

# Validation Report

**GLOBAL WOODS AG** 

# VALIDATION OF THE CCBS-PROJECT: KIKONDA FOREST RESERVE

**REPORT NO. 1196712-CCBA** 

9 July 2009

TÜV SÜD Industrie Service GmbH

Carbon Management Service

Westendstr. 199 - 80686 Munich – GERMANY

Date: 9 July 2009

Page 2 of 20



Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
1196712-CCBA	07-07-2009	-	-	-

Subject: Validation of a CCBA project			
(as add-on to a VER / CarbonFix audit, Validation Report No. 119671, dated 20 January 2009)			
Accredited TÜV SÜD Unit:	TÜV SÜD Contract Partner:		
TÜV SÜD Industrie Service GmbH	TÜV SÜD Industrie Service GmbH		
Certification Body "climate and energy" Westendstr. 199 - 80686 Munich	Carbon Management Service		
Federal Republic of Germany	Westendstr. 199 - 80686 Munich		
	Federal Republic of Germany		
Client:	Project Site(s):		
Global Woods AG	Uganda		
79244 Münstertal	(boundary details and maps included in the		
Germany	CCB PDD and on CarbonFix web page)		
Project Title: Kikonda Forest Reserve			
Applied Methodology / Version: CCBA v1	Scope(s): 14		
First PDD Version:	Final PDD version:		
Date: 10-12-2008	Date: 23-04-2009		
Version No.: 1.1	Version No.: 1.3		
Estimated Emission Reduction: 213,368 VER <sub>fu</sub> (Calculated according to CarbonFix requirements reforestation with an 18 year rotation cycle; minus	based on: 1. expected mean CO <sub>2</sub> stocks in a		
Assessment Team Leader:	Further Assessment Team Members:		
Martin Schröder	Hubertus Schmidtke		
	Juan Chang		
Summary of the Validation Opinion:			
The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant CCB requirements			
The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all relevant CCB criteria.			

Validation of the CCB Standards Project:

Kikonda Forest Reserve

Date: 9 July 2009

Page 3 of 20



#### **Abbreviations**

**CCB (A)** Climate Community and Biodiversity (Alliance)

**ACM** Approved Consolidated Methodology

**AM** Approved Methodology

**CAR** Corrective Action Request

**CDM** Clean Development Mechanism

**CER** Certified Emission Reduction

CR Clarification Request

**DNA** Designated National Authority

**DOE** Designated Operational Entity

**EB** Executive Board

**EIA / EA** Environmental Impact Assessment / Environmental Assessment

**ER** Emission reduction

**GHG** Greenhouse gas(es)

**GSP** Global Stakeholder Process

**KP** Kyoto Protocol

MP Monitoring Plan

NGO Non Governmental Organisation

PDD Project Design Document

**PP** Project Participant

TÜV SÜD TÜV SÜD Industrie Service GmbH

**UNFCCC** United Nations Framework Convention on Climate Change

**VVM** Validation and Verification Manual

# Validation of the CCB Standards Project:

Kikonda Forest Reserve

Date: 9 July 2009

Page 4 of 20



Table of Contents		Page
1	INTRODUCTION	5
1.1	Objective	5
1.2	Scope	5
2	METHODOLOGY	7
2.1	Appointment of the Assessment Team	8
2.2	Review of Documents	9
2.3	Follow-up Interviews and visited sites	9
2.4	Resolution of Clarification and Corrective Action Requests	10
2.5	Internal Quality Control	10
3	SUMMARY OF FINDINGS	11
3.1	General Section	11
3.2	Climate	13
3.3	Community Section	14
3.4	Biodiversity Section	15
4	COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS	19
5	VALIDATION OPINION	20

Annex 1: Validation Protocol

Annex 2: Information Reference List

Date: 9 July 2009

Page 5 of 20



#### 1 INTRODUCTION

## 1.1 Objective

The validation objective is an independent assessment by a Third Party of the proposed project activity against all defined criteria as defined by the Climate Biodiversity and Community Alliance (CCBA).

In line with the framework for the validation of a CDM project, corresponding tasks are carried by an Independent Operational Entity (DOE). TÜV SÜD is a DOE that is accredited by UNFCCC to validate AR-CDM projects. CCBA recognizes this AR-CDM accreditation.

Validation will finally result in a conclusion by the executing DOE whether a project activity is complying with the CCB standards and whether this project should be submitted for registration with CCBA. The ultimate decision on the registration of a proposed project activity rests with CCBA.

The project activity discussed by this validation report has been submitted under the project title: "Kikonda Forest Reserve".

For the particular case of this project, a combined validation approach with the Carbon-Fix Standard was conducted. The published report on the Carbon-Fix webpage (<a href="https://www.carbonfix.info">www.carbonfix.info</a>) describes the findings of the validation process conducted for this matter.

The Validation Report No. 119671, dated 20 January 2009 on the compliance of the same project with the CarbonFix standard is considered an integral part of the present CCBA audit.

The present report is intended to cover only those criteria, in which CCBA differs and exceeds the requirements of CarbonFix.

## 1.2 Scope

For any CCB project activity the scope is set by:

- CCB standards, version 01, as published at www.climate-standards.org
- Technical and methodological guidelines and information for best practice in land use based mitigation projects

In case of a CCB project that is also designed to comply with the requirements of an AR-CDM project or methodology the scope includes furthermore the following:

- The Kyoto Protocol, in particular § 12
- ➤ Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Further COP/MOP decisions with reference to the CDM
- Decisions by the EB published under <a href="http://cdm.unfccc.int">http://cdm.unfccc.int</a>
- Specific guidance by the EB published under <a href="http://cdm.unfccc.int">http://cdm.unfccc.int</a>
- Guidelines for Completing the Project Design Document (CDM-PDD), and the Proposed New Baseline and Monitoring Methodology (CDM-NM)
- The applied approved AR CDM methodology

Date: 9 July 2009

Page 6 of 20



The AR-CDM additionality tool for afforestation / reforestation projects.

Furthermore, in this case of a CCB project being complimentary to a project activity using the CarbonFix Standard the scope is also set by:

- ➤ The CarbonFix Standard in its most recent version
- Guidance documents provided by the CarbonFix Organisation

The validation is not meant to provide any consulting towards the client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

Once TÜV SÜD receives a first PDD version, it is made publicly available on the internet at CCBA's webpage for a 21 day global stakeholder consultation process (GSP). In case of any request a PDD might be revised (under certain conditions the GSP will be repeated) and the final PDD will form the basis for the final evaluation as presented by this report. Information on the first and on the final PDD version is presented at page 1.

The only purpose of a CCB validation is to indicate compliance with the CCBA standards and to use the corresponding reports during the registration process with CCBA. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion.

Date: 9 July 2009

Page 7 of 20



#### 2 METHODOLOGY

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual, an initiative of Designated and Applicant Entities, which aims to harmonize the approach and quality of all such assessments.

In order to ensure transparency, a validation protocol was customised for the project. TÜV SÜD developed specific checklists and a protocol based on the templates presented by the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements that a CCB project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The validation protocol consists of several tables. The different columns in these tables are described in the figure below. The completed validation protocol is enclosed in Annex 1 to this report.

Validation Protocol Table 1: CCB - Conformity of Project Activity				
Checklist Topic / Question	Reference	Comments	Conclusion on PDD in GSP	Final Conclu- sion
The checklist is organised according to the sections of the CCBA standard. Each section is then further subdivided. The lowest level constitutes a checklist question / criterion.	Gives reference to documents where the answer to the checklist question or item is foundin case the comment refers to documents other than the PDD or the applied methodology	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached. In some cases subchecklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any <b>Request</b> has to be substantiated within this column	Conclusions are presented based on the assessment of the first PDD version. This is either acceptable based on evidence provided (五), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CR) is used when the validation team has identified a need for further clarification.	Conclusions are presented in the same manner based on the assessment of the final PDD and other background documentation version.

Date: 9 July 2009

Page 8 of 20



Validation Protocol Table 2: CCB - Resolution of Corrective Action and Clarification Requests				
Clarifications and Corrective Action Requests  Ref. to table 1 Summary of project owner response  Summary of project owner response  Clusion			Validation team con- clusion	
If the conclusions from table 1 are either a Corrective Action Request or a Clarification Request, these are listed in this section.	Reference to the checklist question number in Table 1 where the Corrective Action Request or Clarification Request is explained.	The responses given by the client or other project participants during the communications with the validation team is summarised in this section.	This section summarises the validation team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final PDD".	

In case of a denial of the project activity more detailed information on this decision will be presented in Table 3. Table 3 is also used for listing of any Forward Action Request.

Validation Protocol Table 3: Unresolved Corrective Action, Clarification Requests, Forward Action Requests			
Clarifications Request, Id. of Explanation of the Conclusion for Denial, or Corrective Action Request, Forward Action Request			
If the final conclusions from table 2 result in a denial or a Forward Action Request the referenced request is listed in this section.	Identifier of the Request.	This section presents an explanation, why the project is finally considered not to be in compliance with a criterion with a clear reference to the requirement which is not complied with, or the details of the FAR.	

The completed validation protocol is enclosed in Annex 1 to this report.

## 2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD Certification Body "climate and energy". The composition of an assessment team has to be approved by the Certification Body ensuring that the required skills are covered by the team. The Certification Body operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Auditor (GHG-A)
- Greenhouse Gas Auditor Trainee (T)
- > Experts (E)

It is required that the technical area and sectoral scope linked to the applied methodology is covered by the assessment team. The validation team consisted of the following experts (the responsible Assessment Team Leader in written in bold letters):

Date: 9 July 2009

Page 9 of 20



Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
Martin Schröder	ATL			Ø
Hubertus Schmidtke	GHG-A			V
Juan Chang	Т	Ø	V	

**Martin Schröder** is appointed as Assessment Team Leader by the certification body "climate and energy" of TÜV SÜD. He holds a masters degree in tropical forest science. Within TÜV SÜD he is responsible for the validation and verification of forestry based greenhouse gas mitigation projects. He passed successfully internal training schemes in the field of auditing. Before entering the company, he worked on development projects in the Amazon Region and managed voluntary carbon offset projects.

**Hubertus Schmidtke** is a GHG auditor for forestry projects appointed by the certification body "climate and energy" of TÜV SÜD. He holds a PhD title in field of forest science specialized in forest inventory design and the monitoring of carbon pools in afforestation and reforestation projects. He has received extensive training in CDM related issues and has audited several afforestation and reforestation projects.

**Juan Chang** is a forestry expert and GHG auditor trainee appointed by the certification body "climate and energy" of TÜV SÜD. He is a forest engineer with more than ten years working experience in forestry and land-use related projects. Since 2007 he has participated in more than ten audits as member of the Audit Team for forestry projects under the CDM and different voluntary standards. He has successfully taken part in the training program for GHG auditors developed by TÜV SÜD.

#### 2.2 Review of Documents

The first set of CarbonFix documents and a complementary CCBA-PDD submitted by the client in July 2008 and December 2009 and additional background documents related to the project design and baseline were reviewed as initial step of the validation process. A complete list of all documents and proofs reviewed is attached as Annex 2 to this report.

## 2.3 Follow-up Interviews and visited sites

In the period of July 21 to 25, 2008 TÜV SÜD performed interviews on-site with project stakeholders to confirm selected information and to resolve issues identified in the first document review. The area included to the project boundary was visited as part of a field survey.

Name	Organisation
Matthias Baldus	Global Woods AG, Project Manager
Shedrack Kajura	Sustainable Use of Biomass (SUB) Ltd Director
Johannes Mokena	SUB Ltd Manger
Moses Otim	SUB Ltd Employee Nursery, Thinning, Pruning

Date: 9 July 2009 Page 10 of 20



Emanuel Muganza	SUB Ltd Emploee, research
Sediva Bigirueurenkya	Trainee, SUB Ltd

As part of the field visits of the audit team, further interviews were carried out with villagers in neighboring areas.

## 2.4 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for TÜV SÜD's positive conclusion on the project design. The Corrective Action Requests and Clarification Requests raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process, the concerns raised and responses that have been given are summarised in Chapter 3 below and documented in more detail in the validation protocol in Annex 1.

## 2.5 Internal Quality Control

As final step of a validation the report and the protocol have to undergo an internal quality control procedure by the Certification Body "climate and energy", i.e. each report has to be approved either by the Head of the certification body or his Deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one.

The decision rests at TÜV SÜD's Certification Body whether a project will be submitted for requesting registration by CCBA or not.

In this particular case, the review process by the Certification Body was carried out by Mr. Thomas Kleiser, Head of the Certification Body, using Mr. Robert Sharpenberg, as an Expert in the field to cover the scope.

Date: 9 July 2009

Page 11 of 20



#### 3 SUMMARY OF FINDINGS

Each of the CCB Standards criteria was assessed based on the project design documentation review, follow-up interviews with relevant stakeholders and the review of the background information.

It is underlined that the present CCBA Validation Report focuses on those items and criteria, in which the CCBA standard exceeds the CarbonFix requirements as documented by Validation Report No. 1196712, dated 20 January 2009. Thus, the CarbonFix Validation Report shall be considered an integral part of the present final CCBA audit report.

The main findings of the project audit in regard to the project design and CCBA compliance are summarized in the following sections:

#### 3.1 General Section

#### G.1. Original Condition of Project Site

The project is located 30km south east of the City of Hoima in the catchment of the Kafu River in central Uganda. The project activity includes an eligible planting area of 7,321 ha complemented by non eligible land and conservation areas of 4861 ha, adding up to a total of 12,182 ha.

A description of the vegetation that characterizes the project site, the current land cover and land use and information and the site's physical features are included to the PDD and sustained with credible evidence (see Annex 2).

Details on the boundary as well as baseline vegetation and its carbon stocks have been assessed in the context of the CarbonFix audit. The carbon stocks at the project site have been estimated and considered for all relevant types of vegetation. For baseline stocks a site specific study was elaborated indicating carbon stocks of 45 t CO<sub>2</sub> /ha in trees and shrubs for the project area. Carbon in stocks was discounted in the overall calculations of net anthropogenic removals.

As part of the baseline studies on community aspects, it was estimated that over 20 000 people live in the 20 villages around the project area who are mostly farmers/cultivators and cattle keepers, no settlements are found inside the project boundaries.

A description of the biodiversity present in the project area and the threats to biodiversity are included in the project design. References to studies on biodiversity are provided as well as information from primary sources. A preliminary study conducted in the project area found two vulnerable plant species, seven vulnerable animal species and five endangered animal species according to the IUCN Red List Category. Further studies on the matter are bound to be done, which leads to the necessity that this was reconfirmed with each verification (See FAR in section B.3 below regarding biodiversity monitoring).

#### **G.2. Baseline Projections**

The most likely land-use-scenario in the absence of the project activity is ongoing degradation. Although it is legally required by the Ugandan National Forestry Authority that lease-holders use the reserves for forestry operations, cattle grazing and charcoal burning take place and are considered common practice in absence of the project.

Testimonies as well as references are used to validate the provided information.

Date: 9 July 2009

Page 12 of 20



In light of the analysis of official financial aspects while following the guidance of the AR-CDM additionality tool, the project activity does not represent the business as usual scenario and it is therefore considered additional. As described in the PDD, the baseline scenario describes the effects on the local community, biodiversity and water and soil resources in the project area and it is considered credible.

A projection of the expected removals (also considering non-CO<sub>2</sub> gases) is included to the Carbon Fix documentation and the CCBA PDD. Further analysis is included to section 3.2 below.

With a focus on the actual planting areas it is credibly documented that the impact of a continued degradation process in the absence of the project is likely to impact community and biodiversity negatively in a long term perspective. The information included on the biodiversity status fully considers the conservation areas.

#### G.3. Project Design & Goals

As a result of the project it is expected that a total of more than 200,000 tons CO<sub>2</sub> will be sequestered (calculated on those areas already planted) and more than 200 people employed during the project implementation. Further reforestations outside the project area are promoted through the provision of training and planting material to neighboring families. Based on the information gathered by the audit team these projections are considered reasonable and sustained.

As to the project's timeframe, it is limited to 50 years because of the maximum length of the license issued by the National Forestry Authority. The project started on September 2001 and the expected lifetime will be until September 2051.

Concerning the transparency of the project, it was confirmed that documents are available on the CFS-website and in the office in Kikonda.

#### **G.4. Management Capacity**

It has been demonstrated that the management team has the appropriate experience for the scale of the project. It was confirmed that most of the work staff was hired from the local communities and fulfill the requirements for the project implementation. Furthermore, this is supported with constant training provided by Global Woods.

#### G.5. Land Tenure

There is no need to relocate the people in order to implement the project activities. This was confirmed during the validation visit. The project considers an adequate approach to avoid the occurrence of illegal encroachment. The connection of the project to improved law enforcement activities is nonetheless considered to also constitute a risk for successful stakeholder relations and will require careful management by the project team. Moreover, it is documented that no illegal project activities occur on the project site and that activities are based on legal contracts.

#### G.6. Legal Status

The project is considered to comply with the national legislation of Uganda and is based on a Tree Planting License issued by the state of Uganda for 50 years, which also defines the project lifetime.

Date: 9 July 2009

Page 13 of 20



The project area has been documented to be under formal control and access of the project participant, which is global-woods AG, Germany. The areas are legally owned by the Government of Uganda, which leads to the following Forward Action Request:

- Forward Action Request No.1

Secured land tenure at validation stage cannot assure that land tenure as well as the access to carbon rights is actually maintained over the entire project lifetime. Control of project area and access to carbon rights shall be monitored and assessed at verification.

#### G.7. Adaptive Management for Sustainability

The management structure enables the project to provide feedback and to allow adjustments. It is indicated that the sustainability of the project beyond its lifetime of 50 years will be secured through production and sale of timber and by the involvement of locals. While complying with the general CCBA requirements, the estimates on project future beyond such large timeframes remain uncertain.

#### G.8. Knowledge Dissemination

The network of collaborators involved in the project is considered to lead the dissemination of specific lessons learnt. Furthermore, the establishment and support to the NGO "Kikonda Community Forestry Association - KiCoFA" promotes the farmer-to-farmer knowledge exchange which already involved around 500 members from the communities at the time of validation.

#### 3.2 Climate

#### **CL.1.Net Positive Climate Impacts**

The CarbonFix Standard approach was applied in order to calculate the net change in carbon stocks as a result of project implementation. As indicated in the CarbonFix Validation Report and in difference to other carbon standards, the CarbonFix approach does not calculate the (average) annual net removals over a defined crediting period but the total amount of "VERfutures" for a defined (project specific) timeframe. According to this concept, a total net of 213,368 t CO<sub>2</sub> are expected to be sequestered on the eligible planted area, calculated on a per management unit basis for 9 years, which represents half of the time of the first rotation period of 18 years.

Besides the aspect of calculating the CarbonFix specific units of VER<sub>futures</sub>, the methodological approach is similar to the structure and approaches taken in AR-CDM methodologies.

The discounts for non- $CO_2$  emissions from fertilization of 0.4 tons of  $CO_2$  per kg N and 10% of the baseline estimates from burning of biomass during land preparation are applied in the calculations of the GHG removals. No other significant emission sources have been detected in the context of the project audit.

In order to fully document the estimates without CarbonFix specific components, an overview of expected removals without consideration of a risk buffer and the limitation of removal estimates up to the average of the rotation cycles have been included to the CCBA PDD. Therefore, the consistency of the CarbonFix approach with CCBA requirements is considered to be sufficiently documented in the PDD.

Date: 9 July 2009 Page 14 of 20

Industrie Service

#### CL.2. Offsite Climate Impacts ("Leakage")

Regarding potential leakage as a result of the project activity, the following activities were found relevant: a) fuelwood use, b) charcoal burning, c) livestock grazing. The corresponding data was compiled based on surveys, which have been reviewed by the audit team. Therefore, it was verified that the calculations on the expected amounts of the net positive climate are found to be consistent with the requirements of the CCB Standards. A profound discussion on the emission reduction calculations can be found in the Carbon Fix Validation Report as well as in Annex 1 of this report below.

#### **CL.3. Climate Impact Monitoring**

The monitoring plan is compliant with the Standard requirements. However, as documented during the validation process, the plan is considered to require further definition and specification in order to assure full data consistency and data availability. The following Forward Action Requests have been posed in this context and are also included to the CarbonFix Validation Report:

Forward Action Request No.2

Buffer stripes along watercourses shall be controlled and in cases where they are not sufficient they shall be implemented.

Forward Action Request No.3

The project boundary and the strata boundary require careful monitoring in order to have a verifiable data basis at verification. In general, the monitoring plan shall be further specified in this regard.

