

# The Rainforest Alliance

## VALIDATION STATEMENT FOR ENVIROTRADE CARBON LIMITED

Corporate & Chancery Chambers  
New Caudan 7th Floor, Dias Pier  
Le Caudan Waterfront, Port Louis  
Mauritius

### Validation Scope:

The Rainforest Alliance has validated that the design of **Envirotrade Carbon Limited's Sofala Community Carbon Project** is in conformance with the *Plan Vivo Standard (October 2008)*. This independent third-party verification covers an agroforestry and REDD project on an area of 511,392 ha in two community-owned project zones in the Gorongosa National Park buffer area and the Zambezi Delta in Mozambique. The project has a 100 year project lifetime.

**Validation Registration Code: RA-VAL-PV-013863**

**Date of validity: November 9, 2010**

The period of validity of this statement is contingent upon the project's continued implementation of the *Plan Vivo Standard (October 2008)* and as further defined in the Rainforest Alliance Validation Audit Report dated November 9, 2010.

  
\_\_\_\_\_  
Jon Jickling  
Director  
SmartWood Program of the Rainforest Alliance  
65 Millet Street, Suite 201, Richmond, Vermont USA 05477  
**SMARTWOOD IS A PROGRAM OF THE RAINFOREST ALLIANCE**

The SmartWood Program of the Rainforest Alliance provides carbon project validation and verification services, based on protocols and standards developed by third party organizations and for which Rainforest Alliance has been accredited as a validation or verification body. This statement signifies that Rainforest Alliance has validated that the project listed above complies with the particular standard listed above, as set forth in the audit report referenced above. In no circumstance does Rainforest Alliance warrant or guarantee the delivery of carbon emissions reductions credits or the financial or market value of any credits validated in connection with this statement. This statement is prepared solely for the benefit of the organization listed above and may not be relied upon by any third party without the express written consent of Rainforest Alliance.



# The Rainforest Alliance

## VERIFICATION STATEMENT FOR ENVIROTRADE CARBON LIMITED

Corporate & Chancery Chambers  
New Caudan 7th Floor, Dias Pier  
Le Caudan Waterfront, Port Louis  
Mauritius

### Verification Scope:

The Rainforest Alliance has verified that the design of **Envirotrade Carbon Limited's Sofala Community Carbon Project** is in conformance with the *Plan Vivo Standard (October 2008)*. This independent third-party verification covers an agroforestry and REDD project on an area of 511,392 ha in two community-owned project zones in the Gorongosa National Park buffer area and the Zambezi Delta in Mozambique. The project has a 100 year project lifetime.

**Verification Registration Code: RA-VER-PV-013587**

**Date of validity: November 9, 2010**

The period of validity of this statement is contingent upon the project's continued implementation of the *Plan Vivo Standard (October 2008)* and as further defined in the Rainforest Alliance Verification Audit Report dated November 9, 2010.



---

Jon Jickling  
Director

SmartWood Program of the Rainforest Alliance  
65 Millet Street, Suite 201, Richmond, Vermont USA 05477  
**SMARTWOOD IS A PROGRAM OF THE RAINFOREST ALLIANCE**

The SmartWood Program of the Rainforest Alliance provides carbon project validation and verification services, based on protocols and standards developed by third party organizations and for which Rainforest Alliance has been accredited as a validation or verification body. This statement signifies that Rainforest Alliance has verified that the project listed above complies with the particular standard listed above, as set forth in the audit report referenced above. In no circumstance does Rainforest Alliance warrant or guarantee the delivery of carbon emissions reductions credits or the financial or market value of any credits verified in connection with this statement. This statement is prepared solely for the benefit of the organization listed above and may not be relied upon by any third party without the express written consent of Rainforest Alliance.

Verification Company:



SmartWood Program Headquarters  
65 Millet St. Suite 201  
Richmond, VT 05477 USA  
Tel: 802-434-5491  
Fax: 802-434-3116  
[www.smartwood.org](http://www.smartwood.org)

Verification Audit  
Managed by:

Africa Regional Office  
Tel: +34 608 76 90 09  
Fax: +34 91 791 26 92

Contact person: Mateo Cariño Fraisse  
Email: [mcf@nepcon.net](mailto:mcf@nepcon.net)

# Plan Vivo Standard Validation/Verification Audit Report for:

## Sofala Community Carbon Project in Mozambique

|                                |  |
|--------------------------------|--|
| Report Finalized:              | 9 November 2010  |
| Date Report Issued             | 19 August 2010   |
| Audit dates:                   | 15-21 November 2009  |
| Audit team:                    | Mateo Cariño Fraisse, Adam Gibbon, Dr. Romana Rombe Bandeira |
| Approved by:                   | Jeff Hayward   |
| Standard:                      | Plan Vivo Standards, October 2008                            |
| Validation code:               | RA-VAL-PV-013863   |
| Verification code:             | RA-VER-PV-013587   |
| Validation statement issued:   | 9 November 2010  |
| Verification statement issued: | 9 November 2010  |
| Project proponent contact:     | Philip Powell  |
| Project proponent address:     | P O Box 679, Wetherby LS22 9BD<br>United Kingdom             |
| Project Lat/Long:              | S-34.107825, E-18.961558                                     |

## Table of Contents

|     |  |    |
|-----|--|----|
| 1   | INTRODUCTION.....  | 3  |
| 1.1 | Objective .....  | 3  |
| 1.2 | Scope and Criteria.....  | 3  |
| 1.3 | Plan Vivo Project Description.....                                 | 4  |
| 1.4 | Level of Assurance.....  | 4  |
| 2   | AUDIT CONCLUSIONS .....  | 4  |
| 2.1 | Verification Opinion .....   | 4  |
| 2.2 | Corrective Action Requests.....                                    | 5  |
| 2.3 | Actions Taken by Company Prior to Report Finalization .....        | 17 |
| 3   | AUDIT METHODOLOGY.....   | 17 |
| 3.1 | Audit Team .....   | 17 |
| 3.2 | Project document review methodology description.....               | 18 |
| 3.3 | Field audit methodology description .....                          | 21 |
|     | Appendix A: PROJECT PROPONENT CONTACT AND SCOPE DETAILS .....      | 28 |
| 1   | Contacts .....   | 28 |
| 2   | Verification Scope .....   | 28 |
| 2.2 | Spatial scope details: .....                                       | 29 |
| 2.3 | Temporal scope details: .....                                      | 31 |
|     | Appendix B: DETAILED AUDIT FINDINGS TO STANDARD .....              | 33 |
|     | Appendix C: Assessment of the PDD to the Plan Vivo Standards ..... | 51 |

## 1 INTRODUCTION

### 1.1 Objective

The purpose of this report is to document conformance with the requirements of the Plan Vivo Standards (PVS) by Envirotrade, hereafter referred to as “Project Proponent”. The report presents the findings of qualified Rainforest Alliance program auditors who have evaluated Project Proponent systems and performance against the applicable standard(s). Section 2 below provides the audit conclusions. Appendix B provides detailed findings related to the Plan Vivo Standard and Appendix C provides a detailed assessment of the PDD against the Plan Vivo Standard. Rainforest Alliance carbon evaluation reports are made available to the public via the Plan Vivo or Rainforest Alliance websites. However, particular material in the report identified as confidential by the project proponent will be excluded from any publicly available reports.

Rainforest Alliance is the world’s leading FSC certifier based on forest area certified. Our twenty years of experience with forest certification has given us familiarity with land management practices globally and has provided us with a solid professional platform for auditing forestry carbon projects. We are members and approved verifiers of the Climate, Community, and Biodiversity Alliance, the Chicago Climate Exchange, Carbon Fix and Plan Vivo. We support CCBA and Plan Vivo since these standards align with our organizational mission of providing ecological and social co-benefits alongside the climate benefits of carbon storage.

Rainforest Alliance has received accreditation from the American National Standards Institute (ANSI) to ISO 14065:2007 and therefore accredited to the Voluntary Carbon Standard (VCS) as a validation and verification body. The Rainforest Alliance was the first Forest Stewardship Council (FSC)-certifier to be fully accredited as a forestry verifier to the VCS.

**Dispute resolution:** If Rainforest Alliance clients encounter organizations or individuals having concerns or comments about Rainforest Alliance / SmartWood and our services, these parties are strongly encouraged to contact the SmartWood program headquarters directly. Formal complaints or concerns should be sent in writing and may simultaneously be sent to Plan Vivo Foundation.

### 1.2 Scope and Criteria

**Standard criteria:** Plan Vivo Standards, October 2008

**Objective:**

The scope of the validation audit is to assess the conformance of Envirotrade agroforestry and REDD project in Sofala province, Mozambique, against the Plan Vivo Standard (October 2008). The project covers 2 project zones, in the Gorongosa National Park buffer zone and in the Zambezi Delta, with an area of 511,392 ha. The land is community owned. The audit assesses the project with respect to the baseline scenarios presented in the project design document. The audit assesses all material GHG sources, sinks and reservoirs required by the CCBA. The project has a lifetime of 100 years.

### **1.3 Plan Vivo Project Description**

The Sofala Community Carbon Project aims to develop the community and its environment by far-reaching change in land-use practices. This is done primarily through the training of small subsistence farmers and forest dwellers to become custodians of their habitat, as well as developing sustainable land use practices and in so doing becoming committed to their environment. In this way they secure the regular income and sustainable food supply they need to survive. The money they earn from carbon dioxide offset sales allows them to make the switch from 'slash and burn' agriculture to sustainable food production on the same field. The project also places the community forest resources under management and the use of both timber and non-timber forest products are undertaken in a sustainable manner. The management of forest resources places particular emphasis on fire management and controlled seasonal burning.

**Project name:** Sofala Community Carbon Project

**Greenhouse gases:** CO<sub>2</sub>

### **1.4 Level of Assurance**

**Level of assurance:** Reasonable

## **2 AUDIT CONCLUSIONS**

### **2.1 Validation/Verification Statement**

The Rainforest Alliance has performed a validation and verification audit for the Sofala Community Carbon Project. The review of the project description, supporting documentation and interviews has provided Rainforest Alliance with the evidence to validate the project in fulfillment to the stated criteria of the Plan Vivo Foundation.

This report provides also provides a verification opinion, as to whether:

1. The project documents represent an accurate and clear description of the project and its activities.
2. Based on an objective assessment of the project, the project meets the Plan Vivo Standard.

To the Plan Vivo Foundation:

Rainforest Alliance validation and verification audits of carbon forestry projects follow best practice for evaluation of greenhouse gases, which are closely in accordance with ISO 14064 standards. The validation and verification reported upon herein was performed against the Plan Vivo standards. The project was registered as a Plan Vivo in February 2007.

Rainforest Alliance validated and verified that the project systems comply with the PV requirements, and thus is on track for generating carbon emissions reductions/sequestration equal to 1,111,576 tCO<sub>2</sub>e which are sold ex ante. Of these, a total of 201,719 tCO<sub>2</sub>e have

already been sold. The balance of 909,857 tCO2e, is being held in stock by the project developer.

Signature



Date

9 November 2010

Based on an evaluation of the project proponent's management systems and performance in the field across the defined audit scope, the Rainforest Alliance validation/verification audit team concludes that project proponent has:

- Demonstrated compliance/conformance with the standard
- Not demonstrated compliance/conformance with the standard.

## 2.2 Corrective Action Requests

**Note:** A non-conformance is defined in this report as a deficiency, discrepancy or misrepresentation that in all probability materially affects carbon credit claims. CAR language uses "shall" to suggest its necessity but is not prescriptive in terms of mechanisms to mitigate the CAR. Each CAR is brief and refers to a more detailed finding in the appendices.

Corrective action requests (CARs) identified during draft validation/verification reports should be successfully closed by the project proponents before Rainforest Alliance submits the final report and verification statement to Plan Vivo. However, for MINOR CARs, the Plan Vivo Foundation has indicated to Rainforest Alliance that 6 months is an appropriate time-frame for minor CARs. Any open CARs will result in a qualified verification statement which lists: (a) all qualifications, (b) rationale for each qualification, and (c) impact of each qualification on GHG assertion.

| CAR 01/10                   | Reference Standard & Requirement: 2.1.1  |
|-----------------------------|--|
| Non-conformance:            | It was understood by the audit team that the technical specifications had undergone a number of changes over the period of project implementation. However, due to a lack of version control on documents and a lack of cross referencing between the carbon calculators used to calculate emissions reductions and the technical specifications it was difficult to work out which method had been used to generate each of the emissions reductions credits. |
| Corrective Action Request:  | Envirotrade shall clearly document the history (and anticipated future changes) of baselines used through various iterations of the technical specifications in a manner which allows transparent linking of baselines to the contracts and carbon credits issued.   |
| Timeline for conformance:   | Prior to verification  |
| Evidence to close CAR:      | The PDD is now significantly clearer, documenting the history of technical specifications. Through the numbers used in the database/carbon calculator it is possible to work out which version of the TS was used. It would be an improvement if strict version numbers/date be applied to Technical Specifications that can be directly referenced in the database/carbon calculator.   |
| CAR Status:                 | <b>CLOSED</b>  |
| Follow-up Actions (if any): | <b>NEW OBS 06/10</b>   |

|                             |   |
|-----------------------------|---|
| <b>CAR 02/10</b>            | Reference Standard & Requirement: 2.1.1   |
| Non-conformance:            | Farmers have been able to elect not to burn their machambas in order to receive payments. The baseline for the emissions caused by burning are not documented anywhere. There is no mention of emissions reductions from no burning in the PDD and there is no 'no burning' technical specification.  |
| Corrective Action Request:  | Envirotrade shall develop a technical specification for the no burning element of the project, or add it to all existing technical specifications that it is used in conjunction with.  |
| Timeline for conformance:   | Prior to verification   |
| Evidence to close CAR:      | <p>Section CL1.1 of the PDD now contains an explanation of the methodology for determining the benefits of the 'no burning' system,. A draft technical specification has also been presented (v6). The benefits of the system are conservatively estimated at <math>1 \text{ t C ha}^{-1} \text{ y}^{-1}</math>. The Technical Specification does reference peer reviewed literature, but the comparison link between the input from agricultural residue and the difference between indigenous forest and agricultural soil carbon was not clear. The values presented in the technical specification relate to losses that occur on conversion and not to the gains that can occur through agricultural residue input.</p> <p>The flowing sentence in the PDD was found to be unclear, "<i>In the project zones this means not burning would correspond to an additional <math>13.2 \text{ tCha}^{-1}</math> compared to the long term equilibrium when burning (half of difference between <math>22.8 \text{ tCha}^{-1}</math> and <math>9.6 \text{ tCha}^{-1}</math>).</i>"</p> <p>The units in the following sentence from page 89 are thought to be a typo, "<i>The carbon dioxide equivalent or carbon credits due to the farmer is therefore <math>7 \times 3.67</math> or <math>26 \text{ tCha}^{-1}</math></i>"</p> <p>The Auditors acknowledge that the no burning technical specification has been submitted for peer review as required by the Plan Vivo. Given the relatively small quantities of carbon involved (&lt;4% of total emissions from who project) there is not a risk of the outcome of that review affecting the net benefits of the project. In addition there is no evidence to suggest that not burning could lead to increased net emissions. Therefore it was accepted that an OBS would be issued to complete this process and make any required changes by the verification. It should be noted that of the agroforestry system, overall the no burning system is the third largest creator of emissions reductions (see table on p91 of the methodology).</p> |
| CAR Status:                 | <b>CLOSED</b>   |
| Follow-up Actions (if any): |   |

|                            |   |
|----------------------------|---|
| <b>CAR 03/10</b>           | Reference Standard & Requirement: 2.1.1   |
| Non-conformance:           | The value used to calculate emissions reductions and payments related to avoided burning cannot be traced to any written document, but was believed to have originated from academic staff involved with the project. The amount to be paid for no burning was not included in the contract farmers signed (only attached as a carbon calculator). This had led to some confusion amongst farmers as to what they needed to do to receive the payments. |
| Corrective Action Request: | Envirotrade shall present tables relating to contract and emissions reductions clearly, with adequate   |

|  |  |
|--|--|
| description in the text to allow easy understanding. |  |
| Timeline for conformance:                            | Prior to verification  |
| Evidence to close CAR:                               | The PDD now has clear information relating to the volumes of emissions reductions associated with each system. |
| CAR Status:  | <b>CLOSED</b>  |
| Follow-up Actions (if any):                          |  |

|                             |  |
|-----------------------------|--|
| <b>CAR 04/10</b>            | Reference Standard & Requirement: 2.1.1, 2.1.5   |
| Non-conformance:            | The PDD states that the approach to calculating the changes due to project activities involves calculating the “average net increase in carbon stored in biomass and forest products over a 100 year period relative to the baseline”. However, in discussions with the project proponents it became apparent that the modeling exercise done in the CO2FIX model was not based on an assumption that the trajectory of carbon stocks would follow those shown in the model. A different, ‘tonne year’, accounting method was being implemented, and details of this were not currently documented in the PDD or technical specifications. |
| Corrective Action Request:  | Envirotrade shall describe the “tonne year” carbon accounting methodology used in the PDD and any potential future changes to this approach they are planning to make. There remains a requirement to document more clearly with those who take up no-burning contracts what the system involves.  |
| Timeline for conformance:   | Within a reasonable timeframe to be determined through consultation with Plan Vivo.  |
| Evidence to close CAR:      | After further discussion with the Project Proponents it was established that a tonne year approach was not in fact used. Rather, the average stock over 100 years was used. This is explained in the Technical Specifications and is acceptable.   |
| CAR Status:                 | <b>CLOSED</b>  |
| Follow-up Actions (if any): |  |

|                            |   |
|----------------------------|---|
| <b>CAR 05/10 MINOR</b>     | Reference Standard & Requirement: 2.1.2   |
| Non-conformance:           | <p>It was not under the scope of this audit to perform a peer review of the Technical Specifications used by the project, as this is managed under a separate process by the Plan Vivo Foundation. However, samples were checked against the Plan Vivo Standards (section 2.3.3 ‘requirements for Technical Specifications’). Whilst the new REDD Technical Specification does have an additionality analysis, the other technical specifications being used do not.</p> <p>However, in section G2.2 the PDD presents three barriers to implementation that the project overcomes. These are financial, capacity and compliance with land law barriers. The project was found to be additional as the farmers had neither the technical capacity nor financial means to implement tree planting or sustainable forest management projects.</p> <p>Therefore, whilst the project was found to be additional, and this was documented in the PDD, the technical specifications used did not meet the Plan Vivo standard with respect to the inclusion of additionality demonstration.</p> |
| Corrective Action Request: | Envirotrade shall develop technical specifications that comply with the latest version of the Plan Vivo Standard  |
| Timeline for conformance:  | Within 6 months of the date of closure of this report.  |
| Evidence to close CAR:     | Envirotrade and Plan Vivo have confirmed that updated Technical   |

|                             |  |
|-----------------------------|--|
|                             | Specifications are due to be submitted in November 2010. |
| CAR Status:                 | <b>OPEN</b>  |
| Follow-up Actions (if any): | updated Technical Specifications are due to be submitted |

|                             |  |
|-----------------------------|--|
| <b>CAR 06/10 MINOR</b>      | Reference Standard & Requirement: 2.1.3  |
| Non-conformance:            | The agroforestry technical specifications do not include any analysis of the risks to permanence as required by the Plan Vivo Standards. |
| Corrective Action Request:  | Envirotrade shall include non-permanence analysis in the technical specifications in accordance with the Plan Vivo Standard.             |
| Timeline for conformance:   | Within 6 months of the date of closure of this report.   |
| Evidence to close CAR:      | Envirotrade and Plan Vivo have confirmed that updated Technical Specifications are due to be submitted in November 2010.                 |
| CAR Status:                 | <b>OPEN</b>  |
| Follow-up Actions (if any): |  |

|                             |   |
|-----------------------------|---|
| <b>CAR 07/10</b>            | Reference Standard & Requirement: 2.1.3, PDD Section D4, E 2  |
| Non-conformance:            | It was explained in the introductory meeting that the project is designed to transfer responsibilities over to the community and withdraw from the area over a set time period. However, these plans are not documented in the PDD, so it is not possible to assess the likely impacts on permanence of the carbon stocks, due to anticipated project management and monitoring, and are of fundamental importance to the design of the project. Meetings with some stakeholders' revealed also a lack of communication on the responsibilities transfer for some of the microbusiness. |
| Corrective Action Request:  | Envirotrade shall document in the PDD and to the community the timeline of the project to date for all project activities, explain the key dates in the future running of the project and the responsibilities transfer, and assess the risks to permanence this presents for all project types.  |
| Timeline for conformance:   | Prior to verification   |
| Evidence to close CAR:      | The PDD now has more information in section G3.4 with respect to the phases of the project. There is also a new document called, 'Envirotrade SOF Exit Strategy', that clearly presents the exit strategy. The project proponent has also organized a meeting with the Natural Resources Committee of Nhambita on April 14 2010 to clarify this, and the auditors have checked the minutes of that meeting.   |
| CAR Status:                 | <b>CLOSED</b>   |
| Follow-up Actions (if any): |   |

