

Guidance for the Use of the CCB Standards



About the CCBA

The Climate, Community & Biodiversity Alliance (CCBA) is a partnership of five international nongovernmental organizations: Conservation International, CARE, the Rainforest Alliance, The Nature Conservancy and Wildlife Conservation Society (see www.climate-standards.org). The CCBA's mission is to stimulate and promote land management activities that credibly mitigate global climate change, improve the well-being and reduce the poverty of local communities, and conserve biodiversity.

The CCBA has two initiatives:

- The Climate, Community & Biodiversity (CCB) Standards were launched in 2005 to foster development of, and investment in, site-based projects that deliver credible and significant climate, community and biodiversity benefits in an integrated, sustainable manner.
- The REDD+ Social & Environmental Standards (REDD+ SES) were launched in 2010 to build support for government-led REDD+ programs that make a significant contribution to human rights, poverty alleviation and biodiversity conservation. The development of REDD+ SES was jointly facilitated by CARE and the CCBA.

Both the CCB Standards and the REDD+ SES focus not just on ensuring 'no harm' but also aim to enhance multiple benefits.

Acknowledgements¹

This guidance document for the use of the CCB Standards was developed by the CCBA in collaboration with the Rainforest Alliance. The authors were Priti Narasimhan and Joanna Durbin of the CCBA Secretariat and Jeff Hayward, Ian Starr and Martin Naponen of the Rainforest Alliance, with support for editing and formatting from Gareth Wishart of the CCBA Secretariat, Kassy Holmes of the Rainforest Alliance and Julianne Baroody. Significant inputs and review were provided by Jane Dunlop (Fauna and Flora International), Christy Magerkurth (The Field Museum), Vasco van Roosmalen (Equipe de Conservação da Amazônia), Kebede Regassa (Humbo Community Managed Natural Regeneration Project), Leslie Bolick (Independent Consultant), Tom Evans (Wildlife Conservation Society), Sarah M. Walker (Winrock International), Johannes Ebeling (BioCarbon Macquarie Global Investments) and Camila Donatti, Natasha Calderwood, Yoji Natori and Kame Westerman (Conservation International), Allison Silverman (Center for International Environmental Law) and staff of the Verified Carbon Standard Association.

The development of the guidance document benefited from suggestions and contributions from many people including: Agustin Silvani (Conservation International), Rebecca Dickson (TerraCarbon LLC), Arsema Andargachew, Hulemany Assefa and Lulu Likassa Nefabas (Bale Ecosystem Restoration and Management Project), Geoffrey Onyango (CARE), Caroline Musee and Emmanuel Wachiye (Sustainable Agriculture in a Changing Climate project), Martin Yelibora (Ghana Cocoa Project), Atsu Titiati and Victor Mombu (the Rainforest Alliance), Seretse Sebu Kidanemariam (Government of Ethiopia), Tesfaye Gonfa (Oromia Forest and Wildlife Enterprise), Demess Lemma and Kebede Regassa (Humbo Project), John Mason and Deepali Gohil (Nature Conservation Research Centre), Jenny Henman (Climate Adapt Limited) and Julianne Baroody.

¹ Affiliations are only for reference and may have changed since their contribution to the CCB Standards.

This document should be cited as:

Narasimhan, P., Starr, I., Hayward, J., Nojonen, M. and Durbin, J. (2014). *Guidance for the use of the CCB Standards*. Washington, DC: Climate, Community and Biodiversity Alliance and the Rainforest Alliance.
At: www.climate-standards.org/resources.



Cover photo credits

Left: ©Conservation International/photo by Zo Zatovonirina
Center: ©Conservation International/photo by Bailey Evans
Right: ©Conservation International/photo by Gina Buchanan

This guidance document was created with financial support from:



Contents

Introduction	1
The CCBA and development of the CCB Standards	1
The CCB Standards for Smallholders Initiative	2
This guidance document.....	3
Description of the project	
1. Fundamentals.....	5
2. Physical and Social Conditions	9
3. Spatial Project Boundaries	11
4. Maps	16
5. Without-Project Land Use Scenario and Additionality	22
6. Programmatic Approach.....	27
Multiple benefits including no harm	
7. Climate Benefits	33
8. Climate Gold Level: Positive Climate Change Adaptation Benefits	44
9. Community Benefits.....	47
10. Community Gold: Smallholder-/Community-Led or Pro-Poor Projects.....	65
11. Biodiversity Benefits	80
12. Biodiversity Gold: Conservation of Globally Significant Biodiversity.....	89
13. Stakeholder Engagement and Free, Prior and Informed Consent.....	97
14. Risk Management	108
Capacity to implement	
15. Financial Health of the Implementing Organization(s).....	111
References	114
Index	119

List of Boxes

1. Fundamentals

- Box 1: Key guidance materials for using the CCB Standards, p. 3
Box 2: Key aspects of CCB Standards Third Edition, p. 4
Box 3: Linkages between objectives, p. 5
Box 4: Project results chain underlying the theory of change approach, p. 6
Box 5: Basic steps to develop a theory of change, p. 8

2. Physical and social conditions

3. Spatial project boundaries

- Box 6: Different spatial scenarios for Project Area and Project Zone, p. 11
Box 7: Examples of Project Area and Project Zone (Kasigau Corridor REDD, Kenya; Nakauvadra Community Based Reforestation Project, Fiji), p. 12

4. Maps

- Box 8: List of indicators where maps are required or may be helpful, p. 16
Box 9: Example of a spatial boundaries map employing best practices, p. 18
Box 10: Map making tip, p. 19

5. Without-project land use scenario and additionality

- Box 11: Establishing estimated project impacts, p. 22
Box 12: Necessary information for describing the most likely without-project land use scenario, p. 24

6. Programmatic approach

- Box 13: Conducting a biodiversity and Community impact analysis for a project using a programmatic approach, p. 29
Box 14: Comparing eligibility criteria for programmatic approaches in CCB Standards and VCS, p. 30
Box 15: Scale-related negative impacts on biodiversity in a programmatic approach, p. 31

7. Net climate benefits

- Box 16: Definition of 'Defensible' methodological approach, p. 34
Box 17: Options for demonstrating compliance with the Climate requirements of the CCB Standards Third Edition, p. 35
Box 18: Using an Approved methodological approach without validation or verification to the Recognized GHG Program (Return to Forest, Nicaragua), p. 37
Box 19: Using a Defensible methodological approach, p. 40
Box 20: Key references for developing a Defensible methodological approach, p. 43

8. Climate Gold Level: positive climate change adaptation benefits

9. Community benefits

- Box 21: Types of impacts land-based projects may have with respect to community well-being, p. 48
Box 22: Stakeholders to be identified, p. 49
Box 23: Identifying community groups and other stakeholders (Kikonda Forestry Project, Uganda), p. 52

Box 24: Adapted 'Attacking Poverty' framework for characterizing improvements in well-being in REDD+, p. 53

Box 25: Examples of direct and indirect impacts (Trees for Global Benefit, Uganda), p. 56

Box 26: Basic Necessities Survey – a locally defined assessment of well-being, p. 58

Box 27: Example of a monitoring plan: Cordillera Azul National Park REDD Project, p. 59

Box 28: List of ecosystem services with definitions and examples, p. 62

Box 29: Useful resources for community benefits, p. 64

10. Community Gold: smallholder- or community-led OR pro-poor projects

Box 30: Using the 'Attacking Poverty' framework to address human well-being benefits for Community Gold, p. 67

Box 31: Short-term income losses in climate smart agriculture (Humbo Community Management Natural Regeneration Project, Ethiopia), p. 69

Box 32: Self-governance arrangements that promote active involvement (Suruí Forest Carbon Project, Brazil), p. 71

Box 33: Community-led active involvement (Community Forest Program, Nepal), p. 72

Box 34: A model for democratic governance and equitable benefit sharing, p. 74

Box 35: Steps to addressing gender in a land-based carbon project, p. 75

Box 36: Gender inclusion and planting of 'women trees' (Sustainable Agriculture in a Changing Climate Project, Kenya), p. 77

Box 37: Facilitating access to finance for smallholder projects, p. 78

11. Biodiversity benefits

Box 38: Potential negative/positive impacts on biodiversity by project type, p. 81

Box 39: Using a causal model to demonstrate the relationship between project activities, objectives and biodiversity benefits (Alto Mayo Conservation Initiative, Peru), p. 83

Box 40: How ten projects using the CCB projects identified and addressed negative impacts to biodiversity, p. 88

12. Biodiversity Gold: conservation of globally significant biodiversity

Box 41: Identification of Key Biodiversity Areas, p. 90

Box 42: The Convention on Biological Diversity's treatment of potential biodiversity-related adverse impacts of REDD+ projects, p. 93

Box 43: How projects using CCB Standards can contribute to the Aichi targets, p. 94

Box 44: Forest management to restore rare species (Conservation of Endangered Tree Species in the Apennines, Italy), p. 95

Box 45: Conserving a trigger species: differences in the Biodiversity Gold Level between the CCB Standards Second and Third Editions (Mai Ndombe REDD Project, Democratic Republic of Congo), p. 96

13. Stakeholder engagement and Free, Prior and Informed Consent

Box 46: Key components of full and effective participation, p. 97

Box 47: Phases of stakeholder engagement in land-based carbon projects with appropriate considerations for each phase, p. 98

Box 48: Definition of 'gender sensitive', p. 102

Box 49: Stakeholder engagement strategies that vary between Community Groups and Other Stakeholders (Cordillera Azul National Park REDD Project, Peru), p. 104

Box 50: Definition of customary rights, p. 105

Box 51: Content of a consent agreement, p. 107

14. Risk management

Box 52: Risks related to unresolved conflict or disputes to lands, territories and resources, p. 110

15. Financial health of the implementing organization(s)

Box 53: Metrics for financial health, p. 113

Introduction

Since their release in 2005, the Climate, Community & Biodiversity (CCB) Standards have fostered the development and marketing of land-based carbon projects that deliver credible and significant climate, community and biodiversity benefits in an integrated, sustainable manner. Projects that meet the Standards adopt best practices to deliver net positive benefits for climate change mitigation, for local communities and for biodiversity. The CCB Standards Third Edition was released in December 2013. This document provides guidance for the use of the CCB Standards Third Edition, providing explanations of key concepts and requirements that will be helpful for project proponents, auditors and any users of the CCB Standards.

The CCBA and development of the CCB Standards

The Climate, Community & Biodiversity Alliance (CCBA) is a partnership of five international non-governmental organizations: Conservation International, CARE, the Rainforest Alliance, The Nature Conservancy and Wildlife Conservation Society (see www.climate-standards.org). The CCBA's mission is to stimulate and promote land management activities that credibly mitigate global climate change, improve the well-being and reduce the poverty of local communities, and conserve biodiversity.

The First Edition of the CCB Standards was released by the CCBA in May 2005 after a rigorous two-year development process based on input from community and environmental groups, companies, academics, project developers and others with expert knowledge of - or affected by - the standards. The standards were then revised in 2008 based on feedback from a wide range of similar users of the standards, including representatives of local communities and indigenous peoples, and government agencies, leading to the release of the Second Edition of the CCB Standards in December 2008.

The **CCB Standards Third Edition** was released in December 2013 together with a revised version of the Rules for the Use of the CCB Standards, after a year-long participatory and transparent process including two 60-day public comment periods and the support of a CCB Standards Committee representing a balance of people potentially affected by the standards or with relevant expert knowledge. The objectives of the revision were:

- To incorporate substantial feedback received from current users and others to ensure that the CCB Standards remain robust, practical and continue to meet the demands of users, and also
- To facilitate the access of smallholder and community-led projects to carbon finance.

The main changes made in the Third Edition were:

- In order to reduce repetition and redundancy and to increase the ease of use of the standards, all criteria were reorganized and grouped within the relevant Climate, Community and Biodiversity sections.
- In the reorganization of the General section, greater emphasis was given to stakeholder engagement, now covered by a dedicated criterion.
- Gender was given greater attention by explicitly requiring women, or sub-groups of women, to be identified as a Community Group that must benefit from the project where they derive different income, livelihood and cultural values from the project area from other community members.

- Changes were made which allow the Climate section of the Standards to be waived for projects that meet the requirements of a Recognized Greenhouse Gas (GHG) Program. The procedures, criteria and processes required for deeming programs as ‘recognized’ are defined in the revised Rules for the Use of the CCB Standards, 2013. A list of GHG Programs recognized by the CCBA is also published on the CCBA website. The Climate section of the Standards is only to be used to demonstrate a project’s net positive climate benefits and not for claiming GHG emissions reductions and removal units that may be used as offsets.
- In order to clarify, strengthen and address gaps in existing indicators, modifications were made and additional, new indicators were also included throughout the Standards.

To learn more about the CCB Standards revision process, visit the CCBA website at www.climate-standards.org.

The CCB Standards for Smallholders Initiative

The second objective of the revision sought to support smallholder- and community-led projects which have significant potential to provide multiple climate and development benefits, but face a series of challenges. Smallholder- and community-led land-based carbon projects are those on lands owned individually by smallholders, or collectively by communities, or where smallholders and/or communities have recognized management rights, and where they are actively involved in design and implementation of project activities. The CCBA led the initiative to support and increase access to finance for such projects from April 2012 to March 2014, in partnership with the Nature Conservation Research Centre (NCRC) Ghana and the Rainforest Alliance. This initiative was supported by the Rockefeller Foundation.

The main changes in the Third Edition to facilitate the access of smallholder- and community-led projects to carbon finance are:

- **Smallholder- and community-led projects have an opportunity to showcase their projects through the new Community Gold Level.** These projects have to demonstrate equitable benefit sharing both with and among the Smallholders/Community Members by ensuring that benefits flow to women and other marginalized and vulnerable groups. These projects also need to develop the capacity of Smallholders/Community Members to participate actively in decision making, implementation and eventually in management of the project.
- **Use of programmatic approaches has been enabled which allow new land areas into the project after initial validation has taken place, subject to meeting certain eligibility criteria.** This helps reduce transaction costs, especially for smallholder-led projects that need to aggregate smallholder land parcels at scale, but are likely to start small and expand over time.
- **Improved use of simple and direct language** that is easy to understand throughout the Standards.

This guidance document

This document provides guidance for the use of the CCB Standards Third Edition, providing explanations of key concepts and requirements that will be helpful for project proponents, auditors and any users of the CCB Standards. In particular, this guidance aims to cover aspects relevant to smallholder- and community-led projects. This guidance document does not form part of the CCB Standards Third Edition nor does it contain new requirements. The interpretation of the CCB Standards Third Edition should, however, be consistent with the guidance set out in this document.

Other guidance on the use of the CCB Standards already exists, and this guidance document is intended to be complementary and used in tandem with such guidance (see Box 1).

Box 1: Key guidance materials for using the CCB Standards

The following guidance documents can be accessed at www.climate-standards.org/resources.

1. **CCB Standards Third Edition Footnotes and Glossary:** The footnotes throughout the Standards and the glossary included at the end of the standards provide a lot of information and explanations to help Project Proponents to interpret and understand the requirements of the standards. The terms used in this document are defined in the glossary of the CCB Standards.
2. **Social and Biodiversity Impact Assessment Manual for REDD+ Projects:** This document was developed by the CCBA, Forest Trends, Fauna & Flora International and the Rainforest Alliance to walk Project Proponents through a participatory process for the identification and application of appropriate methodologies for demonstrating social and biodiversity benefits, based on development of a causal model that articulates the project's unique theory of change. It consists of three parts: Part 1, Core Guidance for Project Proponents (Richards & Panfil, 2011), Part 2, Social Impact Assessment Toolbox (Richards, 2011), and Part 3 – Biodiversity Impact Assessment Toolbox (Pitman, 2011).
3. **Tools & Resources to Assist with Use of CCB Standards:** This is a list of references and suggestions from the CCBA which may help Project Proponents to design and implement projects that are in conformance with the requirements of the CCB Standards. Not all of these references are relevant to all projects, and it is the responsibility of the Project Proponent to consult these or other resources as needed to satisfy criteria of the standards.
4. **CCB Standards Second Edition Training Materials:** These are training modules developed by the Rainforest Alliance in collaboration with the CCBA that provide in-depth guidance on each of the major criteria and indicators of the Standards.

The organization of the guidance document is based on key issues in the CCB Standards and does not necessarily follow the order of the criteria and indicators in the standards. The objective is to provide a holistic understanding of how concepts and issues fit into the overall framework for the intent of the standards. The key aspects of the standards were characterized as: 1) description of the project, 2) delivering multiple benefits, including ensuring no harm, and, 3) ensuring that there is sufficient capacity on the part of the Project Proponent to implement the project. Indicators relevant to these broad categories that require description and justification – and thus good practice guidance in order to help lay the foundation for a successful project - are listed in Box 2.

Box 2: Key aspects of CCB Standards Third Edition and This Guidance Document

KEY ASPECT	SECTIONS OF THE GUIDANCE DOCUMENT	CCB STANDARDS CRITERIA/INDICATORS
Description	1. Fundamentals	G1.2 and G1.8
	2. Physical and social conditions	G1.3
	3. Spatial boundaries	G1.4
	4. Maps	G1.7 and G5.1
	5. Without-project land use scenario and additionality	G2
	6. Programmatic approach	G1.13-15
Multiple benefits, including no harm	7. Climate benefits	CL1-4
	8. Climate Gold	GL1
	9. Community benefits	CM1-4
	10. Community Gold	GL2
	11. Biodiversity benefits	B1-4
	12. Biodiversity Gold	GL3
	13. Stakeholder engagement and Free, Prior and Informed Consent	G3 and G5.2-3
	14. Risk management	G10-11
Capacity to implement	15. Financial health of the implementing organization(s)	G4.3

This document presents frequently asked questions with corresponding answers. It consists of clarifications on key concepts and advice on interpretation of requirements in the CCB Standards Third Edition. The explanations include simple clarifications and explanations, detailed notes and descriptions, tables, diagrams, pictures, tools, templates, reference papers and other documents. Examples have been used throughout the document that are, in some instances, theoretical and in others, from real project cases.

1. FUNDAMENTALS

Good practice in project design is founded upon clear objectives and defensible assumptions. This section will help you understand the requirements in the CCB Standards related to project objectives (as required by indicator G1.2 of the CCB Standards Third Edition) and using a theory of change approach (G1.8), which are basic, fundamental aspects of effective project design and implementation.

1.1 What are the underlying, fundamental aspects of any project?

The ‘what’ and the ‘how’ are the two fundamental issues related to the design and implementation of any project. These are:

- Project Objectives: **What** does the project seek to accomplish and what are the desired outputs, outcomes and impacts (G1.2)?
- Theory of change: **How** will the project activities and accomplishments achieve its stated objectives (G1.8)?

1.2 What are the requirements in the CCB Standards related to project objectives?

The climate, community and biodiversity objectives must be clearly articulated in terms of the results that the project activities aim to achieve or generate. The objectives of the project must be based on a solid understanding of the situation in the Project Zone (see section 3 of this document for details on the Project Zone) at the start of the project (G1.3, G1.6-7, CL1.1, CM1.1-2, B1.1-2) and of the most likely land use scenario in the Project Zone in the absence of the project (G2). The project’s objectives must also be based on the main social and biodiversity problems or threats facing the project, that are sometimes referred to as ‘focal issues’ (see Box 3). For more details on the identification of focal issues, see the SBIA Manual Part 1 (Richards & Panfil, 2011, p. 24).

The objectives or results of a project are comprised of its target or actual outputs, outcomes and impacts (see question 1.3 on theory of change).

The CCB Standards require that climate, community and biodiversity objectives be specific, measurable and distinct (G1.2 footnote).

- Specific and measurable community or biodiversity objectives make it possible to easily identify indicators, which are used for monitoring and evaluation purposes and for measuring progress towards corresponding objectives. The SBIA Manual Part 1 provides further guidance information on this topic in section 5 (Richards & Panfil, 2011, p. 31). It is critical to effectively identify appropriate indicators, i.e., those that the project can effectively monitor and which accurately reflect the project’s objectives.

Box 3: Linkages between objectives

The success of most land-based carbon projects depends on getting the social and community aspects of the project right. Community and climate objectives in such projects are often strongly linked.

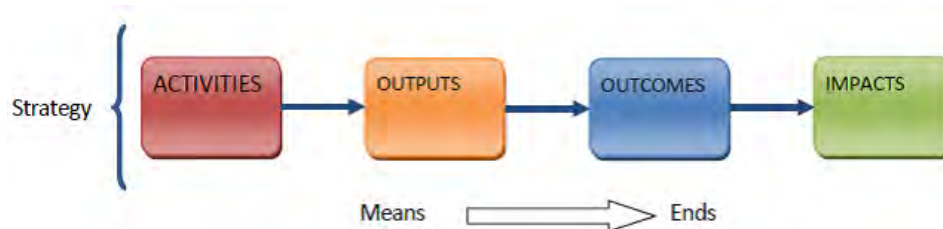
- The requirement for distinct objectives means that the project should, at minimum, set separate objectives that explicitly conserve biodiversity, improve community well-being and reduce or remove GHG emissions. It is not adequate to have a sweeping general objective with expectations that climate, community, and biodiversity objectives materialize by virtue of being a positive externality from activities associated with some other objective of the project, or from other external factors. For example, in forest carbon projects such as avoided deforestation and afforestation/reforestation projects, it is not enough for projects to claim biodiversity outcomes simply based on carbon stock conservation or enhancement (the biodiversity outcomes that would result from habitat conservation). A biodiversity conservation objective requires 1) an understanding of the threats related to *specific aspects of biodiversity* that would be degraded under the without-project scenario and, 2) actions that are tailored to address these threats. In cases where habitat destruction is the primary threat against a specific aspect of biodiversity, the actions for biodiversity conservation may be the same as for the climate objectives.

It is recommended that objectives should be few in number, so that the associated indicators are fewer, which should lead to more efficient (and effective) project monitoring. In addition, it is good practice to use a participatory approach for objective setting, especially for objectives related to community well-being. The SBIA Manual Part 1, which recommends developing four to six objectives, provides more information on this topic (Richards & Panfil, 2011, p. 31-36).

1.3 What are the requirements in the CCB Standards relating to the theory of change of the project activities?

A theory of change is a hypothesis about how the project activities will enable realization of certain objectives, including the social and biodiversity benefits. The theory of change, or causal model, is composed of one or more results chains that track causal relationships over time between short-term project *activities* and *outputs*, short- to medium-term *outcomes* and longer-term *impacts* (Box 4). Therefore, the project activities and outputs can be considered as the means of achieving the project ends – positive climate, community and biodiversity outcomes and impacts.

Box 4: Project Results Chain Underlying the Theory of Change Approach



Source: GEF Evaluation Office and Conservation Development Center (2009).

Some key points about a theory of change are:

- The causal model (theory of change) may be in the form of a narrative or a flow chart that describes the results chain.
- The theory of change will consist of multiple results chains for the various objectives of the project. *At a minimum there should be three results chains, one each for the climate, community and biodiversity objectives*, although there may be additional results chains when the project uses the Gold Level. For example, a results chain will need to be constructed for delivering benefits to women and marginalized and vulnerable groups to meet the Community Gold Level.
- The *assumptions* that underpin the theory of change *should be clearly identified and well substantiated*.
- The theory of change *should be based on the same analysis of drivers and actors of land use or land-use change used for the without-project scenario* described in G2, CL1, CM1 and B1.

A participatory approach that includes the involvement of local communities and other relevant stakeholders is recommended when developing a theory of change.

Box 5 gives some basic steps for elaborating a theory of change. For further guidance on developing a theory of change, as well as information on the use of a participatory approach and examples of theories of change developed for REDD+ projects, see the SBIA Manual Part 1, stage 3 (Richards & Panfil, 2011, p. 31-36).

Box 5: Basic steps to develop a theory of change

According to the Conservation Measures Partnership (2013), the following steps are recommended in developing a theory of change:

Step 1: Develop the long-term objectives of the project: Long-term objectives or impacts are sometimes referred to as goals. As a first step, it is important for the Project Proponents to determine what they would like to accomplish as a result of the project. This involves developing objectives or goals as statements that contain targets and are impact-oriented, measurable, time-limited, and specific.

Step 2: Setting short-term objectives and identifying corresponding activities: Next, the Project Proponent needs to determine the short-term objectives (outputs) and the corresponding activities that are to be carried out in order to meet the medium-term outcomes and long-term impacts. The activities are the strategies that are developed and implemented in order to meet the objectives of the project.