#### CL.4. Adapting to Climate Change and Climate Variability

The considered climate change reports show that the precipitation within the project will have a small increase during the large dry-season and a small decrease to the end of the shorter dry-season. The information provided did not allow the audit team to fully assess the potential of the exotic species chosen to adapt to climate change.

#### CL.5. Carbon Benefits Withheld from Regulatory Markets

The project intends to sell credits exclusively in the voluntary market.

## 3.3 Community Section

## **CM1. Net Positive Community Impacts**

The CCB Standard requirements are considered to be met in this field. In regard to socioeconomic impacts the carried out analysis by the NGO "Kikonda Community Forestry Association" and their survey work was considered in the context of this audit.

As part of the field visits of the audit team, selected interviews were carried out with villagers in neighboring areas. In regard to sustainability, the project and its documentation focuses on the generation of net positive impacts through the generation of additional employment.

This is considered credible while impacts on local inhabitants through changed land use settings cannot be fully excluded.

Date: 9 July 2009

Page 15 of 20



The assessment team has reviewed the documentation in order to validate the inclusion of relevant stakeholders and using the local expertise and it is confirmed that the communication method used to invite the stakeholders can be considered appropriate and in line with the CCB Standard guidance.

#### **CM.2. Offsite Community Impacts**

As there are not communities living on the actual project area, potential community impacts are considered offsite. They were analyzed appropriately.

### **CM.3. Community Impact Monitoring**

In order to reflect the net positive impact of the project, an initial plan is provided as required by the CCB Standards.

Main parameters included are i.e. planting areas installed additional to the project by associated communities (through the associated NGO), trainings, and amount of employment created. The parameters included are considered adequate for the covering the CCBA requirements of an initial monitoring plan.

However, a Forward Action Request is posed on the further definition of the community impact monitoring.

Forward Action Request No.4

Social Impact Monitoring should be further adapted including parameters of actual impact monitoring and focusing on actual stakeholder groups (including Charcoal makers and Nomadic cattle keepers) as well as occurrence of illegal activities prior to first verification. If substantial negative impacts are identified, further mitigation activities need to be defined.

## CM.4. Capacity Building

Forestry practices are promoted among villagers through the Kikonda Community Forestry Association. It was also verified during the onsite visit that a joint training program with the National Forest Authority (NFA) and the Faculty of Forestry of the University of Makarere is conducted to enhance management capacity.

#### **CM.5.** Best Practice in Community Involvement

The project as such is considered not to be developed based on local customs since large scale reforestations are not considered a common practice activity in the region and mainly exotic tree species are used. Nonetheless local traditions have been considered in the project design. Among others, as mentioned in section G.4 above, most of the laboring personnel were hired from the local communities. It is therefore considered credible that the proposed project uses practices for community involvement which are likely to benefit these communities.

## 3.4 Biodiversity Section

#### **B.1. Net Positive Biodiversity Impacts**

As it was described for the baseline scenario, it is credible that further degradation in the absence of the project would impact the general conservation status negatively (and with that biodiversity components and ecological processes).

Date: 9 July 2009

Page 16 of 20



In order to determine the net positive biodiversity impact of the project in future, it is foreseen that key species will be identified with the support of scientific advice which is considerate adequate for this purpose.

A corresponding preliminary assessment as included in the CCBA PDD at the time of validation indicates a positive overall project's impact on biodiversity. It has been specified that there will not be any negative effect on threatened species that were identified based on the IUCN Red List of Endangered Species.

In essence the audit team considers that the project's main positive impact will be generated through the conservation of the associated project areas where no tree planting is foreseen. This overall impact is considered to exceed any potential negative impact of the planting of commercial species in degraded land areas (compare corresponding Forward Action Request in section B.3 below).

#### **B.2. Offsite Biodiversity Impacts**

Although potential negative offsite biodiversity impacts could be caused displaced activities such as illegal timber harvesting for fuelwood or timber and charcoal production, this situation will be largely mitigated by the inclusion of locals as workforce during project implementation. This approach is considered appropriate to minimize the impacts generated by the project towards biodiversity.

#### **B.3. Biodiversity Impact Monitoring**

An initial monitoring plan is included to the PDD for monitoring plants and animals, which will be the basis for the elaboration of monitoring reports to be verified. Main parameters included are i.e. tree species, vegetation type, animal species and habitat fragmentation.

The monitoring of flora is combined with the regular sampling layout for carbon sequestration. The approach is considered feasible. Further specification may be necessary after compilations of first data sets and analysis of complete time series. In regard to monitoring of fauna, it is explained that transects will be used. It was clarified that future monitoring will track the development of floral biodiversity and to compute biodiversity indexes such as e.g. Shannon-Wiener.

- Forward Action Request No.5

In regard to biodiversity monitoring the following shall be established up to first verification:

- Key indicator species shall be identified and included to the monitoring concept. This
  must also consider updated information on endangered species based on further research
- Concrete procedures how to implement the monitoring shall be defined to ensure that the assessment is traceable and allows comparing the biodiversity status between the baseline scenario and the project scenario.
- As part of the analysis of monitoring results, the effects of non-native tree species on the area's environment (including water and soil) shall be quantified.

#### **B.4. Native Species Use**

No native species are used on the current eligible areas of this project. The justification that non-native species used by the project are superior to native species for generating concrete biodiversity benefits was not strong enough to assign the additional point. It is nevertheless notified, that the project planted native species as trials.

Date: 9 July 2009

Page 17 of 20



#### **B.5. Water and Soil Resource Enhancement**

While recognizing that the impacts of reforestations on the hydrological cycle are complex, based on references on the impact of tree plantations to water quantity provided in the PDD and hydrological regime in the region in relation to the water consumption of the selected tree species, it is expected that impacts on water quantity and quality are not severely negative. However the evidence provided to sustain the improvement of water and soil resources compared to the baseline is not specific for the project environmental conditions and for the selected exotic species, therefore the auditor was not able to verify this issue. In regard to soil resource enhancement, a review of literature (IRL 35) demonstrates a low rate of decomposition of *Pinus spp.* leaves in comparison to native species (see above FAR for impact monitoring on soil and water). The additional point on this issue cannot be assigned.

Date: 9 July 2009

Page 18 of 20



## **Summary of CCBA requirements:**

The following table resumes the compliance of the different sections of the CCBA standards:

Project title Kikonda Forest Reserve Reforestation Project

General S	General Section		Extra score	Conclusion
	Baseline Projections	Х		Ø
	Project Design and Goals	Х		Ø
	Management Capacities	Х		Ø
	Land Tenure	Х		Ø
	Legal Status	Х		Ø
	Adaptave Management for Sustainability		1	1
	Knowledge Dissemination		1	1
Climate S	ection			
	Net Positive Climate Impacts	х		Ø
	Offsite Climate Impacts - Leakage	Х		Ø
	Climate Impact Monitoring	Х		
	Adapting to Climate Change and Climate Variability		0	0
Carbon Benefits withheld from regulatory markets			1	1
Communi	ty Section	T		I Ø
	Net Positive Community Impacts Offsite Community Impacts	X		
	Community Impact Monitoring	Х	1	1
	Capacity Building Best Practices in Community Involvement		1 1	1 1
	Best Fractices in Community involvement		l	
Biodivers	ity Section			
	Net Positive Biodiversity Impacts	Х		Ø
	Offsite Biodiversty Impacts	Х		Ø
	Biodiversity Impact Monitoring	Х		Ø
ĺ	Native Species Use		0	0
	Water and Soil Enhancement		0	0

Complying with the 15 mandatory criteria, the project receives the status "approved". For the silver standard, approved projects need to receive at least one additional point from three different sections (general, climate, community, biodiversity). For a gold evaluation, six extra points have to be made with at least one point from each of the four sections.

Final conclusion on CCBA status:	
Approved	Ø
Silver	Ø
Gold	

Date: 9 July 2009 Page 19 of 20



# 4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

The project documents have been published on the CCBA websites. Comments by stake-holders were invited during a period of 21 days.

The following table presents all key information on this process:

Webpage:			
http://www.climate-standards.org/	projects/index.html		
Starting date of the global s	takeholder consultation process:		
10 February 2009			
Comment submitted by:	Issues raised:		
None -			
Response by TÜV SÜD:			
-			

Date: 9 July 2009 Page 20 of 20



#### 5 VALIDATION OPINION

TÜV SÜD has performed a validation of the following proposed CCBA project activity:

Kikonda Forest Reserve

The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria.

In our opinion, the project meets all relevant CCBA requirements. According to the scorecard approach introduced by CCBA, TÜV SÜD considers the project to comply with Silver status.

An analysis as provided by the applied CCBA standards demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity.

Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the version of project documents published on the CCBA webpage.

In this context it is underlined that from the auditor's perspective a combined audit of CCBA and CarbonFix criteria is feasible as CCBA does not foresee the actual issuance of carbon credits. Thus, no immediate risk of double counting is considered to exist. However, TÜV SÜD refrains from liabilities related to ownership of carbon rights and credit issuance.

The validation is based on the information made available to us and the engagement conditions detailed in this report. The only purpose of this report is its use during the registration process as part of the CCBA project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

Munich, 09-07-2009

Munich, 09-07-2009

Thomas Kleiser
Certification Body "climate and energy"
TÜV SÜD Industrie Service GmbH

Martin Schröder
Assessment Team Leader
TÜV SÜD Industrie Service GmbH



# **Annex 1: Validation Protocol**

Validation of the CCB Standards Project:

Kikonda Forest Reserve

Date: 9 July 2009 Page 1 of 88



## **Annex 1: Validation Protocol**

## **Table 1: CCB - Conformity of Project Activity**

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl				
G. General Section									
G.1. Original Conditions at Project Site									
G.1.1. Are the location of the project and the basic physical parameters (e.g. soil, geology, climate) clearly	3	DR, IV	All required maps are available with the management unit and on the internet.	CAR 1	V				
described?			Corrective Action Request No 1						
			The source of the map information (website) on country, project area, nature conservation area neighbors etc. shall be indicated in the CCBA PDD.						
G.1.2. Is sufficient information provided concerning types and	3	DR,	See also CAR 1	CAR 2	Ø				
condition of the vegetation?		IV	Corrective Action Request No 2 Provide information on vegetation types in the PDD.						
G.1.3. Are the current carbon stocks properly explained, e. g. by using approved methodologies for the CDM or from	21	DR, IV	No approved CDM methodology or IPCC methodology was used, but the methodology of the CarbonFix Standard	CAR 3	Ø				
the IPCC Good Practice Guidance?			Corrective Action Request No 3						
			Document and provide evidence that calculation provided in the PDD is conforming to IPCC methodologies or UNFCCC approved methodologies. Thus, the consistency of the CarbonFix approach with CCBA requirements shall be achieved and documented						
G.1.4. Are the communities in and around the project area	3	DR,	Socioeconomic information is not included.	CAR 4	Ø				
adequately illustrated including basic socioeconomic information? This should be done using appropriate methodologies such as the livelihoods framework.		FV	Corrective Action Request No 4 The communities in and around the project area are to be described in the PDD including basic socioeconomic information						

Date: 9 July 2009

Page 2 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl				
G.1.5. Is the current land use as well as the land tenure at the project site clarified?	7, 8, 9	DR, IV	The forest reserve was established in 1963. An "Agreement to Grow Timber Plantations in Kikonda Forest Reserve" between the Republic of Uganda and Mr. Vohrer was signed in 2001, which contains all rights and obligations.	CAR 5, 6	Z				
			Corrective Action Request No 5  Provide a summary of current land use of the project area						
			Corrective Action Request No 6  Provide information why global-woods AG holds the land tenure on the Kikonda forest reserve.						
G.1.6.a) Are the current biodiversity conditions and threats characterized (using e. g. a key species habitat analysis or a connectivity analysis)?	3	DR, IV	There is reference given to studies on the biodiversity.  Corrective Action Request No 7  Main results of studies on the natural and biodiversity parameters shall be included into the PDD.  See CARs in section B.	CAR 5, 7	Ø				
b) Is substantial and appropriate reference material provided?	10	DR, IV	No, see CARs in section B.	CAR in section B	Ø				
G.1.7. Are species that belong to the IUCN Red List and / or on a nationally recognized list (the latter if available) found within the project boundary? Is a list available? (also B1)	10	DR, IV	IUCN red-list species are found in the project area; a list with these species is available.  See CARs in section B	CAR in section B	Ø				
G.2. Baseline Projections									
G.2.1.a) Is the most likely land-use scenario in the absence of the project activity plausibly identified and described in detail?	3	DR, IV, FV	The most likely land-use–scenario is ongoing degradation.	V	Ø				
b) Do existing laws and regulations require the project activity to be undertaken anyway?	3	DR, IV	It is legally required by the Ugandan National Forest Authority that leaseholders use the reserves for forestry	CAR 8	Ø				

Date: 9 July 2009

Page 3 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			operations. Nevertheless, cattle grazing and charcoal burning is taking place in project area.  Corrective Action Request No 8  Give reference to the document "Kikonda – planting trees law not enforced"		
G.2.2.a) Are future carbon stock changes under the scenario in G.2.1. properly anticipated? The timeframe for this should be either the project's lifetime or its accounting time.	3	DR, FV	Yes. The baseline scenario is ongoing degradation. Therefore future carbon stock changes are conservatively set zero for the lifespan of the project. Baseline stocks were calculated to be 40 tCO2/ha.	Ø	Ø
b) Are proofs available evidencing that non-CO <sub>2</sub> GHG such as CH <sub>4</sub> or N <sub>2</sub> O account for more than 15% of the baseline GHG fluxes at the project site (in terms of CO <sub>2</sub> equivalents)? If so, are these emissions estimated appropriately?	3, 21	DR, IV	See above <u>Corrective Action Request No 9</u> Provide project specific information on non-CO <sub>2</sub> GHG emissions in the project	CAR 9	Ø
G.2.3. Does the baseline scenario describe the effects on the local community in the project area?	3	DR, IV	Corrective Action Request No 10  No information is given on impacts of the "without-project" scenario on local communities. Provide these information in the PDD	CAR 10	Ø
G.2.4. Does the baseline scenario describe the effects on biodiversity in the project area in a sufficient manner?	3	DR ,FV	Corrective Action Request No 11 "Unsustainable land use" is mentioned as negative impact of the "without-project" scenario on biodiversity. Provide further details on this in the PDD.	CAR 11	Ø
G.2.5. Does the baseline scenario describe the effects on the water and soil resources in the project area?	3	DR, IV	Corrective Action Request No 12  The PDD assumes a likely negative impact of the "without-project" scenario on water and soil resources. Provide more detailed information.	CAR 12	☑
G.3. Project Design & Goals	,	,			•
G.3.1. Are the scope of the project and a summary of the	3	DR,	7000 ha are earmarked for afforestation with Pinus	V	Ø

Date: 9 July 2009

Page 4 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
major climate, community and biodiversity goals demonstrated?		FV	caribea, remaining 5000 ha grassland, forest and wetland are protected for biodiversity.  Thus climate, community and biodiversity goals are indicated.		
G.3.2. Are each major project activities (if more than one) and its relevance towards achieving the project's goal described?	3	DR, IV	Corrective Action Request No 13  The "executive summary" referenced in the PDD refers only to "Forest Management".Provide information on major project activities leading to the others project goals (i.e. community and biodiversity).	CAR 13	Ø
G.3.3. Is the project location clearly described including a map with the major activities and georeferenced boundaries?	3	DR, IV	Project location is described and maps provided on the CFS webpage . See CAR 1	Ø	Ø
G.3.4.a) Is the project's timeframe clearly characterized?	3	DR, IV	The project's timeframe is limited according to CFS. A permanent forest und sustainable forest management is the target.	☑	N
b) Is a rationale provided for fixing the project's lifetime?	3	DR, IV	See above	Ø	Ø
c) If applicable, is a reason delivered for the lifetime differing from the accounting period for carbon credits?	3	DR, IV	N/A	Ø	Ø
G.3.5.a) Are likely risks to climate, community and biodiversity benefits outlined?	3	DR, IV	The chapters "Protective Capacity" and "Socio economic Aspects" provide the information needed. Risks and counter measures described are: Browsing, diseases, wind-beak, drought, flood, vandalism and encroachment	Ø	Ø
b) Are measures planned and explained against these identified risks?	3	DR, IV	See above (chapters "Protective Capacity")	Ø	Ø
G.3.6. Have the local stakeholders been well defined, including documents on this definition?	2	DR, IV	Major local stakeholders are defined as neighbors. Definition in CFS "Terms and Definitions"	Ø	Ø

Date: 9 July 2009

Page 5 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
G.3.7. Is transparency secured? The latter shall include aspects such as:  - Project documents publicly available at or near the project site.  - Local stakeholders informed how the documents can be accessed.  - Key documents made available in local or regional languages  - Sustained reasoning for confidential information withhold.	3	DR, IV	Documents are available on the CFS-website and all project documents are available with the Kikonda office. A extension forester at KFR acts as communicator between the communities and the company conducting the project.  Documents are in English, which is the official language and understood by the majority of the local people.  Only personnel issues and financial issues are confidential  Corrective Action Request No 14  Documents on additionality of the project is not publicly available and remains to be made accessible. A summary is to be included to the PDD.	CAR 14	Ø
G.4. Management Capacity					
G.4.1. Does the management team have enough experience with regard to land management projects? Is documentation on this issue available?	2	DR, FV	Chapter "Management Capacity" describes clearly the Name, Title, Educational level, Duties of the key personnel.	Ø	Ø
G.4.2. If relevant skills are lacking, will appropriate partners implement the project?	3	DR, IV	The project owner is mainly implementing the project by himself.  For specific issues the project owner is collaborating with:  - University for applied Forest Science Rottenburg Germany  - Makerere University Uganda  - National Forest Authority NFA  The University of Applied Forest Sciences in Rottenburg, Germany and the Forest Faculty of the University of Freiburg regularly sends students to the Project.  Guided by their respective Professors, they elaborate	CAR 15	Ø

Date: 9 July 2009 Page 6 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			specific topics and transfer the output of that kind of research to the management team.		
			Corrective Action Request No 15 Include and reference the information and documentes provided to the audit team during onsite visit also in the corresponding PDD sections. Applicable to entire PDD.		
G.4.3. Is the management capacity adequate for the scale of the project?	3	DR, FV	The management capacity is considered adequate. A list of permanent staff with qualification and function is provided in the "Management Capacity" chapter	Ø	Ø
G.4.4. Are key technical skills necessary for a successful implementation documented and are members of the management team or project partners identified who possess appropriate skills?	3	DR, IV	Corrective Action Request No 16  List key technical skills which are necessary for a successful implementation of the project and identify members of the management team possessing these skills	CAR 16	Ø
G.4.5. Is the financial health of the implementing organization(s) documented?	3	DR, IV	Corrective Action Request No 17  No information are given in the section. "Financial Capacity". The document "financial reports global-woods2004-2006.pdf", which is a copy on the balance of global woods AG, was provided. Provide further explanation and information to the PDD.	CAR 17	Ø
G.5. Land Tenure					
G.5.1. Is it guaranteed that the project will not encroach unwontedly on private property, community property, or government property?	8	DR, IV	"Agreement to Grow Timber Plantations in Kikonda Forest Reserve" between the Republic of Uganda and Mr. Vohrer was signed in 2001. This document provides relevant information on land tenure of the Kikonda forest reserve. All project area is part of the Kikonda Forest Reserve and state property.  See Corrective Action Request No 6	CAR 6	Ø

Date: 9 July 2009

Page 7 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
G.5.2. Is no relocation of people occurring or, if the case, is any relocation necessary 100% voluntary and helping to resolve tenure problems in the area?	8	DR, FV	The project is officially dedicated to forestry and nature conservation. No regular settlements exist within the project boundaries.	Ø	Ø
G.5.3. Is "in-migration" from surrounding areas likely to take place? If relevant, is the project's response appropriate?	3	DR, IV, FV	It was stated in the project documentation and interviews that encroachment happens occasionally. Any encroachment is illegal.  Local people who were engaged in activities related to illegal land use on the project area (such as grazing and char coal production), are offered to work for the project and are supported to plant trees on their own land and on land set aside from the project for the local communities. See "Secured Land Tenure).  The project's response is considered adequate.	D	
G.6. Legal Status		•			
G.6.1. Does the project activity oppose any law?	8	DR, IV	No. All activities are legal and based on contracts.	Ø	Ø
G.6.2. Are all documents available evidencing that the project has or expects to obtain all approvals necessary from the relevant authorities?	8	DR, IV	There is a contract between the national forest authority NFA including all details. See Corrective Action Request No 15	CAR 15	Ø
G.7. Adaptive Management for Sustainability (optional)					
G.7.1. Is it demonstrated that management actions and monitoring programs are designed to generate reliable feedback that is used to improve the project's outcome?	3	DR, IV	Feedback is possible considering the managment structure. Regular meetings of the staff to provide opportunity for discussion and feedback.	Ø	Ø
G.7.2. Does a management plan exist for documenting decisions, actions and outcomes and is this information shared with others within the project team?	3	DR, IV	A set of written internal management procedures (IMP) is elaborated.	Ø	V

