

Validation Report

VALIDATION OF THE CCBA-PROJECT:
REDUCED EMISSIONS FROM DEGRADATION AND
DEFORESTATION IN COMMUNITY FORESTS - ODDAR
MEANCHEY, CAMBODIA

REPORT No. 600500753-10

10 October 2012

TÜV SÜD Industrie Service GmbH

Carbon Management Service

Westendstr. 199 - 80686 Munich – GERMANY

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Report No.	Date of first issue	Revision No.	Revision Date	Certificate No.
600500753	04 Sep 2012	2	10 Oct 2012	-

Subject: Validation of the CCBA Project "Reduced	Emissions from Degradation and Deforestation in		
Community Forests - Oddar Meanchey, Cambodia"			
Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich, Germany	TÜV SÜD Contract Partner: TÜV SÜD Industrie Service GmbH Carbon Management Service Westendstr. 199 80686 Munich, Germany		
Project Participant: Forestry Administration of the Royal Government of Cambodia Other entities involved: PACT; Children's Development Association, Cambodia; The Buddhist Monk's Association, Oddar Meanchey, Cambodia; The Community Forestry Federation of Oddar Meanchey Province, Cambodia; Community Forestry International, USA; Terra Global Capital, USA; (TÜV SÜD contract partner) William J. Clinton Foundation - Clinton Climate Initiative, USA; Technical Working Group on Forestry and the Environment, Cambodia; SNR Denton	Project Site(s): The project area covers 56,050 hectares and consists of 13 discrete parcels spread across the central section of Oddar Meanchey Province. The PDD includes information on geographic boundary. Digital boundary files are provided jointly with this report.		
Applied Methodology / Version: CCBS / Vers	sion No. 2		
First PDD Version: Date of issuance: 11 July 2011 Version No.: 01	Final PDD version: Date of issuance: 28 September 2012 Version No.: 04		
Assessment Team Leader: Sebastian Hetsch Assessment Team Member: Juan Chang	Technical Reviewer Karin Wagner, Martin Opitz Certification Body responsible: Thomas Kleiser		
Summary of the Validation Opinion:			
The review of the project design documentation and the subsequent follow-up intervie have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated of teria. In our opinion, the project meets all relevant requirements for the CCB Standard Hence TÜV SÜD is recommending the project for registration by CCBA.			
not provide TÜV SÜD with sufficient evic	entation and the subsequent follow-up interviews did dence to determine the fulfilment of all stated criteria. e project for registration by CCBA and will inform the ecision.		

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Abbreviations

AFOLU Agriculture, Forestry and other Land Use

ANR Assisted Natural Regeneration

AR-AM Approved Methodology for Afforestation and Reforestation

CAR Corrective Action Request

CCB Climate Community and Biodiversity

CCBA Climate Community and Biodiversity AllianceCCBS Climate Community and Biodiversity Standards

CR Clarification Request

DOE Designated Operational Entity

FAR Forward Action Request
FSC Forest Stewardship Council

GHG Greenhouse Gas(es)

GIS Geographic Information System
GMO Genetically Modified Organism

GPG Good Practice GuidanceGPS Global Positioning SystemHCV High Conservation Value

IPCC Intergovernmental Panel on Climate Change

IRL Information Reference List

LULUCF Land-Use, Land-Use Change and Forestry

MP Monitoring Plan

NGO Non Governmental Organisation

PD Project Document (VCS)
PDD Project Design Document

PP Project Participant

REDD Reducing Emissions from Deforestation and forest Degradation

SOP Standard Operational Procedure

TÜV SÜD TÜV SÜD Industrie Service GmbH

UNFCCC United Nations Framework Convention on Climate Change

VCS Verified Carbon Standard

VVM Validation and Verification Manual

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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 Designated Operational Entity (DOE). TÜV SÜD is a DOE that is accredited by UNFCCC to validate CDM projects. CCBA recognizes this 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 covered by this validation report was submitted under the project title "Reduced Emissions from Degradation and Deforestation in Community Forests - Oddar Meanchey, Cambodia".

For the particular case of this project, a combined validation between CCBS and the Verified Carbon Standard (VCS) was conducted. The VCS Validation Report (No. 600500753-20) describes the findings of the VCS validation process and demonstrates the compliance of the same project with the VCS. The VCS Validation Report is considered an integral part of the present CCBA audit. The present report is intended to cover only those criteria, in which the CCBA differ and exceed the requirements of VCS.

1.2 Scope

For any CCBS project activity the scope is set by:

- CCB standards second edition, as published at www.climate-standards.org
- CCBS Rules for the use of the CCBS (Version June 21, 2010)
- 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 a VCS project or methodology the scope includes furthermore the following:

- ➤ The VCS Standard and VCS program Guide published on their webpage (http://v-c-s.org/)
- AFOLU Requirements published on their webpage
- Respective VCS templates and forms
- Decisions and by specific guidance the VCS
- The applied approved VCS methodology and respective tools

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 global stakeholder consultation process (GSP). In case of a request the PDD is 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 on page 2.

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The purpose of a validation is to demonstrate compliance or non-compliance of the project with all stated and valid CCBA requirements. Additionally, the purpose of validation is to enable the registration of CCBS projects, which is only a part of the total CCBS project cycle.

2 METHODOLOGY

The project assessment applies standard auditing techniques to assess the correctness of the information provided by the project participants. The assessment is based on the "Clean Development Mechanism Validation and Verification Manual" version 1.02. The work starts with the appointment of the team covering the technical scope(s), technical area(s) and relevant host country experience for evaluating the CDM project activity. Once the project is made available for the stakeholder consultation process, members of the team carry out the desk review, follow-up actions, resolution of issues identified, and finally preparation of the validation report. The prepared validation report and other supporting documents then undergo an internal quality control by the CB "climate and energy" before submission to the CDM-EB.

In order to ensure transparency, assumptions are clear and explicitly stated; the background material is clearly referenced. TÜV SÜD developed methodology-specific checklists and protocol customised for the project. 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:

- To organize the details and provision of clarifications on the requirements of which a CCBS project is expected to meet
- To elucidate how a particular requirement has been validated as well as to document the results of the validation and any adjustments made to the project design document.

The validation protocol consists of three tables. The different columns in these tables are described in the figure below.

Validation Protocol Table 1: Conformity of Project activity and PDD

Checklist Reference Question		Comments	Draft Conclusion	Final Conclusion	
The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then subdivided. The lowest level constitutes a checklist question / criterion.	Gives reference to documents where the answer to the checklist question or item is found in case the comment refers to documents other than the PDD.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is used to explain the conclusions reached. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any Request 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 (②), 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 identified a need for further clarification. Forward Action Request (FAR) to highlight issues related to project implementation that requires review during the first verification.	Conclusions are presented in the same manner based on the assessment of the final PDD version and further documents including assumptions presented in the documentation.	



Validation Protocol Table 2: Compilation and Resolutions of CARs, CRs and FARs

Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests							
Clarifications and corrective action requests	Ref. to PDD	Summary of Response	Validation team conclusion				
If the conclusions from table 1 are a Corrective Action, a Clarification or a Forward action Request, these should be listed in this section.	Reference to the checklist question number in Table 1 where the issue is explained.	The responses given by the client or other project participants during the communications with the validation team should be summarised in this section.	This section should summarise the discussion on and revision to project documentation together with the validation team's responses and final conclusions. The conclusions should be reflected 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

CCBS Requirements	Unresolved Corrective Action Request	Forward Action Request
Detailed CCBS requirement as per Standard.		Detailed explanation of why the project is considered non-compliant with a criterion and a clear reference to the criterion

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 business 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 (CB) to assure that the required skills are covered by the team. The CB TÜV SÜD operates the following qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL);
- Validator (V);
- Validator Trainee (T);
- Technical Experts (TE).

It is required that the sectoral scope(s) and the technical area(s) linked to the methodology and project have to be covered by the assessment team. For this particular project the assessment team members are presented in the table below.



Assessment Team:

Name	Qualification	Coverage of scope	Coverage of technical area	Coverage of financial aspect	Host coun- try experi- ence
Sebastian Hetsch	ATL	. 🗹 🗹 (14.1)			Ø
Juan Chang	V	Ø	☑ (14.1)		Ø

Technical Reviewer:

- Karin Wagner (Technical Reviewer)
- Martin Opitz (support for coverage of respective TA)

2.2 Review of Documents

The PDD for the GSP was submitted by the PP to the DOE in July 2011. This PDD version and additional background documents related to the project design and baseline were reviewed to verify the correctness, credibility, and interpretation of the presented information. As a further step of the validation process, information provided by the PP was cross-checked with information from other sources (if available). A complete list of all documents and proofs reviewed is attached as Annex 2 to this report.

The public commenting period for this project activity had to be repeated, as the validation was not finalized within a year of first publication of the documents. In July 2012 the PDD was newly published and CCBA invited for comments.

2.3 Follow-up Interviews

From 16-22 August 2011, TÜV SÜD performed interviews with project stakeholders and physical site inspection to confirm relevant information, and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in this context.

Persons Interviewed:

Name	Organisation
Eric Bergthold	Country Director PACT
Stuart Raetz	REDD officer PACT
Steven De Gryze	TGC Managing Director
Amanda Bradley	PACT Program Director
Omalis Keo	DD Forestry Administration
Long Ratanakoma	DD Forest Dept. Forest Administration
Maya Sepehri	PhD Research
Donal Yeang	Carbon Program Officer
Chou Chandararith	Forestry Administration OMC
Taing chau Sema	Forestry Administration OMC
Sim Sohn	Forestry Administration OMC
Blung Phath	Forestry Administration OMC
Bun Salouth	Program Officer CDA
Chboernung Rachana	P.A CDA
Sa Thlai	CFN

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Yem Sambath	Forestry Administration OMC
Rith Bo	P.M CDA
Net Channa	Junior Database & GIS PACT
Hae Teur	Community Forestry Member
Sour Pisey	Community Forestry Member
Mean Hom	Community Forestry Member
Sari Von	Community Forestry Member
Lat Iveam	Community Forestry Member
Ehhearn Chantrea	Community Forestry Member
Sat Hourt	Community Forestry Member
Rin Chanda	REDD project assistant
Loek Socheata	Forestry Administration

2.4 Further cross-check

During the validation process the team made reference to available information related to similar projects or technologies as the proposed CCBS project activity. The documentation was also reviewed against the approved methodology applied to confirm the appropriateness of formulae and correctness of calculations.

2.5 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions, clarifications, and any other outstanding issues which needed to be clarified for TÜV SÜD's conclusion on the project design. The CARs and CRs 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 were given are documented in more detail in the validation protocol in Annex 1.

The final PDD version submitted in September 2012 served as the basis for the final assessment presented. Changes are not considered to be significant with respect to the qualification of the project as a CCBS project.

2.6 Internal Quality Control

Internal quality control is the final step of the validation process and is conducted by the CB "climate and energy" who checks the final documentation, which includes the validation report and annexes. The completion of the quality control indicates that each report submitted has been approved either by the head of the CB or the deputy. In projects where either the Head of the CB or his/her deputy is part of the assessment team, the approval is given by the one not serving on the project team.

After confirmation of the PP the validation opinion and relevant documents are submitted to CCBA.

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3 SUMMARY OF FINDINGS

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

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

3.1 General Section

G.1. Original Condition in the Project Area

The proposed project activity "Reduced Emissions from Degradation and Deforestation in Community Forests - Oddar Meanchey, Cambodia" foresees to reduce emissions from deforestation and degradation in an area of 56,050 hectares located in the northwest Cambodian province of Oddar Meanchey. The methodology applied is the VCS approved methodology VM0006 "Methodology for Carbon Accounting in Project Activities that Reduce Emissions from Mosaic Deforestation and Degradation".

Basic physical parameters are described in the PDD and confirmed through document review and an onsite visit by the audit team.

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 (IRL 3, 50, 74) as assessed by the audit team.

TÜV SÜD assessed the boundary in the context of the VCS audit (IRL 3, 5). Project area is a total of 56,050 hectares in 13 discrete parcels located inside the "Community Forest Areas".

The baseline vegetation and its carbon stocks were determined by applying the VCS approved methodology VM0006 Version 01. The audit team confirms that respective calculations have been carried out correctly. Further detailed information are also provided in the VCS validation report.

A description of communities located in the project zone is provided in the PDD, including basic socio-economic and cultural information (IRL 3, 12, 13, 17, 18, 19, 82). Respective information was crosschecked and confirmed during the audit.

Current land use and property rights are presented in the PDD. Respective information, legislation and contracts were reviewed by TÜV SÜD and found to be in compliance with CCBA requirements (IRL 3, 20-26, 31, 112, 125).

A description of the current biodiversity inside the project zone and area is provided based on a biodiversity study carried out in the project area. Appropriate methodologies have been applied in the course of the mentioned studies. All species listed in the field inventory were screened against the IUCN's Red list (IRL 3, 49, 50 65, 69).

The project zone contains High Conservation Value (HCV) areas, including areas with threatened and endemic species, areas providing critical ecosystem service, areas fundamental to meet basic needs of local communities and areas critical for cultural identity of local communities (IRL 3, 49, 50 65, 69). The audit team reviewed the PDD, supportive documents and confirmed the information provided also through the onsite visit.

G.2. Baseline Projections

The VCS methodology VM0006 Version 01 was applied to describe the most likely land-use scenario in the absence of the project, as well as the approach to sustain additionality. Detailed information is provided in the VCS Validation Report section 3.2.4. TÜV SÜD confirms that the

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project benefits would not have occurred in the absence of the project; actions implemented by the project are not required by law.

The carbon stock changes of the "without project" scenario are detailed in the VCS PD (IRL 2) and its assessment described in the VCS Validation report (IRL 143). The timeframe for the analysis is the crediting period of 30 years.

The "without project" scenario consists in the continuation of deforestation due to prevailing practices. Drivers of deforestation are presented in the VCS PD (IRL 2), as well as deforestation rates.

The continuation of land deforestation would lead to further biodiversity loss and reduced environmental services likely to affect local communities (IRL 3, 18, 19).

The audit team reviewed the PDD, additional documents and confirmed the information provided also through the onsite visit. It is concluded the project design complies CCBS with the requirements G.2

G.3. Project Design and Goals

A summary of the project's major climate, community and biodiversity objectives are included in the PDD (IRL 3). Each project activity is described with the expected impacts and relevance in achieving the project's objectives.