Step 3: Clarifying assumptions: This step involves making explicit the assumptions that show how the strategies that have been selected will result in achievement of the project's objectives (outputs, outcomes and finally the impact). The assumptions will need to be well substantiated and based on research, experience, etc. The same assumptions used in the analysis of the without-project scenario described in G2, CL1, CM1 and B1, should be used here.

Step 4: Developing the theory of change or results chain: Finally, a results chain may be developed as "IF...THEN" statements. These statements trace the causal chains from project strategies or activities to short-term outputs, from outputs to outcomes, and from outcomes to impacts. This cause-and-effect logic makes sense in forward and in reverse. Points along the results chain where assumptions are weak also need to be identified and must indicate the potential risks in the project.

Source: Conservation Measures Partnership (2013)

2. PHYSICAL AND SOCIAL CONDITIONS

Describing the conditions in the Project Zone, particularly the physical and social parameters (G1.3), is important in order to provide a general understanding of local circumstances. This section will help Project Proponents identify what data and information are necessary and relevant for this description and how much information to include.

2.1 What are the conditions that need to be described for the project overview (G1.3)?

There are two categories of parameters that need to be described for the project overview, the physical and the social. These are listed in the CCB Standards as:

- Physical: soil, topography, climate temperature ranges and precipitation, types of vegetation, forest type, etc.
- Social: main settlements and land use, economic activities, ethnic groups, migration, etc.

2.2 Why is description of physical and social features so important in project design and a requirement to meet the CCB Standards?

For land-based climate projects, it is quite reasonable to expect a solid description of the biological, ecological, geographical, hydrological, climatic, and sociological conditions. After all, these underpin the range of possible net positive benefits, whether related to carbon sequestration, enhanced species or habitat conservation, or improved livelihoods. A sufficiently complete description of the land use, vegetation, soils, rivers and their interplay with human culture, villages, towns, farming, forestry or other economic activities is essential to explaining the assumptions, objectives, and goals of a project.

The rationale defending a without-project scenario, arguments of additionality, drivers of land use, the historical and initial situations, as well as the risks that might confront a project, are all closely tied to the physical and social conditions or resources in the Project Zone.

2.3 What type of physical and social information and data are most useful and necessary for the project overview?

First of all, the main parameters must be supported by data and information, which may be both qualitative and quantitative and can be shared in written or map form. *The 'physical parameters' that are most important to the majority of land-based projects are:*

- **climate** (including temperature, rainfall and seasonality)
- **hydrology** (rivers, streams, wetlands, other watercourses, or sites that provide or protect water resources)
- **soils** (mineral, organic, arable, upland, etc.)

- **topography** (slope, aspect, and geological features, etc.)

The 'social parameters' that are most important to land-based projects using the CCB Standards are:

- **main settlements** (towns, villages, or household clusters where Communities reside)
- **land use and economic activities** (farming and pastoral practices or culture, areas of use for collection, fishing or hunting, managed and conservation lands, etc.)
- **socio-cultural information** (ethnicity, gender, age, household income, land ownership, education, health statistics, migration patterns, etc.)

These are expected to give a reasonably accurate portrayal of socio-economic conditions for Communities from a historical perspective and from the start of the project. Note that much more detailed information about Communities at the start of the project and significant community changes in the past is required for the without-project community scenario (CM1.1). The information required for the project overview (G1.3) should provide a summary of local conditions to underpin the overall project design.

2.4 What quality of data are needed to describe these parameters?

The information presented should be *complete* and *defensible*. It must *evidence actual situations in the Project Area and Project Zone* and *withstand assessment by auditors*. Projects are challenged with balancing breadth and depth of data, aiming for clarity and cost effectiveness. It is not possible to say how much information must be described or how exhaustive biological or socio-economic inventories must be. However, some recommended tips for projects to consider in terms of data collection are:

- The information must be consistent in the way that it is represented qualitatively, quantitatively, and in maps.
- Data that comes from scientific studies or reports or analysis not generated by the project should be from credible sources, properly cited, and these sources should be made available to auditors.
- The socio-economic information should be gathered using participatory processes and a mix of qualitative and quantitative data or official statistics, which can be readily accessed or transparently assessed.
- Socio-economic information should be broken down by different Community Groups or sub-groups.

3. SPATIAL PROJECT BOUNDARIES

The boundaries of the project must be identified accurately. Spatial boundaries serve as reference areas to demonstrate the net climate, community and biodiversity benefits and are utilized for other indicators within the CCB Standards. This section of the guidance document will help you understand how to identify the different spatial boundaries for G1.4 that must be defined for a project in order to successfully meet the requirements of the CCB Standards.

3.1 What are the spatial boundaries that need to be defined for the project?

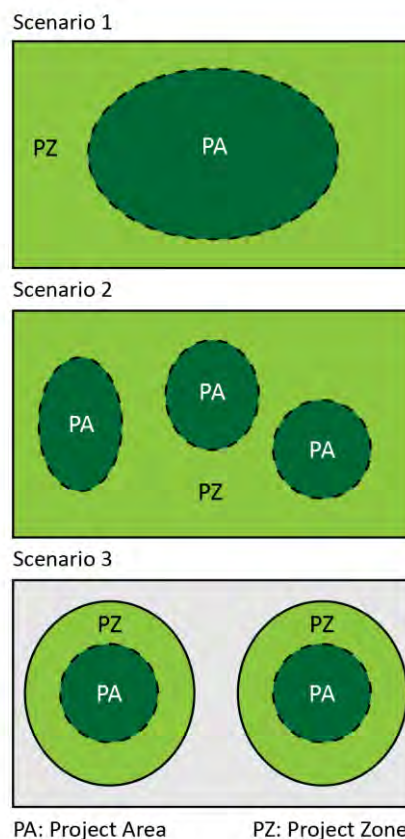
Two separate and distinct spatial boundaries need to be defined for projects to achieve validation to the CCB Standards Third Edition (G1.7):

- **Project Area:** The Project Area is defined as the “area where project activities aim to generate net climate benefits”. The Project Area may be comprised of a single parcel of land (Box 6, Scenario 1) or of multiple land parcels (e.g. Box 6, Scenarios 2 and 3).
- **Project Zone:** The Project Zone is a supplementary area where additional project activities (such as alternative livelihood activities and community development) may be undertaken outside the Project Area. The Project Zone is defined as “the area encompassing the Project Area in which project activities that directly affect land and associated resources, including activities such as those related to provision of alternative livelihoods and community development, are implemented.”

In cases where the Project Area comprises multiple land parcels, the Project Zone may either be a single area uniting all the individual Project Areas (Scenario 2) or there could be multiple Project Zones that are associated with different Project Areas (Scenario 3). Alternatively, the Project Zone may be the same as the Project Area if no additional areas are affected by project activities.

Most projects seek to deflect pressure from the Project Area by implementing activities within an adjacent area. This could include improved agricultural techniques around the Project Area to boost productivity and reduce the pressure of agricultural expansion into the Project Area, or removing, relocating or substituting cattle in the Project Area to allow the Project Area to recover for carbon sequestration. In

Box 6: Different spatial scenarios for Project Area and Project Zone



these cases, the Project Zone should be delimited around the spatial areas where these project activities are likely to have a direct impact on land and associated natural resources.

Note that when using a programmatic approach, the Project Zone must also include all potential Project Areas (i.e. all potential new land areas into which project expansion may take place and in which the project may implement project activities that aim to generate net climate benefits in the future, subsequent to project validation, subject to meeting established eligibility criteria. For further details, see section 6 on the programmatic approach.

Box 7 presents examples of Project Area and Project Zone as defined by actual carbon projects.

Box 7: Examples of Project Area and Project Zone



AVOIDED DEFORESTATION

PROJECT PROFILE: Kasigau Corridor REDD Project Phase I – Rukinga Sanctuary

The Kasigau Corridor REDD Project Phase I – Rukinga Sanctuary in Kenya manages the protection of over 400,000 acres of Dryland Forest in the Kasigau Corridor. Slash and burn agricultural expansion by local communities to meet their basic needs has been identified as the primary driver of deforestation. The REDD project addresses this driver while also providing climate, community and biodiversity benefits by implementing the following activities:

- quantifying the amount of avoided carbon emissions from protecting forests in order to generate carbon credits
- alternative livelihood creation for people in the surrounding areas
- community-based tree nurseries to provide agricultural and fuel wood alternatives
- introduction of cash crops that grow well on degraded or other non-forest land
- education and awareness programs through women’s groups, schools and existing community forums
- establishment of local factories that provide jobs for the community members
- establishment of local schools, etc.

The boundaries for the project are:

- The Project Area is the Dryland Forest in the Kasigau Corridor that is protected from deforestation.
- The Project Zone encompasses the Project Area and also includes areas where the other activities listed above are implemented.

Source: Wildlife Works Carbon LLC, 2009

Box 7, continued



AFFORESTATION/REFORESTATION

PROJECT PROFILE: Nakauvadra Community Based Reforestation Project, Fiji

The Nakauvadra Community Based Reforestation Project in Fiji covers an area of 1,135 hectares comprised of several separate plots. The project will provide multiple benefits by implementing the following activities:

- Community-based reforestation, which includes planting a portion of the area with timber species which can be sustainably harvested upon reaching maturity to provide for long term income generation for the landowning communities.
- Training and support in the development of new livelihood enterprises and sustainable agricultural practices, including the distribution of seedlings to encourage crop diversification, with fruit plants and traditional root crops to benefit families and improve food security.

The boundaries for the project are:

- The Project Area is the 1,135 hectares of reforestation plots in the Nakauvadra Range.
- The Project Zone encompasses all of the Project Areas as well as areas where the project is developing new livelihood enterprises and sustainable agricultural practices.

Source: Conservation International (2013b)

3.2 Why is the Project Zone an important consideration in the CCB Standards?

The CCB Standards require the definition of a Project Zone in order to clearly identify the location of potential positive and negative impacts on biodiversity and ecosystem services outside the Project Area.



AVOIDED DEFORESTATION

Avoided deforestation projects may include project design elements that provide alternatives to help local Communities meet their needs without destroying forests. Such activities might include, for example, sustainable agriculture and the subsequent creation of alternative livelihoods, or community development activities, such as establishing local schools, to ensure the support of the Communities. Reasons to consider incorporating such activities include the following:

- Forestry-related interventions, such as attempts to avoid deforestation, may make life more difficult for poor communities who depend on the forests to meet their basic needs. Projects are most successful when they ensure long-term community support for the conservation of forests and wildlife.
- The core rationale for the CCB Standards is to promote projects that simultaneously deliver social and biodiversity benefits together with emissions reductions.



AFFORESTATION/REFORESTATION

Some afforestation/reforestation projects may include activities for new livelihood creation, such as beekeeping, activities like crop rotation which promote sustainable agriculture, and distribution of seedlings. Reasons why a Project Proponent may choose to implement supplementary activities apart from tree planting include the following:

- A desire to consider equity distribution and ensure that the project successfully benefits all Communities within the operation area.
- A need to compensate project participants in situations where activities result in long-term benefits, but involve short-term costs and risks. A smallholder who undertakes on-farm tree planting may benefit in the long term, for example through increased soil fertility and increased productivity, but may accrue short-term costs, such as direct costs of purchasing and planting trees, or opportunity costs, such as loss of revenue due to planting on land previously used for agriculture.
- A need to reduce pressure on the Project Area and reduce disturbances in the planting area.

The supplementary activities in avoided deforestation as well as afforestation/reforestation projects, such as those described above, may be implemented outside the Project Area where GHG emissions reductions and removals are quantified. The mapping of the Project Zone enables the delineation of the boundary within which all project activities, including supplementary activities, are implemented.

3.3 What types of impacts are demonstrated using the Project Area and Project Zone as reference areas?

In the CCB Standards Third Edition, the Project Area is the area used to demonstrate net climate benefits. The Project Zone (that encompasses the Project Area) is the reference area used to assess the following impacts:

- **Net biodiversity benefits (B1 and B2):** The Project Zone is the appropriate reference area, since supplementary activities may impact biodiversity in areas where they are implemented.
- **No harm to High Conservation Values (CM1, CM2, B1 and B2):** The Project Zone is the appropriate reference area, since supplementary activities could have an impact on the identified High Conservation Values, in areas where they are implemented.
- **Respect for rights to lands, territories and resources, including statutory and customary rights (G5):** The Project Zone is the appropriate reference area since it would be important to consider rights in all areas in which project activities are implemented.

Note that Communities are defined as those “who derive income, livelihood or cultural values and other contributions to well-being from the Project Area” and can therefore live inside or outside the Project Zone. Therefore, *the Project Zone is not to be used as the spatial reference area for assessing Community well-being impacts. These must be assessed based on the impacts that all project activities have on the identified Communities* and are not analyzed spatially. However, there is an exception for the analysis of impacts on ecosystem services identified as important for the Communities, which is done using the Project Zone because it requires a spatial reference area.

3.4 What is the difference between the Project Zone and leakage area?

Leakage refers to climate impacts (changes in GHG emissions) that occur outside the Project Area as a result of project activities. While offsite climate impacts are explicitly referred to as leakage in the standards (CL3), the CCB Standards also include concepts of offsite biodiversity impacts (B3) and Other Stakeholder impacts (CM3), which are analogous to the concept of leakage, but are applied to biodiversity and community impacts, respectively.

Areas where activities related to the provision of alternative livelihoods and where community development activities are implemented would form a part of the Project Zone and may also be an area of leakage prevention or positive leakage (i.e. yielding greater GHG benefits than anticipated). There may be additional leakage areas depending on other types of leakage that are applicable to the project (e.g. activity shifting or displacement, market effects, increased investment in Project Zone, decreased investment in Project Zone, ecological leakage, etc.). Additional tools which can be used to obtain further explanation and clarification on types of leakage include the following, full information about which is provided in the reference section:

- The Verified Carbon Standard's *Agriculture, Forestry and Other Land Use (AFOLU) Requirements* (Verified Carbon Standard Association, 2013)
- Intergovernmental Panel on Climate Change (IPCC)'s *Special Report on Land Use, Land-Use Change and Forestry* (Watson, Noble, Bolin, Ravindranath, Verardo & Dokken, 2000)

3.5 What is different about the definitions of the Project Area and the Project Zone in the Third Edition compared to the Second Edition?

The definition of the Project Area has been clarified to refer to the specific areas that serve to generate net climate benefits. This clarification helps to align the Project Area with the terminology used in various GHG accounting standards. For example, the definition of Project Area in the CCB Standards is consistent with the area in the AFOLU requirements of the Verified Carbon Standard (Verified Carbon Standard Association, 2013) that is eligible under a specific project category, where the project activities are undertaken. The project activities are the technologies and measures that are implemented which result in emission reductions and removals.

Despite its focus on multiple benefits, the CCB Standards were created around land-based strategies for mitigating the causes of GHG emissions. Therefore, the term Project Area and its revised definition highlight the fact that the areas where GHG benefits are generated serve as a focus around which the other indicators are organized.

The definition of the Project Zone has been revised in order to offer more clarity regarding the rationale for the Project Zone and how to identify it. The new definition seeks to demonstrate the spatial relationship between the Project Area and the Project Zone by acknowledging that activities which generate net climate benefits from the Project Area may often occur in areas outside of the Project Area, but which are adjacent to it or are nearby. All project activities that affect land and associated resources can affect biodiversity and ecosystem services, so the full Project Zone should be used as the spatial reference for analysis of these impacts.

4. MAPS

Maps constitute a fundamental means for conveying critical information about land-based projects. The CCB Standards require capturing of information related to location of Communities and the boundaries of the Project Area and Project Zone (G1.4), including any High Conservation Value areas (G1.7). Property rights, including statutory and customary rights also need to be mapped (G5.1). This section will help you understand how to construct high quality maps to meet the requirements of the CCB Standards.

4.1 Which of the CCB Standards indicators require the use of maps?

Some indicators in the CCB Standards explicitly mention the requirement to produce maps, such as G1.7, G5.1, etc. (see Box 8). There are other indicators where the use of maps could be helpful in emphasizing how certain aspects of the indicator requirements have been met. When Project Proponents are utilizing a Climate Section Waiver, they should pay attention to the mapping requirements of the corresponding GHG program, but are not exempt from demonstrating the mapping requirements of other sections of the CCB Standards. For example, mapping requirements listed in the General sections must be adhered to, such as maps to identify the Project Area and Project Zone in G1.4.

Box 8: List of indicators where maps are required or may be helpful

Indicators where maps are explicitly mentioned and required	G1.4, G1.7, G1.13, G5.1, CL3.1
Indicators where the use of maps may be helpful	General: G1.8, G2.1, G5.5 Climate: CL2.1, CL2.2, CL4.2, CL1.1, CL3.1, GL1.1, GL1.4 Community: CM1.3, CM2.1, CM2.4, CM4.1, CM4.2, GL2.1, GL2.4 Biodiversity: B1.1, B2.1, B2.2, B2.3, B2.5, B3.1, B3.3, B4.1, B4.2, GL3.1, GL3.2, GL3.3, GL3.4

4.2 How should spatial boundaries be defined in a map (G1.4, G1.7)?

There is no one solution or approach for defining the Project Area and the Project Zone that can apply across all projects. This is due to the varied nature of land cover and land uses in different landscapes. Project Proponents must gauge the complexity of the region in terms of terrain, land cover, accessibility, or the available imagery and determine the most appropriate strategy for identifying the spatial boundaries and for creating a map that adequately defines them. *Location information should allow the identification of the spatial boundaries unambiguously and with a reasonable level of certainty* through the provision of digital data, such as GPS coordinates, KML files, or shape files (footnote to G1.7).

Certain features represent good practices in map making that enhance the understanding and transparency of the project (see Box 9). The following list of practices are recommended, but not expressly required by the CCB Standards.

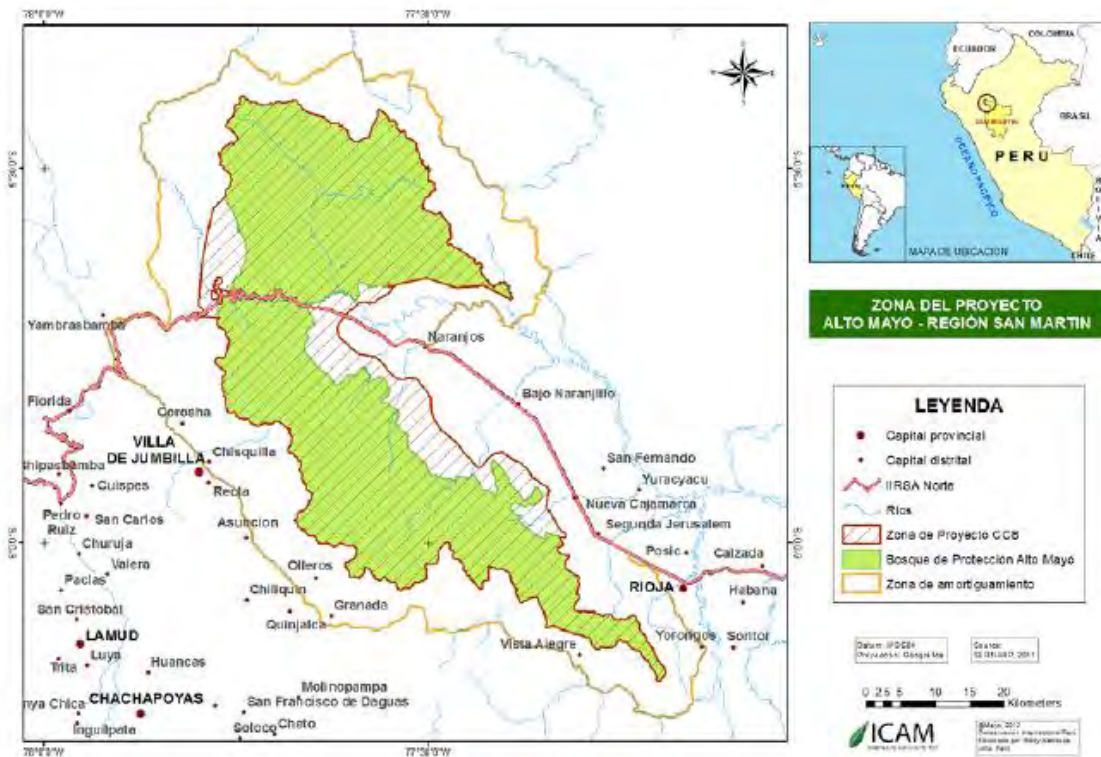
- **Title** - The principal subject matter of the map
- **Map author(s)** – The creators of the map
- **Version number and date** – Reflects the number of revisions a map has gone through and when the map was made or revised
- **Coordinate system, with a grid** - The means for locating and describing a unique point on Earth (Latitude/Longitude, UTM, etc.)
- **Map projection** - The method for transferring the spatial information of the curved surface of the earth to a two-dimensional, ‘flat’, map
- **North arrow** – An arrow that orients the map user to either magnetic or true north
- **Map scale** – A ratio or visual graphic depicting the relationship between a distance on the map to the corresponding distance on the Earth
- **Adequate symbology** – The combination of colors, patterns, or icons to represent the location of information on a map. May include important points of reference, such as key populations centers, rivers, etc., that help orient the user
- **Map legend** – A means for defining the meaning of the symbology of a map
- **Sources** – The data inputs used to create the map
- **Datum** – An associated model to represent the shape of the Earth, which forms the basis for map measurements and coordinates (WGS84, NAD83, etc.)

A map is the end result of a combination of methods and processes that were undertaken to collect, analyze, and manipulate data sources into a final product. *Project Proponents should always identify, reference, and describe the data sources and methods used to construct the map.* The types of possible maps and the methods used to create them are too numerous to name here, however some examples include: land cover maps, geospatial models, and the representation of spatial boundaries. Whether these explanations are included directly within the project design documentation or within a technical annex is left to the discretion of the Project Proponent and the nature of the requirement, see box 9.

Box 9: Example of a spatial boundaries map employing best practices

The subject matter and purpose of a map will dictate its format and the most desirable features to include. Project Proponents are encouraged to incorporate the features presented in this guidance into the maps as appropriate. For instance, a map describing the location and extent of the Project Area and Project Zone placed within the project design documentation might omit certain features, such as a map datum, or a detailed coordinate system, due to the spatial constraints of representing the map in a typical report size or format. However, maps that are indispensable during the auditor's site visit should exist in a format that permits the auditors to verify its accuracy.

The Alto Mayo Conservation Initiative's map of the Project Area and Project Zone is presented here as an example of a map that contains the recommended features. The project is located in San Martín, Peru and is managed by Conservación Internacional Perú, with the help of Asociación de Ecosistemas Andinos (ECOAN), Asociación para la Investigación y el Desarrollo Integral (AIDER) and the Sociedad Peruana del Derecho Ambiental (SPDA), along with strong coordination with various institutions from the Peruvian government.



This map is successful because of the key features it contains. For instance, its use of symbols is clear and matches the content of the legend and the map title. The map also provides users with a means for understanding the spatial context of the map by way of smaller contextual maps, a coordinate system, a north arrow, and major population centers and roads.

Source: Conservation International (2012)

4.3 What is the most desirable method for representing the information required in G1.7 into one map?

Indicator G1.7 requires that Project Proponents provide a map that represents the location of the spatial boundaries (Project Area and Project Zone), Communities, and High Conservation Value (HCV) areas, and any other areas that are predicted to be affected by project activities identified in CL3, CM3, and B3.

Project Proponents are not required to represent all the requested information listed in G1.7 in one map because it may simply be impractical or inappropriate to do so. Therefore, Project Proponents are afforded some flexibility regarding the number of maps that can be used to meet the requirements of G1.7, as long as the location of the required attributes listed in G1.7 can be clearly related back to the physical boundaries of the Project Area and Project Zone (see Box 10).

Box 10: Map making tip

The boundaries of the Project Area and Project Zone could be applied to any map developed for the project in order to clarify the relationship between others maps produced by the Project Proponents and their relevance to the Project Area or Project Zone. For example, when a Project Proponent chooses to include land cover or land use maps as inputs to other indicators of the CCB Standards, it may be helpful to overlay the Project Area and Project Zone boundaries over these maps. This strategy can facilitate auditor reviews during validation or verification, and assist interested readers with a better understanding of the design of the project.

4.4 How should the location of Communities, High Conservation Value areas and additional areas that may be affected by project activities be represented in a map (G1.7)?