Date: 9 July 2009

Page 8 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
This should secure that experience is transferred rather than lost when individuals leave the project.					
G.7.3. Is the project design flexible enough to accommodate potential changes? Are processes defined or in place to adjust project activities as needed?	3	DR, IV	Management staff constantly evaluates the project and can bring the results up at the management meeting.  In regard to field activities it is considered relevant that before any planting activity an onsite survey is conducted, which also allows further adaptation if necessary.	Ø	Ø
G.7.4.a) Are proofs available for an initial commitment towards long-term sustainability (beyond the end of initial financing)?	8	DR, IV	The contract with the Republic of Uganda is limited to 50 years with the option to renew. However the CarbonFix Standard implies that the projects under CFS are long-term. This project will secure its long-term viability through production and sale of timber.	Ø	Ø
b) Is a new project planned building on the outcomes of the initial one?	3	DR, IV	No new project is planned (not applicable, since the project is long-term)	V	V
c) Are payments for ecosystem services secured on a long-term scale?	3	DR, IV	Timber sales will finance the project on a long term scale. The project includes the protection of large areas natural forest including its financing (30% of the Kikonda Forest Reserve).	Ø	
d) Are micro-enterprises promoted?	3	DR, IV	By engaging local contractors for most of the field work the project promotes micro entrepreneurship.	Ø	Ø
e) Are alliances established with organizations or companies securing the continuation of sustainable land management?	3	DR, IV	See above. In addition to that SUB is member of the Uganda Timber Growers Association UTGA	V	Ø
f) Other indicators for long term commitments.		DR, IV	The company has been active in the country for the last 6 years.	Ø	Ø
G.8. Knowledge Dissemination (optional)					
G.8.1. Are relevant or applicable lessons learnt documented sufficiently?	3, 33	DR, IV	All plantation activities are described in SOP's. Those SOP are regularly updated	Ø	Ø

Date: 9 July 2009

Page 9 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
G.8.2.a) Is it described how the generated lessons learned (G.8.1.) are disseminated in order to encourage replication of successful practices?	3	DR, IV	Weekly meetings ensure a sufficient information flow within the company.  Knowledge is disseminated in monthly meetings with KiCoFa outside the company. See also CM1.2a	Ø	Ø
b) Will research be undertaken and results disseminated that have widespread application?	3	DR, IV	As pilot project for the CarbonFix Standard there will be some lessons learnt for future CFS projects. The collaboration with scientific institutions lead to a generation and dissemination of project specific lessons learnt.	Ø	S
c) Are training workshops for community members from other locations planned?	3	DR, IV	KiCoFa was initiated by SUB. In this context communities are educated and encouraged to plant trees on their own land. They get training in all aspects of tree planting and maintenance.	Ø	V
d) Will "farmer to farmer" knowledge-transfer activities be conducted?	3	DR, IV	One major purpose of the monthly regular KiCOFA meetings is the exchange of experiences	Ø	Ø
e) Will the project result be linked to regional databases, if existent?	3	DR, IV	Not applicable. No regional databse is known.	Ø	Ø
f) Is any cooperation with academic, corporate, governmental or non-governmental organizations planned?	3	DR, IV	Yes. There are already close contacts to:  - University for applied Forest Science Rottenburg Germany  - Makerere University Uganda  - National Forest Authority NFA See G 4.2	Ø	Ø
g) Are other forms applied to disseminate the lessons learned?	3	DR, IV	Also university trainees are working with the project, excursions from universities Makarere and forestry students from Germany regularly are visiting the project. See G 4.2  Uganda Plantation Forum is hosted once every year. Project owners and politicians meet here.	Ø	Ø

Date: 9 July 2009 Page 10 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
CL. Climate Section					
CL.1. Net Positive Climate Impacts					
CL.1.1. a) Is the methodology used to estimate the net change in carbon stocks developed by IPCC GPG or approved by the CDM Executive Board?	2, 3	DR, IV	The methodology of CarbonFix Standard is applied. The principles of the Carbon Fix Standards like additionality, baseline, leakage, eligibility of lands are similar to CDM. Main difference are the VER-futures which are issued under CFS ex-ante by using a growth model which has to be adopted according to periodically conducted inventories. VER-futures are not limited in time because one requirement of the CFS is to initiate sustainable forest management.  Information on conformity with IPCC methodology has to be proved as described in CAR 3.	CAR 3	Ø
b) Are the assumptions about how the project activities will alter carbon stocks over the duration of the project or the project accounting period clearly defined and defendable?	2, 3	DR, IV	This is clearly defined by the CFS. The mean carbon stock of a plantation over lifetime is taken as carbon effect of the project. It is not terminated. The project leads into sustainable forest management. So no duration of the project is declared.	Ø	Ø
c) Are the assumptions about how the project activities will alter non-CO <sub>2</sub> GHG emissions over the duration of the project or the project accounting period clearly defined and defendable?	3	DR, IV	No non-CO2 GHG emissions are expected to occur in the project.	Ø	Ø
CL.1.2. If the non-CO <sub>2</sub> gases CH <sub>4</sub> and N <sub>2</sub> O are likely to account for more than 15% (in terms of CO <sub>2</sub> equivalents) of the project's overall GHG impact, are these to gases factored into the net change calculations?	3	DR, IV	Not applicable to the project.	Ø	Ø
CL.1.3. Does the project clearly demonstrate that the net climate impact of the project (including changes in carbon stocks and non-CO <sub>2</sub> gases where appropriate)	3	DR, IV	Corrective Action Request No 18  Provide consolidated information on net climate impact (t CO2-e sequestered) in the PDD.	CAR 18	Ø

Date: 9 July 2009 Page 11 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
will give a positive result in terms of overall GHG benefits delivered?					
CL.2.Offsite Climate Impacts ("Leakage")					
CL.2.1. Are the potential offsite decreases in carbon stocks (increases in emissions or decreases in sequestration) due to project activities properly estimated?	3	DR, IV	Displacement of grazing and charcoal makiing cause leakage, which is considered and calculated according to CFS rules. CDM default values were used in calculations.	Ø	Ø
CL.2.2. Are mitigation efforts referring to these negative offsite impacts documented?	3	DR, IV	It is policy of SUB to offer employment to people who are affected by the project and who may cause leakage by displacing activities. The project also aims to provide the local people with fuel wood and charcoal from sustainable managed forests of the project.  Corrective Action Request No 19  Provide relevant information on leakage mitigation in the PDD	CAR 19	Ø
Is the extent to which such impacts will be reduced adequately estimated?	3	DR, IV	The leakage was quantified and the "worst case" was considered in the calculations. "Worst case" was that all leakage happens without any effect of the mitigation measures. This is conservative.	Ø	Ø
CL.2.3. Are likely project-related unmitigated negative offsite climate impacts subtracted from the climate benefits claimed by the project? The total net effect (net increase in onsite carbon stocks minus negative offsite climate impacts) has to be positive.	3	DR, IV	See above The total net effect is positive, see CL1.3	Ø	Ø
CL.3. Climate Impact Monitoring					
CL.3.1. Is an initial monitoring plan in place?  The CCB Standards accept at this stage of the project development that some of the plan details are not fully defined, especially if a small-scale project.	3	DR, IV	Carbon pools are selected: above and belowground living woody biomass.  Corrective Action Request No 20  Provide information/reference on monitoring plan.	CAR 20	Ø

Date: 9 July 2009 Page 12 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
Are the corresponding measurements and the sampling strategy (including the monitoring frequency) stated?	3	DR, IV	Corrective Action Request No 21 Provide project specific information on monitoring frequency and sampling strategy	CAR 21	Ø
Are all potential pools (aboveground biomass, litter, dead wood, belowground biomass and soil carbon) included? Any pool expected to decrease as a result of the project activities must be included.	3	DR, IV	For project carbon sequestration, above and belowground living woody biomass is considered. For baseline calculations, aboveground living biomass of grass is considered in addition to above and belowground living woody biomass. For leakage, only living aboveground woody biomass is considered.	Ø	Ø
Are non-CO <sub>2</sub> gases part of the monitoring plan? (Only applicable if these gases account for more than 15% of the project's net GHG impact)	3	DR, IV	See Corrective Action Request No 20	CAR 20	V
CL.4. Adapting to Climate Change and Climate Va	ariabilit	y (optio	nal)		
CL.4.1. Are likely regional climate change and climate variability impacts adequately identified using available studies (e.g. in studies)?	3, 30	DR, IV	Yes, as included to UNFCCC study on climate change in east African region.  The project lies in the region EAF (East Africa). In this region, the temperatures will remain the same during the large dry-season of December-January-February (DJF) and increase during the small dry-season / beginning of small wet-season in June-June-August (JJA). The prediction of the climate change report shows that the precipitation within the project will have a small increase during the large dry-season (DJF) and a small decrease to the end of the small dry-season (JJA). The combinations of the above stated developments show that the large dry season will become shorter due to more precipitation. In contrast to this, it is expected that the smaller dry-season will be extended due to higher temperatures and less precipitation. These developments do not show any hazard to the tree species planted.		

Date: 9 July 2009 Page 13 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl			
CL.4.2. Are these potential impacts anticipated by the project (design) and will appropriate measures to minimize the negative consequences be taken?	3	DR, FV	No impact is expected.	Ø	Ø			
CL.5. Carbon Benefits Withheld from Regulatory Markets (optional)								
CL.5.1. Will the project proponents not sell at least 10% of the total carbon benefits (including e.g. avoided deforestation) generated by the project into regulated GHG markets (Kyoto or other regulated markets)? Projects are allowed to sell these carbon benefits in a voluntary market or retire them.	2	DR, IV	CFS includes a buffer of 30% of the carbon credits which will be not sold.	Ø	Ø			
CM. Community Section								
CM.1. Net Positive Community Impacts								
CM.1.1. Were appropriate methodologies (e.g. livelihoods framework) used to estimate the net benefits to communities resulting from planned project activities?	3	DR, IV	In 2007 a survey in the surrounding villages was undertaken following the empiric social research approach.  The methodology applied was an individual interview, orally conducted and on the basis of a structured	CAR 22	Ø			
			questionnaire.					
			Corrective Action Request No 22 For sections CM1b, 1c only references are given in the PDD Insert main content of the references in the PDD, indicating the net benefits					
Are changes in the community wellbeing included in the net benefits? Are the corresponding assumptions about how social and economic wellbeing will be altered over time clearly defined and defendable?	3	DR, IV	Corrective Action Request No 23  Provide information if and how changes in social and economic well being over time will be assessed  See comments G.1.4	CAR 23	Ø			

Date: 9 July 2009 Page 14 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
Is the net community benefit positive ("with project" scenario compared to baseline scenario of social and economic wellbeing)?	3	DR, IV	Providing employment is the most important community benefit to which there is no alternative in the baseline scenario. The improvement of the economic situation is significant. Thus the net community benefit can be considered positive.	CAR 24	Ø
			Corrective Action Request No 24		
			Provide information on potential negative social impacts (e.g. for cattle keepers)		
CM.1.2. Is the local stakeholder participation documented in the project's planning, also including potential dialogues?  In cases where it is unclear whether a project will be implemented or not, it is acceptable to start with a preliminary community consultation, provided there are plans for a full engagement once the project is funded.	3	DR, IV	Local stakeholder participation is promoted.	V	$\square$
			The project directly supports local communities via the Kikonda Community Forest Association (KiCoFA) which was initiated and founded as a non-profit NGO in 2005.		
			The objective of this NGO is to organize tree-planting activities for communities around the project in order to		
			<ul> <li>show the importance of reforestation activities,</li> <li>make villagers sensible for the harmful impacts of cattle and fire on trees,</li> <li>create a constant incomes and enhance income varieties for farmers (e.g. by village nurseries,</li> <li>firewood, sawlog timber),</li> <li>train farmers in sustainable forest management (land preparation, maintenance, etc.), and</li> <li>strengthen social cohesion by including all social subgroups.</li> </ul> See also comments G.1.4		
If the project occurs in an area with significant local stakeholders, is a diversity of stakeholders engaged including appropriate subgroups, underrepresented groups and women living in the project vincity?	3	DR, IV	Yes, KiCoFa is mainly driven by women, 70% of the participants are women.	Ø	<u> </u>

Date: 9 July 2009 Page 15 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl			
Did the stakeholders have the chance to raise concerns about potential negative impacts, to express desired outcomes and to provide input on the project design before the project design was finalized? Has the project proposal been revised or will it be revised based on the input of accordingly?	15	DR, IV	Basically the negotiations went between project developer and the Tanzanian government. But a local stakeholder participation process was initiated which lead to the foundation of KiCoFa.  The "Initial management plan" includes active information policy to the local people.	☑	Ø			
CM.1.3. Is a clear process defined for dealing with unresolved conflicts and grievances that arise during the planning and implementation?	3	DR, IV	For internal issues of SUB there are the Monday meetings and for external issues there is monthly meetings with KiCoFa.  The process is described in the "Socioeconomic Aspects" document.	Ø	Ø			
Did the project design include a process for hearing, responding to and resolving community grievances within a reasonable time period? Has the grievance process been publicized to local stakeholders?	3	DR, IV	See above.	Ø	<b>☑</b>			
Have attempts been undertaken to resolve all reasonable grievances raised and have written response to grievances been provided within 30 days?	3	DR, IV	Grievances are responded within a week.	Ø	Ø			
Have the grievances and the project responses been documented?	3	DR, IV	Protocols of the Monday management meeting document grievances.	Ø	☑			
CM.2. Offsite Community Impacts								
CM.2.1.Have any potential negative offsite community impacts been identified that the project is likely to cause?	3	DR, IV	A negative impact is considered that the people have to stop pre-project illegal activities in the forest such as cattle grazing and producing charcoal.	CAR 25	Ø			
			Corrective Action Request No 25 Only reference is given. Please provide main content of the reference on the offsite community impacts in the PDD.					

Date: 9 July 2009 Page 16 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
CM.2.2.Are the mitigation efforts concerning these negative social and economic impacts properly described?	3	DR, IV	Employment is offered and also fuel wood from the sustainable managed plantations. See Corrective Action Request No 25	CAR 25	Ø
CM.2.3.Is the net social and economic effect of the project positive when comparing the social and economic benefits within the project boundaries with likely unmitigated negative offsite impacts?	3	DR, OV, IV	Yes. The overall effect is positive, considering that the "negative impact" means law enforcement / stopping illegal activities.  See Corrective Action Request No 25	CAR 25	Ø
CM.3. Community Impact Monitoring					
CM.3.1. Is an (initial) plan available for how community variables to be monitored are selected? Potential variables include income, health, roads, schools, food security, education and inequality.  The CCB Standards accept if at this stage of the project development some of the monitoring plan details are not fully defined, especially if the project is a small-scale project.	3, 31	DR, IV	A study "Evaluation of the cooperation between communities and the project management in Kikonda, Uganda" was elaborated in 2007.  Corrective Action Request No 26  The questionnaire does not include monitoring of community impact, but focusses on impact of KiKoFa training. Provide relevant information and also consider monitoring of negative impacts. An initial monitoring plan remains to be included to the PDD (with defined parameters, frequencies, montoring approach etc)	CAR 26	
CM.3.2. Is the monitoring frequency clarified?	19	DR, IV	It is intended to repeat the questionair every two years	Ø	Ø
CM.3.3. Are community variables at risk of being negatively impacted by the project activities included in the monitoring plan?	19	DR, IV	No, see Corrective Action Request No 26	CAR 26	Ø
CM.4. Capacity Building (optional)					
CM.4.1. Is the capacity building structured in a way that the needs of communities (not only of the project) are met?	3	DR, IV	The NGO KiCoFa is independent from the project. One of the targets of KiCoFa is to motivate people to plant trees	CAR 27	Ø

Date: 9 July 2009 Page 17 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			on their private land. Capacity building in planting technology and seedlings are provided.		
			Corrective Action Request No 27		
			A local primary school is supported; provide relevant reference and evidence.		
CM.4.2. Is the capacity building targeted to a wide range of groups, not just elites?		DR, IV	The project is located in a remote area. Capacity is built up as well in higher management and technical position but also in the local population for all issues related with forest plantations. The local people are encouraged to plant trees on their land, they are provided with knowledge and seedlings.	CAR 28	Ø
			Corrective Action Request No 28		
			Text in the PDD partly not understandable, please correct.		
CM.4.3. Is the capacity building targeted to increase the participation of women?	3	DR, IV	Majority of the members of KiCoFa are women (70%).		☑
CM.4.4. Is the capacity building aimed to increase the community participation in the project implementation?	3	DR, IV	In a wider view the plantations outside the project can be considered. See CM.4.2	Ø	Ø
CM.5. Best Practices in Community Involvement	(optiona	al)			
CM.5.1. Was the project developed with a strong knowledge	3	DR,	Local customs are respected.	$\overline{\mathbf{V}}$	V
of local customs? Is the project compatible with local customs?		IV	However the project as such is considered not to be developed based on local customs, since afforestation is considered not a local custom and mainly exotic tree species where used.		
CM.5.2. Will local stakeholders fill all employment positions (including management) if the job requirements are fulfilled?	3	DR, IV	Workforce, including management is recruted from the region. In addition to CM5.1 many people are employed especially conducting the field work like preparation of the plantation areas the direct plantation activities, pruning	Ø	Ø

Kikonda Forest Reserve

Date: 9 July 2009 Page 18 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS		Final Concl
			maintenance etc.		
Is the manner explained by which local stakeholders are selected for positions? Do traditionally underrepresented stakeholders and women get a fair chance to fill positions for which they can be trained?	3	DR, IV	7   1   1   2		☑
CM.5.3. Are workers informed about their rights by the project proponents?	3	DR, IV	Permanent staff is informed when being engaged. Workers of contractors are informed during the monthly meeting. Compliance remains to be reconfirmed at verification.		Ø
Does the project comply with international rules on worker rights?	3	DR, IV	·   •		☑
CM.5.4. Are situations and occupations that pose a substantial risk to worker safety comprehensively assessed?	11	DR, IV	Safety rules for use of herbicide are subject to one IMP	Ø	Ø
Is a plan in place to inform workers of potential risks and to explain how to minimize such risks?	26	DR, IV	Written safety guidance is there and safety trainings are conducted	Ø	Ø
Are risks being minimized using best work practices, where worker safety cannot be guaranteed?	11	IV	See above	Ø	$\square$
B. Biodiversity Section					
B.1. Net Positive Biodiversity Impacts					
B.1.1. Are the methodologies (e.g. key species habitat analysis, connectivity analysis) used to estimate the changes in biodiversity resulting from planned project activities appropriate?	10	DR, IV	A study on the biodiversity was elaborated. An IMP is dedicated to the "Protected areas"  It is estimated that the biodiversity will slightly decrease in the planted area due to the economically required faster growing tree species. At the same time it is expected that biodiversity will increase in the areas protected from	CAR 29- 31	Ø

Date: 9 July 2009 Page 19 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			uncontrolled and illegal land-use. These areas comprise more than one third of the project are and hold grasslands as well as forest and wetlands.		
			Corrective Action Request No 29 Provide references to relevant studies on biodiversity in the PDD.		
			Corrective Action Request No 30  Provide further information on the methodology and sampling design, including information of the inventory method for biodiversity.		
			Corrective Action Request No 31 Clarify and define assumptions used to sustain methodologies desiged to quantify in the net biodiversity impacts ("with project" vs "without project" scenarios). Provide such information.		
Are the assumptions for this estimate clearly defined and defendable?	10	DR, IV	No, see above	CAR 29- 31	Ø
Is the net biodiversity benefit positive ("with project" scenario compared to baseline biodiversity scenario)?	3	IV, FV	30% of the total forest reserve will be protected area, which is likely to have a positive impact on biodiversity. See Corrective Action Request No 31	CAR 31	Ø
B.1.2. Are possible adverse effects of non-native species on the area's environment described (including impacts on native species and disease introduction or facilitation)?	3	FV	Currently there are no adverse effects of the planted tree species identified (Carribean Pine).  Corrective Action Request No 32  The PDD states that native species in mixed stands are used, which is not the case in this project. Delete the section of the PDD	CAR 32	Ø
If the impacts are substantial, is the necessity of using non-native species over native species justified?	3	IV, FV	N/A	Ø	Ø