The project location containing of the project zone and the project area is presented on maps. The project area is further digitally documented by GIS files (IRL 3, 5). The audit team checked the boundary during the onsite visit.

Both, the project crediting period is defined to be 30 years; the project lifetime is however expected to be longer (IRL 2, 3).

Natural and human-induced risks and appropriate mitigation measures are presented in the PDD. In order to mitigate these risks, respective actions are described in the PDD. Measures to ensure the high conservation value attributes are foreseen by the project proponents, as required by CCBS (IRL 3). The PDD includes information on measures to maintain and enhance the climate, community and biodiversity benefits beyond the project lifetime.

Communities and other stakeholders potentially affected by the project have been involved through workshops and meetings in the communities (IRL 3, 19, 38-45). TÜV SÜD reviewed respective documentations and cross checked the results through interviews with local communities during the onsite visit.

Communities and stakeholders have been invited and facilitated to submit their comments on the project.

A process for handling conflicts and grievances is elaborated. However a managing third party or mediator was not determined at the time of the validation. The audit team post therefore a Forward Action Request (see table 3 of annex 1) to provide respective information at verification of the project.

The PDD described financial mechanisms that are adopted to provide adequate flow of funds for project implementation and achieving the climate, community and biodiversity benefits. The audit team reviewed respective information and confirms compliance with the CCBS (IRL 3, 47, 48, 128), considering the FAR raised.

G.4. Management Capacity and Best Practices

The roles of the different organizations involved in the project are described in the PDD. Key technical skills required for successful project implementation are described and met by project team (IRL 3, 23-26). It is shown that the project partners are likely to have sufficient expertise and experience in the putting into action the envisioned REDD project. TÜV SÜD reviewed re-

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spective documents and interviewed employees during the onsite visit and concludes compliance with CCBS requirements.

Capacity building is foreseen in the project activity, including training for the community members working in the project (IRL 3, 38, 39, 42, 56, 57, 58). The project design foresees that priority is given to local people for employment (IRL 3).

A sound description of the applicable laws and/or regulations covering worker rights and how and by which means the project is fulfilling those has been included to the PDD (IRL 3, 72, 112, 124, 127).

Several safety measures are listed in the PDD, which can be considered to minimize potential risk. As described in the PDD the final plan to inform workers of risks and how to minimize these risks is not yet elaborated. The audit team post therefore a Forward Action Request (see table 3 of annex 1) to provide respective information at verification of the project.

The project's funding was assessed by the audit team and it was demonstrated that sufficient funding was available for the first years of implementation (IRL 3, 47, 48, 128). Further detailed information is also provided in the VCS risk assessment in the section on financial viability.

Based on the PDD, further documents delivered by the PP and the observations made during the onsite visit, TÜV SÜD concludes that the requirements of CCBS G4. are met, keeping in mind the "Forward Action Requests" raised.

G.5. Legal Status and Property Rights

A description on relevant national and local laws has been included (IRL 3, 72, 112, 113, 124, 125) as well as how compliance with those is achieved through the project is included to the PDD (IRL 2). Respective information was reviewed by the audit team.

The project has approval from relevant authorities, as it was approved by the director general of the forest administration (IRL 22). The Community Forests are also formally approved by the administration (IRL 26, 30, 31). Each Community Forest group has signed an agreement with the project (IRL 26). Therefore the audit team confirms that the project is also approved by the communities. Respective interviews with the forest administration and the communities were conducted by TÜV SÜD during the onsite visit to confirm the project's approval.

As discussed in the paragraph above, it is also documented that the project does not encroach uninvited on private, community or governmental property (IRL 26, 30, 71, 72). The project does not require involuntary relocation of people, as no households are located inside the project area.

Illegal activities taking place in the project zone are identified and described in the PDD, such as illegal logging, intentional fires and agricultural encroachment.

It is demonstrated in the PDD and VCS PD, that the project has clear, uncontested title to the carbon rights. Respective information and contracts was reviewed by TÜV SÜD and found in compliance with CCBS requirements.

3.2 Climate Section

CL.1.Net Positive Climate Impacts

The approved VCS methodology VM 0006 version 01 was applied in order to calculate the net change in carbon stocks as a result of project implementation. As indicated in the VCS Validation Report, a total net of 6,143,767 tCO₂e are expected to be sequestered after applying a 19.75% buffer discount over a 30 year crediting period. Hence, the overall net climate impact is expected to be positive (IRL 2, 3, 4, 6).

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Non-CO₂ emissions for the "with" and "without project" scenario have been assessed by the audit team. The emissions account for less than 5% of the project's overall GHG emissions reductions (IRL 2, 3, 6). The audit team reviewed respective calculation (IRL 6) and input data and considers the calculation complete and correct.

No double counting is expected, as the credits will be issued under a VCS respective registry, which tracks the use of the credits on the voluntary market. At the time of validation, no compliance market for REDD was established; however the project has approval from Cambodia, which should ensure that no double counting occurs in case Cambodia would join a potential market for REDD.

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

Potential types of leakage as a result of the project activity, are listed in the PDD. A leakage belt was defined as an area around the project that will be monitored (IRL 3, 5). Certain activities were classified as market leakage

Measures to minimize potential leakage are listed in the PDD. The total amount of unmitigated negative offsite climate impacts are discounted from the overall climate benefits as required.

Non-CO₂ GHG emissions are calculated and found to be less than 5% of the projects overall off-site GHG emissions reductions and thus have been neglected (IRL 77). TÜV SÜD reviewed respective calculation regarding leakage and found them correctly applied and in compliance with CCBS requirements.

Further detailed description of leakage is presented in the VCS PD (IRL 2) and the respective assessment is presented in the VCS Validation report (IRL 143).

TÜV SÜD concludes that leakage is accounted in this project activity in line with CCBS requirements CL2.

CL.3. Climate Impact Monitoring

The monitoring plan provided in the PDD is in compliance with CCBS requirements. A monitoring plan was elaborated in the course of the VCS project (IRL 2). In line with CCBS requirement CL3.2 the audit team concludes that all respective requirements of this section are met.

3.3 Community Section

CM1. Net Positive Community Impacts

Impacts on communities resulting from the project activity are addressed by applying appropriated methodologies. Differences between "with" and "without" project scenario are discussed in the PDD and supported with respective information and documentation (IRL 3, 12, 13, 17-19).

HCVs are not expected to be negatively impacted by the project, as the project is designed to protect these areas (IRL 3).

The audit team reviewed the PDD and respective background information. Based on documents reviewed and information collected during the onsite visit, the audit team concludes that respective CCBS requirements are met.

CM.2. Offsite Stakeholder Impacts

Potential negative offsite stakeholder impacts are identified in the PDD. The major negative impact under the project scenario is the displacement of illegal activities from the project area (IRL 2, 3, 18, 19). Respective mitigation strategies are foreseen in the project implementation through capacity building (IRL 3). In total the project is expected to more likely provide positive

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impacts rather than negative (IRL 3). TÜV SÜD reviewed respective documentation and assessed the statements in the PDD during the onsite visit. The audit team concludes that respective CCBS requirements are met.

CM.3. Community Impact Monitoring

A initial monitoring plan is provided for community variables as required by the CCB Standards in the PDD and respective SOPs were provided to the audit team (IRL 3, 12, 13). The monitoring plan will also assess the effectiveness of measures for HCV related to community wellbeing in the project zone.

The project developer commits in the PDD to develop a full monitoring plan within six month of validation against the CCBS and to disseminate this plan and the results of monitoring, ensuring that they are made publically available on the internet and are communicated to the communities (IRL 3). TÜV SÜD confirms that the requirements of CCBS section CM 3 are met.

3.4 Biodiversity Section

B.1. Net Positive Biodiversity Impacts

Impacts on biodiversity resulting from the project activity are addressed by applying appropriated methodologies. Differences between "with" and without" project scenario are discussed in the PDD and supported with respective information and documentation (IRL 3, 49, 50, 62).

The PPs expect a net positive impact on biodiversity through conservation of the natural forest ecosystem in the project area. HCVs are not expected to be negatively affected by the project activity, as the project activity foresees to protect these areas. No known invasive species will be used in the project activity as per project design (IRL 2, 3), as crossed checked by the audit team (IRL 144). No Genetically Modified Organisms (GMOs) are foreseen to be used in the proposed project (IRL 2, 3).

The audit team reviewed respective documents and information and confirmed the statements during the onsite visit through interviews with stakeholders and observations in the project areas.

B.2. Offsite Biodiversity Impacts

Offsite biodiversity negative impacts and respective mitigation measures are identified and discussed in the PDD. Mitigation strategies are included in the PDD, and it is expected that no unmitigated impacts will occur. Hence, the net effect of the project is expected to be positive.

The information presented in this section of the PDD was assessed by TÜV SÜD and found to be in compliance with CCBS.

B.3. Biodiversity Impact Monitoring

An initial biodiversity monitoring plan was included to the CCBA PDD. Measures to monitor HCVs according to the CCBA are described in the monitoring plan (IRL 3, 49, 50). The plan was reviewed by TÜV SÜD and found in compliance with the CCBS.

A statement of commitment to developing a full monitoring plan within twelve months of validation against the CCB Standards and to disseminate this plan and the results of the monitoring, ensuring that they are made publically available on the internet and are communicated to the communities and other stakeholders is included to the CCBA PDD (IRL 3).

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3.5 Gold Level Section

GL.1. Climate Change Adaptation Benefits

Likely regional climate change and climate variability scenarios and impacts are presented in the PDD and sustained with scientific literature (IRL 135-138). The audit team reviewed respective documentation and found them in line with CCBS requirements.

Risks to the project's climate, community and biodiversity benefits resulting from climate change and climate variability impacts are described in the PDD based on respective studies (IRL 139-142). Mitigation strategies against these risks are discussed in the project documentation. It was demonstrated that anticipated climate changes are likely to have an impact on the well-being of communities and biodiversity in the project zone.

TÜV SÜD reviewed the description in the PDD and further studies and documents provided by the project participants. The audit team concludes that the project complies with the Gold Level "Climate Change Adaptation Benefits".

GL.2. Exceptional Community Benefits

The project is located in a low human development country.

The project design (IRL 3) foresees that the households within the lowest category of well-being of the community benefits substantially from the project activities, and it is foreseen that the benefits for these households are subject to monitoring (IRL 3, 17, 18, 19).

Activities for alleviating barriers are identified, and the project design (IRL 3) foresees to remove these barriers during the project implementation. The monitoring foresees to specifically include poorer and more vulnerable groups (IRL 17, 18, 19). Through this monitoring it is foreseen to identify the poorest 50% of the households in the community, and monitor the benefits that they will receive through the project activity.

The project foresees to also identify potential negative impacts of the project on poorer and more vulnerable households and individuals of the community through monitoring. As it was however not fully possible to assess these information at validation, a Forward Action Request 03 was raised to assess whether any poorer and more vulnerable households and individuals will be negatively impacted by the project activity. Respective counter measures to avoid such impacts shall be assessed at verification.

The audit team concludes that the project complies with the Gold Level "Exceptional Community Benefits", considering the Forward Action Request 03.

GL.3. Exceptional Biodiversity Benefits

It was demonstrated that the project zone and area include a site of high biodiversity conservation priority by meeting the vulnerability criteria (IRL 49, 50). The PP demonstrated that several endangered species are present in the project area. Occurrence of these species was sustained in a study on biodiversity in the project area (IRL 49, 50). The audit team reviewed this study and further confirmed the results through interviews and onsite observations. The audit team concludes that the project complies with the Gold Level "Exceptional Biodiversity Benefits".

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Summary of CCBA requirements:

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

Section	Status			
General Section				
G1.	Original Conditions in the Project Area	Ø		
G2.	Baseline Projections	Ø		
G3.	Project Design and Goals	Ø		
G4.	Management Capacity and Best Practices	V		
G5.	Legal Status and Property Rights	Ø		
Clima	te Section			
CL1.	Net Positive Climate Impacts	Ø		
CL2.	Offsite Climate Impacts ("Leakage")	V		
CL3.	Climate Impact Monitoring	Ø		
Community Section				
CM1.	Net Positive Community Impacts	V		
CM2.	Offsite Community Impacts	V		
CM3.	Community Impact Monitoring	V		
Biodiv	versity Section			
B1.	Net Positive Biodiversity Impacts	V		
B2.	Offsite Biodiversity Impacts	V		
B3.	Biodiversity Impact Monitoring	V		
Gold I	Level Section			
GL1.	Climate Change Adaptation Benefits	Ø		
GL2.	Exceptional Community Benefits	FAR		
GL3.	Exceptional Biodiversity Benefits	V		
	Approved Status	Ø		
	Gold Status			

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4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

The project documents have been published on the CCBA websites. Comments by stake-holders were invited twice (30 July - 31 August 2011 and 31 July - 31 August 2012).

One comment was received in the second public comment period. The following table presents all key information on this process:

webpage:

http://www.climate-standards.org/projects/index.html

Comment submitted by:

Kyle Holland,

Managing Member, Ecological Carbon Offset Partners, LLC

Date: 30 August 2012

Issues raised:

Cambodia's forests have long been threatened by deforestation, and while conservation efforts have been made, many of the native forests remain at risk. The Oddar Meanchey REDD Project is an excellent example of a carbon project empowering indigenous communities to preserve their valuable natural resources. The validation of this project will not only be significant for the Oddar Meanchey Province and its inhabitants, but for the rest of Cambodia as a model for forest offset projects going forward.

In general, we found the project design document to be extremely thorough, organized, and well planned. Of particular significance is the involvement of indigenous peoples and local communities throughout the project design and decision-making process, specifically the numerous dialogues, workshops, and trainings held to gather input and increase awareness. The continued feedback and involvement of community members through the life of the project is invaluable.

We support validation and encourage similar efforts to preserve biodiversity and support local communities in Cambodia and the rest of Southeast Asia.

However, we are concerned about the coverage that is provided to foreign investors regarding political risk insurance. The PDD does not mention or discuss the effects of this coverage on the long-term implementation of project activities or on community benefits. Because this critical information is missing from the PDD and has potential effects on project benefits, we request that it be added to the PDD and that the PDD be re-released for second comments.

It is conceivable that this class of insurance could spur important and needed financial support by foreign investors for future REDD projects. Thus the effects of such policies should be scrutinized on this premier project so that any potential negative effects can be mitigated in order strengthen the design of such insurance coverage on future projects.