The CCB Standards are not prescriptive with respect to mapping approach. However, *Project Proponents should explain and justify the approaches taken to identify and represent the location of Communities, High Conservation Value areas and additional areas affected by the project in their maps.* Each of these requirements is addressed below in more detail.

Communities: Locations of Communities could be represented as the central coordinate of a settlement or as the full spatial extent of the area occupied by a settlement. If the latter is chosen, the manner in which the boundary of a settlement is drawn should be justified and explained by the Project Proponent. The ultimate decision on which strategy to use to represent Communities in a map must be made according to the purpose of the map. Proponents may decide on other strategies for representing the locations of Communities other than those mentioned here, especially in situations where settlement configurations are amorphous.

High Conservation Value (HCV) areas: Some HCV areas may be more difficult to represent accurately in a map than others. In many instances, the exact boundary of an HCV area may be difficult to discern. Project Proponents should use the conservativeness principle to delimit HCV areas when there is high uncertainty regarding their full spatial extent. For instance, if there is high uncertainty regarding the spatial limits of an HCV area, the larger area that potentially meets the HCV criteria should be mapped.

However, the most current and appropriate information or methods for delimiting HCV areas should be used.

Divulging the exact location or extent of certain HCV areas, such as sacred sites or areas of high cultural value, may create unacceptable risk for local actors for a variety of reasons. Therefore, Project Proponents may choose appropriate strategies for mitigating these risks as long as these strategies are adequately explained in the project design documentation and auditors have the opportunity to fully understand and investigate such strategies during a validation or verification.

Additional areas affected by project activities as described in CL3, CM3, B3: CL3 and B3 require identification of offsite climate and biodiversity impacts, respectively, and CM3 requires identification of impacts on Other Stakeholders. G1.7 requires Project Proponents to map the areas affected by such offsite impacts, where relevant and when estimates are possible. The methods used to determine the location and spatial extent of these areas should be explained and justified, including cases where there are significant challenges in mapping of offsite impact areas - for example, the location of certain Other Stakeholders.

If using a Climate Section Waiver, any maps specifically required in the Climate section (CL3) would be produced according to the guidelines of the Recognized GHG program and could either be reproduced in project design documentation developed for CCB Standards or a cross-reference could be made to the relevant map in supporting documentation relevant to the GHG program.

Maps could also be useful for describing measures to mitigate negative impacts. For example, a project might establish a park guard or monitoring post in a particular area in order to deter illegal hunting that might be displaced to another sensitive area outside the Project Zone. This would qualify as an area affected by project activities and must be included in a map. If the spatial extent of the activity's influence can be estimated, this may be useful information to include too.

Unmitigated impacts outside the Project Zone that have a spatial component (for example, in the case of unmitigated impacts on biodiversity) also should be represented in a map, where possible. The manner in which these impacts are assessed, evaluated and ultimately represented is left to the discretion of the Project Proponent. However, all strategies for assessing and representing unmitigated impacts must be explained and justified.

4.5 Are there any special requirements for maps used to describe programmatic approaches (G1.13)?

For projects using a programmatic approach (see section 6 of this document), the geographic area within which activities will be expanded (to generate net climate benefits) over time must be included in the Project Zone, which needs to be represented in a map. The map describing this geographic area should follow the guidance for developing maps described in this section.

4.6 How should land tenure arrangements be represented in a map (G5.1)?

Indicator G5.1 requires Project Proponents to describe and map property rights and land and resource use in the Project Zone, including:

- statutory and customary tenure/use/access/management rights to lands, territories and resources in the Project Zone

- differentiation between areas with individual and collective rights
- identification of overlapping or conflicting rights

The level of detail and effort needed to adequately represent these issues in a map should be sufficient so that an auditor or interested third party could clearly, easily, and unambiguously decipher how these arrangements are distributed across the Project Zone. The Project Proponent is encouraged to undertake effective mapping of property rights and land and resource use through a participatory process including Communities and neighboring communities (so that they can confirm boundaries). It is also recommended that all Community Groups participate in the mapping exercise.

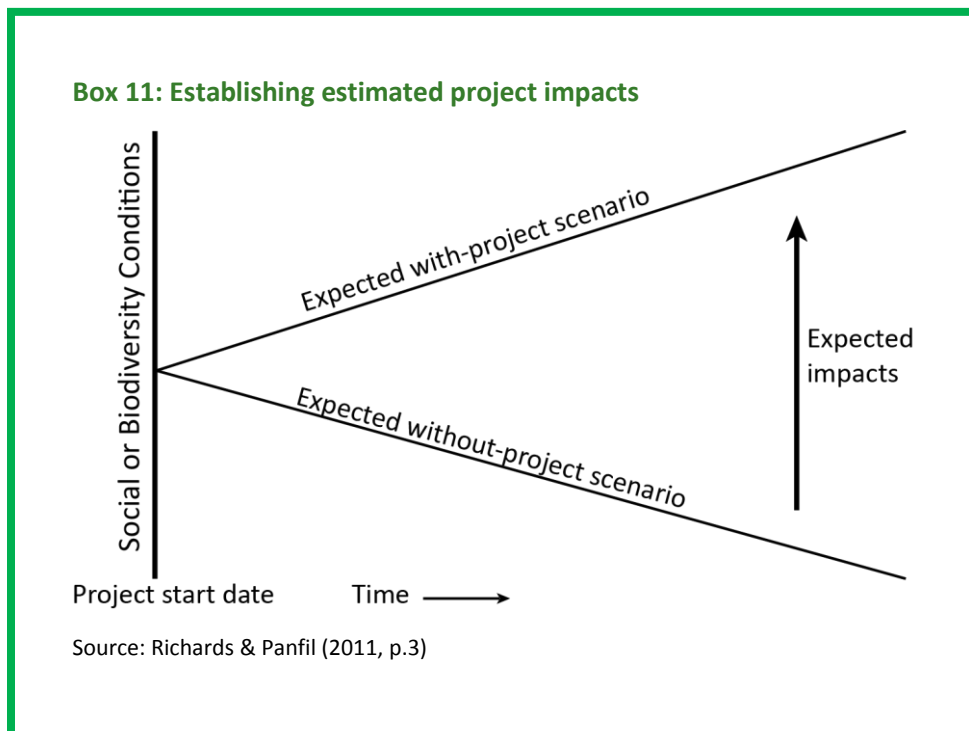
The degree of accuracy of any mapped tenure boundaries will necessarily vary according to the information and conditions specific to each country or jurisdiction. It is not uncommon for maps regarding statutory tenure/use/access/management to contain discrepancies in spatial boundaries. *Project Proponents should select the most appropriate method for communicating these discrepancies, but should ensure that they have been identified and that any relevant conditions that result from these discrepancies are described in the project design documentation. Project Proponents should find the most appropriate means for identifying and communicating the areas where overlapping or conflicting rights occur.*

5. WITHOUT-PROJECT LAND USE SCENARIO AND ADDITIONALITY

The CCB Standards require Project Proponents to establish the most likely land use scenario without the project and the additionality of the proposed project activities (G2). This section will help you understand options for demonstrating conformance with G2.1 and G2.2. This section will also help you understand how the without-project scenario is used to demonstrate climate, community and biodiversity benefits, including the relationship between the without-project land use scenario described for G2.1 and the without-project analysis for climate (CL1.1), community (CM1.1), and biodiversity benefits (B1.1).

5.1 Why do the CCB Standards require projects to establish the most likely without-project land use scenario (G2.1)?

The “most likely without-project land use scenario” forms the basis for assessing the climate, community, and biodiversity impacts of land management projects. This approach entails identifying the initial configuration of land users and land uses in the Project Zone and their predicted changes over time. This scenario is then analyzed from different perspectives (with respect to GHG emissions reductions and removals, well-being of Communities and biodiversity) to provide the basis for determining the project’s impacts. The analysis is used as a foundation for project activity design and monitoring. The graphic in Box 11, from the SBIA Manual Part 1, explains the role of the expected without-project scenario in establishing estimated expected or actual project impacts.



G2.1 requires a written analysis or description that identifies the principal agents and drivers of land-use change, and the associated land uses, within the Project Zone. A Project Proponent could cite and use relevant facts, charts, figures, or other information to develop this description. For G2.1, *Project*

Proponents should describe a well-justified land use scenario that describes how the initial configuration of agents, drivers and land uses within the Project Zone might change over space and time during the project's lifetime. By contrast, CL1.1, CM1.1, and B1.1 provide the opportunity to characterize the most likely scenario of agents, drivers, and land uses that were described in G2.1 in terms of climate (CL1.1), community (CM1.1), and biodiversity (B1.1) indicators. Therefore, the description for G2.1 should be written as a largely qualitative analysis of land users and relevant stakeholder groups that affect land uses and land cover in the Project Zone, while the responses to CL1.1, CM1.1, and B1.1 build on the qualitative land use scenario laid forth in G2.1 to describe the most likely scenario in terms of the effects (largely quantitative) on relevant carbon pools or sources of GHG emissions, and on salient social and biodiversity conditions.

Because of the central importance that this analysis plays in analyzing impacts from the perspective of climate, communities, and biodiversity, Project Proponents that wish to apply a Climate Section Waiver must still provide a written narrative to comply with the requirements of G2.1 and G2.2 in their project design documentation. However, these narratives may reference the methods, analyses, and results used to meet the requirements of a Recognized GHG Program as described in other sections of this guidance provided the Recognized GHG Program contains procedures to do so. Therefore, a Project Proponent may reference any technical assessments or tools used to meet the requirements of these GHG programs in order to fulfill G2.1 and G2.2.

5.2 What are the guidelines for establishing the range of possible land use scenarios that are likely in the Project Zone and selecting the most likely scenario (G2.1)?

When determining a range of land use scenarios that are likely in any given Project Zone, the Project Proponent is expected to consider the important land uses and the agents and drivers behind the dominant land uses within the Project Zone, including how they may change over time without the project. The CCB Standards are not prescriptive as to the use of any particular methodology or model to assess land-use change and its drivers. However, when a published method is used, a full reference should be provided and any variations from the published method should be explained (footnote to G2.1). One such tool is the **VCS Tool for the Demonstration and Assessment of Additionality in VCS AFOLU Project Activities** (Verified Carbon Standard Association, 2012a). The VCS Tool for additionality contains an approach for structuring the analysis of the range of most likely without-project scenarios as well as an analysis of the additionality of the project. Project Proponents may find the need to supplement the structure offered by the VCS Tool with other methods, but in any case they must ensure that all assumptions are appropriately justified with supporting evidence.

Project Proponents that seek dual validation/verification with both a Recognized GHG Program and the CCB Standards may be provided with tools or procedures by the GHG program for assessing the most likely land use scenario. In this case, Project Proponents may either integrate the procedure required by the GHG program into the project design documentation prepared for the CCB Standards *or* present a synthesis of the outcome of such a method provided that, in either case:

- the tool/procedure required by the GHG Program is properly identified, fully referenced and is provided as part of the project documentation,
- it is followed in its entirety, and

- the project is successfully validated against the GHG program requirements.

For example, if a proponent is using the VCS in addition to the CCB Standards then the VCS procedures for establishing the most likely land use scenario are sufficient. However, Project Proponents must still summarize the results of these analyses and provide relevant documents (or references to such documents) as part of the CCB Standards project design documentation. *In all cases, the tool or method used should include an analysis of the principal agents, and drivers of -the land use and land-use change, and the respective land uses associated with them. All assumptions should be appropriately justified with supporting evidence.* See Box 12 for the types of information that may go into this justification.

Box 12: Necessary information for describing the most likely without-project land use scenario (G2.1)

The intent of the CCB Standards Third Edition is for Project Proponents to develop a narrative for G2.1 that synthesizes various sources of information to characterize and explain the agents and drivers of land use and land-use change, including how that configuration of land users and uses is expected to change over time. A variety of information is needed to identify the most likely land use scenario. A clear narrative should identify the initial configuration of user groups, stakeholders and influences on land uses and land-use change at the start of the GHG accounting period as a starting point for describing the most likely land use scenario. The supporting data may include the following:

- Socio-economic assessments;
- Forestry, wildlife or biodiversity inventories;
- Physiographic information (major hydrological features, topography, soil types, etc.);
- The location and extent of relevant land cover and land use classes in the Project Area and Project Zone, and their associated carbon stocks at the start of the GHG accounting period;
- Identification of agents and drivers of land-use change that exist in and around the Project Zone along with a causal analysis or theory of change linking their activities to decreases in relevant terrestrial carbon stocks;
- Analyses of historical trends concerning agents and drivers of land-use change in and around the Project Area and Project Zone, their associated impact on relevant land cover/land uses, as well as their estimated carbon stocks (remote sensing, demographic or population data, etc.); and
- Models, regressions or other appropriate techniques used to construct, develop, or support a projected with-out project land use scenario.

The analysis should provide sufficient evidence and justification to construct a reasonably accurate assessment of the principal agents, user groups, stakeholders, etc., and their respective land uses within the Project Zone and how these actors, influences and land uses could change under the most likely land use scenario. The level of detail required to meet the requirement of G2.1 will vary in proportion to the scale and complexity of the physiographic, biophysical, and social attributes of the Project Zone.

5.3 How should additionality be demonstrated (G2.2)?

If a Project Proponent elects to complete the Climate section of the CCB Standards Third Edition, it is acceptable to use the Tool for the Demonstration and Assessment of Additionality in VCS AFOLU Project Activities as a means for framing and developing an analysis of the project's additionality. In this case, the Project Proponent must follow the procedures and requirements described in the tool, bearing in mind the footnotes to G2.2 that provide additional guidance as follows:

Project Proponents must demonstrate that project activities would not have been implemented under the without-project scenario due to significant financial, technological, institutional or capacity barriers. Actions implemented by the project must not be required by law, or Project Proponents must demonstrate that the pertinent laws are not being enforced. Project Proponents must provide credible and well-documented analyses (e.g., poverty assessments, farming knowledge assessments, or remote sensing analysis) to demonstrate that the without-project land use scenario reflects land use practices that are likely to continue or that otherwise differ from the land use practices expected as a result of project activities. The most recent version of the following Verified Carbon Standard Tool may be used (www.v-c-s.org/methodologies/VT0001) considering the following options: Sub-step 2b. – Option I. Apply simple cost analysis; or Step 3. Barrier analysis.

Although Step 2 of the VCS Tool contains other options for establishing additionality, if the proponent is using the CCB Standards and elects to use the VCS Tool, Project Proponents must select one of the two options listed in the CCB Standards regardless of whether the project is seeking a combined validation with the VCS and the CCB Standards or elects to use the CCB Standards alone (G2.2, footnote).

If the VCS additionality tool or any other tool from a Recognized GHG Program is not utilized, then the Project Proponent must provide a logical, well-justified and supported analysis to demonstrate why the project does not result in business-as-usual (G2.2). GHG program approaches for establishing project additionality, such as the tools developed by the VCS or Clean Development Mechanism (CDM), can involve the demonstration of significant financial, technological, environmental, institutional or capacity barriers that exist in the business-as-usual scenario and that have prevented the project's activities from being common practice. Defensible methodologies must employ some method for analyzing and describing significant barriers to the with-project scenario under a business-as-usual scenario. However, Project Proponents are strongly encouraged to follow the guidelines and practices established by a Recognized GHG Program or the Intergovernmental Panel on Climate Change (IPCC) to structure their assessment of additionality.

Project Proponents that wish to apply a Climate Section Waiver must still provide an analysis of project additionality, and the Project Proponent may use the method established by the Recognized GHG Program for establishing additionality.

5.4 How should the additionality of stacked benefits be assessed (G2.2)?

The CCB Standards Third Edition allows Project Proponents to utilize the standard for offset projects that stack or layer multiple offset schemes pertaining to different benefits together in one project. For example, a Project Proponent may be promoting a forest restoration program alongside a riparian buffer and plans to use carbon offsets as a means for financing the project activities. The same project is also enhancing water quality benefits for downstream users through the restoration of riparian buffers and has chosen to engage in a payment mechanism that incentivizes upstream users to change their

land uses to improve downstream water quality. *Multiple benefits and financial mechanisms are being used in tandem, in which case an additionality assessment is required to demonstrate that both mechanisms are required in order to realize the project's objectives.* Further guidance on this topic is referenced in G2.2 of the CCB Standards.

6. PROGRAMMATIC APPROACH

The CCB Standards Third Edition contains provisions for the use of programmatic approaches (G1.13-15) which are specifically oriented towards promoting replicability and scalability. This section will help you understand what this approach entails and why it may be particularly useful for smallholder- and community-led projects.

6.1 What is a programmatic approach?

A programmatic approach allows Project Proponents to expand their land areas and add activities that aim to generate net climate benefits after a project is validated to the CCB Standards, subject to meeting established eligibility criteria. Additional land area and activities can be added over time through this approach without requiring development of new project design documentation or a new validation of the project. This is similar to the Clean Development Mechanism (CDM) and Verified Carbon Standard (VCS) provisions for Programme of Activities and Grouped Projects respectively, with additional requirements included to account for community and biodiversity impacts related to project expansion.

6.2 Why is a programmatic approach beneficial to smallholder- and community-led projects?

A programmatic approach is particularly useful for projects involving smallholders, since typically these projects aggregate hundreds (or even thousands) of smallholder farmers who own or manage small land areas. Carbon projects entail significant, fixed transaction costs – such as the costs of monitoring and reporting, and the costs of aggregating and organizing smallholders and community members, so they need to be of sufficient scale to be financially feasible. The opportunity to add many smallholders to a group allows project expenses to be spread out, thereby lowering the costs for each participant. In many communities, not all potential smallholder participants may be interested in joining a project from the beginning. Expansion of the smallholder project, therefore, may happen only gradually, beginning small but growing over time as it proves successful.

A programmatic approach is also useful for projects that are by design better implemented in phases of planned expansion. For example, a Project Proponent implementing a reforestation project will often plan to plant trees in an identified area, spanning over several years and planting seasons. This allows time for detailed negotiations with communities in order to define the boundaries of planting sites and the techniques and species for planting. This also gives land managers time to decide if they would like to join the project at a later date. Using a programmatic approach allows such projects to validate the entire potential Project Area, even without having all landowners and lands finalized at the project's start, provided there is the framework for adding new lands in the future.

6.3 What is the main change in the Third Edition as compared to the Second Edition on use of programmatic approaches?

The CCB Standards Third Edition includes a framework that enables projects to aggregate new lands over time within a single project using a programmatic approach. The Second Edition of CCB Standards did not permit this. Rather, the Project Area had to be defined in the project design documentation at

the time of validation. Any new addition of lands necessitated preparation of new project design documentation and a new validation process.

6.4 What are the CCB Standards requirements for a programmatic approach?

Projects using a programmatic approach need to satisfy three requirements that are explained in detail below.

- **Specify the geographic area within which activities will be expanded (to generate net climate benefits) over time. Also identify the Communities that derive income, livelihood or other cultural values from this geographic area (G1.13)**

At validation, the Project Proponents must specify the geographic area that includes all potential Project Areas that may be added under a programmatic approach. *All Project Areas, actual at the time of validation or potential instances to be added in the future, must lie within the Project Zone. The geographic area of future project instances must be described, but the exact boundaries (e.g. GPS coordinates, KML files, or shape files) are not required. At the time of validation, Project Proponents must also indicate the main Communities that may be included under the project's programmatic approach in the future.* See Box 13 for details on how to monitor the impact of project activities implemented using the programmatic approach.

Box 13: Conducting a biodiversity and community impact analysis for a project using a programmatic approach

The Project Zone includes all potential instances of Project Areas, the geographic areas within which activities to generate net climate benefits occur. *A biodiversity impact assessment must be completed for the entire Project Zone of the programmatic approach at the time of validation* (B1 & B2). The net positive biodiversity impacts and no harm to High Conservation Values are also demonstrated within the Project Zone.

Some examples of biodiversity data and analysis that need to be performed for the Project Zone in such cases are:

- Habitat presence/absence and broad measures of habitat quality (using remote sensing based land cover/ land use mapping)
- Habitat extent and distribution (using remote sensing based land cover mapping, GIS data and literature survey)
- Biodiversity hotspots (using remote sensing based land cover mapping, GIS data and literature survey)
- Biodiversity related High Conservation Values (using remote sensing based land cover mapping, GIS data, literature survey and other resources, such as the IUCN Red List (www.iucnredlist.org))

This approach is not likely to cause undue burden for the Project Proponents, since biodiversity analysis (e.g. on High Conservation Values) is best done at the start of the project on the largest scale associated with the programmatic approach, rather than having to be done every time the Project Area expands.

A detailed community analysis, including impact assessment, is not required at the time of project validation for communities that may join the project in the future under a programmatic approach. This is because:

- net positive benefits are not demonstrated for the Project Zone, but for a non-spatial boundary, namely, Community Groups; and
- the definition of Communities does not include all potential communities that may be included under a programmatic approach.

This approach has been followed because adequate information about communities that may join in the project at a later date may not be available upfront and community impact analysis can be done most effectively when they decide to join the project.

- **Specify eligibility criteria for inclusion of new land areas and Communities (G1.14)**

Eligibility criteria for inclusion of new Project Areas and Communities must be specified in the project design documentation. These criteria are similar to those specified by the VCS for the addition of instances, with the addition of criteria for Community impacts (see Box 14). Note that VCS's Grouped projects are similar to CDM's Programme of Activities and bring together several instances of the same activity into one Project Description, and allow for new "instances" to be introduced as the project proceeds. For the CCB Standards, Project Proponents

must develop their own set of eligibility criteria which comply with these categories. Eligibility criteria for biodiversity impacts are not needed since, with the programmatic approach, the project is already expected to describe its biodiversity impact assessment of the Project Zone in the project design documentation, which by definition covers all potential Project Area(s).

Box 14: Comparison of eligibility criteria for programmatic approaches in CCB Standards and VCS

CCB STANDARDS	VERIFIED CARBON STANDARD
Adoption of project activities specified in the project design documentation and applied in the same manner as specified in the project design documentation	Meet the applicability conditions set out in the methodology applied to the project. Use the technologies or measures specified in the project description. Apply the technologies or measures in the same manner as specified in the project description.
Are subject to the climate, community and biodiversity without-project scenarios as determined for the project	Are subject to the baseline scenario determined in the project description for the specified project activity and geographic area;
Have similar characteristics with respect to additionality	Have characteristics with respect to additionality that are consistent with the initial instances for the specified project activity and geographic area
Subject to the same processes for stakeholder engagement described in G3 and respect for rights to lands, territories and resources including free, prior and informed consent described in G5; and have similar monitoring elements	

- **Specify scalability limits (G1.15)**

Scalability limits are defined in the CCB Standards as the scale beyond which the addition of new project activities may cause a project to not generate net positive climate, community or biodiversity benefits. These may be capacity limits, economic and managerial constraints, and thresholds for project expansion beyond which there may be negative impacts on communities and/or biodiversity.

Examples of scalability limits:

- a. **Capacity limits:** Some carbon accounting standards provide small-scale methodologies that establish simplified procedures for accounting and monitoring, and simplified procedures for small-scale projects. The methodologies may no longer be valid when the project expands beyond a ‘capacity limit’ because they could result in an over estimation of emissions reductions.

- b. **Economic and managerial constraints:** The project may have met the criterion requiring adequate human and financial resources for effective implementation (G4) based on an assumed scale of operation. If the project grows beyond a certain size, the human and financial resources may no longer be adequate.
- c. **Negative impacts on Communities and/or biodiversity:** Scaling up of project activities after validation could alter the biodiversity (see Box 15) or community impact that was assessed in the validated project design documentation. The threshold for project expansion beyond which there are negative impacts on Communities and/or biodiversity needs to be determined.

Box 15: Scale-related negative impacts on biodiversity in a programmatic approach

Reforestation on 1,000 hectares might not impact stream flow or wildlife corridors, but scaling up to 10,000 hectares could cause an impact on hydrology and wildlife movements.

In an agroforestry project where farmers plant eucalyptus trees, there may be negative biodiversity impacts if the total number of trees planted in a given area exceeds a certain threshold. Past that threshold – the scalability limit – the eucalyptus trees might suppress native species and reduce biological diversity, causing harmful impacts to the soil's water balance.

The Project Proponent needs to describe measures taken to address any risks to climate, community and biodiversity benefits if the project expands beyond the scalability limits (G1.15).