Date: 9 July 2009 Page 20 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
B.1.3. Is a list of threatened species available (G.1.8)? Is documentation available showing that the project activities will not be detrimental in any way to these species?	3, 10	DR, IV	A list of species in the Kikonda Forest Reserve was provided, including IUCN Red List aspects. See B 1.1., G.1.6  Corrective Action Request No 33  No information is provided in how the list of endangered species was developed. Provide information on methodology  Corrective Action Request No 34  Provide information that the project activities will not be detrimental in any way to threatened species.	CAR 33	
B.1.4. Are all species to be used by the project identified? Will no known invasive species be used?	3	DR, IV	Species aused are: Pinus Carribae, Maesopsis, Eucalyptus grandis, Tectona Grandis, Makamia ploatycalayx. Those species are considered as not invasive.	V	Ø
B.1.5. Is it guaranteed that no genetically modified organisms will be used to generate carbon credits?	13	DR, IV	Yes. Seed orders were provided as evidence.	Ø	Ø
B.2. Offsite Biodiversity Impacts					
B.2.1. Are potential negative offsite biodiversity impacts that the project is likely to cause identified?	3	DR. IV	The potential negative offsite biodiversity impacts could be caused by the potential leakage of activities: illegal timber harvesting for fuelwood, timber and charcoal production as well as cattle grazing.	CAR 35	✓
			Corrective Action Request No 35  Provide information on the impact on biodiversity of the leakage activities described in the PDD		
B.2.2. Are the mitigation efforts concerning these negative biodiversity impacts properly described?	3		People involved in activities leading to leakage are offered employment within the project.  See Corrective Action Request No 35	CAR 35	V
B.2.3. Is the net biodiversity effect of the project positive	3	DR,	Yes it is positive. Conservation of 30% of the project is only	<b>I</b>	

Date: 9 July 2009 Page 21 of 88



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
when comparing the biodiversity benefits within the project boundaries with likely unmitigated negative offsite impacts?		IV	possible because of the income from carbon and timber. Otherwise those areas would continue to degrade.		
B.3. Biodiversity Impact Monitoring					
B.3.1. Is a plan available for how biodiversity variables to be monitored are selected? Potential variables include species abundance and diversity, landscape connectivity, forest fragmentation, habitat area and diversity.  The CCB Standards accept if at this stage of the project development some of the monitoring plan details are not fully defined, especially if the project is a small-scale project.	3	DR, IV	The refernce provided does not describe the required parameters and details of the methodology.  Corrective Action Request No 36  Include an initial monitoring plan to the PDD that includes paramters, frequencies and monitoring approach for biodiversity, including parameters at risk to be impacted negatively.	CAR 36	Ø
Is the monitoring frequency clarified?	3	DR, IV	For the project, the monitoring frequency is 2-5 years.	CAR 36	Ø
Are biodiversity variables at risk of being negatively impacted by the project activities included in the monitoring plan?	3	DR, IV	No, see above.	CAR 36	Ø
B.4. Native Species Use (optional)					
B.4.1. Is it proven that the project will only use species being native to the region?OR	3		No, mostly Pinus Carribean will be used. To some small extend Maesopsis, Markhamia, Albisia	Ø	Ø
B.4.2. If non-native species are planned to occur, is their use justified by being superior to native species for generating concrete biodiversity benefits (e. g. for rehabilitating degraded areas unlikely to support natives or for producing fuel wood that reduces logging pressure on intact ecosystems)?	3	DR, FV	Kikonda Forest Reserve project is mainly planting non- native Pinus Carribaea. This helps to protect 30% of the project area as natural forest. Those areas are already partly degraded and will regenerate under the project activities.  Timber provided from the plantations can possibly reduce pressure from native forests in the region	CAR 37	Ø

Date: 9 July 2009 Page 22 of 88



CHECKLIST QUESTION		MoV*	COMMENTS	Draft Concl	Final Concl
			Corrective Action Request No 37		
			Provide information on your reasoning mentione d above in the PDD. Provide information why only alien species can provide these benefits.		
B.5. Water and Soil Enhancement (optional)					
B.5.1. Are project activities that are likely to enhance water and soil resources identified?	3, 5	DR, IV, FV	The project areas are in the process of degradation with negative consequences on soil and water. The reforestation as well as the revitalisation of the protected natural forest is considered likely to improve the water balance and hinder further soil degradation.	CAR 38 -40	Ø
B.5.2. Is it credibly demonstrated that these activities are likely to improve water and soil resources compared to the baseline?	3, 5	DR, IV, FV	No, not sufficiently	CAR 38 -40	Ø
B.5.3. Do justifiable assumptions about cause and effect as well as relevant studies support the statements in B.5.2.?	5, 27, 28	DR, IV, FV	Information was provided during onsite visit that a general study on Uganda's forests was provided in which the actual situation described above was stated.	CAR 38 -40	Ø
			Corrective Action Request No 38  Provide reference to the study on Uganda's forests in the PDD		
			Corrective Action Request No 39		
			Information given in the PDD regarding organic soil layers (in particular under pure Pinus Caribea stands) need to be sustained with scientific eveidence		
			Corrective Action Request No 40		
			Information given in the PDD regarding water quality (in particular considering plantation management and possible clear cuts during harvesting) need to be sustained with scientific evidence		

Date: 9 July 2009 Page 23 of 88



Clarifications and Corrective Action Requests by validation team	Ref. to table 1	Summary of project or	Summary of project owner response					
Corrective Action Request No 1  The source of the map information (website) on country, project area, nature conservation area neighbors etc. shall be indicated in the CCBA PDD.	G 1.1	Project team, 23 Jan 20 The exact location of the CarbonFix platform: www Here, also maps on the made available.  Audit team, 13 March 2 A corresponding link was to identify location.  http://www.carbonfix.info The PDD shall however types (conservation, plate project team, 27 March A table has been added	e project can be w.CarbonFix.inf project area, co 009: as included to the o/Project/Project include basic include	o/KFR onservation area, Mana e PDD. The maps are tslist.html?itemid=69& offormation on the size to be included.	agement Units, etc. are considered sufficient ipage=0 of the different area			
		Natural Forest (Conservation Area)  3.376 ha (28%)  Audit team, 20 April 200 The PDD has been upd have been included. Dig	Wetland (Conservation Area)  1.485 ha (12%)  09: ated correspond	Bush- and Grassland (Planting Area) 7.321 ha (60%)	Total area  12.182 ha (100%)  n and overview maps			

Date: 9 July 2009 Page 24 of 88



		validation. The Request is closed.	
Corrective Action Request No 2  Provide information on vegetation types in the PDD.		Project team, 23 Jan 2009: In 2006 a vegetation assessment led by biologist Olivia Wannyana of Makerer University, Kampala was conducted. The main findings for the project area were, that vegetation types are mainly woodlands and wooded grasslands.	Ø
		Its natural <i>tree vegetation</i> mainly comprises of Combretaceous species, Acacia woodlands, forest remnants or savanna / forest mosaic, colonising forests, thickets mainly of Grewia and Rhus spp. and <i>wooded grasslands</i> mainly of Hyparrhenia and Loudetia spp.	
		This vegetation is a result of grazing and burning of formerly supported forests and woodlands.	
		These woodlands are locally common but not extensive as described by Langdale-Brown et al (1964) they contain a variety of woody genera (Appendix 1) most of which are fire tolerant. The most common genera are Combretum, Terminalia and Acacia species. In these woodlands especially the Combretaceous woodlands there is very little shrubby undergrowth. In the absence of burning, many woodlands tend to revert to forests. Such habitats if left undisturbed and many grasslands to woodlands	
		Kikonda forest has been demarcated and a small area of the forest has been converted into an exotic forest plantation of Pinus and Eucalyptus plus the indigenous Maesopsis eminii.	
		For more details see document "Classification of Kikonda Vegetation by Olivia Wannyana.pdf"	
		Audit team, 13 March 2009:	
		The provided information on baseline vegetation and the adaptation in the PDD are considered to sufficient to cover this Request. Nonetheless, an overview table of baseline vegetation classes per different area types (carbon accounting area, associated areas) are to be inlcuded to the PDD.	

Date: 9 July 2009 Page 25 of 88



		accounting.  Project team, 27 I  Tables describing together with exp Amongst other the	Project team, 27 March 2009:  Tables describing the various vegetation types have been added to the PDD - ogether with explanations on which of them are eligible for carbon accounting. Amongst other the following table was added:  Land use type							
		(area in ha)	1990	<u>1995</u>	2001	2006	<u>1990-2001</u> (ha)			
		Natural Forest	3,376	3,273	2,945	2,569	-431			
		Bush/Grassland	7,321	7,390	7,745	8,229	424			
		Wetland	1,402	1,434	1,409	1,006	7			
		Cropland	0.02	0.01	0.01	0.1				
		Settlement				12				
		Other Land	82	85	82	83				
		Planted area				282				
		Total area (ha)	12.182	12.182	12.182	12.182				
		Audit team, 20 Ap	the table on baseline vegetation types has been included also to the PDD. The Request is closed.							
		The table on base Request is closed								
Corrective Action Request No 3	G 1.3	Project team, 23 . The document "C		ogy" states t	he compliand	ce of the CFS	method to the	Ø		

Kikonda Forest Reserve

Date: 9 July 2009 Page 26 of 88



Document and provide evidence that calculation provided in the PDD is conforrm to IPCC methodologies or UNFCCC approved methodologies. Thus, the consistency of the CarbonFix approach with CCBA requirements shall be achieved and documented.

guidelines of the IPCC GPG.

## Audit team, 13 March 2009:

In section G.1.3 a general statement on compliance of baseline assessment has been included. This can be confirmed for stocks assessment. Removals were set zero, which is considered sustained for eligible grasslands.

Summary of baseline results remains to be included to PDD:

Remaining general request aplicable for ex-ante estimated of actual net removal calculations (section G1.3, G.2.2 and CL 1.3 (CAR 18):

No discussion provided on IPCC compliance. Compliance remains to be discussed and confirmed in detail.

Among others, temporal boundaries project lifetime / accounting period (crediting period) are not defined in the PDD.

Information to be provided shall clearly confirm and discuss the consistency of the Carbonfix calculation with IPCC/general methological approaches, if possible. If this is not possible, apply changes in calculation so that consistency is achieved.

In general consistency with concepts of validation and vertication of removals is to be assured and made clear (i.e. relevant for topcis such VERfutures / buffers etc)

# Project team, 29 March 2009:

The baseline of Kikonda project was determined by the methodology of the CFS, which is based on the on the IPCC GPG and uses a stationary baseline approach whereby it has to be proven that the biomass on the carbon accounting area is not increasing in a "without project scenario".

9 out of 10 approved A/R CDM methodologies use the same approach (stationary). Only the methodology AR-AM0010 uses a dynamic approach.

To determine the baseline of a project, different carbon pools must be selected. According to the CFS methodology the following carbon pools have been assessed by the project:

Kikonda Forest Reserve

Date: 9 July 2009 Page 27 of 88



Carbon pools	Relevance for long- term CO <sub>2</sub> -sequestration	Costs of measurements	
Aboveground living biomass	++	0	
Belowground living biomass	+	Not necessary (calculated)	
Dead wood	0	0	
Litter	0	+	
Soil	Depending on the soil (o to ++)	++	
	++ very relevant + relevant o less relevant - not relevant	++ very high + high o moderate - low	

From the already approved A/R CDM methodologies 5 out of 10 use the same approach – selecting the above- and belowground living biomass only.

Comparing the long-term CO<sub>2</sub>-sequestration of the different carbon pools, it becomes evident that these two pools can be considered as most cost effective.

To avoid that 'soil' becomes a *relevant* carbon pool the following restrictions are given within the CarbonFix Standard:

Trees are not allowed to be planted on wetland.

No flooding or regular irrigation is allowed.

For the planting of trees no area-wide ploughing is allowed. Overall,

Kikonda Forest Reserve

Date: 9 July 2009 Page 28 of 88



mechanized ploughing is limited to the purpose of planting.

To convert standing wood and living non-woody biomass into the unit of CO<sub>2</sub>equivalent other parameters must be considered. The graph below shows these variables:

The synergy of the application from these variables determines if the methodology follows a conservative approach – which means by determining the baseline that emissions are rather overestimated than underestimated.

Variables to determine the baseline can be influences by one or several of the following attributes:

- As the Stem volume is based on a specific cut diameter (x cm), the Biomass Expansion Factors (BEF) must relate accordingly.
- As the Stem volume can be calculated over-bark or under-bark, the BEF must thus consider this.
- Some BEFs are written as a relative figure (0.4), others as calculation figure (1.4).
- ☑ Some BEFs already include the Root-to-Shoot ratio.

All these factors have been considered in the determination of the Kikonda baseline.

The guideline 'Inventory' (Doc-Ref: 07) was followed to execute the execute the field measurements. This guideline is based on the 'Winrock Sourcebook for LULUCF'.

The following table given an overview on the results from the baseline assessment executed:

Woody biomass		Non-woody biomass			
Stem volume:	14.9 m₃	Fresh biomass:	12.8 tons /		
Wood density:	0.58	ha			
BEF:	1.4	Wet-to-Dry ratio:	0.36		

Date: 9 July 2009 Page 29 of 88



		Root-to-Shoot ratio: Carbon fraction: C to CO <sub>2</sub> -ration:	0.48 0.5 3.666	Root-to-Shoot ratio: Carbon fraction: C to CO <sub>2</sub> -ration:	0.48 0.5 3.666		
		Subtotal: tCO <sub>2</sub> /ha	32.8	12.5 tCO <sub>2</sub> /ha			
		TOTAL:	45 tCO	₂/ha			
		Ref-Doc: 07					
		Audit team, 20 April 20	009:				
		For the baseline assestine with IPCC required baseline is closed.	,	,			
Corrective Action Request No 4  The communities in and around the project area are to be described in the PDD including basic socioeconomic information	G 1.4	Project team, 23 Jan 2 Corresponding informa Audit team, 13 March Clarify how this socioe monitoring.	ation included t 2009:		es with the env	visioned	Ø
		Project team, 27 Marc	h 2009:				
		The description how the section section, also the section, also the section which will be monitore	ne information i sources (refere	s described in section	CM 3.1. In the	e table of	

Date: 9 July 2009 Page 30 of 88



		,	
		Audit team, 20 April 2009:	
		A community description (localisation, population, main activities) has been included to the PDD. The section CM also includes an overview of net benefits. Compare corresponding Requests. CAR No4 is covered and closed.	
Corrective Action Request No 5	G 1.5	Project team, 23 Jan 2009:	
Provide a summary of current land use of the project area.		As visualised in the latest satelitte picture of the eligibility assessment, there is very limted agricultural activity taking place within the forest reserve.	
acc of the project area.		According to the classifications cropland and settlement which these activities are between 0.1 ha – 12 ha of the forest reserve. This represents 0,1% of the area.	
		In most parts of the reserve where no planting activities have yet taken place, illegal cattle grazing and charcoal burning activities are taking place.	
		These activities, as well as the minor activities of illegal agriculture farming will be diminished and eventually stopped with the expansion of the afforestation. Currently, security guards (app. 10) employed by the project management, patrol constantly through the area of the forest reserve to stopp illegal activities. These patrolls also constantly remind the people of the area, that the Forest Reserve may only be used for tree growing. As the government does not have capacities to arrest culprits in the field, these security guards also take this responsibility and bring the culprits to local police station if necessary.	
		Audit team, 13 March 2009:	
		The corresponding information has been provided.	
		The potential that community members are "brought to the police", hence that the project team takes law inforcement roles, shall be clarified and impacts on local community members through sanctioning shall be clarified and /or practice remains to be revised.	
		Project team, 27 March 2009:	
		The following text was added within the PDD:	

Date: 9 July 2009 Page 31 of 88



		Capacities which hinder local police to take action are mainly due to the lack of financial capacity – which also includes fuel for transportation. Instead of providing the local police with monetary means, the projecet management sees it as more effective to assist in law enforcement by the possibilities which are given from the usual private property rights. Hereby, no sanctions are given by the management team – this is up to the police and the juridical courts of the state of Uganda.  The assistance is appreciated by the police and by now, known as normal practice by the communities. Activities, such as the illegal agriculture will diminish with the expansion of the planted areas, as people will see that the land is eventually being used.  The standard procedure of arrest and their documentation is described in the document "IMP – Security Cattle" (Ref-Doc: 03-02).  As the holder of the tree planting licence issued by the State of Uganda to the area, global-woods AG holds the land-tenure-rights of the Kikonda Forest Reserve.  Audit team, 20 April 2009:  The Request has been covered. Pracitices on law enforcement and assisting role of the project have been clarified.	
Corrective Action Request No 6 Provide information why global-woods AG holds the land tenure on the Kikonda forest reserve.	G 1.5	Project team, 23 Jan 2009: As holder of the tree planting licence issued by the State of Uganda on an area, global-woods AG holds the land-tenure-rights of the Kikonda Forest Reserve.  Audit team, 13 March 2009: Land access is held by Global Woods (IUE). This shall be monitored in furture verifications. Inlcude a table of project participants to the PDD (including contact details (ie as first or last page).  Project team, 27 March 2009:	☑ FAR

Kikonda Forest Reserve

Date: 9 July 2009 Page 32 of 88



	The following	table and	text was	added	within	the PDD:
--	---------------	-----------	----------	-------	--------	----------

Name of project participants ((host) indicates a host Party)	Private or Public entity
Germany	global-woods (private)
Uganda (host)	SUB – Sustainable Use of Biomass (private) 100% owned by global-woods
Uganda (host)	National Forest Authority (public)

#### Contact details:

global-woods / SUB Project Manager Mr. Matthias Baldus baldus@global-woods.com Stohren 5, 79244 Münstertal, Germany

Executive Director Mr. Damian Ankankwasa damianb@nfa.org.ug Spring Road Plot 10/20, P.O. Box 70863, Kampala, Uganda

# Audit team, 20 April 2009:

Include contact details of SUB in Uganda.

FAR

Secured land tenure at validation stage can not assure that land tenure as well as the access to carbon rights is actually maintained over the entire project lifetime.

Date: 9 July 2009 Page 33 of 88



		Control of project area and access to carbon rights shall be monitored and assessed at verification.  Project team, 23 April 2009: The following table and text was updated within the PDD: global-woods Project Manager Mr. Matthias Baldus baldus@global-woods.com Stohren 5, 79244 Münstertal, Germany  Sustainable Use of Biomass Ltd. (SUB) Director of Corporate Affairs Mr. Shedrack Kajura sub_dl@yahoo.com P.O. Box 290, Hoima, Uganda  Audit team, 07 July 2009: The contact details of SUB in Uganda were included to the PDD as requested. The CAR is closed.	
Corrective Action Request No 7  Main results of studies on the natural and biodiversity parameters shall be included into the PDD.	G 1.6	Project team, 23 Jan 2009: In the vegetation study executed by Olivia Wannyana ("Classification of Kikonda Vegetation by Olivia Wannyana.pdf", 2006) floral biodiversity was summaries as follows:  "There are significant frequency differences in vegetation of Kikonda. Between forest remnants, Combretaceous woodlands, Acacia woodlands and wooded grasslands, especially where there were many termites. The most common genera in the Combretaceous woodlands were Combretum and Terminalia spp. In these woodlands there is very little shrubby undergrowth around termite mounds. The	₹

Kikonda Forest Reserve

Date: 9 July 2009 Page 34 of 88



woody genera along termite mounds are often different from those in the surrounding microhabitats and include species more characteristic of drier areas. These termite thickets have many shrubs with edible fruits of the major ones being Capparis tomentosa and Grewia similes. The grass layer consists of perennial tussocks of several genera including Brachiaria, Hyparrhenia, Sporobolus and Loudetia species. In many places Hyparrhenia dominates. Thickets can be looked upon as extreme types of bushlands or woodlands with dense stands of thorny or spiny shrubs. Milne (1947), states that thickets appears to be limited to deep soils of high acidity and light texture. According to Gillman (1947) it is consolidated swamp floor deposit of pre-rift age."

On the fauna biodiversity a survey based on field assessment and interviews with local people and staff produced a list of species common in the reserve which does not differ to great extend from the fauna in the surrounding areas. Further studies on that matter are bound to be made.

For more details see CFS document "Environmental aspects"

### Audit team, 13 March 2009:

Clarify in the PDD the methodology used for flora and fauna biodiversity assessments.

Assure that it is clearly indicated for which projec area types (and baseline strata) these assessments were made.

Clarify how the biodiversity baseline information matches with the envisioned monitoring (consistency of data sets).

# Project team, 27 March 2009:

Satellite picture analysis by the consultant Dr. Dees (GeoFIS GmbH - Freiburg, Germany) was conducted to identify the vegetation strata within the project area. These are: high forest, degraded forest, grass- and bushland and wetlands.