Response by Project Participants:

Political risk insurance is not discussed in the CCB PDD because this insurance contract does not have any bearing on the implementation of planned project activities, or the benefits that will accrue to communities as a result of the project. The insurance was optionally taken and paid for by Terra to insure their investment in the project in the case of 1) expropriation or 2) political violence affecting the project. This coverage may be cancelled at any time and its existence cannot impact project as it is planned and reported in the CCB PD. If an act of expropriation or political violence takes which affects Terra's investment in the project, the insurance could only support the continuation of project activities and the distribution of community benefits in the exact way they are detailed in the CCB PD. Thus, the project will continue to implement its activities according to its workplan whether or not the insurance comes into ef-

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fect.

Moreover, nothing in the CCB Guidance requires the PDD to address any aftermarket insurance products taken by project partners or investors, nor does the CCB PDD require the inclusion of an analysis of "the potential negative effects of such policies to strengthen the design of such insurance coverage on other projects". The CCB Guidance does require that any potential risks to the project benefits are addressed in the PDD. An exhaustive list of potential risks to the CCB benefits has been included in the PDD, and was approved by the validator in the draft validation report. The project team does not consider the existence of the insurance as a risk to the benefits of the project and thus it was not included in the PDD.

Response by TÜV SÜD:

The comment raised regarding political risk insurance for foreign investors is not a requirement by the CCBS.

Nevertheless, the project document discusses the financial viability of the project (see section G.3.11), and likely risks are identified see section G.3.5). Both sections were validated by the audit team and found in compliance with CCBS requirements.

Further, the audit team likes to point out that the CCB audit was combined with a VCS audit. As part of the VCS audit, the risk was also assessed, following the VCS "AFOLU non-permanence risk tool". Respective information can be found in the VCS PDD and the respective assessment by the audit team in the VCS validation report.

A second publication of the PDD is not foreseen in the CCBA validation procedures.

TÜV SÜD considers the comment adequately addressed through the response from the project participant above and the explanation given by the audit team.

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5 VALIDATION OPINION

TÜV SÜD performed a validation of the proposed CCBA project activity "Reduced Emissions from Degradation and Deforestation in Community Forests - Oddar Meanchey, Cambodia".

Standard auditing techniques have been used for the validation of the project. A methodology-specific protocol for the project has been prepared to conduct the audit in a transparent and comprehensive manner.

The review of the project design documentation, subsequent follow-up interviews and further verification of references provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria in the protocol. In our opinion, the project meets all relevant requirements of the CCBS second edition. Therefore, TÜV SÜD recommends the project for registration by CCBA. According to the scorecard approach introduced by CCBA (second edition), TÜV SÜD considers the project to comply with Gold Level requirements of CCBS.

An analysis as provided by the applied methodology demonstrates that the proposed project activity is not a likely baseline scenario. GHG removals attributable to the project are 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 GHG removals as specified within the final PDD version.

In this context it is underlined that from the auditor's perspective a combined audit of CCB Standards and VCS 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, as well as the engagement conditions detailed in this report. The validation was performed following the VVM requirements. The single purpose of this report is its use during the registration process as part of the CCBA project cycle.

Munich, 10 October 2012

Munich, 10 October 2012

Thomas Kleiser

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

Sebastian Hetsch
Assessment Team Leader
TÜV SÜD Industrie Service GmbH



ANNEX 1: VALIDATION PROTOCOL

Table 1: Conformity of project activity and PDD

	CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
G. General Section					
G.1.	Original Conditions in the Project Area				
	Information Are the location of the project and the basic physical parameters (e.g. soil, geology, climate) clearly described?	3	The location of the project area is described in the PDD, GIS shape files are provided to audit team. Boundary was assessed onsite during the field visit Information on precipitation is provided Clarification Request 1. Provide information and references on soil, geology and climate.	CR	Ø
G.1.2.	Is sufficient information provided concerning types and condition of the vegetation?	3, 50, 74	A brief description of the vegetation is provided, mixed and deciduous forests and evergreen forests are the main vegetation types	Ø	Ø
G.1.3.	Are boundary of the project and the project zone described in the PDD	3, 5	GIS files are submitted to the audit team, identifying the project boundary. The project area is 63318 ha on 13 parcels, project zone/reference region is larger Corrective Action Request No 1. Update the boundary files (GIS data) and the PDD to the actual size of the project area (see VCS checklist section 1.9) Provide information on project zone (size) in the PDD Ensure that the references in the document are readable	CAR	Ø
Climate	Information	3	Project strata are defined: Deciduous and Mixed Forest	CR	Ø

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	CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
G.1.4.	Are the current carbon stocks properly explained, e. g. by using stratification by land-use or vegetation type and methods of carbon calculation (such as biomass plots, formulae, default values) from IPCC 2006 or a more robust and detailed methodology?		 (MX1, MX2, MX3), Evergreen Forest (EG1, EG2), Non-Forest Clarification Request 2. Provide further details on the stratification of the project area, or provide reference to the respective VCS document. Provide information on carbon stock per strata Clarify table G6 (no units) 		
	nity Information Is a description included of communities located in the project zone, including basic socio-economic and cultural information that describes the social, economic and cultural diversity within communities (wealth, gender, age, ethnicity etc.), identifying also specific groups such as Indigenous Peoples and describing any community characteristics?	3, 12, 13,17, 18,19, 31, 73 82,	A description of the communities in the vicinity of the project area is provided in the PDD. Socio-economic information were obtained in household surveys (and a PRA) that was conducted with the project. Communities are organized in Community Forests (CF) to manage the project area. Clarification Request 3. Update the information regarding project area and project zone. As evident during the onsite visit, no villages are located inside the project area.	CR	Q
G.1.6.	Description of current land use and customary and legal property rights including community property in the project zone, identifying any ongoing or unresolved conflicts or disputes and identifying and describing any disputes over land tenure that were resolved during the last ten years (see also G5).	3, 20- 26, 31, 112, 125	The owner of the project area is the state of Cambodia (see also Cambodian Land Law). The project area consists of 13 Community Forestry (CF) areas, which were established with the government (see CF sub-degree). Each CF consists of families in several communities in the vicinity of the CF area. The actual management is done by Community Forestry Management Committees (CFMCs), elected by the members of the CFs. The CFs were already founded before the start of the project, however there was not sufficient funding to implement activities to actually protect the forest area.	Ø	Ø

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
		Respective documents were reviewed by the audit team and discussed with relevant authorities during the onsite visit.		
G.1.7. Description of current biodiversity within the project zone (diversity of species and ecosystems) and threats to that biodiversity, using appropriate methodologies, substantiated where possible with appropriate reference material.	3, 49, 50 65, 69	Biodiversity is briefly outlined based on the study from McMahon. Further a study was carried out by Birdlife international. The survey included interviews with local people and also field samples where camera traps and other signs such as footprints. The assessment was based mainly in bird and mammal species. General description on vegetation is also included. Threats to biodiversity are loss of forest cover and hunting	Ø	☑
Is substantial and appropriate reference material provided?	3, 49	The study from McMahon is quoted. A detailed information is provided in the assessment conducted by BirdLife International	Ø	Ø
G.1.8. An evaluation of whether the project zone includes any of the following High Conservation Values (HCVs) and a description of the qualifying attributes:	3, 49	HCV are listed in the PDD. The major HCV identified include biological an cultural HCVs.	Ø	V
 8.1. Globally, regionally or nationally significant concentrations of biodiversity values: a. protected areas b. threatened species c. endemic species d. areas that support significant concentrations of a species during any time in their lifecycle (e.g. migrations, feeding grounds, breeding areas). 	3, 49	The project <i>zone</i> contains protected areas, and threatened and endemic species. The project <i>area</i> also contains threatened and endemic species according to the IUCN red list as described in the assessment conducted by Birdlife Int provided as evidence.	V	Ø
8.2. Globally, regionally or nationally significant large landscape-level areas where viable populations of most if not all naturally occur- ring species exist in natural patterns of distribution and abun- dance;	3, 49	It is indicated that these areas will provide significant habitat to large vertebrates with expansive ranges such as elephants, leopards, tigers and bears, however during the field work interviews with local communities this was not confirmed neither it is reported in the biodiversity survey.	CR	Ø

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
		Clarification Request 4. Provide evidence on the description included to the PDD regarding areas where viable populations exist.		
8.3. Threatened or rare ecosystems;	3, 49	It is indicated that HCVs are threatened or rare ecosystems. As described above	V	Ø
8.4. Areas that provide critical ecosystem services (e.g., hydrological services, erosion control, fire control);	3, 49	General statements indicate the forest cover as critical to provide ecosystem services, however more specific information is required considering the project site characteristics. Clarification Request 5. The CCBS requires to provide a description on areas that provide critical ecosystem services and provide corresponding evidence. Such information is not provided in the PDD.	CR	Ø
8.5. Areas that are fundamental for meeting the basic needs of local communities (e.g., for essential food, fuel, fodder, medicines or building materials without readily available alternatives); and	3, 49	General information is provided. Clarification Request 6. The CCBS requires to provide a description on areas that are fundamental for meeting basic needs of local communities and provide corresponding evidence on how these areas were identified. Such information is not provided in the PDD.	CR	Ø
8.6. Areas that are critical for the traditional cultural identity of communities (e.g., areas of cultural, ecological, economic or religious significance identified in collaboration with the communities).	3, 49	General information is provided. Clarification Request 7. The CCBS requires to provide description on areas that are critical for traditional identity of local communities and provide corresponding evidence on how these areas were identified Such information is not provided in the PDD.	CR	Ø
G.2. Baseline Projections				
G.2.1. Describe the most likely land-use scenario in the absence of the project following IPCC 2006 GL for AFOLU or a more ro-	2, 3	The VCS approved methodology VM 0006 is used to determine and quantify the baseline scenario in the project area	CAR	Ø

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	CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
	bust and detailed methodology, describing the range of potential landuse scenarios and the associated drivers of GHG emissions and justifying why the land-use scenario selected is most likely.		See baseline Section in VCS PD and respective checklist Corrective Action Request No 2. Update the section on baseline in line with the VCS PD and calculations.		
G.2.2.	Document that project benefits would not have occurred in the absence of the project, explaining how existing laws or regulations would likely affect land use and justifying that the benefits being claimed by the project are truly 'additional' and would be unlikely to occur without the project.	2, 3	See baseline/additionality Section in VCS PD and respective checklist	Ø	Ø
G.2.3.	Calculate the estimated carbon stock changes associated with the 'without project' reference scenario described above. This requires estimation of carbon stocks for each of the land-use classes of concern and a definition of the carbon pools included, among the classes defined in the IPCC 2006 GL for AFOLU. The timeframe for this analysis can be either the project lifetime (see G3) or the project GHG accounting period, whichever is more appropriate. Estimate the net change in the emissions of non-CO2 GHG emissions such as CH4 and N2O in the 'without project' scenario. Non-CO2 gases must be included if they are likely to account for more than 5% (in terms of CO2-equivalent) of the project's overall GHG impact over each monitoring period	2, 3	See baseline Section in VCS PD and respective checklist	Ø	Q
	Projects whose activities are designed to avoid GHG emissions (such as those reducing emissions from deforestation and forest degradation (REDD), avoiding conversion of non-forest land, or certain improved forest management projects) must include an analysis of the relevant drivers and rates of deforestation and/or degradation and a description and justification of the approaches, assumptions and data used to perform this analy-	2, 3	See baseline Section in VCS PD and respective checklist	Ø	₫

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	CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
	sis. Regional-level estimates can be used at the project's planning stage as long as there is a commitment to evaluate locally-specific carbon stocks and to develop a project-specific spatial analysis of deforestation and/or degradation using an appropriately robust and detailed carbon accounting methodology before the start of the project.				
G.2.4.	Describe how the 'without project' reference scenario would affect communities in the project zone, including the impact of likely changes in water, soil and other locally important ecosystem services.	3, 18, 19	A description is provided in the PD. It is expected that encroachment would further increase, and local forest dependent communities will further lose control over the area.	I	V
G.2.5.	Describe how the 'without project' reference scenario would affect biodiversity in the project zone (e.g., habitat availability, landscape connectivity and threatened species).	3	In the absence of the project further deforestation is expected, which will negatively impact biodiversity.	Ø	Ø
G.3.	Project Design & Goals				
G.3.1.	Provide a summary of the project's major climate, community and biodiversity objectives.	3	Mayor objectives are described in the PDD, including reduced GHG emissions from deforestation/forest degradation, secure land tenure for local communities, improve local governance and contribution to protect local biodiversity.	Ø	\(\sigma\)
G.3.2.	Describe each project activity with expected climate, community and biodiversity impacts and its relevance to achieving the project's objectives.	3	Project activities are described in the PDD: 1. Reinforcing land tenure 2. Sustainable forest and land-use plans 3. Forest protection 4. Assisted natural regeneration 5. Fuel efficient cook-stoves 6. Livestock protection from mosquitoes 7. Agricultural land intensification 8. Natural resource management projects	Ø	V

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
		9. NTFP Development Activities 10. Fire prevention See VCS PD and respective checklist		
G.3.3. Provide a map identifying the project location and boundaries of the project area(s), where the project activities will occur, of the project zone and of additional surrounding locations that are predicted to be impacted by project activities (e.g. through leakage).	3, 5	A map is included in the PDD, GIS files are provided to the audit team, clearly identifying the project boundaries. Respective "leakage belts" are defined, see also VCS PD and checklist for details	Ø	☑
G.3.4. Define the project lifetime and GHG accounting period and explain and justify any differences between them. Define an implementation schedule, indicating key dates and milestones in the project's development.	3	The project crediting period and lifetime is 30 years. See also VCS PD and respective checklist	☑	Ø
G.3.5. Identify likely natural and human-induced risks to the expected climate, community and biodiversity benefits during the project lifetime and outline measures adopted to mitigate these risks.	3	 Risk and mitigation strategies are discussed: Community lack of effectiveness to control the CF areas Community member experience loss of confidence in the CFMC Population growth forces agricultural expansion in project area Loss of carbon stock through fire, illegal felling and land clearing Insufficient funding or inappropriate use of revenues Site preparation Fertilizer and pesticides See also VCS risk assessment and respective checklist Clarification Request 8. Clarify what are the specific risks for the benefits that the points listed above entail. 	CR	