- a. **In a case where the Project Proponent's resources would be stretched at the scalability limit,** at that point the Project Proponents might add human or financial resources to ensure that there is no risk to climate, community or biodiversity benefits.
- b. **In instances where a small-scale methodology is implemented,** an alternate methodology that preserves the multiple benefits of the project should be used if the scalability limit is breached (a new validation would be required when the new methodology is implemented).
- c. **In instances where planting a certain type of tree on a large scale may have negative community or biodiversity impacts,** the project design documentation should specify the maximum number of trees that can be planted in a given area, and if this number is breached, measures must be taken and monitoring done to ensure that there are no negative impacts.

6.5 Monitoring new Project Areas and Communities that are added to the project over time (G1.13, G1.14 and G1.15)

New Project Areas and Communities that have been included in the project since the last validation or verification against the CCB Standards must be identified in the Project Implementation Report (PIR)

that is prepared for verification against the CCB Standards. The PIR must explaining how these new Project Areas and Communities meet the eligibility criteria. Conformance with the standards is assessed for new Project Areas and new Communities during the next verification of the project against the CCB Standards (see Rules for the Use of the CCB Standards available at www.climate-standards.org/resources).

7. NET CLIMATE BENEFITS

The CCB Standards' requirement to demonstrate net positive climate benefits affords Project Proponents some flexibility when selecting methodological approaches in order to meet the requirements of the Climate section (CL1-4). The Climate section is used to demonstrate net positive climate benefits. It is not to be used for claiming quantified GHG emissions reductions or removals to be used as offsets. Projects that meet the requirements of a Recognized GHG Program do not need to use the Climate section. GHG methodological approaches for the Climate section may range from being sophisticated and detailed to simplified and/or highly conservative. Regardless of the scope, the burden of proof of any GHG methodological approach is to demonstrate net positive climate benefits. This guidance will help you understand the difference between "Approved" or "Defensible" methodological approaches and under what scenarios they might apply.

7.1 What is the difference between an 'Approved' and a 'Defensible' methodological approach?

- a) An Approved methodological approach refers to the use of a methodology that has been formally approved by a Recognized GHG Program. Recognized GHG Programs are those that meet the CCBA requirements in the Rules for the Use of the CCB Standards and are listed on the CCBA website. *If a Project Proponent is using an approved methodology of a Recognized GHG Program and meets the validation/verification requirements of that program, the Project Proponent may apply a Climate Section Waiver as defined in the Rules for the Use of the CCB Standards. In cases where the project is not validated/verified to the Recognized GHG Program, an Approved methodological approach may be used to meet the requirements of the CCB Standards Climate section at the time of the CCB Standards audit.*
- b) A Defensible methodological approach is defined in the CCB Standards Third Edition (CL1.1 footnote, see also Box 16 of this document). It is a GHG accounting method that follows best practices in order to measure and substantiate net positive climate benefits of project activities but is not approved by a Recognized GHG Program. *Project Proponents must include justification of the 'Defensibility' of the methodology in their project documentation.* A primary intent behind the concept of Defensible methodological approaches is to help simplify project development and reduce transaction costs significantly, especially for smallholder projects. This option could be useful to projects that might benefit from using the CCB Standards to attract alternative investment options by using a GHG accounting strategy that lowers project development costs, but that still assures credible net positive climate benefits.

Box 16: Definition of ‘Defensible’ methodological approach (CL1.1 footnote)

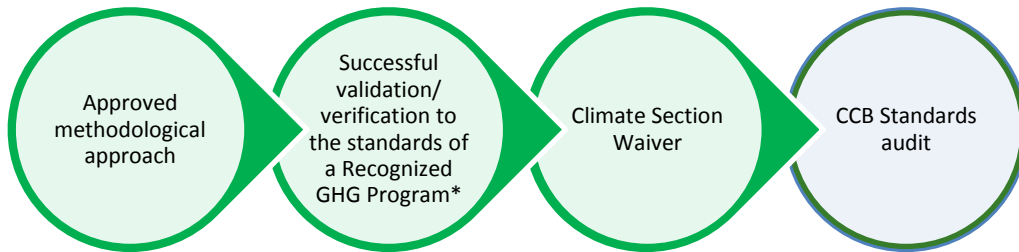
A defensible methodological approach includes the following procedures for delineating the conditions under which it can be applied:

- defining the project area;
- estimating any projected rates of land cover change in the without-project and with-project scenarios;
- conservatively estimating without project GHG emissions and removals;
- monitoring GHG emissions over the project lifetime;
- defining types of leakage potential caused by project activities;
- and conservatively estimating expected leakage emissions under the with-project scenario.

It shall also observe principles of relevance, completeness, consistency, transparency and conservativeness for land-based carbon accounting; such as the Intergovernmental Panel on Climate Change’s *2006 Guidelines for National GHG Inventories for Agriculture, Forestry and Other Land Use* (IPCC, 2006), and the AFOLU Requirements of the Verified Carbon Standard (Verified Carbon Standard Association, 2013). The principle of conservativeness means that where accounting relies on assumptions, values and procedures with high uncertainty, the most conservative option in the biological range should be chosen so as not overestimate GHG removals or GHG emissions.

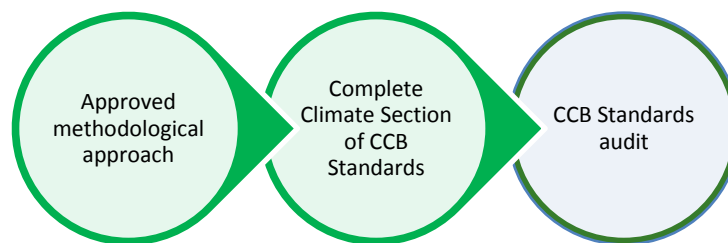
Box 17: Options for demonstrating compliance with the climate requirements of the CCB Standards Third Edition

Option 1

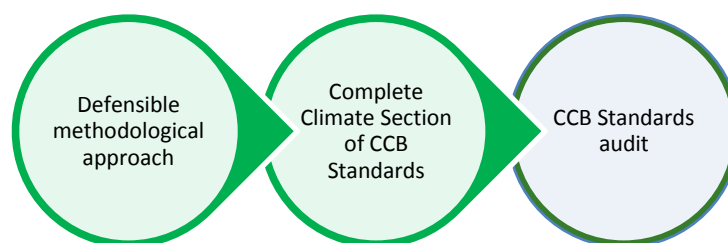


* Validation or verification of the project to the Recognized GHG Program may occur at the same time as the project's audit to the CCB Standards, but will likely occur prior to the field visit so that a project has time to re-work their Climate section if it does not meet the Recognized GHG Program's criteria.

Option 2



Option 3



7.2 What are some possible scenarios for using the Climate section of the CCB Standards?

- **Approved methodological approaches - approved by a Recognized GHG Program**

Project Proponent uses an Approved methodology, but does not validate/verify the project under the GHG program (Box 17, Option 2 and Box 18). The project follows the methods and requirements of the Recognized GHG Program, but does not seek a combined validation/verification with that program and the CCB Standards. In this case, *Project Proponents should demonstrate that the methodology is used as intended by the Recognized GHG Program, but the accounting methods set out in the methodology may be applied in isolation from the rest of that GHG Program's requirements.* It is not required that the Project Proponent demonstrate compliance with *all* project-level requirements set out by the GHG Program under which the methodology was approved, unless compliance with these project-level requirements is fundamental to application of the methodology. Additionally, if the methodology refers to other protocols or tools developed by the GHG Program, then these rules should be considered, particularly if deemed essential for appropriately utilizing the methodology. *The Project Proponent should assess which protocols are necessary for successfully following the methodology and clearly explain and justify its choices to an auditor in the project design documentation. Any deviations from the method should be justified and demonstrated to still result in net-positive climate benefits.*

- **Defensible methodological approaches - not approved by a Recognized GHG program**

Under this scenario (Box 17, option 3 and Box 19), Project Proponents can employ a wide range of GHG accounting methods for projects that:

- a. propose a novel and clearly conservative approach to a particular land use scenario where approved methodologies recognized by GHG Programs do not yet exist,
- b. use other published methods that demonstrate net climate benefits since they lack resources to develop and approve a methodology,
- c. fall outside of the scope of eligible project types accepted by GHG Programs, or
- d. use an unapproved or expired methodology intended for a GHG Program paying attention to the reasons for expiry.

As long as net positive climate benefits can be clearly demonstrated (see section 7.3), a Project Proponent can use a Defensible methodology to showcase and describe their approach to a particular land use scenario that results in multiple benefits.

Some Project Proponents may encounter project types or land use scenarios where the costs of undertaking GHG accounting strategies to levels of certainty typically required by GHG Programs outweigh the estimated value of using the project's climate benefits as the principal means for financing the project. In such cases, a variety of simplified and/or conservative approaches to GHG accounting may be sufficient for meeting the requirements of the CCB Standards Climate section. This option encourages Project Proponents to use or develop new and innovative GHG accounting strategies in circumstances that might otherwise be outside the scope of current GHG Programs. For example, numerous tools, calculators, or other approaches may be acceptable to use as part of a simplified GHG accounting approach, however, care must be exercised to justify that GHG results are acceptable, appropriate, and conservative.

Box 18: Using an Approved methodological approach without validation or verification to the Recognized GHG Program



PROJECT PROFILE: Return to Forest, Nicaragua

The Return to Forest reforestation project (www.climate-standards.org/2007/12/12/return-to-forest-nicaragua/) was validated in March 2008 against the CCB Standards First Edition. Although this reforestation project used an earlier version of the Standards, and at the time of the writing of this guidance its CCB Status had expired, it nonetheless demonstrates the use of an Approved methodological approach. The Project Proponent used an afforestation/reforestation methodology developed for the Clean Development Mechanism* (AR-AM0002) to estimate net-positive carbon stock changes due to its project activities. It was not audited to a GHG Program, but used the CDM methodology to fulfil the requirements of the CCB Standards Climate section. A similar approach could also be used under the Third Edition of the standard. Some of the project's notable carbon strategies are summarized here.

- The central strategy of the project activities is focused on assisting the restoration and regeneration of sites subject to cattle grazing, totaling approximately 405 ha. Cattle pressures were removed and sites were planted with tree species raised in nurseries to allow sites to more quickly overcome competition by grass species.
- The project geo-referenced the planting sites and documented existing vegetation using ground-based measurements and aerial photography.
- Initial project area conditions contained two ecological life zones: Lowland Dry Tropical Forest, and Lowland Tropical Moist Forest. The reforestation areas prior to planting contained varied vegetation with various mixes of native grasses or non-native pasture grasses, occasionally accompanied by savannah-like trees and shrubs, and patches of remnant vegetation.
- The carbon content of pre-project vegetation was estimated using a combination of default values and acceptable allometric equations.
- With-project scenario estimates were obtained by estimating the carbon content of surrounding remnant vegetation at age classes for both moist and dry forests of with estimated ages of 20, 30, and 40 years, as well as a "mature" class. These data were gathered using a combination of interviews with local residents, and observations from the site. The 40-year carbon value for dry and moist forest stands was applied to each project area as appropriate.
- The project estimated that each parcel would reach the estimated 40-year value after removing cattle pressures, however 100% of the pre-project vegetation was discounted. In addition, the project discounted leakage at 20% due to the difficulties in continuously tracking the risk of displaced cattle.

Even with the deductions described, the project estimated significant overall net-positive climate benefits.

* GHG Programs must register with the CCB Standards to become Recognized GHG Programs. The Verified Carbon Standard has been approved by the CCBA as a Recognized GHG Program, which in turn has led to CDM methodologies, which are approved by VCS, becoming an Approved methodological approaches. A list of Recognized GHG Programs is posted on the CCBA's website, www.climate-standards.org. See Rules for the Use of the CCB Standards for more information about requirements for qualification as a Recognized GHG Program.

Source: Otterstrom, S., González, L., Hodgson, H., Lexama, M., Valerio, L., Fuentes, C., ...Martinez, J. (2008)

7.3 What are the important elements of a Defensible methodological approach?

Project Proponents must show how Defensible methodologies adhere to best practices in terrestrial carbon accounting developed by the IPCC and other respected organizations and institutions. In so doing, they must address the principal components that are commonly accepted as best practice in land-based climate change mitigation projects for the assessment and substantiation of the permanence, additionality, measurability, and net GHG benefits of the project. *The list below contains criteria that Project Proponents must address in their selection of Defensible methods*, which may rely on a combination of conservative and simplified approaches to demonstrate net-positive benefits (CL1.1, footnote).

- **Principles:** The principles of relevance, completeness, consistency, transparency and conservativeness shall be followed. However, it is expected that Defensible methodological approaches may tend to rely on heavily on the conservativeness principle in order to simplify GHG accounting methods.
- **Following good practice:** Any good practice guidance relevant to the approach must be used whenever applicable or available. If good practice guidance is not yet firmly established, the methods must be supported with accessible and verifiable evidence, including peer-reviewed sources, publications, or expert opinion.
- **Eligibility:** The approach must clearly explain the procedures for delineating the Project Area and the conditions under which the methodological approach can be applied.
- **Carbon pools and other relevant GHG sources:** Inclusion or exclusion of all commonly assessed carbon pools and GHG gases and sources recognized by the scientific community (represented by the IPCC or other relevant groups), and that could be applicable to the with- and without-project scenario, must be clearly identified and justified. All justifications for inclusion or exclusion must be clearly stated and supported with appropriate evidence.
- **Temporal boundaries of analysis and GHG accounting:** The time periods associated with any relevant analysis used to estimate net climate benefits must be clearly established and demonstrated as being applicable throughout the GHG accounting period or project lifetime. Specific start and end dates are required.
- **Benchmark data:** A Defensible methodology must provide credible methods that describe the conditions at the project start date in terms of relevant carbon stocks and other GHG sources (as applicable), as well as their associated GHG content or potential. These benchmarks must be used as the starting point for developing projections of the without and with-project-scenarios. The methods of a Defensible approach will necessarily guide the Project Proponent to completing the requirements of G2.2.
- **Additionality:** Please refer to the guidance in section 5 of this document. Furthermore, the CCB Standards (G2.2 footnote) specify that it is acceptable to use the *VCS Tool for the Demonstration and Assessment of Additionality in VCS AFOLU Project Activities* (Verified Carbon Standard Association, 2012a) to satisfy the requirement for establishing project additionality.
- **Projections of land use scenarios (without-project and with-project scenarios):** Defensible methods must provide and describe methods and results used to estimate the potential changes

in terrestrial carbon stocks in both the without-project and with-project scenarios. The without-project scenario is the same as a baseline scenario or reference level. Examples of available methods have been covered by the IPCC and others, such as the Global Observation of Forest Cover and Land Dynamics (GOFC-GOLD) Sourcebook. Please consult the “Key References” table in Box 19 for a list of recommended resources.

- **Uncertainty:** Project Proponents must identify the sources and levels of uncertainty and demonstrate how the project is being conservative with its estimates.
- **Leakage:** The CCB Standards require that increases in GHG emissions which are attributable to the project’s activities, but are outside of the Project Area, must be accounted for. Project Proponents must demonstrate that they have accounted for the risk of leakage and have produced a conservative estimate of leakage. It is not required that locations of possible leakage be identified, although a Project Proponent may do so. If the risk of leakage is relevant to the project then the Project Proponent must define a method to monitor leakage or otherwise account for it in a conservative fashion. Because the CCB Standard is designed for project-scale activities, a Project Proponent is not required to estimate or account for the effects of leakage that occur across international borders. The effects of leakage can significantly reduce or negate a project’s climate benefits, and as such, Project Proponents are required to consider and develop methods to prevent or reduce the emissions due to leakage.
- **Monitoring:** A defensible methodology must specify and justify the data and parameters needed for monitoring GHG emissions, as well as the frequency at which they are to be monitored. The methodology must contain a monitoring plan that leads to a credible and implementable means for monitoring and determining GHG emissions under the project scenario. The plan must have a clear operational component including timelines, milestones, roles and responsibilities, and any materials needed to gather the relevant measurements.

Box 19: Using a Defensible methodological approach



AGRICULTURE

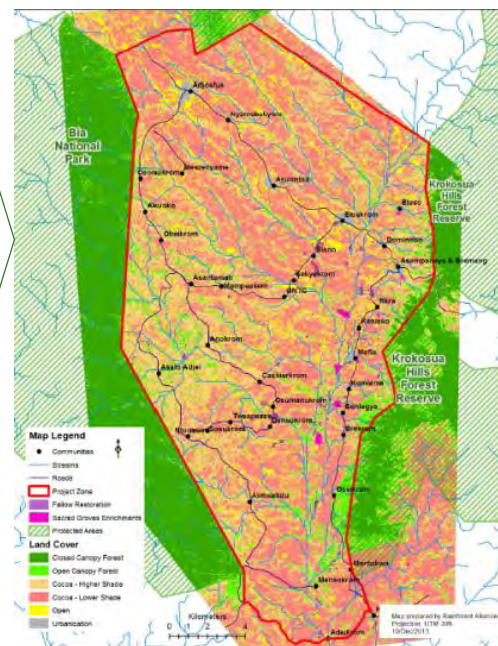


AVOIDED DEFORESTATION

PROJECT PROFILE: Improving Cocoa Agroforestry, Ghana

Improving Cocoa Agroforestry aims to implement Rainforest Alliance certification of cocoa farms and best practices for climate change mitigation at the landscape scale. The Project Proponents, the Rainforest Alliance and the Juabeso-Bia Landscape Management Board, are working with 36 cocoa farming communities with the aim of increasing economic opportunities for poor, marginalized farmers to promote an integrated approach to sustainable agriculture and forest management. Thousands of cocoa farmers and community members are being given the training necessary to protect and improve tree-based ecosystems through the application of climate-smart land use practices. Though the project has not yet been validated to CCB Standards, it is estimated that the adoption of best practices in cocoa farming (resulting in certification to the standards of the Sustainable Agriculture Network – ‘Rainforest Alliance Certified’) and restoration of degraded fallow lands and protection of ‘sacred groves’ will lead to positive climate benefits estimated as a potential net greenhouse gas reduction of 255,229 tCO₂e over a 20 year period. The Project Area and Project Zone are 2,796 and 36,211 hectares, respectively, and the Project Proponents are using a programmatic approach.

Dark red areas within the red Project Zone boundary are areas of low-shade agroforests; lighter red indicates cocoa grown under more shade. Green represents closed-canopy forests while light green represents open canopy forests. The open canopy areas are assumed to be the result of anthropogenic degradation.



Barriers were encountered in the identification of an appropriate GHG Program and Approved methodology for this project’s design. Barriers include the complexity of the landscape, the high transaction costs of aggregating smallholders under one project, the modest amounts of potential carbon stock enhancements, and the lack of an Approved methodological approach under a Recognized GHG Program for an improved cocoa agroforestry scenario in a mosaic landscape. Therefore, the project chose to develop a Defensible carbon accounting methodology. The project is relying on this approach as a means to concretely demonstrate the net-positive environmental and social benefits of certification to the standards of the Sustainable Agriculture Network (SAN) and the SAN Climate Module to actors in the global cocoa supply chain.

Box 19, continued

Constructing a Defensible methodological approach

The Project Proponents made a variety of simplifying and conservative assumptions to create a cost-effective landscape-scale approach for estimating the net positive climate benefits of enhancing shade tree cover in cocoa over time. Although Project Proponents could not rely on producing verified emissions reductions given gaps in available data, they were able to make a strong argument for claiming net positive climate benefits using a methodological approach based on accepted best practices.

Benchmark data: The team collected ground-based data from nearly 200 plots within cocoa agroforests and surrounding forests to inform a supervised classification of a RapidEye satellite image that used six land cover types to characterize the project area/zone. This approach allowed the team to distinguish between “low/no shade” and “higher shade” cover types, which make up 47% and 30% respectively of the 36,211-hectare Project Zone. The project targeted cocoa farms as Project Areas.

Carbon pools and other relevant GHG sources: The project only considered the carbon stored and released by above- and belowground live biomass. Ground-based sampling was used to establish constants for per-hectare carbon stored in three classes of trees: cocoa trees, low/no shade non-cocoa trees, and higher shade non-cocoa trees. Cocoa tree plantings were revealed to have relative structural consistency in both low/no shade and higher shade stands, meaning that the Project Proponents can use a constant, 24tC/hectare, for aboveground carbon stored in cocoa trees regardless of shade cover. The mean carbon content of non-cocoa shade trees in low/no shade and higher shade were established at 31tC/hectare and 52tC/hectare respectively.

Projections of land use scenarios:

Without-project scenario: Areas of low/no shade cocoa were assumed to not lose or gain shade trees in the baseline case, but their average (a non-zero carbon content value) was used as the target carbon density for the transition scenario from higher to lower shade cocoa. The Project Proponents did not possess resources to produce a historical estimate of emissions from conversion of forests to cocoa or from further degradation from higher shade cocoa to low/no shade. However, enough data existed to make a case for continued degradation represented by a transition from higher shade to no/low shade cocoa, which was estimated at an average loss of 21tC/hectare as represented by the difference between the mean carbon content between high and lower shade cocoa agroforest. The rate of at which this transition might occur could not be estimated with precision. However, several observations led the team to assume that the loss could occur within a 20-year timeframe across the Project Zone. First, the high degree of saturation of cocoa agroforests within the landscape, a majority of which were observed to be low/no shade cocoa. Second, the increasing value of cocoa as a commodity. Third, the continued dissemination of sun-tolerant cocoa varieties and continued patterns of shade tree girdling. At the farm level, the shade tree tallies taken from Rainforest Alliance Certified farm baseline data showed that farmers with low/no shade dominated the types of farms in the Project Area. Fourth, therefore, no emissions from degradation of shade trees were counted within the initial Project Area GHG estimates.

With-project scenario: Through the adoption of Rainforest Alliance Certified practices, the team accounted for stabilized shade tree cover (avoided emissions from degradation) and then quantified the carbon sequestration potential of shade tree enrichment plantings on farms that had adopted SAN best practices (2,401 hectares total). Farm entrance records and shade tree tallies indicated that an average farmer only had the equivalent of 5 shade trees per hectare. The Project Proponents’ goal is to increase this number to 20-25 trees/hectares to meet the shade tree count recommended by the Ghanaian Cocoa Research Institute (COCOBOD). The methodology uses regional growth estimates of similar enrichment plantings with similar species in western Africa. Survival rates were triangulated using secondary data and set at 70%, without replacement. This led to a conservative estimate that the project could add approximately 10 tC/hectare through shade tree enrichment plantings in certified farms over 20 years.

Leakage: The voluntary nature of certification to the SAN Standards and Climate Module, combined with the fact that certification does not directly displace cocoa activities and may promote a gain in efficiencies and production, led the team to assume a negligible risk of leakage to the surrounding forest reserves resulting from the project activities.

Source: Rainforest Alliance (2013)

7.4 What are some recommended references regarding good practices, methods or tools that could be consulted to construct a Defensible methodological approach?

There are a wide range of reports, assessments, case studies, tools and calculators that can be consulted and analyzed by practitioners for further information on good practice guidelines in terrestrial carbon accounting, appropriate methods, and means for estimating GHG emissions. Tools or calculators such as those in the following list of recommended sources may be acceptable, provided the proponent can justify that the data inputs and results obtained are applicable to the Project Area and its ecological/social characteristics, and are clearly conservative. The CCBA encourages practitioners interested in developing Defensible methodological approaches to refer to the important sources listed in Box 20.

Box 20. Key references for developing a Defensible methodological approach

Full information about where to find these documents is listed in the reference section.

GHG accounting principles and good practice

- The IPCC's *Good Practice Guidance for Land Use, Land-Use Change and Forestry* (GPG-LULUCF) provides supplementary methods and good practice guidance for estimating, measuring, monitoring and reporting on carbon stock changes and greenhouse gas emissions from LULUCF activities under Article 3, paragraphs 3 and 4, and Articles 6 and 12 of the Kyoto Protocol (Penman, Gytarsky, Hiraishi, Krug, & Kruger, 2003). The GPG-LULUCF assists countries in producing inventories for the land use, land-use change and forestry sector that are neither over- nor underestimates so far as can be judged, and in which uncertainties are reduced as far as practicable. It supports the development of inventories that are transparent, documented, consistent over time, complete, comparable, assessed for uncertainties, subject to quality control and quality assurance, and efficient in the use of resources.
- The *Land Use, Land-Use Change, and Forestry (LULUCF) Guidance for GHG Project Accounting* was developed by the World Resources Institute to provide more specific guidance to their Protocol for Project Accounting to quantify and report GHG reductions from LULUCF project activities (Daviet, Greenhalgh, & Weninger, 2006).
- *Forest Carbon Accounting*, a UNEP guide, presents the main principles, practices and challenges of carbon accounting in the forestry sector (Watson, 2009). It highlights the historic, current and future needs for forest carbon accounting; principles and good practice; the process of forest carbon accounting; and existing guidance and toolkits available for forestry carbon accounting.
- The paper *Methods for the quantification of emissions at the landscape level for developing countries in smallholder contexts* (Milne, et al. 2012) gives an overview of approaches that have been taken to date for landscape-scale GHG quantification, covering both measurement and modelling and the reliance of one upon the other. The discussion covers ground-based measurement approaches for carbon stock changes in biomass and soils, methods for measuring GHG flux and the application of remote sensing techniques. Computational approaches for estimating carbon stock changes and GHG emissions are discussed, in addition to the use of more complex dynamic ecosystem models. This is followed by an analysis of some of the resources that are available for those wishing to do GHG quantification at the landscape scale in areas dominated by smallholders.