|                  |  |
|------------------|--|
| <b>CAR 08/10</b> | Reference Standard & Requirement: 2.1.3  |
| Non-conformance: | In section CL1.3 of the PDD it is explained that a non-permanence risk buffer, "of 10% of the total woodland carbon stock is excluded from the calculated emission reductions, 10% for boundary systems and 15% for all other agroforestry systems". On the other hand, in discussions with the Project Proponent it was stated that the buffer reserve would be used to account for more than the risk to the permanence to the carbon sequestered (or emissions avoided). For example, there had been an error found in the Faidherbia Technical Specification which led to a significant over-estimate in the amount of carbon that would be sequestered. The intention of the project was to make a deduction equivalent of the over-estimate from the buffer. |

|   |   |
|---|---|
| <p><b>Corrective Action Request:</b><br/>           Envirotrade shall document clearly how the buffer system will be used and how this conforms with Plan Vivo rules.</p> |   |
| Timeline for conformance:   | Prior to verification   |
| Evidence to close CAR:  | After conversations with the Plan Vivo Foundation and Envirotrade, the auditors have been assured that the Foundation will oversee the transparent use of the buffer credits. |
| CAR Status:   | <b>CLOSED</b>   |
| Follow-up Actions (if any):   |   |

|   |   |
|---|---|
| <b>CAR 09/10</b>  | Reference Standard & Requirement: 2.1.4, 4.1.4  |
| Non-conformance:  | In the contract that the farmers sign for agroforestry projects the amount of penalties that would be applied to them in the case of not meeting the monitoring targets was found to be ambiguous and do not correlate, in most cases, with the monitoring indicators in the technical specifications, which normally do not prescribe allowed mortality rates for years 1 to 3 (requiring only a certain percentage of the plot is established). |
| <p><b>Corrective Action Request:</b><br/>           Envirotrade shall document the contracting procedure and explain any deviances from it.</p> |   |
| Timeline for conformance:   | Prior to verification   |
| Evidence to close CAR:  | Envirotrade have shared a draft monitoring plan which formalizes the contracting process. The full version of this which is due within 6 months.  |
| CAR Status:   | <b>CLOSED</b>   |
| Follow-up Actions (if any):   |   |

|  |   |
|--|---|
| <b>CAR 10/10 MINOR</b>   | Reference Standard & Requirement: 2.1.6   |
| Non-conformance:   | Leakage is not mentioned in the agroforestry technical specifications as mandated by the Plan Vivo Standards. In the REDD technical specification that is currently under peer review there is a section on addressing leakage. There is no technical specification for no-burning so leakage is not addressed there. |
| <p><b>Corrective Action Request:</b><br/>           Envirotrade shall include leakage in the technical specifications in accordance with the Plan Vivo Standard.</p> |   |
| Timeline for conformance:  | Within 6 months of the date of closure of this report.  |
| Evidence to close CAR:   | The new versions of Technical Specifications, currently in peer review and due to be submitted in November 2010, are intended to address this issue.  |
| CAR Status:  | <b>OPEN</b>   |
| Follow-up Actions (if any):  |   |

|   |  |
|---|--|
| <b>CAR 11/10 MINOR</b>  | Reference Standard & Requirement: 2.1.8  |
| Non-conformance:  | The agroforestry technical specifications, contain monitoring indicators for the first ten years of the project, however the monitoring sections do not cover all the required points stated in section 3.2.3 of the Plan Vivo Standard. |
| <p><b>Corrective Action Request:</b><br/>           Envirotrade shall include monitoring in the technical specifications in accordance with the Plan Vivo Standard.</p> |  |
| Timeline for conformance:   | Within 6 months of the date of closure of this report.   |
| Evidence to close CAR:  | The new versions of Technical Specifications, due to be submitted in   |

|                             |   |
|-----------------------------|---|
|                             | November 2010 are intended to address this issue. |
| CAR Status:                 | <b>OPEN</b>                                       |
| Follow-up Actions (if any): |   |

|  |   |
|--|---|
| <b>CAR 12/10</b>   | Reference Standard & Requirement: 2.1.8   |
| Non-conformance:   | There did not appear to be a mechanism for linking the results of the monitoring to verifying the ex-post quantified emissions reductions. It was explained to the audit team that the monitoring plans were going to undergo a revision to bring them in line with CO2Fix models, but this was not mentioned in the PDD.                                       |
| Corrective Action Request:   |   |
| Envirotrade shall transparently document their monitoring process and any plans to change it, ensuring that the system can quantify the amount of carbon sequestered by the project. |   |
| Timeline for conformance:  | Prior to verification   |
| Evidence to close CAR:   | A worked example of how corrective actions are issued to farmers who suffer mortality has been added to section CL3.2 of the PDD. It is explained that corrective actions ensure the carbon sequestered remains in line with the projections in the Technical Specification. The plans to update the TS's have been communicated to the auditors and Plan Vivo. |
| CAR Status:  | <b>CLOSED</b>   |
| Follow-up Actions (if any):  |   |

|   |  |
|---|--|
| <b>CAR 13/10 MINOR</b>  | Reference Standard & Requirement: 1.1.2, 2.1.9   |
| Non-conformance:  | In some cases Plan Vivos were designed as part of the process for drawing up contracts. Examples were seen of hand drawn, annotated plans that had been drawn in a participatory manner with farmers. However, more recently in the project's history there has been a move away from this approach, rather a GPS mapping tool is used to mark the edge of the plantation area and this is attached to the contract in place of a Plan Vivo.   |
| Corrective Action Request:  |  |
| Envirotrade shall use Plan Vivos as a tool in the planning of landuse activities. |  |
| Timeline for conformance:   | At the time of next verification audit   |
| Evidence to close CAR:  | Envirotrade have defended the move to solely GPS based mapping, advocating that the participatory process that is used to construct the maps is may be as beneficial as the production written/drawn plans.<br>Plan Vivo was contacted regarding this matter and provided clear guidance on what is required in order for these criteria to be met. This does involve the production of annotated maps. The full details of Plan Vivo's requirements for these criteria to be met can be found in section 2.1.9 below. |
| CAR Status:   | <b>OPEN</b>  |
| Follow-up Actions (if any):   |  |

|  |   |
|--|---|
| <b>CAR 14/10</b>   | Reference Standard & Requirement: PDD Section B 1, B2, Section C1   |
| Non-conformance:   | The 'Basic Information' section on page 3 of the PDD describes the project as being in the district of Gorongosa. However, one of the project zones is outside of this district. This inconsistent treatment of the two project zones, and a bias towards documenting project information for primarily the Gorongosa portion continues throughout the PDD. |
| Corrective Action Request: Envirotrade shall describe all project attributes for both project zones. |   |
| Timeline for conformance: Prior to verification  |   |

|                             |   |
|-----------------------------|---|
| Evidence to close CAR:      | The PDD now describes explicitly the two project sites: The project considers now one project zone (Sofala province) with 2 project sites (the Gorongosa project site and the Zambezi Delta project site) where the project areas are located (over a thousand <i>machambas</i> (fields) with an average of 1.03ha plus the REDD areas, from 2 ha to 5.249 ha). This is reinforced by adding new maps and differentiating the activities and attributes in each zone. |
| CAR Status:                 | <b>CLOSED</b>   |
| Follow-up Actions (if any): |   |

|   |   |
|---|---|
| <b>CAR 15/10</b>  | Reference Standard & Requirement: PDD Section B 1   |
| Non-conformance:  | In section G1.1 of the PDD figure 1 shows the location of the two “project areas”. However, based on discussions with the project proponents, the areas actually represent the two project zones, which are part of one project. This inconsistent use of the terms ‘project area’ and ‘project zone’ continues throughout the PDD, |
| Corrective Action Request: Envirotrade shall use the terms project area and project zone consistently throughout the PDD. |   |
| Timeline for conformance:   | Prior to verification   |
| Evidence to close CAR:  | The PDD has been reworked to be more consistent in the terminology employed.  |
| CAR Status:   | <b>CLOSED</b>   |
| Follow-up Actions (if any):   |   |

|   |   |
|---|---|
| <b>CAR 16/10</b>  | Reference Standard & Requirement: PDD Section B2  |
| Non-conformance:  | In section G1.2 of the PDD there is a thorough description of vegetation types. However, the descriptions do not include the condition of the vegetation types. For example one savanna site visited during the audit had evidence of illegal logging for honey collection. |
| Corrective Action Request:<br>Envirotrade shall describe the condition of vegetation within the project area. |   |
| Timeline for conformance:   | Prior to verification   |
| Evidence to close CAR:  | The condition of the vegetation types is now described in section G1.2 of the PDD. In addition, monitoring carried out by Eduardo Mondlane University (MOU signed) will determine the condition in the future.  |
| CAR Status:   | <b>CLOSED</b>   |
| Follow-up Actions (if any):   |   |

|  |   |
|--|---|
| <b>CAR 17/10</b>   | Reference Standard & Requirement: PDD Section B2  |
| Non-conformance:   | No specific HCV assessment has been carried out though. Some regional documents related to the importance of the miombo forest have been listed in the PDD, but there is no link with the particularities of the values in the project zones. |
| Corrective Action Request:<br>Envirotrade shall design a plan to complete HCV evaluation including any rare or endangered species or high conservation value habitats or protected areas in project area or in surrounding areas, including clear steps and resources for defining whether and how this affects or places constraints on the project design or implementation. |   |
| Timeline for conformance:  | Prior to verification   |
| Evidence to close CAR:   | Envirotrade has used the ProForest HCVF toolkit to comprehensively  |

|                             |   |
|-----------------------------|---|
|                             | <p>determine the HCV in the project sites, with a result of 63.7% of the project area within one of the 6 HCV categories. Four different categories, grouping different HCV, have been appointed and maps have been included in the PDD:</p> <ul style="list-style-type: none"> <li>• High biodiversity closed canopy forests, such as gallery/riverine forests and dry tropical forests</li> <li>• Protected areas (Inhamitanga Forest Reserve)</li> <li>• Woody vegetation on steep slopes</li> <li>• Culturally important areas</li> </ul> <p>General management recommendations have been included in the PDD for these categories. In the Plan Vivo annual report progress on protection and maintenance of HCV zones are to be documented to test the effectiveness of the measures taken.</p> <p>The monitoring plan has been already outlined to some extent (using community technicians, the University Eduardo Mondlane, satellite imagery, questionnaires, surveys, and others) to check their status and it is expected to be finished within 6 months after validation.</p> |
| CAR Status:                 | <b>CLOSED</b>   |
| Follow-up Actions (if any): |   |

|                             |  |
|-----------------------------|--|
| <b>CAR 18/10</b>            | Reference Standard & Requirement: 1.1.3, PDD Section D1  |
| Non-conformance:            | <p>There is no reference to Envirotrade Mozambique Limitada and its relationship with Associação Envirotrade Carbon Livelihoods, nor if the latter is already a legally approved association.</p> <p>There is also a lack of description of the coordinator and project proponent, Envirotrade Carbon Limited, and of completion of a table that includes Legal Status of Provider and Directors/Trustees and description of activities, as requested by PV.</p> |
| Corrective Action Request:  |  |
| Timeline for conformance:   | Prior to verification  |
| Evidence to close CAR:      | <p>The PDD has been modified by deleting Associação Envirotrade Carbon Livelihoods (which has been created to replace Envirotrade Mozambique Limitada but is not yet officially published in <i>Bulletim da Republica</i>), and also by describing Envirotrade Carbon Limited as the project developer replacing Envirotrade Limited in early 2009.</p> <p>The PDD has also been completed to include all the team's professional skills.</p>                    |
| CAR Status:                 | <b>CLOSED</b>  |
| Follow-up Actions (if any): |  |

|                  |   |
|------------------|---|
| <b>CAR 19/10</b> | Reference Standard & Requirement: PDD Section D1  |
| Non-conformance: | <p>In section G4.2 of the PDD the key technical skills that will be required to implement the project successfully are not documented. The previous section G4.1 does state the responsibilities of the project but without a list of key skills, the absence of gaps is not easy to detect. The prior experience of the management team is not stated.</p> |

|  |   |
|--|---|
| <p>Corrective Action Request:</p> <p>Envirotrade shall document the technical skills required to implement the project or the management teams experience and expertise in project implementation.</p> |   |
| Timeline for conformance:  | Prior to verification   |
| Evidence to close CAR:   | The PDD has been completed to include all the team's professional skills. |
| CAR Status:  | <b>CLOSED</b>   |
| Follow-up Actions (if any):  |   |

|  |   |
|--|---|
| <b>CAR 20/10</b>   | Reference Standard & Requirement: PDD Section E1  |
| Non-conformance:   | The PDD does not contain a tabulation of Technical Specifications to the Plan Vivo requirements. In addition, the Technical Specifications used by the project have undergone numerous version changes, and are in different status' of approval. The versions, the periods for which they were used, the differences between them and the current status according to the Plan Vivo Standard was not documented anywhere. This makes tracing the changes and the scale of their impacts difficult. |
| <p>Corrective Action Request:</p> <p>Envirotrade shall document the Technical Specification used in the PDD in accordance with the Plan Vivo Template requirements. In addition there shall be transparency around the versions and statuses of Technical Specifications used.</p> |   |
| Timeline for conformance:  | Prior to verification   |
| Evidence to close CAR:   | Section G3.2 of the PDD now contains the required table. There is now transparency around the versions of technical specifications that have been used.   |
| CAR Status:  | <b>CLOSED</b>   |
| Follow-up Actions (if any):  |   |

|  |  |
|--|--|
| <b>CAR 21/10</b>   | Reference Standard & Requirement: PDD Section E 3  |
| Non-conformance:   | Table 8 in section CL1.1 tabulates some of the information required by table E.2 of the Plan Vivo PDD template, however, it does not include all the information.  |
| <p>Corrective Action Request:</p> <p>Envirotrade shall document the carbon benefits of project activities as required on the Plan Vivo PDD template.</p> |  |
| Timeline for conformance:  | Prior to verification  |
| Evidence to close CAR:   | <p>A new table in section CL1.1 now includes all the required information.</p> <p>In section CL1.1 there appear to be errors in the units used in the summary table of expected carbon benefits. For example, the Cashew Technical Specification states, <i>“Carbon sequestration potential over 100 years with a rotation of 60 years on an average quality site with optimal climatic conditions is 37.4 tC/ha above an initial vegetation carbon baseline of 2.8 tC/ha (Sambane, 2005)”</i>. These errors are not present in the carbon calculator.</p> <p>However the table states the baseline to be <math>2.8 \text{ t CO}_2 \text{ ha}^{-1}</math>. It is suspected this leads to a knock on error in the column “Long-term carbon uptake with management”.</p> |
| CAR Status:  | <b>CLOSED</b>  |
| Follow-up Actions (if any):  | <b>NEW OBS 05/10</b>   |

|   |  |
|---|--|
| <b>CAR 22/10</b>  | Reference Standard & Requirement: PDD Section E 5  |
| Non-conformance:  | Table 14 in the PDD summarizes the benefits resulting from project activities when addressing biodiversity. Nevertheless, a summary table of expected impacts of project activities on key environmental services by technical specification, as required on table E3, was not provided. |
| Corrective Action Request:  |  |
| Envirotrade shall document expected impacts of project activities on key environmental services by technical specification as required on the Plan Vivo PDD template. |  |
| Timeline for conformance:   | Prior to verification  |
| Evidence to close CAR:  | A table has been added to B1.1 which conforms with Plan Vivo requirements.   |
| CAR Status:   | <b>CLOSED</b>  |
| Follow-up Actions (if any):   |  |

|  |  |
|--|--|
| <b>CAR 23/10 MINOR</b>   | Reference Standard & Requirement: PDD Section E 6, E 7   |
| Non-conformance:   | In section G3.5 of the PDD six risks are identified. These are; "risk of flooding", "risk of fire", "social risks", "institutional capacity risks", "financial risks" and "institutional/political risks". Each risk has a mitigation action explained. However, the risks have not been presented in a table similar to E.4. As a result the risks have not been categorized as high medium or low. |
| Corrective Action Request:   |  |
| Envirotrade shall categorize risks as low, medium or high as required on the Plan Vivo PDD template. |  |
| Timeline for conformance:  | Within 6 months of the date of closure of this report.   |
| Evidence to close CAR:   | The permanence risks have been categorized in accordance with Plan Vivo in section G3.5. A leakage table similar to PV's table E.4 (note there are two E.4's in the Plan Vivo guidance template) has been added to section CL2.2 of the PDD. The table is completed well, although it is missing a column to categorize the leakage risk.  |
| CAR Status:  | <b>OPEN</b>  |
| Follow-up Actions (if any):  |  |

|   |  |
|---|--|
| <b>CAR 24/10 MINOR</b>  | Reference Standard & Requirement: PDD Section G2   |
| Non-conformance:  | While annual reporting for biodiversity is expected, as per PV procedures, this is not indicated in the PDD, nor exists a table showing methods of monitoring environmental impacts of proposed activities as required by table G1 of the PV PDD template. |
| Corrective Action Request:  |  |
| Envirotrade shall document how the environmental impacts of project activities will be monitored as required on the Plan Vivo PDD template. |  |
| Timeline for conformance:   | Within 6 months of the date of closure of this report.   |
| Evidence to close CAR:  | The PDD has been updated in B3.3 to include impacts, methods, and thresholds. Nevertheless, a column with the baselines as required in the PV PDD template is still missing.   |
| CAR Status:   | <b>OPEN</b>  |
| Follow-up Actions (if any):   |  |

|                             |  |
|-----------------------------|--|
| <b>CAR 25/10</b>            | Reference Standard & Requirement: PDD Section G3   |
| Non-conformance:            | The monitoring results are distributed as part of the project's annual reporting process to Plan Vivo. However the audit team has seen very different PV annual reports (2006-08), without a clear plan with variables and frequencies to be followed-up. As above, it doesn't exist a table showing methods of monitoring socio-economic impacts of proposed activities as required by table G2 of the PV PDD template. |
| Corrective Action Request:  | Envirotrade shall document how the socio-economic impacts of project activities will be monitored as required on the Plan Vivo PDD template.   |
| Timeline for conformance:   | Prior to verification  |
| Evidence to close CAR:      | The PDD has been updated to include the methods of monitoring related to socio-economic aspects ( sections G3.4 and <a href="#">CM3.1</a> )  |
| CAR Status:                 | <b>CLOSED</b>  |
| Follow-up Actions (if any): |  |

|                             |   |
|-----------------------------|---|
| <b>CAR 26/10</b>            | Reference Standard & Requirement: PDD Section I   |
| Non-conformance:            | The PDD is written using the template of the CCBA. On the title page it is stated that the project is written according to CCB standards. There is actually no mention that the PDD has been designed to Plan Vivo standards, although it is stated that the project is a Plan Vivo project and uses Plan Vivo systems. |
| Corrective Action Request:  | Envirotrade shall state the intention and status of the PDD with respect to the Plan Vivo Standard.   |
| Timeline for conformance:   | Prior to verification   |
| Evidence to close CAR:      | The title page and introduction are now clear on the scope of the PDD and the involvement with Plan Vivo  |
| CAR Status:                 | <b>CLOSED</b>   |
| Follow-up Actions (if any): |   |

|                            |   |
|----------------------------|---|
| <b>CAR 27/10</b>           | Reference Standard & Requirement: PDD Annexes   |
| Non-conformance:           | The PDD is said, on the title page to be presented, "without annexes". However, the PDD does have one annex within it. This is Annex I, "Relevant and respective laws in Mozambique". In addition, over 400 additional documents were provided to the audit team including academic papers that have emerged from the project, annual reports, meeting minutes, etc. As such the documents were not organised into those which are a current, relevant annex to the PDD, and those which were more general background and subsidiary documents. This made assessing the documentation more difficult, and does not comply with PV requirements to have all this information in the related annexes. |
| Corrective Action Request: | Envirotrade shall include the annexes to the PDD as required in the Plan Vivo Standard.   |
| Timeline for conformance:  | Prior to verification   |
| Evidence to close CAR:     | There are hyperlinks to most of the documents referenced in the PDD and descriptions of the documents in the document list provided to the auditor and an index which was categorised by subject, i.e. "microbusinesses REDD" rather than which ones were in the PDD. Flexibility has been allowed by PVF, but the number of documents is so big that the project proponent should synthesize the relevant documentation in a more coherent set of documentation.   |
| CAR Status:                | <b>CLOSED</b>   |

|                             |                  |
|-----------------------------|------------------|
| Follow-up Actions (if any): | <b>OBS 08/10</b> |
|-----------------------------|------------------|

### 2.2.1 Observations

*Note: Observations are issued for areas that the auditor sees the potential for improvement in implementing standard requirements or in the quality system; observations may lead to direct non-conformances if not addressed.*

|  |   |
|--|---|
| <b>OBS 01/10</b>   | Reference Standard & Requirement: 3.1.1 |
| It has not been indicated the extent and steps for <i>Gliricidia sp.</i> use being phased out. |   |