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ССВ	A Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
to ensure the mainter	project design includes specific measures nance or enhancement of the high conser- s identified in G1 consistent with the pre-	3	Assisted natural regeneration, securing land tenure and supporting communities livelihoods should ensure to maintain or enhance HCVs.	Ø	☑
	es that will be taken to maintain and en- ommunity and biodiversity benefits beyond	3	Activities are designed for continuation also after the project crediting period.	V	Ø
ers potentially affected tified and have been tive consultation, part nity and stakeholder values and maintainity velopers must docume and how the project part A plan must be devel sultation between project about the project and	d how communities and other stakeholded by the project activities have been ideninvolved in project design through effecticularly with a view to optimizing commubenefits, respecting local customs and ng high conservation values. Project denent stakeholder dialogues and indicate if proposal was revised based on such input. loped to continue communication and conject managers and all community groups its impacts to facilitate adaptive manthe life of the project.	3, 19, 38-45	The project area is managed by Community Forests (CF). The actual management is done by Community Forestry Management Committees (CFMCs), elected by the members of the CFs. NGOs like in particular CDA and CFI help the communities to conduct the activities in the project area. The CFs and the respective communities are identified as key stakeholder. Several workshops and meetings were carried out before and after the commence of the project. The CFs can only receive direct financial benefits once the project breaks even (after about 4-5 years after project start). In the meantime communities can benefit from direct employment through the project, as well as training and support in infrastructure. Once financial benefits are generated, they will managed by the Forest Administration (FA), at time of validation no agreement is met with the CFs how the benefits will be shared. In a different agreement between the FA and TGC it is stated that a minimum of 50% of all revenue should be directed to the communities, after deduction of project costs.	CR	
			 Clarification Request 9. Clarify how it is optimized that communities and stakeholder benefit from the project, and ensure that benefit sharing is clearly communicated to the communities and 		

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
		 stakeholders. Provide evidence on the consent given by local communities based on clear and transparent communication on the potential benefits of the project implementation 		
G.3.9. Describe what specific steps have been taken, and communications methods used, to publicize the CCBA public comment period to communities and other stakeholders and to facilitate their submission of comments to CCBA. Project proponents must play an active role in distributing key project documents to affected communities and stakeholders and hold widely publicized information meetings in relevant local or regional languages.	3	The PDD was published on the CCBA webpage. The document was also translated into Khmer and distributed within the forest administration and local governments		FAR 01
G.3.10. Formalize a clear process for handling unresolved conflicts and grievances that arise during project planning and implementation. The project design must include a process for hearing, responding to and resolving community and other stakeholder grievances within a reasonable time period. This grievance process must be publicized to communities and other stakeholders and must be managed by a third party or mediator to prevent any conflict of interest. Project management must attempt to resolve all reasonable grievances raised, and provide a written response to grievances within 30 days. Grievances and project responses must be documented.	3	The CFMCs are focal point in the communities. Conflicts will be presented and vetted during monthly meeting However no formal process for handling unresolved conflicts and grievances is defined yet. Corrective Action Request No 3. Introduce a clear process for handling unresolved conflicts and grievances in line with CCBA requirements	CAR	Ø
G.3.11. Demonstrate that financial mechanisms adopted, including projected revenues from emissions reductions and other sources, are likely to provide an adequate flow of funds for project implementation and to achieve the anticipated climate, community and biodiversity benefits.	3, 47, 48	Upfront funding was received from donors. The cash flow and budget was reviewed by the audit team as part of the validation. Revenues will mainly be generated through the sale of carbon credits under VCS. The Forest Administration (FA) will receive the revenues and distribute them to the different organizations for implementing activities in the project. Surplus will be shared between FA and the CFs	☑	Ø

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	CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
G.4.	Management Capacity				
G.4.1.	Identify a single project proponent which is responsible for the project's design and implementation. If multiple organizations or individuals are involved in the project's development and implementation the governance structure, roles and responsibilities of each of the organizations or individuals involved must also be described.	3, 23-26	Project proponents are listed in the PDD: Forestry administration PACT Cambodia Children's Development Association (CDA) Terra Global Capital Clinton Climate Initiative TWG-F&E Buddhist Monk's Association Communities of Oddar Meanchey Clarification Request 10. Clarify if all partners listed in table G17 are project proponent. Ensure consistency with VCS PD.	CR	Ø
G.4.2.	Document key technical skills that will be required to implement the project successfully, including community engagement, biodiversity assessment and carbon measurement and monitoring skills. Document the management team's expertise and prior experience implementing land management projects at the scale of this project. If relevant experience is lacking, the proponents must either demonstrate how other organizations will be partnered with to support the project or have a recruitment strategy to fill the gaps.	3, 23-26	The PP includes the Forest Administration with expertise on forest management, as well as biodiversity. The CDA and Monks with experience in community work and Terra Global providing the expertise for development of carbon projects.	Ø	Ø
G.4.3.	Include a plan to provide orientation and training for the project's employees and relevant people from the communities with an objective of building locally useful skills and knowledge to increase local participation in project implementation. These capacity building efforts should target a wide range of people in the communities, including minority and underrepresented	3, 38, 39, 42, 56, 57,	It is foreseen to provide trainings in the following aspects:	☑	Ø

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	CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
	groups. Identify how training will be passed on to new workers when there is staff turnover, so that local capacity will not be lost.	58,	 Non-Timber Forest Products (NTFP) Fire prevention Silvicultural measures for ANR Some activities have already been carried out, others are foreseen at later stages of the project. 		
G.4.4.	Show that people from the communities will be given an equal opportunity to fill all employment positions (including management) if the job requirements are met. Project proponents must explain how employees will be selected for positions and where relevant, must indicate how local community members, including women and other potentially underrepresented groups, will be given a fair chance to fill positions for which they can be trained.	3	It was explained that priority would be given to local people for employment. For work in the project area, people from the communities are hired Clarification Request 11. Ensure to keep structure of CCBA (G.4.4 is missing as header)	CR	Ŋ
G.4.5.	Submit a list of all relevant laws and regulations covering worker's rights in the host country. Describe how the project will inform workers about their rights. Provide assurance that the project meets or exceeds all applicable laws and/or regulations covering worker rights and, where relevant, demonstrate how compliance is achieved.	3, 72, 112, 124, 127	Basic information are summarized in the PDD Clarification Request 12. Provide summary of relevant laws and regulations (reference to section 0 is unclear) Explain further how it is ensured that workers are aware of their rights	CR	Ø
G.4.6.	Comprehensively assess situations and occupations that pose a substantial risk to worker safety. A plan must be in place to inform workers of risks and to explain how to minimize such risks. Where worker safety cannot be guaranteed, project proponents must show how the risks will be minimized using best work practices.	3	Work related risks include: Malaria Accidents in thinning operations Forest fires Landmines Clarification Request 13. Provide a plan/procedures how workers are informed on risks (as applicable), and procedures in case of accidents	CR	FAR 02

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	CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
G.4.7.	Document the financial health of the implementing organization(s) to demonstrate that financial resources budgeted will be adequate to implement the project.	3, 47, 48, 128	The budget for the project was discussed during the onsite visit of the audit team. The implementation of project activities depend largely on sales of carbon revenue under the VCS Financial viability is discussed in the VCS risk assessment as well.	V	Ø
G.5.	Legal Status and Property Rights				
G.5.1.	Submit a list of all relevant national and local laws and regulations in the host country and all applicable international treaties and agreements. Provide assurance that the project will comply with these and, where relevant, demonstrate how compliance is achieved.	3, 72, 112, 113, 124, 125, 129	A list with laws is provided in the PDD. Further during the onsite visit of the audit team, the national forest programme and the Cambodia UN-REDD National Programme were discussed Clarification Request 14. Clarify how compliance with the listed laws is achieved	CR	Ø
G.5.2.	Document that the project has approval from the appropriate authorities, including the established formal and/or traditional authorities customarily required by the communities.	3, 22	The forest administration has approved the project. The office of the Prime Minister has also sanctioned the project. Respective documents were reviewed by the audit team.	Ø	☑
G.5.3.	Demonstrate with documented consultations and agreements that the project will not encroach uninvited on private property, community property, or government property and has obtained the free, prior, and informed consent of those whose rights will be affected by the project.	3, 29, 30, 36	The land belongs to the government and is managed by the CFs who have agreed to participate in the project	Ø	☑
G.5.4.	Demonstrate that the project does not require the involuntary relocation of people or of the activities important for the livelihoods and culture of the communities. If any relocation of habitation or activities is undertaken within the terms of an agreement, the project proponents must demonstrate that the agreement was made with the free, prior, and informed consent of those concerned and includes provisions for just and fair compensation.	3, 71, 72	No relocation of people is foreseen in the project	Ø	Ø

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
G.5.5. Identify any illegal activities that could affect the project's climate, community or biodiversity impacts (e.g., logging) taking place in the project zone and describe how the project will help to reduce these activities so that project benefits are not derived from illegal activities.	3	Project activities are focusing on combating illegal activities such as logging, fires and agricultural encroachment. Project activities are described and discussed in earlier sections.	J	Ø
G.5.6. Demonstrate that the project proponents have clear, uncontested title to the carbon rights, or provide legal documentation demonstrating that the project is undertaken on behalf of the carbon owners with their full consent. Where local or national conditions preclude clear title to the carbon rights at the time of validation against the Standards, the project proponents must provide evidence that their ownership of carbon rights is likely to be established before they enter into any transactions concerning the project's carbon assets.	3, 22	Project has received endorsement by the council of ministers. See also section on property and carbon rights in the VCS PDD and checklist	Ø	Ø
CL. Climate Section				
Net Positive Climate Impacts				
CL.1.1. Estimate the net change in carbon stocks due to the project activities using the methods of calculation, formulae and default values of the IPCC 2006 GL for AFOLU or using a more robust and detailed methodology. The net change is equal to carbon stock changes with the project minus carbon stock changes without the project (the latter having been estimated in G2). This estimate must be based on clearly defined and defendable assumptions about how project activities will alter GHG emissions or carbon stocks over the duration of the project or the project GHG accounting period.	2, 3, 6	The VCS approved methodology VM 0006 is used for calculation of carbon credits. See VCS PD and respective checklist Corrective Action Request No 4. Update the PDD in line with the VCS PD and calculations	CAR	Ø

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
CL.1.2. Estimate the net change in the emissions of non-CO ₂ GHG emissions such as CH ₄ and N ₂ O in the with and without project scenarios if those gases are likely to account for more than a 5% increase or decrease (in terms of CO ₂ -equivalent) of the project's overall GHG emissions reductions or removals over each monitoring period.	2, 3, 6	See VCS PD and respective checklist regarding emissions	Ø	☑
CL.1.3. Estimate any other GHG emissions resulting from project activities. Emissions sources include, but are not limited to, emissions from biomass burning during site preparation, emissions from fossil fuel combustion, direct emissions from the use of synthetic fertilizers, and emissions from the decomposition of N-fixing species.	2, 3, 6	See VCS PD and respective checklist regarding emissions	V	Ø
CL.1.4. Demonstrate that the net climate impact of the project is positive. The net climate impact of the project is the net change in carbon stocks plus net change in non-CO2 GHGs where appropriate minus any other GHG emissions resulting from project activities minus any likely project-related unmitigated negative offsite climate impacts (see CL2.3).	2, 3, 6	See VCS PD and respective checklist	V	Ø
CL.1.5. Specify how double counting of GHG emissions reductions or removals will be avoided, particularly for offsets sold on the voluntary market and generated in a country with an emissions cap.	2, 3	The project is also a VCS project. Currently no compliance system is in place for REDD projects and credits.	Ø	☑
CL.2.Offsite Climate Impacts ("Leakage")				
CL.2.1. Determine the types of leakage that are expected and estimate potential offsite increases in GHGs (increases in emissions or decreases in sequestration) due to project activities. Where relevant, define and justify where leakage is most likely to take place.	2, 3	Leakage is calculated in line with the applied VCS methodology See VCS PD and respective checklist	Ø	

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
CL.2.2. Document how any leakage will be mitigated and estimate the extent to which such impacts will be reduced by these mitigation activities.	2, 3	Leakage mitigation activities are discussed in the VCS PD as well See VCS PD and respective checklist	V	Ø
CL.2.3. Subtract any likely project-related unmitigated negative offsite climate impacts from the climate benefits being claimed by the project and demonstrate that this has been included in the evaluation of net climate impact of the project (as calculated in CL1.4).	2, 3	See VCS PD and respective checklist	☑	☑
CL.2.4. Non-CO ₂ gases must be included if they are likely to account for more than a 5% increase or decrease (in terms of CO ₂ -equivalent) of the net change calculations (above) of the project's overall off-site GHG emissions reductions or removals over each monitoring period.	2, 3	See VCS PD and respective checklist	₫	Ø
CL.3. Climate Impact Monitoring				
CL.3.1. Develop an initial plan for selecting carbon pools and non-CO2 GHGs to be monitored, and determine the frequency of monitoring.	2, 3	Monitoring for carbon is conducted in line with the applied VCS methodology VM0006 See VCS PD and respective checklist for details	V	Ø
Potential pools include aboveground biomass, litter, dead wood, belowground biomass, wood products, soil carbon and peat. Pools to monitor must include any pools expected to decrease as a result of project activities, including those in the region outside the project boundaries resulting from all types of leakage identified in CL2.	2, 3	See VCS PD and respective checklist for details	Q	Ø
A plan must be in place to continue leakage monitoring for at least five years after all activity displacement or other leakage causing activity has taken place.	2, 3	See VCS PD and respective checklist for details	V	V

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
Individual GHG sources may be considered 'insignificant' and do not have to be accounted for if together such omitted decreases in carbon pools and increases in GHG emissions amount to less than 5% of the total CO2-equivalent benefits generated by the project.	2, 3	See VCS PD and respective checklist for details	V	Ø
Non-CO2 gases must be included if they are likely to account for more than 5% (in terms of CO2-equivalent) of the project's overall GHG impact over each monitoring period.	2, 3	See VCS PD and respective checklist for details	V	Ø
Direct field measurements using scientifically robust sampling must be used to measure more significant elements of the project's carbon stocks. Other data must be suitable to the project site and specific forest type.	2, 3	See VCS PD and respective checklist for details	V	Ø
CL.3.2. Commit to developing a full monitoring plan within six months of the project start date or within twelve months of validation against the Standards and to disseminate this plan and the results of monitoring, ensuring that they are made publicly available on the internet and are communicated to the communities and other stakeholders.	2, 3	A full monitoring plan is foreseen to be developed six month after the VCS validation Clarification Request 15. Clarify if an additional monitoring plan monitoring plan for climate impact will developed in addition to the VCS monitoring plan	CR	Ø
CM. Community Section				
CM.1. Net Positive Community Impacts				
CM.1.1.Use appropriate methodologies to estimate the impacts on communities, including all constituent socio-economic or cultural groups such as indigenous peoples (defined in G1), resulting from planned project activities. A credible estimate of impacts must include changes in community well-being due to project activities and an evaluation of the impacts by the affected groups. This estimate must be based on clearly defined and defendable assumptions about how project activities will alter so-	3, 12, 13, 18, 19	The local NGO and PP Children's Development Association (CDA) has carried out PRA exercises in the villages, including semi structured interviews and group discussion. Initial field visits were carried out in Jan 2008, PRA in Feb 2008, During the course of the project annual stakeholder dialogues with a focus on project communities are foreseen. With and	Ø	Ø

