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3 July | 14

CCBS VALIDATION REPORT: " KULERA LANDSCAPE REDD+ PROJECT FOR CO-MANAGED PROTECTED AREAS, MALAWI" IN MALAWI

REPORT NO. 2014-9307

REVISION NO. 01

DET NORSKE VERITAS

Validation of project activity "Kulera Landscape REDD+ Project for Co-Managed Protected Areas in Malawi Malawi	
For: Terra Global Capital, LLC	
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Det Norske Veritas (U.S.A.) Inc. (DNV GL) has performed a validation of the project activity " Kulera Landscape REDD+ Project for Co-Managed Protected Areas, Malawi " in Malawi on the basis of criteria defined by the Climate Community and Biodiversity Standard (CCBS) second edition and the VCS methodology 'Carbon Accounting for Mosaic and Landscape-scale REDD Projects', Version 2.0 as well as criteria for consistent project operations, monitoring and reporting. This validation report summarizes the findings of the CCBS validation.

The validation consisted of the following three phases: i) a desk review of the project design, the baseline and the monitoring plan, ii) an onsite inspection and follow-up interviews with project stakeholders and the issuance of the finding list, and iii) the resolution of outstanding issues and the issuance of the final validation report and opinion.

In summary, it is DNV GL 's opinion that the " Kulera Landscape REDD+ Project for Co-Managed Protected Areas, Malawi" in Malawi as described in the CCBA PDD Version 11.0 of April 2014, meets all relevant CCBS requirements.

Prepared by:	Verified by:	Approved by:
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☒ Unrestricted distribution (internal and external) ☐ Unrestricted distribution within DNV GL ☐ Limited distribution within DNV GL after 3 years ☐ No distribution (confidential) ☐ Secret	Keywords Climate Change Validation Climate, Community and Biodoversity Standard Verified Carbon Standard

Rev. No.	Date	Reason for Issue
0	22 November 2013	Draft validation report
01	3 July 2014	Final validation report

Abbreviations

AFOLU Guidelines	Agriculture, Forestry and Other Land Uses Section of Guidelines for National Greenhouse Gas Inventories 2006
CAR	Corrective Action Request
CCBA	Climate Community and Biodiversity Alliance
CDM	Clean Development Mechanism
CL	Clarification Request
CO2	Carbon Dioxide
DNA	Designated National Authority
DNV GL	Det Norske Veritas
DR	Document Review
GHG	Greenhouse Gas(es)
GPG LULUCF	Intergovernmental Panel on Climate Change's Good Practice Guidance for Land-Use Land Use Change and Forestry
GWP	Global warming potential
HCV	High Conservation Value(s)
MSME	Micro-, Small- And Medium-Enterprise
MoV	Means of Verification
NTFPs	Non-Timber Forestry Products
PDD	Project Design Document
REDD	Reduced Emissions from Deforestation and Degradation
tCO2e	Tonnes CO_2 equivalent
VCS	Verified Carbon Standard
VCSA	VCS Association
VCU	Voluntary Carbon Unit
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute

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Appendix A: Resolution of Corrective Action and Clarification Requests

1 INTRODUCTION

Terra Global Capital, LLC has commissioned Det Norske Veritas (U.S.A.) Inc. (DNV GL) to perform a validation of the Kulera Landscape REDD+ Project for Co-Managed Protected Areas, Malawi in Malawi. This report provides a description of the steps involved in conducting the validation and the findings of the validation based on the Climate, Community and Biodiversity Standards (Second Edition) (CCBS), as well as criteria for consistent project operations, monitoring and reporting.

The validation team consisted of the following personnel:

				Type of involvement					
Role	***Last Name***	***First Name***	***Country***	Desk review	Site visit / Interviews	Reporting	Supervision of work	Technical review	TA 14.1 competence
Project Manager	Bachamanda	Shruthi	USA				✓		
Team leader (Validator)	Espejo	Andres	Italy	✓	✓	✓			✓
Technical reviewer	Aalders	Edwin	Norway					✓	✓

1.1 Objective

The purpose of a validation is to have an independent third party assess the project design against all criteria set out in the CCBS. Validation is a requirement for all CCBS projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended climate, community, and biodiversity benefits. The final decision on the registration of a proposed project rests with the CCBA.

1.2 Scope and Criteria

The validation scope is defined as an independent and objective review of the CCB Project Document (CCB PDD). The CCB PDD is reviewed against the criteria stated in the CCB Standard (Second Edition – December, 2008), and the and the VCS methodology 'Carbon Accounting for Mosaic and Landscape-scale REDD Projects', Version 2.0

In particular, the project was assessed against the CCBS to determine which of the fourteen required and three optional CCBS criteria the project satisfies. As specified by CCBA, an 'approved' project is one that meets all 14 of the required CCB standards criteria.

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

1.3 CCB Project Description

1.4 Level of Assurance

DNV GL provides reasonable assurance that the emission reduction estimations for the " Kulera Landscape REDD+ Project for Co-Managed Protected Areas, Malawi" are conservative and meet the CCBS criteria and approved VCS methodology 'Carbon Accounting for Mosaic and Landscape-scale REDD Projects', Version 2.0.

To ensure complete transparency, DNV GL has included any clarification or corrective actions that were raised in this validation report in an appendix found at the end of this report.

2 METHODOLOGY

The validation consisted of the following three phases:

- A desk review of the project design and the baseline and monitoring methodology.
- Site visit and interviews with project stakeholders.
- The resolution of outstanding issues and the issuance of the final validation report and opinion.

The validation process includes the following events and activities:

- Opening meeting, introduction and project orientation;
- Desk Review of the project document (PDD) and supplemental documentation including data, models, and maps of project zone;
- Site visit from period from 11 November 2013 to 16 November 2013. The site visit included:
    - Interviews with representatives of the community associations of Nyika-Vwaza Association (NVA) and Nkhotakota Wildlife Reserve Association (NAWIRA);
    - Interviews with local communities in the villages of Nkchamayamaji (Nyika), Chimlu (Nyika), Kapatakafinye (Nyika), Bongowongo (Vwaza) and Mphalamando (Nkhotakota);
    - Interview with a member of Faculty of Development Studies in charge of the PRA;
    - Interviews with members of The Department of National Parks and Wildlife (DNPW);
    - Interviews with members of the Biological Sciences Department – Chancellor College in charge of the biophysical baseline survey;
    - Interviews with members of the Forestry Department;
    - Interviews with staff of Total Land Care (TLC).
    - Field assessments in the three different sites;;
    - Closing meeting and presentation of preliminary findings.
- Review of stakeholder comments;
- Review of collected evidence and supporting documentation;
- Issuance of findings;
- Project proponent responses to findings;
- Preparation of final report;
- Technical review of final report;
- Submission of final report to CCBA.

Findings established during the validation can either be seen as a non-fulfilment of validation protocol criteria or where a risk to the fulfilment of project objectives is identified. Corrective Action Requests (CAR) are issued where:

- Mistakes have been made with a direct influence on project results.
- CCBS requirements have not been met.
- There is a risk that the project would not be accepted as a VCS or CCBA project or that emission reductions will not be certified.

The term Clarification (CL) may be used where additional information is needed to fully clarify an issue.

Draft report corrective action requests and requests for clarifications	***Project participants' response***	***Final conclusion***
If the conclusions from the draft Validation are either a Corrective	***The responses given by the project participants during the***	***This section should summarise the validation team's responses and final***

Action Request or a Clarification Request, these should be listed in this section.	***communications with the validation team should be summarized in this section.***	***conclusions. The conclusions should also be included in Table 1, under "Final Conclusion.***

Figure 1: Validation Protocol Table

2.1 Review of Documents

The project document version 2.0 dated October 2013 was submitted by the project proponents along with additional background documents related to the project design and baseline, which were assessed as part of the validation. The project documentation followed the guidance set out in CCBS, December, 2008 and these documents were published in the CCBA site.

The following table lists the documentation that was assessed during the validation:

Documentation provided by the project proponents

Ref	Name of Document
/1/	Terra Global Capital, LLC. CCB PDD for project activity " Kulera Landscape REDD+ Project for Co-Managed Protected Areas, Malawi" in Malawi, version 2.0 dated October 2013 first version received from the project proponent and published in the CCBA website and version 11.0 dated April 2014
/2/	Terra Global Capital, LLC: VCS-PD for project activity " Kulera Landscape REDD+ Project for Co-Managed Protected Areas, Malawi" in Malawi, version 1.0 dated 1 September 2013 first version received from the project proponent and version 14 dated 3 July 2014
/3/	Terra Global Capital, LLC. Non-Permanence risk assessment report, version 10, 3 July 2014
/4/	Terra Global Capital, LLC. GIS data and information: - ESRI Shapefiles of general geographical information (i.e. roads, rivers, political limits, protected areas, etc.) - ESRI Shapefiles with limits of project boundary, leakage area and reference region. - LULC Maps for Nyika, Vwaza and Nkhotakota project areas for three historical periods (2000, 2002/2003 and 2009).
/5/	Various entities. Signed contracts and agreements: - Co-Management Agreement between Department of National Parks and Wildlife and Nyika Vwaza Association - Agreement for the carbon development, carbon rights and benefits sharing with respect to emission reductions for the Kulera biodiversity landscape REDD+ project in co-managed national protected areas in Malawi by and between the Government Of Malawi; the Nkhotakota Wildlife Reserve Association; and Terra Global Capital, LLC, 20 September 2013 - Agreement for the carbon development, carbon rights and benefits sharing with respect to emission reductions for the Kulera biodiversity landscape REDD+ project in co-managed national protected areas in Malawi by and between the Government Of Malawi; the Nyika-

Ref	Name of Document
	Vwaza Association; and Terra Global Capital, Llc, 20 September 2013
/6/	Terra Global Capital, LLC. Various financial information and data: - Carbon Development Costs, v8-0 Kulera v0-4 - Financial Projections v8-0 Kulera v0-4 - Kulera REDD Project Implementation Budget - 60 years for PD v0-2
/7/	Total Land Care. Annual and quarterly reports on project implementation issued to USAID. - Year 1 Annual and 4th Quarter Report, October 2010 - Year 2 Annual Report, October 2011 - Year 3 Annual and 4th Quarter Report, October 2012 - Year 4 Quarter 3 Quarterly Report April -June 2013, July 2013
/8/	Total Land Care. Information on local stakeholder consultations, surveys and Participatory Rural Appraisal. - Summary of Consultations, September 2013 - HH Survey Report v2, 10 June 2011 - PRA Field Report, 22 July 2012
/9/	Terra Global Capital, LLC. Standard Operating Procedures (SOPs): - SOP Biomass Inventory v7-0, May 2012 - SOP Bunda College Walkley Black Procedure, Year 2012 - SOP for Boundary Demarcation - Kulera v11-1, May 2012 - SOP PRA Kulera v6-0, May 2012 - SOP Terralytics Classification Manual Kulera v1-1, September 2011
/10/	Terra Global Capital, LLC. Field Inventory data sheets: - Plots visited: NFOR_008, NFOR_009, NFOR_021, NFOR_008, NKHT_011, NKHT_106, NYKA_039, VWZA_016 - Additional data transfer check: NYKA – 220, NYKA – 221, NYKA – 223, NYKA - 239
/11/	Terra Global Capital, LLC. ER and Forest Inventory spreadsheet: - Gross Emission Reductions for Nyika, Vwaza and Nkhotakota, Year 2013 - Combine calcs overview tables, Year 2013 - Kulera Biomass Data, Year 2013
/12/	Dr Chimwemwe Mawaya (Team Leader), Dr Marlene Chikuni, Mr. James Chimphamba and Mr. Zuze Dulanya. Bio-Physical Inventory For The Kulera Biodiversity Project Final Copy: Volume I. Year 2011.