Observation:  
Enviroterade should clearly indicate in the PDD the steps for changing tree species in their systems.

|   |   |
|---|---|
| <b>OBS 02/10</b>  | Reference Standard & Requirement: 3.1.1 |
| Seeds origin is not mentioned in the PDD: i.e. <i>Faidherbia sp.</i> comes from Malawi. |   |

Observation:  
Enviroterade should mention seeds origin in the PDD.

|   |   |
|---|---|
| <b>OBS 04/10</b>  | Reference Standard & Requirement: PDD Section D 5 |
| Some explanations given about financial mechanism and the organizational structure of the project led to the REDD activities only (i.e. 1 <sup>st</sup> paragraph on page 58) while actually being applicable to all of them, creating confusion. |   |
| Observation:<br>Enviroterade should clarify the activities concerned by the financial mechanisms, such as MCLT.   |   |

#### New Observations raised in the Draft Final Report:

|   |   |
|---|---|
| <b>OBS 05/10</b>  | Reference Standard & Requirement: 2.1.1 |
| In section CL1.1 of the PDD there is an explanation of how technical specifications have evolved over time. Section G2.3 does explain that a carbon value of 73.3 t C ha <sup>-1</sup> was used prior to the adoption of the new REDD Technical Specification in 2009, however it is not clear how many credits were created using this value, and whether any corrections had been made or were planned. However, this was found to be a typo, and in fact the original carbon density value used for REDD areas was 73.3 t CO <sub>2</sub> ha <sup>-1</sup> . In a document called, "Implementation of REDD in Sofala Project" the use of this number, and the history of REDD activities is presented. |   |

Observation: Enviroterade should use the correct units throughout the PDD.

|   |                                   |
|---|-----------------------------------|
| <b>OBS 06/10</b>  | Reference Standard & Requirement: |
| It would be an improvement if strict version numbers/date be applied to Technical Specifications that can be directly referenced in the database/carbon calculator. |                                   |
| Observation: Enviroterade should strengthen the version control and tracking of use of Technical Specifications.  |                                   |

|   |   |
|---|---|
| <b>OBS 07/10</b>  | Reference Standard & Requirement: 2.1.1 |
| Issues of ambiguity were found in the as yet unapproved 'no burning' technical specification. The Auditors acknowledge that the no burning technical specification has been submitted for peer review as required by the Plan Vivo. Given the relatively small quantities of carbon involved there is not a risk of the outcome of that review affecting the net benefits of the project. In addition there is no evidence to suggest that not burning could lead to increased net emissions. Therefore it was accepted that an OBS would be issued to complete this process and make any required changes by the verification. |   |
| Observation: Envirotrade should complete the peer review process for the no burning technical specification.  |   |

|   |   |
|---|---|
| <b>OBS 08/10</b>  | Reference Standard & Requirement: PDD Annexes |
| There are hyperlinks to most of the documents referenced in the PDD and descriptions of the documents in the document list provided to the auditor and an index which was categorised by subject i.e. microbusinesses REDD rather than which ones were in the PDD. Flexibility has been allowed by PV, but the number of documents is very big and this is still confusing. |   |
| Observation: Envirotrade should synthesize the relevant documentation in a more coherent set of documentation.  |   |

## 2.3 Actions Taken by Company Prior to Report Finalization

Envirotrade worked to solve the issues by doing a review and making changes to the PDD, and then subsequent changes in the relevant associated documentation, including the Technical Specifications.

Envirotrade has also developed new tools such as the High Conservation Values evaluation, based on the ProForest HCVF toolkit, an exit strategy explaining the key dates in the future running of the project, and outlined a monitoring plan that will be completed 6 months after the validation.

A list of the documents provided as exhibits in this phase can be checked in 3.2.

## 3 AUDIT METHODOLOGY

### 3.1 Audit Team

| <b>Auditor(s)</b> | <b>Qualifications</b>  |
|-------------------|--|
| Adam Gibbon       | Adam is Technical Specialist for the Rainforest Alliance Climate Change Initiative. Adam has led the technical climate change related side of ten CCBA validations, one VCS validation and four VCS methodology reviews, that are either completed or currently underway. Adam was also involved in one CCX verification. Adam is a qualified lead auditor for the Climate Action Reserve and was a CCX forestry verifier committee participant.<br>Adam has trained over 60 people in Spain, Bali and Vietnam in AFOLU project auditing and project development. Recipients of the training included Rainforest Alliance auditors, government officials, private consultants and NGO representatives. Adam was lead author of recent Rainforest Alliance publication entitled, "Guidance on coffee carbon |

|                       |  |
|-----------------------|--|
|                       | <p>project development using the (CDM) simplified agroforestry methodology" as well as two scientific articles currently in press. Before joining Rainforest Alliance Adam worked at Oxford University as a researcher. His research emphasized the potential of carbon markets to finance sustainable management of forest resources. He led a team conducting a landscape scale assessment of carbon stocks in the Peruvian Andes' cloud forests and montane grasslands. Adam earned a distinction on the Environmental Change and Management MSc. Program at Oxford University, winning prizes for his dissertation and overall performance. He was awarded the Sir Walter Raleigh Scholarship at Oriel College, Oxford. He graduated with a first class degree from Durham University, with a BSc in Natural Sciences, specializing in Geology, Chemistry &amp; Geography.</p>   |
| Romana Rombe Bandeira | <p>Romana is assistant professor since 2000, Eduardo Mondlane University. Areas of work include Forest protection, protection and rehabilitation of ecosystems, wildfires, forest health, pest ecology. Design, coordination and implementation of several research projects and publications in the fields of forest protection. Supervision of more than 15 final year undergraduate students and MSc work. Consultancy work and management positions within the Faculty of Agronomy and Forestry Engineering such as Associate Dean for Research and Extension (2001-2004); Associate Dean for Academic Issues (2005-2008). Worked at the National Commission of Planning/ National Directorate for Planning/Agrarian Department, in charge of forest policy analysis and analysis of the national forest production and statistics. Has been involved in the evaluation of research projects in the biology topic for the Ministry of High Education and Technology (2002); IUCN (2003); University Open Fund (2008). Gender analysis and diagnosis for the Faculty of Agronomy and Forestry Engineering (1995).</p> |
| Mateo Cariño Fraisse  | <p>Mateo is the Forest and Climate Services Coordinator for the Mediterranean and Africa. Mateo speaks French, Spanish, English, and Portuguese, holds a masters degree in Forestry, and has gained experience in forest fires (Spain), research (France), management plans (Comoros Islands), FSC and Carbon projects assessments (Costa Rica, DR Congo, Cameroon, Morocco, Guatemala, UK, Uruguay, Portugal, México, Brazil, Bolivia), funding projects (Fundación Biodiversidad, AECID, DFID, CBFF) and delivering trainings (Spain, Bolivia, UK, DR Congo, Cameroon, Brazil, Morocco). Mateo has completed a lead auditor training by SmartWood.</p>   |

### 3.2 Project document review methodology description

Submitted after the field audit in response to the draft Report

- 2010-18-04-PDD-CCBA-Sofala-post audit\_FINAL.doc
- 2010-18-04-PDD-CCBA-Sofala-post audit\_FINAL.pdf
- Envirotrade SOF Exit Strategy.pdf
- ET POL Grievance Policy.pdf
- ET POL Harassment Policy.pdf
- Falcao 2010.pdf
- Ghee 2010, prerelease.pdf
- Implementation of REDD in Sofala Project.pdf
- Machamba sem queimada.pdf

- N'hambita Carbon Crediting Technical Note written by ECCM.pdf
- Protective Clothing to sawmill.pdf
- SOF Envirotrade monitoring manual DRAFT.pdf
- Sofala HCVF report.pdf
- 120610 Sofala\_AC.xlsx
- Nhambita Final Report main part.doc (EU “Evaluation of N'hambita Pilot Project” Final Report November 2009, Antonio Marzoli and Piero Del Lungo)
- comments\_on\_ML\_evaluation\_amended2.doc (Comments on the document above)
- 2009 Casey's thesis chapter 6 - uncertainty.pdf
- 2009 Calculator Gorongosa

#### Prior to, or during, the Field Audit

The PDD and over 400 additional documents were provided to the audit team including academic papers that have emerged from the project, annual reports, meeting minutes, etc. As such the documents were not organised into those which are a current, relevant annex to the PDD, and those which were more general background and subsidiary documents. Although the documents referenced as footnotes in the PDD were hyperlinked to the documents submitted, this made assessing the documentation very difficult. The documents were separated in the different topics (technical, social, environmental) and reviewed by the team. The list of the documents reviewed is provided below:

- CCBA PDD, V13, 30 August 2009
- 2008 Sofala Report to Plan Vivo (and Appendixes)
- Technical specifications:
  1. 050609 MOZ-NHA-TS-DIP var faidherbia
  2. 080509 MOZ-NHA-TS-Boundary
  3. 080509 MOZ-NHA-TS-DIP var Gliricidia
  4. 080509 MOZ-NHA-TS-FO-Mango
  5. 080509 MOZ-NHA-TS-Homestead Planting
  6. 080509 MOZ-NHA-TS-Woodlot
  7. 080509 MOZ-NHA-TS-FO-Cashew
- Conservation of miombo woodland in Mozambique, V2.2, 21 Sept 09 (in peer review) (*older versions were also seen for some systems, but frequently the date or version number was not present*)
- Actions Required to Establish Conservation Areas (no date or version, filename = 34ACTI~1)
- Avoided deforestation areas transect protocol (stratification) (no date or version, filename = 370104~1)
- PSP measurement program document
- Modelling deforestation rate on population size
- Forest Management Plan
- Spadavecahia, L.; Williams, M. & Wright, J. 01-09-04 Synthesis of Remote Sensing Products and a GIS Database to Estimate Land Use Change: an Analysis of the Nhambita Community Forest, Mozambique. Landsat 2000 Classification. 26 p.
- Sambane, E.C.C. 2005. Above-ground Biomass Accumulation in Fallow Fields at the Nhambita Community – Mozambique. M.Sc. Thesis. University of Edinburgh. 79 p.
- Zolho, R. Effect of Fire Frequency on the Regeneration of Miombo Woodland in Nhambita, Mozambique. M.Sc. Thesis. University of Edinburgh

- Wallentin, G. 2006. Carbon Change Rate and Assessment of its Drivers in Nhambita, Mozambique. University of Edinburgh. 18 p.
- Flaherty, S. 2008. Analysis of Land Use Change Using Spot Images. N'hambita Pilot Project, Final Report, September 2008. Institute of Geography, School of Geosciences, University of Edinburgh, Drummond Street, Edinburgh EH8 9XP
- Marzoli, A. 2008. Inventário Florestal Nacional. Ministério de Agricultura. Direcção Nacional de Terras e Florestas. Maputo, 98 p.
- Relatório sobre o processo de visionagem na Comunidade de Matondo. Programa de Desenvolvimento Rural, Sofala. República de Moçambique. Ministério da Agricultura e Desenvolvimento Rural e da Cooperação Técnica Alemã GTZ 30p. By Charles Chidamba. 01/2004
- Herd, A.R.C. 2007. Exploring the Socio-Economic Role of Charcoal and the Potential for Sustainable Production in the Chicale Regulado, Mozambique. A dissertation presented for the degree of Master of Sciences. University of Edinburgh. 77p.
- Rohit Jindal. Impact Assessment of the Nhambita Community Carbon Project, Mozambique. 408 p. (follow up socio-economic data from 2008)
- Jindal, R. 2004. Measuring the Socio-Economic Impact of carbon Sequestration on Local Communities: An Assessment Study with Specific Reference to the Nhambita Pilot Project in Mozambique. M.Sc. Thesis. University of Edinburgh. 113 p.
- Minihousehold Census (mini census Chicare Regulado).
- Mini Household Census. April 2009.
- Williams, M.; Ryan, C.M.; Rees, R.M.; Sambane, E.; Fernando, J.; Grace, J. 2008. Carbon Sequestration and Biodiversity of Re-growing Miombo Woodlands in Mozambique. Forest Ecology and management. 254: 145-155. Science Direct. [www.science.direct.com](http://www.science.direct.com)
- Furley, P.A.; Rees, R.M.; Ryan, C.M.; Saiz, G. 2008. Savanna Burning and the Assessment of Long-term Fire Experiments with Particular Reference to Zimbabwe. Progress in Physical Geography. 32 (6): 611-634
- Carbon sequestration and biodiversity of regrowing miombo woodlands of Malawi (Walker et al., 2008)
- Policy and procedure Manual (draft)
- Staff CVs
- Training materials, educational movies and reports:
  1. António Serra: Princípios Básicos de Plantação. Guião de Treinamento.
  2. António Serra: Mudanças Climáticas. Manual de Treinamento.
  3. António Serra: Technical Specification Training Manual. Envirotrade Moçambique. Princípios Básicos de Plantação. Guião de Treinamento Mfumaya Nhambita. ECCM. The Edinburgh Centre for Carbon Management/Envirotrade/The University of Edinburgh. Funded by the European Union.
  4. António Serra: Feijão Boer (Ndodze). Guião de Treinamento. Envirotrade Moçambique
  5. Relatório Anual de Actividades 2008-2009. Envirotrade Moçambique
  6. Panflet Fundação Carbono Para Vida. Mozambique Carbon Livelihoods Trust. Contabil.
  7. Seca e Desertificação. Promarte. ABC do Ambiente. 2. VHS – PAL, 51 MIN.
- Pigeon Pea Training manual (slides)
- Tree planting techniques slides

- Treiamento Tecnicos slides
- Trust Fund leaflet
- Portugese Envirotrade leaflet
- Climate change manual
- Farmers selection report for 2008
- Comparison of average survival rate between four communities in Zambezi Project Zone
- Systems for 2009 and Performance Analyss 2009
- Resume – Statistical Report
- Zambezi Database (contracts and sales)
- Zambezi Database (Monitoring 2009)
- Gorongosa Database (contracts and sales)
- Gorongosa Payments File
- 2009 Carbon Calculator Forestry Spreadsheet
- No burning Carbon Calculator
- 2009 Agroforestry Carbon Calculator (older versions seen as well)
- 2006-2009 Forestry Payments and Monitoring Reports
- Contracts, monitoring reports and carbon calculators for all farmers listed as having their sites visited.
- BBC DVD – Taking the credit, 2009
- Conferences attended by project staff
- Williams, M.: Quantifying and monitoring Carbon Stocks in Tropical Woodlands. University of Edinburgh/School of Geosciences.
- Johit Jindal: Payments for Ecosystem Services and Poverty Alleviation. The University of Edinburgh. Michigan State University.
- António Serra: Zambezi Delta Floodings. The Plan Vivo Contribution to Developemnt Strategy
- Powels, P. 2007. Carbon Livelihoods Program. Changing how the World Thinks about Climate Change. Envirotrade. The Independent - 2007
- Ryan, C. Fire and Biospheric carbon Management
- Barbir, J. 2009. Socio-Environmental Approach to Drip Irrigation System Implementation as a Climate Change Adaptation Measure Within N'hambita Community Carbon Project Area, Mozambique. Joint European Master in Environmental Studies. Universitat Autònoma de Barcelona. Technical University of Hamburg-Harburg.
- Appendix G Gorongosa Monitoring Sofala-2008

### **3.3 Field audit methodology description**

The audit team conducted three main activities in the field: on-farm/forest inspections, interviews with land owners and Envirotrade staff, including community coordinators, and interviews with stakeholders. Field evaluation was then followed up on review of documents, databases, and management issues at the Envirotrade camp in Nhambita.

#### On-farm/forest inspection and interviews with landowners

The sites for field visits were selected by taking a representative sample based on start date of contract, type of system employed (the various agroforestry systems or REDD), and location (in both project zones). The aim was to review 2% of the contracts and visit 1% of the producers under contract.

The Gorongosa project zone had approximately 1500 contracted landowners which represents 1500 project areas with different agroforestry systems being employed, dating back to the contract year of 2004-2005. The site selection was based on a random sample balanced by logistical constraints. Some farms were nominated specifically by Envirotrade to demonstrate specific circumstances (for example, to ensure all systems were visited). In addition, within the Gorongosa project zone we visited one of the 21 REDD areas, which is the very biggest area with 5249 ha (others are in a range from 5249 to 4 ha)

The Zambezi project zone has approximately 800 contracted landowners which represents 800 project areas, with different agroforestry systems being employed dating back to the contract year of 2007-2008. The site selection was based on a random sample balanced by logistical constraints.

The farm inspections typically began with the community technician and/or farmer explaining the history of land use on the site and the tree planting associated with the project. The audit team checked this oral history with the files and asked Envirotrade for explanations. The audit team walked each plot to determine how well elements such as tree spacing, growth, survival, species, and planted area matched the records.

The farmer was interviewed to grasp her or his understanding of the project. The audit team also tried to ascertain how satisfied the farmer was with his or her engagement with the project and if there had been any disputes. The farmer was asked about the amount and frequency of payments, the benefits they intend to receive besides carbon payments, expenses they had incurred in project establishment, etc. Figures and statements were checked against the farmers' contracts, the project databases, and payment record folders.

Project coordinators were asked to demonstrate their monitoring and measuring methodologies and techniques with the audit team observing. Audit team members checked recorded data and made some measurements of their own to compare with Envirotrade results.

#### Interviews with Envirotrade staff

Envirotrade staff, including the Envirotrade Projects Director, Project Manager, Operations Managers, Administrator, Science Responsible for Envirotrade Projects, database responsible, NTFP Specialist , community technicians, patrol team, and drivers accompanied the audit team on the entire field visit. Throughout the field visit, Envirotrade staff was informally interviewed by the audit team to ascertain management practices, monitoring methodologies, training practices and needs, and information about the carbon sequestration resulting from the project's implementation.

#### Interviews with stakeholders

During the field visit, several meetings were held with government structures at different level (Sofala Provincial Directorate for the Coordination of Environmental Affairs, Department for Environmental Management, Sofala Provincial Directorate for the Coordination of Environmental Affairs, Department of Natural Resources Assessment/ National Directorate of Lands and Forests, Ministry of Agriculture, Gorongosa District Service for Economic Activities, Púnguè and Mponda Localities Governement), Development Agencies (GTZ), Financial auditing agencies (CONTABIL, LDA ), NGO's (Agência do Desenvolvimento Económico Local de Sofala – ADEL, WWF Mozambique, Associação Rural de Ajuda Mútua-ORAM, CARR

Foundation), and community associations (Association, Natural Resources Management Committee for the Nhambita, Mponda, Mantega, Chirimadzi, and Gorra Communities, microbusiness), community chiefs and members.

The audit team discussed the Envirotrade project with all these stakeholders in order to understand their perspective on the project, legal issues, communication, relationships, etc. The community members were invited to give their general impressions of the project, including its benefits to the community, and to explain how the community viewed the project. The leaders were asked to explain their roles with respect to the project, specifically, their responsibilities for and experiences with substantiating tenure claims and conflict resolution. The local Natural Resources Management Committee members were also asked to identify risks they associated with the project.