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
cial and economic well-being, including potential impacts of changes in natural resources and ecosystem services identified as important by the communities (including water and soil resources), over the duration of the project. The 'with project' scenario must then be compared with the 'without project' scenario of social and economic well-being in the absence of the project (completed in G2). The difference (i.e., the community benefit) must be positive for all community groups.		without project scenario are discussed in the PDD Clarification Request 16. Outline the methodology used to estimate the impacts on communities in the PDD. In particular clarify how the impact of the project can be measured through the methodology used.		
CM.1.2.Demonstrate that no High Conservation Values identified in G1.8.4-642 will be negatively affected by the project.	3	No negative effects on HCV are expected, as the project focuses on protection of natural ecosystems	V	V
CM.2. Offsite Community Impacts				
CM.2.1.Identify any potential negative offsite stakeholder impacts that the project activities are likely to cause.	3	The communities affected by the project are largely identified stakeholder in the project. Some activities can however also affect further stakeholder, in particular: • Forest clearing by migrants • Settlement extension • Fuel wood collection • Timer felling for house construction	Ø	Ø
CM.2.2.Describe how the project plans to mitigate these negative offsite social and economic impacts.	3	Awareness campaigns are foreseen in neighboring communities Clarification Request 17. Discuss impact of project outside the project zone, in particular to migrants, hunters, etc.	CR	☑
CM.2.3.Demonstrate that the project is not likely to result in net negative impacts on the well-being of other stakeholder groups.	3	See above	CR	Ø

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
CM.3. Community Impact Monitoring				
CM.3.1.Develop an initial plan for selecting community variables to be monitored and the frequency of monitoring and reporting to ensure that monitoring variables are directly linked to the project's community development objectives and to anticipated impacts (positive and negative).	3, 12, 13	The community monitoring plan is not yet finalized. In relation to community aspects, it is foreseen to monitor social, economic and institutional indicators. The PPs are aiming at using the PRA and household survey already conducted once as basis for a monitoring plan. Clarification Request 18. Provide an initial of monitoring plan, including community variables and methodology used.	CR	Ø
CM.3.2.Develop an initial plan for how they will assess the effective- ness of measures used to maintain or enhance High Conserva- tion Values related to community well-being (G1.8.4-6) present in the project zone.	3, 12, 13	See CR above	CR	Ø
CM.3.3.Commit to developing a full monitoring plan within six months of the project start date or within twelve months of validation against the Standards and to disseminate this plan and the results of monitoring, ensuring that they are made publicly available on the internet and are communicated to the communities and other stakeholders.	3, 12, 13	A full plan is foreseen to be developed six month after validation. See CR above	CR	Ø
B. Biodiversity Section				
B.1. Net Positive Biodiversity Impacts				
B.1.1. Use appropriate methodologies to estimate changes in biodiversity as a result of the project in the project zone and in the project lifetime. This estimate must be based on clearly defined and defendable assumptions. The 'with project' scenario should then be compared with the baseline 'without project' biodiversity scenario completed in G2. The difference (i.e., the net biodi-	3, 62	Methodology from Finn Danielsen et al is used to monitor biodiversity, including: • Standardized routine observations • Fixed point photography • Line transect surveys	Ø	Ø

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	CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
	versity benefit) must be positive.		Focus group discussions The methodologies have been tested by other agencies (not involved in the project)		
B.1.2.	Demonstrate that no High Conservation Values identified in G1.8.1-3 will be negatively affected by the project.	3	One major objective of the project is to protect HCV, therefore no negative impacts are expected.	Ø	Ø
B.1.3.	Identify all species to be used by the project and show that no known invasive species will be introduced into any area affected by the project and that the population of any invasive species will not increase as a result of the project.	3, 62, 144	The project is mainly focusing on protecting existing forests. In some parts trees will be planted (ANR). These species are listed in the PD. Seedlings will be grown in nurseries in the province.	CR	Ø
			Clarification Request 19. Provide references to the species used and planted in the project (in the ANR areas)		
B.1.4.	Describe possible adverse effects of non-native species used by the project on the region's environment, including impacts on native species and disease introduction or facilitation. Pro- ject proponents must justify any use of non-native species over native species.	3, 144	Of the species planted, most are native to the region, only some nut/tree species are not. However no negative impacts are expected	₫	☑
B.1.5.	Guarantee that no GMOs will be used to generate GHG emissions reductions or removals.	3	No GMO are foreseen to be used in the project activities	Ø	\square
B.2.	Offsite Biodiversity Impacts				
B.2.1.	Identify potential negative offsite biodiversity impacts that the project is likely to cause.	3	Potential negative offsite impacts can be the displacement of activities (e.g. hunting etc) to areas outside the project area	Ø	☑
B.2.2.	Document how the project plans to mitigate these negative offsite biodiversity impacts.	3	Mitigation options include:	CR	Ø

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	CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
			Clarification Request 20. Provide further description and evidence on how potential negative impacts from displacement of hunting or illegal felling / charcoal production can be mitigated.		
B.2.3.	Evaluate likely unmitigated negative offsite biodiversity impacts against the biodiversity benefits of the project within the project boundaries. Justify and demonstrate that the net effect of the project on biodiversity is positive.	3	No major unmitigated negative offsite biodiversity impacts are expected by the project. Net effects are expected to be positive	✓	Ø
В.3.	Biodiversity Impact Monitoring				
B.3.1.	Develop an initial plan for selecting biodiversity variables to be monitored and the frequency of monitoring and reporting to ensure that monitoring variables are directly linked to the project's biodiversity objectives and to anticipated impacts (positive and negative).	3	A superficial description for monitoring of biodiversity is provided in the PDD. Clarification Request 21. Provide further details on monitoring of biodiversity, including a initial monitoring plan in line with CCBA requirements	CR	Ø
B.3.2.	Develop an initial plan for assessing the effectiveness of measures used to maintain or enhance High Conservation Values related to globally, regionally or nationally significant biodiversity (G1.8.1-3) present in the project zone.	3	See CR above	CR	Ø
B.3.3.	Commit to developing a full monitoring plan within six months of the project start date or within twelve months of validation against the Standards and to disseminate this plan and the results of monitoring, ensuring that they are made publicly available on the internet and are communicated to the communities and other stakeholders.	3	The final monitoring plan is expected to be finalized six month after project validation (see also CR above)	₫	☑

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
Gold Level Section				
GL1. Climate Change Adaptation Benefits				
Identify likely regional climate change and climate variability scenarios and impacts, using available studies, and identify potential changes in the local land-use scenario due to these climate change scenarios in the absence of the project.	3	Likely regional scenarios are identified in the PDD, based on studies form Houghton et al. Scenarios including more extreme weather (rainfall, storms and droughts leading to forest fires) Clarification Request 22. Provide references for likely climate change scenarios with focus on Cambodia Provide references indicated in the PDD to the audit team	CR	Ø
Identify any risks to the project's climate, community and biodiversity benefits resulting from likely climate change and climate variability impacts and explain how these risks will be mitigated.	3	Fire can endanger all benefits (climate, biodiversity and community). Fire mitigation and awareness are focus areas of the project's activities. Further, loss in yield in agriculture are potential risk, resulting from predicted climate change scenarios. As the PPs foresee to conduct activities for water management these risks would also be mitigated. Clarification Request 23. Provide information in PDD on mitigation options on potential loss in agricultural yield	CR	₹
 Demonstrate that current or anticipated climate changes are having or are likely to have an impact on the well-being of communities and/or the conservation status of biodiversity in the project zone and surrounding regions. 	3	Fires as well as loss in agricultural yield can have impact on biodiversity and well-being of communities	V	Ø
 Demonstrate that the project activities will assist communities and/or biodiversity to adapt to the probable impacts of climate change. 	3	The project activities include fire prevention (fire breaks etc), as well as water management for agriculture and agricultural	Ø	Ø

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
		intensification (as leakage prevention measure)		
GL2. Exceptional Community Benefits				
 Demonstrate that the project zone is in a low human development country OR in an administrative area of a medium or high human de- velopment55 country in which at least 50% of the population of that area is below the national poverty line. 	3	Cambodia is considered least developed country.	V	Ø
 Demonstrate that at least 50% of households within the lowest category of well-being (e.g., poorest quartile) of the community are likely to benefit substantially from the project. 	3	Description is provided in the PDD. However the PDD does not focus on the lowest income households in the community Clarification Request 24. Demonstrate that at least 50% of households within the lowest category of well-being of the community are likely to benefit substantially from the project	CR	V
Demonstrate that any barriers or risks that might prevent benefits going to poorer households have been identified and addressed in order to increase the probable flow of benefits to poorer households.	3	Clarification Request 25. As discussed during the onsite visit, no micro credits will be offered in the frame of the project, delete respective information from PDD. Identify and present in the PDD barrier for "poorer" households for benefitting from the project Describe how it is ensured that poorer households benefit from the project, and provide respective evidence Provide evidence on education activities for poor households.	CR	V
4. Demonstrate that measures have been taken to identify any poorer and more vulnerable households and individuals whose well-being or poverty may be negatively affected by the project, and that the pro-	3	Clarification Request 26. Provide information as required by the CCB Standards	CR	FAR

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CCBA Requirements	Ref.	COMMENTS	Draft Concl	Final Concl
ject design includes measures to avoid any such impacts. Where negative impacts are unavoidable, demonstrate that they will be effectively mitigated.				
5. Demonstrate that community impact monitoring will be able to identify positive and negative impacts on poorer and more vulnerable groups. The social impact monitoring must take a differentiated approach that can identify positive and negative impacts on poorer households and individuals and other disadvantaged groups, including women.	3	Clarification Request 27. Provide information how it will be assured that the monitoring will be able to identify positive and negative impacts on poorer and more vulnerable groups Provide information the approach to identify positive and negative impacts on poorer households and individuals and other disadvantaged groups, including women	CR	☑
GL3. Exceptional Biodiversity Benefits				
1. Vulnerability Regular occurrence of a globally threatened species (according to the IUCN Red List) at the site:	3, 49	A number of endangered species are located in the project area and the objective of the project is to protect their habitat.	V	Ø
1.1. Critically Endangered (CR) and Endangered (EN) species - presence of at least a single individual; or	3, 49	Endangered species are present in the project area as demonstrated in the study by Birdlife International, and also confirmed during the onsite visit of the audit team.	V	Ø
1.2. Vulnerable species (VU) - presence of at least 30 individuals or 10 pairs.	3		NA	NA
2. Irreplaceability A minimum proportion of a species' global population present at the site at any stage of the species' lifecycle according to the following thresholds	3	Vulnerability criteria above is already fulfilled	NA	NA



Table 2: Response to Corrective Action Requests (CAR) and Clarification Requests (CR)

Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
Clarification Request 1. Provide information and references on soil, geology and climate.	G.1.1	Additional text has been added describing the ecology/climate/region. Many references were added to the text.	Brief information regarding soil, climate and geology were added to the PDD, as required by the CCB Standard. References were provided to the audit team and reviewed. The request is closed.
 Corrective Action Request No 1. Update the boundary files (GIS data) and the PDD to the actual size of the project area (see VCS checklist section 1.9) Provide information on project zone (size) in the PDD Ensure that the references in the document are readable 	G.1.3	 The text was updated to reflect revised forest area. A description was added to identify "project areas" and "CF areas". added project size in section G1.3 (64,318 hectares) fixed broken references to tables and figures 	The project zone is defined as the area of the Community Forests, while the project area is only the forest area. Provide GIS files to the audit team. References are updated in the text.
		The correct shape file has been provided to the validator and the PDD reflects the correct project area size	The project area presented in Section G.1.3 (64,318 ha) does not coincide with the project area in the VCS project description, as in the VCS project only the forest area is included in the project area. No information is provided regarding the boundary of the project zone as requested by the CCB Standard.

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
		We have revised the CCB PD Section G1.3 to reflect the correct project area boundary of 56,050 ha, consistent with the VCS PD. Table G2 has been updated.	Information on the project area is included in the PDD. The project area is in line with the digital boundary files and the observations made by the audit team during the field visit. Request closed.
 Clarification Request 2. Provide further details on the stratification of the project area, or provide reference to the respective VCS document. Provide information on carbon stock per strata Clarify table G6 (no units) 	G.1.4	 Text was changed to reflect revised strata in the VCS PD. Additional details refer to the VCS PD itself. Text was changed to reflect revised strata in the VCS PD. Additional details refer to the VCS PD itself. Units were added to the table. 	The CCBA PDD is updated in line with the VCS PD. Information on strata is now included, as well as information on carbon stocks. Units were added to the respective table. Request closed
Clarification Request 3. Update the information regarding project area and project zone. As evident during the onsite visit, no villages are located inside the project area.	G.1.5	The text was updated to reflect revised forest area. A description was added to identify "project areas" and "CF areas"	The PDD was not updated. During the onsite visit it was found that no villages were inside the project area. The PDD provides inconsistent information (Section G1.5)
		Changed first sentence in Section G1.5 to read project zone instead of project area	The PDD was updated, indicating that the villages are located within the project zone. No villages are located within the project area. Request closed.
Clarification Request 4. Provide evidence on the description included to the PDD regarding areas where viable populations exist.	G.1.8	Added clarification from the biodiversity study regarding the specific species of critical animals that were discovered by the biodiversity study to Section G1.8.2	Information on populations of endangered species were added to the PDD. The respective study that was carried out was provided to the audit team and reviewed. Information is now in line with requirements of CCBS, hence the request is closed.