To evaluate the main parameters of the biodiversity within the project area, the initial baseline analysis - which normally only determines the stock and in-situ growth of

Date: 9 July 2009 Page 35 of 88



		existing vegetation was extended by biodiversity parameters in order to provide a base for further monitoring.  Sample plots of 250 m² were visited by a professional biologist and a team of 2 assistants and plants were identified <i>in situ</i> . The location of the plots was documented through GPS, making a re-measurement possible.  Although this initial analysis has given a good overview of the current state of faunal biodiversity, it is envisage to further develop sampling techniques for the upcoming inventories, earmarked for every five years. The overall aim is to generate sufficient data to transparently track the development of floral biodiversity and to compute biodiversity indicators such as e.g. Shannon-Wiener.  Audit team, 20 April 2009:  The information on biodiversity status of the project land has been complemented in the PDD. It was clarified that future monitoring will track the development of floral biodiversity and to compute biodiversity indexes such as e.g. Shannon-Wiener. The Request is closed.	
Corrective Action Request No 8  Give reference to the document  "Kikonda – planting trees law not enforced".	G 2.1	Project team, 23 Jan 2009: The document is attached to the email.  Audit team, 13 March 2009: The reference is mentioned in the PDD and is considered to sustain systematic non-inforcement of forest operations in the Reserve.	⊠
Corrective Action Request No 9  Provide project specific information on non-CO <sub>2</sub> GHG emissions in the project.	G 2.2	Project team, 23 Jan 2009: The impact on soil in the project is limited, since only small planting-wholes are dug by manual labour. Further, the project does not use any drainage, irrigation or fertilization for its tree planting activities.  During land preparation, biomass from shubs and grasses is cleared and burned. This causes non-GHG emissions which are accounted for by an adding an	

Kikonda Forest Reserve

Date: 9 July 2009 Page 36 of 88



additional 10% to the baseline emissions. Hence, these emissions are deducted when the volume of carbon credits is calculated.

Other non-GHG which caused by project acitivities (such as from flights, machines, etc.) are accounted for by the deduction of 0.5% from the projects 'Future CO2-Fixation'.

#### Audit team, 13 March 2009:

General table on CarbonFix calculations has been included to section G.2.2 while only baseline information is requested as per PDD.

Remaining general request aplicable for ex-ante estimated of actual net removal calculations (section G1.3, G.2.2 and CL 1.3 (CAR 18):

No discussion provided on IPCC compliance. Compliance remains to be discussed and confirmed in detail.

Among others, temporal boundaries project lifetime / accounting period (crediting period) are not defined in the PDD.

Information to be provided shall clearly confirm and discuss the consistency of the Carbonfix calculation with IPCC/general methological approaches, if possible. If this is not possible, apply changes in calculation so that consistency is achieved.

In general consistency with concepts of validation and vertication of removals is to be assured and made clear (i.e. relevant for topcis such VERfutures / buffers etc)

Non-CO2 gases are considered negligible or adequately considered through calculation approachs and their effects will need to be monitored (FAR).

# Project team, 27 March 2009:

As described in the without-project scenario, where illegal charcoaling and cattle grazing will continue, evidence is given that the future carbon stock change would be negative.

Following a conservative approach the baseline is set to zero.

Date: 9 July 2009 Page 37 of 88



		Audit team, 20 April 2009:	
		Non-CO <sub>2</sub> gases are considered negligible or adequately considered through calculation approach.	
Corrective Action Request No 10  No information is given on impacts of the "without-project" scenario on local communities. Provide this information in the PDD.	G 2.3	Project team, 23 Jan 2009: Without the project activities, actions such as illegal agriculture, cattle grazing and charcoaling would expand in the forest reserve and eventually lead to an uncontrolled and unsustainable land-use.  As seen in other forest reserves within Uganda, tension between local communities and the government would grow. The government would probably try to enforce the law (to clear the land of illegal activites) - when the financial means are available.  Audit team, 13 March 2009: Clarify further (and document in the PDD) the expected use of the project area in the absence of the project by the local communities (also as input for net socioeconomic impact estimates of the project (CM1)).  Project team, 27 March 2009: Overall, any without-project scenario will lead to the unsustainable use of natural resources, due to the fact that any law to protect the forest reserve cannot be enforced. The following examples of other forest reserves within Uganda display clearly what the results are if sufficient protection is not provided by the governement or the license holder:  In the PDD 4 references to the activities in other Forest Reserves of Uganda are given.  Audit team, 20 April 2009: The potential use of project area in the without project scenario is considered to be	
		sufficiently described.	
Corrective Action Request No 11 "Unsustainable land use" is mentioned as negative impact of the	G 2.4	Project team, 23 Jan 2009: With the expansion of agricultural activities, cattle grazing and charcoal burning the remaining areas of natural forest would be destroyed step-by-step.	Ø

Date: 9 July 2009

Page 38 of 88



"without-project" scenario on biodiversity. Provide further details on this in the PDD.		In contrast to the current mixture of ecosystems, in the "without-project" scenario agriculture activities in combination with savanna bushland that is used for pasture and charcoal activities would be the remaining types of land-uses.  Therefore, the current biodiversity would be negatively effected.  Audit team, 13 March 2009:  It is credible that further degradation in the absence of the project would impact the general conservation status negatively (and with that biodiversity parameters).	
Corrective Action Request No 12  The PDD assumes a likely negative impact of the "without-project" scenario on water and soil resources. Provide more detailed information.	G 2.5	Project team, 23 Jan 2009: Although, the productivity of tropical forests, mainly situated on ferrasols, is quite high, these type of tropical soils are actually very thin and poor in nutrients. The underlying "parent" rock weathers rapidly in the tropics' high temperatures and heavy rains, and over time, most of the minerals have washed from the soil. Nearly all the nutrient content of a tropical forest is in the living plants and the decomposing litter on the forest floor.  When an area is completely deforested for farming or cattle grazing, the farmer typically burns the trees and vegetation to create a fertilizing layer of ash or	Ø
		grassland which serves as meadow. After this slash-and-burn deforestation, the nutrient reservoir is lost, flooding and erosion rates are high, and soils often become unable to support crops in just a few years. In case of cattle pasture, the ground is further being compacted, preventing forest recovery.  The missing root system of the trees will decrease the natural filtering of water which	
		further leads to an enrichment of nutrients within the water. Such enrichment will increase the growth of algee and waterplants leading to disturbance of the ecosystem of lakes and rivers.	
		Audit team, 13 March 2009:  Due to the fact that the without project scenario equals the current and common landuse, the general description of the of impacts of continous degradation processes on soils and water ressources is accepted.	

Date: 9 July 2009 Page 39 of 88



	1		
		In regard to water ressources it has been furthermore discussed in the audit process, that the retention capacities of non forest vegetation (grasslands) are comparitively low while higher amounts infiltrate into the ground immediately.	
Corrective Action Request No 13  The "executive summary" referenced in the PDD refers only to "Forest Management". Provide information on major project activities leading to the others project goals (i.e. community and biodiversity).	G 3.2	Project team, 27 March 2009: The project activities will be implemted in the Kikonda Forest Reserve at Kiboga District in Uganda. To counteract the limitation of wood production within the country which lead to the exploitation of native forests, the project has the following objectives:  1. The production of wood for the national markets of timber and energy wood  Uganda is fast approaching a major shortage of sawn timber. To meet the	✓
		increasing demand of the growing economy, the country already imports timber as well as it is facing the increasing pressure on its remaining natural forests.	
		Virtually no planting activities have been established in Uganda for over 30 years and less than 2 000ha of mature timber-forest now remains in Uganda, whilst it has been estimated that Uganda needs some 60-70 000ha of productive forests to meet the country's projected timber demand by 2025.	
		The main requirement in Uganda is general purpose timber for construction, furniture making, etc. Pine is very suitable for these markets and could eventually replace much of the hardwood timber currently being used from native forests.	
		Furthermore, the demand of energy-wood is also growing quickly together with the rapid polutation growth in Uganda. Timber which will not be used in high-quality market segment will find its value in this secondary market.	
		2. Sustainable sequestration of CO2 with the trees	
		According to the CarbonFix Standard, the carbon sequestration of the project is being monitored over the project's lifetime. Hereby, the monitoring of the trees is based on the inventory guideline for LULUCF projects – published by Winrock International. Growth-models which predict the amount of carbon being	

Kikonda Forest Reserve

Date: 9 July 2009 Page 40 of 88



sequestrated will be adapted and verified with every certification process.

Initial inventories were executed during 2007 and 2008 verifying the expected growth rate of the already planted forests.

# 3. Improving the economic situation of the surrounding villages

The project provides continuouse long-term employment to more and more people in different fields of forest operations and with its expansion these benefits will also continue to grow. Currently over 300 workers are employed to raise seedlings, prepare land, maintain already planted forests and administer the project. Staff is countiously being trained in their work to ensure best practices.

When trees are mature, additional work will be created through the transformation of wood into timber. Sawmilling as well as further wood processing, such as carpentry, will lead to further jobs which also require continuous capacity building.

In addition to the direct impact coming from the project activities, the project supports schools within the region to enhance one of the most needed instruments of society - education.

Overall, the project's activities lead to continuous and long-term positive impacts on the communities surrounding the forest reserve.

# 4. The conservation of biodiversity

With the protection of parts of the forest reserve, natural fauna and flora will recover.

The conservation areas is step-by-step being protected so that animals such as hippos, birds, monkey and bushbucks can find refuge from illegal hunters. These hiding placed will allow them to breed and live in their natural habitats.

With the start of the project activities, the company started to fight illegal activities such as charcoaling and cattle grazing so that animals and plants are able to resettle their natural habitats. As a significant portion of the project area will not be used for forestation purposes habitat fragmentation is avoided.

An additional positive effect on biodiversity will be reached through the sale of

Date: 9 July 2009 Page 41 of 88



		timber. This is due the fact that all timber will be sold on the national market and thereby lower the pressure of the unsustainable exploitation of the natural forests in Uganda and surrounding countries.	
		Audit team, 20 April 2009:	
		An overview of project targets also beyond carbon sequestration have been included to the PDD. The Request is closed.	
Corrective Action Request No 14  Documents on additionality of the project are not publicly available and	G 3.7	Project team, 23 Jan 2009: All project documents can be accessed through the project website at <a href="https://www.CarbonFix.info/KFR">www.CarbonFix.info/KFR</a>	Ø
remain to be made accessible. A summary is to be included to the		As the information on the additionality of the projects is limited by the CarbonFix websystem, here the direct link:	
PDD.		http://www.carbonfix.info/chameleon//outbox//8537a1a644478df435a7c59f922dcbe3 /Kikonda - CFS v20 - Template - Additionality.pdf	
		Audit team, 13 March 2009:	
		As requested, include corresponding information to the PDD. Core additionality information needs to be publically available. In the PDD, include information how project information is made publically available.	
		Project team, 27 March 2009:	
		All CFS documents, also those which are not publically available, have been added to the attachment folder of the CCBS PDD.	
		Audit team, 20 April 2009:	
		a. Section G.3.7 mentions PDD Annex that are not included to the PDD. Correct this.	
		b. Core information / summary on additionality assessment needs to be included to the PDD (G.2.1). Compare CAR 45	
		Project team, 23 April 2009:	

Date: 9 July 2009 Page 42 of 88



		a. All CFS documents, also those which are not publically available, have been added to the attachment folder of the CCBS PDD.  b. The following table and text was added within the PDD:  The additionality of the project was further proven by the application of the "UNFCCC additionality-tool". In the frame of that application, an investment analysis was conducted, that has proven, that without returns from CO2-sales the project would be financially less attractive that state bonds, which come with a significantly lower risk. This benchmark analysis was favored over an investment comparison analysis, since reliable date for potential land-use alternatives (charcoal burning, cattle keeping) was not available. Low returns in a project scenario without CO2-sales therefore is a significant barrier to the implementation of such projects but this barrier does not stop alternative, illegal activities.	
		Although it is mandatory to plant trees on the project area, the activity is regarded additional, since it is evident and proven by statements of authorities, that this mandate is not implemented and illegal biomass removal is the reality if the project activity does not take place. Taken all these points into account, the project is regarded to be additional.  Audit team, 20 April 2009:	
		Additionality information was received.	
Corrective Action Request No 15 Include and reference the information and documents provided to the audit team during onsite visit also in the corresponding PDD sections. Applicable to entire PDD.	G 4.2 and PDD	Project team, 23 Jan 2009: We are uncertain how this action request should be implemented. All on-site references are made available through the "Management capacities" attachment folder on the projects webpage. No key differences to other TÜV Süd validated projects were found. Please provide further clarification.  Audit team, 13 March 2009:	☑
		References shall be quoted in PDD in order to sustain assumptions and hypothesis	

Date: 9 July 2009

Page 43 of 88



		made by the project team (partly to CFS documents as included but also to other relevant documents i.e. as listed to IRL in Carbonfix Report).  Project team, 27 March 2009:  There are 11 full time employees working for the Kikonda Forest Reserve, 3 of which are responsible for operations and the remaining are technicians. The local office provides technical guidance, including training courses, and conduct quality control for the preparation and implementation of the project activities. Project participants have a network of local, national, and international forestry experts they can approach to solve questions concerning the different aspects of the projects. The project implements the most up-to-date technologies and silvicultural models.  During the time of plantation, temporary labour is employed from the local community. As the planting area varies between 100 to 500ha per year, on average 300 local farmers find work by the projects activity.  To achieve the qualitative and quantitative targets of the project, the company structure as well as the amount of management staff is sufficient. The following organigramm shows in detail the structure of the working force.  Organigramm is made available within the PDD.  Audit team, 20 April 2009:  The response above does not refer to the initial request. However, as part of the substantial PDD update, most relevant sources have been quoted. The Request is therefore closed.	
Corrective Action Request No 16  List key technical skills which are necessary for a successful implementation of the project and identify members of the management team possessing these skills.	G 4.4	Project team, 23 Jan 2009: The management team has adequate experience for running the project.  Audit team, 13 March 2009: The corresponding information has been included to the PDD and has been confirmed by the audit team during the oniste visit.	Ø

Date: 9 July 2009 Page 44 of 88



Corrective Action Request No 17  No information are given in the section. "Financial Capacity". The document "financial reports global-woods2004-2006.pdf", which is a copy on the balance of global woods AG, was provided. Provide further explanation and information to the PDD.	G 4.5	Project team, 23 Jan 2009: Global-woods is a public company under German law. Its shareholders are international private as well as institutional investors. During the last years company has invested over 3 Mio US\$ in afforestation and biofuel projects.  The business model of timber investment in combination with the generation of high-quality CO2certificates, as it is implemented in Uganda, gives the organzation a stable financial ground to continue its expansive course in the set-up and management of climate forestation projects.  Audit team, 13 March 2009:  References to the Documents sustaining financial health and basic information have been included and are conisdered adequate.	₽
Corrective Action Request No 18  Provide consolidated information on net climate impact (t CO2-e sequestered) in the PDD.	CL 1.3	Project team, 23 Jan 2009: The net climate impact of the Management Units (MUs) is calculated the following:  VER <sub>futures</sub> = Eligible	✓
		Audit team, 13 March 2009:  Remaining general request aplicable for ex-ante estimated of actual net removal calculations (section G1.3, G.2.2 and CL 1.3 (CAR 18):  No discussion provided on IPCC compliance. Compliance remains to be discussed	

Kikonda Forest Reserve

Date: 9 July 2009 Page 45 of 88



and confirmed in detail.

Among others, temporal boundaries project lifetime / accounting period (crediting period) are not defined in the PDD.

Information to be provided shall clearly confirm and discuss the consistency of the Carbonfix calculation with IPCC/general methological approaches, if possible. If this is not possible, apply changes in calculation so that consistency is achieved.

In general consistency with concepts of validation and verfication of removals is to be assured and made clear (i.e. relevant for topcis such VERfutures / buffers etc)

Entire section CL remains to be updated correspondingly.

Furthermore, in CL.1.2 copliance with 15% requirement on non CO2 gases needs to be documented.

#### Project team, 27 March 2009:

The section CL has been updated correspondingly.

# Audit team, 20 April 2009:

The Carbon Fix approach has been explained aggregated numbers per Management Unit for sequestration over half a rotation period are included. Crediting period / project lifetime is 50 years.

For matters of consistency and in order to allow comparable results with other projects include:

Annual actual net removals of the project activity over the project lifetime

Annual average and total actual net removals

# Project team, 23 April 2009:

The following table and text was added within the PDD:

The net anthropogenic GHG removals by sinks for the entire project and each year are presented in the following (table was removed from answer, it is already

Date: 9 July 2009

Page 46 of 88



	1	included to the DDD)		
		included to the PDD)		
		Audit team, 07 July 2009:		
		The above request was included in table in section CL 1.1. The CAR is closed.		
Corrective Action Request No 19 Provide relevant information on leakage mitigation in the PDD	CL 2.2	Project team, 23 Jan 2009:  To mitigate leakage, the project offers jobs especially to people living in surrounding areas. This enhances the effect that charcoalers and cattle keepers from the region do not shift their activities with the expansion of the project, but change their jobs to become part of the tree planting activities.		
		Audit team, 13 March 2009:		
		PDD remains to be updated and main leakage inf	formation needs to be included.	
		Project team, 27 March 2009:		
		The following categories of potential leakage effect	cts have been evaluated	
		a. Fuelwood use d.	Agricultural farming	
		b. Charcoal burning e.	Resettlement	
		c. Timber harvesting f.	Livestock farming	
		whereby only category a. b. and f. are applicable to the project of the Kikonda Forest Reserve.		
		To mitigate any of these types of leakages, the project offers jobs especially to people living in surrounding areas. This enhances the effect that charcoalers (b.) and cattle keepers (f.) from the region do not shift their activities with the expansion of the project, but change their jobs to become part of the tree planting activities.		
		The use of fuelwood (a.) is not majorly effected by the project activity, as people mainly (80%) collect dead-wood. Dead-wood will continue to be accessible in areas which are not planted on by the project. The strict enforcement that no living wood is being cut in the remaining existing forests is provided by the project developer.		

Kikonda Forest Reserve

Date: 9 July 2009 Page 47 of 88



For more detailed information see also CFS-document "Leakage" (Ref-Doc: 08).

# Audit team, 20 April 2009

Types of leakage has been summarized in PDD. Include main results of leakage assessmen from Ref-Doc.08 to the PDD. Applicable also to CL2.1. / CL2.3. Simple cross-references should be avoided.

### Project team, 23 April 2009:

The following text was added within the PDD – to Point CL 2.1:

In 2006 a survey was conducted in 22 villages surrounding the reserve. With knowledgeable representatives, in many cases the mayor, it was discussed, what leakage effects might occur, in case the project activity is implemented. The main activities mentioned that might be shifted were fuelwood use, charcoal burning and lifestock grazing.

For fuelwood, the study and further estimations found out, that of app. 15 m³ of fuelwood that are collected annually per ha, app. 2 m³ come from living trees. It is expected that this activities will shift 100% to outside areas and hence leading to a leakage of app. 4,4 t of CO2/ha.

For charcoal production 6.9% of the interviewees stated that they will shift charcoaling to places outside the reserve, the rest will shift to work in reforestation etc.. This will lead to a leakage effect of 1,52 t of CO2/ha.

For cattle keeping the result of the survey was, that 19% of the cattle keepers would clear forests outside the project area whereas the rest has sufficient other grazing lands leading to leakage of 66,5 t of CO2/ha.