**Non-forest sites visited:**

| Date  | Location & site description   | Audit activities  |
|-------|---|---|
| 16/11 | Beira, Sofala Province. Sofala Provincial Directorate for the Coordination of Environmental Affairs                     | Consultation about project impact and relevance for the communities and implementation of activities  |
| 16/11 | Beira, Sofala Province. Sofala Provincial Directorate of Agriculture/ Provincial Forest Services                        | Consultation regarding the project impact and implementation process  |
| 16/11 | NGO <i>Agência do Desenvolvimento Económico Local de Sofala</i> (ADEL) in Beira, Sofala Province                        | Consultation regarding the project impact and relationships   |
| 16/11 | NGO WWF Mozambique, Coordination Office in Beira, Sofala Province   | Consultation regarding the project impact and relationships   |
| 16/11 | Auditing agency CONTABIL LDA in Beira, Sofala Province  | Consultation regarding the auditing process for the project   |
| 16/11 | Department of Natural Resources Assessment/National Directorate of Lands and Forests, Ministry of Agriculture in Maputo | Consultation by phone, regarding deforestation areas in the project zone  |
| 17/11 | Association N'FUMA Nhambita at the Natural Resources Management Committee Headquarters for the Nhambita Community       | Consultation about the project impact, consultation and communication, training, recruitment processes, farm integration and contract system, suggestions for improvement |
| 17/11 | District Services for Economic Activities, Gorongosa District at the Gorongosa Village                                  | Consultation about the project relevance and impact in the project zone   |
| 17/11 | Punguè Local Authorities for the Locality of Punguè, at the Gorongosa Village   | Consultation about the project relevance and impact in the project zone, project consultation and communication, training, recruitment processes                          |
| 18/11 | NGO GTZ based in Beira, Sofala Province   | Consultation by phone regarding the project impact and relationships  |
| 18/11 | NGO ORAM based in Beira, Sofala   | Consultation by phone regarding the project relevance, impact and relationships   |
| 19/11 | TCT Dallman Company in Catapú, Sofala Province  | Consultation about project relevance, impact and relationships  |

|          |  |  |
|----------|--|--|
| 19/11    | Consultations with representatives for Guma, Mponda, Chirimádzi and Gorra communities at the Mponda Primary School | Meeting for consultation about the project relevance and impact in the project zone, project consultation and communication, training, recruitment processes |
| 20/11    | Gorongosa National Park  | Consultation about the impact and relationship with the project.   |
| 20/11    | Microbussiness (sawmill, carpentry, apiaries). Nhambita  | Consultation about the project impact on the community members and its projection in the future.   |
| 16-20/11 | Envirotrade site, Nhambita   | Document review  |

**Agroforestry sites evaluated:**

| Date  | Name / Location                    | Total Area (ha) | Systems / Contract Date  | Audit Activities  |
|-------|------------------------------------|-----------------|--|---|
| 17/11 | Mbulawa Mudoda                     | 5248.83         | REDD 07/08   | Interview with team who protect the REDD area through fire break creation, early burning and patrols. Walk through area. Observation of measurement techniques. Demonstration of stratification techniques. |
| 18/11 | Laurinda Ferreira / Pavua          | 0.48            | Faidherbia 08/09<br>No burning 08/09   | Farmer and technician interview and observation of plantings. Comparison to contract and maps.  |
| 18/11 | Anita Chuva / Pavua                | 0.42            | Faidherbia 08/09<br>No burning 08/09   | Farmer and technician interview and observation of plantings. Comparison to contract and maps.  |
| 18/11 | Bernardo Simbe Chimuala / Pavua    | 3.87            | Gliricidia 05/06<br>Homestead 05/06<br>Boundary 06/07<br>No burning 06/07<br>Faidherbia 08/09<br>(replaced Gliricidia 05/06) | Farmer and technician interview and observation of plantings. Comparison to contract and maps.  |
| 18/11 | Cardoso Ernesto Pavua              | 0.95            | Homestead 08/09<br>No burning 08/09<br>Faidherbia 08/09  | Farmer and technician interview and observation of plantings. Demonstration of monitoring techniques. Comparison to contract and maps.  |
| 18/11 | Deolinda Manuel Nsengo/Munhanganha | 4,42            | Faidherbia 07/08, 08/09  | Farmer and technician interview and observation of plantings. Demonstration of monitoring techniques. Comparison to contract and maps.  |
| 18/11 | Maneca Luis/ Chicare               | 2,54            | Boundary 04-05   | Farmer and technician interview and observation of plantings. Demonstration of monitoring techniques. Comparison to contract and maps.  |
| 18/11 | Chitambe Jorge                     | 16,9            | Boundary 04-05,  | Farmer and technician interview   |

|       |   |       |  |  |
|-------|---|-------|--|--|
|       | João/Nhambita   |       | 05-06, 06-07<br>Faidherbia 08/09<br>Cashew 07-08<br>Homestead<br>08/09                         | and observation of plantings.<br>Demonstration of monitoring<br>techniques. Comparison to contract<br>and maps.                                    |
| 18/11 | Simão<br>Raposo/Nhambita                                | 7,43  | Boundary 04-05,<br>05-06<br>Faidherbia 08/09<br>Cashew 06-07<br>Homestead 08-<br>09            | Farmer and technician interview<br>and observation of plantings.<br>Demonstration of monitoring<br>techniques. Comparison to contract<br>and maps. |
| 18/11 | Chingamoio Antonio<br>Jemuse/Nhambita                   | 11,99 | Boundary 04-05,<br>05-06, 06-07<br>Faidherbia 08/09<br>Cashew 07-08<br>Homestead 06-<br>07     | Farmer and technician interview<br>and observation of plantings.<br>Demonstration of monitoring<br>techniques. Comparison to contract<br>and maps. |
| 18/11 | Maria Francisco<br>/Bue-Maria                           | 2,39  | Boundary (04-<br>05)<br>Cashew (07-08)<br>Faidherbia (08-<br>09)                               | Farmer and technician interview<br>and observation of plantings.<br>Demonstration of monitoring<br>techniques. Comparison to contract<br>and maps. |
| 18/11 | Joanita Miquitaio<br>Jone/Bue-Maria                     | 2,69  | Boundary 05-06<br>Faidherbia 08-<br>09<br>Cashew 07-08   | Farmer and technician interview<br>and observation of plantings.<br>Demonstration of monitoring<br>techniques. Comparison to contract<br>and maps. |
| 18/11 | Francisco Rosa<br>Maibeque/Bue-Maria                    | 0,25  | Cashew (08-09)   | Farmer and technician interview<br>and observation of plantings.<br>Demonstration of monitoring<br>techniques. Comparison to contract<br>and maps. |
| 18/11 | Maria Raete<br>Alfanete/Bue-Maria                       | 2,41  | Boundary 05-06,<br>07-08<br>Faidherbia 08-<br>09   | Farmer and technician interview<br>and observation of plantings.<br>Demonstration of monitoring<br>techniques. Comparison to contract<br>and maps. |
| 18/11 | Ngaite Joalinho<br>Manuel/Nhambita                      | 3,228 | Boundary 04-05,<br>07-08   | Technician interview and<br>observation of plantings.<br>Demonstration of monitoring<br>techniques. Comparison to contract<br>and maps.            |
| 18/11 | Jorge Ernesto Branco,<br>Magalla<br>Zebedia/Munhanganga |       | Owner of the<br>nursery  | Interview about project impact to<br>local communities   |
| 19/11 | Joao Chadreque  | 1,72  | Cashew 07/08   | Farmer and technician interview<br>and observation of plantings.<br>Comparison to contract and maps.   |
| 19/11 | Jose Armando  | 1,45  | Boundary 07/08<br>Homestead<br>07/08<br>Faidherbia 08/09<br>(no contract but<br>trees planted) | Farmer and technician interview<br>and observation of plantings.<br>Comparison to contract and maps.   |

|       |  |      |  |  |
|-------|--|------|--|--|
| 19/11 | Chano Samo                               | 1,06 | Boundary 07/08<br>Homestead<br>07/08<br>No burning<br>07/08  | Farmer and technician interview and observation of plantings. Comparison to contract and maps.   |
| 19/11 | Antonio Mirione                          | 1,43 | Boundary 07/08<br>No Burning<br>07/08  | Farmer and technician interview and observation of plantings. Comparison to contract and maps.   |
| 19/11 | Lucia<br>Henriques/Cherimadzi            | 1,64 | Boundary 07/08   | Farmer and technician interview.   |
| 19/11 | Vena José<br>Duarte/Cherimadzi           | 1,00 | Boundary 07/08   | Farmer and technician interview.   |
| 19/11 | Beti Carlos/Cherimadzi                   | 1,15 | Boundary 07/08   | Farmer and technician interview.   |
| 19/11 | Jose Sacue<br>Quembo/Cherimadzi          | 1    | Boundary 07/08<br>NF 07/08   | Farmer and technician interview and observation of plantings. Comparison to contract and maps.   |
| 19/11 | Dias Dique<br>Melo/Cherimadzi            | 1    | Boundary 07/08   | Farmer and technician interview and observation of plantings. Comparison to contract and maps.   |
| 19/11 | Mponda, Zambezi<br>Delta Area            |      | Nursery owner  | Interview about project impact to local communities  |
| 20/11 | Ernesto Fulai Jesse,<br>Matenga          | 6,37 | Boundary<br>Woodlot<br>Cashew<br>Faidhebia<br>2007/08<br>No burn<br>In Mantega,<br>Mecumbúzi           | Interview to check contract and farm activities, the monitoring process, plants survival, process of farmer involvement with the project |
| 20/11 | Geraldo Luís Lore                        | 0,22 | Homestead<br>2008<br>No burn<br>In Mantega<br>Community,<br>Mecumbúzi                                  | Interview to check contract and farm activities, the monitoring process, plants survival, process of farmer involvement with the project |
| 20/11 | Jose Ismael                              | 0,05 | Homestead  | Interview to check contract and farm activities, the monitoring process, plants survival, process of farmer involvement with the project |
| 20/11 | Ibraimo Fibione<br>Capendecare           | 5,68 | Boundary<br>Boundary<br>Faidherbia 2008<br>Woodlot<br>No burn<br>In Mantega<br>Community,<br>Mecumbúzi | Interview to check contract and farm activities, the monitoring process, plants survival, process of farmer involvement with the project |
| 20/11 | Marta Veríssimo and<br>Adelino Veríssimo | 1,65 | Woodlot 2005<br>Woodlot 2007<br>No burn<br>In Pávua  | Interview to check contract and farm activities, the monitoring process, plants survival, process of farmer involvement with the project |
| 20/11 | Armando Joaquim                          | 1,32 | Cashew 2007<br>Homestead<br>Glicridia  | Interview to check contract and farm activities, the monitoring process, plants survival, process of farmer                              |

|       |                                 |  |                     |  |
|-------|---------------------------------|--|---------------------|--|
|       |                                 |  | No burn<br>In Pávua | involvement with the project                           |
| 20/11 | Mantega Community,<br>Mecumbúzi |  | Nursery owner       | Interview about project impact to<br>local communities |

## Appendix A: PROJECT PROPONENT CONTACT AND SCOPE DETAILS

### 1 Contacts

|  |  |
|--|--|
| <b>Project name:</b>   | Sofala Community Carbon Project                                    |
| <b>Project proponent:</b>  | Envirotrade  |
| Type of organization:  | Company  |
| Contact person, Title:   | Philip Powell, Project Director                                    |
| Address:   | P O Box 679, Wetherby LS22 9BD, UK                                 |
| Tel/Fax/Email:   | +44 1937 579945/ +44 1937573131<br>philip.powell@envirotrade.co.uk |
| <b>Billing contact (if applicable):</b>  |  |
| <b>Project carbon owner (if applicable):</b>   |  |
| Type of organization:  |  |
| Contact person, Title:   |  |
| Address:   |  |
| Tel/Fax/Email:   |  |
| <b>Project aggregator (if applicable):</b>   |  |
| Contact person, Title:   |  |
| Address:   |  |
| Tel/Fax/Email:   |  |
| <b>Project subaggregator, (if applicable):</b>                                       |  |
| <b>Project estimated amount of metric tons of CO<sub>2</sub>e year<sup>-1</sup>.</b> |  |

### 2 Verification Scope

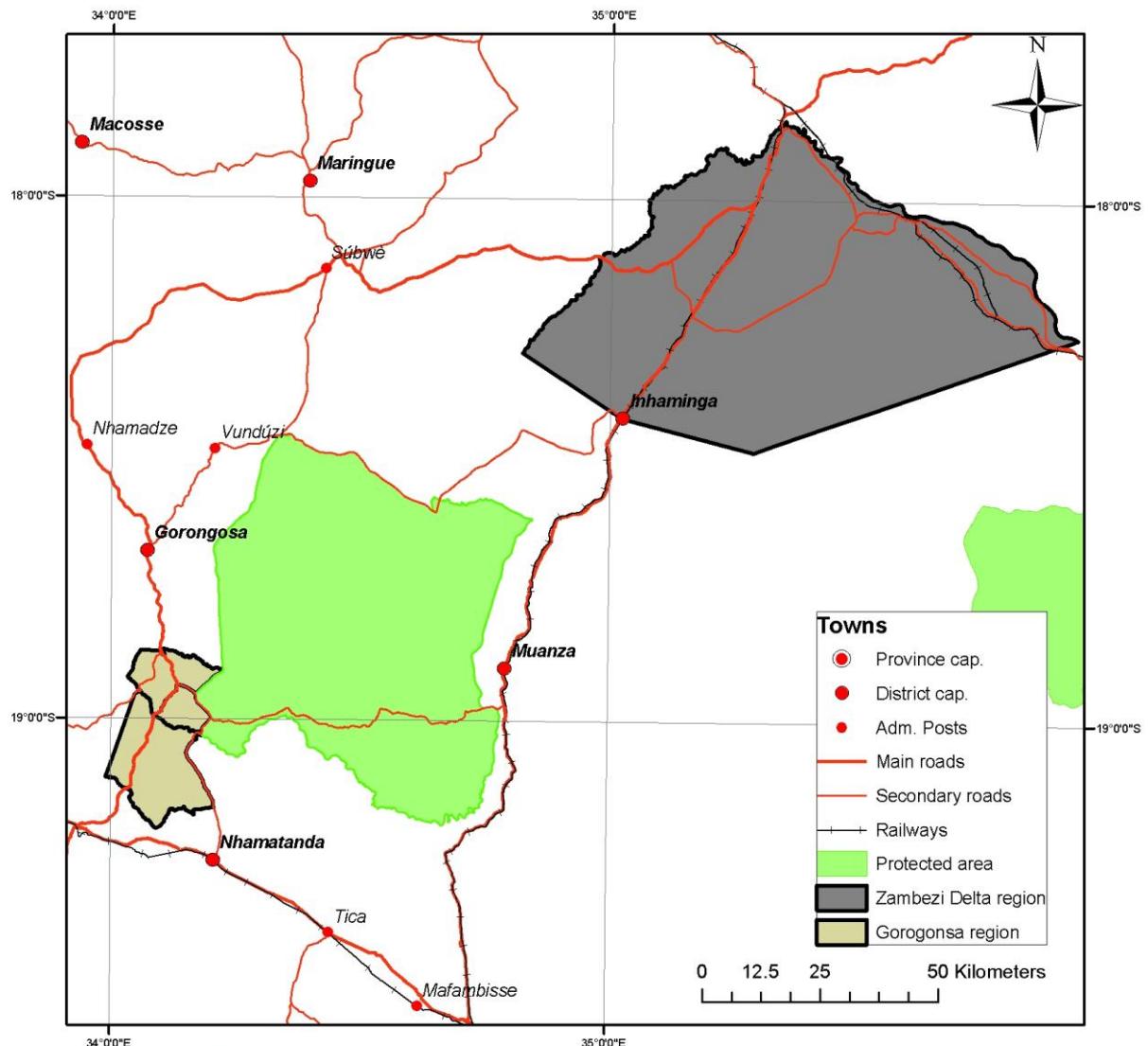
#### 2.1 Change in scope:

|   |   |
|---|---|
| Has the project changed since the previous evaluation in scope of activities, spatial area, and/or temporal period that, in all probability, will materially impact GHG credits?<br><br>Note: If the project has materially changed, the scope of the audit will need to be adjusted appropriately and the GHG standard organization will need to be contacted. | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| If yes, briefly review the changes:   |   |

## 2.2 Spatial scope details:

| Spatial scope  | Description  | Change in Scope (Yes if checked) |
|--|--|----------------------------------|
| Narrative justification of project spatial area in words of proponent: | The Sofala Community Carbon Project aims to develop the community and its environment by far-reaching change in land-use practices. The project covers 2 project zones, in the Gorongosa National Park buffer zone and in the Zambezi Delta, with an area of in 511,392 ha. The land is community owned.   | <input type="checkbox"/>         |
| Project location:  | Sofala province, Mozambique  | <input type="checkbox"/>         |
| Project geographic boundaries:   | Gorongosa National Park buffer zone and in the Zambezi Delta   | <input type="checkbox"/>         |
| Project size:  | 511,392 ha   | <input type="checkbox"/>         |
| Project dominant tree species:   | <i>Faidherbia albida, Anacardium occidentale, Mangifera Indica, Cordia africana, Afzelia quanzensis, Sclerocarya birrea, Tamarindus indica, Zisiphus mauritania, Pterocarpus angolensis, Millettia stuhlmannii, Strychnos innocua, Kigelia africana, Swartzia madagascariensis, Julbernadia globiflora, Brachystegia boehmii, Khaya nyasica, Albizia lebbeck</i> | <input type="checkbox"/>         |
| Project dominant tree age:   | 1-5 years  | <input type="checkbox"/>         |

Site map (insert below)



Envirotrade

### 2.3 Temporal scope details:

| Temporal scope  | Description  | Change in Scope (Yes if checked) |
|---|--|----------------------------------|
| <p>Narrative justification of project length starting with financial closure in words of proponent:</p>                           | <p>Since 2008 the project is a carbon-sales funded project, implemented by project developer Envirotrade Lda.</p> <p>The objective is that: the project moves from a joint donor/investment phase to become dependent on sales of carbon offsets. Projected CO2e offsets from the project exceed one million tonnes and continued sales of VER's should provide income for the project to continue its activities. The communities' capacity for administering elements of the project increases and the local operational entity increases the capacity of the locally recruited staff to adopt roles in the project and its management. The expansion of the project into adjoining areas is determined by the availability of markets and the sale of offsets. Fire and forest management operations carried out by the community begin to become entrenched in the community.</p> <p>After the initial establishment period (3 years) trees grow rapidly; some will continue to grow over 50 years. After 25 years we expect to reach a steady state where annual increments are balanced by annual utilisation rates.</p> <p>After 25 years, if fire control is well-applied and sustainable management successful, carbon stocks remain more or less constant, and the trees themselves yield useful products and so are protected by the community.</p> | <input type="checkbox"/>         |
| <p>Narrative justification of baseline (including discussion of conditions prior to project inception) in words of proponent:</p> | <p>A historic baseline approach was used to anticipate the business as usual scenario assuming that in the absence of the project, deforestation and unsustainable land use would continue unimpeded across the project area.</p> <p>A detailed analysis of deforestation rates was carried out by the University of Edinburgh in the project zone and surrounding areas based on satellite imagery time series analysis. According to the respective research the annual deforestation rate is 2.4% and accordingly in the absence of the project it can be expected that the forest would disappear within 43 years.</p>   | <input type="checkbox"/>         |

|                       |  |                          |
|-----------------------|--|--------------------------|
| Project length:       | During the introductory meeting of the field audit the project proponents explained that the project as a whole had two phases. A ramping up period of approximately 10 years, and a 5 year period of transferring project implementation and governance entirely to the local communities. These future plans were not discussed in the PDD and are of fundamental importance to the design of the project. Meetings with some stakeholders' revealed also a lack of communication on the responsibilities transfer for some of the microbusiness (See CAR 07/10 CLOSED). | <input type="checkbox"/> |
| Carbon credit length: | 100 years  | <input type="checkbox"/> |