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
			Ø
Clarification Request 5. Include further description on areas that provide critical ecosystem services and provide corresponding evidence	G.1.8	Added descriptions of key areas for ecosystem services and habitat support to G 1.8.4	Information on critical ecosystem services are provided in the PDD (including protection of watershed and biodiversity). Information is now in line with requirements of CCBS, hence the request is closed.
Clarification Request 6. Include further description on areas that are fundamental for meeting basic needs of local communities and provide corresponding evidence on how these areas were identified	G.1.8	added clarification to section G 1.8.5	Information on areas that are fundamental for meeting basic needs of local communities are provided in the PDD (collection of NTFPs and firewood). A respective study was provided to the audit team to further substantiate. Information is now in line with requirements of CCBS, hence the request is closed.
Clarification Request 7. Include further description on areas that are critical for traditional identity of local communities and provide corresponding evidence on how these areas were identified	G.1.8	Have added clarification and additional information to section G1.8.6	Information on areas that are critical for traditional identity of local communities are provided in the PDD. This includes collection of resin and in particular spirit forests. In line with the CCBA requirements, it needs to be clarified how these areas were identified and where they are located.
		The methodology of locating the spirit forest areas, and the specific areas and sizes of the spirit forests, have been added to Section G1.8.6	The PDD now contains information regarding areas that are crucial for traditional cultural identity of the communities. The audit team concludes that the project

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
			design meets the requirement of CCB requirement G.1.8.6. Request closed. ☑
Corrective Action Request No 2. Update the section on baseline in line with the VCS PD and calculations.	G.2.1	Figures and tables were updated in the document. References to the VCS PD were added for detail on specific calculations.	Figures were updated based on the VCS PD. Note that the VCS validation report will be part of the CCB validation, hence the requests is closed, once the VCS validation is finalized.
Clarification Request 8. Clarify what are the specific risks for the benefits that the points listed above entail.	G.3.5	Added some clarification to the risks section of the CCB PD.	No clarification was provided in the updated PDD regarding the risks to the expected climate, community and biodiversity benefits of the project.
		Section 3.5 has been revised and updated to provide more clarity on how the identified risks pose a risk to the climate, community and biodiversity benefits of the project. Additional risks have also been added to this effect.	Likely natural and human induced risks to the expected climate, community and biodiversity benefits of the project are presented in the updated PDD. Natural disturbance and change in domestic policies / armed conflicts have been added to the description. The risks are described and potential mitigation options described in the PDD. The audit team concludes that this meets the respective CCB requirements G.3.5. Request closed.

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
 Clarification Request 9. Clarify how it is optimized that communities and stakeholder benefit from the project, and ensure that benefit sharing is clearly communicated to the communities and stakeholders. Provide evidence on the consent given by local communities based on clear and transparent communication on the potential benefits of the project implementation 	The docume Consultation" velopment ar	Added a benefits sharing communications section to CCB PD in section 3.8	Information regarding benefit sharing was added to the PDD. Consultations were held regarding benefit sharing. The PP communicated that benefit sharing would include: • Employment opportunities • Skill training • Distribution of fuel efficient stoves and mosquito nets • A minimum of 50% of the net income of the project (after deducting the project costs) Provide evidence on the respective consultation with the communities
		The documents "Minutes on Benefit-sharing Consultation" & "Presentation on OM REDD Development and Benefit Sharing" have been provided to the validator as evidence for consultation	In the last email submitted on 19 July, no such evidence was attached.
Corrective Action Request No 3. Introduce a clear process for handling unresolved conflicts and grievances in line with CCBA requirements	G.3.10	Added language to section 3.10 on the process for resolving conflicts	 A new design for the grievance process is included in the PDD. Provide further details for grievance process to the audit team, in particular the current focal points and of each project team member and the responsible focal point for keeping record Clarify how the grievance process is published and effectively communicated to all stakeholders (not only CF

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
			members)
			Clarify if a third party or mediator is managing the process
		 Additional clarification on the grievance process has been added to Section G3.10, as well as the current focal points for the grievance process Project policies have been translated into Khmer, and policy consultation workshops have been planned with all Project Stakeholders once the project receives sufficient funding to cover costs of organizing these workshops. These policies have been provided to the validator ("OM REDD Project Policies 5 October 2011") Clarified in G3.10 	The process for handling unresolved conflicts and grievance is further elaborated in the PDD. Provide the project policies to the audit team The grievance process is not in compliance with CCB Standard requirement G.3.10, as the process is not managed by a third party or mediator

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
		The focal points have been added as of the last version of the CCB PD sent to you. Please see the 5 th paragraph of Section G 3.10 for a list of the focal points. Have added clarification to the PD that Mr. Long Ratanakoma will be responsible for keeping record. Clarification has been added to Section G.3.10 of the VCS PD (paragraph 1) A third party mediator is going to manage the grievance process. Have clarified this in the PD and in the Project Policies. The Mediator will be identified and chosen after project validation. The project policies were provided already in the last round of documents. They have been provided again to the auditors via email. Language has been added to the PD and the Project Policies reflecting that a third-party mediator will be used in the grievance process.	At the time of validation, the no third party or mediator is determined to manage the grievance process. During the project implementation it is however foreseen to appoint an independent, third-party mediator. Forward Action Request 01: At verification the PP shall present the independent, third-party mediator, who is in charge of handling the complaint and grievance process in line with the CCB requirement.
Clarification Request 10. Clarify if all partners listed in table G17 are project proponent. Ensure consistency with VCS PD.	G.4.1	Clarified that the FA is the sole project proponent.	Clarification is provided in the updated CCB PDD. Request is closed. ☑
Clarification Request 11. Ensure to keep structure of CCBA (G.4.4 is missing as header)	G.4.4	fixed; added header	The format of the CCB Standards is complied with in the updated PDD. Request closed. ☑
Clarification Request 12. Provide summary of relevant laws and regulations (reference to section 0 is unclear)	G.4.5	 only one relevant law, added to section G4.5 Added description of how workers are 	Reference to the Cambodian Labour Law is included to the PDD. According to the project design outlined in the PDD, the implementing partners will

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
Explain further how it is ensured that workers are aware of their rights		aware of their rights to section G4.5	ensure during ongoing conversations and meetings that CF members and participating communities are aware of their rights. Request closed.
Clarification Request 13. Provide a plan/procedures how workers are informed on risks (as applicable), and procedures in case of accidents	G.4.6	Clarification added to section G4.5 of the CCB PD	Several safety measures are listed in the PDD, which can be considered to minimize potential risk. As per CCB requirement G.4.6, the PP shall present a plan to inform workers of risks and explain how to minimize such risks
		The OM Project Policies document contains a section "Safety Policy". As mentioned, once funds are available, a wider consultation on the project policies will be conducted with all key stakeholders. Additional clarification has been added to Section G4.6	As described in the PDD the final plan to inform workers of risks and how to minimize these risks is not yet elaborated Forward Action Request 02: The PP shall present a final plan to inform workers of risks and how to minimize the-
			se risks in line with CCB requirement G.4.6.
Clarification Request 14. Clarify how compliance with the listed laws is achieved	G.5	added clarification to section G 5.1	It is specified that the PP (the Forestry Administration of the Royal Government of Cambodia) and implementing partners will ensure compliance with national and local laws.
			An internal review will analyze all laws and regulations in context of the project.

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
			The policies to govern the implementation of the project are foreseen to be updated, and monitoring is planned to ensure effective implementation.
			Therefore, the audit team concludes that compliance with national laws and regulations can be assessed at verification. Hence compliance with CCBS G.5.1 is provided at validation of the project. Request closed.
Corrective Action Request No 4. Update the PDD in line with the VCS PD and calculations	CL	Text was changed to reflect revised calculations in the VCS PD. Additional details refer to the VCS PD itself.	Figures were updated based on the VCS PD. Note that the VCS validation report will be part of the CCB validation, hence the requests is closed, once the VCS validation is finalized.
Clarification Request 15. Clarify if an additional monitoring plan monitoring plan for climate impact will developed in addition to the VCS monitoring plan	CL.3	clarified in section CL 3.2; there will only be one monitoring plan	The monitoring plan will be in line with the VCS climate monitoring. Hence the CCBS criteria is complied with once the VCS validation is finalized. ☑

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
Clarification Request 16. Outline the methodology used to estimate the impacts on communities in the PDD. In particular clarify how the impact of the project can be measured through the methodology used.	CM.1	added clarification to section CM 1.1 to explain	A brief outline regarding the methodology to be used is included in the PDD. (Methodology to be used is planned to be household surveys and qualitative methods such as PRA and "focus groups". Three groups are analyzed, households being CF members, households not being CF members and households outside on the CFs). Clarify how the impact of the project can be measured through the methodology described in the PDD.
		Clarification has been added to Section CM 1.1 about how the methodology can measure community impacts. Table CM1 has been added to articulate the specific community variables that will be monitored, based on the baseline PRAs and HH surveys that were carried out by the project.	Specific parameters are now defined in the PDD in section CM 3.1. Based on these parameters the impact of the project will be quantified in line with CCB requirement CM1.1. Request closed ☑
Clarification Request 17. Discuss impact of project outside the project zone, in particular to migrants, hunters, etc.	CM.2	Added additional information about offsite impacts to G2.2	In line with the CCBS requirement CM.2 potential negative impacts of the projects are discussed in the PDD. Plans how to mitigate these impacts are also discussed. Hence the request is closed.

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
Clarification Request 18. Provide an initial of monitoring plan, including community variables and methodology used.	CM.3	Added additional information about monitoring community variables to section CM3	A brief description of the monitoring plan is provided in the updated PDD section CM.3. In line with CCB requirement CM 3.1 the initial plan shall include at least the community variable and the frequency of monitoring and reporting. Provide reference Pact 2011 (monitoring framework), which can potentially be accepted as initial plan
		 In line with CCB requirement CM 3.1 the initial plan shall include at least the community variable and the frequency of monitoring and reporting. The most recent version of the monitoring plan has been sent to the validator (Monitoring Framework for the Oddar Meanchey REDD+ Project) 	Monitoring parameter are included in the PDD, including measure, frequency, and responsible organization for the monitoring. The audit team concludes that the plan meets the requirements of requirement CM3. Request closed.
Clarification Request 19. Provide references to the species used and planted in the project (in the ANR areas)	B.1	Text was added to reference the Cambodia Tree Seed Project, and that the Project Proponents and FA foresters worked closely together to pick the most significant species to the ecology and communities.	Additional information on the tree species planted in ANR area was added to the PDD. In line with CCB requirement B.1.3, the PDD foresees that no known invasive species will be introduced (as only native species are listed in the PDD). Request is closed.
Clarification Request 20. Provide further description and evidence on how potential negative impacts from displacement of hunting or illegal	B.2	Added additional information to B 2.1 and B 2.2	In line with the CCBS requirement B.2.1 potential negative impacts of the projects are discussed in the PDD. Plans how to mitigate these impacts are also presented

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
felling / charcoal production can be mitigated.			in the PDD (CCBS B.2.2.) Hence the request is closed. ☑
Clarification Request 21. Provide further details on monitoring of biodiversity, including a initial monitoring plan in line with CCBA requirements	B.3	Added further details on the planned biodiversity monitoring plan to section B 3.1	A brief description of the monitoring plan is provided in the updated PDD section B.3. In line with CCB requirement B 3.1 the initial plan shall include at least the biodiversity variables to be monitored and the frequency of monitoring and reporting.
		The biodiversity monitoring variables and frequency table has been added to Section B3.1, Table B1	Parameters for the biodiversity monitoring have been added to the PDD including measure, frequency, and responsible organization for the monitoring. The audit team concludes that the plan meets the requirements of requirement B3. Request closed.
Clarification Request 22. Provide references for likely climate change scenarios with focus on Cambodia Provide references indicated in the PDD to the audit team	GL.1	Many references were added to the text. References were added to document repository or emailed to the validator As of May 1, 2012 the data set has moved from UMD to NASA where we used to access the dataset that shows that it moved: http://maps.geog.umd.edu/firms/disclaimer.htm. The new website can be found on the NASA FIRMS website: http://earthdata.nasa.gov/data/near-real-timedata/firms	Several studies are presented in the PDD, which identify likely regional climate change and climate variability scenarios and impact. The studies were provided to the audit team and reviewed. The CCB requirement GL.1. is met. Request closed.
Clarification Request 23.	GL.1	Text was added to support mitigation strategies	No further information was provided re-

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
Provide information in PDD on mitigation options on potential loss in agricultural yield		and many citations were included.	garding mitigation activities of the project regarding potential future loss in agricultural yield.
			However, based on the information provided in the PDD and the VCS PD, the audit team concludes that risks towards biodiversity e.g. through more frequent droughts and fire are foreseen to be mitigated by the project through the project activity such as patrolling and fire fighting. Hence the audit team concludes that the CCB requirement of GL1 is met and the Gold level for climate change adaptation is granted.
Clarification Request 24. Demonstrate that at least 50% of households within the lowest category of well-being of the community are likely to benefit substantially from the project	GL.2.2	Added additional information to GL 2.2	As described in the PDD, a database of "poor" households has been created. The database remains to be submitted to the audit team. Further the PP shall specified how the database was created and how it can be demonstrated that 50% of households within the lowest category of wellbeing of the community are identified in line with CCB requirement GL.2.2. It is foreseen in the project design (PDD) that the poorest shall benefit most from the project.

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
		The ID Poor database, used to identify poor households in the project CFs, has been provided to the validator. Clarification has been added to section GL 2.2 on how this database was created, and how this database has allowed the project to identify the poor communities specific to the project CFs	 Description of how the poverty level of the households is identified is included in the PDD. Provide further information of the analysis showing that 50% of the households within the lowest category of well-being of the community are likely to benefit substantially from the project It is unclear what are "substantial benefits" which the households within the lowest category of well-being of the community are going to receive No database was provided in the last email.
		The database has been provided on the document repository. This database will be used by the project to track the impacts, both positive and negative, on the poorer and more vulnerable households in the project zone. I believe that we have shown sufficient detail how the social and economic benefits of the project will accrue to the communities involved in the project. It goes without saying that these benefits are even more meaningful for the 50% of households in the lowest category of "well-being". It is the intention of the project to ensure that direct opportunities for employment (such as patrolling, ANR activities or nursery establishment) are provided to these communities, and the ID Poor database will be	The PPs intend to identify the households within the lowest category of well-being of the community through the community database. The project design foresees that these households benefits substantially from the project activities. The project design foresees that the benefits for these households are subject to monitoring. The audit team concludes that the requirement is met for validation, but needs to be verified and confirmed at verification.