Date: 9 July 2009 Page 48 of 88



		Overall this resulted in a leakage effect of 67'477 tCO2.	
		32'212 tCO2 From the shift of fuelwood use activities 11'128 tCO2 From the shift of charcoal burning activities	
		24'137 tCO2 From the shift of livestock grazing	
		Divided by the eligible project area of 7'321ha, this result in a leakage effect of 9,2tCO2/ha For more details see CFS-document "Leakage" (Ref-Doc: 08).	
		Audit team, 07 July 2009:	
		The above request was included in table in section CL 2.1. The CAR is closed.	
Corrective Action Request No 20 Provide information/reference on	CL 3.1	Project team, 23 Jan 2009: The parameter of "Baseline" as well as "Leakage" are determined once in the beginning of the project and must therefor not be monitored.	
monitoring plan.		The parameter "CO2-Fixation", respectively the carbon pools "Woody Aboveground Biomass" must be monitored through the forest inventories. Guidelines for these inventories are given by the CFS (document "Inventory guideline"). The parameter "Woody Belowground Biomass" is determined by a continuously used expansion factor.  The continuous monitoring of non-GHGs is done by verifying the amount of fertilzer used per MU and if the biomass was burned on a MU. Both of these parameters must be considered in the CarbonFix Websystem for the calculation of the CO2-certificates.	
		Audit team, 13 March 2009:  PDD remains to be updated and main monitoring information needs to be included.	
		Assure that a concrete list of parameters to be monitored is included.  Project team, 27 March 2009:  A list of parameters have been added to point CL 3.1b. Hereby also the reference	

Date: 9 July 2009 Page 49 of 88



		source to already executed monitoring has been given.  Audit team, 20 April 2009  The table and included parameters are considered to allow future monitoring and	
		verification. It is underlined that M25 / (Area of) stratum has to be located within the defined project area. The Request is closed.	
Corrective Action Request No 21  Provide project specific information on monitoring frequency and sampling strategy.	CL 3.1	Project team, 23 Jan 2009: According to the "Procedures" of the CFS, the frequency of monitoring is linked to the frequency of certification. Which varies according to the CFS between 2 to 5 years, depending on the age of a project.	
campung caucagy.		The "Inventory" guideline of CFS recommends the measurements and sampling strategy for the monitoring of the parameter "CO2fixation" include details. All of these requirements must be monitored and shall lead to an accurate adaptation of the predicted growth-model.	
		Audit team, 13 March 2009:	
		Include a statement that GPG LULUCF requirements on uncertainties and best practice in sampling design will be followed.  Project team, 27 March 2009:  The inventory guideline of the CFS is an extended version of the "Winrock Sourcebook for LULUCF (2005)" which is considered as best practice in sampling design for worldwide climate forestation projects.	
		Uncertainties from forest inventories which are the basis for the determination of the CO2fixation are treated with the conservative approach, which lead to a rather underestimation of carbon sequestration.  Audit team, 20 April 2009	
		The monitoring and sampling is considered to sufficiently described. Implications of Winrock Sourcebook for LULUCF (2005)" on future consideration of uncertainties are considered adequate.	

Kikonda Forest Reserve

Date: 9 July 2009 Page 50 of 88



### **Corrective Action Request No 22**

For sections CM1b, 1c only references are given in the PDD.. Insert main content of the references in the PDD, indicating the net benefits..

# CM 1.1 | Project team, 23 Jan 2009:

To evaluate the community benefits coming from the project, the performance of the KiCoFA association is contiously (before every certification process) being assessed. A first study was conducted in 2007 which now present the base of evaluation for further assessments.

Further information was included to PDD.

# Audit team, 13 March 2009:

Net benefits (baseline vs. Project) shall be presented in an overview per stakeholder group (while considering the planting area, being in the focus for this validation)

It is considered that net benefit balance may be negative for charcoalers. Include this to CM and monitoring parameters.

# Project team, 27 March 2009:

The following table together with a description of the impacts to the different stakeholders was included in the PDD:

Stakeholder	Scope	Short- term	Long- term	Comment
Charcoalers	~ 300	0	+	- enforcement of law
Nomadic cattle keepers	~ 100	-	0	accelerates through the project implementation + alternative work is offered
KiCoFA (Kikonda Community Forest Association)	Farmers from all neighboring communities (> 20.000 people) are invited to	+	++	+ sponsored tree seedlings or assistance in nursery practices + theoretical training of tree planting and management + practical support in the implementation of tree

abla

Kikonda Forest Reserve

Date: 9 July 2009 Page 51 of 88



	join the KiCoFA 2008: ~ 500			planting activities  + assistance in management of community forest  + direct support of local schools  + income from community forests will raise investment for social infrastructure (hospitals, schools, boreholes, etc.)
Workers (families)	~ 300 (~ 1500 family members)	++	++	+ continuous long-term income + employment in rural area

- negative impacts
- o neither positive nor negative impacts
- positiv impacts
- ++ major positiv impacts

# Audit team, 20 April 2009

Relevant information was included to the PDD. The audit team considers that changes in employment may have some negative impacts due overall changes in employment situation in the area (while considering that these may be illegal but common practice), which are however likely to be outcompeted by positive effects. In a transition phase after planting— especially up to regular forest operations start, socioeconomic impacts due to reduced (illegal) activities may be comparatively higher.

A FAR on socioeconomic monitoring was posed that also reflects on socioeconomic impacts and mitigation activities. Compare below.

Date: 9 July 2009 Page 52 of 88



Corrective A	Action F	Request	No 23
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Provide information if and how changes in social and economic well being over time will be assessed.

#### CM 1.1

#### Project team, 23 Jan 2009:

The net-benefit from the activities described above will be assessed through repetitions of such evaluation studies which will than be able to compare past to current performances.

#### Audit team, 13 March 2009:

Methodologies to be defined and specified for each parameter chosen (in CM3) Project team, 27 March 2009:

In section CM 3.1 a table is provided which displays the parameter to evaluate the socioeconomic impacts of the project. This table also includes the references of source of the already executed study which evaluates these parameters. Audit team, 20 April 2009

It is clarified that survey methods will be used. The included initial monitoring plan is output rather than impact focussed. See CM 3.1

In related section CM 1.2a consideration of stakeholders (according to groups) in project planning shall be described in further detail. Contracting of personel is not deemed sufficient. Reflect on requirements of indicator (and consider to avoid publishing names in PDD, and / or demonstrate consent)

Include main elements of referenced hearing procedure in section CM.1.3 of PDD.

## Project team, 23 April 2009:

The following text was added to the PDD – Point 1.1c

A project of the size of KFR affects the lives of a large number of people living in the area. global-woods is fully aware that potentially conflicts during the projects lifetime with neighboring stakeholder groups and inidviduals must be treated and solved in consensus with all participants in order to ensure a long-term secured set-up of the project – and therefore bind the CO<sub>2</sub> fixed from the atmosphere on a permanent base.

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Date: 9 July 2009

Page 53 of 88



Corrective Action Request No 24  Provide information on potential	CM 1.1	Project team, 23 Jan 2009: Potential negative impacts are that cattle keepers as well as charcoal burners will	V
On any office Antique Barress No. 04	01444	The above request was considered in the last version of the CCB-PDD. The CAR is closed	lacktriangledown
		Audit team, 07 July 2009:	
		For further details please see CFS-document "Socioeconomic Aspects" (Ref-Doc: 04).	
		economic impact will be assured in future, too.	
		keeping and charcoal burning) by far.  Nevertheless global-woods remains attentive to ensure that a net postive socio	
		In total, these effects already now exceed the negative effects (dislocation of cattle	
		As a quantifiable positive output, 250 to 350 people have found a job in the project so far, which is significantly more than the work created through cattle keeping and charcoal burning on the area already planted. People who decide not to change their source of income and work for global-woods, still have the possibility to continue their way of living and working in other parts of the country. Grazing land and land for charcoal burning is abundant in areas around the reserve and other parts of the country. Besides creating jobs, global-woods supports the surrounding villages with tree seedlings free of charge, financial support of schools and seedlings and training for oil-crop (Jatropha) production.	
		To monitor and mitigate these potential negative effects, global-woods puts into the centre of its attention the ongoing dialogue with the neighbouring communities and all people potentially affected by the project. That is done in the shape of scientifically backed-up socio-economic surveys on the perception and impact of global-woods activities (Ref-Doc: 04-01) as well as through continuous communication via extension workers and regular meetings (see also later part of this document).	

Date: 9 July 2009 Page 54 of 88



negative social impacts (e.g. for cattle keepers).		have to stop their illegal activities and therefore lose their source of income.  As all of them are aware that such changes will occure with the expansion of the project – which will still take many years – only minor negative impacts can be expected to those which are not willing to adapt.  Further, cattle keepers most often have a normadic background. Their adaptations to changes can be regarded as more flexible as for the local charcoalers. For local charcoalers alternative jobs within the project are being offered.  Audit team, 13 March 2009: Compare CAR 22 and requirement definition.  Project team, 27 March 2009: See corrections implemented for CAR 22.  Audit team, 20 April 2009  The Request has been covered in CAR 22.	
Corrective Action Request No 25  Only reference is given. Please provide main content of the reference on the offsite community impacts in the PDD.	CM 2.1	Project team, 23 Jan 2009: The Kikonda project is not expected to have negative social impacts on the communities outside of the Reserve.  However, the implementation of the project includes the support of the KiCoFA. With the continuous evaluation of the performance of the KiCoFA, the project seeks to enhance the relationships to the communities surrounding the project and to generate critical input to avoid and manage possible future negative impacts to offsite communities.  Audit team, 13 March 2009: Include main information to PDD. Assure consistency. In other sections offsite negative impacts are mentioned, i.e in regard to limited charcoaling and grazing.  Project team, 27 March 2009: Also for charcoaler and cattle keepers which will have to stop their illegal activities	<b>☑</b>

Date: 9 July 2009 Page 55 of 88



		within the reserve and must find other work outside, no long-term negative impacan be expected. The time of transition to find other work (5-10 years) should be sufficient in order to avoid any disputes. Still for normadic cattle keepers the ove situation within Uganda - growth of population combined with the settlement of ladoes not favor the nomadic way of life.  Audit team, 20 April 2009  The Request has been covered in CAR 22.	e erall
Corrective Action Request No 26	CM 3.1	Project team, 23 Jan 2009:  Variables for the evaluation of the net-benefits to communities from the study	Ø
The questionnaire does not include monitoring of community impact, but		conducted are amongst others:	FAR
focuses on impact of KiKoFa training.		Members of the KiCoFA (page 10, tab 2)	
Provide relevant information and also consider monitoring of negative		Area planted by the KiCoFA (page 10, tab 2)	
impacts. An initial monitoring plan remains to be included to the PDD		Trainings offered to the farmers (page 21, fig 11)	
(with defined parameters,		Evaluation of the trainings (page 25, fig 16; page 26, fig	g 18)
frequencies, monitoring approach etc).		Evaluation of relation to the project develoer (page 34, fig 28)	
cto).		Negative impacts will be monitored by the amount of arrests made in the forest reserve – by the security group. The standard procedure of arrest and their documentation is described in the document "IMP – Security Cattle" which can be accessed in the attachment folder of the CFS-document "Management capacity"	
		Audit team, 13 March 2009:	
		The Request remains to be covered. Include a Monitoring Plan to the PDD. The parameters included shall exeed the main (output) parameters currently included (trainings and area planted). It shall be focussed on actual impacts. (Furthermore, page references in PDD are unclear)	

Date: 9 July 2009

Page 56 of 88



		Project team, 27 March 2009: A table is provided which displays the parameter to evaluate the socioeconomic impacts of the project. This table also includes the references of source of the already executed study which evaluates these parameters.  Audit team, 20 April 2009	
		FAR:  Social Impact Monitoring should be further adapted including parameters of actual impact monitoring (rather than outpout monitoring) focussing on actual stakeholder	
		groups prior to first verification.	
		Beyond this, socioeconomic impacts on Charcoal Makers and Nomadic cattle keepers shall be monitored especially in the initial years of implementation - and if substantial negative impacts are identified, further mitigation activities need to be defined.	
Corrective Action Request No 27  A local primary school is supported; provide relevant reference and evidence.	CM 4.1	Project team, 23 Jan 2009: To enhance the education of the children living in the surrounding communities the company is supporting schools by sponsoring the salary of teachers. At present one teacher at a primary school is fully and continuously paid by the project owner. Based on the experience of that exercise more teachers will be funded. Schools are often overloaded and classes of 50 to 100 students are often found. In the school, children learn how to read and write. Skills that are essential for their further lives.	<u> </u>
		Audit team, 13 March 2009:	
		Evidence to be provided, i.e. contract with teachers.  No other informaiton on capacity building has been provided in the PDD.	
		Project team, 27 March 2009: Reference documents have been attached to the PDD.	
		Ref-Doc: 004 and 005 Audit team, 20 April 2009	

Date: 9 July 2009 Page 57 of 88



		Reference / evidence has been provided. The Request is closed.	
Corrective Action Request No 28  Text in the PDD partly not understandable, please correct.	CM 4.2	Project team, 23 Jan 2009: The capacity building in terms of lectures held at the forest station or in the villages is open to everybody living in the surrounding communities. There are no restrictions regarding the participant's religion, position in the local communities, race or gender.	Ø
		Audit team, 13 March 2009:	
		Information to be included to PDD.	
		Project team, 27 March 2009: Information was added already to PDD	
		Audit team, 20 April 2009	
		The Request on this optional point is closed.	
Corrective Action Request No 29 Provide references to relevant studies on biodiversity in the PDD.	B 1.1	Project team, 23 Jan 2009: Without the project and its protective actions on the conservation land, the current degradating and unsustainable land-uses will be maintained. This will have negative impacts to the habitat of wild animals and plants as well as negative effect to biodiversity.	Ø
		As the project implemented app. 30% of nature conservation area, the expansion of wildlife habitats will be enhanced. With the success of the project, the reintroduce of native species is supported.	
		Although major biodiversity benefits can be expected also through the production of wood which lowers the pressure on the native forests in Uganda, these impacts are not monitored.	
		>>>>>>> Start COPY of CFS	
		Following the guidelines of the 2. Helsinki Conference on Biodiversity, biodiversity is assessed by comparing inventories in a regular time frame.	
		A biodiversity inventory in the planted area is executed every two years. In the	

Kikonda Forest Reserve

Date: 9 July 2009 Page 58 of 88



nonplanted area it is executed every 5 years. The results of the inventory are made public. If a decline in the number of species appearing or the amount of individuals sighted per species declines, the project management calls in a meeting with local stakeholders to discuss the consequences.

Above that, it is recommended to calculate biodiversity indices following the Shannon- Wiener equation or the Simpson-Index.

It is recommended to repeat the inventory at the same time of the year. The inventory counting animals is recommended to be done both at daytime and at night.

#### Plants

For the inventory on plants in the planting area and in the total project area sample plots are set up according to the CarbonFix inventory guidelines.

On top of the information collected following CarbonFix, data on the name and amount of non-woody species must be gathered. This approach follows the recommendations of Prof. Pelz on the integration of Biodiversity Inventories in regular

forest inventories1.

The following data must be gathered:

- Name and number of all woody species found on the sample plot.
- Name and number of all non-woody species counted on a sample plot of one by one meter within the big sample plot.

#### Animals

Per land-use-type 7 transects of 100 meter must be identified.

These transects are walked along and the species name of all animals seen during that walk are recorded and their number counted.

In the middle of the 100 meter transect an area of 5 by 2 meter must be demarcated and the names of all animals on that area must be determined and their number

Kikonda Forest Reserve

Date: 9 July 2009 Page 59 of 88



counted.

Text taken from CFS attachment-document "Guideline Biodiversity Inventory", in which also further background information is available.

#### Audit team, 13 March 2009:

For Flora / herbaceous vegetation the approach to use an adaptation of the standard forest sampling, and the regular Indix comparison over time is considered adequate.

For Fauna, the methodolgoy used shall be further specified (indicating species monitoried, why these are chosen).

Define in which types of the project area the biodiversity monitoring is going to occur.

#### Project team, 27 March 2009:

The following text and tables for the determination of the biodiversity variables were added to B1.1.

The methodology followed to measure the current state of biodiversity and its development with respect to the project activities is based on the report of

Jacques Rondeux (Agricultural Sciences Faculty, University of Gembloux) on "Forest inventories and biodiversity" - for the monitoring of plants (Doc-Ref: 006), and

Barry Shiver & Bruce Borders on "Sampling Techniques for Forest Resource Inventories" - for the monitoring of animals (Doc-Ref: 007)

Monitoring of flora will be streamlined with the regular forest monitoring.

Monitoring of fauna will be done by a combination of three approaches:

interviews with field staff on animal sightings (focus on large mammals, reptiles and birds)

transect sampling (focus on all animal types not well known to field

Date: 9 July 2009 Page 60 of 88



		capture – re-capture (focus on small mammals, reptiles, insects)  Intervals of monitoring are once every five years. For the next years of the project, which will see a rather high figure of areas planted with new forests, shorter intervals are envisaged.  In co-operation with scientists it will be determined, what indicator species are common in the region. Currently no such indicator species are known. Using indicator species would allow to make reliable assumptions for a greater section of the fauna, without actually having to sight or capture all animals in question.  Biodiversity has been monitored, although not fully scientifically structured, since the very beginning of the project. Based on these observations, literature review and expert interviews the following development is expected.  The assumptions count for the transformation of the land use types of the baseline scenario (degraded forest, wetlands, bush- and grasslands) to the land use types of the project scenario (protected forest and wetlands, planted forest).  Audit team, 20 April 2009  The described methodological approach is considered adequate to monitor.	
		The described methodological approach is considered adequate to monitor biodiversity impacts.	
Corrective Action Request No 30  Provide further information on the methodology and sampling design, including information of the inventory method for biodiversity.	B 1.1	Project team, 23 Jan 2009: see CAR 29  Audit team, 20 April 2009  The described methodological approach is considered adequate to monitor biodiversity impacts.	Ø

Kikonda Forest Reserve

Date: 9 July 2009 Page 61 of 88



#### **Corrective Action Request No 31**

Clarify and define assumptions used to sustain methodologies designed to quantify in the net biodiversity impacts ("with project" vs "without project" scenarios). Provide such information.

# B 1.1 <u>Project team, 23 Jan 2009:</u> see CAR 29

Audit team, 13 March 2009:

Include further details on assessment of positive net benefits in the PDD

Include conclusion statement to PDD:

Project team, 27 March 2009:

#### Animals

Both on the grass and bushland areas and in the degraded forests, wild animals, in the baseline scenario, are permanently subject to poaching and their habitat is threatened by illegal logging and cattle keeping. Nesting trees of birds are felled and vegetation that provides shelter for insects up to mammals is destroyed by fires set by herdsmen to increase pasture land.

When the set-aside forest and swampland areas are fully protected under the frame of the project activities, animal population is expected to increase in size and variety. This increase will also cover the areas planted with new trees since also here poaching and wildfires are effectively stopped and a layer of grass and herbs under the planted trees provides shelter and food.

#### **Plants**

The degraded forests and swamp areas in the baseline scenario bear a smaller variety of plants than in a natural state. This is due to active removal of plants (for logging, fuelwood collection, grazing) and intentional fires.

The bush- and grassland of the baseline scenario represent a human induced mix of plant species that is not related to the original high-forest/savannah composition of species.

The project activity of setting aside all vegetation that falls under the definition of forest and permanent wetlands provides an effective measure to increase variety of species and number of plants in the protected areas. The areas planted with trees in

Kikonda Forest Reserve

Date: 9 July 2009 Page 62 of 88



the project scenario are expected to rather remain with the same level of plant biodiversity as found by now in the degraded grass and bushland, since under the planted trees a layer of grass, herbs and small shrubs will still be present. Still, a decline in the individual plants per species on these areas might occur.

	Habitat	Short- term	Long- term	Comment
<u>Animals</u>				
	Depleted forest turns into protected forest	0	++	It is expected that it will take some time until animal population and variety has recovered from century long poaching and forest destruction. Since the next large scale forest is more than 100 km away, transfer of animals extinct in Kikonda shall be taken into consideration.
	Disturbed wetlands turns into protected wetlands	+	++	It is expected, that wetland will rather fast be recovered by animals for that niche migrating in from the nearby river Kafu.
	Grass- and bushland turns into planted forests	-	+	The establishment of new planted forests will certainly scare of a significant number of animals from the planting area. As the stands grow it is expected that they give habitat to more animals than the baseline

Date: 9 July 2009 Page 63 of 88



				vegetation
Plants				
	Depleted forest turns into protected forest	++	++	The depleted forest still have a vivid seed stock in the soil and are not invaded by elephant grass. It is hence expected that recovery of plant distribution will start rather fast and will be continuous
	Disturbed wetlands turns into protected wetlands	+	++	Since wetlands had suffered from grazing which has altered the species mix, it is expected that it will take some time until the natural biodiversity is archived again.
	Grass- and bushland turns into planted forests	-	0	Similar to the animal aspect, it is expected that plant biodiversity will decline due to establishment work of planted forests. As the stand mature, grass and bushland species will move into the planted area again. Chemical and intensive mechanical weed control is done for the first few years only, so that the natural plant mix can re-establish after some years. Due to competition from the planted trees it is nevertheless likely that not the full number of plants per species will be restored as in the baseline scenario

Date: 9 July 2009 Page 64 of 88



		- negative impact o neither positive nor negative impact + positive impact ++ major positive impact  Audit team, 20 April 2009  The described benefit assessment is considered traceable. Among others due to established conservation areas the overall impacts are considered positive (in comparison to baseline)	
Corrective Action Request No 32  The PDD states that native species in mixed stands are used, which is not the case in this project. Delete the section of the PDD.	B 1.2	Project team, 23 Jan 2009: PDD is updated. Audit team, 13 March 2009: Information was updated.	⊠
Corrective Action Request No 33  No information is provided in how the list of endangered species was developed. Provide information on methodology	B 1.3	Project team, 23 Jan 2009: How was the list of endangered species developed?  The CFS gives guidance on the website to access to find out the potential endangered species within the project area. Extracting this list, mangagers as well as the division leaders were ask which species they have once seen in the field.  Audit team, 13 March 2009:  In regard to information on Red list species as presented in G.1.7 (and B.1.3) it shall be clarified and documented in detail in the PDD how the assessment was carried out.  Methodolgy of assessment and qualification of assessors is to be indicated.  Sources of Red Lists used to be given in the PDD as reference.	⊠

Date: 9 July 2009

Page 65 of 88



#### Project team, 27 March 2009:

For both fauna and flora assessment, the red list was obtained from <a href="https://www.iucnredlist.org">www.iucnredlist.org</a>.