## Appendix B: DETAILED AUDIT FINDINGS TO STANDARD

### Principle: **Effective and Transparent Project Governance**

**Criteria: Project has established an effective governance structure. Roles and lines of accountability are clear. The project coordinator has necessary core capabilities.**

|                                     |   |                             |                              |
|-------------------------------------|---|-----------------------------|------------------------------|
| Indicator 1.1.1                     | <p><b>Producers</b></p> <p>Must be small-scale farmers and land-users in developing countries with recognised land tenure or user rights.</p>   |                             |                              |
| Findings from 11 Feb 10 Review      | <p>The project is community based, working in 2 project zones in the Sofala Province (Mozambique, one of the world's poorest countries as per UNICEF, 2003)</p> <p>Most people in the project zone farm on two kinds of land – Machambas, which used to be forestland that has been cleared around homesteads, and Dimbas, which are flood plains of the various seasonal and perennial streams in the area. The average area of a Machambas is 0.94 ha, which is about twice as large as an average Dimba with an area of 0.49 ha.</p> <p>The communities have legal land use rights and are entitled to sell the products arising from their use of the land. This is entrenched in law in Mozambique. The government extends so-called DUATs, which is a license to trade products of the land. Communities in the project zones have obtain or are in the process of obtaining these DUATs.</p> |                             |                              |
| Findings from 19 August 2010 review | N/A   |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |   |                             |                              |

|                                |  |  |  |
|--------------------------------|--|--|--|
| Indicator 1.1.2                | <p><b>Producers</b></p> <p>Must have a registered Plan Vivo for their own piece of land or be part of a group with a Plan Vivo for a piece of community-owned or managed land. Producers should not be structurally dependent on permanent hired labour, and should manage their land mainly with their own and their family's labour force.</p>   |  |  |
| Findings from 11 Feb 10 Review | <p>In some cases Plan Vivos were designed as part of the process for drawing up contracts. Examples were seen of hand drawn, annotated plans that had been drawn in a participatory manner with farmers. However, more recently in the project's history there has been a move away from this approach, rather a GPS mapping tool is used to mark the edge of the plantation area and this is attached to the contract in place of a Plan Vivo. The GPS created maps are not annotated, do not state what system is being used and provide no guidance regarding planning of production on the farmers land. The audit team understand the benefits associated with GPS mapping boundaries associated with better area estimations and the ability to map digitally, however, by replacing the Plan Vivos entirely by a GPS outline an important part of the Plan Vivo process was being missed.</p> <p>From interviews conducted with farmers contracted into the project there was no evidence to suggest that the systems employed were not going to cause the producer's overall agricultural production too become unsustainable or unviable. In fact, the indications were the opposite, that more sustainable systems were being developed.</p> <p>The audit team has confirmed by the interviews that producers were managing their lands without any structural dependence.</p> |  |  |
| Findings from 19 AUGUST 2010   | Envirotrade have defended the move to solely GPS based mapping, advocating that the participatory process that is used to construct the maps is may be as beneficial as  |  |  |

|             |  |  |                              |
|-------------|--|--|------------------------------|
| review      | the production written/drawn plans.<br><br>Plan Vivo was contacted regarding this matter and provided clear guidance on what is required in order for these criteria are met. This does involve the production of annotated maps. The full details of Plan Vivo's requirements for these criteria to be met can be found in section 2.1.9 below. |  |                              |
| Conformance | Yes <input type="checkbox"/>   | No <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS     | <b>CAR 13/10 OPEN</b>  |  |                              |

|                                |   |
|--------------------------------|---|
| Indicator 1.1.3                | <p><b>Administrative:</b></p> <ul style="list-style-type: none"> <li>a) Legal and organisational framework with the ability and capacity to aggregate carbon from multiple land-owners and transact to purchasers, and monitor progress across all project operations. This must include:</li> <li>b) A legal entity (project coordinator) able to enter into sale agreements with multiple producers or producer groups for carbon services;</li> <li>c) Standard sale agreement templates for the provision of carbon services;</li> <li>d) Transparent and audited financial accounts able to the secure receipt, holding and disbursement of payments to producers;</li> <li>e) All necessary legal permissions to carry out the intended activities;</li> <li>f) Mechanisms for participants to discuss issues associated with the design and running of the project.</li> </ul>   |
| Findings from 11 Feb 10 Review | <p>The project has built structures to ensure financial sustainability through the production of timber and NTFPs in the community and through the sale of carbon offsets generated by carbon sequestration and management activities. An independent trust fund (MCLT) has been established to administer the proceeds of the sale of carbon offsets generated by project activities. The audit team checked the budgets of the Project and held a meeting with Contabil, a firm auditing the flow of funds from the carbon sales.</p> <p>Most the organizations (Envirotrade Group, Mozambique Carbon Livelihoods Trust, the University of Edinburgh, the Edinburgh Centre for Carbon Management, and the Administration of the Gorongosa National Park) involved in the project and their responsibilities are clearly described in the PDD. There is no reference to Envirotrade Mozambique Limitada and its relationship with Associação Envirotrade Carbon Livelihoods, nor if the latter is already a legally establish or in-the-process association.</p> <p>There is also a lack of description of the coordinator and project proponent, clarifying if it's Envirotrade Carbon Limited (as by page 3 of the PDD) or only Envirotrade (as by page 2 of the PDD).</p> <p>There are standard contracts for the agroforestry activities, but no template has been seen for the REDD activities.</p> <p>A list of all stakeholders involvement process has been detailed in section G3.8, as well as the communication procedures. This included consultation to the communities and stakeholders through stakeholders summits, meetings, apart from community briefings, meetings with government officials. Documents confirming the consultation and communication process include Chidamba (2004). The team has confirmed these steps through consultations with the communities, receiving input on their involvement in the project design and consultation process.</p> |

|                                     |  |                             |                              |
|-------------------------------------|--|-----------------------------|------------------------------|
|                                     | The project proponents have also included the tools that will be used to continue communication and consultation in the future.  |                             |                              |
| Findings from 19 AUGUST 2010 review | The PDD has been modified by deleting Associação Enviroterade Carbon Livelihoods (which has been created to replace Enviroterade Mozambique Limitada but is not yet officially published in <i>Bulletim da Republica</i> ), and also by describing Enviroterade Carbon Limited as the project developer replacing Enviroterade Limited in early 2009. The PDD has also been completed to include all the team's professional skills. |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             | <b>CAR 18/10 CLOSED</b>  |                             |                              |

|                                     |  |                             |                              |
|-------------------------------------|--|-----------------------------|------------------------------|
| Indicator 1.1.4                     | <b>Technical:</b><br>Able to assist producers in planning and implementing productive, sustainable and economically viable forestry and agroforestry systems, and provide support for silvicultural and other management operations. |                             |                              |
| Findings from 11 Feb 10 Review      | The team of community technicians was able to assist producers in planning and implementing systems that aligned with the goals of the Plan Vivo system.   |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A  |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |  |                             |                              |

|                                     |   |                             |                              |
|-------------------------------------|---|-----------------------------|------------------------------|
| Indicator 1.1.5                     | <b>Social:</b><br>Able to select appropriate target groups, inform groups about the Plan Vivo System and the nature of carbon and ecosystem services and establish effective participatory relationships with producers.  |                             |                              |
| Findings from 11 Feb 10 Review      | Methodological approaches of project impact measurements were provided in this section of the PDD. To carry out the livelihood analysis the project monitors two different groups, namely a control group and the target group, using the Sustainable Rural Livelihoods approach. The PDD describes the indicators to measure community benefits, comparison between with project and without project scenarios. Five asset types are described, namely natural, social, human, physical and financial assets. The meetings with local traditional leaders and producers confirmed such benefits on the different asset types such as the development of community associations, conservation of environmental resources, improvement of infrastructure (e.g. school), communication, or training (e.g. farm activities to improve plants survival)<br>A plan highlights training of community extension workers, forest technicians, staff and workshops organized by the company. The project appears to contribute for continuous knowledge transfer assured also by the establishment of appropriate school programmes. By checking reports and from interview accounts it is clear that training is inclusive of all groups. Availability of training manuals and technical guidelines used, training of forest and agroforestry technicians documented in page 16 (Training materials, educational movies and reports);<br>conferences attended by staff members and articles published on related matters and environmental education materials in page 17 (Conferences attended by project staff) |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A   |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |   |                             |                              |

|                 |                |  |  |
|-----------------|----------------|--|--|
| Indicator 1.1.6 | <b>Social:</b> |  |  |
|-----------------|----------------|--|--|

|                                     |   |                             |                              |
|-------------------------------------|---|-----------------------------|------------------------------|
|                                     | Able to establish land-tenure rights through engaging with producers and other relevant organizations   |                             |                              |
| Findings from 11 Feb 10 Review      | <p>The communities have legal land use rights and are entitled to sell the products arising from their use of the land. This is entrenched in law in Mozambique. The government extends so-called DUATs, which is a license to trade products of the land. Communities in the project zones have obtained or are in the process of obtaining these DUATs, with involvement of communities, local authorities, Community Based Natural Resources Management Committees and traditional leaders.</p> <p>The project has been interacting with organizations such as GTZ, WWF, and ORAM, which gave assistance at the project initial phase in 2000 to place boundaries and community land delimitations to avoid conflicts regarding land rights.</p> |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A   |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |   |                             |                              |

|                                     |  |                             |                              |
|-------------------------------------|--|-----------------------------|------------------------------|
| Indicator 1.1.7                     | <b>Social:</b><br>Able to consult producers effectively on a sustained basis   |                             |                              |
| Findings from 11 Feb 10 Review      | There is a consultation process (see Chidamba 2004) involving communities, local authorities, Community Based Natural Resources Management Committees, and traditional leaders that has been confirmed in the field by the audit team. |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A  |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |  |                             |                              |

|                                     |   |                             |                              |
|-------------------------------------|---|-----------------------------|------------------------------|
| Indicator 1.1.8                     | <b>Reporting:</b><br>Projects must on an annual basis, according to the reporting schedule agreed with the Plan Vivo Foundation: <ol style="list-style-type: none"> <li>Accurately report progress, achievements and problems experienced;</li> <li>Transparently report sales figures and demonstrate resource allocation in the interest of target groups.</li> </ol> |                             |                              |
| Findings from 11 Feb 10 Review      | Annual reports have been provided to the audit team.  |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A   |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |   |                             |                              |

## Principle: Carbon Benefits

**Criteria: Carbon benefits are calculated using recognised carbon accounting methodologies and conservative estimates of carbon uptake/storage that take into account risks of leakage and reversibility.**

|                                |  |  |  |
|--------------------------------|--|--|--|
| Indicator 2.1.1                | Carbon benefits are measured against a clear and credible carbon baseline.   |  |  |
| Findings from 11 Feb 10 Review | <b>Baseline Calculations:</b><br>The project employs three broad project types that require different baseline calculation |  |  |

methods.

### Agroforestry Systems

Firstly, the group of seven agroforestry ‘systems’ whereby trees are planted on machambas (fields), can be grouped and referred to as the agroforestry systems. For each one the baseline is stated in the technical specification and in section CL1.1 of the PDD. The technical specifications for the activities on agricultural land describe the baseline as being static (no loss or gain to carbon stocks over a 100 year period). It was explained that, because of the slash and burn system employed by farmers in the project zones, the static baseline was not intended to be representative of what would actually happen on one piece of land, but rather the net impact of always having a field cleared for farmland. This was considered acceptable, but was not documented, even within the technical specifications. The static baseline was based on field measurements of current carbon stocks of Machambas. The methodology used to quantify current carbon stocks was found to be appropriate.

Section G2.1 of the PDD does not adequately describe the without project land-use scenario. There is no information provided about the likely future land uses on areas where the agroforestry project activities occur.

### No burning system

Secondly, since 2006, farmers have been able to elect not to burn their machambas in order to receive payments. The baseline for the emissions caused by burning are not documented anywhere. There is no mention of emissions reductions from no burning in the PDD and there is no ‘no burning’ technical specification. The value of  $1.0 \text{ t C ha}^{-1} \text{ yr}^{-1}$ , which is used to calculate emissions reductions and payments cannot be traced to any written document, but was believed to have originated from academic staff involved with the project. The amount to be paid for no burning was not included in the contract farmers signed (only attached as a carbon calculator). This had led to some confusion amongst farmers as to what they needed to do to receive the payments.

### REDD system

Thirdly, the project has a “reduced emissions from deforestation and degradation” (REDD) element. In order to calculate a baseline emissions rate, extensive modeling has been conducted, and a deforestation rate of 2.4% is used in conjunction with measured biomass densities of the various forest classes and the proportion of each forest class found in a project area. This approach was found to be suitable and well explained in section G2.1 and G2.3 of the PDD. However, it was understood, after discussions with the project proponents that the deforestation rate of 2.4% was not going to be used in the Zambezi project zone, and that another approach to REDD would be adopted. This plan is not mentioned in any documentation. It was also mentioned that for the earliest REDD contracts a different baseline was used and then the new one retrospectively employed. Due to the lack of clarity over versions of documentation and their use this is not easy to track.

Table 5 of the PDD shows the impact of the deforestation on the remaining carbon stock within the project area. It was explained during the field audit by the project proponents that the deforestation rate of 2.4% was distributed proportionally between the forest types. It was also explained that all credits issued so far had been based on

a carbon loss of 73.3 t CO<sub>2</sub> ha<sup>-1</sup> and that a new version of the technical specification was currently under review by the Plan Vivo Foundation. The history of the methods used to calculate emissions in the past and the recent move to more sophisticated techniques was not found to be well documented.

Table 6 was not explained in the text. For example, there is no definition of the distinction between 'old' and 'new' contracts. In addition, the PDD has yet to explain contracts or define the systems that the project use. As such this table would be difficult for a reader to interpret.

#### Versions of Technical Specifications

It was understood by the audit team that the technical specifications had undergone a number of changes over the period of project implementation. However, due to a lack of version control on documents and a lack of cross referencing between the carbon calculators used to calculate emissions reductions and the technical specifications it was difficult to work out which method had been used to generate each of the emissions reductions credits.

#### **Project Scenario Emissions/Sequestration**

The PDD states that the approach to calculating the changes due to project activities involves calculating the "average net increase in carbon stored in biomass and forest products over a 100 year period relative to the baseline". However, in discussions with the project proponents it became apparent that the modeling exercise done in the CO2FIX model was not based on an assumption that the trajectory of carbon stocks would follow those shown in the model. A different, 'tonne year', accounting method was being implemented, this could not be fully explained at the time of the audit and details of this were not currently documented in the PDD or technical specifications.

Table 9 contains an ex-ante projection of the carbon sequestration over the crediting period. It is not clear what assumptions have been used to create the data presented here or exactly which technical specifications have been used. For example, what is the area assumed for each system? What data is used to calculate the actual removals? How do the units correspond to those in the technical specification?

#### Overestimation in one technical specification

The project proponents explained during the field audit that there has been one case (Faidherbia plantations) where an error had been discovered in the modeling used to calculate emissions reductions by ECCM, the original authors. The issue, whereby carbon sequestration was overestimated, affected contracts signed between 2005 and 2009. An updated technical specification had been made, but not yet used. It was understood by the audit team that the project did not want to punish farmers who signed contracts before the error was discovered by paying them less money because this would undermine trust in the project. The auditors have discussed the matter with the Plan Vivo foundation and it is understood that there has been transparent dialogue between Plan Vivo and Envirotrade on this matter. Plan Vivo and Envirotrade have agreed in principle that a deduction should be made from the risk buffer once the Plan Vivo database is up and running. Envirotrade have not yet documented the quantified impact this will have on their buffer stocks or what exactly the buffer is designed to absorb. See Indicator 2.1.3 below for more details.

To conclude, the approach used to constructing baselines for the projects various elements seems to have been conducted in a scientific and conservative manner.

|                                     |   |
|-------------------------------------|---|
|                                     | However, the dispersal of information on baseline methodologies across the PDD, the various versions of technical specifications makes understanding what has been done difficult. In addition, the baseline for no burning emissions is not documented.  |
| Findings from 19 AUGUST 2010 review | <p><b><u>Overview</u></b></p> <p>The revised PDD (2010-18-04-PDD-CCBA-Sofala-post audit_FINAL) has undergone significant changes to improve the ease with which the reader can understand the carbon benefits of the projects and the methods used to calculate them, Discussions with the Plan Vivo Foundation confirmed that the REDD technical specification was undergoing peer review. A new 'no burning' technical specification has been drafted and submitted for peer review. All the other TSs are set to be updated and re-submitted in November 2010.</p> <p><b><u>Baselines</u></b></p> <p><b><u>Agroforestry</u></b></p> <p>As explained above, the TSs and systems are now clearly explained in the PDD.</p> <p>In section CL1.1 there appear to be errors in the units used in the summary table of expected carbon benefits. For example, the Cashew Technical Specification states, <i>"Carbon sequestration potential over 100 years with a rotation of 60 years on an average quality site with optimal climatic conditions is 37.4 tC/ha above an initial vegetation carbon baseline of 2.8 tC/ha (Sambane, 2005)"</i>.</p> <p>However the table states the baseline to be <math>2.8 \text{ t CO}_2 \text{ ha}^{-1}</math>. It is suspected this leads to a knock on error in the column "Long-term carbon uptake with management".</p> <p><b><u>REDD</u></b></p> <p>In the revised PDD the text accompanying Figure 20 on page 43 explains the relationship of the REDD areas to the baseline deforestation determination exercise. It is now clearly explained in Section G2.3 that the Zambesi Delta area will use a different baseline for REDD that has yet to be determined.</p> <p>In section CL1.1 of the PDD there is an explanation of how technical specifications have evolved over time. Section G2.3 does explain that a carbon value of <math>73.3 \text{ t C ha}^{-1}</math> was used prior to the adoption of the new REDD Technical Specification in 2009, however it is not clear how many credits were created using this value, and whether any corrections had been made or were planned. However, this was found to be a typo, and in fact the original carbon density value used for REDD areas was <math>73.3 \text{ t CO}_2 \text{ ha}^{-1}</math>. In a document called, "Implementation of REDD in Sofala Project" the use of this number , and the history of REDD activities is presented.</p> <p><b><u>The tables that had caused confusion in the original PDD have been removed.</u></b></p> <p>It should be noted that since the technical specification is nt yet approved, there has not been a full assessment against its implementation. To provide an example, the TS states that, there will be an annual assessment of governance structures. This has not been formally documented yet, but drafts are underway. Future compliance with the TS, once approved will need to be verified at subsequent verifications.</p> |

|                 |  |
|-----------------|--|
|                 | <p><u>No burning system</u></p> <p>Section CL1.1 of the PDD now contains an explanation of the methodology for determining the benefits of the 'no burning' system,. A draft technical specification has also been presented (v6). The benefits of the system are conservatively estimated at 1 t C ha<sup>-1</sup> y<sup>-1</sup>. The Technical Specification does reference peer reviewed literature, but the comparison link between the input from agricultural residue and the difference between indigenous forest and agricultural soil carbon was not clear. The values presented in the technical specification relate to losses that occur on conversion and not to the gains that can occur through agricultural residue input.</p> <p>The flowing sentence in the PDD was found to be unclear, "<i>In the project zones this means not burning would correspond to an additional 13.2 tCha<sup>-1</sup> compared to the long term equilibrium when burning (half of difference between 22.8 tCha<sup>-1</sup> and 9.6 tCha<sup>-1</sup>).</i>"</p> <p>The units in the following sentence from page 89 are thought to be a typo, "<i>The carbon dioxide equivalent or carbon credits due to the farmer is therefore 7 x 3.67 or 26 tCha<sup>-1</sup></i>"</p> <p>The Auditors acknowledge that the no burning technical specification has been submitted for peer review as required by the Plan Vivo. Given the relatively small quantities of carbon involved there is not a risk of the outcome of that review affecting the net benefits of the project. In addition there is no evidence to suggest that not burning could lead to increased net emissions. Therefore it was accepted that an OBS would be issued to complete this process and make any required changes by the verification.</p> <p><b>Project Scenario Emissions/Sequestration</b></p> <p>After further discussion with the Project Proponents it was established that a tonne year approach was not in fact used. Rather, the average stock over 100 years was used. This is explained in the Technical Specifications and is acceptable.</p> <p><u>Overestimation in one technical specification</u></p> <p>The change in the Faidherbia Technical Specification has been estimated to 60% of the buffer (number provided by Envirotrade in response to CARs). This approach is undergoing Plan Vivo approval.</p> |
| Conformance     | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>   |
| CAR/OBS         | <b>CAR 01/10 (CLOSED), CAR 02/09 (CLOSED), CAR 03/10( CLOSED), CAR 04/10 (CLOSED)</b><br><b>NEW OBS 05/10, NEW OBS 06/10, NEW OBS 07/10</b>  |
| Indicator 2.1.2 | Carbon benefits are <b>additional</b> , i.e. the project and activities supported by the project could not have happened were it not for the availability of carbon finance. Specifically this means demonstrating, as a minimum:<br>a) The project does not owe its existence to legislative decrees or to commercial land-use initiatives likely to have been economically viable in their own right without payments for ecosystem services; and<br>b) In the absence of project development funding and carbon finance, financial,   |

|                                     |   |
|-------------------------------------|---|
|                                     | social, cultural, technical, ecological or institutional barriers would have prevented the project activity.  |
| Findings from 11 Feb 10 Review      | <p>It was not under the scope of this audit to perform a peer review of the Technical Specifications used by the project, as this is managed under a separate process by the Plan Vivo Foundation. However, samples were checked against the Plan Vivo Standards (section 2.3.3 'requirements for Technical Specifications'). Whilst the new REDD Technical Specification does have an additionality analysis, the other technical specifications being used do not.</p> <p>However, in section G2.2 the PDD presents three barriers to implementation that the project overcomes. These are financial, capacity and compliance with land law barriers. The project was found to be additional as the farmers had neither the technical capacity nor financial means to implement tree planting or sustainable forest management projects.</p> <p>Therefore, whilst the project was found to be additional, and this was documented in the PDD, the technical specifications used did not meet the Plan Vivo standard with respect to the inclusion of additionality demonstration.</p> |
| Findings from 19 AUGUST 2010 review | Envirotrade and Plan Vivo have confirmed that updated Technical Specifications are due to be submitted in November 2010.  |
| Conformance                         | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>  |
| CAR/OBS                             | <b>CAR 05/10 (OPEN)</b>   |

|                                |   |
|--------------------------------|---|
| Indicator 2.1.3                | <p><b>Permanence:</b><br/>Potential risks to permanence of carbon stocks are identified in project technical specifications and effective mitigation measures implemented into project design, management and reporting procedures.</p>   |
| Findings from 11 Feb 10 Review | <p>It was not under the scope of this audit to perform a peer review of the Technical Specifications used by the project, as this is managed under a separate process by the Plan Vivo Foundation. However, the agroforestry technical specifications do not include any analysis of the risks to permanence as required by the Plan Vivo Standards. Furthermore, they do not include risk mitigation measures or state a recommendation for the risk buffer amount. However, it is explained in section G3.4 of the PDD that the after the seven years of payments, the systems are expected to become self-financing and thus there would be no incentive to stop the adopted management activities. In section CL1.3 of the PDD it is explained that a non-permanence risk buffer, "of 10% of the total woodland carbon stock is excluded from the calculated emission reductions, 10% for boundary systems and 15% for all other agroforestry systems". Interrogation of the database revealed that this amount of carbon was indeed being set-aside as a buffer and not being traded.</p> <p>On the other hand, in discussions with the Project Proponent it was stated that the buffer reserve would be used to account for more than the risk to the permanence to the carbon sequestered (or emissions avoided). For example, there had been an error found in the Faidherbia Technical Specification which led to a significant over-estimate in the amount of carbon that would be sequestered. The intention of the project was to make a deduction equivalent of the over-estimate from the buffer. If this is the case, then the buffer is being used as more than a risk to non-permanence buffer and may not be adequately sized. In order to provide transparency, and allow full analysis, the use of the buffer should be clearly defined. In addition, in section CL1.3 of the PDD the 'VCS Guidance for AFOLU Projects' document is referenced, implying that it has been used in relation to the buffer. However, no analysis to demonstrate this has been presented.</p> <p>The latest version of the REDD technical specification currently under peer review does</p> |