Methodologies, tools and other guidance by VCSA

Ref	Name of Document
/13/	Terra Global Capital: Methodology VM0006 'Carbon Accounting for Mosaic and Landscape-scale

Ref	Name of Document
	REDD Projects', Version 2.0
/14/	VCSA: VT0001 – "Tool for the Demonstration and Assessment of Additionality in VCS AFOLU project activities" (Version 3.0), 1 February 2012
/15/	VCSA: VCS standards: VCS Standard Version 3.4, 8 October 2013
/16/	VCSA: AFOLU Non-Permanence Risk tool: VCS Version 3.2, 4 October 2012
/17/	VCSA: 'Program Definitions: VCS Version 3.5', 8 October 2013
/18/	VCSA: AFOLU requirements: VCS Version 3.4, 8 October 2013
/19/	ISO 14064-3:2006: Greenhouse gases — Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions, First edition, 1 March 2006
/20/	ISO 14065:2007: Greenhouse gases — Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognitions, First edition, 15 April 2007
/21/	CDM Executive Board: 'Combined tool to identify the baseline scenario and demonstrate additionality in AR CDM project activities' (version 1), Annex 19, EB35
/22/	VCSA: Validation and Verification Manual. Version 3.0

Documentation used by DNV GL to validate / cross-check the information provided by the project proponents

Ref	Name of Document
/23/	Government of Malawi. Applicable legislation: - National parks and wildlife act (1992), 4 May 1992 and modifications made in 2004 - Customary Land Bill, 2012
/24/	Environmental Affairs Department - Ministry of Natural Resources, Energy and Environment. Malawi Fourth Country Report To the Convention on Biological Diversity (CBD), 30 June 2010
/25/	ESRI : Change matters – On-line visor showing NDVI change between 1975 and 2000, http://changematters.esri.com/compare
/26/	Henry, M., Picard, N., Trotta, C., Manlay, R.J., Valentini, R., Bernoux, M. & Saint-André, L. 2011. Estimating tree biomass of sub-Saharan African forests: a review of available allometric equations. Silva Fennica 45(3B): 477–569.
/27/	Timothy Pearson, Sarah Walker and Sandra Brown. 2005. Sourcebook for Land Use, Land-Use Change and Forestry Projects.
/28/	Ghislain Vieilledent, Romuald Vaudry, Samuelson F. D. Andriamanohisoa O. Sarobidy Rakotonarivo, H. Zafyson Randrianasolo, Hasina N. Razafindrabe, C´ecile Bidaud Rakotoarivony, Johannes Ebeling, and Maminiaina Rasamoelina. 2011. Allometric models, from scaling theory to improved biomass and carbon stock estimates in tropical forests
/29/	Zanne, A.E., Lopez-Gonzalez, G.*, Coomes, D.A., Ilic, J., Jansen, S., Lewis, S.L., Miller, R.B.,

Ref	Name of Document
	Swenson, N.G., Wiemann, M.C., and Chave, J. 2009. Global wood density database. Dryad. Identifier: http://hdl.handle.net/10255/dryad.235.
/30/	IPCC, 2003: Good Practice Guidance for Land Use, Land-Use Change and Forestry, prepared by the National Greenhouse Gas Inventories Programme, Jim Penman, Michael Gytarsky, Taka Hiraishi, Thelma Krug, Dina Kruger, Riitta Pipatti, Leandro Buendia, Kyoko Miwa, Todd Ngara (eds). Published: IGES, Japan. URL: http://www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf.html
/31/	Forest Carbon Partnership Facility: http://www.forestcarbonpartnership.org/fcp/
/32/	UN-REDD programme: http://www.un-redd.org/
/33/	DNV GL : VCS validation report of "Kulera Landscape REDD+ Project for Co-Managed Protected Areas in Malawi". Revision 01. 3 July 2014
/34/	DNV GL : VCS verification report of "Kulera Landscape REDD+ Project for Co-Managed Protected Areas in Malawi". Revision 01. 3 July 2014
/35/	Richards, M. 2011. Social and Biodiversity Impact Assessment (SBIA) Manual for REDD+ Projects: Part 2 – Social Impact Assessment Toolbox. Climate, Community & Biodiversity Alliance and Forest Trends with Rainforest Alliance and Fauna & Flora International. Washington, DC.
/36/	Richards, Michael. Social Impacts Guidance: Key Assessment Issues for Forest Carbon Projects. In Building Forest Carbon Projects, Johannes Ebeling and Jacob Olander (eds.). Washington, DC: Forest Trends, 2011.
/37/	Schreckenberg, K., Camargo, I., Withnall, K., Corrigan, C., Franks, P., Roe, D., Scherl, L. M. and Richardson, V. (2010) Social Assessment of Conservation Initiatives: A review of rapid methodologies, Natural Resource Issues No. 22. IIED, London.
/38/	Dilley, M., R.S. Chen, U. Deichmann, A.L. Lerner-Lam, M. Arnold, J. Agwe, P. Buys, O. Kjekstad, B. Lyon, and G. Yetman. 2005. Natural Disaster Hotspots: A Global Risk Analysis. Disaster Risk Management Series No. 5. Washington, D.C.: The World Bank.
/39/	UNDP: International Human Development Indicators, http://hdr.undp.org/en/countries
/40/	FSC, NEPCON, and RainForest Alliance: Global Forest Registry. http://www.globalforestregistry.org/map

2.2 Follow-up Interviews

In the period from 11 November 2013 to 16 November 2013 DNV GL conducted various interviews with the project proponent's staff, staff of other project entities involved in the project, and other stakeholders such as the REDD+ national initiative coordinator.

Interview Topics

Ref.	Date	Name	Organization	Topic
/41/	11 November 2013	James Sadrack (Chairman)	NAWIRA	- Organisation of association - FPIC - Agents and drivers of deforestation
	11-14 November 2013	Duncan Mkandawire (Chairman)	NVA	
/42/	11-16 November 2013	Blessings Mwale (Chief of Party – Kulera Biodiversity Project)	TLC	- Project description and project's history - Baseline scenario (Drivers of deforestation) - Implementation of project activities - Monitoring of project activities
	11 November 2013	Trent Bunderson (Executive Director)		
	11 November 2013	Zwide D. Jere (Managing Director)		
/43/	11-16 November 2013	Erica Meta (Forester)	TGC	- Forest inventory - GHG accounting - Other carbon aspects
	11-16 November 2013	Leslie Bolick (Consultant)		
	11 November 2013	Cheri Sugar (Director)		- Project description and project's history - Institutional arrangements
/44/	11 November 2013	Brighton Kumchedwa (Director – Chair)	NDPW	- History of protected areas - Applicable Laws and regulations - Drivers of deforestation
		Ramosh Jiah (Deputy Director)		
/45/	11 November 2013	Alexander Phiri (Head of Department)	Faculty of Development Studies	- PRA - Drivers of deforestation
/46/	12-13 November 2013	Obedi G. Mkandawire (Zone Manager)	TLC	- Implementation and monitoring of project activities - Drivers of deforestation - Validity of reference region
		ThomasMilanue (Field coordinator)	TLC	- Implementation and monitoring of project activities
/47/	12-14 November 2013	He nry Kad au ma	DNPW	- Past trends in deforestation - Drivers of deforestation - Validity of reference region

Ref.	Date	Name	Organization	Topic
		(Extension Officer – Nyika and Vwaza)		
	14 November 2013	George Banda (Vwaza Wildlife Reserve Manager having worked previously in Nyika National Park)	DNPW	- Past trends in deforestation - Drivers of deforestation - Validity of reference region - System of grievances
	15 November 2013	Mutheto Ndhlamini (Extension Officer Nkhotakota having worked previously in Nyika and Vwaza)	DNPW	- Past trends in deforestation - Drivers of deforestation - Validity of reference region - System of grievances
/48/	13-15 November 2013	Twalibu Tandwe (Team Leader Forest Inventory)	Biological Sciences Department – Chancellor College	- Forest inventory
		Makina Mawaya (Team Leader Forest Inventory)		
	15 November 2013	Cmwe Mawaya (Head of Department / Lecturer)		
/49/	11 November 2013	John Kerkering (REDD National Coordinator)	Forestry Department	- Drivers of deforestation - Validity of reference region - REDD institutional arrangements - Data availability (i.e. allometric equations, etc.)
/50/	12-16 November 2013	Members of 4 villages and members of PRA of villages within the same group of villages: 1. Nkchamayamaji (Nyika) 2. Chimlu (Nyika) 3. Kapatakafinye (Nyika) 4. Bongowongo (Vwaza) 5. Mphalamando (Nkhotakota)	Local communities	- Drivers of deforestation - Validity of reference region - Past trends in deforestation - Impacts of project activity - FPIC - Complaints and grievances

2.3 Site Inspections

On 12-15 November 2013, a field inspection and interviews on-site were carried out in the three different project areas and their surroundings. As part of this inspection the following activities were performed:

- An assessment of the implementation and operation of the proposed project activity through visual inspection and through interviews with the project proponent's staff.
- Confirmation of the applicability of the methodology.
- Assessment of the project boundaries and the stand information using a Pocket PC with the geographic information uploaded and connected to a GPS receiver.
- Assessment of the accuracy in the LULC maps and other cartography;
- Assessment of the implementation of the SOPs of forest inventory;
- Assessment of the monitoring provisions;

2.4 Resolution of Any Material Discrepancy

The objective of this phase of the validation is to resolve any outstanding issues which need be clarified prior to DNV GL 's positive conclusion on the project design.

To guarantee the transparency of the validation process, the concerns raised by DNV GL and the response provided by the project proponent and the consultant are documented in a Table of the Validation Protocol in Appendix A.

A corrective action request (CAR) is raised if one of the following occurs:

(a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions ;

(b) The VCS/CCBS requirements have not been met;

(c) There is a risk that emission reductions cannot be monitored or calculated.

A clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable requirements have been met.