The study for IUCN red-list plant species was executed by Biologist Ms. Olivia Wannyana from Makerere University, Department of Botany. It was done together with the baseline analysis (Ref-Doc: 07-05) executed on the project area. This meant visiting sample plots of a size of 250 m³ in the different vegetation types of Kikonda (Forest, Bushland, grassland, wetland) and assessing in-situ all plant species. Overall, 69 different plants were identified whereby 2 of them are on the IUCN red list as endangered species

It is apparent that there is rich biodiversity in the still existing forests and a lower biodiversity value in the proposed reforestation sites which are currently covered by bush- and grassland.

Scientific Name	Common Name	Red List Category	Existence
Hallea stipulosa		VU A1cd ver 2.3 (1994)	Permanent
	RED STINKWOOD		
Prunus africana	(E)	VU A1cd ver 2.3 (1994)	Permanent

Table of IUCN redlist - Plants. Ref-Doc: 05-01

Assessment of animal species was done by staff of SUB Ltd. lead by biologist Charles Kiija. The methodology applied were interviews with field workers, neighbors and management staff of SUB with regards to spotting of animals.

A scientific rigorous analysis including transect sampling and capture – re-capture is still pending.

The following table nevertheless gives a first indication of the red-list species spotted in Kikonda..

Kikonda Forest Reserve

Date: 9 July 2009 Page 66 of 88



Scientific Name	Common Name	Red List Category	Existence
		VU B1ab(iii) ver	
Afrixalus orophilus		3.1(2001)	Permanent
		VU B1ab(iii) +2ab(iii)	
Chrolocypha jacksoni		ver 3.1(2001)	Permanent
Chrolocypha		EN B1ab(iii) +2ab(iii)	
molindica		ver 3.1(2001)	Permanent
	UGANDAN SHREW		
Crocidura tarella	(E)	VU D2 ver 3.1 (2001)	Temporary
	MONTANE SHAGGY	VU B1ab(iii); D1 ver	
Dasymys montanus	RAT (E)	3.1 (2001)	Permanent
	DELANY'S MOUSE	EN B1ab(iii) ver 3.1	
Delanymys brooksi	(E)	(2001)	Permanent
	NAHAN'S	EN B1ab(ii,iii,v) ver	
Francolinus nahani	FRANCOLIN (E)	3.1 (2001)	Permanent
	GLEN'S WATTLED		
Glauconycteris gleni	BAT (E)	VU D1 ver 3.1 (2001)	Permanent
Hippopotamus	COMMON	VU A4cd ver 3.1	
amphibius	HIPPOPOTAMUS (E)	(2001)	Temporary
	TREVOR'S FREE-	VU A4c ver 3.1	
Mops trevori	TAILED BAT (E)	(2001)	Temporary
	BARBOUR'S VLEI	EN Blac(ii,iv) ver 3.1	
Otomys barbouri	RAT (E)	(2001)	Permanent
		EN A3cd ver 3.1	
Pan troglodytes	CHIMPANZEE (E)	(2001)	Temporary

Table of IUCN redlist – Animals. Ref-Doc: 05-01

The project has assigned a significant portion of its area as conservation area. While areas where planting activities are taking place might decrease in few aspects of

Date: 9 July 2009 Page 67 of 88



		biodiversity the protection of these conservation area will be a refuge of natural habitat for the majority of species.  As most IUCN endangered species within the project area are animals, the protection of remaining forests from illegal activities (such as meat-bush hunting) will enhance the possibilites for wild animals to reproduce and recover in their natural habitats.  It is expected that also the the change of bush- and grassland will enhance animals to resettle in the area. As no fences will be used, habitat fragmentation for larger animals is not given.  Audit team, 20 April 2009	
		It has been described in the PDD how the assessment of present endangered species was carried out.	
Corrective Action Request No 34  Provide information that the project activities will not be detrimental in any way to threatened species.	B 1.3	Project team, 23 Jan 2009: The project has assigned app. 30% of its area as conservation area. While areas where planting activities are taking place might decrease in few aspects of biodiversity the protection of these 30% of conservation area will refuge of natural habitat for the majority of species.	Ø
		As most IUCN endangered species within the project area are animals, the change of habitats from shrubland and forest to forest which will be protected of illegal activities (such as meat-bush hunting) will enhance the possibilites for wild animals to reproduce.	
		Audit team, 13 March 2009:	
		Impact of project to be dicussed for each threatened species or groups of species.	
		Project team, 27 March 2009: It is expected that also the change of bush- and grassland will enhance animals to resettle in the area. As no fences will be used, habitat fragmentation for larger animals is not given.	

Date: 9 July 2009 Page 68 of 88



		,	
		Monitoring will provide scientific evidence on how the different species are impacted.	
		Audit team, 20 April 2009	
		It is considered credible that the project will not be ditremental to red list species – among others due to conservations areas.	
Corrective Action Request No 35  Provide information on the impact on biodiversity of the leakage activities	B 2.1	Project team, 23 Jan 2009: With the project illegal cattle grazing as well as charcoal burning activities are being partly shifted.	
described in the PDD.		To avoid any negative biodiversity impacts from local charcoal burners it is offered to them to work for the project. The possible shift to other areas for charcoal production is limited, as these people normally have family and land which limites them in their movements.	
		Possible negative biodiversity impacts from the shift of cattle grazing activities are hard to predict. The majority of cattle grazing activites within the reserve is done by normadic people, which use every year slighly different pathes. Overall, there are ongoing conflics of normadic living and setteled people throughout the country. Therefore, not the project but other political desicions have influence on the shift of these activities and their consequences on biodiversity.	
		Audit team, 13 March 2009:	
		Include statement if spearding of seeds and natural regeneration to non forest areas is considered a negative offsite impact.	
		B.2.2 and B.2.3 does not include any information and shall be completed.	
		Include statements how impact to biodiversty through activities displaced by the project are mitigated.	
		Project team, 27 March 2009: Added to B2.1	
		Spreading of seeds to non forest areas outside the project is not regarded as a negative impact. Such spread does not negatively interfere with the standard land-	

Date: 9 July 2009 Page 69 of 88



		use types around the project area.	
		Added to B2.2 It is the overall policy of the project to develop alternatives to the illegal activities that might be shifted due to the project activities to neigbouring areas. This policy includes offering jobs at the project to illegal loggers, charcoalers and cattle grazers and supplying surrounding villages with sustainability produced fuelwood – which they can also use to make legaly charcoal. Combined with a continous capacity building to sensetize the neighborhood for a sustainable use of forest the potential negative impacts on the biodiversity outside the project are seen as very limited.	
		Added to B2.3 Shifts of illegal activities such as logging and cattle grazing to areas of relatively high biodiversity outside the project area can not at 100% be ruled out.	
		Nevertheless it is likely that the project gives strong incentives for illegal loggers not to move to places outside the reserve, since it offers jobs and supplies the regional market with sustainably produced timber.	
		Combined with a strict enforcement of biodiversity protection on more than one third of the	
		project area it is expected that the speed of reduction of biodiversity outside the project will deacrease and the positive effects inside the reserve will increase by the projects implementation.	
		Audit team, 20 April 2009	
		As the planted species are not considered invasive, potential spreading of trees to non-project areas by natural regeneration is considered acceptable.	
		Negative impacts outside the project areas are considered to remain at comparatively low levels. Documented activities to leakage mitigation exist i.e. through creation of employment and fostering of offsite reforestations.	
Corrective Action Request No 36	B 3.1	Project team, 23 Jan 2009:	

Date: 9 July 2009 Page 70 of 88



Include an initial monitoring plan to		See B1.1.	FAR
the PDD that includes paramters, frequencies and monitoring approach for biodiversity,		Audit team, 20 April 2009	
		The monitoring of flora is combined with the regualar sampling layout for carbon sequestration. The approach is considered feasable. Further specificication maybe necessary after compilations of first data sets and analysis of complete timeseries.	
		In regard to monitoring of fauna, it is explained that transects will be used.	
		FAR:	
		In regard to biodiversity monitoring the following shall be established up to first verification:	
		Key indicator species shall be identified and included to the monitoring concept this must also consider updated information on endangered species based on further research.	
		Concrete procedures how to implement the monitoring shall be defined. to ensure that the assessment is traceable and allows comparing the biodiversity status between the baseline scenario and the project scenario	
		As part of the analysis of monitoring results, the effects of non-native tree species on the area's environment shall be quantified.	
Corrective Action Request No 37  Provide information on your reasoning mentione d above in the PDD. Provide information why only alien species can provide these benefits.	B 4.2	Project team, 23 Jan 2009: At present majorly non-native tree species are planted, as there are no reliable information on the cultivation of local species in Uganda is available. Nevertheless the project owner undertook tests with the native species Maesopsis emminii. The results where as such that the growth rate and the timber quality are not sufficient for commercial tree planting. Having that in mind the project owner followed the advice of the National Forestry Authority to plant Pinus caribaea, a tree of good growth and no direct negative ecological effects.	Ø
		Indirect positive effects on the biodiversity are reached by this species through the production of timber. This is due the fact, that all timber will be sold on the national	

Date: 9 July 2009 Page 71 of 88



	D.5.0	market and will lower herewith the pressure on the unsustainable exploitation of the natural forests in Uganda and surrounding countries.  Audit team, 13 March 2009: Information was provided. Only exotic species are used.  No corresponding CCBA point will be given.	1
Corrective Action Request No 38  Provide reference to the study on Uganda's forests in the PDD.	B 5.3	Project team, 23 Jan 2009: Study on Uganda's forests  There are nearly 5 million hectares of forests, which is 24% of Uganda's land area. Of the total forest area, 80% is woodland, 19% is highland forest and less than 1% is plantation. There are also many trees in 'other landuses', for example in peri-urban settings or in traditional agroforestry systems.  Source: <a href="http://www.ias.ac.in/currsci/oct252001/936.pdf">http://www.ias.ac.in/currsci/oct252001/936.pdf</a> Dissappearing forest of Uganda, the way forward. CURRENT SCIENCE, VOL. 81, NO. 8, 25 OCTOBER 2001  Audit team, 13 March 2009: Reference on basic data of forestry sector has been provided.	
Corrective Action Request No 39 Information given in the PDD regarding organic soil layers (in particular under pure Pinus Caribea stands) need to be sustained with scientific eveidence.	B 5.3	Project team, 23 Jan 2009: Organic soil layers - in particular under Pinus Caribaea stands: Due to fast growth of the trees the turnover of biomass is increased. This leads to a greater production of litter, which ends up as dead biomass on the soil and converts fastly into organic soil.  Source: Litter production, nutrient recycling and litter accumulation in Pinus caribaea Morelet var. hondurensis stands in the northern Guniea savanna of Nigeria, 2005, O. Kadeba and A. Aduayi, Plant and Soil, Springer Netherlands  Audit team, 13 March 2009:	<b>∑</b>

Date: 9 July 2009 Page 72 of 88



		Credible data and sources was given.	
Corrective Action Request No 40 Information given in the PDD regarding water quality (in particular considering plantation management	B 5.3	Project team, 23 Jan 2009: Key points for the relation of plantations and water  1. Trees have a longer growing season, more foliage and deeper roots than pasture or crops. Runoff from forested catchments is therefore generally lower than	Ø
and possible clear cuts during harvesting) need to be sustained with scientific evidence.		from those other land uses.  2. Run-off reduction increases with increasing rainfall. It is estimated to be less than 80–100 mm where rainfall is 500 mm/year and increases to more than 300 mm where rainfall is 1500 mm/year.	
		3. Stream flow from small catchments may become more intermittent after reforestation.	
		4. The effect on stream flow of converting agricultural land to plantation is related to the catchment area affected. In smaller catchments, it is difficult to detect an impact when less than 20% of the catchment is planted.	
		5. Water use is less in younger plantations and when plantations have been thinned. These effects should be considered in estimating plantation impacts on stream flow.	
		6. Effects on stream flow can be reduced by concentrating plantings in elevated parts of catchments, planting in lower rainfall zones and distributing planting in smaller blocks across a catchment.	
		7. Research is required to reduce uncertainty in estimating impacts of plantations on stream flow and to translate the results of research on subcatchments to larger areas.	
		8. When properly planned and managed, plantation development can contribute to more sustainable land use in rural areas by providing substantial environmental, social and economic benefits with little impact on water availability.	
		Source: http://www.acera.unimelb.edu.au/materials/brochures/SDM-	

Kikonda Forest Reserve

Date: 9 July 2009 Page 73 of 88



#### PlantationsWater.pdf

Science for decision makers – Plantation and Water, Australian Government, February 2006.

#### Audit team, 13 March 2009:

Explanations on water ressource enhancement which are specific for the project area shall be given.

Local climate conditions and water cycle specifics shall be considered.

#### Project team, 27 March 2009:

In contrast to the current land-use types the newly established forest will build up an

organic soil layer which enhances soil fertility. In contrast to the baseline scenario in which the project area would be striped off forests and overgrazed, the newly grown forest counteracts the erosison as in the baseline scenario.

Water resources are improved since the planted trees support a penetration of water into

the soil at the spot and decrease drainage into surface waters. Local groundwater levels

are hence expected to rise. Prohibition of cattle grazing in swamp areas is expected to

reduce the level of water contamination from dung of cows grazing in the swamps. The following studies support the fact that with the project activities water and soil resources will be enhances, not only due to the fact that bare land is being planted, but also that the timber supply allows the protection of other native forests within the country.

The baseline would lead to a further loss of existing forest which would leads to soil erosion and therefore to the "degradation of watershed areas". (*Dissappearing forest of Uganda - the way forward*. CURRENT SCIENCE, VOL. 81, NO. 8, 25 OCTOBER

Kikonda Forest Reserve

Date: 9 July 2009 Page 74 of 88



2001. http://www.ias.ac.in/currsci/oct252001/936.pdf)

In contrast to the baseline scenario where the project area is continuously being depredated the "fast growth of the trees the turnover of biomass is increased. This leads to a greater production of litter, which ends up as dead biomass on the soil and converts fastly into organic soil". (*Litter production, nutrient recycling and litter accumulation in Pinus caribaea Morelet var. hondurensis stands in the northern Guniea savanna of Nigeria*, 2005, O. Kadeba and A. Aduayi, Plant and Soil, Springer Netherlands)

Further than this, the report of "Science for decision makers – Plantation and Water, Australian Government, 2006" states the following points which favor the planting of trees in regard to water and soil improvement over the baseline scenario of grassland and pasture.

- Trees have a longer growing season, more foliage and deeper roots than pasture. Runoff from forested catchments is therefore generally lower than from those other land uses.
- Run-off reduction increases with increasing rainfall. For the Kikonda Forest Reserve with an annual rainfall of  $\sim$  1000mm, this is estimated to be a reduction of 200 mm.
- As no fertilizer and only environmentally accepted herbicides are being applied, no negative impacts are expected.

Overall, the Kikonda region does not have any contains of water which might be negatively impacted by the planting of trees. More importantly for people surrounding the Forest Reserves are electricity supply and boreholes which must have a depth of 30 to more than 100m in order to supply the community with clean drinkable water.

## Audit team, 20 April 2009:

While recognizing that the impacts of reforestation on the hydrological cycle are complex, and average annual precipitation of >1000 mm in the region and the

Date: 9 July 2009 Page 75 of 88



		statements above, allow the estimate that impacts on water quantity and quality are not severely negative. The Request is closed.	
Additional CARs defined after the delivery of a revised PDD			
Corrective Action Request No 41 The Region is identified within the Country.	G1.1	Project team, 23 Jan 2009: The location of the project is displayed by two picture underneath the "googlemap" – on the projects website. The map on the right also includes the region / district where the project is situated. Location: Kikonda Forest Reserve District: Kiboga Country: Uganda  Audit team, 13 March 2009: Provide regional map in PDD (jointly with project boundary map already requested). Project team, 27 March 2009: Regional and project area map have been inserted in the PDD. Audit team, 20 April 2009: The PDD includes an overview of the Region. The Request is closed.	<b>∑</b>
Corrective Action Request No 42 Provide CFS 'neighbourhood map'.	G1.4	Project team, 23 Jan 2009: On the projects website it is called "Community map" and can be found by clicking of the [find out] link in the googlemap box. Here, you than have to click on one of the pins in googlemap. As this is a bid complication – I hope that CarbonFix will change this – I also uploaded the map as a picture. This can be accessed in the picture gallery. Audit team, 13 March 2009: Include neighborhood map to PDD. Project team, 27 March 2009: Regional and project area map have been inserted in the PDD.	₹

Date: 9 July 2009 Page 76 of 88



	I	A	
		Audit team, 20 April 2009:	
		The PDD includes an overview of neighboring villages. The Request is closed.	
Corrective Action Request No 43 G3.4 requires a timeframe for the project duration. In the CFS-document "Secured Land Tenure" the exact timeframe of the land holding and therefore also for the project is described.	G3.4	Project team, 23 Jan 2009: According to CFS, the timeframe of the project must be continuously. The currently secured time frame is given by the length of the tree planting license. In case of the Kikonda project this is 50 years.  See also a) in the attachment folder of the CFS-document "Secured land tenure" – document "Kikonda – secured land-tenure – tree planting license" (page 2), or b) file attached to this email.	☑
		Audit team, 13 March 2009:	
		Among others, temporal boundaries project lifetime / accounting period (crediting period) are not defined in the PDD.	
		To be closed with closure of remaining request on calculations (section G1.3, G.2.2 and CL 1.3 (CAR 18):	
		Project team, 27 March 2009:	
		The following text together with an explanatory graph was added to point CL1.1 to describe the projects lifetime and its crediting period.	
		According to the CFS "Terms and Definitions" (Doc-Ref: 00-01) projects are designed to create a permanent CO <sub>2</sub> -stock.	
		The current license for the project area limits the project lifetime to 50 years. This is the maximum length of license issued by the National Forestry Authority.	
		Start of the project: 06 September 2001	
		Project lifetime: 05 September 2051	
		Still, it can be expected that with appropriate management of the project, a renewal of the license will be achieved.	

Date: 9 July 2009 Page 77 of 88



		The project area is reserved by law for tree planting and a continuous forest cover must be established and maintained following the regulations of the tree planting license. These obligations also count for future holders of the tree planting license that might take over from the current project manager in future.	
		All management decisions related to the project are made under the assumption that the project is unlimited in time.	
		Audit team, 20 April 2009:	
		Project lifetime of 50 years has been defined. CAR 18 is covering the aspect of corresponding carbon calculations. The Request is closed.	
Corrective Action Request No 44 The document 'Kikonda-secured land tenure-tree planting licence.pdf' indicates that the planting license is between the Uganda Gov and IUE. Clarify the relation between IUE and the project proponent Global Woods?	Projec particip ants	Project team, 23 Jan 2009:  IUE was the former name of the company which is now called global-woods. I attached the renewed license document (17-May-07) to this email – here global-woods is already stated as owner of the planting license.  Audit team, 20 April 2009:  It is credibly documented through the licence that Global woods is the follow up organisation of IUE and that this covers the planting licence. Global woods is a project participant. The Request is closed.	☑
Corrective Action Request No 45	G.2.1	Project team, 27 March 2009:	<b></b> ✓
Section G.2.1 in PDD is incomplete In the way described, the project is described as-nonadditional due to	0.2.1	The historical activities of cattle-grazing and charcoal burning can be considered as alternatives to the proposed climate forest project – although they are illegal within the Kikonda Forest Reserve.	_
legal obligation that the area is to maintained forest. Clarification in PDD necessary.		By law (National Forest Act) National Forest Reserves of Uganda are strictly reserved for sustainable timber production - still, reality shows that in most cases illegal logging and non-sustainable land-use regimes take place. This is also the case in parts of the Kikonda Forest Reserve.	
		The police as the primary law enforcement authority are not taking care of enforcing the forest laws since no political pressure is put on the police to do so and financial	

Date: 9 July 2009

Page 78 of 88



means are restricted. As the Commonwealth Human Rights Commission named it in their 2004 report on the Ugandan police system "Uganda does not have a democratic, accountable police service. Instead, it has a heavily militarized, colonial-style regime police force that is firmly under the control of the ruling government".