|                                     |   |
|-------------------------------------|---|
|                                     | <p>state that a risk buffer of 10% of salable credits will be withheld from the market, however there is no analysis of the risks to permanence or presentation of risk mitigation strategies.</p> <p>It should be noted that the Landscape scale and wide scope of the project (such as the generation of micro businesses) will reduce the risk of non-permanence for all project types. It is evident that the project has been designed in a way to establish long-term, sustainable landuse with the aim of permanently increasing and avoiding reductions of biomass in the project region. In addition, through interviews with farmers contracted to the project it was understood that most farmers saw the plantations as a long term commitment. However, a lack of required documentation, as per the Plan Vivo Standard was seen as a weakness, and to be in non-conformity with the standard.</p> <p>The project management design is fundamentally designed to incentivize permanence in the short term through payments related to performance. In addition, in the case of tree mortality (above an acceptable level defined by the project of 15%), free trees are provided to farmers for replanting. In the longer term, it was explained in the introductory meeting that the project is designed to transfer responsibilities over to the community and withdraw from the area over a set time period. However, these plans are not documented in the PDD, so it is not possible to assess the likely impacts on permanence of the carbon stocks, due to anticipated project management and monitoring.</p> |
| Findings from 19 AUGUST 2010 review | <p>With regard to the missing components of Technical Specifications, Envirotrade and Plan Vivo have confirmed that updated Technical Specifications are due to be submitted in November 2010.</p> <p>The PDD now has more information in section 3.4 with respect to the phases of the project. There is also a new document called, 'Envirotrade SOF Exit Strategy', that clearly presents the exit strategy.</p>   |
| Conformance                         | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>  |
| CAR/OBS                             | <b>CAR 06/10 (OPEN), CAR 07/10 (CLOSED), CAR 08/10 (CLOSED)</b>   |

|                                |   |
|--------------------------------|---|
| Indicator 2.1.4                | <p><b>Permanence:</b><br/>Producers enter into legal sale agreements with the project coordinator agreeing to maintain activities, comply with the monitoring, implement management requirements and re-plant trees felled or lost.</p>   |
| Findings from 11 Feb 10 Review | <p>For the agroforestry systems a contract is signed between Envirotrade and the farmer whereby the parts agree the scope of the service (planting area, system to be used, maintaining works, provision of plants, assistance, monitoring, payment, termination, and conflict resolution).</p> <p>In the contract that the farmers sign for agroforestry projects the amount of penalties that would be applied to them in the case of not meeting the monitoring targets was found to be ambiguous. In practice farmers were being charged a fixed rate of 4 Meticals for every tree that died over an allowed mortality rate of 15% (the allowed mortality rate was increased in the Zambezi Delta project zone in 2008-2009 due to high average mortality rates). The contract was found to be lacking in detail about the penalties that would be applied. These penalties do not correlate, in most cases, with the monitoring indicators in the technical specifications, which normally do not prescribe allowed mortality rates for years 1 to 3 (requiring only a certain percentage of the plot is established). The penalties inflicted were not found to be unreasonable, however the lack of transparency at the outset, and lack of linkages to technical specifications was a concern for the audit team.</p> |
| Findings from 19 AUGUST 2010   | Envirotrade have informed the auditors that they are committed to producing a monitoring protocol within 6 months and have also shared a draft version of this  |

|             |   |                             |                              |
|-------------|---|-----------------------------|------------------------------|
| review      | protocol. The contracting procedure is also outlined in this document. It is acknowledged by the auditors that deviances from the monitoring related payments have been a dynamic reaction to the realities of the project on the ground, and that Envirotrade's policy of replanting trees that dies should ensure carbon sequestration targets are met so long as the growth projections are sufficiently conservative. |                             |                              |
| Conformance | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS     | <b>CAR 09/10 (CLOSED)</b>   |                             |                              |

|                                     |  |
|-------------------------------------|--|
| Indicator 2.1.5                     | <b>Permanence:</b><br>As a minimum, a 10% risk buffer is deducted from the saleable carbon of each producer, where the level of buffer is recommended in the technical specifications according to the level of risk identified, and subsequently reviewed annually following annual reporting.  |
| Findings from 11 Feb 10 Review      | As mentioned in the findings for indicator 2.1.3 the risk buffer amount was not documented in the technical specification, which were not written by Envirotrade. However, it was documented in the PDD and was over the 10% minimum. In section CL1.3 of the PDD it is stated that, "The size of risk buffer (based on the perceived risk associated with the project activity) should be constantly reviewed and maintained." However, the evidence for this risk analysis having been conducted was not seen. |
| Findings from 19 AUGUST 2010 review | The project's commitment to update the TS's in line with the Plan Vivo requirements will satisfy this criteria once complete. They must take show evidence of buffer review in the updates.  |
| Conformance                         | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>   |
| CAR/OBS                             | <b>CAR 05/10 (OPEN)</b>  |

|                                     |   |
|-------------------------------------|---|
| Indicator 2.1.6                     | Potential sources of <b>leakage</b> have been identified and effective mitigation measures implemented.   |
| Findings from 11 Feb 10 Review      | <p>Leakage is not mentioned in the agroforestry technical specifications as mandated by the Plan Vivo Standards. In the REDD technical specification that is currently under peer review there is a section on addressing leakage. There is no technical specification for no-burning so leakage is not addressed there.</p> <p>The PDD identifies two probable types of leakage, "displacement of agricultural development" and "displacement of charcoal mining." The PDD also documents the possible sources of leakage adequately. Section CL2.1 does not link the sources or types of leakage back to the specific project activities, but it is understood that the risks for the project as a whole are covered, with one exception. The exception is that there is no mention of the leakage risk from no burning. For example, a farmer, may burn his agri-residues on a field not enrolled in the scheme.</p> <p>In section CL2.2 of the PDD the management measures to mitigate leakage are described. These are considered acceptable and it was acknowledge by the auditors that the project was designed in a way that would minimize leakage.</p> <p>However, in section CL2.3 of the PDD it is stated that any leakage that does occur a risk buffer will be used and a reference is made to the Voluntary Carbon Standard is made. The Voluntary Carbon Standard's risk buffer approach is not used for leakage, so it is not understood what this means. Please see <b>CAR 08/10</b> regarding documentation of the buffer account.</p> |
| Findings from 19 AUGUST 2010 review | <p>The project's commitment to update the TS's in line with the Plan Vivo requirements will satisfy this criteria once complete.</p> <p>The mis-reference to the VCS risk buffer has been removed.</p>  |

|             |                              |  |                              |
|-------------|------------------------------|--|------------------------------|
| Conformance | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS     | <b>CAR 10/10 (OPEN)</b>      |  |                              |

|                                     |   |                             |                              |
|-------------------------------------|---|-----------------------------|------------------------------|
| Indicator 2.1.7                     | Carbon sales are <b>traceable</b> and recorded in the database.   |                             |                              |
| Findings from 11 Feb 10 Review      | The audit team analysed the databases that were being used to record and track carbon sequestration/avoided emissions volumes from contracts signed by farmers through to sales. The databases were well developed, and accurately recorded information provided in the contracts. The project was waiting for the official Plan Vivo Database to be ready, which would provide a common platform for Plan Vivo projects. |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A   |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |   |                             |                              |

|                                |  |
|--------------------------------|--|
| Indicator 2.1.8                | Project has an effective process for <b>monitoring</b> the continued delivery of the ecosystem services, where: <ol style="list-style-type: none"> <li>Monitoring is carried out against <b>targets</b> specified in technical specifications;</li> <li>Monitoring is carried out accurately using <b>indicators</b> specified in technical specifications;</li> <li>Monitoring is accurately documented and <b>reported</b> to the entity responsible for disbursing payments to producers;</li> <li><b>Corrective actions</b> are prescribed and recorded where targets are not met, and followed up in subsequent monitoring.</li> </ol>  |
| Findings from 11 Feb 10 Review | <p>This indicator requires that there be a link between the monitoring that is carried out and the technical specifications. The agroforestry technical specifications, contain monitoring indicators for the first ten years of the project, however the monitoring sections do not cover all the required points stated in section 3.2.3 of the Plan Vivo Standard. In discussions with the project propend it was stated that the indicators did not link to the CO2Fix model used to generate the emissions reductions calculations. Therefore it is not clear how the monitoring links to ensuring that the emissions reductions predicted ex-ante are accomplished. In addition there did not appear to be a mechanism for linking the results of the monitoring to verifying the ex-post quantified emissions reductions. It was explained to the audit team that the monitoring plans were going to under-go a revision to bring them in line with CO2Fix models, but this was not mentioned in the PDD.</p> <p>There is more detail in the REDD technical specification, but this is currently under peer review by Plan Vivo to determine its conformance with the standard. REDD monitoring is carried out by Eduardo Mondlane University.</p> <p>There is no written documentation on the monitoring plan for no burning.</p> <p>(a) Since there are no targets defined in the agroforestry Technical Specifications, the monitoring that is conducted is not carried out against them.</p> <p>(b) The indicators in the technical specification vary between the systems. For example, the <i>Gliricidia sp</i> Technical specification states that in year 1 100% of the plot must be established with 85% survival, whilst for mango, by the end of year 1, only 35% of the plot need be established (no survival rate demanded). In later years an average diameter at breast height of trees greater than a threshold value was the monitoring indicator. The monitoring forms that were seen by the audit team indicated that for all systems, the survival rate in the first year was being used as an indicator, and if survival fell below a threshold penalties in the form of reduced payments to cover</p> |

|                                     |  |
|-------------------------------------|--|
|                                     | <p>tree replacement costs were issued. This was inconsistent with those technical specifications that did not specify a survival rate in the first year. However, it was consistent with the contract that farmers signed.</p> <p>(c) Envirotrade conducts the monitoring and makes the payments. The system of recording monitoring results was seen by the audit team and found to be appropriate.</p> <p>(d) The monitoring forms contain sections for recording corrective actions for farmers to improve upon for the next monitoring event.</p> <p>The PDD documents some elements related to the monitoring strategy. However, it did not constitute a description that allowed a reader to understand the link between the technical specifications and what the community technicians actually do when monitoring. For example, there is no mention in section CL3.2 of the monitoring frequency, the forms that are used, or the process for quality checking the results of the community technicians.</p> <p>Both community technicians and the forest area patrol were asked to demonstrate the monitoring activities in the field and were found to be competent at carrying out the required tasks and documenting the results.</p> |
| Findings from 19 AUGUST 2010 review | The project's commitment to update the TS's in line with the Plan Vivo requirements will satisfy this criterion once complete. In addition, a draft monitoring protocol was submitted to the auditors which contains the annual process for monitoring all systems. The PDD now contains an overview of monitoring and worked examples of what happens when tree mortality occurs.   |
| Conformance                         | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>   |
| CAR/OBS                             | <b>CAR 11/10 (OPEN), CAR 12/10 (CLOSED)</b>  |

|                                     |  |
|-------------------------------------|--|
| Indicator 2.1.9                     | <p>Producers <b>draw up Plan Vivos</b> as part of a voluntary and participatory process that ensures proposed land-use activities:</p> <ol style="list-style-type: none"> <li>Are clear, appropriate and consistent with approved technical specifications for the project;</li> <li>Will not cause producers' overall agricultural production or revenue potential to become unsustainable or unviable.</li> </ol>  |
| Findings from 11 Feb 10 Review      | <p>In some cases Plan Vivos were designed as part of the process for drawing up contracts. Examples were seen of hand drawn, annotated plans that had been drawn in a participatory manner with farmers. However, more recently in the project's history there has been a move away from this approach, rather a GPS mapping tool is used to mark the edge of the plantation area and this is attached to the contract in place of a Plan Vivo. The GPS created maps are not annotated, do not state what system is being used and provide no guidance regarding planning of production on the farmers land. The audit team understand the benefits associated with GPS mapping boundaries associated with better area estimations and the ability to map digitally, however, by replacing the Plan Vivos entirely by a GPS outline an important part of the Plan Vivo process was being missed.</p> <p>From interviews conducted with farmers contracted into the project there was no evidence to suggest that the systems employed were not going to cause the producer's overall agricultural production to become unsustainable or unviable. In fact, the indications, were the opposite, that more sustainable systems were being developed.</p> |
| Findings from 19 AUGUST 2010 review | <p>Envirotrade have defended the move to solely GPS based mapping, advocating that the participatory process that is used to construct the maps is may be as beneficial as the production written/drawn plans.</p> <p>Plan Vivo were contacted regarding this matter and the following response was received:</p> <p><i>"The following elements should be incorporated into the Sofala project's process for</i></p>   |

|             |  |
|-------------|--|
|             | <p><i>developing plan vivos:</i></p> <ul style="list-style-type: none"> <li><i>.Annotation by the producer to demonstrate informed, voluntary participation and engagement in land-use planning</i></li> <li><i>.Producers keep original/receive a copy of their plan vivo so they have a visual record of their agreed activities</i></li> <li><i>.Plan vivos show the following:</i> <ul style="list-style-type: none"> <li><i>o Key surrounding landmarks/features (e.g. house, river) to help with visual identification of area</i></li> <li><i>o Area where Plan Vivo activities are to be implemented and what the activity is, which shows/states what the previous land-use is (e.g. neglected/degraded land – to show that Plan vivo activities are not displacing food production or causing clearance of important natural ecosystems or clearance of existing forest etc) plus size of area</i></li> <li><i>o Land-uses surrounding the Plan Vivo activity (to show how Plan Vivo activities are integrated in to existing livelihood activities. This can have benefits later, as technicians, auditors will see how other land-uses have changed and potentially have been affected by the project activities)</i></li> <li><i>o The date on which it was drawn up</i></li> <li><i>o Tech spec being used plus species chosen and spacing (unless these are written on the sale agreement that the producer also has a copy of)</i></li> </ul> </li> </ul> <p><i>If this information is included, the plan vivo becomes a tool that can be used by the project coordinator and the producer to track and monitor the performance of the system over time.</i></p> <p><i>I think the elements of Envirotrade responding to the CAR are:</i></p> <ol style="list-style-type: none"> <li><i>1. To define a process and describe time-frame for implementation (that is realistic for the project) plus means of training community technicians (e.g. develop one-pager of guidance with a couple of example plan vivos, laminate and make available to community technicians, plus introduce new process in trainings, workshops)</i></li> <li><i>2. To decide a process and time-scale for annotation of existing plan vivos - the project already has hundreds of ecosystem service agreements so the Foundation will discuss how best to address this. It is likely to be a challenge and will need to be implemented over a number of months. We will look to the project to determine what is a realistic time-frame for them." (A. Morrison, Pers Comm. 02 July 2010)</i></li> </ol> |
| Conformance | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>   |
| CAR/OBS     | <b>CAR 13/10 (OPEN)</b>  |

### Principle: **Ecosystem benefits**

|                 |   |
|-----------------|---|
| Indicator 3.1.1 | Planting activities are restricted to <b>native and naturalised species</b> . |
|-----------------|---|

|                                     |   |                             |                              |
|-------------------------------------|---|-----------------------------|------------------------------|
| Findings from 11 Feb 10 Review      | <p>Only native species such as <i>Afzelia quanzensis</i>, <i>Milletthia stuhlmannii</i>, <i>Albizia</i> sp., <i>Khaya anthotheca</i>, <i>Faidherbia</i> sp. and naturalized fruit trees including cashewnut trees, citros, avocado, or <i>Cajanus cajan</i> are used in the project areas as indicated in the PDD section G3.2. The use of native or naturalized species is consistent with the project objective of using sustainable land and management and agricultural practices. The project carries out the reforestation activity of degraded agricultural land using boundary planting and woodlot systems with native species. This was observed during the field visits to farmers machambas and woodlots. This issue is explained in the PDD section B1.4.</p> <p>In the project areas, other species such as <i>Leucaena leucocephala</i> and <i>Gliricidia sepium</i> had been used respectively considered/used in the past, after advice by ICRAF. The use of these species stopped a couple years ago, and this was confirmed through observations during the field visits and confirmations by the farmers. It has not been indicated, though, the extent and steps for <i>Gliricidia</i> sp. use being phased out.</p> <p><i>Cajanus cajan</i> is now the only naturalized species being promoted and used in the project areas and the reasons behind its selection are, according to the project staff, the literature and the survey that was carried in 2009 by Clare Ghee whose paper is in review 2010, related with its attribute of soil improvement by nitrogen fixation and because the plant produces beans, a much appreciated food by local communities.</p> <p>It's also worth noting that seeds origin is not mentioned in the PDD: i.e. <i>Faidherbia</i> sp. comes from Malawi.</p> |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A   |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             | <b>OBS 01/10, OBS 02/10</b>   |                             |                              |

|                                     |   |
|-------------------------------------|---|
| Indicator 3.1.2                     | Naturalised (i.e. non-invasive) species are eligible only where they can be shown to have compelling livelihood benefits and: <ol style="list-style-type: none"> <li>Producers have clearly expressed a wish to use this species;</li> <li>The areas involve are not in immediate proximity to conservation areas or likely to have any significant negative effect on biodiversity;</li> <li>The activity is still additional i.e. the producers in the area are not doing this activity or able to do this activity without the intervention and support of the project;</li> <li>The activity will have no harmful effects on the water-table.</li> </ol>  |
| Findings from 11 Feb 10 Review      | <i>Cajanus cajan</i> is a naturalized species, used as food and appreciated and valued by local communities. <i>Cajanus cajan</i> beans consumption by the communities is likely to improve diet nutrition and increase household income. The species improves soil fertility since fixing nitrogen and is not known to have potential negative impacts on biodiversity. Fruit trees were indicated as important for nutrition and diet improvement and cash. During the field visits the audit team confirmed with the farmers that farmers themselves select the system and plants they want, after training and explanations by the project technicians about the advantages of each system and species. |
| Findings from 19 AUGUST 2010 review | N/A   |
| Conformance                         | Yes <input checked="" type="checkbox"/>   |
| CAR/OBS                             |   |
| Indicator 3.1.3                     | Wider <b>ecological impacts</b> have been identified and considered expressly including impacts on local and regional biodiversity and impacts on watersheds.   |

|                                     |   |                             |                              |
|-------------------------------------|---|-----------------------------|------------------------------|
| Findings from 11 Feb 10 Review      | <p>The project is expected to benefit the region in terms of biodiversity, ecosystems connectivity, habitat quality improvement and the environment in an integrated manner, at the project earlier stages. Explanations are provided in the PDD section B1.1. According to the project staff an the Provincial Directorate for the Coordination of Environmental Affairs, studies on environmental impact assessment were undertaken even though not regarded as essential by this body, due to the project's nature.</p> <p>Table 14 in the PDD summarizes the benefits resulting from project activities when addressing biodiversity.</p> |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A   |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |   |                             |                              |