Monitoring GHG Emissions

- Based on the current status of negotiations and UNFCCC approved methodologies, the *Global Observation for Forest Cover and Land Dynamics Sourcebook* (Global Observation for Forest Cover and Land Dynamics, 2013) aims to provide additional explanation, clarification, and methodologies to support REDD early actions and readiness mechanisms for building national REDD monitoring systems. The book emphasizes the role of satellite remote sensing as an important tool for monitoring changes in forest cover, and provides clarification on the IPCC Guidelines for reporting changes in forest carbon stocks at the national level.

Developing Forest Carbon Projects

- *Carbon Stock Assessment Guidance: Inventory and Monitoring Procedures* (Diaz & Delaney, 2011), a Forest Trends publication that is part of a series on developing forest carbon projects, highlights strong and timely treatment of technical subject areas among the multitude of existing guidebooks and directs readers to these sources for more detailed treatment of specific technical considerations.

8. CLIMATE GOLD LEVEL: POSITIVE CLIMATE CHANGE ADAPTATION BENEFITS

For the Climate Gold Level (GL1), it is expected that the project will provide significant support to assist Communities and/or biodiversity to adapt to the impacts of climate change. This section will help you understand how to demonstrate that the project promotes preparedness of Communities and biodiversity to adapt to local or regional climate impacts.

8.1 What are the requirements for achieving the Climate Gold Level?

The Climate Gold Level of the CCB Standards Third Edition is an optional criterion that can be used to identify and promote projects that provide significant support to Communities and/or biodiversity to *adapt to anticipated climate change impacts and risks*. It requires that likely regional or sub-national climate change and climate variability scenarios and anticipated impacts on Communities and biodiversity are identified and assessed. Measures to assist Communities and/or biodiversity to adapt to the probable impacts of climate change must be identified and implemented. Finally, the effectiveness of these measures to assist Community and/or biodiversity to adapt to climate change must be monitored, ensuring that assessment of the impacts of project activities on Communities must include an evaluation of the impacts by the affected Communities.

8.2 Why are responses to promote community and biodiversity adaptation so important?

An important element of ensuring long-term viability of community and biodiversity benefits generated by the project is to take climate change impacts into account and risks when planning project activities. Climate change has been affecting and will affect people and biodiversity in several ways. By assessing and identifying future changes in climate, adaptation strategies can be developed that aid in designing suitable project interventions that carry expected community and biodiversity benefits.

8.3 What is the suggested process for demonstrating assistance to Communities and biodiversity to adapt to the impacts of climate change?

Step 1: Identify climate change impacts

The first step is to identify likely climate change and climate variability scenarios. There are an increasing number of available studies at the regional and sub-national level that can help identify likely climate changes and the anticipated impacts on current land use systems in the absence of the project. With this information and the knowledge of current livelihood strategies and biodiversity in the Project Zone, anticipated impacts and risks of climate change for the well-being of communities and biodiversity can be described. The footnote to GL1.1 suggests some appropriate tools that can help with this step.

Step 2: Describe how the project will help Communities and/or biodiversity to adapt to climate change.

Once the likely without-project impacts on Communities and biodiversity have been described, a causal model must be developed to explain how project activities will help Communities and/or biodiversity to

minimize any expected negative impacts of climate change by helping Communities and/or biodiversity, for example helping to develop increased resilience and adaptive capacity.

The theory of change process (see section 1 on fundamentals) is one strategy that can be particularly useful in identifying the necessary steps in creating a causal model with respective actions for climate change adaptation projects.

8.4 What tools are available to help Project Proponents create a theory of change for climate change adaptation activities?

The following tools can be helpful in creating a theory of change that achieves the sub-points laid out above. Full reference information about where to find these documents is listed in the reference section.

- *Theory of change approach to climate change adaptation programming* (Bours, McGinn, & Pringle, 2014)
- *Ecosystem Services for Poverty Alleviation Theory of Change* (LTS International Ltd & ITAD Ltd., 2012)
- *Constructing theories of change models for ecosystem-based adaptation projects: a guidance document* (Conservation International, 2013a)
- *Community-based Risk Screening Tool – Adaptation and Livelihoods: Focus on Forests and Ecosystems* (International Institute for Sustainable Development, 2013)
- *The NatureServe Climate Change Vulnerability Index* (Young, Byers, Gravuer, Hall, Hammerson, & Redder, 2011)
- CARE's *Climate Vulnerability and Capacity Analysis Handbook* (Dazé, Ambrose & Erhart, 2009)
- *UKCIP Adaptation Wizard* (UKCIP, 2013) from the Environmental Change Institute at the University of Oxford

8.5 Can the Climate Gold Level be used for demonstrating positive climate change adaptation benefits if a waiver has been obtained for the Climate section CM1-4?

The Climate Gold Level may be used even if the project opts to use a Climate Section Waiver. Demonstration of climate change adaptation benefits is not required for projects that have met the requirements of a Recognized GHG Program. However, Project Proponents may want to assess climate change risks and vulnerabilities to demonstrate an extra level of project planning and engagement with the local communities and improve the long-term success of the project.

8.6 What are the main changes between CCB Standards Second and Third Editions regarding climate change adaptation?

A few substantive changes were made to the Climate Gold Level in the revision to develop the Third Edition. First, an indicator in the Second Edition requiring identification of risks to the project's climate, community and biodiversity benefits due to climate variability and their mitigation was moved from the Climate Gold Level to the General section and added to the identification of natural and human-induced risks related to the project (G1.10). In addition, it has now been clarified that Project Proponents are expected to develop a causal model to support the likely or probable impacts of a changing climate, what measures are needed to address these, and the assertions and assumptions of project benefits regarding adaptation to climate change. It is intended that the adaptive measures included in the conceptual model are also included in the monitoring plan.

9. COMMUNITY BENEFITS

Project activities must result in net positive impacts on the well-being of Communities and Community Groups over the project lifetime (CM1-4). Project activities must not result in net negative impacts (i.e. 'do no harm') on the well-being of Other Stakeholders and measures should be taken to mitigate that possibility. Project activities must maintain or enhance High Conservation Values related to community well-being. Monitoring plans must be developed and implemented to assess the social impacts, using indicators selected to assess changes resulting from project activities with respect to the without-project scenario based on the project's theory of change. This section will help you understand how to meet the requirements of the CCB Standards for delivering and monitoring community benefits.

9.1 What are the requirements for demonstrating community benefits in the CCB Standards?

Land-based carbon projects can have many types of good and bad impacts on Communities and Community Groups (see Box 21). The following five indicators are important for demonstrating net community benefits.

- **CM 2.1 – Evaluate changes in well-being due to project activities**, assessing predicted and actual, direct and indirect, positive and negative (costs and risks) in a participatory manner with affected Community Groups, including potential impacts of changes in all ecosystem services identified as important for the Communities, using appropriate methodologies to estimate such changes and stating and defending assumptions.
- **CM 2.3 – Demonstrate net positive well-being impacts for all identified Community Groups**, assessing the difference between with-project and without-project measures (indicators) of community well-being measured over time.
- **CM2.2 – Describe measures to mitigate negative impacts and to maintain or enhance High Conservation Values**, helping to ensure net positive impacts.
- **CM2.4 – Demonstrate no negative impacts on High Conservation Values** related to community well-being.
- **CM3.3 – Demonstrate that project activities do no harm to the well-being of Other Stakeholders**

Box 21: Types of impacts land-based projects may have with respect to community well-being

Economic aspects	Social aspects	Environmental service aspects	Cultural aspects
<ul style="list-style-type: none">• Sustainable economic alternatives• Income from project activities• Increased access to credit• ...	<ul style="list-style-type: none">• Organization and governance• Social capital• Influence on decision-making• Health care• Education• ...	<ul style="list-style-type: none">• Improved water quantity and quality• Improved indoor air quality• ...	<ul style="list-style-type: none">• Cultural integrity: (historical and spiritual connections between people and nature)• ...

9.2 What are the different stakeholders and stakeholder groups that need to be identified to demonstrate community benefits?

In order to assess community benefits, *the Project Proponents must first identify all the stakeholders who affect or may be affected by the project through a rigorous stakeholder analysis and mapping exercise* (G1.5). The SBIA Manual, Part 2 provides a detailed explanation of good practices for stakeholder analysis (Richards & Panfil, 2011, p. 26-30).

All these stakeholders must then be classified into Communities, and constituent Community Groups, or Other Stakeholders as defined in the CCB Standards (G1.6). The accurate identification of these groups is important since various indicators in the Standards related to demonstration of net community benefits and do-no-harm apply to them. For example, the CCB Standards require net positive benefits for all Community Groups, and access to information for all Communities and Other Stakeholders, etc. (see Box 22).

In the case of Community Gold projects, the Project Proponent must capture data about the Communities at the household level, referred to in the CCB Standards as Smallholders/Community Members (see the section 10 on Exceptional Community Benefits for further information about Community Gold Level).

Box 22: Stakeholders to be identified

PURPOSE		GROUPS TO BE IDENTIFIED FOR CCB STANDARDS	ADDITIONAL GROUPS FOR COMMUNITY GOLD LEVEL
Community benefits	For demonstrating 'net positive benefits'	Communities, Community Groups	Community Groups that are marginalized and/or vulnerable and women
	For demonstrating 'no harm' to stakeholders	Other Stakeholders	Smallholders/Community Members (households) that are marginalized and/or vulnerable
	For demonstrating 'no harm' to High Conservation Values	Communities and Community Groups (for ecosystem services derived at a local level)	
Stakeholder engagement	For demonstrating full and effective participation	Communities, Community Groups, women, marginalized and vulnerable members, Other Stakeholders	

9.3 What are the criteria for identification of Communities and Other Stakeholders in the CCB Standards?

Communities are identified based on whether they 'derive income, livelihood or cultural values and other contributions to well-being from the Project Area at the start of the project and/or under the with-project scenario'. Communities may live in the Project Area, the Project Zone or beyond (see the section on Project Boundaries for further information on Project Area and Project Zone). For example, there may be groups of people who derive income, livelihood or cultural values from the Project Area by visiting the area, but who do not live in or adjacent to the Project Area. In such cases, these groups are considered Communities and must be included in the Community descriptions and analyses.

However, it is not required to predict all Communities that may become involved in the future in the without-project scenario, for example as hired laborers on a plantation or in a logging operation. Any groups for which all income, livelihood or cultural values derived from the Project Area result from illegal activities that are not long-standing practices (that confer 'customary rights') may be excluded from Communities and treated as Other Stakeholders. However, *if the groups derive only some values from the Project Area from illegal activities and other values are based on statutory or customary rights, then they should be included in the Communities.* See question 9.5 on illegal activities for further explanation and examples.

Incoming groups who are Project Proponents should not be included in Communities unless they have interests and rights in the Project Area unrelated to their role as Project Proponent. However, in some instances a Community itself may be the Project Proponent (see the case study of the Suruí project in Box 33).

Other Stakeholders are any populations that do not qualify as Communities but that ‘can potentially affect or be affected by the project activities’. For example, there may be people living within the Project Zone who do not derive income, livelihood or cultural values from the project area. As for Communities, Other Stakeholders may also live outside the Project Zone and are not defined spatially. The purpose of identification of Other Stakeholders is to ensure that they receive information, that they are consulted and that no harm is done to these groups.

9.4 How are Community Groups identified in the CCB Standards?

Community Groups are sub-groups within the Communities, such as Indigenous Peoples, women, charcoal producers, youth, etc. The Community Groups are not mutually exclusive and some members may belong to multiple Groups. For example, a woman may belong to a Women’s Group, an Indigenous Peoples’ Group, and a Cattle Herders’ Group. However, *all people in the Community should belong to at least one of the Community Groups identified. Any residual Community members who do not belong in any of the Community Groups initially identified must be clustered in an additional Community Group*, which could be a large group that includes all the people in the Communities.

The Community Groups are identified as groups of people with ‘similar income, livelihood and/or cultural values and other contributions to well-being from the Project Area.’ Their similar values may be linked to ethnicity, gender, age, household income, size of land-holding, levels of health, education, labor resources, vulnerability to risk, land use/livelihood interests (e.g. pastoralists, charcoal producers, etc.). In addition, *women and marginalized and vulnerable groups need to be identified in the stakeholder mapping exercise to ensure effective consultation* (G3.4). One should note, however, that the identification of groups is context specific and may vary depending on the size and complexity of the Communities from which the Community Groups are derived.

Identifying Community Groups will demonstrate a good understanding of the Communities’ composition and relationship with the Project Area. Analyzing the impacts on different groups, taking into account their different values and reliance on the Project Area, ensures that some groups do not end up bearing a disproportionate burden of risks and costs related to the project. It also ensures that all groups receive benefits from the project. When Community Groups are not significantly affected by the project and are not participating in the project, then it is permissible not to include them in the impacts analysis (CL2.3 footnote).

Community Gold projects need to demonstrate net positive benefits to women, as well as, marginalized and vulnerable Community Groups, and must ensure effective consultation with these Groups (GL2.4-5).

9.5 Do groups carrying out illegal activities need to be considered for community benefits analysis?

The indicator on illegal activities (G5.4) requires that illegal activities taking place in the Project Zone that could affect the project’s climate, community or biodiversity impacts must be identified and measures must be taken to reduce such activities.

If groups are carrying out illegal activities in the Project Zone at the beginning of the project or in the with-project scenario that are associated with long-standing community land and resource usage that confer customary rights (footnote CM2.1), then those groups qualify for the provisions of Free, Prior and Informed Consent (FPIC) in the Third Edition and need to derive net positive benefits from the project.

For example, in the Kikonda case study (Box 23), if the charcoal producers or pastoralists had customary rights to lands in the Project Area, they would qualify for FPIC and would need to derive net positive benefits from the project. However, the analysis of project costs and benefits should not include illegal activities, since benefits must not be derived from illegal activities (G5.4).

If there are any cases where, for certain groups, their only interest related to the Project Area is carrying out illegal activities that are not associated with long-standing community land and resource usage, then they are considered as Other Stakeholders since they can ‘potentially affect or be affected by the project activities’. These groups do not qualify for Free, Prior and Informed Consent and need to be included in the Other Stakeholder group for which the project activities ‘do no harm’. However, if such groups are simultaneously also deriving values from the Project Area by performing activities based on statutory or customary rights, these groups would qualify for FPIC and need to derive net positive benefits from the project. For example, in the Kikonda case study (Box 23), there might be subsistence farmers who are involved in project activities who may also be carrying out illegal activities, such as hunting or charcoal production. These farmers are eligible for FPIC and need to derive net positive benefits from the project.

Box 23: Identifying Community Groups and Other Stakeholders



AFFORESTATION/REFORESTATION

PROJECT PROFILE: Kikonda Forestry Project, Uganda

The Kikonda Forest Reserve Project is a commercial plantation in central Uganda implemented by German-based company global-woods AG. In 2001, the Government of Uganda issued a tree planting licence to global-woods to use 12,186 hectares area of the reserve, with approximately 8,000 hectares being planted and the remaining area (approximately 30%) allocated for conservation (including areas of natural forest, wetlands and hilltops). Under this plan, the project includes provisions to support schools within the region and employment opportunities from project activities. 12,540 people live in 20 villages around the Kikonda Forest Reserve.

COMMUNITY GROUP	WITHOUT-PROJECT SCENARIO	WITH-PROJECT SCENARIO
Subsistence farmers	Cultivate crops on small farms outside the reserve within a 5km radius of the Project Area. Derive some income from tree planting in the Reserve.	Project participants: Same as without-project scenario but with additional training in tree planting and forest conservation, and better access to schools Non-participants: Same as without-project scenario; no harm should come to them as a result of the project
Cattle keepers*	Nomadic; pass through the Project Zone annually or every second year. During migration, cattle keepers graze cows on Reserve land or that which belongs to farmers	Move to other areas
Charcoal producers*	Important source of income	Alternate employment
Wild pig hunters*		
Forest reserve employees	Employed in forest operations	
In-migrants	Non-existent	Employment

*Illegal activity



The Project Design Documentation for this project does not contain sufficient information on whether those groups currently engaged in illegal activities have customary rights to the lands in the Project Area as defined in the CCB Standards. If they do, they qualify for the provisions of Free, Prior and Informed Consent and need to derive net positive benefits from the project.

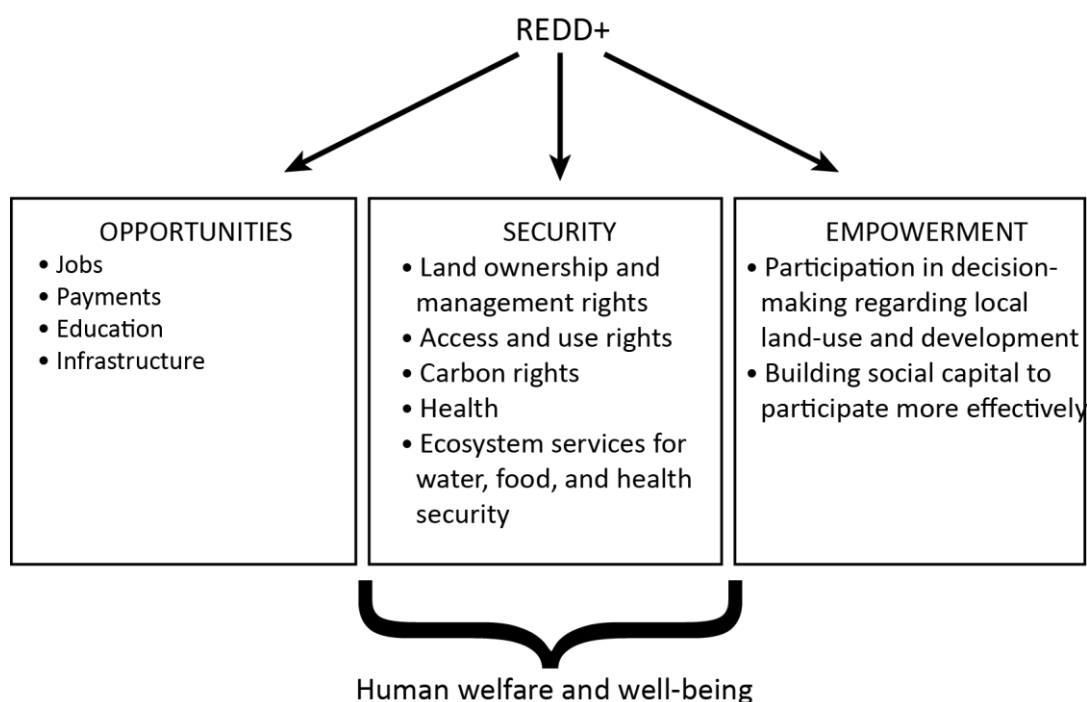
Source: global-woods (2009)

9.6 What constitutes improvements in well-being?

Well-being is defined as ‘people’s experience of the quality of their lives and may include environmental, social, economic, psychological, spiritual, and medical dimensions’. *Well-being needs to be defined by the Communities themselves* (for more information on participatory evaluation of impacts please see section 13 in this document) (CM1, footnote).

Well-being is much more than the component of wealth creation opportunities for Communities. Well-being is also impacted by enhancing (or weakening) security, including tenure security, food security, livelihood security, and adaptability to climate change; and by facilitating (or preventing) the empowerment of individuals and communities to participate in decisions affecting local land use and development. This conceptual framework of improvements in well-being draws on the World Bank’s ‘Attacking Poverty’ framework applied to the context of socio-economic outcomes in REDD+. See Box 24 and Lawlor, Madeira, Blockhus and Ganz (2013) for a more detailed discussion.

Box 24: Adapted ‘Attacking Poverty’ framework for characterizing improvements in well-being in REDD+



Source: Lawlor, Madeira, Blockhus, & Ganz (2013)

Other frameworks that consider well-being aspects beyond livelihoods may be used such as The Sustainable Livelihoods Framework explained in p. 35-38 of the SBIA Manual Part 2 (Richards, 2011), and the ‘Nested Spheres of Poverty’ framework (Göner, Haug, Cahyat, Wollenberg, de Jong, Limberg, ... & Becker, 2007).

9.7 What is the recommended process to demonstrate net positive community benefits?

The CCB Standards require net positive impacts on the well-being of all Community Groups identified within the Communities. Projects seeking validation to the CCB Standards (to determine that the *project design* conforms to the Standards) need to describe predicted impacts on the well-being of all Community Groups. Projects seeking verification to the CCB Standards (to determine that the *project implementation* has been successful) need to demonstrate that the project has delivered, or is on track to deliver, net positive impacts on the well-being of all Community Groups.

Demonstration of net positive impacts involves the following steps:

Step 1: Describe the starting conditions for the Communities, Community Groups and Other Stakeholders identified in the stakeholder mapping exercise with as much historical perspective as practical.

This step corresponds to SBIA stage 1 of Part 1 of SBIA Manual (Richards & Panfil, 2011). For further details on description of social conditions, see the SBIA manual Part 1, p. 20-26 (Richards & Panfil, 2011). For further details on stakeholder analysis, see the SBIA manual Part 2, p. 26-29 (Richards, 2011).

Step 2: Describe expected changes in well-being conditions for all Community Groups under the most likely without-project land use scenario that is also being used for the carbon accounting. Scenario analysis can be a useful tool for building the without-project scenario.

This step corresponds to SBIA stage 2 of Part 1 of SBIA Manual (Richards & Panfil, 2011). For further details on scenario analysis see the SBIA Manual, Part 2, p. 31-34 (Richards, 2011).

Step 3: Assess the impacts resulting from project activities on all Community Groups to demonstrate and justify a net positive benefit for all Community Groups compared with the without-project scenario. Projects seeking validation to the CCB Standards need to assess the predicted impacts of project activities, whereas projects seeking verification need to assess the actual impacts of project activities. The attribution of benefits to project activities must be derived from the theory of change analysis (G1.8). For more details on theory of change see section 1 of this document.

*In order to claim net positive benefits, the assessment of impacts must take into account the types and magnitude of impacts and must assess all positive and negative impacts, including costs and risks. The assessment must include direct and indirect impacts (see Box 25), and include those related to social, cultural, environmental and economic aspects and to human rights and rights to lands territories and resources (CM2.1). Costs include those related to responsibilities and also opportunity costs to the communities (for example, reduced flexibility in land use options and loss of alternative economic activities in example in Box 25). In addition, a participatory assessment should be made of impacts of changes in all ecosystem services identified as important for the Communities. For more details on participatory identification and assessment of ecosystem services, see question 13.4 in this document. The requirement for net positive benefits, however, does not mean that all individuals or all households must receive net benefits. Instead, *Project Proponents must give credible justification that Communities as a whole, and Community Groups within them, receive net benefits (CM2.3). For example women, Indigenous Peoples, or another socio-economic or cultural groups identified as deriving different cultural, economic and livelihood values from the Project Area must get a net benefit from the project activities rather than their individual members.**

There is an exception for Community Groups that are not significantly affected by, or participating in, the project (for example people who visit the Project Area infrequently), in which case, net well-being impacts must not be negative for that Community Group.

In contrast, *Community Gold projects must generate net positive short-term and long-term well-being impacts at a household level* (for Smallholders and Community Members) (GL2.2).

This step corresponds to SBIA stages 3 and 4 of Part 1 of SBIA Manual (Richards & Panfil, 2011, p. 20-30).