3 VALIDATION FINDINGS

G1 – Original Conditions in the Project Area

Within the PD, the project proponents have illustrated with sufficient detail and supporting evidence the original conditions of the project area. The requirements of the CCBA standards related to the description of the original conditions at the project area and the surrounding project zone have been met. DNV GL was able to verify the original conditions of the project area through document review (i.e. satellite imagery) and interviews with local communities and other relevant stakeholders.

General information

1. Location of the project and Basic Physical Parameters

DNV GL was able to confirm the project area location and basic physical parameters presented by the project proponents in the PDD through on-site inspection, interviews with relevant stakeholders as well as through review of other geographical information. Basic descriptions of climate, hydrology, and soils are presented in the CCBS PDD, and were found to be consistent with the information included in the baseline biophysical survey performed by an independent third party /12/. The information provided in the CCBS PDD is complete.

2. Types and Condition of Vegetation within the Project Area

The information on existing vegetation presented in the CCBS PDD has been based on a biophysical survey performed by members of the Biological Sciences Department – Chancellor College /12/ and other supporting documentation. DNV GL was able to confirm that the information presented on the condition of vegetation within the project area is complete.

3. Boundaries of the Project Area and the Project Zone

The boundaries of the project area and project zone are presented in the PDD both in the form of maps of individual parcels of land and geographical coordinates. The definition of the boundaries of the project area and project zone is in line with the definitions provided in the CCB Standard and are accurate as confirmed by DNV GL /4//8//42//46//50/.
For more details please refer to the VCS validation report Version 01 dated 03 July 2014 /33/.

Climate information

4. Current Carbon Stocks in the Project Area

The PDD refers to the carbon stocks provided in the VCS PD /2/. As part of the VCS validation DNV GL was able to confirm that these have been determined following sound methods which are in compliance with VCS VM0006 Version 2.0 which is in turn in compliance with 2006 IPCC GL and 2003 LULUCF GPG.

Community information

5. Description of Communities in the Project Zone

Within the description of the PDD, the project proponent provide detailed information including census data, ethnicity, gender, age and wealth for each of the protected areas. The information provided was verified against the information presented in the PRA and the HH surveys /8/ and as confirmed in the bio-physical survey /12/. The accuracy of this information was further confirmed through interviews with local Stakeholders /41//44//47//50/.

6. Current Land Use, Property Rights, and Unresolved Conflicts

An analysis of the current land use, property rights, has been reported in the PDD, including how unresolved conflicts in the project area are addressed. Land-tenure differs from the project area to the project zone. The former is located just inside the border of three public protected areas: Nyika National Park, Vwaza Marsh Wildlife Reserve, and Nkhotakota Wildlife Reserve, which according to the National Parks and Wildlife Act of 1992 /23/ are the property of the Government of Malawi and under the custody of the DNPW. The latter is located around the borders of the protected areas where 90% of the land is customary land /8/. According to the Customary Land Bill (2012) /23/ these lands may be public lands or private lands. The former is land that the Government or Traditional Authorities (TA) held or manage and are accessible to the public at large. If under the custody of TA, these lands are not allocated exclusively to any group, individual or family; however, they are reserved for the exclusive use of members of the respective Traditional Authority, but it does not represent ownership or the right to transfer it. The latter is land also called "customary estates," which are lands that are allocated exclusively to a clearly defined community, corporation, clan, family or individual. Once registered customary estates provide the proprietor private use rights in perpetuity and can be leased or used as security for a mortgage loan /8/. As confirmed by DNV GL during the site visit, private lands are not common, yet there are some examples of community forests /50/.
Hence, the information contained in the PDD is accurate.

Biodiversity information

7. Current Biodiversity in the Project Zone, and Threats to It

Current biodiversity in the project zone is mainly sourced from the bio-physical survey /12/, which indicates that the project area contains an exceptional biodiversity that in some cases is classified as endangered in the IUCN red list.
The main threats to biodiversity are linked to the increasing encroachment around the protected areas. Although the project areas are just located within three different protected areas, the increasing degradation and depletion of resources in the project zone is causing an increasing pressure over the resources of the protected areas, especially wildlife. The DNPW has not enough resources in order to enforce the law. This situation was effectively confirmed by DNV GL during the site visit: staff of DNPW showed their concerns regarding this increasing threat on animals and habitats /44//47/; associations and local communities /41//50/ showed their concerns linked to an increasing demand of products and lack of available resources for many of the villages.

8. High Conservation Values within the Project Zone

The three protected areas were declared in the 60s and 70s due to their exceptional nature and especially due to the ecosystem services that they generated, in particular water /44//47/. As such they were protected due to their HCV. These HCV have been enhanced due to more than 30 year protection and to the fact that these protected areas are real islands surrounded by much degraded areas that have lost most of their biodiversity, etc. As confirmed by the bio-physical survey /12/, the project area has the 6 HCV described in the CCBS.

G2 – Baseline Projections

1. Most likely land-use scenario

DNV GL confirmed that the information provided in the PDD is accurate and complete. Following the provisions of VM0006 Version 2.0, the most plausible baseline scenario according to the CDM modalities and procedures, paragraph 22, is option (a): Existing or historical, as applicable, changes in carbon stocks in the carbon pools within the project boundary.

This baseline scenario is prescribed by the methodology and it will be based in the historical information of the reference region.

2. Project Benefits that would not Have Occurred in Absence of Project

The baseline consists in the deforestation that would have occurred within the project area without the implementation of the project. This deforestation has been estimated based on historical rates of deforestation observed in the project area and project zone which is comparable to the project area, and the location of the deforestation is based on various spatial drivers including the presence of a protected area or the distance to the protected area. This estimation of deforestation is an accurate representation of what would have happened without project, as it represents historical levels of enforcement. This historical level of enforcement would have continued without the project as confirmed by DNV GL through interviews with the DNPW /44//47/. The project activity consists in the increase of the levels of protection through community management and increased enforcement, which are implemented due to the project. Since the baseline is an accurate representation of what would happen without the project, any benefit generated by the project above baseline levels will be truly additional.

3. Carbon stock changes in the “without project” scenario

The baseline carbon stock changes have been estimated following the VCS methodology VM0006 Version 2.0. This has been validated by DNV GL as part of the VCS validation process /33/. DNV GL confirmed that the estimation provided is consistent with the estimation provided in the validated VCS PD /2/.

4. Baseline scenario and existing communities

DNV GL confirmed that the information provided in the PDD is accurate and complete. Without the proposed project, which intends to diversify and increase the resilience of livelihoods of households in the project zone, the increase use of existing resources would probably cause a further encroachment of the project area, as it has seen in the historical period /41//44//47/. Although the encroachment would produce in the short term benefits to the local communities, in the mid-term and long-term the negative effects would be noticed linked to unsustainable livelihoods.

5. Baseline scenario and biodiversity

DNV GL confirmed that the information provided in the PDD is accurate and complete. Without the proposed project, which intends to diversify and increase the resilience of livelihoods of households in the project zone, the increase use of existing resources would probably cause a further encroachment of the project area, as it has seen in the historical period /41//44//47/. This would cause an obvious impact in the natural conditions of the project area and would have an adverse effect on the biodiversity of the three protected areas.

G3 – Project Design and Goals

1. Climate, Community and Biodiversity Objectives

DNV GL confirmed that the information provided in the PDD is accurate and complete. The PDD provides a summary of project's major climate, community and biodiversity objectives:

- Climate objectives: The Project is designed to avoid further deforestation and degradation in the Project Areas, which will lead to a significant reduction in GHG emissions over the 30-year Project life;
- Community objectives: The Project seeks to improve governance of the three protected areas through a participatory, decentralized structure that provides economics incentives to support sustainable natural resource management;
- Biodiversity objectives: The Project will contribute to the protection and conservation of Malawi's most important protected areas, which are home to many threatened and endemic species and considered HCV areas, by increasing the capacity of local communities located in the Project Zones to participate in sustainable resource management.

2. Description of project activities

DNV GL confirmed that the information provided in the PDD is accurate and complete. Project activities have been designed in order to ensure that the project delivers climate, community and biodiversity impacts as confirmed during the site visit. The planned project activities are the following /2/:

- Strengthening land-tenure and protected area governance;
- Support for the development and implementation of sustainable forest and land use management plans;
- Forest protection through patrolling, social fencing and maintenance of forest boundaries;
- Fire prevention and suppression activities;
- Reducing fuel wood consumption and increasing energy efficiency by introducing fuel-efficient woodstoves;
- Creating alternative sources of fuel wood through agroforestry and farm woodlots; management
- Sustainable intensification of agriculture on existing agricultural land; and
- Developing local enterprises based on sustainably harvested Non-Timber Forestry Products (NTFPs) such as honey, coffee, macadamia, and livestock, and supporting access to loans for micro-, small- and medium-enterprise (MSMEs)

3. Map with location of project area and project zone

The PDD provides an accurate map of the project area, project zone and leakage area as confirmed by DNV GL /4/.

4. Project Lifetime and GHG Accounting Period

The GHG accounting period is the crediting period defined under the VCS of 30 years while the project longevity will be of 60 years which is the time in which the project activities will be in place /2/.

5. Natural and human-induced risks

DNV GL confirmed that the information provided in the PDD is accurate and complete. An assessment of the main risks to the climate, community, and biodiversity during the duration of the project is also presented in the PDD grouped in two different categories: Human-induced risks and natural risks. Regarding the former, risks identified are community adoption risks, government approval risks,

Enforcement Capacity in Protected Areas and Policy Effectiveness. Regarding the latter, fire and extreme weather have been identified as the main risks /2/. DNV GL assessed the accuracy of these as part of the VCS validation of the Non-Permanence risk assessment /3//33/.

6. Measures to Ensure Maintenance or Enhancement of HCV

DNV GL confirmed that the information provided in the PDD is accurate and complete. The project itself intends to protect the existing carbon stocks which are directly linked in this case to the existence of HCV; hence, the designed measures will ensure maintenance or enhancement of HCV. No activities will have a net negative effect in HCV, as the negative effects will be conveniently mitigated (i.e. wood source from the protected areas is compensated through afforestation activities and cook-stove projects). This was effectively confirmed during the site visit.

7. Measures that will be taken to maintain and enhance benefits beyond project lifetime

DNV GL confirmed that the information provided in the PDD is accurate and complete. Measures have been designed in order to ensure the diversification of livelihoods and enhancement of their resilience (i.e. creation of enterprises, investment in new economy activities, etc.). This will ensure that beyond the project's lifetime, benefits will be maintained.

8. Identification and involvement of communities and other stakeholders in project design

The proposed project consists in the implementation of various project activities which aim to reduce the increasing illegal encroachment and other illegal activities of three existing protected areas. These activities are illegal in nature and DNPW has the right to enforce the law within the project areas as confirmed by DNPW staff and other stakeholders /41//44//47/ and through legislation /23/. The proposed project seeks to address these deforestation drivers not through law enforcement but by addressing the underlying causes of deforestation, i.e. the increasing reliance of local livelihoods on the natural resources of the protected areas. The institutional framework for doing this is broadly decentralized where the decision making is mainly in the hands of the Community Associations who represent them /41/. These Community Associations have a democratically elected instrument of governance and from an organization point of view are composed by various Zone Natural Resource Committees (ZNRCs) which group various Natural Resource Committee (NRCs) which in turn group various villages /41/. These organizational arrangements are parallel to already existing traditional institutions which ensures a full integration of these associations /41/.