### Principle: **Livelihood Benefits**

|                                     |   |                             |                              |
|-------------------------------------|---|-----------------------------|------------------------------|
| Indicator 4.1.1                     | <p>Project has undergone a <b>producer/community-led planning process</b> aimed at identifying and defining sustainable land-use activities that serve the community's needs and priorities.</p>  |                             |                              |
| Findings from 11 Feb 10 Review      | <p>All local producers, community leaders such as <i>Régulos</i>, <i>Sapandas</i> and Natural Resources Management Community Committee confirmed that they have been consulted and involved in the project planning process.</p> <p>The report by Chidamba (2004) documents the steps taken by the project to address communities interests and to assist in the project design to ensure maximization of benefits both for the communities as well as for the project.</p> <p>The PDD explains in section G3.8 the process of involving communities through consultations, meetings, briefings and summits with stakeholders, a scoping study conducted in 2002 and traditional ceremonies with local traditional authorities. In section G3.9 the PDD gives an account of the process of discussions with the traditional leaders and community associations regarding the CCBA. The communication process ensured also that the provincial government was informed about the same matter. Section G.10 in the PDD document explains also the steps taken to solve disputes, which involves consultations and mediation by the District Administrators.</p> |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A   |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |   |                             |                              |

|                                |  |  |  |
|--------------------------------|--|--|--|
| Indicator 4.1.2                | <p>Mechanisms are in place for continued training of producers and participation by producers in project development.</p>  |  |  |
| Findings from 11 Feb 10 Review | <p>The visited farmers stated that during all monitoring visits by the project technicians to the producers, they receive assistance and technical advice.</p> <p>During the field visits the audit team was able to observe contract records per farmer visited, records of the monitoring days and evaluations of the farm condition and activities performed by the farmer, which are recorded by the project technician.</p> <p>In section G.3.2 the PDD details the process of training the farmers in agroforestry techniques such as species selection, seed collection, seedlings production, tree maintenance and appropriate agroforestry management practices. The project strategy</p> |  |  |

|                                     |  |                             |                              |
|-------------------------------------|--|-----------------------------|------------------------------|
|                                     | <p>include a participatory analysis of the results, in order to demonstrate the advantages of the taught techniques and promote greater adoption. Exchange visits are also part of the training process strategy, so that farmers that have already benefited from the project support assist others joining the project. The same section indicates annual monitoring of the activities in the farm. Monitoring is performed by the community technicians, linked to carbon payments from carbon sequestered in the trees. These reports by the community technicians are checked by project supervisors.</p> <p>The PDD explains in section CM3.1 the methods to be applied by the project team to measure socio-economic impacts through periodic surveys and questionnaires regarding quantity and diversity of crops being produced and marketed as for community impact monitoring.</p> <p>Studies on Livelihood Assessment were carried out in 2004 and 2008, with the next scheduled for 2012.</p> |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A  |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |  |                             |                              |

|                                     |   |                             |                              |
|-------------------------------------|---|-----------------------------|------------------------------|
| Indicator 4.1.3                     | <p>Project has procedures for entering into <b>sale agreements</b> with producers based on saleable carbon from Plan Vivos, where:</p> <ol style="list-style-type: none"> <li>Producers have recognised carbon ownership via tenure or land-use rights;</li> <li>Agreements specify quantity, price, buyer, payment conditions, risk buffer, and monitoring milestones;</li> <li>An equitable system is in place to determine the share of the total price which is allocated to the producer;</li> <li>Producers enter into sale agreements voluntarily.</li> </ol>  |                             |                              |
| Findings from 11 Feb 10 Review      | <p>The farmers demonstrated to have understood the ownership of the carbon of the trees in their lands and they have shown to be sure of their land-use rights, consistent with the country Land Law. The communities have legal land use rights and are entitled to sell the products arising from their use of the land. This is entrenched in law in Mozambique. The government extends so-called DUATs, which is a license to trade products of the land. Communities in the project zones have obtain or are in the process of obtaining these DUATs.</p> <p>Producers join the project on a voluntary basis and during the field visits they referred to have agreed with the sales platform although not clearly able to explain how the carbon and related trade works. The PDD clearly explains, in section G3.11, the flow of carbon credits. An independent trust fund (MCLT) has been established to administer the proceeds of the sale of carbon offsets generated by project activities. The audit team checked the budgets of the Project and held a meeting with Contabil, a firm auditing the flow of funds from the carbon sales.</p> <p>The contracts, which must be signed by both the farmer and the project manager provide specifications on planting area, system to be used, maintaining works, provision of plants, assistance, monitoring, payment, termination, and conflict resolution.</p> |                             |                              |
| Findings from 19 AUGUST 2010 review | N/A   |                             |                              |
| Conformance                         | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS                             |   |                             |                              |
| Indicator 4.1.4                     | Project has an effective and transparent process for the timely administration and recording of <b>payments to producers</b> , where:   |                             |                              |

|                                     |   |
|-------------------------------------|---|
|                                     | <p>a) Payments are delivered in full when monitoring is successfully completed against milestones in sale agreements;</p> <p>b) Payments are recorded in the project database to ensure traceability of sales.</p>  |
| Findings from 11 Feb 10 Review      | <p>Producers confirmed getting payments upon monitoring completion taking into account the contracts for example the discounts due to penalties.</p> <p>During the audit a sample of over 40 contracts were viewed by the audit team. They were checked for completeness and their accuracy with respect to the details recorded on the project database. In all cases, the contracts were found to be accurate with what was recorded in the project database. However, some contracts were signed after the start date of the activities, some from the Zambezi Delta project zone were not dated and some did not have the section on payment amount completed.</p> <p>After discussions with the project proponents it arose that in some cases, that trees were planted before the amount of payment was calculated, which was different from how the project was operating in the Gorongosa project zone. It was concluded by the audit team that there was not sufficient documentation of the process for recruiting farmers, planning, contract drafting, signing, planting etc. Because of this it was not possible to determine what the intended best practice was for the process and if or when deviations from this were acceptable.</p> |
| Findings from 19 AUGUST 2010 review | Enviroterade have shared a draft monitoring plan which formalizes the contracting process. The full version of this which is due within 6 months.   |
| Conformance                         | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>  |
| CAR/OBS                             | <b>CAR 09/10 (CLOSED)</b>   |

## Appendix C: Assessment of the PDD to the Plan Vivo Standards

The Plan Vivo Standard states,

*“The Plan Vivo Project Design Document (PDD) (formerly Operational Manual) is a compilation of all key information on the project governance structure, its technical design and internal processes.” (Plan Vivo Standard Section 3.2.4).*

The PDD that has been submitted has been designed based on the CCBA standard, but with the intention of covering both the Plan Vivo and CCBA standard. The Plan Vivo PDD template structure was not used, so here we present an analysis of the PDD to the information required in the Plan Vivo PDD according to the Plan Vivo Project Template. An old version of the PDD, which was written using the Plan Vivo template was seen by the audit team, however it was understood that this has been superseded by the new version.

### **Section A. Aims and objectives**

>> Please provide a brief (under 250 words) description of the nature of the project and its key aims and objectives.

|  |  |                             |                              |
|--|--|-----------------------------|------------------------------|
| Findings from 1st review: 11 FEB 10                  | The PDD contains an executive summary. The PDD, in section G3.1 also briefly summarises the projects major objectives.       |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | The PDD is now significantly clearer in explaining the different project activities and how they relate to the project aims. |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  |  |                             |                              |

### **Section B. Site information**

#### **1. Project location and boundaries**

>> Please describe the location and initial size (in hectares) of the project area(s), including country, state and district (or national equivalent).

>> Provide a map with geographical co-ordinates, demonstrating the project boundary/boundaries. Describe the nature of the project area (i.e. large numbers of smallholder *plan vivos* in a certain project area, or a single project boundary for forest conservation for example).

Note that detailed boundaries of *plan vivo* plots and management areas should not be included here, as these will be provided within individual Plan Vivo management plans.

|  |  |
|--|--|
| Findings from 1st review: 11 FEB 10                  | In section G1.1 of the PDD figure 1 shows the location of the two “project areas”. However, based on discussions with the project proponents, the areas actually represent the two project zones, which are part of one project. The ‘Basic Information’ section on page 3 of the PDD describes the project as being in the district of Gorongosa. However, one of the project zones is outside of this district. This inconsistent treatment of the two project zones, and a bias towards documenting project information for primarily the Gorongosa portion continues throughout the PDD, as does the inconsistent use of the terms ‘project area’ and ‘project zone’. The boundaries for the project zone are clearly shown in Figure 7 of the PDD in section G3.3. There are two distinct project zones called Gorongosa and Zambezi. The other two figures in section G3.3 show the locations of the project sites for the agroforestry activities and the areas of the community carbon conservation areas. |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | The PDD now describes explicitly the two project sites: The project considers now one project zone (Sofala province) with 2 project sites (the Gorongosa project site and the Zambezi Delta project site) where the project areas are located (over a thousand   |

|             |  |                             |                              |
|-------------|--|-----------------------------|------------------------------|
|             | <p><i>machambas</i> (fields) with an average of 1.03ha plus the REDD areas, from 2 ha to 5.249 ha). This is reinforced by adding new maps, and differentiating the activities and attributes in each zone.</p> <p>In addition the PDD has been reworked to be more consistent in the terminology employed.</p> |                             |                              |
| Conformance | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS     | <b>CAR 14/10 (CLOSED), CAR 15/10 (CLOSED)</b>  |                             |                              |

## 2. Description of the project area

>> Please provide a description of the current physical, climatic and ecological conditions in the project area and a brief account of any recent changes in land use and ecosystems.

>> Please describe the current land-use of the project area and how it will be affected by the project.

|  |  |                             |                              |
|--|--|-----------------------------|------------------------------|
| Findings from 1st review: 11 FEB 10                  | <p>In section G1.2 of the PDD there is a thorough description of vegetation types. However, the descriptions do not include the condition of the vegetation types. For example one savanna site visited during the audit had evidence of illegal logging for honey collection. The vegetation types include 'tropical (miombo) woodland', 'savanna', 'rivine or riparian forest', 'secondary woodland' and 'machambas.' Attributes of these types are shown in table 1. It would appear that a rigorous scientific method has been used to acquire this data. However, what is not clear in the PDD is how the permanent plots and areas sampled relate to the two project zones (Gorongosa and Zambezi). For example, the inventory referenced in the first line of section G1.2 refers to the 'Nhambita community forest, so it is not clear how applicable this is to other areas.</p> <p>The methods used to classify forest type and gather biomass data within one of the REDD project areas was demonstrated during the field audit. The methods were carried out accurately by well trained project staff. The methods were appropriate to the aims of estimating carbon stocks and stratifying the landscape.</p> <p>Section G1.1 of the PDD contains basic physical and climatic data for the project zones.</p> <p>The PDD describes the current land use in section G1.6, the main uses are subsistence agriculture and forest resource utilisation.</p> |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | <p>The PDD now describes explicitly the two project sites: The project considers now one project zone (Sofala province) with 2 project sites (the Gorongosa project site and the Zambezi Delta project site) where the project areas are located (over a thousand <i>machambas</i> (fields) with an average of 1.03ha plus the REDD areas, from 2 ha to 5.249 ha). This is reinforced by adding new maps and differentiating the activities and attributes in each zone.</p> <p>The condition of the vegetation types is now described in section G1.2 of the PDD. In addition, monitoring carried out by Eduardo Mondlane University (MOU signed) will determine the condition in the future.</p>   |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  | <b>CAR 14/10 (CLOSED), CAR 16/10 (CLOSED)</b>  |                             |                              |

>> Provide a description of any rare or endangered species or high conservation value habitats or protected areas in project area or in surrounding areas. Where such areas apply, describe whether and how this affects or places constraints on the project design or implementation.

|                                     |   |
|-------------------------------------|---|
| Findings from 1st review: 11 FEB 10 | <p>The project highlights its focus on protection of concerned ecosystems in section G.1.7 of the PDD. The information was confirmed in consultations to documents such as (MICOA, 2008; Marzoli, 2008); local NGO's namely GTZ, WWF and government authorities such as the Provincial Directorate for Environmental Affairs and Provincial Forest Services of the Provincial Directorate of Agriculture.</p> |
|-------------------------------------|---|

|  |  |
|--|--|
|  | No specific HCV assessment has been carried out though. Some regional documents related to the importance of the miombo forest have been listed in the PDD, but there is no link with the particularities of the values in the project zones.  |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | <p>Envirotrade has used the ProForest HCVF toolkit to comprehensively determine the HCV in the project sites, with a result of 63.7% of the project area within one of the 6 HCV categories. Four different categories, grouping different HCV, have been appointed and maps have been included in the PDD:</p> <ul style="list-style-type: none"> <li>• High biodiversity closed canopy forests, such as gallery/riverine forests and dry tropical forests</li> <li>• Protected areas (Inhamitanga Forest Reserve)</li> <li>• Woody vegetation on steep slopes</li> <li>• Culturally important areas</li> </ul> <p>General management recommendations have been included in the PDD for these categories. In the Plan Vivo annual report progress on protection and maintenance of HCV zones are to be documented to test the effectiveness of the measures taken.</p> <p>The monitoring plan has been already outlined to some extent (using community technicians, the University Eduardo Mondlane, satellite imagery, questionnaires, surveys, and others) to check their status and it is expected to be finished within 6 months after validation.</p> |
| Conformance  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>   |
| CAR/OBS  | <b>CAR 17/10 (CLOSED)</b>  |

### **Section C: Community and livelihood information**

#### **1. Target communities/groups**

>>Please identify the target groups that will be engaged in the project.

|  |   |
|--|---|
| Findings from 1st review: 11 FEB 10                  | PDD section G.1.5 describes the communities involved in the project activities where cultural aspects, religion, community homogeneity and institutional structures are provided including the traditional structure managed by the traditional authorities. PDD however focused on the Gorongosa area in the Gorongosa District.   |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | The PDD now describes explicitly the two project sites: The project considers now one project zone (Sofala province) with 2 project sites (the Gorongosa project site and the Zambezi Delta project site) where the project areas are located (over a thousand <i>machambas</i> (fields) with an average of 1.03ha plus the REDD areas, from 2 ha to 5.249 ha). This is reinforced by adding new maps and differentiating the activities and attributes in each zone. |
| Conformance  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>  |
| CAR/OBS  | <b>CAR 14/10 (CLOSED)</b>   |

#### **2. Socio-economic context**

>> Please provide brief information on communities living in the vicinity of the project area, including main livelihoods and sources of income.

>>Describe how the project area is currently used by these communities or local land-owners. Describe how the project activities may affect existing uses of the project area or surrounding vicinity.

|                                     |  |
|-------------------------------------|--|
| Findings from 1st review: 11 FEB 10 | PDD section G1.5, page 16, describes Nhambita community socio-economic situation, characterized by great poverty, no regular source of income, endemic diseases, high illiteracy levels and lack of investments. Some NGO's though, have developed |
|-------------------------------------|--|

|  |   |                             |                              |
|--|---|-----------------------------|------------------------------|
|  | activities as to organize local communities and foster income activities, A Livelihood Assessment Study was carried out in 2004, with a follow up study in 2008 to monitor development progress. Projects like Envirotrade among others are likely to improve smallholder welfare in particular and that of the communities in general. |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | N/A   |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  |   |                             |                              |

### 3. Ownership of carbon benefits (land-tenure)

>> Please describe the basis upon which the project participants have clear, undisputed ownership to the carbon benefits arising from the project and are able to enter into long-term ecosystem service agreements (and under what conditions if any).

E.g. Small-holders are able to enter agreements as they are the private landowners, or communities are able to enter into agreements as they have written user-right agreements for the land in question.

Attach any documentary evidence in Appendices.

>>Please describe the process for establishing land-tenure for each smallholder or community entering the project.

>>Describe any disputes that may be likely to arise in the project relating to land-tenure and how they would be addressed and resolved.

|  |   |                             |                              |
|--|---|-----------------------------|------------------------------|
| Findings from 1st review: 11 FEB 10                  | Communities and individual farmers enter the project on a voluntary basis. Reports such as Chidamba (2004) document the process of community and farmers' involvement and the consultation that resulted in the design of the project. ORAM, an NGO that operated then in the project area, assisted with the legal aspects of land tenure. The communities have legal land use rights and are entitled to sell the products arising from their use of the land. This is entrenched in law in Mozambique. The government extends so-called DUATs, which is a license to trade products of the land. Communities in the project zones have obtain or are in the process of obtaining these DUATs. The account is provided in section G1.6 of the PDD. According to local government authorities at the <i>Posto Administrativo</i> level, the project encouraged communities to register and get their land use rights on traditional lands. Conflicts solving process has been described in a general and flexible way, mainly related with land occupation rights and land use title. Conflicts over land disputes are getting fewer as the land law establishes provisions for increased role of local communities and traditional authorities. |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | N/A   |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  |   |                             |                              |

## Section D: Project governance and community participation

### 1. Project organisational structure

>>Please provide a description of the organisational structure and governance of the project, including an organisational diagram. There must be an overall 'project coordinator' that takes overall responsibility for the project and reporting to the Plan Vivo Foundation.

>>Please state how each actor or entity participates in the project, and how they are represented in project organisational structures (e.g. individual producers may be represented through a group committee).

>> Please provide a brief description of the management capacity of the organisations involved to implement a long-term community land-use project.

Evidence may include an annex detailing key staff skills, or evidence of previous project experience.

Please complete table D1.

|  |   |                             |                              |  |
|--|---|-----------------------------|------------------------------|--|
| Findings from 1st review: 11 FEB 10                  | <p>Most the organizations (Enviroterade Group, Mozambique Carbon Livelihoods Trust, the University of Edinburgh, the Edinburgh Centre for Carbon Management, the Administration of the Gorongosa National Park) involved in the project and their responsibilities are clearly described in the PDD. There is no reference to Enviroterade Mozambique Limitada and its relationship with Associação Enviroterade Carbon Livelihoods, nor if the latter is already a legally establish or in-the-process association.</p> <p>There is also a lack of description of the coordinator and project proponent, clarifying if it's Enviroterade Carbon Limited (as by page 3 of the PDD) or only Enviroterade (as by page 2 of the PDD). While key functions of the involved organizations have been provided, a table including Legal Status of Provider and Directors /Trustees has not been documented.</p> <p>In section G4.2 of the PDD the key technical skills that will be required to implement the project successfully are not documented. The previous section G4.1 does state the responsibilities of the project but without a list of key skills, the absence of gaps is not easy to detect. The prior experience of the management team is not stated.</p> <p>During the field audit, observations suggested that the management team have adequate experience and competence to execute the project successfully. However, this has not been documented.</p> |                             |                              |  |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | <p>The PDD has been modified by deleting Associação Enviroterade Carbon Livelihoods (which has been created to replace Enviroterade Mozambique Limitada but is not yet officially published in <i>Bulletim da Republica</i>), and also by describing Enviroterade Carbon Limited as the project developer replacing Enviroterade Limited in early 2009. The PDD has also been completed to include all the team's professional skills.</p>  |                             |                              |  |
| Conformance  | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |  |
| CAR/OBS  | <b>CAR 18/10 (CLOSED), CAR 19/10 (CLOSED)</b>   |                             |                              |  |

## 2. Relationship to national organisations

>>Please describe if and how the project relates to any national organisations (e.g. national forestry authorities or environmental agencies) and programmes. Does the project require government approval to operate? If so, written approval should be included in the Appendices.

|  |  |                             |                              |
|--|--|-----------------------------|------------------------------|
| Findings from 1st review: 11 FEB 10                  | According to the government officials at the Province level in the environment and agricultural sectors, the project has support from government and has complied with the laws. |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | N/A  |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  |  |                             |                              |

## 3. Community-led design and livelihood benefits

>>Please describe how target groups will be recruited and initiated into the project and how informed and voluntary and informed participation will be ensured.

>>Please describe how target groups were involved in the initial development and design of the project and how the proposed activities have been designed to ensure they support and diversify livelihoods.

>>Describe how continued involvement and community consultation will be ensured (e.g. through workshops/meetings).

|                                     |  |
|-------------------------------------|--|
| Findings from 1st review: 11 FEB 10 | The PDD section G3.2 describes how communities and individual farmers enter the project, a voluntary process. It was also confirmed during the field visits and consultation to the community associations, traditional leaders, individual farmers, local |
|-------------------------------------|--|

|  |  |                             |                              |
|--|--|-----------------------------|------------------------------|
|  | government authorities that recruitment is not discriminatory. Reports such as Chidamba (2004) document also the consultation process that resulted in the design of the project and community and farmers involvement in the project. |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | N/A  |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  |  |                             |                              |

#### 4. Technology transfer and training

>>Please provide a description of the technology transfer and training that will be provided by the project. How will local organisations and/or producers take on long-term roles relating to sustainable management and monitoring? What roles and responsibilities will be transferred to the community level over time and how will this be achieved?

|  |  |                             |                              |
|--|--|-----------------------------|------------------------------|
| Findings from 1st review: 11 FEB 10                  | <p>Section G3.2 provides information on training for the development of sustainable natural resources management including carbon. The community is also given assistance in forest management planning. Training activities include identification and tree species selection, seeds collection, nursery techniques, seedlings handling, planting and maintenance, forest measuring and inventory. Appropriate agricultural practices have also been emphasized during the training, such as the drip irrigation vegetable gardening in order to decrease clearing forest areas for agricultural land. Non timber forest products such as bee keeping has been part of training, reforestation of agricultural lands and timber extraction based on inventory information. Results of such training include existing nurseries owned by local farmers. Two such nurseries were visited during field inspection. Several training manuals used by the project in their training sessions were verified during field visits, namely <i>Princípios Básicos de Plantação. Guião de Treinamento</i> by Serra, A.; <i>Mudanças Climáticas. Manual de Treinamento</i> by Serra, A.; <i>Technical Specification Training Manual. Envirotrade Moçambique. Princípios Básicos de Plantação. Guião de Treinamento Mfumaya Nhambita. ECCM. The Edinburgh Centre for Carbon Management/Envirotrade/The University of Edinburgh. Funded by the European Union. By Serra, A.; Feijão Boer (Ndodze). Guião de Treinamento. Envirotrade Moçambique; awareness planlet: Panlet Fundação Carbono Para Vida. Mozambique Carbon Livelihoods Trust. Contabil.</i> and a documentary: <i>Seca e Desertificação. Promarte. ABC do Ambiente. 2. VHS – PAL, 51 MIN</i></p> <p>During the introductory meeting of the field audit the project proponents explained that the project as a whole had two phases. A ramping up period of approximately 10 years, and a 5 year period of transferring project implementation and governance entirely to the local communities. These future plans were not discussed in the PDD and are of fundamental importance to the design of the project. Meetings with some stakeholders' revealed also a lack of communication on the responsibilities transfer for some of the microbusiness.</p> |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | <p>The PDD now has more information in section G3.4 with respect to the phases of the project. There is also a new document called, 'Envirotrade SOF Exit Strategy', that clearly presents the exit strategy. The project proponent has also organized a meeting with the Natural Resources Committee of Nhambita on April 14 2010 to clarify this, and the auditors have checked the minutes of that meeting.</p>   |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  | <b>CAR 07/10</b>   |                             |                              |

#### 5. Project financial structure

>>Please provide a description of the financial structure for the project, showing how benefits will be distributed in the project, and the approximate proportions of carbon finance to be received by the project coordinator and all other project participants and beneficiaries (including producers and community groups).