Box 25: Examples of direct and indirect impacts



AFFORESTATION/REFORESTATION

PROJECT PROFILE: Trees for Global Benefit, Uganda

The Trees for Global Benefit project is an afforestation project in the rural Bushenyi District of Southwestern Uganda that promotes agroforestry systems and small-scale plantations involving native and naturalized trees. The project aims to help local farmers increase and diversify their incomes, gain access to fuel wood and basic building materials, and reduce deforestation pressures on nearby forests.

Observed direct outcomes

- Carbon payments to households
- Income generating activities
- Strengthened social and human capacity
- Improved farm management capacity
- Improved timber stocks

Observed indirect outcomes and impacts

- Increased access to credit (loans)
- Increased ability for households to make investments
- Increased household spending (purchasing power) on basic needs
- Improved household food security and diet
- Improved fuel security (firewood)
- Improved social cohesion
- Decreased flexibility in land use options (loss of alternative economic activities)
- Decreased customary access to previously idle land (loss of customary 'safety net')
- Increased reliance on purchased food
- Renting land necessary for farming due to loss of access to land
- New disputes and conflict between households regarding land use and natural capital in new woodlots

Source: Carter's 2009 study of the socio-economic benefits of Plan Vivo projects, as presented in Richards (2011)

Step 4: Identify indicators and develop the monitoring plan to monitor social impacts.

Appropriate indicators need to be selected to facilitate social impact assessment. Some important aspects of indicator selection are:

- The theory of change provides the best basis for selecting indicators to help with demonstrating that observed changes can be attributed to project activities.

- Indicators should be specific, measurable, achievable, relevant, reliable and sensitive. Having Specific and measurable objectives (G1.2) helps with identification of appropriate indicators.
- Indicators for potential negative impacts must also be selected.

For further details and examples of indicators to monitor social impacts, see the SBIA Manual, Part 2 (Richards, 2011, p. 59-66).

The CCB Standards require Project Proponents to develop a monitoring plan to ensure that monitoring of social impacts is integrated into project implementation. *The monitoring plan must be a clear, well-justified plan for collecting information that will be used to describe the impact of the project. The monitoring plan must contain the specific methods, measures and timeframes for assessing and expressing project impacts* (CM4.1). The monitoring plan should consist of social impact variables to be monitored, an explanation and justification of the methods used to collect information and the plan for collecting this information. This includes sampling designs and methods, timelines, roles, responsibilities, and field procedures. Furthermore, the plan should contain an unambiguous description concerning the source of the measurement, the sampling intensity, sampling frequency, and the unit of measure for each parameter.

The CCB Standards require an ‘evaluation of the impacts by the affected groups’ (CM2.1), and it is therefore important to integrate this aspect into the monitoring plan.

The CCB Standards Third Edition has eliminated the flexibility once afforded to allow presentation of the full monitoring plan within six months of the project start date or twelve months of validation. *Project Proponents are now required to present a full monitoring plan at the time of validation without exception* (CM4).

Communities and Other Stakeholders need to be informed about the project’s monitoring plan as well as its results through appropriate means (CM4.3). An explanation to Communities consisting of indicators alone as a measure of project impacts may be inappropriate depending on local circumstances such as language barriers, or literacy and education levels. However, the communication of predicted impacts to Communities is also incomplete without some explanation of the variables or measures assessed by the monitoring plan. *Project Proponents should gauge local circumstances such as language barriers, and literacy and education levels to design an appropriate strategy for communicating the monitoring plan and monitoring results.* The Project Proponent should consider these characteristics when deciding how to convey the intent, procedures, timelines and expectations of local participation (if any) contained in the monitoring plan in a manner that is comprehensible by Communities and Other Stakeholders. Project Proponents may summarize aspects of plans and their results using a variety of strategies as long as they do not diminish the ability of Communities and Other Stakeholders to understand their overall objectives and the implications for these stakeholders.

Some useful methods for social impact assessment are ‘Participatory Impact Assessment’ and ‘Basic Necessities Surveys’ (see Box 26). For further information on participatory impact assessment methods and basic necessities surveys see the SBIA Manual, Part 2 (Richards, 2011, p. 43-51, 54-55).

Box 26: Basic Necessities Survey – a locally defined assessment of well-being

Most common assessments of household livelihoods focus on minimum monetary requirements (e.g. \$1/day) to cover the costs of a standard basket of items such as food, fuel, shelter, and clothing. These global measures do not reflect local definitions of well-being as required by the CCB Standards. The Basic Necessities Survey in SBIA Manual, Part 2 (Richards, 2011, p. 54-55) is an easy way to implement approach that uses a locally-defined set of goods and services that a community feels all families should have and none should live without. A simple yes/no survey makes it easy to assess which households have access to all goods and services needed to meet their basic needs and which do not. Repetition of the survey over time quickly shows how many households' locally-defined well-being has improved or declined as a result of project activities.

This step corresponds to SBIA stages 5 and 6 of the SBIA Manual, Part 1 (Richards & Panfil, 2011). For further details on identification of indicators and development of the monitoring plan see the SBIA Manual, Part 1 (Richards & Panfil, 2011, p. 43-53). An example of a monitoring plan is provided in Box 27.

Box 27: Example of a monitoring plan: The Cordillera Azul National Park REDD Project

There is no single monitoring plan design that will be universally appropriate to all projects. However, there are important principles that can raise the effectiveness and quality of monitoring plans that measure net positive community benefits. The monitoring plan of the Cordillera Azul National Park REDD Project provides an excellent example to illustrate some of these principles.

The Cordillera Azul National Park REDD Project aims to avoid deforestation in the Cordillera Azul National Park, Peru, through work with communities in the surrounding buffer zone. This approach relies on a technical team that works closely with community leaders and organizations to implement land-use zoning, environmental education, and capacity building to improve well-being by strengthening the subsistence base in the buffer zone and the ability of local residents to manage the park. From the beginning, the Project Proponent, Centro de Conservación, Investigación y Manejo de Áreas Naturales (CIMA), and its implementing partner The Field Museum, designed a participatory approach for assessing the initial conditions of land-use change for the park and buffer zone. This approach led to a theory of change to explain the causes of deforestation in the Project Zone, and was used as the basis for addressing the causes of deforestation. Ultimately the decision on how to measure project impacts was rooted in a participatory framework from the beginning. For more details see the CCBA website. www.climate-standards.org/category/projects

The Monitoring Plan

The Project Proponent first developed a spatially explicit framework for mapping project risks, assets and opportunities throughout the Project Area and Project Zone at the beginning of the project. This was paired with household surveys conducted using a methodology based on a combination of the Sustainable Livelihoods Framework and the Review of Outcomes to Impact (ROtI) approach. The social impacts of the project were assessed, using a results chain that maps how short term project outputs can lead to long term changes. Once project activities had commenced, CIMA implemented a process using several sources to evaluate project indicators from a variety of perspectives, allowing the team to identify and adapt to any unforeseen circumstances. These sources include monthly field reports from its technical team; reports and real-time assessments from park guards, project staff, and community leaders; and a periodic social risk and asset map based on a household survey (every three years). The results generated from various monitoring sources are then shared and analyzed between units of the technical teams and validated with participating communities and community representatives. This allows CIMA to engage project communities in a meaningful way to influence project design, select indicators, and gather and review monitoring results.

Box 27, continued

The table below summarizes how CIMA has conceptualized their principal monitoring indicators into five categories that most effectively measure ‘quality of life’ in the project zone as defined through the participatory processes. It is important to note that these indicators are the product of a variety of processes specific to this project that assisted in the design of the monitoring plan and may not be applicable or appropriate for all projects.

Category	Indicator	Data Collection Method	Data Source	Frequency
Natural Capital	# of hectares under community-generated management or used according to land-use plans	Quarterly summaries of field staff reports and; Social risk and asset mapping	Social Risk and Asset Maps; Project Maps	Annually at time of evaluation and more thoroughly every 3 years with the Social Risks and Asset Maps
Social Capital 1	# of communities implementing quality-of-life plans and sharing experiences with neighbors.	Social Risk and Asset Maps	Social Risk and Asset Maps report	Every 3 years
Social Capital 2	# of communities with women as active participants in REDD project interventions	Quarterly summaries	Annual report	Annual
Human Capital	# of REDD project participants applying new technical skills in resource management, project administration and governance	Number of individuals certified in new skills and field staff reports	Project maps and data base	Annual
Physical Capital	# of communities with infrastructure improvements and mechanisms for maintaining them sustainably	Social Risk and Asset Maps	Social Risk and Asset Maps report	Every 3 years
Economic Capital	# of participating communities whose basic family and communal needs are satisfied through sustainable economic activities in accordance with land-use and quality-of-life plans	Social Risk and Asset Maps	Economic analysis component of the Social Risk and Asset Maps	Every 3 years

Source: CIMA (2012)

9.8 How should no net negative impacts on well-being of Other Stakeholders be demonstrated?

The Project Proponent must undertake an analysis of positive as well as negative impacts on the population identified as Other Stakeholders (CM3.1). The impact analysis only needs to consider impacts in terms of positive, negative, or no impact without an indication of magnitude (CM3.3). Net impacts can be assessed across all Other Stakeholders as a group and this indicator can be met as long as populations of Other Stakeholders with negative impacts do not outweigh populations of Other Stakeholders with benefits.

In the Kikonda project example (see Box 23), Other Stakeholders are local farmers who are not involved in tree planting. The cattle keepers, charcoal producers and hunters, whose activities are illegal, would be Other Stakeholders if they do not possess statutory or customary rights to the lands and if their interest in the Project Area is solely derived from their illegal activity. *The do-no-harm analysis needs to consider the positive and negative impacts across the entire population of Other Stakeholders (CM3.3).* This is done by considering the number of Other Stakeholders who are actually negatively impacted (e.g. hunters in the Kikonda project example) as compared to the number of individuals to whom benefits accrue (for example, alternative jobs for charcoal producers or enhanced ecosystem services).

The Standards also require negative well-being impacts on Other Stakeholders to be mitigated. This may occur without outside intervention by enabling circumstances, possibly as facilitated by the Project Proponent (in the Kikonda project, nomadic groups may choose to move to other areas), or by deliberate attempts to compensate or provide new opportunities to affected stakeholders (in the Kikonda project, through the provision of alternative jobs and education).

9.9 How should no harm to High Conservation Values related to community well-being be demonstrated?

The CCB Standards require that no harm is done to High Conservation Values (HCVs) related to community well-being in the Project Zone (CM2.4). The High Conservation Value criteria used in the CCB Standards are based on those defined by the High Conservation Value Resource Network (www.hcvnetwork.org).

The HCVs related to community well-being identified in CM1.2 are:

- Areas that provide critical ecosystem services;
- Areas that are fundamental for the livelihoods of Communities; and
- Areas that are critical for the traditional cultural identity of Communities.

The Three HCVs related to biodiversity are identified in B1.2.

The HCV Network's *Common Guidance on the Identification of High Conservation Values* (Brown, Dudley, Lindhe, Muhtaman, Stewart, & Synnott, 2013) clarifies that critical situations are those:

- Where loss of or major damage to an ecosystem service would cause serious prejudice or suffering to recipients of the service either immediately or periodically.
- Where there are no viable, readily available or affordable alternatives that can be relied on if the service fails.

Ecosystem services are functions provided by terrestrial ecosystems that benefit people or the natural capital upon which people depend. Box 28 lists the types of ecosystem services and groups them into regulating services, supporting services, provisioning services and cultural services. Critical ecosystem services (CM1.2a/HCV4) can be described as regulating and supporting services. Services that are ‘fundamental for the livelihoods of Communities’ (CM1.2b/HCV5) can be described as provisioning services. Services that are ‘critical for the cultural identity of Communities’ (CM1.2c/HCV6) can be described as cultural services. Even though there can certainly be overlaps in these categories, they are useful frames for their identification.

Box 28: List of ecosystem services with definitions and examples

Service	Subcategory	Definition	Examples
Provisioning services: The goods or products obtained from ecosystems			
Food	Crops	Cultivate plants or agriculture produce harvested by people for human or animal consumption as food	<ul style="list-style-type: none"> • Grains • Vegetables • Fruits
	Livestock	Animals raised for domestic or commercial consumption	<ul style="list-style-type: none"> • Chickens • Pigs • Cattle
	Capture fisheries	Wild fish captured through trawling and other non-farming methods	<ul style="list-style-type: none"> • Cod • Crabs • Tuna
	Aquaculture	Fish, shellfish, and/or plants that are bred and reared in ponds, enclosure, and other forms of freshwater or saltwater confinement for purposes of harvesting	<ul style="list-style-type: none"> • Shrimp • Oysters • Salmon
	Wild foods	Edible plant and animal species gathered or captured in the wild	<ul style="list-style-type: none"> • Fruits and nuts • Fungi • Bushmeat
Biological raw materials	Timber and other wood products	Products made from trees harvested from natural forest ecosystems, plantations, or non-forested lands	<ul style="list-style-type: none"> • Industrial roundwood • Wood pulp • Paper
	Fibers and resins	Non-wood and non-fuel fibers, and resins	<ul style="list-style-type: none"> • Cotton, silk, hemp • Twine, rope • Natural rubber
	Animal skins	Processed skins of cattle, deer, pig, snakes, sting rays, or other animals	<ul style="list-style-type: none"> • Leather, rawhide, cordwain
	Sand	Sand formed from coral and shells	<ul style="list-style-type: none"> • White sand from coral and white shells • Colored sand from shells
Ornamental resources		Products derived from ecosystems that serve aesthetic purposes	<ul style="list-style-type: none"> • Tagua nut, wild flowers, coral jewelry
Biomass fuel		Biological material derived from living or recently living organisms – both plant and animal – that serves as a source of energy	<ul style="list-style-type: none"> • Fuelwood and charcoal • Grain for ethanol production • Dung
Freshwater		Inland bodies of water, ground water, rain water, and surface waters for household, industrial, and agricultural uses	<ul style="list-style-type: none"> • Freshwater for drinking, cleaning, cooling, industrial processes, electricity generation, or mode of transportation
Genetic resources		Genes and genetic information used for animal breeding, plant improvement, and biotechnology	<ul style="list-style-type: none"> • Genes used to increase crop resistance to disease or pests
Biochemical, natural medicines, and pharmaceuticals		Medicines, biocides, food additives, and other biological material derived from ecosystems for commercial or domestic use.	<ul style="list-style-type: none"> • Echinacea, ginseng, garlic • Paclitaxel as basis for cancer drugs • Tree extracts used for pest control
Regulating services: The benefits obtained from an ecosystem’s control of natural processes			
Maintenance of air quality		Influence ecosystems have on air quality by emitting chemicals to the atmosphere (i.e., serving as a “sources”) or extracting chemicals from the atmosphere (i.e., serving as a “sink”)	<ul style="list-style-type: none"> • Lakes serve as a sink for industrial emissions of sulfur compounds • Tree and shrub leaves trap air pollutants near roadways
Regulation of climate	Global	Influence ecosystems have on the global climate by emitting greenhouse gases or aerosols to the atmosphere or by absorbing greenhouse gases or aerosols from atmosphere	<ul style="list-style-type: none"> • Forests capture and store carbon dioxide • Cattle and rice paddies emit methane
	Regional and local	Influence ecosystems have on local or regional temperature, precipitation, and other climatic factors	<ul style="list-style-type: none"> • Forests can impact regional rainfall levels

Box 28, continues

Service	Definition	Examples
Regulating services continued		
Erosion control	Role ecosystems play in retaining and replenishing soil and sand deposits	<ul style="list-style-type: none"> •Vegetation such as grass and trees prevents soil loss due to wind and rain and prevents siltation of waterways •Coral reefs, oyster reefs, and sea grass beds reduce loss of land and beaches due to waves and storms
Water purification and waste treatment	Role ecosystems play in the filtration and decomposition of organic wastes and pollutants in water; assimilation and detoxification of compounds through soil and subsoil processes	<ul style="list-style-type: none"> •Wetlands remove harmful pollutants from water by trapping metals and organic materials •Soil microbes degrade organic waste, rendering it less harmful
Disease mitigation	Influence that ecosystems have on the incidence and abundance of human pathogens	<ul style="list-style-type: none"> •Some intact forests reduce the occurrence of standing water – a breeding area for mosquitoes – which lowers the prevalence of malaria
Water purification and waste treatment	Role ecosystems play in the filtration and decomposition of organic wastes and pollutants in water; assimilation and detoxification of compounds through soil and subsoil processes	<ul style="list-style-type: none"> •Wetlands remove harmful pollutants from water by trapping metals and organic materials •Soil microbes degrade organic waste, rendering it less harmful
Maintenance of soil quality	Role ecosystems play in sustaining soil's biological activity, diversity and productivity; regulating and partitioning water and solute flow; storing and recycling nutrients and gases; among other functions	<ul style="list-style-type: none"> •Some organisms aid in decomposition of organic matter, increasing soil nutrient levels •Some organisms aerate soil, improve soil chemistry, and increase moisture retention
Pest mitigation	Influence ecosystems have on the prevalence of crop and livestock pests and diseases	<ul style="list-style-type: none"> •Predators from nearby forests – such as bats, toads, and snakes – consume crop pests
Pollination	Role ecosystems have on the prevalence of crop and livestock pests and diseases	<ul style="list-style-type: none"> •Bees from nearby forests pollinate crops
Natural hazard mitigation	Capacity for ecosystems to reduce the damage caused by natural disasters such as hurricanes and tsunamis and to maintain natural fire frequency and intensity	<ul style="list-style-type: none"> •Mangrove forests and coral reefs protect coastlines from storm surges •Biological decomposition processes reduce potential fuel for wildfires
Cultural services: The nonmaterial benefits obtained from ecosystems		
Recreation and ecotourism	Recreational pleasure people derive from natural or cultivated ecosystems	<ul style="list-style-type: none"> •Hiking, camping, and bird watching •Going on safari •Scuba diving
Ethical and spiritual values	Spiritual, religious, aesthetic, intrinsic, "existence," or similar values people attach to ecosystems, landscapes, or species	<ul style="list-style-type: none"> •Spiritual fulfillment derived from sacred lands and rivers •People's desire to protect endangered species and rare habitats.
Educational and inspirational values	Information derived from ecosystems used for intellectual development, culture, art, design, and innovation	<ul style="list-style-type: none"> •The structure of trees has inspired technological improvements in solar power cells •School fieldtrips to nature preserves aid in teaching scientific concepts and research skills
Supporting services: The natural processes that maintain the other ecosystem services		
Habitat	Natural or semi-natural spaces that maintain species populations and protect the capacity of ecological communities to recover from disturbances	<ul style="list-style-type: none"> •Native plant communities often provide pollinators with food and structure for reproduction •Rivers and estuaries provide nurseries for fish reproduction and juvenile development •Large natural areas and biological corridors allow animals to survive forest fires and other disturbances
Nutrient cycling	Flow of nutrients (e.g., nitrogen, sulfur, phosphorus, carbon) through ecosystems	<ul style="list-style-type: none"> •Transfer of nitrogen from plants to soil, from soil to oceans, from oceans to the atmosphere, and from the atmosphere to plants
Primary production	Formation of biological material by plants through photosynthesis and nutrient assimilation	<ul style="list-style-type: none"> •Algae transform sunlight and nutrients into biomass, thereby forming the base of the food chain in aquatic ecosystems
Water cycling	Flow of water through ecosystems in its solid, liquid or gaseous forms	<ul style="list-style-type: none"> •Transfer of water from soil to plants, plants to air, and air to rain

Adapted from Hanson, Van der Lugt and Ozment (2011)

'Critical ecosystem services' (CM1.2a) refer to basic ecosystem services in critical conditions, including protection of water catchments and control of erosion of vulnerable soils and slopes. The category of ecosystem services that relate to regulating and supporting services therefore not only applies to ecosystem services that benefit 'Communities' at the local level but also services that benefit broader populations at the local and regional scale.

Areas that are fundamental for the livelihoods of Communities (CM1.2b) and areas that are critical for the traditional cultural identity of Communities (CM1.2c), however, only refer to provisioning and cultural ecosystem services that benefit the project's Communities at the local level.

For each of the High Conservation Values identified in the Project Zone, the qualifying attributes must be described and the area that needs to be managed to maintain or enhance the values must be identified. This area may extend beyond the Project Zone.

The CCB Standards require evaluation of the impacts of project activities on well-being by the affected groups, including the impacts on ecosystem services identified as important for the Communities (including water and soil resources) (CM2.1). A participatory approach to identification of the three types of ecosystem services that qualify as High Conservation Values (CM1.2) is recommended but not required. For a more detailed discussion on participatory analysis related to ecosystem services, see question 13.4 in this document.

Box 29: Useful resources for community benefits

Well-being

- The paper *Community Participation and Benefits in REDD+: A Review of Initial Outcomes and Lessons* (Lawlor, Madeira, Blockhus and Ganz, 2013) includes an adaptation of the World Bank's "Attacking Poverty" framework

Stakeholder analysis and Community benefits

- The *SIBA Manual, Part 1* (Richards & Panfil, 2011)

HCV identification, management and monitoring

- *Common Guidance on HCV Identification* (Brown, Dudley, Lindhe, Muhtaman, ..., & Synnott, 2013), by the High Conservation Value Resource Network
- *Assessment, Management & Monitoring of High Conservation Value Forest: A practical guide for forest managers* from Proforest (Rayden, 2008)
- *Good practice guidelines for High Conservation Value assessments: A practical guide for practitioners and auditors* from Proforest (Stewart, George, Rayden, & Nussbaum, 2008).
- *High Conservation Value Forests: The concept in theory and practice*, from WWF (Rietbergen-McCracken, Steindlegger, & Koon, 2007).

10. COMMUNITY GOLD: SMALLHOLDER-/COMMUNITY-LED OR PRO-POOR PROJECTS

The Gold Level in the Community section (GL2) showcases projects that are either led by Smallholders or Community Members or that are explicitly pro-poor. This section of the guidance document will help you understand the requirements needed to achieve the Community Gold Level, how these requirements can be met, and provides an explanation of key concepts and examples of projects on the ground.

10.1 What are the eligibility criteria for the Community Gold level?

The Community Gold Level of the CCB Standards Third Edition is an optional criterion that can be used to identify and promote projects that are smallholder- and community-led or pro-poor (including those that satisfy both of these requirements).

- **Smallholder- and community-led projects** are projects implemented on lands owned or managed individually or collectively by smallholders or community members, where Smallholders/Community Members are defined as households within the Communities that are actively participating in the project.
- **Pro-poor projects** explicitly benefit globally poor communities.

The eligibility criteria includes an 'or' condition (e.g. smallholder/community-led projects and/or pro-poor projects) in order to accommodate all types of projects that deliver equitable benefit sharing and enable active involvement of the Communities. Recognizing only those projects on land that are owned or controlled by communities or smallholders might result in excluding some types of projects that deliver exceptional community benefits, such as projects in concessions, national parks and other government-owned protected areas, privately owned forests, etc. Similarly, only recognizing projects that help poorer communities of the world might exclude some community-led projects that deliver exceptional community benefits.

10.2 What are the additional requirements in the Community Gold Level (GL2) which go above the Community section (CM2) requirements?

Both GL2 and CM2 focus on improving human well-being. However, GL2 is different in the following respects:

- The Gold Level indicators mostly focus on the household level, whereas CM2 requires demonstration of net positive benefits for each Community Group. The only case where GL2 focuses on assessment at the group level is for indicators GL2.4-5 which require that marginalized and/or vulnerable Community Groups and women benefit from the project. *The Gold Level*, therefore, *requires gathering data at the household level* (e.g. household surveys). For GL2.2-3 and GL2.6-7, more than 50% of the households need to derive net well-being benefits. For GL2.3-4, more than 50% of the households within groups (marginalized and vulnerable groups in GL 2.4 and women in GL 2.5) must derive net positive impacts.