9. Publicize the CCBA public comment period to communities and other stakeholders

The PDD indicates how the project proponent intends to promote meetings with the leaders of the local communities to publicize the CCBA public comments period. DNV GL confirmed during the site visit that relevant stakeholders has copies of the PDDs /41//44//47/ and that resumes in local language were provided to the Associations and other community leaders /41//50/. The proposed measures meet the requirements of the CCBS.

10. Process for handling unresolved conflicts and grievances

The PDD provides a clear description of the procedure in place for handling unresolved conflicts and grievances which relies mainly on existing traditional institutions. As confirmed during the site visit any

conflict will be handled within the local communities by their traditional authorities. Any conflict that may arise beyond the control of the traditional authorities will be taken to the Associations. In the case of conflicts that cannot be resolved at the level of the Association will be mediated by a mutually agreed upon, neutral third party, as stated in the Carbon Agreement signed by the NVA, NAWIRA, the DNPW and Terra /5/. TLC and the DNPW will attempt to resolve conflicts that are based on the Forestry Laws and the co-management agreements, and will provide a written response to grievances within 30 days (by the next monthly meeting) /2/.

During the site visit DNV GL checked whether this procedure was in place and found that in the case of Nkhotakota it is not yet implemented as the Association is about to be established, and in the case of Nyika and Vwaza, the association does not have the necessary resources to fully implement the procedure. However, with the coming of carbon revenues these gaps will be covered and the intention is to implement the procedure. Furthermore, as part of this check, DNV GL identified two cases of conflicts and grievances:

- Some conflicts exist between local communities and the DNPW due to the damages caused by wild animals out of the boundaries of the protected areas. During the site visit it was confirmed that the process followed by the local communities to complain was: a) the village chief is informed of the issue; b) the village chief informs DNPW extension office; c) the extension officer informs DNPW's management team in charge of the protected area. This would confirm that the procedure described in the CCBS PDD is not yet implemented.
- Local communities wanted to increase the period in which they could fish within the protected area of Nyika. A request was made to the DNPW who analysed the case and rejected the proposal giving reasons for this rejection. This would confirm that there is a procedure in place, that the DNPW gave due response to the communities with a justification of the reasons of the rejection, which is in accordance with good practice. However, as confirmed by DNV GL standardisation is required as the procedure is not a written procedure with times of response well defined and local communities are not fully informed of the procedures and timing of response that are in place.

In view of the above, in the second verification a clear procedure for handling disputes and grievances between the local communities and DNPW shall be implemented, indicating clearly responsibilities, information flows and timings for responses. Furthermore, all parties must be duly informed of the procedure in place. This should be checked in the second verification (c.f. **FAR1**).

11. Demonstration of adequate flow of funds for project implementation

A business plan has been provided which includes an adequate flow of funds for project implementation /6/. Contracts in place define clearly how the funds coming from the carbon credits will be shared between the different parties in order to ensure funding of the different activities, and how the remaining cash will be employed for future operating costs beyond the crediting period /5/.

DNV GL confirmed that adequate flow of funds for project implementation have been defined.

DNV GL confirmed during the site visit that the Public Private Partnership Entity that will handle the revenues from the carbon credits has not been created yet. Confirmation that this entity is in place shall be verified during the second verification (c.f. **FAR2**).

G4 – Management Capacity and Best Practices

1. Identification and roles of project proponents

DNV GL confirmed that the information provided in the PDD is accurate and complete. A clear identification of roles and responsibilities of project proponents and implementation partners is provided in the PDD. The DNPW and the Community Associations have agreed to transfer carbon rights into a Public Private Partnership Entity /5/. Terra Global Capital will provide the required technical support in the project development side and will be the general manager for the REDD+ entity for the initial years.

2. Identification of key skills and experience of management team

DNV GL confirmed that the information provided in the PDD is accurate and complete. A clear identification of key skills and experience of the management team is provided in the PDD. DNV GL confirms that the management team groups the necessary skills and experience for managing the proposed project. No gaps are observed as the team is a multi-disciplinary team the covers the main project components.

3. Orientation and training to the project's employees and communities

DNV GL confirmed that the information provided in the PDD is accurate and complete. As confirmed during the site visit: a) technology and know-how transfer has been provided from TGC to the local team in all matters related to CCBS monitoring; b) TLC is providing training to local communities on cook-stove manufacture, planting, conservation agriculture, etc. c) TLC is providing training on financial management to the Associations for the management of the future revenues from carbon credits and from other activities within the protected areas; d) TLC has in place a continuous training program in order to ensure that their staff is fully qualified. DNV GL deems that the provisions for training are adequate. In order to ensure broad participation, mainly of Minority Groups, the project proponent conducts as part of PRAs targeting exercises in order to identify these amongst the community members and to understand their specific needs for the design of the project activities /8//9/.

4. Equal employment opportunities for local community members

The project proponents have an equal employment opportunity policy linked to this project. The Community Associations have a democratic system whereby representatives at various levels are elected by communities. TLC, the entity responsible of the project implementation in the first 4 years have in place a policy for equal employment opportunities for local community members /42//46/.

5. Relevant laws and regulations covering workers' rights

DNV GL confirmed that the information provided in the PDD is accurate and complete. It provides a list of relevant laws and regulations (i.e. Labour Relations Act (No. 16 of 1996); Malawi Employment Act No 6 of 2000; Employment Amendment Bill in Parliament 2010) and it describes how workers will be informed for their rights. TLC, the entity responsible of the project implementation in the first 4 years duly informs their workers of their rights /42//46/.

6. Assessment of risk to worker's safety and plan to communicate and minimize risk

DNV GL confirmed that the information provided in the PDD is accurate and complete. A plan will be developed in order to analyze the risk of each activity and to define the measures to be applied to reduce this risk. As confirmed by DNV GL during the site view, TLC, the entity responsible of the project implementation in the first 4 years, has in place the TLC Human Resource Management Manual /42//46/

defining the risks and the requirements in order to reduce the health risks (e.g. not driving during the night).

7. Financial Health of the Implementing Organization(s)

The main implementing organizations will be TLC and DNPW. The former is a well-known NGO with financial health sufficiently demonstrated /43//49/, the second is a governmental entity with resources assigned by the Government of Malawi. DNV GL checked the arrangements to ensure the financial health of the project /6/ and confirmed that they are adequate.

Although the PDD provides an adequate description regarding the project management, it is worth noting that the management in the first 4 years will differ significantly from what will be seen onwards. The reason is that with the arrival of carbon revenues a Public Private Partnership Entity will be in place in order to manage the carbon revenues and allocate them to the Associations, the DNPW and other entities for the implementation of the different project activities and the overall functioning of the project. At the time of the project validation and first verification, this entity was not in place and DNV GL validated all G4 based on the management present in the first 4 years of project. A confirmation that the new management is in compliance with G4 will be required as part of the second verification (c.f. **FAR2**)

G5 – Legal Status and Property Rights

1. Relevant laws and assurance of compliance

DNV GL confirmed during the site visit (i.e. interviews with DNPW's staff /44//47/ and members of the Forestry Department /49/) that the list of relevant laws is complete and that the project is in compliance with all these laws.

2. Demonstration of approval from authorities

DNV GL confirmed that the information provided in the PDD is accurate and complete. The proposed project has the necessary approval from authorities as evidenced by the REDD+ agreement signed between TGC and the Community Associations with DNPW /5/.

3. No encroachment on private property, community property or government property

DNV GL confirmed that the information provided in the PDD is accurate and complete. The proposed project is implemented in already existing protected areas so no encroachment on private, community or government property takes place. The rights of local communities which are recognized through the co-management agreements signed between the DNPW and the Community Associations /5/ are integral part of the REDD+ agreements. DNV GL confirmed during the site visit that no customary rights affect the project area.

Regarding the project zone, project activities implemented in the project zone is done in collaboration with the community member and authorities, so no customary right is affected due to these activities.

4. Demonstration that project does not require involuntary relocation

DNV GL confirmed that the information provided in the PDD is accurate and complete. No involuntary relocation takes place as no communities live inside the three protected areas where the project is implemented /12//44//49//47//50/.

5. Identification and mitigation of illegal activities that could affect the project's climate, community or biodiversity impacts

DNV GL confirmed that the information provided in the PDD is accurate and complete. The existing drivers of deforestation are all illegal activities which as discussed above, may affect the project's climate, community and biodiversity impacts.

6. Demonstration of clear title to carbon rights

DNV GL confirmed that the information provided in the PDD is accurate and complete. The title of carbon rights are clear; the proposed project is implemented in three protected areas under the control of DNPW as confirmed by the National Parks and Wildlife Act, CAP 66.07 (1992) as amended and the Regulations Game Act, CAP 66.03 /23/. Hence, the DNPW would have the title to carbon rights as given by the applicable legislation. However, DNPW has entered in a REDD+ agreement with TGC and the Community Associations /5/ whereby they recognise them as project proponents and they entitle a Seller's entity to transact the carbon credits generated by the proposed project.

CL1 – Net Positive Climate Impacts

1. Net Change in Carbon Stocks due to Project Activities

Following EQ104 of VM0006 Version 2.0 /13/ and considering that: a) emissions from degradation are not accounted for; b) no harvesting or Assisted Natural Regeneration (ANR) is foreseen in the project scenario; c) emissions from long-lived wood products are not accounted for (c.f. §3.2.3. Project Boundary); and d) emissions from other secondary sources are not applicable (c.f. §3.2.3. Project Boundary), the GHG emission reductions would be quantified through the following equation:

Net Emission Reductions (NERs) = ❶ + ❷ + ❸ + ❹

ΔGHG from avoided deforestation ❶
+ ΔGHG from deforestation due to leakage ❷
+ΔGHG from leakage by unconstrained geographic drivers ❸
+ ΔGHG from improved cook-stoves ❹

For more details please refer to the VCS validation report Version 01 dated 3 July 2014 /33/.

2. Net Change in Emissions of Non-CO2 Gases

Non-CO2 emissions sources defined by the applicable methodology are not significant. Emissions from fires are assumed to be negligible as it is expected that the project will have a positive influence in the frequency and intensity of fires within the project area. Emissions from livestock or rice production are assumed to be negligible as no large-scale farming or rice production is part of the defined project activities.

3. Other GHG Emissions from Project Activities

The only emission sources identified ex-ante are those related to the efficient cook-stove activity.

4. Net Climate Impact of the Project

DNV GL has confirmed that the calculations are in accordance to the methodology VM0006 Version 2.0 /13/, and that the GHG removals calculations are correct.