>>Please include a diagram showing how funds will flow through the project.

|  |  |                             |                              |
|--|--|-----------------------------|------------------------------|
| Findings from 1st review: 11 FEB 10                  | In section G3.11 exhaustive explanation has been provided on the adopted financial mechanism, the organizational structure of the project according to Plan Vivo specifications and the Mozambique carbon Livelihoods Trust and the flow of goods/funds. The PDD highlights their strategy to ensure financial sustainability through the production of timber, non-forest products and carbon. Figure 11 shows the project organizational structure with reference to the Plan Vivo specifications. Some explanations given led to the REDD activities only (i.e. 1 <sup>st</sup> paragraph on page 58) while actually being applicable to all of them, creating confusion. |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | N/A  |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  | <b>OBS 04/10</b>   |                             |                              |

### **Section E: Project activities and impacts**

#### **1. Description of the Plan Vivo technical specifications (methodologies)**

>>Please complete table E.1 to provide details of the afforestation, reforestation, agroforestry, forest management, forest restoration and/or forest conservation systems to be applied within the project to generate quantifiable ecosystem services (1 row per technical specification).

Only enter technical specifications which have been approved or have been submitted for approval by the Plan Vivo Foundation.

|  |  |                             |                              |
|--|--|-----------------------------|------------------------------|
| Findings from 1st review: 11 FEB 10                  | The PDD does not contain a tabulation of Technical Specifications to the Plan Vivo requirements. In addition, the Technical Specifications used by the project have undergone numerous version changes, and are in different status's of approval. The versions, the periods for which they were used, the differences between them and the current status according to the Plan Vivo Standard was not documented anywhere. This makes tracing the changes and the scale of their impacts difficult. |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | Section G3.2 of the PDD now contains the required table. There is now transparency around the versions of technical specifications that have been used.  |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  | <b>CAR 20/10 (CLOSED)</b>  |                             |                              |

#### **2. Duration of project activities and crediting period**

>>Please provide a description of the timescales for the following activities; project establishment; pilot activities; scaling-up; crediting period used to calculate saleable carbon credits from carbon uptake or emissions reductions.

|                                     |   |
|-------------------------------------|---|
| Findings from 1st review: 11 FEB 10 | The crediting period is defined as being 100 years. Farmers receive the money from credit sales ex-ante over a seven year period. After seven years it is expected that the activities are self financing. The justification for using this system is thorough and follows the Plan Vivo system.<br><br>The implementation schedule is defined, although it was found to be incomplete. There was a trial phase in 2002 with 53 farmers. A research pilot ran from August 2003 – August 2008 where numerous activities including establishing community associations, |
|-------------------------------------|---|

|  |  |
|--|--|
|  | <p>building nurseries, conduction baseline assessments and training. The project has been fully operative since 2008. Maps are provided that show the various phases of expansion spatially (Figure 7). However, after discussions with the project proponents it appears that the REDD related project activities rolled out on a slightly different time period. This is not documented here.</p> <p>In addition, during the introductory meeting of the field audit the project proponents explained that the project as a whole had two phases. A ramping up period of approximately 10 years, and a 5 year period of transferring project implementation and governance entirely to the local communities. These future plans were not discussed in the PDD and are of fundamental importance to the design of the project.</p> |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | The PDD now has more information in section G3.4 with respect to the phases of the project. There is also a new document called, 'Enviroterade SOF Exit Strategy', that clearly presents the exit strategy.  |
| Conformance  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>   |
| CAR/OBS  | <b>CAR 07/10 (CLOSED)</b>  |

### 3. Carbon benefits of project activities

>>Please complete table E.2 to provide details of the carbon benefits per hectare of each technical specification (1 row per technical specification).

|  |   |
|--|---|
| Findings from 1st review: 11 FEB 10                  | Table 8 in section CL1.1 tabulates some of the information required by table E.2 of the Plan Vivo PDD template; however, it does not include all the information.   |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | <p>A new table in section CL1.1 now includes all the required information.</p> <p>In section CL1.1 there appear to be errors in the units used in the summary table of expected carbon benefits. For example, the Cashew Technical Specification states, <i>"Carbon sequestration potential over 100 years with a rotation of 60 years on an average quality site with optimal climatic conditions is 37.4 tC/ha above an initial vegetation carbon baseline of 2.8 tC/ha (Sambane, 2005)"</i>. These errors are not present in the carbon calculator.</p> <p>However the table states the baseline to be 2.8 t CO<sub>2</sub> ha<sup>-1</sup>. It is suspected this leads to a knock on error in the column "Long-term carbon uptake with management".</p> |
| Conformance  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>  |
| CAR/OBS  | <b>CAR 21/10 (CLOSED), NEW OBS 05/10</b>  |

### 4. Livelihood and other socio-economic impacts

>>Please provide a description of the main expected impacts of project activities on the participants and communities in the surrounding project area.

|                                     |   |
|-------------------------------------|---|
| Findings from 1st review: 11 FEB 10 | <p>The project indicates in the PDD to benefit a wide range of stakeholders starting from individuals in the business and forest communities. The financial beneficiaries from the sales include the more than a thousand farmers and the community associations. For them, the income has provided livelihood transformations and protection and restoration of forest resources apart from development some necessary infrastructure such as schools. The project seeks that a minimum of two-thirds of revenues from carbon credit sales return to local community, which is done in the form of contracted payments to farmers and community activities, a community fund. and also via payment for in-country services.</p> <p>Section G3.11 provides a description of the adopted financial mechanism, the organizational structure of the project according to Plan Vivo specifications and the Mozambique carbon Livelihoods Trust and the flow of goods and funds. The PDD explains the strategy to ensure financial sustainability both through the production of</p> |
|-------------------------------------|---|

|  |   |                             |                              |
|--|---|-----------------------------|------------------------------|
|  | <p>timber and non-forest products and carbon. Figure 11 shows the project organizational structure with reference to the Plan Vivo specifications.</p> <p>A detailed account is presented in section G2.4 on socio-economic impacts in “without project” scenario for the several indicators, such as source of income, food production, natural resources use. The audit team confirmed this information through field observations and accounts from reports (Rohit 2008), and also by interviews with farmers, Community Based Natural Resources Management Committees, and other relevant NGO’s such as ORAM, ADEL, GTZ, WWF, specially on source of income, food production, natural resources use.</p> <p>According to consulted local NGO, the project existence in the project region helped to ease tense relationships between the Gorongosa National Park and the surrounding communities, but project activities are positively appreciated by the communities and NGO’s consulted, saying that the project factor attracted communities from inside the park to the buffer zones where communities were able to use agricultural practices in their farms and as a consequence reduce pressure to natural resources and illegal hunting. A local partner project stated that the project promoted better use and management of natural resources including wildfire control and increased income from micro-business (carpentry, nurseries, honey). The project proponents have also divergences with some managing members of Gorongosa NP, but steps have been taken to solve existing issues.</p> |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | N/A   |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  |   |                             |                              |

## 5. Ecosystem impacts

>>Please provide a description of the main expected impacts of project activities on the local environment and ecosystems.

>>Please complete table E.3.

|  |  |
|--|--|
| Findings from 1st review: 11 FEB 10                  | <p>The project is expected to benefit the region in terms of biodiversity, ecosystems connectivity, habitat quality improvement and the environment in an integrated manner, at the project earlier stages. Explanations are provided in the PDD section B1.1. According to the project staff at the Provincial Directorate for the Coordination of Environmental Affairs, studies on environmental impact assessment were undertaken even though not regarded as essential by this body, due to the project’s nature.</p> <p>Table 14 in the PDD summarizes the benefits resulting from project activities when addressing biodiversity. Nevertheless, a summary table of expected impacts of project activities on key environmental services by technical specification, as required on table E3, was not provided.</p> |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | A table has been added to B1.1 which conforms with Plan Vivo requirements.   |
| Conformance  | Yes <input checked="" type="checkbox"/>  |
| CAR/OBS  | <b>CAR 21/10 (CLOSED)</b>  |

## 6. Measures to address risks and ensure permanence

>>Please provide a description of the measures used within the project to address risk and potential non-permanence of carbon uptake and storage by vegetation and soils.

>>Please summarise the measures used to address the main risks in Table E.4.

>>Please identify the percentage of carbon benefits that will be held as a risk buffer by the project as insurance against unexpected losses or underachievement of carbon benefits.

|  |   |  |                              |
|--|---|--|------------------------------|
| Findings from 1st review: 11 FEB 10                  | <p>In section G3.5 of the PDD six risks are identified. These are; "risk of flooding", "risk of fire", "social risks", "institutional capacity risks", "financial risks" and "institutional/political risks". Each risk has a mitigation action explained.</p> <p>During interviews with stakeholders that the audit team conducted, these were also the main risks identified.</p> <p>However, the risks have not been presented in a table similar to E.4. As a result the risks have not been categorised as high medium or low.</p> |  |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | <p><b>The risks have been categorized in accordance with Plan Vivo in section G3.5.</b> However, it is missing a column to categorize the leakage risk.</p>   |  |                              |
| Conformance  | Yes <input type="checkbox"/>  | No <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  | <b>CAR 23/10 (OPEN)</b>   |  |                              |

## 7. Measures to address leakage

>>Please provide a description of the potential means by which project activities could give rise to leakage (unintended releases of GHGs outside the project boundary) and how the project will manage the risk of leakage.

>>Please summarise the measures used to address leakage in Table E.4.

|  |   |  |                              |
|--|---|--|------------------------------|
| Findings from 1st review: 11 FEB 10                  | <p>See findings for indicator for 2.1.6. Leakage was adequately described in the PDD but not in the Technical Specifications.</p> <p>However, the risks have not been presented in a table similar to E.4 [sic]. As a result the risks have not been categorised as high medium or low.</p> |  |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | <p>A leakage table similar to PV's table E.4 (note there are two E.4's in the Plan Vivo guidance template) has been added to section CL2.2 of the PDD. The table is completed well however, it is missing a column to categorize the leakage risk.</p>                                      |  |                              |
| Conformance  | Yes <input type="checkbox"/>  | No <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  | <b>CAR 23/10 (OPEN)</b>   |  |                              |

## 8. Additional activities to be supported by the project:

>>Please describe any additional businesses or livelihood improvement activities that will be supported by the project (e.g. carpentry or beekeeping). How will their management be structured? How will benefits be distributed?

|  |   |                             |                              |
|--|---|-----------------------------|------------------------------|
| Findings from 1st review: 11 FEB 10                  | <p>The communities involved in the project benefited from changes brought by the project such as safe water, schools, non timber forest products (namely honey from beekeeping) and microbusinesses such as carpentry, sawmill.</p> |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | N/A   |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  |   |                             |                              |

## SECTION F. Additionality of project and project activities

>>Please describe how the carbon impact of the project is additional to what would have occurred in the absence of the project and support of carbon finance.

>>Please confirm that the project activities are not required under any law or regulatory framework, and is not commercially viable in its own right.

>>Describe any barriers that exist to implementing and maintaining project activities. Describe how the project interventions and availability of carbon finance will overcome these barriers.

|  |  |                             |                              |
|--|--|-----------------------------|------------------------------|
| Findings from 1 <sup>st</sup> review: 11 FEB 10      | The PDD, in section G2.2 presents three barriers to implementation that the project overcomes. These are financial, capacity and compliance with land law barriers. The project was found to be additional as the farmers had neither the technical capacity nor financial means to implement tree planting or sustainable forest management projects. |                             |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | N/A  |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>  | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  |  |                             |                              |

## **SECTION G: Monitoring and technical support plan**

### **1. Monitoring of carbon indicators**

>>Please describe the indicators that will be used to monitor achievement of intended project impacts.

>>Describe frequency of monitoring and how monitoring results will be recorded.

>>Where communities are to be involved in monitoring activities at a local level, please describe who will be responsible for verifying the quality of monitoring and how quality will be checked.

|  |   |  |                              |
|--|---|--|------------------------------|
| Findings from 1 <sup>st</sup> review: 11 FEB 10      | Please see indicator 2.1.8 for details of the climate monitoring. The PDD lacks an operational level description of the monitoring that takes place. During the audit, the team viewed evidence of completed monitoring sheets and was satisfied that monitoring was being conducted. |  |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | N/A   |  |                              |
| Conformance  | Yes <input type="checkbox"/>  | No <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  | <b>CAR 12/10 (CLOSED), CAR 11/10 (OPEN)</b>   |  |                              |

### **2. Monitoring of environmental impacts of the proposed activities:**

>> Please complete table G.1, with descriptions of how the environmental impacts of project activities will be monitored. Please indicate any key thresholds or indicators that may be used to set specific management interventions or project reviews.

|  |  |  |                              |
|--|--|--|------------------------------|
| Findings from 1 <sup>st</sup> review: 11 FEB 10      | Biodiversity variables were selected (trees being the focus) and described in section B3.1; It was indicated and explained that an increase of tree biodiversity is likely to occur. The frequency of monitoring and reporting, as indicated in G.3.3, would be annual monitoring of tree biodiversity at the same time as annual monitoring of forest management areas. While annual reporting for biodiversity is expected, as per PV procedures, this is not indicated in the PDD, nor exist a table showing methods of monitoring environmental impacts of proposed activities as required by table G1 of the PV PDD template. |  |                              |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | The PDD has been updated in B3.3 to include impacts, methods, and thresholds. Nevertheless, a column with the baselines as required in the PV PDD template is still missing  |  |                              |
| Conformance  | Yes <input type="checkbox"/>   | No <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  | <b>CAR 24/10 (OPEN)</b>  |  |                              |

### **3. Monitoring livelihood and socio-economic impacts**

>> Please complete table G.2., with descriptions of how the livelihood and other socio-economic impacts of project activities will be monitored.

|   |  |  |  |
|---|--|--|--|
| Findings from 1 <sup>st</sup> review: 11 FEB 10 | PDD section CM3.1 describes the community impact monitoring based on the Livelihood Assessment Study carried out in 2004 with a follow up in 2008. Documents |  |  |
|---|--|--|--|

|  |  |
|--|--|
|  | <p>include Rohit (2004) and Rohit (2008). Impact is assessed on the local income, local food production and gender. Methods of measurement such as periodic questionnaire based on the baseline survey will be used for the income area of impact; surveys on the quantity and diversity of produced crops, external sales will be conducted by the project team for food production area of impact while periodic surveys using standard questionnaires will be applied for the gender area of impact.</p> <p>The monitoring results are distributed as part of the project's annual reporting process to Plan Vivo. However the audit team has seen very different PV annual reports (2006-08), without a clear plan with variables and frequencies to be followed-up. As above, it doesn't exists a table showing methods of monitoring socio-economic impacts of proposed activities as required by table G2 of the PV PDD template.</p> |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | The PDD has been updated to include the methods of monitoring related to socio-economic aspects ( sections G3.4 and CM3.1)   |
| Conformance  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>   |
| CAR/OBS  | <b>CAR 25/10 (CLOSED)</b>  |

#### 4. Technical support and review:

>>Please describe how continued technical support and training will be provided to participants, such as tree nurseries or agroforestry extension support.

|  |   |
|--|---|
| Findings from 1st review: 11 FEB 10                  | Section G3.2 provides information on training for the development of sustainable natural resources management including carbon. The community is also given assistance in forest management planning. Training activities include identification and tree species selection, seeds collection, nursery techniques, seedlings handling, planting and maintenance, forest measuring and inventory, Appropriate agricultural practices have also been emphasized during the training, such as the drip irrigation vegetable gardening in order to decrease clearing forest areas for agricultural land. Non timber forest products such as bee keeping has been part of training, reforestation of agricultural lands and timber extraction based on inventory information. Results of such training include existing nurseries owned by local farmers. Two such nurseries were visited during field inspection. Several training manuals used by the project in their training sessions were verified during field visits, namely <i>Princípios Básicos de Plantação. Guião de Treinamento</i> by Serra, A.; <i>Mudanças Climáticas. Manual de Treinamento</i> by Serra, A.; <i>Technical Specification Training Manual. Envirotrade Moçambique. Princípios Básicos de Plantação. Guião de Treinamento Mfumaya Nhambita. ECCM. The Edinburgh Centre for Carbon Management/Envirotrade/The University of Edinburgh. Funded by the European Union. By Serra, A.; Feijão Boer (Ndodze). Guião de Treinamento. Envirotrade Moçambique; awareness planflet: Panflet Fundação Carbono Para Vida. Mozambique Carbon Livelihoods Trust. Contabil. and a documentary: Seca e Desertificação. Promarte. ABC do Ambiente. 2. VHS – PAL, 51 MIN</i> |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | N/A   |
| Conformance  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>  |
| CAR/OBS  |   |

#### SECTION H. Compliance with the law

>> Please describe how any local, national or regional laws or regulations affect the project area or implementation of the project and explain how the project will ensure compliance with them.

|                   |   |
|-------------------|---|
| Findings from 1st | Mozambique has ratified the United Nations Convention on Climate Change in 1994 |
|-------------------|---|

|  |   |                             |                              |
|--|---|-----------------------------|------------------------------|
| review: 11 FEB 10  | <p>and the Kyoto Protocol to the United Nations Convention on Climate Changes in 2005 with which the project is consistent.</p> <p>The Government of Mozambique has set legal framework to ensure appropriate natural resources management including the recognition of community participation in the processes. By the Decree n.º 12/2006, of June 15th, the Ministry for the Coordination of Environmental Affairs was designated as the national authority for implementation of the Clean Development Mechanism in Mozambique and related issues. The Ministry for Coordination of Environmental Affairs is currently leading the process to establish the National Strategy for Reduced Emissions by Deforestation and Degradation. According to the Provincial Directorate for Environmental Affairs in Sofala and the Provincial Forest Services, the project has complied with national laws such as the National Afforestation Strategy and the National Afforestation Strategy which aim to improve livelihoods, reduce poverty by using plantations in degraded and cleared forest. Since the start of community management in Mozambique, focus has been placed on Forest Reserves where community management experiences were undertaken. With this in view, community management committees were created, natural resources management interest groups as well as training of community surveyors.</p> <p>As the audit team has checked, the project involves the project community, who implements sustainable natural resources use and agriculture practices for carbon emission reduction.</p> |                             |                              |
| Findings from 2 <sup>nd</sup><br>review: 19<br>AUGUST 2010 | N/A   |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  |   |                             |                              |

## **SECTION I. Certification or evaluation to other standards**

>> Please state if the project is certified or approved, or has applied for certification or approval under any other carbon standard or programme.

>> Describe how any credits generated under another scheme will be cancelled or not used to ensure against double-selling of carbon benefits.

|  |   |                             |                              |
|--|---|-----------------------------|------------------------------|
| Findings from 1st<br>review: 11 FEB 10                     | The PDD is written using the template of the CCBA. On the title page it is stated that the project is written according to CCB standards. There is actually no mention that the PDD has been designed to Plan Vivo standards, although it is stated that the project is a Plan Vivo project and uses Plan Vivo systems. |                             |                              |
| Findings from 2 <sup>nd</sup><br>review: 19<br>AUGUST 2010 | The title page and executive summary are now clear on the scope of the PDD and the involvement with Plan Vivo.  |                             |                              |
| Conformance  | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CAR/OBS  | <b>CAR 27/10 (CLOSED)</b>   |                             |                              |

## **Annexes**

- **Annex 1: List of responsible staff and contact information**
- **Annex 2: Information regarding public and other sources of co-funding**
- **Annex 3: Technical specifications**
- **Annex 4: Producer/group agreement template**
- **Annex 5: Monitoring plan**
- **Annex 6: Database template**
- **Annex 7. Example forest management plans**

- **Annex 8. Permits and legal documentation**
- **Related Documents**
- **Annual Reports**
- **Verification Reports**
- **Corrective Action Reports**

|  |   |
|--|---|
| Findings from 1 <sup>st</sup> review: 11 FEB 10      | The PDD is said, on the title page to be presented, "without annexes". However, the PDD does have one annex within it. This is Annex I, "Relevant and respective laws in Mozambique". In addition, over 400 additional documents were provided to the audit team including academic papers that have emerged from the project, annual reports, meeting minutes, etc. As such the documents were not organised into those which are a current, relevant annex to the PDD, and those which were more general background and subsidiary documents. This made assessing the documentation more difficult, and does not comply with PV requirements to have all this information in the related annexes. |
| Findings from 2 <sup>nd</sup> review: 19 AUGUST 2010 | There are hyperlinks to most of the documents referenced in the PDD and descriptions of the documents in the document list provided to the auditor and an index which was categorised by subject i.e. microbusinesses REDD rather than which ones were in the PDD. Flexibility has been allowed by PV, but the number of documents is very big and this is still confusing.   |
| Conformance  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>  |
| CAR/OBS  | <b>CAR 27/10 (CLOSED), OBS 08/10</b>  |