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
		used to inform the distribution of these opportunities. The majority of project activities being undertaken by the project are all community-focused, and community-implemented. Moreover, the project has a mandate from the Royal Government of Cambodia to ensure that at least 50% of the revenues generated by the project go to the communities.	☑
		The CCB PD outlines the myriad benefits that communities in the project zone will receive. Given that none of these benefits would occur under the baseline scenario, and that all of these benefits are unique to Cambodia's first REDD project, we view them as quite substantial. As I mentioned above, these benefits become even more substantial for households in the lowest category of well being, as under normal circumstances these families are more likely to face barriers to receiving these benefits, and stand to gain even more from access to these benefits than more well-off families.	

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion																		
 Clarification Request 25. As discussed during the onsite visit, no micro credits will be offered in the frame of the project, delete respective information from PDD. Identify and present in the PDD barrier for "poorer" households for benefitting from the project Describe how it is ensured that poorer households benefit from the project, and provide respective evidence Provide evidence on education activities for poor households. 	GL.2.3	 removed all references to micro-loans added additional information to GL 2.3 added additional information to section GL 2.2. Have also added the poor household list as well as a summary of this information to the document repository under the "Other" category. Documents entitled 1) ID Poor Household List and 2) ID Poor OM Summary have added further clarification to section GL 2.2 and 2.3 explaining how poor households were identified and how they are integrated into project information distribution and how benefits will accrue to poorer households 	The PDD is updated and information that could not be verified during the onsite visit was removed (e.g. micro-credits as part of the project activity). Barrier for "poorer" households are identified. Activities are foreseen to alleviate these barriers are briefly described. Provide evidence on activities alleviating the identified barrier, and evidence that poorer households did actually participate in these activities																		
																					Some additional clarification has been added to the PD. Given that the identified barriers will only present themselves during implementation of project activities, it cannot currently be demonstrated that the barriers have been alleviated. To the extent allowed by existing project funding, measures have been taken to try and reduce potential barriers that may arise for poorer and more vulnerable households. The full suite of activities designed to remove or alleviate these barriers is described in Section GL 2.3

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion	
	GL.2.4	This has been clarified already from the information added in CR 25 (see section GL 2.2)	It remains unclear which measures identify any poorer and more vulnerable households and individuals whose wellbeing or poverty may be negatively affected by the project. No information is provided in the PDD how unavoidable negative impacts are mitigated in particular for poorer and more vulnerable households and individuals	
			 Please see CR 24 regarding the ID Poor database, which has been used to identify the poor households in the project area Additional information has been added to Section GL 2.3 and GL 2.4 	It remains unclear, which are potential negative impacts of the project. Considering that project design, it needs clarification and evidence, whether the baseline activities (e.g. cutting forest for small scale agriculture, illegal logging, hunting, etc) were also carried out by poorer and more vulnerable households. Mitigation options presented in the PDD are trainings. It needs however clarification how these trainings can provide for adequate mitigation of potential negative impacts to their livelihoods.
		The database has been provided on the document repository. This database will be used by the project to track the impacts, both positive and negative, on the poorer and more vulnerable households in the project zone.	The community database and respective monitoring can be used to identify any negative impacts of the project on poorer and more vulnerable households and individuals of the community. If such impacts would occur it is not clarified how it might be mitigated effectively.	

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Clarifications and Corrective Action Requests	Ref. to PDD	Summary of Response by Project Proponent	Validation Conclusion
			At the time of validation the audit team concludes that the CCBS requirements are met. However this needs to be sustained during verification
			Forward Action Request 03: The PP shall present information whether any poorer and more vulnerable households and individuals of the community are impacted by the project activity. Respective counter measures to avoid such impacts shall be presented at verification.
Clarification Request 27. Provide information how it will be assured that the monitoring will be able to identify positive and negative impacts on poorer and more vulnerable groups Provide information the approach to identify positive and negative impacts on poorer households and individuals and other disadvantaged groups, including women	GL.2.5	 see section GL 2.2 see section GL 2.2, GL 2.3 & GL 2. 	Further information is provided in the updated PDD regarding community impact monitoring. It remains unclear if the community monitoring will be able to identify positive and negative impacts on poorer and more vulnerable groups. Also it remains unclear if a different approach is taken to identify positive and negative impacts on poorer households and individuals and other disadvantaged groups, including women.
		 added additional clarification to Section G2.5 added additional clarification to Section G2.5 	The monitoring foresees to specifically include poorer and more vulnerable groups, which shall be verified at verification. The audit team concludes that CCB requirement GL2.5 is met. Request closed.



Table 3: Unresolved Corrective Action Requests, Clarification Requests, Forward Action Requests (FAR)

CCBS Requirements	Unresolved Corrective Action Request	Resulting Forward Action Request
G.3.10 Formalize a clear process for handling unresolved conflicts and grievances that arise during project planning and implementation. The project design must include a process for hearing, responding to and resolving community and other stakeholder grievances within a reasonable time period. This grievance process must be publicized to communities and other stakeholders and must be managed by a third party or mediator to prevent any conflict of interest. Project management must attempt to resolve all reasonable grievances raised, and provide a written response to grievances within 30 days. Grievances and project responses must be documented.	Corrective Action Request No 3: Introduce a clear process for handling unresolved conflicts and grievances in line with CCBA requirements	Forward Action Request 01: At verification the PP shall present the independent, third-party mediator, who is in charge of handling the complaint and grievance process in line with the CCB requirement.
G.4.6 Comprehensively assess situations and occupations that pose a substantial risk to worker safety. A plan must be in place to inform workers of risks and to explain how to minimize such risks. Where worker safety cannot be guaranteed, project proponents must show how the risks will be minimized using best work practices.	Clarification Request 13 Provide a plan/procedures how workers are informed on risks (as applicable), and procedures in case of accidents	Forward Action Request 02: The PP shall present a final plan to inform workers of risks and how to minimize these risks in line with CCB requirement G.4.6.
GL.2.4 Demonstrate that measures have been taken to identify any poorer and more vulnerable households and individuals whose well-being or poverty may be negatively affected by the project, and that the project design includes measures to avoid any such impacts. Where negative impacts are unavoidable, demonstrate that they will be effectively mitigated.	Clarification Request 26 Provide information as required by the CCB Standards	Forward Action Request 03: The PP shall present information whether any poorer and more vulnerable households and individuals of the community are impacted by the project activity. Respective counter measures to avoid such impacts shall be presented at verification.



Annex 2: Information Reference List

Ref. No.	Author/Editor/ Issuer	Title, Type of Document			Date
1.		Interview during field visit			2011
		Eric Bergthold	Country Director PACT		
		Stuart Raetz	REDD officer PACT	7	
		Steven De Gryze	TGC Managing Director	7	
		Amanda Bradley	PACT Program Director	7	
		Omalis Keo	DD Forestry Administration		
		Long Ratanakoma	DD Forest Dept. Forest Administration	7	
		Maya Sepehri	PhD Research		
		Donal Yeang	Carbon Program Officer	7	
		Chou Chandararith	Forestry Administration OMC		
		Taing chau Sema	Forestry Administration OMC		
	TÜV SÜD Industrie Service	Sim Sohn	Forestry Administration OMC		
	GmbH	Blung Phath	Forestry Administration OMC		
		Bun Salouth	Program Officer CDA		
		Chboernung Rachana	P.A CDA		
		Sa Thlai	CFN		
		Yem Sambath	Forestry Administration OMC		
		Rith Bo	P.M CDA		
		Net Channa	Junior Database & GIS PACT		
		Hae Teur	Community Forestry Member		
		Sour Pisey	Community Forestry Member		
		Mean Hom	Community Forestry Member		
		Sari Von	Community Forestry Member		
		Lat Iveam	Community Forestry Member		
		Ehhearn Chantrea	Community Forestry Member		

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Ref. No.	Author/Editor/ Issuer	Title, Type of Document		Date
		Sat Hourt	Community Forestry Member	
		Rin Chanda	REDD project assistant	
		Loek Socheata	Forestry Administration	
2.	Terra Global, PACT	Initial VCS PD		2011
		Final VCS PD		2012
3.	Terra Global, PACT	Initial CCB PDD		2011
		Final CCB PDD		2012
4.	Terra Global, PACT	VCS risk assessment: OM RE	DD Risk Assessment v1.pdf	2011
5.	Terra Global, PACT	GIS files of the project area		2011
6.	Terra Global, PACT	VCU calculations (Excel files)		2011
7.	Chave et al	Tree allometry and improved	estimation of carbon stocks and balance in tropical forests. Oecologia 145: 87-99.	2005
8.	Terra Global, PACT	Allomteric equation verification	٦	2011
9.	Tom Evans, Hannah O'Kelly,	Validation of the biomass equ	ation used for the Seima REDD Project, Cambodia	2011
	Nut Meng Hor	WCS Cambodia Program, For	restry Administration, Ministry of Agriculture, Forestry and Fisheries, Cambodia	
10.	Terra Global, PACT	SOP Assisted Natural Regene	eration Oddar Meanchey v4.pdf	2011
11.	Terra Global, PACT	SOP Biomass Inventory Odda	r Meanchey v11.pdf	2011
12.	Terra Global, PACT	SOP Household Survey Odda	r Meanchey v2.pdf	2011
13.	Terra Global, PACT	SOP Participatory Rural Appra	aisal Oddar Meanchey v2.pdf	2011
14.	Terra Global, PACT	SOP QA-QC for Biomass Inve	entories Oddar Meanchey v2.pdf	2011
15.	Terra Global, PACT	Summary of biomass plots (Fi	eld inventory V7.xlsx)	2011
16.	Terra Global, PACT	GIS file on location of biomass	s sample plots	2011
17.	Thomas W. Blackburn Jr.	Household_Survey_Data_Rep	port_Final_Final.pdf	2011

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Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
18.	Terra Global, PACT	Household Survey Database: CDA_pact_REDD Database_Samnarng-VT_24.mdb	2011
19.	PACT	Report on Participatory Rural Appraisal (PRA), Oddar Meanchey Community Forestry REDD Project (PRA Analysis V2.doc)	2011
20.	FA TGC	Oddar Meanchey FA TGC Carbon Agreement Extension JUL 2011.jpg	2011
21.	FA TGC	Oddar Meanchey FA TGC Carbon Agreement Final Signed MAR 2009.pdf	2009
22.	Government of Cambodia	Council of Ministers 699 English Translation of Reply from MAY 26 2008.pdf	2008
23.	Terra Global, PACT	OM REDD Pact Terra MOU Signed JUL 1 2010.pdf	2010
24.	PACT	MOU PACT&FA 16 Dec 2010 eng.pdf	2010
25.	PACT, FA	Implementing Partners MOA Pact and FA OCT 29 2010 - Final text but not signed yet.pdf	2010
26.	FA, CFA	FA CFA Mgt and Carbon Agreement.docx	2011
27.	Terra Global, PACT	Carbon Development work plan 2 for PD Validation.pdf	2011
28.	PACT	OM REDD Workplan_30 years_15 June 2011 with % mgmt.xlsx	2011
29.	PACT	Minutes of community agreements for avoiding logging activities	2011
30.	PACT	Binding community forestry agreements	2011
31.	Government of Cambodia	Sub-Decree on Community Forestry Management	2003
32.	PACT	Commitment of communities for the implementation of project activities	2011
33.	Technical Working Group	Signed agreement between the TWG-F&E Secretariat	2008
34.	PACT	Member list of communities	2011
35.	Terra Global, PACT	Land Eligibility Assessment	2011
36.	PACT	List of community meetings	2011
37.	PACT, Stuart Raetz	Oddar Meanchey Community Forestry REDD Project: Review of monitoring capacity (January 2011 OM-REDD_Monitoring Scoping Visit-Review.doc)	2011



Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
38.	PACT	OM CF REDD+ Participatory MERL Workshop Module July 2011 OM CF REDD Participatory M E Workshop - Module.doc July 2011 OM CF REDD Participatory M E Workshop - List of Invitees.xls	2011
39.	PACT	June 2008 Forest Law Enforcement Workshop - report.doc	2008
40.	PACT	June 2011 CFF Meeting - 28th June 2011 CFF Meeting Minutes (Integrated).docx	2011
41.	PACT	List of Community Engagement and Consultation Documents.xlsx	
42.	PACT	List of Trainings conducted for CF in Oddar Meanchey by CDA as of 2010.doc	
43.	PACT	March 2008 Launch Workshop - Carbon workshop : - Report - List of Participants - Agenda	2008
44.	PACT	OM REDD Community Consultation. - List of participants - Minutes - Plan and guidelines - Summary of Results	2009
45.	PACT	OM-CF-REDD-PM&E-Workshop	2011
46.	PACT	Issue reports by communities	2011
47.	Terra Global, PACT	OM REDD Budget - 30 years (revised - 21 01 11) for DG presentation Jan 25 2011.xlsx	2011
48.	Terra Global, PACT	Investment Model - v2 - OM JUL 15 2011 for Validation.xlsx	2011
49.	PACT, Birdlife international	Final OM Biodiversity assessment report (24 Jan 2011) .doc	2011
50.	PACT	PACT Field reports on biodiversity assessment	2011
51.	Acker, Frank Van.	"Natural Resource Management and Decentralization" Support Programme for the Agricultural Sector in Cambodia.	2003