Based on the calculations and results presented in the sections above the implementation of the project activity will result in an average *ex-ante* estimation of net GHG emission reductions (i.e. GHG benefits) of 7 468 935 tCO_2e in total for the crediting period. Considering the risk rating of the proposed project activity (i.e. 10% of the Net Emission Reductions from deforestation (changes in carbon stocks)), the total buffer credits would be equal to 1 156 303 tCO_2e. This would give a total of 6 312 632 VCUs issued in the crediting period.

Baseline Emissions (including cookstove net baseline emissions)	17 786 680 tCO_2e
Project Emissions	3 161 764 tCO_2e
Leakage emissions	7 155 981 tCO_2e
Net GHG benefits	7 468 935 tCO_2e
GHG credits issued	7 468 935 tCO_2e
Buffer credits -Non-permanence risk rating: 10%	1 156 303 tCO_2e
VCUs in first 10 years of crediting period	**6 312 632 tCO_2e**

All assumptions and data used by the project proponents are listed in the VCS PD /2/ and/or supporting documents, including their references and sources. All documentation used by the project proponents as the basis for assumptions and source of data is correctly quoted and interpreted in the VCS PD /2/. All values used in the VCS PD are considered reasonable in the context of the proposed project activity. The baseline methodology has been applied correctly to calculate project emissions and removals, baseline removals, leakage emissions and GHG benefits. All estimates of the baseline removals, project removals and leakage emissions can be replicated using the data and parameter values provided in the VCS PD /2/.

For more details please refer to the VCS validation report Version 01 dated 12 March 2014.

5. Specification on How Double Counting is avoided

The emission reductions generated from the Project will be registered under the VCS. The Project has not been registered, nor is seeking registration under any other GHG program.

CL2 - Offsite Climate Impacts "Leakage"

1. Determination of Leakage Type and Extent

According to the applicable methodology VM0006 Version 2.0 /13/ there are three possible leakage sources: a) Geographically constraint drivers; b) Geographically unconstraint drivers; c) Market leakage. Market leakage is not applicable as no timber products sourced from the project area in the baseline or project scenario are supplied to a national or international market.

Leakage emissions from geographically un-constrained drivers

The analysis of drivers of deforestation made as part of the PRA and household survey /8/ did not show the existence of un-constrained drivers. During the site visit DNV GL held a number of interviews with local stakeholders and confirmed that in the project areas there is not a large migration such as it happens in other countries (e.g. Trans-migrassi) /41//44//47//50/. New habitants arriving from other areas in Malawi integrate in existing populations upon being authorized by the village chief and other traditional authorities. Once this is authorized a piece of land is allocated to the new family and they become part of the existing community, becoming part of the constrained drivers emission source. Any increase in deforestation from these populations will be factored in the monitoring of the deforestation in the leakage area. Hence, no emissions from geographically un-constrained drivers are applicable in the context of the present project.

Leakage emissions from geographically constrained drivers

In order to estimate this, a leakage area has been defined first. The leakage area constitutes the area where the baseline activities would be probably displaced. The leakage area has been defined following the procedures prescribed in VM0006 (Version 2.0) /13/. The project proponent has produced a cost grid indicating the time that an agent would take to cross each pixel by foot in average. This grid has been produced from a grid indicating the maximum speed that an agent could reach in a certain pixel. DNV GL checked the average speeds assigned and deems that the values are reasonable considering the values provided by the PRA /8/. The leakage area would be defined as the isochrone from the project area equivalent to 1.5 the maximal time provided by the PRA /8/, being in this case 15 hours. Hence, the leakage area would be defined by the 15 hour isochrone from the project boundary.

DNV GL, based on its experience in conducting biomass procurement and logistical models, is able to confirm that the above approach is correct and that it is in compliance with the applicable methodology.

For more details please refer to the VCS validation report Version 01 dated 12 March 2014.

2. Documentation and Quantification of How Leakage will be mitigated

The VCS PD provides a clear description of the leakage management activities. Leakage mitigation is integrated within the Project activities. Given that Project Area is comprised of protected areas without communities living in them and the Project Zone, where activities are being implemented, covers an area larger the Leakage the Project activities have been designed to address leakage rather than have separate activities that address leakage. DNV GL confirmed the accuracy of the description provided and confirmed that these measures are in place during the site visit.

3. Subtracting Project related Leakage from Carbon Benefits

According to equation EQ107 of the applicable methodology this is estimated as follows:

$$Leakage(t) = \sum_{i=1}^{nrFNFtransitions} \sum_{tt=1}^{t} u_{classification} \cdot u_{transition}(i) \cdot \begin{pmatrix} +\Delta area_{leakageArea,projectScenario}(t,i) \\ -\Delta area_{leakageArea,baselineScenario}(t,i) \end{pmatrix} \cdot \left(EF_{AGL}(i) + EF_{AGD}(i,t-tt) + EF_{BG}(i,t-tt) + EF_{SOM}(i,t-tt)\right)$$

Where:

$u_{classification}$	Discounting factor for NERs from avoided deforestation, based on the accuracy of classification, i.e. dividing land into broad land use types.
$u_{transition}(i)$	Discounting factor for all emission reductions, based on the uncertainty of biomass inventory related to transition i.
$-\Delta area_{leakageArea,baselineScenario}$	Hectares undergoing transition i within the leakage area under the baseline scenario during year t. [ha yr-1].
$\Delta area_{leakageArea,projectScenario}(t$	Hectares undergoing transition i within the leakage area under the project scenario during year t. [ha yr-1].
$EF_{AGL}(i), EF_{AGD}(i,t-tt), EF_{BG}(i,t-tt)$, and $EF_{SOM}(i,t-tt)$	Aboveground live, aboveground dead, belowground, and soil emission factor for transition i, and time after transition $t-tt$.

For more details please refer to the VCS validation report Version 01 dated 12 March 2014.

4. Inclusion of Non-CO_2 Gases in Calculations

Non-CO2 emissions from leakage have not been identified as part of the proposed project.

CL3 – Climate Impact Monitoring

1. Development of Full Monitoring Plan

A monitoring plan has been developed to meet the requirements of methodology and related tools. This was assessed through the verification of the project proponent's Standard Operating Procedures for forest inventory, as well as through interviews with relevant members of staff.

It is DNV GL 's opinion, that the project participants are able to implement the monitoring plan.

For more details please refer to the VCS validation report Version 01 dated 12 March 2014.

2. Commitment to Develop Full Monitoring Plan

Not applicable since a full monitoring plan has been presented already.

CM1 – Net Positive Community Impacts

1. Net Positive Community Impact Methods

The PDD provides in section 1.3.2 (c.f. Table 9) and indication of the Direct/Indirect benefit that each project activity will have over defined indicators which refer to impacts or outputs/outcomes of defined project activities. DNV GL conducted an analysis based on the "cause of change theory" and confirmed that considering the conditions of the project zone before the project implementation and the expected projection, it is expected that all activities will have a positive impact on the communities (without considering illegal activities as accepted by the CCBS). Hence, DNV GL deems that the project would generate net positive community impacts.

In order to confirm this in an ex-post basis, two surveys were conducted in order to understand the baseline conditions which was required for the project design. These surveys will be repeated in time in order to confirm the net-positive community benefits:

- Social conditions PRA: Over 13 weeks between December 2010 and March 2011, researchers from the University of Malawi and Bunda College of Agriculture conducted a series of household surveys, village Participatory Rural Appraisals, and mapping exercises to assess the impact of the Project on communities located in the Project Zones. The socio-economic baseline survey was conducted and consisted of household surveys and focus group discussions. A total of 1 924 households were surveyed with a structured questionnaire in the Project Zones and the control area, being 1 066 households from the Project Zones and 858 households from outside of the Project Zones, from non-Project intervention sites, as a control group.
- REDD PRA: In June and July 2012, a total of 38 PRA discussions were held representing each traditional authority (TA) area falling within the Project Areas. The PRA discussions focused on the local drivers of deforestation and forest degradation; strategies on how to reduce deforestation; possible challenges; management of forest fires; and transportation of timber, fuelwood and NTFPs.

2. Demonstration that No HCV Areas Will Be Negatively Affected by the Project

No HCV areas will be negatively affected as the project intends to protect the identified HCV which are directly related to local communities: ecosystem services will be conserved (i.e. water), other services will be allowed and enhanced (i.e. beekeeping) and any sacred areas will be respected.

CM2 – Offsite Stakeholder Impacts

1. Identification of Negative Offsite Stakeholder Community Impacts

DNV GL confirmed that the information provided in the PDD is accurate and complete. The proposed project includes project activities to be implemented in the 10 km buffer outside from the project boundary some which consist in the diversification of the livelihoods, so they mitigate project emissions and leakage at the same time. The PRAs and HH surveys conducted indicate that within this 10 km all communities which may rely on the project area are included /8//12/. Hence, no negative offsite Stakeholder Community Impacts have been identified.

2. Offsite Impact Mitigation Strategies

DNV GL confirmed that the information provided in the PDD is accurate and complete. The Project intends to monitor any unintended activity-shifting leakage in a leakage belt surrounding the Project Areas to account for any negative environmental impacts. To the extent possible, hunters, migrants and other agents of deforestation that are shifting their illegal land-use practices outside of the Project Areas will be engaged by the Project team and assisted in developing alternative land-use practices and livelihoods. In any case, DNV GL deems that the offsite impact will be unlikely considering that leakage from project areas would be within the project zones which are already targeted by the proposed project. In the case of any activity displacement out of the project area and project zones, this would be minor or illegal (i.e. not to be accounted for according to CCBS).

3. Demonstration that the Project will Not Negatively Impact the Well-Being of Other Stakeholder Groups

DNV GL confirmed that the information provided in the PDD is accurate and complete. No negative impacts on other stakeholders groups have been identified as explained above.

CM3 – Community Impact Monitoring

1. Selecting Community Variables to be monitored

The Project communities will be involved in an annual participatory monitoring exercise to assess the extent to which Project activities are achieving the community and Project goals. DNV GL confirmed that monitoring will be done through 3 different means:

- HH Surveys: A survey will be conducted in various households as required by VM0006 Version 2.0 in order to obtain information related to drivers of deforestation and agent mobility. This information will serve for comparison with the baseline survey conducted in order to conclude whether positive benefits to the community can be demonstrated.
- PRA: The PRA discussions focused on the natural resource management, livelihoods, HVC identification, wealth ranking, etc. /9/. This information will serve for comparison with the baseline survey conducted in order to conclude whether positive benefits to the community can be demonstrated.
- PMP with Community Impact Project Level Indicators: PMP indicators were identified by TLC and USAID as part of the first phase of the project. Monitoring of these indicators will be continued and will serve to confirm net community benefits.

