points over the deforested area shall be visited. In each selected point location the required information to determine if that area was subject to a natural event is registered."

The 250x250 meters grid will be used for map validation only.

Auditor Response 2: Through review of the updated PD entitled "PD_REDD_v1_110", the audit team confirmed that the text is now clearer and it is no longer indicated that a map delineating disturbed areas should be created using field measurements. Rather, it is clarified that these data "shall be used for the validation of the deforestation maps (depicting two different types of disturbance: natural and anthropogenic)" and additional procedures (such as use of MODIS data) are provided for the creation of the maps themselves. The audit team agrees that the procedures within the PD are adequate to produce natural disturbance maps with a minimum mapping unit of 1 ha. Therefore, the non-conformity has been resolved

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.120 dated 02-11-2015

Standard Reference: VCS Standard V3.4, Sec. 3.18.1; VCS Project Description Template V3.2

Document Reference: PD REDD v1 100

Finding: The VCS Standard states that "The project proponent shall use the VCS Project Description Template (or approved GHG program project description template where the project is requesting registration under an approved GHG program) and adhere to all instructional text within the template." The VCS Project Description Template requires that "All sections must be completed using Arial 10pt, black, regular (non-italic) font." The figure references "Figure 1", "Figure 6" and "Figure 7" within the PD are in Arial 12pt font and are therefore not compliant with the requirement of the VCS Project Description Template.

Client Response: The PD was revised (PD_REDD_v1_110.docx) and the font sizes on the text Figure 1, Figure 6 and Figure 7 were correct to Arial 10pt.

Auditor Response: Through review of the updated PD entitled "PD_REDD_v1_110", the audit team confirmed that the text in question was corrected such that all text is in Arial 10pt font. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NIR 2012.121 dated 02-11-2015

Standard Reference: VCS Standard V3.4, Sec. Sec. 3.10.1(3)

Document Reference: N/A

Finding: The VCS Standard requires that "Project location for AFOLU projects shall be specified using geodetic polygons to delineate the geographic area of each AFOLU project activity and provided in a KML file." Please provide a KML file showing the geographic location of the Cacheu and Cantanhez project areas.

Client Response: [A response was provided outside the cover of the findings workbook.] **Auditor Response**: In response to this finding, two KML files for the project area, "PA_Cacheu" and "PA_Cantanhez", were provided. The audit team confirmed that the areas depicted in these files was equivalent to the project areas as shown within the previously reviewed shapefiles. Therefore, the information request has been satisfied.

Closing Remarks: The Client's response adequately addresses the finding.

NCR 2012.122 dated 02-11-2015

Standard Reference: AFOLU Non-Permanence Risk Tool, Sec. 1.1.3

Document Reference: PD_REDD_v1_110

Finding: The Non-Permanence Risk Tool states that "Project proponents shall clearly document and substantiate the risk analysis covering each risk factor applicable to the project".

The risk report within the PD indicates that the significance of risks attributable to natural fire is "significant" but also states that this risk is not applicable.

The risk report within the PD indicates that the likelihood of risks attributable to extreme weather is "likely" but also states that this risk is not applicable.

Therefore, the above risks are not clearly documented.

Client Response: [A response was provided outside the cover of the findings workbook.]

Auditor Response: In response to this finding, the audit team was provided with an updated PD entitled "PD_REDD_v1_120" wherein the identified discrepancy was resolved. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.



NCR 2012.123 dated 02-13-2015

Standard Reference: AFOLU Non-Permanence Risk Tool, Sec. 1.1.3

Document Reference: PD REDD v1 110

Finding: The Non-Permanence Risk Tool states that "Project proponents shall clearly document and

substantiate the risk analysis covering each risk factor applicable to the project".

The risk report within the PD implicitly indicates, under the "Opportunity Cost" sub-category, that net positive community impacts are not demonstrated by application of a score of 8 for risk item a. However, it is also suggested, under the "Community Engagement" sub-category, that net positive community impacts are demonstrated. Therefore, the above risks are not clearly documented.

Client Response: [A response was provided outside the cover of the findings workbook.]

Auditor Response: In response to this finding, the audit team was provided with an updated PD entitled "PD_REDD_v1_120" wherein the identified discrepancy was resolved. Therefore, the non-conformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.

NIR 2012.124 dated 02-13-2015

Standard Reference: AFOLU Non-Permanence Risk Tool, Sec. 2.2.2

Document Reference: PD REDD v1 110

Finding: Section 2.2.2 of the Non-Permanence Risk Tool clearly distinguishes between "secured funding" and "callable financial resources" by stating that "Callable financial resources are those not included in secured funding". Through application of the same funding source towards both factors h and i within the "Financial Viability" sub-category, the risk report appears to count the same funding source as both between "secured funding" and "callable financial resources". Please explain the rationale for this.

Client Response: [A response was provided outside the cover of the findings workbook.]

Auditor Response: In response to this finding, the audit team was provided with an updated PD entitled "PD_REDD_v1_120" wherein mitigation factor I within the "Financial Viability" is no longer applied.

Therefore, the finding is no longer relevant and will be withdrawn.

Closing Remarks: The Client's response adequately addresses the finding.

157 v3.3