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Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
		(PRASAC II, Phnom Penh) August 2003.	
52.	ADB	Asian Development Bank. Cambodia: Enhancing Governance for Sustainable Development. (ADB: Phnom Penh) 2000.	2000
53.	Azimi, Ali et al.	Environments in Transition: Cambodia, Lao PDR, Thailand, Vietnam. (Asian Development Bank: Manila) February 2001.	2001
54.	Bailleux, Renaud.	The Tonle Sap Great Lake. (FAO/Asia Horizons Books Co., Bangkok) 2003.	2003
55.	Forestry Administration	Cambodian Tree Seed Project. Cambodian Tree Species. (Forestry Administration: Phnom Penh, Cambodia) 2004.	2004
56.	Community Forestry International	CFI. Proceedings of the Non-Timber Forest Product (NTFP) Workshop and Seminar. (Community Forestry International: Phnom Penh) 2006.	2006
57.	Community Forestry International	CFI. Workshop on Rattan in Cambodia. (Community Forestry International: Phnom Penh) 2007.	2007
58.	Community Forestry International	CFI. Community Forestry and Honey Enterprise Development. (Community Forestry International: Phnom Penh) 2007.	2007
59.	Community Forestry International	CFI. "Report on Launching Workshop on Avoided Deforestation Community Forestry Carbon Pilot Project in Oddor Meanchey Province." Provincial Department of Agriculture: Samraong, Oddar Meanchey, March 2008.	2008
60.	Community Forestry International	CFI. "Social Appraisal Report- Oddar Meanchey Province." Phnom Penh. 2008.	2008
61.	Community Forestry International	CFRP Management Team, Cambodia's Community Forestry Research Project. (Community Forestry Research Project: Phnom Penh) September 2006.	2006
62.	Danielsen, Finn et al.	"A simple system for monitoring biodiversity in protected areas of a developing country" Biodiversity and Conservation (9:1671-1705), 2000.	2000
63.	Evans, Tom D. et al.	"A Study of Resin-Tapping and Livelihoods in Southern Modulkiri, Cambodia" (World Conservation Society, Phnom Penh) January 2003,	2003
64.	FAO	FAO. Country Deforestation Data (Source: Food and Agriculture Organization of the U.N.: The State of the World's Forests) 2003.	2003

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Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
65.	Forestry Administration	"Cambodian Tree Species". (Forestry Administration, Phnom Penh) April 2004.	2004
66.	Fox, Jefferson M. et al.	"Land Use and Tenure Change in Ratanakiri: 1989-2006." (Community Forestry International: Phnom Penh) 2008.	2008
67.	IUCN	IUCN Red List Categories and Criteria: Version 3.1. (IUCN Species Survival Commission. IUCN, Gland, Switzerland and Cambridge, UK) 2001.	2001
68.	Kanninen, Markku et al.	"Do Trees Grow on Money? The implications of deforestation research for policies to promote RED." (Center for International Forestry Research: Bogor Indonesia) 2006.	2006
69.	McMahon, Dennis.	"Assessment of Community Forestry Sites and Migration Patterns in the Oddar Meanchey Province, Cambodia". (CFI: Phnom Penh) 2008.	2008
70.	Min Bunnara et al.	"Participatory Land Use Planning in Cambodia". The Development of Community-based Natural Resource Management (CBNRM-LI) in Cambodia. (CBNRM-LI Leaning Institute: Phnom Penh) 2005.	2005
71.	Oberndorf, Robert B.	"Legal Analysis of Forest and land Laws in Cambodia," (Community Forestry International, Phnom Penh) 2006.	2006
72.	Government of Cambodia	Royal Government of Cambodia, Community Forestry Sub-Decree. 2003.	2003
73.	Government of Cambodia	Royal Government of Cambodia. "Income and Expenditure" (Council for Administrative Reform: www.car.gov.kh/Cambodia/income-expenditure).	
74.	scw	Save Cambodia's Wildlife. The Atlas of Cambodia: National Poverty and Environment Maps (SCW: Phnom Penh) 2006.	2006
75.	Kingdom of Cambodia	Sar. Chor. Nor. No. 699, Council of Ministers, Kingdom of Cambodia, Phnom Penh May 2008.	2008
76.	Sunderlin, William D.	Poverty Alleviation Trough Improved Community Forestry in Cambodia, Lao-PDR, and Vietnam. (Draft) 2006.	2006
77.	TWG	Technical Working Group on Forestry & Environment. FOREST COVER CHANGES IN CAMBODIA 2002-2006. (Cambodia Development Cooperation Forum, Phnom Penh) June 2007.	2007
78.	Top, Neth et al.	"Spatial Analysis of woodfuel supply and demand in Kampong Thom Province, Cambodia." Forest Ecology and Management, 194. 2004.	2004
79.	PACT	Trip Report: Visit to Oddar Meanchey to Explore Possibilities for Forest Carbon Project. January, 2008.	2008
80.	Taillandier, Valerie-Anne.	"Cambodia Fuel wood Saving Project Phase 2". Geres Cambodia. http://www.geres-cambodia.org/cfsp/index.html.	2009

Validation of the CCBA Project: Reduced Emissions from Deforestation in Community Forests Oddar Meanchey, Cambodia Page 67 of 71



Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
		Accessed October 2009.	
81.	Vitou, Sam and Ngak, Ouch.	Dissemination of New Lao Bucket Stove. Undated newsletter.	2011
82.	World Bank.	"Country Brief- Cambodia" (www.worldbank.org/wbsite/external/countries)	2011
83.	World Bank.	Forest Policy Assessment: Cambodia. (World Bank: Washington, D.C.) 1996.	1996
84.	Acker, Frank Van.	"Natural Resource Management and Decentralization" Support Programme for the Agricultural Sector in Cambodia. (PRASAC II, Phnom Penh) August 2003.	2003
85.	Brown, S., A. J. R. Gillespie, and A.E. Lugo.	Biomass estimation methods for tropical forests with applications to forest inventory data. Forest Science. 35: 881-902.	1989
86.	Cairns, M.A., Brown, S., Helmer, E.H., Baumgardner, G.A.	Root biomass allocation in the world's upland forests. Oecologia 111:1-11.	1997
87.	CSES	CSES Poverty Profile and Trend in Cambodia. Findings from the 2007 Cambodia Socio-Economic Survey (CSES). Poverty Reduction and Economic Management Sector Unit, East Asia and Pacific Region. World Bank. 2009.	2007
88.	Community Forestry International	CFI. "Report on Launching Workshop on Avoided Deforestation Community Forestry Carbon Pilot Project in Oddar Meanchey Province." Provincial Department of Agriculture: Samraong, Oddar Meanchey, March 2008.	2008
89.	Chave, J., Andalo, C., Brown, S., Cairns, M. A., Chambers, J. Q., Eamus, D., Folster, H., Fromard, H., Higuchi, N., Kira, T., Lescure, J.P., Nelson, B. W., Ogawa, H., Puig, H., Riera, B. and Yamakura, T.	Tree allometry and improved estimation of carbon stocks and balance in tropical forests. Oecologia 145: 87-99.	2005
90.	Evans T., H. O'Kellly, N. M. Hor.	Validation of the biomass equation used in the Seima REDD Project, Cambodia. Document released by WCS Cambodia Program and the Forestry Administration. Unpublished.	2011
91.	FAO	Food and Agriculture Organization (FAO) of the United Nations. 2000. Forestry Department. Global Forest Resource Assessment 2000.	2000
92.	FAO	Food and Agriculture Organization (FAO) of the United Nations. 2005. Forestry Department. Global Forest Re-	2005

Validation of the CCBA Project: Reduced Emissions from Deforestation in Community Forests Oddar Meanchey, Cambodia Page 68 of 71



Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
		source Assessment 2005.	
93.	Hozumi K, Kyoji Y, Kokawa S, Kira T	Production ecology of tropical rain forests in Southwestern Cambodia, I. Plant biomass. In: Kira T, Iwata K (eds) Nature and life in Southeast Asia (VI), Japan Society for the Promotion of Science, pp 1–34.	1969
94.	IPCC	Intergovernmental Panel on Climate Change (IPCC). 2003. Institute for Global Environmental Strategies. Good Practice Guidance for land use, land-use change and forestry (GPG-LULUCF).	2003
95.	Kim Phat, N., Ouk, S., Uozumi, Y., Ueki, T., Kim S.	Management of mixed deciduous forest in central Cambodia- A case study in Sandan district. Bulletin of Shinshu University Forest Research 2, 290-309.	2002
96.	Kim-Phat N, Ouk S, Uozumi Y, Ueki T.	Stand dynamics of dipterocarp trees in Cambodia's evergreen forest and management implications – a case study in Sandan district, Kamong Thom. J Jpn Forest Plann 6:13–23.	2000
97.	Meyfroidt and Lambin.	Forest transition in Vietnam and its environmental impacts. Global Change Biology, 14 (6), 1319-1336.	2008
98.	MAFF	Ministry of Agriculture, Forestry and Fisheries of Cambodia, (MAFF) agricultural census of 2005-2006.	2006
99.	National Institute of Statistics	NIS. General Population census of Cambodia 1998, Final Result. National Institute of Statistics, Ministry of Planning, Phnom Penh, Cambodia, 199. p. 299.	1998
100.	Pearson T., S. Walker and S. Brown.	Sourcebook for Land Use, Land-use Change, and Forestry Projects. Winrock International and the Bio Carbon Fund.	2005
101.	Poffenberger, M	Community Forestry International. Oddar Mean Chey Field Trip Report 28, February 2008.	2008
102.	Sasaki, N.,	Carbon emissions due to land-use change and logging in Cambodia- a modeling approach. Journal of Forest Research 11(6), 397-403.	2006
103.	Schlesinger, W. H.	Evidence from chrono sequence studies for a low carbon-storage potential of soils. Nature 348, 232-234.	1990
104.	Schlesinger, W. H.	Changes in soil carbon storage and associated properties with Disturbance and recovery. In: The Changing Carbon Cycle: A Global Analysis (eds Trabalka J.R., Reichle D.E.), Springer-Verlag, New York.	1985
105.	Top, N., N. Mizoue, S. Ito, S. Kai.	Spatial Analysis of woodfuel supply and demand in Kampong Thom Province, Cambodia. Forest Ecology and Management, 194: 370-371.	2004a
106.	Top, N., N. Mizoue, S. Ito, S. Kai.	Estimating forest biomass increment based on permanent sample plots in relation to woodfuel consumption a case study in Kampong Thom Province, Cambodia. J. For. Res. 9:117-123.	2004b

Validation of the CCBA Project: Reduced Emissions from Deforestation in Community Forests Oddar Meanchey, Cambodia Page 69 of 71



Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
107.	Top, N., Mizoue, N., Kai, S.,	Woodfuel consumption rates and flow in Kampong Thom Province, Cambodia. Journal of Forest Planning. 9, 17–24.	2003
108.	UNDP/MOE	Improvement of activity data and emission factors for forestry sector in Cambodia. Phnom Penh, Cambodia.	2003
109.	Brown, S., A. J. R. Gillespie, and A.E. Lugo.	Biomass estimation methods for tropical forests with applications to forest inventory data. Forest Science. 35: 881-902.	1989
110.	PACT	Documents for getting Community Forestry Approval	2011
111.	N/A	Sources for non-spatial drivers: census data from Cambodia	2011
112.	Government of Cambodia	Cambodian forestry law: http://www.forestry.gov.kh/Documents/Forestry%20Law Eng.pdf Para 40-41	2011
113.	Government of Cambodia	REDD readiness plan for Cambodia	2011
114.	University of Copenhagen	Deforestation rates calculated in the Forestry Administration study supported by GRAS A/S of the University of Copenhagen between 2002 and 2006	2006
115.	DANIDA	ATLAS of Cambodia (sponsored by DANIDA) (checked onsite) shapefiles available	
116.	Terra Global Capital	Radar data for elevation, and slope	2011
117.	Chambers et al.	Decomposition and carbon cycling of dead trees in tropical forests of the central Amazon	2000
118.	Ministry of Agriculture	agricultural census of the Ministry of Agriculture, Forestry and Fisheries of Cambodia (AC 14	
119.	Terra Global Capital	SOP on remote sensing analysis	2011
120.	Terra Global Capital	Classified LANDSAT images (TIF)	2011
121.	Terra Global Capital	Interlinked Excel sheets for biomass plot data	2011
122.	Terra Global Capital	Guideline on Community Forestry and its Relevant Policies	2011
123.	PACT	Brief profile of CFs (in English)	2011

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Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
124.	Government of Cambodia	National Forest programme	2011
125.	PACT	Summary of consultation process, minutes and photographs	2011
126.	Terra Global Capital, PACT	Module for training	2011
127.	PACT	Labour law / regulation	2011
128.	Terra Global Capital, PACT	Activity based budget	2011
129.	UNFCCC	CDM Forest Definition of Cambodia: http://cdm.unfccc.int/DNA/index.html	2011
130.	Terra Global Capital	SPOT Image 2005	2005
131.	Terra Global Capital	Excel file: 0. Log of remote sensing work.xlsx	2011
132.	Chomitz and Grey.	Roads, Land Use, and Deforestation: A Spatial Model Applied to Belize.	1996
133.	Muller and Munroe	Tradeoffs Rural Development Policies and Forest Protection: Spatially Explicit Vietnam	2005
134.	Peter et al.	Accessibility and Land-Use Patterns at the Forest Fringe in the Northeastern Part of the Philippines.	2004
135.	Houghton et al	Climate Change 2001: The Scientific Basis is the most comprehensive and up-to-date scientific assessment of past, present and future climate change. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change	2001
136.	World Resources Institute	World Resources Institute Earthtrends database. http://earthtrends.wri.org/	2003
137.	ADB	The economics of climate change in Southeast Asia: A regional review. Asian Development Bank Manila, Philippines	2009
138.	NASA/University of Maryland	MODIS Hotspot / Active Fire Detections. Data set. MODIS Rapid Response Project, NASA/GSFC, University of Maryland, Fire Information for Resource Management System.	2002
139.	Millar C I, Stephenson N L, and Stephens S L.	Climate Change and Forests of the Future: Managing in the Face of Uncertainty. Ecological Applications 17(8): 2145-2151.	2007
140.	Davis, M. B.	Lags in vegetation response to green-house warming. Climate Change 15:75-82. Elkin, Chantal. "Assessment of the Monk's Forest of Oddar Meanchey." Phnom Penh. 2008.	1989

Validation of the CCBA Project: Reduced Emissions from Deforestation in Community Forests Oddar Meanchey, Cambodia Page 71 of 71



Ref. No.	Author/Editor/ Issuer	Title, Type of Document	Date
141.	Smith J.E., and D.A. Tirpak, eds.	Potential impacts of climate warming vol. 1, Regional Studies, Chapter 4. EPA-230-05-89-050. Washington D.C.: U.S. Environmental Protection Agency.	1989
		Climate Change in Southeast Asia with a Focus on Agriculture. Swedish International Development Cooperation Agency. International Water Management Institute, Southeast Asia (IWMI-SEA).	2009
143.	TÜV SÜD	VCS Validation Report "Reduced Emissions from Degradation and Deforestation in Community Forests - Oddar Meanchey, Cambodia", Report number 600500753-20	2012
144.	Invasive Species Specialist Group (ISSG)	Global Invasive Species Database (GISD): http://www.issg.org/	2012