DNV GL was able to confirm that social data to be gathered is clearly defined and is regarded as very useful for management purposes and for other in-depth analysis. Furthermore, the methods to gather it follow best practices /35/. Since baseline surveys have been conducted and since some data provides already net benefits, it will be possible to confirm that the project is delivering net community benefits. The intention of the project proponent was to conduct a full PRA at every verification in order to demonstrate benefits through the results, not through specific indicators. According to applicable guidance and best practices /35//36/, a short list of SMART and relevant indicators is desirable in order to show in a simple and transparent manner how the community impacts are monitored and demonstrate that the project is achieving net community benefits. Richards (2011) /35//36/ or Schreckenberg et al. (2010) /37/ provides a list of methods that could be employed for defining key indicators, the latter related to protected areas. The project proponent is requested to define a list of community-related indicators at the time of the second verification (c.f. FAR3).

2. Assessing Effectiveness of High Conservation Value Monitoring

Although the project is not expected to have any negative impact in HCV in the project zone or project area, possible changes will be conducted as part of the PRAs through community focus group discussions /9/. This will ensure detecting any undesired impact in HCV and acting in consequence. DNV GL deems that considering the project circumstances this monitoring procedure is adequate.

3. Commitment to Develop Full Monitoring Plan

The project proponent commits to developing a full monitoring plan 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.

DNV GL was given a copy of the monitoring plan and confirmed that it was uploaded in the CCBS site, thus complying with the “dissemination” requirement.

B1 – Net Positive Biodiversity Impacts

1. Net Positive biodiversity impact methods

The PDD provides in section 1.3.2 (c.f. Table 9) and indication of the Direct/Indirect benefit that each project activity will have over defined indicators which refer to impacts or outputs/outcomes of defined project activities:

- Increased forest cover and health as habitat for wildlife
- Increased biodiversity (species present in Project Area)
- Reduced poaching
- Increased water quality and quantity

DNV GL conducted an analysis based on the "cause of change theory" and confirmed that considering the conditions of the project zone before the project implementation and the expected projection, it is expected that all activities will have a positive impact on Biodiversity values.

In order to confirm this in an ex-post basis, a bio-physical survey was conducted in 2011 for estimating the baseline values of the above aspects /12/. This survey will be conducted in a periodical basis in order to analyse any change in the above.

2. Demonstration that No High Conservation Value (HCV) areas will be negatively affected

Since the goal of the Project is to enhance and protect forest resources, areas that are of HCV will not be negatively affected by the project. In the project zone no HCV are identified as the remaining forests show different degrees of degradation.

3. Identification of all species to be used by the project and no known invasive species will be introduced into any area affected by the project

Within the project area, no invasive species will be employed as these are natural forests. Within the project zone no invasive species are used as confirmed during the site visit /42//46/. The most common species do well in the Project zone are the following:

- Bamboo
- *Acacia albida*
- *Senna spectabilis*
- *Faidherbia albida*
- *Senna siamea*
- *Albizia lebbeck*
- *Accacia polyacantha*
- *Acacia galpini*
- *Afzelia quanzensis*

None of these tree species are invasive and they are mostly indigenous to the area.

4. Possible adverse effects of non-native species used by the project

The list of species are extensively used by local communities in the project zone and they will be further supported by the proposed project. No adverse effects have been identified.

5. Guarantee that no Genetically Modified Organisms (GMO) will be used in the Project

According to the PD, no GMOs will be used in the project. DNV GL confirmed that this is consistent with the data for the Global Forest Registry /40/ which indicates that Malawi is a low risk country as no commercial GM tree species are present in the country.

B2 – Offsite Biodiversity Impacts

1. Identification of potential negative offsite project impacts

DNV GL confirmed that the information provided in the PDD is accurate and complete. Since biodiversity monitoring will be conducted only within the project area, possible impacts within the project zone would not be monitored. These could be negative as hunting activities and other activities might be displaced within the project zone, hence causing some negative impacts. However, DNV GL agrees in that these negative impacts would be minor considering that areas out of the protected areas are very degraded which contrast with the forest within many areas within protected areas, and the project has in place various activities in order to mitigate any negative impact.

2. Mitigation strategies for negative offsite biodiversity impacts

DNV GL confirmed that the information provided in the PDD is accurate and complete. The Project intends to monitor any unintended activity-shifting leakage in a leakage belt surrounding the Project Areas to account for any negative environmental impacts. To the extent possible, hunters, migrants and other agents of deforestation that are shifting their illegal land-use practices outside of the Project Areas will be engaged by the Project team and assisted in developing alternative land-use practices and livelihoods. In any case, DNV GL deems that the offsite impact will be unlikely considering that leakage from project areas would be within the project zones which are already targeted by the proposed project. In the case of any activity displacement out of the project area and project zones, this would be minor or illegal (i.e. not to be accounted form according to CCBS).

3. Unmitigated negative off-site biodiversity impacts

DNV GL confirmed that the information provided in the PDD is accurate and complete. No major unmitigated impacts on biodiversity have been identified as explained above.

B3 - Biodiversity Impact Monitoring

1. Biodiversity monitoring plan

DNV GL confirmed that monitoring will be done through 2 different means:

- Biophysical survey: As part of the biophysical survey a number of indicators are measured related to: Woody and herbaceous vegetation; Water quantity and sediment loads in key rivers and streams; Bulk Density or Organic Matter in Soil; Wildlife Inventories
- PMP with Biodiversity Impact Project Level Indicators: PMP indicators were identified by TLC and USAID as part of the first phase of the project. Monitoring of these indicators will be continued and will serve to confirm net biodiversity benefits.

Defined indicators will be re-measured and compared with the values obtained in the baseline in order to define changes in these indicators and confirm net biodiversity benefits. Baseline values are provided in the CCBS PD.

2. Assessment of the monitoring plan effectiveness

Although the project is not expected to have any negative impact in HCV in the project area or project zone, possible changes will be conducted as part of the PRAs through community focus group discussions /9/ and also through the bio-physical surveys within the project area /12/. This will ensure detecting any undesired impact in HCV and acting in consequence. DNV GL deems that considering the project circumstances this monitoring procedure is adequate.

3. Commitment to develop full monitoring plan within twelve months of validation

The project proponent commits to developing a full monitoring plan 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.

DNV GL was given a copy of the monitoring plan and confirmed that it was uploaded in the CCBS site, thus complying with the “dissemination” requirement.

GL1 – Climate Change Adaptation Benefits

1. Identification of likely regional climate change and climate variability scenarios and impacts

DNV GL is able to confirm that the information provided in the CCBS PDD is complete and accurate.

The main risk for local community's households and natural ecosystems is the presence of droughts which occur with a period of return of 25 years. Malawi, and in particular the project areas have an extreme risks linked to droughts as evidenced by Dilley *et al*. /38/. As confirmed during the site visit /41//44//47//50/ severe draughts are becoming more frequent and during the year the rainfall season commencement is delaying. This has a direct impact in livelihoods as they mainly rely on crops and livestock which are severely affected during the drought years, and it has an indirect impact in the project area as in drought years the pressure in these area increases in order to obtain food through other means (i.e. game, fishing, etc.), which in turn have a degrading effect (i.e. higher frequency of fires, etc.). As validated in the VCS side, this has also a substantial impact in the fire and disease risk which have a degrading effect on existing ecosystems within the project area.

2. Identification and mitigation of any risks to the project's climate, community and biodiversity benefits

DNV GL is able to confirm that the information provided in the CCBS PDD is complete and accurate. DNV GL deems that the project has in place adequate measures in order to identify and mitigate risks resulting from the climate change and climate variability impacts described above. The project proponents have design project activities aiming to diversify livelihoods and therefore increase the resilience of their livelihoods to climate change, i.e. conservation Agriculture, integrating tree crops in the farm; promoting afforestation and tree regeneration; engaging in income generating opportunities and other livelihood support programs, etc. These improvements in the livelihood resilience will allow in turn a reduced pressure on the project area in drought years.

3. Demonstration of climate change impacts on communities and/or biodiversity

DNV GL is able to confirm that the information provided in the CCBS PDD is complete and accurate. It is evident that the climate change and climate variability has an impact in the wellbeing of the communities as assessed above.

4. Demonstration that project activities assist communities and/or biodiversity to adapt to climate change

DNV GL is able to confirm that the information provided in the CCBS PDD is complete and accurate. As assessed above, the different activities aim to diversify livelihoods and improve the resilience to climate change.

GL2 – Exceptional Community Benefits

1. Demonstration that the project zones are in a low human development country

DNV GL is able to confirm that the information provided in the CCBS PDD is complete and accurate. The project is located in Malawi which is defined as a Low Human Development country according to the UNDP Human Development Indicator's page /39/. Besides, the PRA information indicates that the average annual income in the project zone is 0.72 USD/HH/day /8/, being below the thresholds defined by UNDP of 1.25 USD/HH/day /39/.

2. Demonstration that the poorest communities will benefit from the project

DNV GL is able to confirm that the information provided in the CCBS PDD is complete and accurate. As confirmed during the site visit, the periodical PRA conducted by the project proponent includes methods to identify the poorest households within the community using a wealth ranking exercise /8/. This enables targeting of these specific groups and also monitoring of how the well-being of these groups varies in parallel to the project implementation.

3. Demonstration that barriers or risks are addressed

DNV GL is able to confirm that the information provided in the CCBS PDD is complete and accurate. As assessed above a PRA will enable to identify whether any disadvantage group is facing any barrier for being part of any project activity.

During the site visit, it was also confirmed that one way to convey the carbon revenues would be through the Associations, who would analyse and tentatively (depending on resources) finance projects proposed by NRCs (Natural Resource Committees, which are participated by various villages) through the Zones which group various NRCs. During the site visit one of the villages /50/ pointed out that a possible issue of this mechanism is that since projects are proposed by the majority of villages, only projects that would address a need of the majority of villages would be proposed, while those villages with specific problems not shared with the majority of villages would not have the opportunity address their needs. DNV GL understand that resources are always a constraint for reaching all villages, but would like to point out a possible issue with the aforementioned mechanism which could pose a barrier for reaching disadvantaged groups (c.f. **FAR4**).

4. Demonstration that disadvantaged groups will not be negatively affected

DNV GL is able to confirm that the information provided in the CCBS PDD is complete and accurate. DNV GL deems that "No Harm" will be done to disadvantaged groups or the poorest in the community.

5. Community monitoring of disadvantaged groups

DNV GL is able to confirm that the information provided in the CCBS PDD is complete and accurate. Two different of means will be used in order to monitor this:

- PRA conducted every 2 years which include a wealth ranking and focus groups.
- Annual gender assessments.

This information will be employed in order to identify positive and negative impacts in poorest HH/individuals and disadvantaged groups.

GL3 – Exceptional Biodiversity Benefits

1. Demonstration of high biodiversity conservation priority through the vulnerability criterion

DNV GL is able to confirm that the information provided in the CCBS PDD is complete and accurate.

DNV GL confirmed through interviews /44//47//50/ and through literature review /12/ that at least 30 individuals of the following Vulnerable (VU) species according to the IUCN red list (http://www.iucnredlist.org/search) are present in each of the three protected areas:

- *Hippopotamus amphibius* - Vulnerable A4cd ver 3.1
- *Loxodonta Africana* - Vulnerable A2a ver 3.1
- *Panthera leo* - Vulnerable A2abcd ver 3.1

Hence, the Project would comply with the vulnerability criterion set by GL3.