- The Gold Level requires net benefits for each of the aspects of human well-being as outlined in the Attacking Poverty framework (Box 30). This requirement in the Gold Level is more stringent than CM2 in that it *requires net positive human well-being benefits across all well-being categories*, whereas CM2 allows for trade-offs in some areas. The categories of human well-being that must be assessed are:
 - a. Opportunities: creating (and not blocking) material opportunities for wealth creation and well-being, such as jobs, revenue streams, infrastructure, and improved educational conditions;
 - b. Security: enhancing (and not weakening) populations' security, including tenure security, food security, livelihood security, and capacity to adapt to climate change; and
 - c. Empowerment: facilitating (and not preventing) the empowerment of individuals and communities to participate in decisions affecting local land use and development.
- While gender is given attention throughout the Third Edition, the Gold Level *requires projects to explicitly demonstrate net positive well-being benefits to women* (GL2.5). The CM2 requires net positive benefits to women or sub-groups of women only if they are identified as a Community Group, deriving a different set of income, livelihood and cultural values from the project from others in the Communities. The Gold Level also goes further by *requiring women to participate in or influence decision-making* (GL2.5). For all projects, the General section requires participation to be gender-sensitive.
- The Gold Level *focuses on ensuring equitable benefit sharing not only between the project and the Communities, but also among Smallholders/Community Members* (CL2.4) – for example, by requiring that all identified marginalized and vulnerable groups obtain net positive benefits. CM2 requires net benefits for all identified Community Groups such as women, charcoal producers, pastoralists, etc., except those that are not significantly affected by or participating in the project.

Box 30: Using the 'Attacking Poverty' framework to address human well-being benefits for GL2

Opportunity	Security	Empowerment
<ul style="list-style-type: none">• GL2.4: Generate net positive impacts on well-being of all identified marginalized and vulnerable groups.• GL2.5: Generate net positive impacts on well-being of women.• GL2.2: Generate short-term and long-term net positive well-being benefits.	<ul style="list-style-type: none">• GL2.3: Identify risks to food security, land loss, loss of yields and climate change adaptation.	<ul style="list-style-type: none">• GL2.6: Ensure full and effective participation in the benefit sharing mechanism, and transparency in project funding and costs, and benefit distribution.• GL2.7: Communicate relevant and adequate information to Smallholders/Community Members and provide evidence that the information is understood.• GL2.8: Describe the project's governance and implementation structures and any relevant self-governance structures used for aggregation of Smallholders/Community Members.• GL2.9: Build capacity of Smallholders/Community Members to participate in project design, implementation and management.

Source: Lawlor, Madeira, Blockhus, & Ganz (2013)

Note that other frameworks that consider aspects of well-being beyond livelihoods may also be used for demonstrating community benefits. These include the following:

- Sustainable Livelihoods Framework (see section 6 of Richards, 2011).
- 'Nested Spheres of Poverty' framework (see Gönner, et al., 2007)

The concept of well-being is discussed in detail in section 9 of this document.

10.3 What are the main requirements of the Community Gold Level in the CCB Standards Third Edition?

The requirements in the Community Gold Level primarily relate to ensuring equitable benefit sharing, meaning equitable sharing of benefits, costs and risks associated with the project and not just sharing of revenues. This consists of two aspects: (1) equitable sharing **with** the Smallholders/Community Members, ensuring active involvement of Smallholders/Community Members to strengthen the equity of the benefit sharing mechanism, and (2) equitable sharing **among** the Smallholders/Community Members.

10.4 What are the requirements for equitable benefits for Smallholders/Community Members?

The project must deliver comprehensive benefits in all three categories of human well-being: opportunities, security and empowerment. The project must deliver short-term and long-term benefits, must take measures to avoid and manage trade-offs with food security, livelihood security, capacity to adapt to climate change and tenure security, and must build capacity and enable full and effective participation of Smallholders/Community Members. Some of these aspects are explained below with examples.

1. **Short-term and long-term benefits:** GL2.2 requires the delivery of short-term, as well as, long-term benefits. This requirement is explained for afforestation/reforestation, agriculture and avoided deforestation projects below.



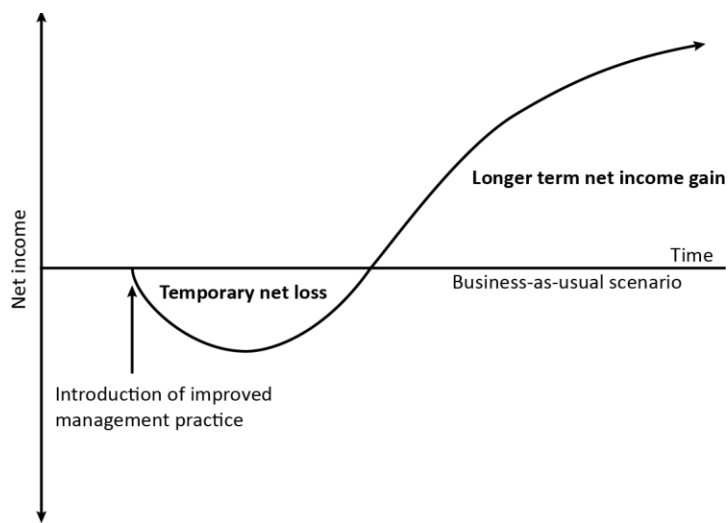
AFFORESTATION/REFORESTATION



AGRICULTURE

Climate-smart agriculture projects are those where agriculture sustainably increases productivity, resilience, reduces/removes greenhouse gases, and enhances achievement of national food security and development goals (Food and Agriculture Organization of the United Nations, 2010). Such projects and afforestation/reforestation projects may provide net well-being benefits to smallholders in the long term (such as increased crop yields, or carbon payments), while involving costs and risks for these farmers in the short term. The costs and risks to smallholders may include establishment and maintenance costs of new practices, initial periods of low return, or high labor requirements. Constraints faced by Smallholders include a lack of long-term investment capital and an inability to absorb risks due to their limited asset base (Shames, Buck & Scherr, 2012). Projects must therefore be designed and implemented in such a way that farmers receive both short-term and long-term benefits, taking into account costs and risks, and receive incentives to invest in new practices (Neufeldt, Kristjanson, Thorlakson, Gassner, Norton-Griffiths, ..., & Langford, 2011). See Box 31.

Box 31: Short-term income losses in climate smart agriculture



Source: Neufeldt, et al., 2011



AVOIDED DEFORESTATION

REDD projects must be designed and implemented in such a way that they provide short-term, as well as, long-term benefits. Pay-for-performance schemes take a long time to materialize and therefore benefits, such as revenue distribution from sale of carbon offsets, will materialize later on in the project. Other concrete benefits - including creation of sustainable forest enterprises, securing recognized management and land rights for forest-dependent Community Members - also may not deliver immediate benefits. Early benefits (prior to performance) are often necessary in order to provide incentives for a change in community activities to reduce deforestation and/or where Communities are subject to opportunity costs or other costs from the start of the project. Short-term benefits help to build support and maintain interest of the affected Community Members in the project until the long-term benefits start flowing. There is evidence of improved outcomes in integrated conservation and development programs when visible and sustainable benefits are provided for Community Members at an early stage (Madeira, Kelley, Blockhus, Ganz, Cortez & Fishbein, 2013).

2. **Active involvement:** GL2.6-2.9 in the Gold Level requires that Smallholders/Community Members are not passive beneficiaries of projects, but that they participate actively in the project with respect to participating effectively in the design of benefit sharing and in project decision making, implementation and management. Further, these Community Gold projects must also help to build the capacity and autonomy of Smallholders/Community Members. While there are some projects where the Communities are the Project Proponents, for several smallholder- and community-led projects, NGOs/other organizations may still play a significant role, with their involvement decreasing over time as local capacity is built.

See Box 32 for an example of active involvement in a reforestation project and Box 33 for an avoided deforestation example.

Box 32: Self-governance arrangements that promote active involvement

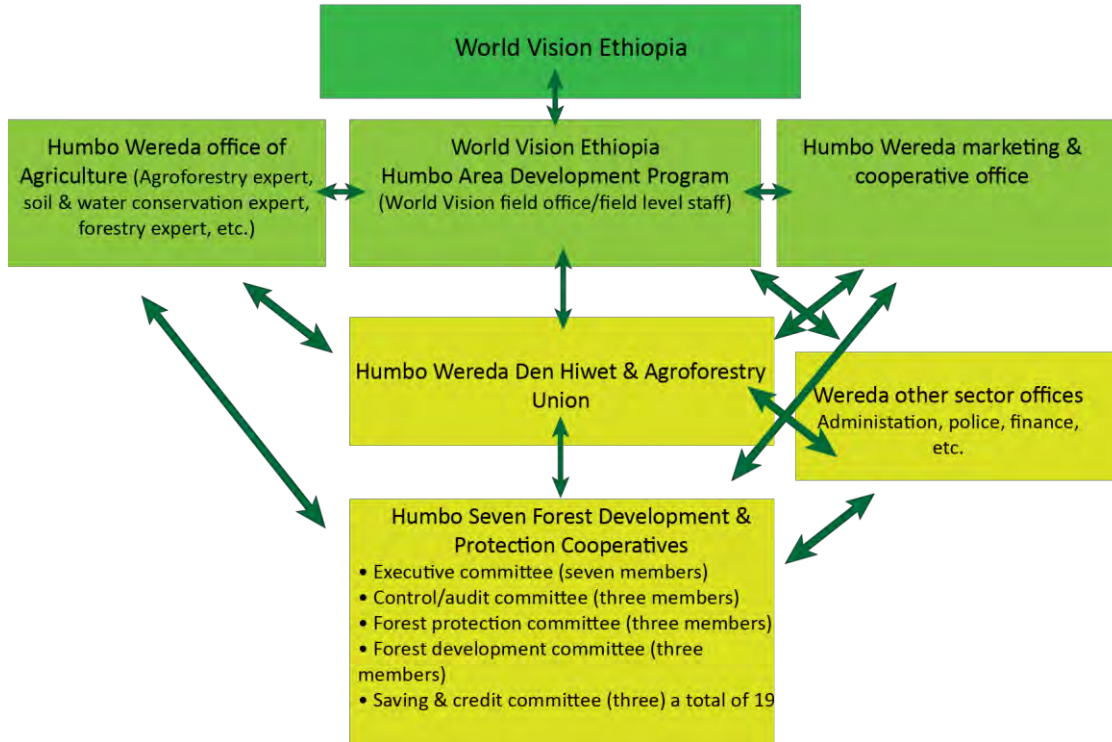


PROJECT PROFILE: Humbo Community Management Natural Regeneration, Ethiopia

The Project Area is divided into seven sections, each managed by neighboring communities. Communities are aggregated through cooperative societies to manage and implement farmer-managed natural regeneration in their jurisdictions of the Project Area. Each section is communally owned, with cooperative societies assigned with user rights certificates. Cooperative society management boards are composed of an executive steering committee supported by the forest development, forest protection and savings and loans sub-committees. The forest development and protection committees implement the forest management plan, which was developed by the cooperatives in conjunction with World Vision Ethiopia (WVE). The cooperative societies are collectively managed by an umbrella body, the Union. It is envisioned that the Union will take over the implementation and management duties currently provided by the WVE, and WVE will move into a technical backstopping role.

These governance structures facilitate information sharing and ensure full and effective participation of the smallholders. Information related to the project is readily available at the cooperative level. Central offices paste meeting dates, committee members and locations, project implementation activities and other details on their walls. Any interested members can access these offices or obtain information through sub-group leaders who are also part of the cooperative management committee. The smallholders have been involved in the step-by-step process of developing this project, including designation of communal areas for afforestation/reforestation activities, development of implementation and management plans, assessment and benefit sharing within their cooperative structure.

Humbo Community Managed Natural Regeneration Project Management Chart



Source: World Vision Ethiopia (2009)

Box 33: Community-led active involvement



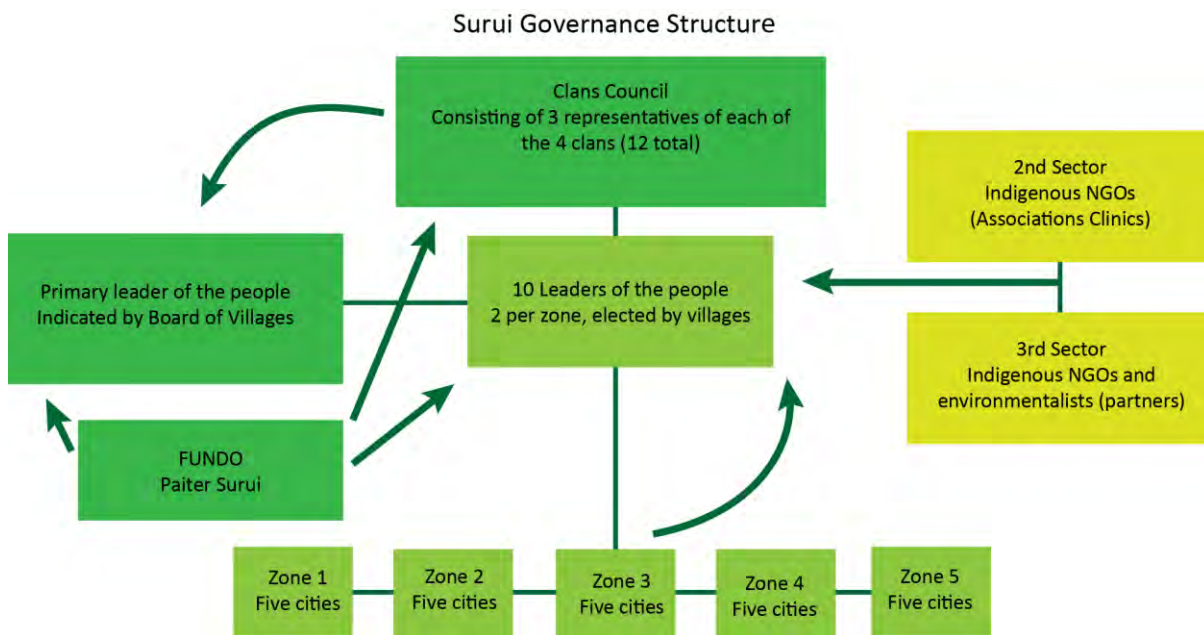
AVOIDED DEFORESTATION

PROJECT PROFILE: Suruí Forest Carbon Project, Brazil

The Suruí Forest Carbon Project is led by the Suruí people in the Brazilian Amazon. The Suruí are a tribe of roughly 1,300 members, structured in four clans, who were first contacted by outsiders less than 50 years ago. They made an autonomous decision to start a REDD project which was formalized in the signing of a cooperation agreement by all four clans in June 2009. This agreement established that the clans would work together to implement the carbon project, and that all economic benefits would be shared in a just and equitable way among the Suruí communities.

The REDD project development process involved several meetings and workshops to explain the project objectives and share details on the project that included a transparent dialogue about the risks. Local communities participated in preparing and designing the project through meetings, consultations and processes of free, prior and informed consent that lasted close to two years. The project is also in alignment with their 50-year Plan, a long-term development vision that seeks to gradually improve the quality of life for the Suruí people through a series of activities based on socio-environmental sustainability principles.

The participation of local communities in decision-making, including decisions related to benefit sharing, is facilitated through self-governance structures that include traditional and practical decision-making structures. The governance structure consists of a Higher Parliament which is the Clan Council (3 representatives from each of the 4 clans) and a Lower Parliament which represents the villages (2 representatives from each of five zones, with each zone consisting of 5 villages.) The FUNDO Suruí has been set up by the Brazilian Biodiversity Fund (Funbio) to administer income from the carbon project. There is a five year plan in place to train the Suruí people to start governing and managing the fund.



Source: Olander, Borges, Suruí, Suruí, and Nearykosar (2011)

- 3. Monetary and non-monetary benefits (GL 2.6):** In both afforestation/reforestation and avoided deforestation projects, monetary benefits could also be provided through mutually agreed revenue sharing mechanisms. For example, in the Oddar Meanchey project in northwest Cambodia, a minimum of 50% of project profits (revenues minus costs) will accrue to local communities. The revenue will be available as a grant fund for the communities to apply to a wide range of activities: education, health, agriculture, forestry, livestock, access to markets, infrastructure, micro-enterprises etc. (Madeira et al., 2013).

Non-monetary benefits such as such as improved capacity for adaptation and empowerment of the smallholders would be attractive in smallholder-led projects. In avoided deforestation projects, non-monetary benefits might include securing statutory management and land rights for forest-dependent Communities or Community Members or empowering Community Members to participate in land use decision processes and education programs. These benefits not only help mobilize community buy-in, but also help facilitate a transition towards more sustainable economic activities (Madeira et al., 2013).

10.5 What are the requirements for sharing benefits equitably among Smallholders/Community Members?

GL2.4 and 2.5 require the inclusion of women and marginalized and/or vulnerable groups as beneficiaries of the project. *The project also should consider power dynamics among beneficiaries and safeguard against elite capture.* Not only is equity essential for legitimacy, it also helps reduce social risks and therefore contributes to the long-term success of the project. Strategies that can be used to promote equitable engagement and benefit sharing are exemplified in the Nepal Community Forestry Project (Box 34).

Box 34: A model of democratic governance and equitable benefit sharing

PROJECT PROFILE: Community Forest Program, Nepal

The Community Forestry Program in Nepal has institutionalized equity in decision making, empowerment over forest management and use, and access to forest resources at the community level. Community Forest User Groups (CFUG's), which are local institutions comprised of village residents using common forests (with the number of households in a CFUG ranging from fewer than a dozen to more than 10,000 households), have been given the authority to undertake management decisions regarding forest resources.

Issues related to the distribution of benefits (forest products and income), social exclusion and marginalization of traditionally disadvantaged groups, elite capture of benefits, decision-making processes, and transparency in managing CFUG funds have been addressed by the CFUGs by including explicit provisions for participation of poorer groups, women, lower caste groups, and other marginalized groups in their operational plans.

Provisions for participation

- Reservation of spots for the poor, women, and Dalits (low caste groups) on community forest committees and decision-making bodies.
- Special provisions for the distribution of forest products to vulnerable groups (for example, charcoal to blacksmiths, provisions to victims of natural disasters, single women, or conflict victims).
- Forest resource management with allocation of Community Forestry Program land to poorer community members.
- Scholarships for children from poorer families.

Governance practices

- Mobilizing marginalized groups to create pressures on elites.
- Facilitation of interactions and knowledge networks that influence the perceptions of local elites about themselves and the poor.
- Balancing gender distribution by forming women-only CFUGs.
- Including the names of women in the CFUG member list instead of the earlier practice of including only the male household heads.

All these efforts have helped to increase representation by women and marginalized and vulnerable groups such as Dalits, in decision making over time. Participation in decision-making helps to increase access to assets and resources and livelihood benefits from the project. A positive feedback loop is also created when greater access to financial assets drives up participation in decision-making.

Source: Ohja, Persha, and Chhatre (2009)

10.6 What are the gender requirements in the Community Gold level?

The Community Gold Level requires that the gender dimension is effectively addressed to contribute to the well-being of women and the success of the project as a whole. The project must demonstrate:

- that it delivers net positive impacts on the well-being of women and appropriate indicators are developed and monitored; and
- that women participate or influence decision-making and appropriate indicators are developed and monitored.

The key steps to follow to ensure that the gender dimension is effectively addressed in a project are: gender analysis, developing project processes and activities keeping the gender dimension in mind and finally developing indicators for inclusion in monitoring plan. The various aspects to consider in each of these phases is described in Box 35.

Box 35: Steps to addressing gender in a land-based carbon project

Gender analysis

- Organize focus groups and interviews to analyze:
 - different roles of men and women especially in relation to project activities;
 - gender differentiated use, access to and control of resources;
 - gender inequities in processes related to participation, transparency , decision making, sharing of benefits;
 - gender differentiated preferences for benefits; and,
 - gender differentiated impacts (positive and negative) of the project on men and women.
- Identify gender based constraints/barriers and opportunities.

Developing project processes and activities with gender in mind

- Ensure women's inclusion and participation and influence in project planning and implementation decisions. Examples include: interviewing women separately from men, targeted capacity building for women, etc.
- Ensure that planned activities involve men and women. Examples include planting of trees that women have rights over in Afforestation and Reforestation projects.
- Ensure that women derive net positive well-being benefits from the project.

Monitor indicators for gender inclusion

- Develop quantitative and qualitative monitoring variables directly linked to the projects objectives.
- Ensure that the indicators are directly linked to outputs, outcomes and impacts identified in the project's causal model relating to influence and well-being of women.
- Include indicators that enable assessment of differentiated impacts on women.
- Include an evaluation of impacts by women.

Net positive impacts on well-being of women: Some examples of potential benefits to women, as noted in the Women’s Carbon Standard (Women Organizing for Change in Agriculture and Natural Resource Management, 2013) are:

- Increased income and assets (material goods, monetary resources, land and livestock, etc.) that are accessible to or controlled by women within households and communities where the project is implemented.
- Improved productivity of the women involved in, or affected by, the project leading to improved income, reduction in drudgery and/or greater time for leisure activities: increase in women’s discretionary or leisure time; shifts in the use of time away from lower-value activities toward higher-value activities; reduction in drudgery, such as gathering fuel, carrying water, etc.; an increase in men’s share of work usually done by women; or, access to electricity, time-saving technologies and tools (e.g., tractors, biogas, improved cook stoves, water pumps, storage facilities) that can reduce the time women spend on household and farm tasks.
- Increased knowledge and skills among women, as well as, the transmission of women’s knowledge and skills to others in the community, within the boundaries or scope of the project, such as increased access to extension services to enhance knowledge about agriculture, forest management, livestock and health, renewable energy, basic reading and writing, numeracy, business management, computer and GPS use, and communication.
- Improvement in the overall health of women and their families within the Project Zone, for example improved local or regional air quality, improved local water quality and quantity, new or improved sanitation services, improved education, additional health clinics and improved staffing and supplies to existing health clinics, and reductions in infant mortality rates, maternal mortality rates, rates of anemia amongst women and local disease rates (respiratory, gastrointestinal).

Enabling women’s participation or influence in decision-making: Participation in decision making helps to ensure that women’s needs/wants/desires are taken into account and reflected in project design and benefits. Some types of benefits to women relating to increased decision-making roles for women, within the context of the project itself or within communities within the Project Zone include: the representation and participation of women both quantitatively and qualitatively in governance bodies of community organizations (measuring how many women are in leadership roles and how many are active in discussions and decisions); and, an increase in the effectiveness of women’s groups to advocate, manage funds, negotiate and network through leadership and entrepreneurship skill development and coaching (Women Organizing for Change in Agriculture and Natural Resource Management, 2013).

Box 36 presents a case where all three steps were followed to ensure that the gender is effectively addressed, with the result that women participate in decision-making and the project positively impacts their well-being.

Box 36: Gender inclusion and planting of 'women trees'



AFFORESTATION/REFORESTATION

PROJECT PROFILE: Sustainable Agriculture in a Changing Climate Project, Kenya

Project design of this Western Kenya project was informed by a six-month baseline study undertaken by the Project Proponent to understand community dynamics, women's roles, women's preferences for benefits and barriers that might limit women's full and effective participation and deriving of benefits. Gender equity is stressed as an important project outcome.

- The project has increased women's roles as decision-makers. Women form the majority members in the savings and loans committees that have been formed for project implementation. Project Proponents also consciously promote women's participation in management committees, as resource persons and in trainings.
- Women's well-being and productivity is improved through Project Proponents' promotion the planting of 'women trees' such as *Leucaena* sp. and *Callandria* sp. 'Women trees' can be harvested for fodder and firewood without male permission and directly lessen women's work in cooking, fetching water, and livestock grazing. Planting these trees also helps increase the income and assets of women, since men cannot stake a claim to these trees. Other trees with higher timber value are perceived as belonging to men.

Source: Nature Conservation Research Centre and the Rainforest Alliance (2012)

10.7 How does the Community Gold Level address the issue of managing risk in smallholder- and community-led projects?

Smallholder-led projects face certain types of risks related to grouping a large number of Smallholders/Community Members at scale, such as ensuring full and effective participation of all Smallholders/Community Members and, ensuring that benefit sharing is perceived as legitimate and equitable. These risks are managed and mitigated in the following ways in the Community Gold Level:

- **Equitable benefit sharing:** GL2.1-9 ensures that the benefit sharing is equitable and increases perceptions of legitimacy.
- **Appropriate institutional and governance arrangements to facilitate full and effective participation of all Smallholders/Community Members (GL2.8):** While some projects may aim to build self-governance groups from scratch, other projects may use existing institutions/groups in order to be effective more quickly, to avoid competition between parallel structures and to reduce cost. Smallholders/Community Members may be grouped through cooperatives, microfinance groups, Community Resource Management Area (CREMA)

arrangements (used in Ghana), etc. Many projects use aggregation structures that are recognized legal entities.