The National Forestry Authority as the administration second in line to be concerned about the enforcement of the forest laws is understaffed and not able to ensure widespread law enforcement on the ground.

In fact, this is well known in Uganda. As a testimony we quote Paul Jacovelly, Chief Technical Advisor of the National Forest Authority of Uganda (NFA) (16.09.2004, Kampala): "The NFA has inherited an extremely run-down business from the Forest Department as the former authority responsible for Ugandan forestry. This includes many Forest Reserves with encroachment problems and cattle grazers that are now accustomed to grazing in reserves. Since the NFA and an increasing number of private investors are now planting in such reserves, there is unsurprisingly a conflict situation that needs to be resolved and this will undoubtedly take time. NFA staff numbers are low (compared with Forest Department days) and the work-load high after years of neglect of the estate."

After that quote was taken the NFA faced another setback since the international funding was stopped in 2006 as a reaction of groups close to the president taking key positions in NFA to back-up unlawful land-use conversion in Forest Reserves. Cases of Forest Reserves taken for sugar cane or oil palm production have gained specific attention in recent years.

A report of the Yale School of Forestry on "Forest Certification in Uganda" in 2004 supports that the poor law enforcement is reflected in the figures on land cover in Forest Reserves. Of the 1.1 Million ha covered by Forest Reserves, 0.7 Million ha are covered with Tropical High Forest and Woodlands (including forests that are encroached and damaged), 0.4 Million ha have other land-use and only 0.02 Million ha is plantation.

Despite the fact that Uganda has remained politically stable with great efforts from donors and international environmental agencies, the trend remains that

Date: 9 July 2009 Page 79 of 88



		deforestation of Forest Reserves is only effectively stopped if tree planting projects are executed.  Audit team, 20 April 2009:  Core information / summary on additionality assessment as presented according to CarbonFix validation needs to be included to the PDD. (note footnote of CCBA indicator).  Compare also Request above on information publically available.  Project team, 23 April 2009:  The following table and text was added within the PDD – G2.1 (see also CAR 14):  The additionality of the project was further proven by the application of the "UNFCCC additionality-tool". In the frame of that application, an investment analysis was conducted, that has proven, that without returns from CO2-sales the project would be financially less attractive that state bonds, which come with a significantly lower risk. This benchmark analysis was favored over an investment comparison analysis, since reliable date for potential land-use alternatives (charcoal burning, cattle keeping) was not available. Low returns in a project scenario without CO2-sales therefore is a significant barrier to the implementation of such projects but this barrier does not stop alternative, illegal activities.  Although it is mandatory to plant trees on the project area, the activity is regarded additional, since it is evident and proven by statements of authorities, that this mandate is not implemented and illegal biomass removal is the reality if the project activity does not take place. Taken all these points into account, the project is regarded to be additional.  Audit team, 07 Julyl 2009:  The above request was properly addressed in the final version submited to the audit team. The CAR is closed.	
Corrective Action Request No 46	PDD	Project team, 27 March 2009:	

Date: 9 July 2009 Page 80 of 88



For entire PDD; explain abreviations used, such as KFR and NFA.		The following explanations of abbreviations were added to Section I (Basic data) of the PDD:  KFR Kikonda Forest Reserve	
		CFS CarbonFix Standard	
		FSC Forest Stewardship Council	
		IUE Institut für Umwelt und Entwicklung (now called global-woods)	
		NFA National Forest Authority (Uganda)	
		SUB Sustainable Use of Biomass Ltd. (owned by global-woods)	
		MU Management Unit	
		Audit team, 20 April 2009:	
		The PDD now includes an overview of acronyms. Request is closed.	
Corrective Action Request No 47 Inclusion of maps: A selfexplanatory map should be included to PDD. Boundary is not clear on current map on management untis.	G.3.3	Project team, 27 March 2009: Map was adapted and the following text was inserted: The map shows the different Management Units of the project. Each Management Unit is labeled with an ID. The first two digits of ID state the year of planting, the last two figures represent a company specific code. E.g.: 0801 is an area which was planted in 2008. This shows clearly that step-by-step planting activities expand further away from the forest station.	⊠
		Audit team, 20 April 2009:	
		The included map is considered sufficiently clear. Detailes vector files were provided to the audit team. It is underlined that the project area consists of fully labelled areas (MU), that have been planted and entered the carbon assessment, and larger areas that only entered the eligibility assessment (no consideration of carbon effects). The Request is closed.	

Kikonda Forest Reserve

Date: 9 July 2009 Page 81 of 88



#### **Corrective Action Request No 48**

Describe actual risks to community and biodiversity benefits. (copy paste does not match the question).

# G.3.5 Project team, 27 March 2009:

#### Risks to communities

The potential risk to communities is to loose income from illegal activities on the project area. As the shift only comes step-by-step in the next 5 to 10 years, the risk is seen as a chance to move to legal work within this time.

Risks evolving from the water consumption of trees or the spreading of seeds can not be seen.

## **Risks for Biodiversity**

A potential risk to biodiversity would be, that the project developer does not

 $\ensuremath{\square}$  have the means to pay for the services needed to protect the set-aside areas and

☑ undertake the necessary measures to sensitize neighboring communities to biodiversity protection.

The total project stands on solid financial ground and has payments for biodiversity protection in its cash-flows. Since FSC certification is also a goal for the years to come, payment for biodiversity protection will maintain a high ranking position on the list of expenditures.

For further reading on the measures to mitigate the risks addressed above please read the CFS-documents Forest Management (Ref-Doc: 03), Protective capacity (Ref-Doc: 12), Socioeconomic aspects (Ref-Doc: 04), and Environmental aspects (Ref-Doc: 05).

# Audit team, 20 April 2009:

The risks have been described. Impacts on community members have been included to the net social benefit analysis. Risks are considered relevant and do lead of elevated relevance of monitoring and potentially also mitigation activities in this field. See FAR above on social benefits. The Request is covered and closed.

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Date: 9 July 2009 Page 82 of 88



Corrective Action Request No 49	G 3.6	Project team, 27 March 2009:	Ø
Clarifiy what the geographic dimension in defining "neighbors", and indicate the definition of other stakeholders (institutions etc).		Definition of the stakeholders was done in a process of subsequent group discussions. In each discussion, people from different parts of the project organization and environment (community members, consultants etc.) had a brainstorm session on the question of who the stakeholders of the project are. The results of such sessions were further refined through interviews of individuals involved in the project.  Based on that process, the following groups are considered as stakeholders of the project.	
		National Forest Authority - NFA	
		The NFA represents the government of Uganda which owns the land of the Kikonda Forest Reserve and leases it to the SUB (the project developer).	
		Sustainable Use of Biomass - SUB // global-woods	
		SUB is a subsidiary company of the German company global-woods. It is registered in Uganda and takes care of the management from the Kikonda Forest Reserve. SUB as well as the company global-woods can both be regarded as project developer.	
		Kikonda Community Forest Association (KiCoFA)	
		The KiCoFA is a non-profit organization run by the communities surrounding the Kikonda Forest Reserve. Its aim is to foster tree planting activities in the region. SUB supports this organization in their activities.	
		Neighboring community	
		The neighborhood of the KFR is defined by a 5km zone around the project area.	
		Cattle keepers	
		This stakeholder group consists of cattle keepers which live a nomadic style.  Although, cattle keepers are often only a few weeks or months within project area, their interest of new pastures has led to a decrease of forest within the KFR. Cattle-	

Date: 9 July 2009 Page 83 of 88



		grazing within forest reserves is forbidden by Ugandan law.	
		Illegal Charcoal Users	
		This group of stakeholders burn charcoal illegally within the KFR leading to the degradation of forests.	
		Contractors	
		Contractors are individuals who signed working contracts with SUB to execute work for the project. They employ their own workers.	
		Workers	
		Workers are individuals operating and paid by a contractor.	
		Employees	
		Individuals employed by SUB which execute work according to their work contract.	
		Audit team, 20 April 2009:	
		Stakeholder groups have been defined in the PDD. The division is consdered reasonable in light of onsite conditions. Neighborhood map with villages has been included to PDD.	
Corrective Action Request No 50	G.5.1	Project team, 27 March 2009:	Ø
Section G.5.1 and G.5.2 only includes references to CFS documents. Summarize main content and relevant information.		5.1 The project boundaries are clearly defined by the National Forest Authority – via GPS and field-trenches at the corner points of the reserve. It is illegal in Uganda to encroach uninvited on private, community or leasehold land without the permission of the landholder or leaseholder. The project developer acts in accordance to all laws within the country.	
		5.2 As validated during the field visit of the TÜV in July 2008, no relocation of people was necessary in order to implement the project activities.	

Date: 9 July 2009 Page 84 of 88



		Audit team, 20 April 2009:	
		It has been clarified that the project has clearly defined boundaries.	
Corrective Action Request No 51	G.6	Project team, 27 March 2009:	$\square$
Include relevant information to the PDDs.  All permits and approvaly shall be		The project is legally based on a Tree Planting License (Doc-Ref. 003) issued by the state of Uganda. This license is further defined by a Management Plan imposed and	
		permanently controlled by the National Forestry Authority.	
detailed,i.e. on land aquistion, EIA, planting permits, forest operations,		Audit team, 20 April 2009:	
harvesting etc. (as relevant)		Clarify if forest operation / harvesting will require any other legal permit.	
3 111 (111 11 1)		Project team, 23 April 2009:	
		The Tree Planting License includes the right to use the wood for its final harvest and any other silvicultural operations (pruning, thinning, etc.) <u>Audit team, 07 July 2009:</u>	
		The above was clarified in the final version of the PDD. The Tree Planting License alllows Global Woods to develop all forest operations requierd for the peoject implementation	
Corrective Action Request No 52 On adaptive management, no information is provided in the PDD besides cross-referencesto CFS	G.7	Project team, 27 March 2009: The following text has been added to G7.1:	Ø
		The Kikonda project follows an approach for adaptive management which is based on three pillars:	
(optional). This remains to be corrected.		Written documentation of all factual knowledge and procedures	
corrected.		2) Weekly meetings of the entire management staff	
		3) Quarterly visits of global-woods staff, Germany	
		Details included to PDD.	
		Section G7.2, G7.3, G7.4 have been updated as well.	

Date: 9 July 2009 Page 85 of 88



	1		
		Audit team, 20 April 2009:	
		Further information was included. Based on the documents provided, pointage will be assessed.	
Corrective Action Request No 53  On knowledge dissemination, no information is provided in the PDD besides cross-referencesto CFS (optional). This remains to be corrected.	G.8	Project team, 27 March 2009: The following text has been added to G8.1: The Kikonda project has a written record of management meeting minutes over more than 4 years. This wealth of documents shows the successes and failures and will continue to document these lessons learned with note keeping on all weekly and extraordinary meetings. The essence of "lessons learned" finds its way into the Standard Operating Procedures (called IMPs in Kikonda). These documents show the current status of knowledge and appliance in all aspects of the project. At least once a year they are updated in a joint effort of the permanent staff in Kikonda and the staff of global-woods Germany.  The following text has been added to G8.2: The Kikonda project has extensive 'welfare activities' which aim to encourage surrounding farmers to learn more about the techniques of tree planting. These activities have led to better understanding, improved communication and the plating of almost 300 hectares of forest outside the project area.  The Kikonda project from the very beginning has had the aim, not only to be a good project, but also to play a significant role in the development of the region and of the national forestry sector. The following pullet-point gives an overview what has been achieved so far:  The NGO "Kikonda Community Forestry Association" has been set up with the support of global-woods to form a center of farmer-to-farmer knowledge	
		the support of global-woods to form a center of farmer-to-farmer knowledge	

Date: 9 July 2009 Page 86 of 88



exchange on tree planting, Jatropha farming and sustainable land use. Today KiCoFA has almost 500 members and looks back on app. 200 ha of small scale wood lots planted.

- More than 100 village training courses on tree planting and Jatropha farming and processing have been conducted by global-woods.
- More than 20 graduates from national forestry schools have been trained in a 6 month program in plantation management. Knowledge from the Kikonda Project is now applied in all major forestry operations and administrations in the country.\*
- A co-operation with the University of applied science, Rottenburg, Germany and the Makerere University Kampala is in place that has brought app. 10 students from Germany and a multitude of students from Makerere to the project. Project dissertations and reports have been made available to the greater public.
- Kikonda has frequently been the host of workshops of the "Sawlog Productions Grant Scheme" bringing together tree planter from all over the country to get hands-on training on forest management.
- Kikonda has hosted twice the "Uganda Forest Plantation Forum", a workshop on the sustainable development of forest attended by forestry entrepreneurs as well as local farmers, ministers and ambassadors.
- Staff of Kikonda is member of the Uganda Tree Growers Association as well as of the working group of the Ugandan FSC standard.

These are examples of how global-woods puts its philosophy of "sharing knowledge for constant growth". It is our firm belief that sharing is rewarding. And as a next step of replicating the positive results we have gotten in Kikonda so far, global-woods is currently looking into setting up a similar project in the North of Tanzania.

## Audit team, 20 April 2009:

Further information was included. Based on the documents provided, pointage will be assessed.

Date: 9 July 2009 Page 87 of 88



Corrective Action Request No 54  Section B.5.1 is incomplete and partially left blank. This remains to be corrected.	B.5.1	Project team, 27 March 2009: The project activity of "tree planting" in combination with the protection area area will contribute to enhance water and soil resources. That is due to the fact, that in contrast to the baseline activities, newly established forests will reduce fast surface drain of water and soil erosion. Soil is fixed and water oozes away to the ground water instead of beeing washed away to the rivers and streams.	₫
		Audit team, 20 April 2009:	
		Further information was included to the corresponding section.	

Kikonda Forest Reserve Date: 9 July 2009

Page 88 of 88



# **Table 3: Forward Action Requests**

Forward Action Request	FAR	Background of Forward Action Request
Control of project area and access to carbon rights shall be monitored and assessed at verification	FAR 1	Secured land tenure at validation stage cannot assure that land tenure as well as the access to carbon rights is actually maintained over the entire project lifetime
Buffer stripes along watercourses shall be controlled and in cases where they are not sufficient they shall be implemented.	FAR 2	The initial monitoring plan is considered to require further definition and specification in order to assure full data consistency and data availability at verification
In general, the monitoring plan shall be further specified in this regard.	FAR 3	The project boundary and the strata boundary require careful monitoring in order to have a verifiable data basis at verification.
Social Impact Monitoring should be further adapted including parameters of actual impact monitoring and focusing on actual stakeholder groups (including Charcoal Makers and Nomadic cattle keepers) prior to first verification. If substantial negative impacts are identified, further mitigation activities need to be defined.	FAR 4	The initial community impact monitoring plan are considered adequate for the covering the CCBA requirements, however further parameters are required in order to assure full data consistency and data availability at verification
<ul> <li>In regard to biodiversity monitoring the following shall be established up to first verification:</li> <li>Key indicator species shall be identified and included to the monitoring concept. This must also consider updated information on endangered species based on further research.</li> <li>Concrete procedures how to implement the monitoring shall be defined, to ensure that the assessment is traceable and allows comparing the biodiversity status between the baseline scenario and the project scenario.</li> <li>As part of the analysis of monitoring results, the effects of non-native tree species on the area's environment (including soil and water) shall be quantified.</li> </ul>	FAR 5	The initial biodiversity impact monitoring plan are considered adequate for the covering the CCBA requirements, however further parameters are required in order to assure full data consistency and data availability at verification



# **Annex 2: Information Reference List**

Kikonda Forest Reserve

Date: 9 July 2009

Page 1 of 2



# **Annex 2: Information Reference List**

Reference No.		Document or Type of Information				
1.	Set of project documents on Kikonda Forest Reserve Reforestation Project as available on CarbonFix webpage for the certifier. Version of 8 July 2008					
2.	CarbonFix Standard Version 0	2				
3.	On-site audit carried out during the period July 21 to July 25, 2008:					
	Validation team:					
	Dr. Hubertus Schmidtke	TÜV SÜD Industrie Service GmbH GHG-Auditor				
	Persons interviewed during the on-site audits (Name, Position, Institution)					
	Matthias Baldus	Global Woods AG, Manager				
	Shedrack Kajura	Sustainable Use of Biomass (SUB) Ltd Director				
	Johannes Mokena	SUB Ltd Manger				
	Moses Otim	SUB Ltd Employee Nursery, Thinning, Pruning				
	Emanuel Muganza	SUB Ltd Emploee, research				
	Sediva Bigirueurenkya	Trainee				
4.	Initial Management Plan for IU	E Kikonda Forest Reserve, 1999				
5.	Soil description as the basis for at the Kikonda Forest Reserve	or soil classification, soil and site assessment and suitability evaluation for planting <i>Pinus caribaea</i> and/or other species in the north-west of Uganda. August 2007, BSc thesis Matthias Baur				
6.	Summary of satellite image cla	assification project, GMES Service Element Forest Monitoring (GSE FM), 4 Oct 2005-3 Oct 2006, carried out by GAF				
7.	Management Plan for The Kikonda Forest Reserve for the Period 2007-2012, approved by National Forest Authority.					
8.		antations in Kikonda Forest Reserve, dated 6.09.2001				
9.	Photo on entrance sign of the	Reserve indicating the establishment of the reserve in 1963 by the NFA National Forestry Authority				
10.	Biodiversity paper on IUCN red	d list species in Kikonda Forest Reserve, date May 2008,				
11.		intenance, Written instruction on the application of herbicide, 2008				
12.	Safety and Health in the Use of	of Agrochemicals: a Guide, ILO International Labor Office, Geneva. 1991				
13.	Seed Export, J. A Lewald C. G	duatemala City. Declaration on origin of tree seeds stands of "Pure natural Pinus caribaea"				
14.		Expression of interest for Pinus seeds. Order for Global Woods.				
15.	Kikonda Internal Management	Plans / Standard Operating Procedures on technical aspects, as presented during the onsite visit.				
16.	Subdivision on manangement	units and main maps: www.carbonfix.info/projects/kikonda/management units/ complemented by Shape files on actual fferent project areas categories, provided to the audit team in their final version on 15. Nov 2008				

Date: 9 July 2009

Page 2 of 2



Reference	Document or Type of Information
No.	
17.	Yields of Eucalyptus and Carribean Pine in Uganda, Denis Alder et. Al. 2003
18.	GPG Good Practice Guidance for Land Use Land Use Change and Forestry, IPCC 2003
19.	Monitoring Guideline, M. Vohrer et al. 2007
20.	Excel spreadsheet: Kikonda – Summary Inventory+Site.xls (summary on carbon stock inventory)
21.	Excel spreadsheet: Kikonda Baseline Inventory 2006.xls (summary on carbon stock inventory in the baseline)
22.	Economic Balance Global Woods, 2007
23.	Balances of Global Woods 2004-2007
24.	Fire Action Plan,
25.	Best Operating Practices (safety and health) Sustainable Use of Biomass Ltd, Johannes Mokwen, Forest Operations Manager
26.	Safety and Training Standards and Documents, Folder
27.	NFA Uganda's Forests, Functions and Classification, 2005
28.	Statement on Environmental Impact as provided by other environmental NGOs: KYRIDA (Aug 2008) and NEMA (Sep 1999)
29.	Kikonda Internal Management Plan, prepared by P.K. Karani Forestry Consultant, Team Leader EC Funded NFMC Project, Approved by R.M. Musoke, Ag. Commissioner for Forestry, October, 1999
30.	Evaluation of the past cooperation between the non governmental organisation Kikonda Community Forestry Association and the company Sustainable Use of Biomass Kikonda, Uganda Annexes, , 2007, Arne Steiss
31.	Memorandum of Understanding on forest establishement and conservation in the Kikonda Reserve
32.	Uganda State bonds, Overview document from the Bank of Uganda, 2007
33.	Forest Certification in Uganda, Polycarp Musimami Mwima, William Gombya Ssembajjwe, Gerald Eilu, Paper presented at the Symposium
	Forest Certification in Developing and Transitioning Societies Social, Economic, and Ecological Effects, Yale School of Forestry and Environmental
	Studies, June 10 & 1, 2004 (including indications on plantation areas)
34.	The police, the people and the politics: police accountability in Uganda, Commonwealth Human Rights Initiative 2006
35.	Hofstede, R. 1998. Ecological Impact of Forestry Plantations ( <a href="http://www.condesan.org/e-foros/paramos2/Ponencia%20RHsemana2.htm">http://www.condesan.org/e-foros/paramos2/Ponencia%20RHsemana2.htm</a> )