2. Demonstration of high biodiversity conservation priority through the irreplaceability criterion

Not argued.

4 CCB VALIDATION CONCLUSION

Det Norske Veritas (U.S.A.) Inc. Climate Change & Environmental Services (DNV GL) has performed a validation of the project activity " Kulera Landscape REDD+ Project for Co-Managed Protected Areas, Malawi*" in Malawi on the basis of criteria defined by the Climate Community and Biodiversity Standard (CCBS) second edition and the VCS methodology 'Carbon Accounting for Mosaic and Landscape-scale REDD Projects', Version 2.0 as well as criteria for consistent project operations, monitoring and reporting.*

The project proponents are: the Department of National Parks and Wildlife (DNPW), on behalf of the Government of Malawi; the Nyika-Vwaza Association (NVA); the Nkhotakota Wildlife Reserve Association (NAWIRA); and Terra Global Capital (TGC). DNV GL has confirmed that the project proponents have the right to all and any reductions generated by the Project.

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

The project correctly applies the approved VCS methodology element VCS methodology 'Carbon Accounting for Mosaic and Landscape-scale REDD Projects', Version 2.0 for the quantification of GHG emissions reductions and monitoring of leakage.

The " Kulera Landscape REDD+ Project for Co-Managed Protected Areas, Malawi*", has an overall objective of the activity is to contribute to mitigating climate change and contributing to sustainable environmental management, community development and poverty alleviation in Malawi.*

Adequate training and monitoring procedures have been implemented to monitor how climate, community, and biodiversity are affected by the project activities.

In summary, it is DNV GL 's opinion that the " Kulera Landscape REDD+ Project for Co-Managed Protected Areas, Malawi*" in Malawi as described in the CCBA PDD Version* 11.0 *of* April 2014*, meets all relevant CCBS requirements.*

CCBS Compliance Checklist – Kulera Landscape REDD+ Project for Co-Managed Protected Areas, Malawi

General Section			***Conformance***		
G1.	Original Conditions in the Project Area (Required)	Yes	☒	No	☐
G2.	Baseline Projects (Required)	Yes	☒	No	☐
G3.	Project Design and Goals (Required)	Yes	☒	No	☐
G4.	Management Capacity and Best Practices (Required)	Yes	☒	No	☐
G5.	Legal Status and Property Rights (Required)	Yes	☒	No	☐

Climate Section					
CL1.	Net Positive Climate Impacts (Required)	Yes	☒	No	☐
CL2.	Offsite Climate Impacts ("Leakage") (Required)	Yes	☒	No	☐
CL3.	Climate Impact Monitoring (Required)	Yes	☒	No	☐

Community Section					
CM1.	Net Positive Community Impacts (Required)	Yes	☒	No	☐
CM2.	Offsite Community Impacts (Required)	Yes	☒	No	☐
CM3.	Community Impact Monitoring (Required)	Yes	☒	No	☐

Biodiversity Section					
B1.	Net Positive Biodiversity Impacts (Required)	Yes	☒	No	☐
B2.	Offsite Biodiversity Impacts (Required)	Yes	☒	No	☐
B3.	Biodiversity Impact Monitoring (Required)	Yes	☒	No	☐

Gold Section					
GL1.	Climate Change Adaptation Benefits (Optional)	Yes	☒	No	☐
GL2.	Exceptional Community Benefits (Optional)	Yes	☒	No	☐
CL 3.	Exceptional Biodiversity Benefits (Optional)	Yes	☒	No	☐

CCBA Validation Level Attained:

Approved (all requirements met)	☐
Gold (all requirements and also at least one optional Gold Level criterion met)	☒

APPENDIX A

CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS

Table Resolution of Corrective Action and Clarification Requests

CAR ID	Corrective action request	Response by project proponents	DNV GL 's assessment of response by project proponents
VCS specific			
CAR1	For more details please refer to the VCS validation report Version 01 dated 12 March 2014.		
CCBS specific			
CAR1	**Requirement:** ¶5 of G3 **Evidence**: Section 1.3.2 of CCBS PDD Version 2.0 **Non-Conformity:** The PDD provides a description of the different project activities and their outputs, but it does not provide an identification of social impacts (positive or negative) caused by such activities/outputs. Note: In order to facilitate in a later stage the validation of the indicators of the monitoring plan (i.e. instead of monitoring directly the impacts, outputs and outcomes are monitored as a proxy), the project proponent should describe the social change that such activities cause in turn how such social change induces long-term impacts either positive or negative.	A table has been added to the CCB PD 1.3.2 which provides a mapping of the Climate, Community and Biodiversity impact benefits, and which of the Project activities will produce these benefits either directly or indirectly through the activities. Additionally, details have been added to Section 3.1. and 3.3 to show how the baseline was set for community impact monitoring and to provide an overview the on-going monitoring data for tracking of community benefits.	The PDD provides in section 1.3.2 (c.f. Table 9) and indication of the Direct/Indirect benefit that each project activity will have over defined indicators which refer to impacts or outputs/outcomes of defined project activities. DNV GL conducted an analysis based on the "cause of change theory" and confirmed that considering the conditions of the project zone before the project implementation and the expected projection, it is expected that all activities will have a positive impact on the communities (without considering illegal activities as accepted by the CCBS). Hence, DNV GL deems that the project would generate net positive community impacts. **CAR is closed.**

CAR ID	Corrective action request	Response by project proponents	DNV GL ’s assessment of response by project proponents
CAR2	**Requirement:** ¶1 of CM1 **Evidence**: Section 3.1 of CCBS PDD Version 2.0 **Non-Conformity:** The PDD provides a description of the HH Survey and PRA conducted, and a general overview of the intermediate results (outcomes). However: a) It does not provide an estimate of impacts (positive and negative) as required by the CCBS; b) It does not provide a clear explanation on how those impacts will generate a positive benefit to the community (i.e. without-project scenario vs. project scenario; c) It does not explain how the results of the HH Survey and the PRA were used to estimate the community impacts. d) The results of the baseline survey have not been provided in the CCBS PDD in order to give a clear picture of the conditions before the implementation of the project.	a) The CCB PD has been made clearer - it now provides specific detail on which indicators will be used to measure community impacts. These details are provided in Section 3.1.1. b) Information was added in Section 1.3.2 to show how each of the Project actions is expected to have a direct or indirect impact on each major variable that is used to produce climate, community and biodiversity benefits. The baseline values for these variables are summarized in each section, and the details of the baseline without project scenario were added to 3.3.1 for Community and 4.3.1 for biodiversity. Section 3.1.1 shows exactly which indicators of community benefit are monitored. There is no requirement to ex-ante predict the impact, but to show that a baseline is established and which variables will be monitored to show improvements over the baseline values. c) See additional information added to Section 3.1.1 and 3.3.1 on how the PRAs and HH are used to collect data that will demonstrate community impacts. Also see the supporting files that are provided on Terralytics. d) The baseline values for the data collected through HH, PRAs and biodiversity have been provided. The HH and PRA are on Terralytics, the size of the biodiversity baseline report may be found on this link FINALFINALKULERA BIODIVERSITYPROJECTBIOPHYSICAL	The Project communities will be involved in an annual participatory monitoring exercise to assess the extent to which Project activities are achieving the community and Project goals. DNV GL confirmed that monitoring will be done through 3 different means: • HH Surveys: A survey will be conducted in various households as required by VM0006 Version 2.0 in order to obtain information related to drivers of deforestation and agent mobility. This information will serve for comparison with the baseline survey conducted in order to conclude whether positive benefits to the community can be demonstrated. • PRA: The PRA discussions focused on the natural resource management, livelihoods, HVC identification, wealth ranking, etc. /9/. This information will serve for comparison with the baseline survey conducted in order to conclude whether positive benefits to the community can be demonstrated. • PMP with Community Impact Project Level Indicators: PMP indicators were identified by TLC and USAID as part of the first phase of the project. Monitoring of these indicators will be continued and will serve to confirm net community benefits. DNV GL was able to confirm that social data to be gathered is clearly defined and is regarded as very

CAR ID	Corrective action request	Response by project proponents	DNV GL ’s assessment of response by project proponents
		INVENTORYVOLUMEI.docx: https://files.terraglobalcapital.com:5001/fbsharing/bo37JJL3	useful for management purposes and for other in-depth analysis. Furthermore, the methods to gather it follow best practices /35/. Since baseline surveys have been conducted and since some data provides already net benefits, it will be possible to confirm that the project is delivering net community benefits. The intention of the project proponent was to conduct a full PRA at every verification in order to demonstrate benefits through the results, not through specific indicators. According to applicable guidance and best practices /35//36/, a short list of SMART and relevant indicators is desirable in order to show in a simple and transparent manner how the community impacts are monitored and demonstrate that the project is achieving net community benefits. Richards (2011) /35//36/ or Schreckenberg et al. (2010) /37/ provides a list of methods that could be employed for defining key indicators, the latter related to protected areas. The project proponent is requested to define a list of community-related indicators at the time of the second verification (c.f. FAR3). **CAR is closed.**

CL ID	Clarification request	Response by project proponents	DNV GL ’s assessment of response by project proponents
CL1	**Requirement:** ¶10 of G3 **Evidence**: Site visit **Clarification:**	Section 1.3.10 of the CCB PD was updated to explicitly clarify that the process for addressing conflicts and	The PDD provides a clear description of the procedure in place for handling unresolved conflicts and grievances which relies mainly on

CL ID	Clarification request	Response by project proponents	DNV GL 's assessment of response by project proponents
	During the site visit it was confirmed the existence of conflicts between the local communities and DNPW caused by wild animals leaving the protected areas and causing disturbances in neighbouring villages. During the site visit it was confirmed that the process followed by the local communities to complaint has been: a) the village chief is informed of the issue; b) the village chief informs DNPW extension office; c) the extension officer informs DNPW's management team in charge of the protected area. This process differs from the described process for handling disputes and grievances provided in the CCBS PD. Clarification is sought in the CCBS PD on what is the process for handling these type of disputes which are do not occur within the communities but with one of the project proponents.	grievances within communities is the same as the process used to address conflicts and grievances with a Project proponent. A section in the CCB monitoring plan (Section 1.6) was also created to reflect this change and to clearly outline the process for handling conflicts and grievances. Section 1.3.10 of the CCB PD was updated to explicitly clarify that the process for addressing conflicts and grievances within communities is the same as the process used to address conflicts and grievances with a Project Proponent. Section 1.6 was added to the CCB Monitoring Plan to reflect this change and to clearly outline the process for handling conflicts and grievances.	existing traditional institutions. As confirmed during the site visit any conflict will be handled within the local communities by their traditional authorities. Any conflict that may arise beyond the control of the traditional authorities will be taken to the Associations. In the case of conflicts that cannot be resolved at the level of the Association will be mediated by a mutually agreed upon, neutral third party, as stated in the Carbon Agreement signed by the NVA, NAWIRA, the DNPW and Terra /5/. TLC and the DNPW will attempt to resolve conflicts that are based on the Forestry Laws and the co-management agreements, and will provide a written response to grievances within 30 days (by the next monthly meeting) /2/. During the site visit DNV GL checked whether this procedure was in place and found that in the case of Nkhotakota it is not yet implemented as the Association is about to be established, and in the case of Nyika and Vwaza, the association does not have the necessary resources to fully implement the procedure. However, with the coming of carbon revenues these gaps will be covered and the intention is to implement the procedure. Furthermore, as part of this check, DNV GL identified two cases of conflicts and grievances: • Some conflicts exist between local communities and the DNPW due to the damages caused by wild animals out of the boundaries of the protected areas. During the site visit it was confirmed that the process

CL ID	Clarification request	Response by project proponents	DNV GL ’s assessment of response by project proponents
			followed by the local communities to complain was: a) the village chief is informed of the issue; b) the village chief informs DNPW extension office; c) the extension officer informs DNPW’s management team in charge of the protected area. This would confirm that the procedure described in the CCBS PDD is not yet implemented. • Local communities wanted to increase the period in which they could fish within the protected area of Nyika. A request was made to the DNPW who analysed the case and rejected the proposal giving reasons for this rejection. This would confirm that there is a procedure in place, that the DNPW gave due response to the communities with a justification of the reasons of the rejection, which is in accordance with good practice. However, as confirmed by DNV GL standardisation is required as the procedure is not a written procedure with times of response well defined and local communities are not fully informed of the procedures and timing of response that are in place. In view of the above, in the second verification a clear procedure for handling disputes and grievances between the local communities and DNPW shall be implemented, indicating clearly responsibilities, information flows and timings for responses. Furthermore, all parties must be duly informed of the procedure in place. This should be

CL ID	Clarification request	Response by project proponents	DNV GL 's assessment of response by project proponents
			checked in the second verification (c.f. **FAR1**). **CL is closed.**
CL2	**Requirement:** ¶3 of CM3 **Evidence**: Section 3.3 of CCBS PDD Version 2.0 and CCB Monitoring Plan Version 1.0 **Clarification:** a) According to the CCBS PDD the monitoring methodology "will feature periodic social assessment consisting of household surveys to measure the quantitative impacts on local communities and PRAs to measure the qualitative impacts against the baseline". Furthermore, it is stated that "In addition, TLC has drafted a Performance Monitoring Plan (PMP) and will continually track progress against performance indicators. The next stage in this process will be to fully involve local communities in developing their own articulation of indicators to track community impacts, the results of which will be integrated in the overall monitoring plan". However, the monitoring plan only provides indicators sourced from the PMP. The project proponent is requested to clarify the means of monitoring of community impacts and to clarify this apparent lack of consistency.	a) The CCB PD has been updated to clearly state how each of the different components that are used for monitoring will be used to track each of the Climate, Community and Biodiversity benefits. The PMP indicators are now divided into each of the sections of the CCB to show how each indicator aligns and contributes to monitoring each type of benefit. In addition, detail has been added on to show how the data from the HH and PRAs are used to monitor each type of impact. Also see Annex 1 (PMP) - this shows which indicators contribute to each of the Climate, Community and Biodiversity benefits of the Projects. b) This has been made clearer in the PD, but will have the detail in the CCB Monitoring Plan. For the PRA and HH, the high level indicators that are monitored have been added to make this clear. c) All the indicators monitored are for activities that are supported by the Project in the villages where projects are active. The example provided - MSME loans - is a specific project	DNV GL was able to confirm that social data to be gathered is clearly defined and is regarded as very useful for management purposes and for other in-depth analysis. Furthermore, the methods to gather it follow best practices /35/. Since baseline surveys have been conducted and since some data provides already net benefits, it will be possible to confirm that the project is delivering net community benefits. The intention of the project proponent was to conduct a full PRA at every verification in order to demonstrate benefits through the results, not through specific indicators. According to applicable guidance and best practices /35//36/, a short list of SMART and relevant indicators is desirable in order to show in a simple and transparent manner how the community impacts are monitored and demonstrate that the project is achieving net community benefits. Richards (2011) /35//36/ or Schreckenberg et al. (2010) /37/ provides a list of methods that could be employed for defining key indicators, the latter related to protected areas. The project proponent is requested to define a list of community-related indicators at the time of the second verification (c.f. FAR3). **CL is closed.**

CL ID	Clarification request	Response by project proponents	DNV GL 's assessment of response by project proponents
	b) According to the monitoring plan "data will be collected through community focus group discussions, in-depth interviews, and sample surveys. This annual participatory assessment will be supplemented by field trip reports and the minutes of meetings facilitated by the local NGO support group. Longer term measurement of the impact of the Project on local communities will be gathered through periodic sample surveys conducted with Project families. These surveys will cover a range of issues including income, land tenure, and employment, education, social capital, and resource availability and will be used to quantitatively measure socio-economic changes in the Project communities". However: the defined indicators are monitored through the M&E system implemented by TLC which are not based on sample surveys. Clarification is sought on how the HH surveys or PRAs match with the defined indicators. Note: Please adjust the column "method/approach of data collection" if needed. c) There are some indicators (e.g. Indicator 3.2 Number of MSMEs accessing loans from commercial banks / lending institutions / DCA facility) which might not serve to monitor the project's	activity that is supported by the Project partner CARE and is a direct result of their involvement in the project. To clarify that this is a project activity it was added to the activity 'Developing local enterprises based on sustainably harvested NTFPs such as honey, coffee, macadamia, and livestock.'	

CL ID	Clarification request	Response by project proponents	DNV GL 's assessment of response by project proponents
	performance as they are not project-specific and they might be caused by external factors not related to the project (e.g. market conditions, etc.). The project proponent is requested to clarify how it will ensure that indicators account only for those aspects which have been delivered directly or indirectly by the project.		
CL3	**Requirement:** ¶3 of B3 **Evidence**: Section 4.3 of CCBS PDD Version 2.0 and CCB Monitoring Plan Version 1.0 **Clarification:** a) The CCBS PDD states that "A full biodiversity monitoring plan will be developed by the implementing partner, TLC in collaboration with the DNPW, within 12 months of validation". However, a full biodiversity monitoring plan has been provided. The project proponent is requested to clarify this. b) §4.3.2 of the CCBS PDD lists some indicators that will be monitored that will be tasked to community members. However, these indicators are not provided in the biodiversity monitoring plan. c) The Biodiversity monitoring plan provides four indicators. Three of them have as unit the number of hectares of improved conditions. However, it is not	CL3a: Details regarding the existing biodiversity monitoring plan have been clarified within the CCBS PDD in each appropriate instance, including the removal of any statements regarding the future creation of a full biodiversity monitoring plan by the implementing partner, or similarly contradictory statements. CL3b: Terra requested clarification from the validator regarding the sub-section listed in this clarification request. After confirming the correct source of the information, these indicators were added to the biodiversity monitoring plan CL3c: Rationale reconciling the unit of measure (ha) for three biodiversity indicators (Section 4, Indicators 1.1, 1.3, and 1.4) and their respective parameters was provided in the CCB monitoring plan. CL3d: Baseline information obtained	a) More information on the monitoring plan is provided in the CCBS PD - OK b) The CCBS PD was revised – OK. c) The CCBS PD was revised –OK. d) Baseline information has been provided in the CCBS PD – OK. **CL is closed.**

CL ID	Clarification request	Response by project proponents	DNV GL 's assessment of response by project proponents
	clear how this unit matches with the parameters that will be collected in order to monitor these indicators, e.g. number of poached animals. d) The CCBS PD does not provide the baseline values of the different parameters which will be required to determine changes in the biodiversity condition of the project area.	through the biophysical inventory conducted in 2011 was added for each of four biodiversity indicators and their parameters, as applicable (Section 4.3.1 – Biodiversity Impact Monitoring, CCBS PDD).	

FAR ID	**Forward action request**
FAR1	During the site visit it was confirmed the existence of conflicts between the local communities and DNPW caused by wild animals leaving the protected areas and causing disturbances in neighbouring villages. During the site visit it was confirmed that the process followed by the local communities to complaint has been: a) the village chief is informed of the issue; b) the village chief informs DNPW extension office; c) the extension officer informs DNPW's management team in charge of the protected area. This process differs from the described process for handling disputes and grievances provided in the CCBS PD. Clarification is sought in the CCBS PD on what is the process for handling these type of disputes which are do not occur within the communities but with one of the project proponents.
FAR2	DNV GL confirmed during the site visit that the Public Private Partnership Entity that will handle the revenues from the carbon credits has not been created yet. Confirmation that this entity is in place shall be verified during the second verification Although the PDD provides an adequate description regarding the project management, it is worth noting that the management in the first 4 years will differ significantly from what will be seen onwards. The reason is that with the arrival of carbon revenues a Public Private Partnership Entity will be in place in order to manage the carbon revenues and allocate them to the Associations, the DNPW and other entities for the implementation of the different project activities and the overall functioning of the project. At the time of the project validation and first verification, this entity was not in place and DNV GL validated all G4 based on the management present in the first 4 years of project. A confirmation that the new management is in compliance with G4 will be required as part of

FAR ID	Forward action request
	the second verification.
FAR3	DNV GL was able to confirm that social data to be gathered is clearly defined and is regarded as very useful for management purposes and for other in-depth analysis. Furthermore, the methods to gather it follows best practices /35/. Since baseline surveys have been conducted and since some data provides already net benefits, it will be possible to confirm that the project is delivering net community benefits. The intention of the project proponent was to conduct a full PRA at every verification in order to demonstrate benefits through the results, not through specific indicators. . According to applicable guidance and best practices /35//36/, a short list of SMART and relevant indicators is desirable in order to show in a simple and transparent manner how the community impacts are monitored and demonstrate that the project is achieving net community benefits. Richards (2011) /35//36/ or Schreckenberg et al. (2010) /37/ provides a list of methods that could be employed for defining key indicators, the latter related to protected areas. The project proponent is requested to define a list of community-related indicators at the time of the second verification.
FAR4	During the site visit, it was also confirmed that one way to convey the carbon revenues would be through the Associations, who would analyse and tentatively (depending on resources) finance projects proposed by NRCs (Natural Resource Committees, which are participated by various villages) through the Zones which group various NRCs. During the site visit one of the villages /50/ pointed out that a possible issue of this mechanism is that since projects are proposed by the majority of villages, only projects that would address a need of the majority of villages would be proposed, while those villages with specific problems not shared with the majority of villages would not have the opportunity address their needs. DNV GL understands that resources are always a constraint for reaching all villages, but would like to point out a possible issue with the aforementioned mechanism which could pose a barrier for reaching disadvantaged groups.