- **Accountability and transparency of the institutions and mechanisms (GL2.8):** Risks related to receiving carbon funds or other revenues as well as to the distribution of funds to individual households are identified as critical areas for risk management (see Box 37). GL2.6 requires transparency on inflow and benefit sharing of project revenues. Benefit sharing programs need to be defined with effective participation of the affected stakeholders, and communicated clearly and in a transparent process from the outset of the project. In addition, given the need for upfront financing, Project Proponents must also be transparent with stakeholders regarding entire project funding, costs and benefit distribution. There should be trust between the Communities and Project Proponents. There should also be good working relationship with the government.
- **Communication and information-sharing with Smallholders/Community Members (GL2.7):** It is critical for projects to manage expectations of smallholders and community members regarding carbon payments. GL2.7 requires relevant and adequate information to be communicated about project costs, benefits and risks, including revenues, and also evidence that this has been understood, thereby demonstrating that the Smallholders/Community Members understand what they are agreeing to.

Box 37: Facilitating access of finance to smallholder projects

A study conducted by the CCBA on the demand for smallholder- and community-led land based carbon projects through interviews of potential investors, donors and offset buyers indicated market interest and potential to stimulate new demand in the carbon voluntary market, in projects that provide improved livelihoods for small farmers, reduce poverty, have community benefits, boost economic return and reduce carbon emissions due to the strong sustainability story. However the buyers of offset projects are wary of the risks of these projects related to scale and aggregation, community organization and governance, benefit sharing and flow of funds, verification and due diligence. The Community Gold level helps to showcase high quality and low risk projects that provide long lasting benefits.

Source: The CCBA & Conservation International (2012)

10.8 What is the main change in the Community Gold Level in the Third Edition compared with the Second Edition?

The Second Edition Community Gold Level identifies pro-poor projects that target benefits to globally poor communities and the poorer households within them. The Third Edition maintains this focus and also identifies projects in which Smallholders and Community Members actively participate, since these projects also help to empower Smallholders and Community Members.

The Second Edition Gold Level requirement that at least 50% of households within the lowest category of well-being (e.g. poorest quartile) of the community are likely to benefit substantially from the project has been replaced in the Community Gold Level in the Third Edition by a requirement for net positive benefits to flow to women and to marginalized and vulnerable groups. Poorer households (such as those that would be in the poorest quartile) should be identified as vulnerable groups, and the Project Proponent needs to demonstrate net positive benefit to this group and also mitigate any negative impacts for this group. Net positive impacts on such vulnerable groups should result in more than 50% of the households in the group deriving net positive impacts similar to the Second Edition requirement where 50% of the households in the lowest category of well-being had to benefit from the project.

11. BIODIVERSITY BENEFITS

Nearly all land-based projects that seek to protect and restore forest ecosystems will endeavor to demonstrate that their conservation-minded strategies and activities, almost by definition, will conserve biodiversity. The act of maintaining or rehabilitating forest habitat as a project-based intervention, when compared to nearly all exploitation, conversion or extractive alternatives, should have a positive impact on biodiversity. However, it is not sufficient for a Project Proponent to make assertions of net positive biodiversity benefits without some minimum level of justification to their assumptions. This section helps to explain the steps a Project Proponent may take to justify positive biodiversity benefits using techniques that are systematic and defensible.

11.1 What are the requirements for demonstrating biodiversity benefits in the CCB Standards?

There are four indicators in the CCB Standards Third Edition that most directly require establishment of net biodiversity benefits from project activities – B2.1, B2.2, B2.3 and B2.4. In this guidance, we highlight the aspects of these that require the most attention.

In B2.1, three core elements stand out as fundamental to the approach required to demonstrate net biodiversity benefits:

- the importance of stating assumptions explicitly and defending them;
- the need to use appropriate methodologies to estimate changes in biodiversity due to project activities; and,

the need to assess whether such changes have occurred. *It is important to note that the indicators involved in any method used to estimate and monitor biodiversity change should go hand in hand with those indicators identified in criterion G1.8*, which asks for a description of the causal relationships between drivers and actors of land use or land-use change, built upon a theory of change (a significant addition compared with the Second Edition).

B2.2 asks for a comparison between the predicted project results (for validation) or the actual project results (for verification) and the without-project scenario. This is another way of saying that the standard requires that estimated changes will be measured over time, assessing the difference between biodiversity (or, in most cases, the indicators that will serve as measures of biodiversity) with the project compared against biodiversity (or indicators of the same) without the project.

B2.3 is concerned with mitigation measures to lessen possible negative results, and in doing so, ensuring net positive impacts. Note that B2.1 requires identification and monitoring of predicted and actual negative impacts as well as positive impacts. In practice, almost no projects validated to the CCB Standards to date have indicated more than limited negative impacts. This is because avoided deforestation projects make the assumption that the project activities related to reducing deforestation or forest ecosystem degradation are inherently good for biodiversity and net positive. However, the possibility remains, and negative impacts are likely to be a more important concern in the case of afforestation (e.g. tree planting on a species-rich grassland or wetland) or some reforestation (e.g. monoculture) projects that are not aiming to restore native habitats (see Box 38).

Box 38: Potential negative/positive impacts on biodiversity by Project Type



AVOIDED DEFORESTATION

NEGATIVE IMPACTS	POSITIVE IMPACTS
- Displacement of human activities to forests of higher biodiversity value	+ Maintain mix of native species, especially those that are rare, threatened, endangered, or endemic.
- Displacement of agriculture, mining or other economic activities to non-forest areas, such as grasslands or wetlands of high biodiversity value.	+ Conserve diverse communities of flora and fauna
- An emphasis on curbing deforestation may fail to prevent hunting of wildlife.	+ Maintain ecosystem services and functions provided by plants (flowering/fruitletting/habitat) and animals (dispersal/pollination).
	+ Maintain connectivity within the landscape



AFFORESTATION/REFORESTATION

NEGATIVE IMPACTS	POSITIVE IMPACTS
- High inputs of water, fertilizers, or pesticides (with possible effects on biota)	+ Low inputs of water, fertilizers, and pesticides
- Monoculture plantations with low floristic diversity	+ Plantations incorporating many species
- Plantations of non-native species	+ Plantations incorporating native species
- Planting sites already in good condition, but with non-forest or recovering forest vegetation.	+ Planting site extremely degraded

See SBIA Manual Part 3 (Pitman, 2011, p. 3-10) for further details of potential impacts of different project types.

The CCB Standards also require that particular attention be paid to the possible adverse effects of any non-native species used for project activities (B3.6), including for agricultural or other activities that aim to support Communities with alternative livelihoods, and also to any potential negative impacts of the use of fertilizers, chemical pesticides, biological control agents and other inputs used for the project (B2.8) or from management of waste products (B2.9). While mitigation of negative impacts is an essential element of the standard, if a project is able to establish the causal relationship between project activities and positive biodiversity benefits, and to justify that potential negative impacts are minimal, it is likely that only in the rarest of cases would negative impacts outweigh positive ones.

B2.4 ensures that any tradeoff between positive and negative impacts does not involve any negative impacts to biodiversity values that qualify as High Conservation Values, identified in B1.2, using criteria based on those defined by the High Conservation Value Resource Network (see question 11.5 for more details).

11.2 What is the area of reference for demonstrating biodiversity benefits?

The Project Zone must be used for assessing positive and negative impacts on biodiversity and for demonstrating net biodiversity benefits (B2), since it is the geographic area directly affected by project activities. Note that the Project Zone may extend beyond the Project Area to include the area where activities such as those supporting Communities with the development of alternative livelihoods are implemented.

The success of a land-based project in its Project Zone may mean that displaced activities cause indirect negative impacts to biodiversity elsewhere. Therefore, the CCB Standards require an evaluation of the potential negative impacts outside the Project Zone and implementation of mitigation measures (B3). In practice, the offsite impacts on biodiversity are often characterized as limited (as mentioned in question 11.1). Any unmitigated negative impacts on biodiversity outside the Project Zone must be taken into account when justifying the claim to net positive biodiversity benefits (B3.3).

11.3 What are appropriate methodologies to demonstrate net positive biodiversity benefits?

The CCB Standards require the use of appropriate methodologies to estimate changes in biodiversity between the with-project and the without-project scenarios, and to do so based on clearly-defined and defensible assumptions (B2.1). The best guidance for projects to follow in doing this is the SBIA Manual Part 1 Core Guidance for Project Proponents (Richards & Panfil, 2011) and Part 3 Biodiversity Impact Assessment Toolbox (Pitman, 2011). Since publication, this manual has been the de facto sourcebook for walking Project Proponents through a participatory process for the identification and application of appropriate methodologies. It remains the clearest and most thorough guide for projects, starting with detailing the process of describing initial or historical conditions in the Project Zone, then onto defining the dynamics driving land-use change and projecting a baseline into the future, and on through defending the net effects through implementation of the project, based on monitoring of indicators of outcomes and long-term impacts. The entire process is based on the development of a causal model that articulates the project's unique theory of change (Box 39). For further details on developing a theory of change, see the section 1 of this document.

Box 39: Using a causal model to demonstrate the relationship between project activities, objectives and biodiversity benefits



AVOIDED DEFORESTATION

PROJECT PROFILE: Alto Mayo Conservation Initiative, Peru

A causal model and a theory of change were included in the project design documentation for this project (available at www.climate-standards.org/2012/06/22/alto-mayo-conservation-initiative/; see the Biodiversity Monitoring Protocol in the supporting documentation for the conceptual model relating to biodiversity). The theory of change was developed in a participatory manner between local actors and conservation organizations. For each of the eight positive impacts identified, the project relates attainment of these through a results chain connecting them to the activities and objectives of the project. Conceptualization of the model was done through use of the MIRADI software developed through the Open Standards for the Practice of Conservation (Conservation Measures Partnership, 2013). Reducing threats to biodiversity was an explicitly considered goal of the project, for which five main strategies were articulated to achieve reduced deforestation. Examples include:

- Increasing the capacity of local smallholder farmers to follow more ecologically sustainable, agroforestry coffee practices is intended to lessen the expansion of cultivation into the park area.
- Building the capacity of the local protected area management in order to control illegal trade in flora and fauna, thereby reducing pressures on biodiversity.

Source: Conservation International (2012)

Part 3 of the SBIA Manual is a Biodiversity Impact Assessment Toolbox (Pitman, 2011) with a specific objective to provide guidance on each of the biodiversity-related criteria required to meet the CCB Standards. While it was written for the Second Edition, the advice maintains relevant for the Third Edition. More than anything, it helps the user navigate between two extremes:

- projects assumed “to be so clearly biodiversity-friendly...that they fail to invest in designing monitoring plans or mitigating against possible negative impacts”; and,
- projects “bogged down in the complexities of biodiversity monitoring” and the possibility of elaborate and costly research, inventory, and analysis programs.

Because the SBIA Manual is such an effective guidance tool, the intention here is not to duplicate the contents of the Biodiversity Impact Assessment Toolbox, but to summarize its important messages and to refer projects to that toolbox for more detail.

11.4 What is the recommended process to demonstrate positive biodiversity benefits?

Step 1: Prepare the description of biodiversity in the Project Zone (B1.1-2)

- Description of the major ecoregion(s) where the Project Zone is located.
- Description of the smaller-scale vegetation type(s) present in the Project Zone.
- Description of biodiversity in the Project Zone based on surveys of flora/fauna, reports and publications (e.g. government documents, scientific studies), with as much historical perspective as practical. This information may include types of terrestrial and aquatic ecosystems and habitats that are present, plant and animal communities associated with these, landscape or other features important for biodiversity etc.
- An assessment of existing threats to such biodiversity, that may be carried out through surveys, interviews with stakeholders (e.g. government agencies, local scientists, conservation organizations, local people and community members), or through other research findings.
- Description of qualifying attributes for any biodiversity-related High Conservation Values, including lists of rare, threatened, or endangered species, endemic species, the location of threatened or rare ecosystems, etc. occurring in the Project Zone as required for G2.2.
- The use of data or external information should be applicable to the Project Zone.
- As a reference point to measure impacts on biodiversity during the project lifetime, these data should inform and be consistent with the selection of monitoring indicators.
- This step corresponds to SBIA stage 1. See the SBIA Manual Part 3 (Pitman, 2011, p. 12-18).

Step 2: Explain the without-project scenario for biodiversity (B1.3)

- Describe the indicators chosen for the without-project scenario projection of the conditions related to biodiversity (ecosystems/species).
- The projection should be based on the project's own causal model required for G1.8. Ideally, Project Proponents will incorporate advice from experts with knowledge of local biology, ecology, or zoology, including scientists and local people, which can be gained through interviews or consultation.
- The biodiversity indicators selected should reflect potential changes in species, ecosystems and/or ecosystem function/habitat provision or threats to them, linked to the causal model of the project.

This step corresponds to SBIA stage 2. See the SBIA Manual, Part 3 (Pitman, 2011, p. 18-21).

Step 3: Explain the explicit relationship between project objectives, activities and impacts on biodiversity (G1.2 and G1.8)

- The with-project biodiversity objectives and the activities to realize those should be based on a clear causal relationship to the short/mid-term outcomes and long-term impacts.

- The objectives should reflect a well-defined analysis of the situation confronting the Project Zone at the start of the project and how certain activities will address the projected long-term threats.
- The summary of how project activities are expected to affect biodiversity in the Project Zone must include an honest assessment of potential negative impacts, whether direct or indirect.
- It is recommended that biodiversity objectives should be few in number, so that monitoring progress can be done effectively, reducing significant costs in time and money.
- Biodiversity objectives should be easy to assess and quantify using practical indicators, so that the link between an objective and the biodiversity indicator that will measure progress towards that objective is straightforward.

This step corresponds to SBIA stage 3. See the SBIA Manual Part 3 (Pitman, 2011, p. 22-28).

Step 4: Identify appropriate indicators and develop the monitoring plan to monitor positive and negative biodiversity impacts

Indicators should link to the conservation targets in a way that is clear, direct, easy to understand, and well-established are. Appropriate indicators should:

- enable low-cost monitoring
- refer specifically to the situation of the project
- be sensitive to the driving forces affecting ecosystems
- correlate well to conservation goals or objectives
- be suitable for identification/monitoring by project participants
- be multiple, but not too many, and
- address pressure, state and response variables.

For more details on selection of indicators, see SBIA manual Part 3 (Pitman, 2011, p. 29-36).

Project Proponents should take care to address some of the most frequently encountered weaknesses in biodiversity monitoring that include:

- data are collected that are of no use and cannot answer key questions
- poor study design leads to inconclusive results (a common problem in field biology due to low encounter rates and high variability)
- indicators selected are not sensitive to project activities
- multiple observers differ in field skills and use inconsistent methods
- methods are changed during the monitoring program, and thus survey results cannot be compared
- inappropriate methods are chosen for habitats or species, or that

- timing or frequency of data collection is insufficient to draw conclusions.

This step corresponds to SBIA stages 5 and 6. See the SBIA Manual, Part 3 (Pitman, 2011, p. 29-39).

11.5 What are the requirements for maintaining or enhancing the High Conservation Values related to biodiversity in the Project Zone?

The CCB Standards require that the project maintains or enhances any High Conservation Values (HCVs) present in the Project Zone that are of importance in conserving biodiversity (see the section 9 for further details on High Conservation Values) (B2.4). While the CCB Standards allow for tradeoffs while satisfying the requirement of net positive benefits to biodiversity, the requirement relating to High Conservation Values ensures that there is no harm done to areas that are of particular importance in conserving biodiversity. The High Conservation Values that are of importance in conserving biodiversity, identified in B1.2, are:

- Globally, regionally or nationally significant concentrations of biodiversity values: protected areas, threatened species, endemic species and areas that support significant concentrations of a species during any time in their lifecycle.
- Globally, regionally or nationally significant large landscape-level areas where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance; and
- Threatened or rare ecosystems.

The three HCVs related to community well-being are identified in CM 1.2.

11.6 How should no harm to High Conservation Values related to biodiversity be demonstrated?

Where the conservation values related to species, ecosystems, or large landscape level forests have been identified and qualified as HCVs, then the management and monitoring objectives of the project must ensure that these are not negatively impacted. Some examples of interventions that could negatively impact HCVs may include:

- a mono-culture afforestation or reforestation project established on a native grassland or non-forest ecosystem that may qualify as a HCV may be of greater biodiversity value than the new tree-based system being established;
- an avoided deforestation project protects a relatively commonly occurring and low to medium conservation value forest ecosystem and human activities shift to a very unique forest ecosystem, perhaps one with a much higher level of endemism or rare, threatened, and endangered species, which qualifies as a HCV; and,
- an avoided deforestation project that emphasizes forest conservation and livelihood strategies, perhaps boosting human presence in the forest through patrols, but doesn't manage wildlife hunting, so that certain wildlife species that constitute HCVs are not safeguarded through the project.

The Project Proponent needs to articulate how HCV attributes are maintained or enhanced through a narrative description of the theory of change (see section 1 for more details on theory of change).

Ten projects validated or verified to the CCB Standards were analyzed to study how negative impacts on biodiversity (including HCV) were identified and addressed. The results are presented in Box 40.

Box 40: How ten projects using the CCB projects identified and addressed negative impacts to biodiversity

PROJECT	ON-SITE NEGATIVE IMPACT IDENTIFIED	OFF-SITE NEGATIVE IMPACT IDENTIFIED	MITIGATION OF NEGATIVE IMPACT	CAVEATS/REMARKS
Makira, Madagascar	None	No major impacts. Some shifting of human activities, intensified exploitation, and habitat impoverishment.	Support to off-site communities, largely through education	Didn't use Theory of Change, however constructs narrative explanation of impacts.
Russas, Brazil	None	Limited. Due to leakage from shifting human activities outside of project zone.	Meetings with community members	Used 'Island Biogeography' concept to justify net positive.
Mai Ndombe, DRC	Limited to none	None. Assumes no activity shifting leakage.	None, not identified.	Developed project Theory of Change model. (DNV 'confirms' the project will not result in off-site negative impacts.)
Jadora Isangi, DRC	None	Limited. Due to leakage of shifting hunting outside project area.	Plan to introduce aquaculture (tilapia) as alternative protein source to bush meat.	Assume conservation of forest is inherently net positive, not negative. No systematic method used.
Reforestation with Rubber, Columbia	None	Limited. Due to pest and weed control chemicals that could poison plants and animals.	Only preventive application techniques.	Assumes rubber plantation is more diverse than pasture.
Paraguay Forest Conservation Project, Paraguay	None	None. Project only envisions upsides from protecting habitat.	None, not identified.	
Kasigua Corridor, Kenya	None	None. Protection of wildlife and their habitat is a core to the project.	None, not identified.	Activity shifting leakage as migrants seek farmland identified in Climate section. Use alternative livelihoods strategies to address.
Empresas Públicas de Medellín REDD+ Project, Columbia	None	None. Foresees only positive impacts.	None, not identified.	Prepared a 'modified' theory of change, comparing without and with project scenario to conclude positive impacts.
Alto Mayo Conservation Initiative, Peru	None	Limited. Project will maintain connectivity and ecosystem services, however there may be displacement of deforestation or illegal extraction of flora and fauna.	Promote improved agriculture practices with communities outside project, as well as increased monitoring.	Prepared causal model, and theory of change. Defines 8 positive impacts of project.
TIST Program CCB-003, Kenya	None	None. Indigenous tree planting on degraded lands will not displace drivers.	None, not identified.	Assumes indigenous tree planting has greater biodiversity than farmland.

12. BIODIVERSITY GOLD: CONSERVATION OF GLOBALLY SIGNIFICANT BIODIVERSITY

The Gold Level in the Biodiversity section (GL3) showcases projects that conserve biodiversity at sites of global significance for biodiversity conservation. This section will help you understand the requirements to achieve the Biodiversity Gold Level and how these requirements can be met.

12.1 What are the eligibility criteria for the Biodiversity Gold Level?

The Biodiversity Gold Level of the CCB Standards is an optional section that can be used to identify and promote projects that conserve biodiversity in areas that qualify as Key Biodiversity Areas (KBAs). KBA is the designation by the International Union for the Conservation of Nature (IUCN) for sites of global significance for biodiversity conservation comprising an ‘umbrella’ which includes globally important sites for different taxa and realms. These include Important Bird Areas (IBAs), Important Plant Areas (IPAs), Important Sites for Freshwater Biodiversity, and Alliance for Zero Extinction (AZE) sites, and are used for biodiversity conservation priority setting.

At the national scale, a KBA approach can be valuable for establishing protected areas to meet commitments under the Convention on Biological Diversity. At the same time, KBAs can be applied at the site scale to establish the biodiversity significance of existing management units, such as protected areas, concessions, etc. For projects, the KBA approach can help not only to identify ‘watch lists’ of sites in which biodiversity loss needs to be mitigated and avoided, but also opportunities associated with biodiversity conservation. The criteria for KBA identification are used by several international financial institutions, such as the World Bank (Operational Policy 4.04) and the International Finance Corporation (IFC) (Performance Standard 6) to ensure no harm. The CCB Standards use the KBA criteria in the optional Gold Level to identify opportunities for delivering exceptional biodiversity benefits.

Box 41: Identification of Key Biodiversity Areas

CRITERION	SUB-CRITERIA	PROVISIONAL THRESHOLDS FOR TRIGGERING KBA STATUS
Vulnerability Regular occurrence of a globally threatened species (according to the IUCN Red List) at the site	N/A	Critically Endangered (CR) and Endangered (EN) species – presence of a single individual species Vulnerable species (VU) – 30 individuals or 10 pairs
Irreplaceability Site holds X% of a species' global population at any stage of the species' lifecycle	A) Restricted-range species	Species with a global range less than 50,000 km ² 5% of global population at site
	b) Species with large but clumped distributions	5% of global population at site
	c) Globally significant congregations	1% of global population seasonally at the site
	d) Globally significant source populations	Site is responsible for maintaining 1% of global population
	e) Bioregionally restricted assemblages	To be defined

Source: Langhammer, Bakarr, Bennun, Brooks, Clay, Darwall, ... & Tordoff (2007)

KBAs are identified using international criteria and thresholds and are based on a framework of vulnerability and irreplaceability defined in terms of species and population threat levels. The vulnerability criteria identify a site as a KBA if it supports regular occurrence of species facing the highest extinction risk according to the IUCN Red List of Threatened Species (Red List). The Red List represents the most authoritative source for the conservation status of species, applying quantified criteria to identify the most threatened species (which are listed as Critically Endangered, Endangered or Vulnerable). Different threshold levels are set for KBAs depending on the threat level of species found at the site; highly threatened species (classified as Critically Endangered or Endangered) have lower thresholds. The irreplaceability criteria identify sites that are particularly important for species persistence, irrespective of threat level. Note that the KBA sub-criterion on bioregionally restricted assemblages is excluded from the CCB Standards since international guidelines and thresholds have yet not been agreed upon.

12.2 How can Project Proponents determine if the Project Zone qualifies as a KBA?

Some Key Biodiversity Areas may have been identified at a national or regional level by nationally or regionally driven processes. The inclusion of the Project Zone in a KBA identified through these processes may be used to establish eligibility for the Biodiversity Gold Level. In addition, projects can be eligible for the Biodiversity Gold Level if the Project Proponent can establish that the Project Zone meets the eligibility criteria for KBAs as described above.

The Integrated Biodiversity Assessment Tool (IBAT) provides both site-based and species-based information. IBAT maps Key Biodiversity Areas that have already been identified using nationally-driven processes. It also integrates the Red List database, and thus provides information on the estimated distribution of threatened species. This can be helpful to the Project Proponent as one source of information regarding whether the Project Zone might contain any threatened species. Note that the Red List maps are indicative of species occurrence, but further evidence is required to demonstrate that the species is present in the Project Zone.

There are two ways to subscribe to IBAT:

1. A free version that may only be used by non-profit organizations and universities: www.ibat-alliance.org/ibat-conservation/login
2. A fee based version for commercial business users: www.ibatforbusiness.org/login

In addition to IBAT, Project Proponents may obtain species information from the following sources: www.protectedplanet.net, www.iucnredlist.org, and www.birdlife.org/datazone.

12.3 How can Project Proponents demonstrate that project activities are conserving the biodiversity that makes the area a KBA?

In the Third Edition, the following approach has been adopted for ensuring that project activities are contributing to maintaining or enhancing biodiversity that enabled the site to qualify for KBA status:

- **Step 1: Identify all the ‘Trigger’ species present in the Project Zone.** A Trigger species is defined as any species that causes a site to meet the KBA qualifying conditions (i.e. those meeting the vulnerability or irreplaceability criteria).
- **Step 2: Select the Trigger species for monitoring.** If more than three Trigger species occur, for practical reasons it is permissible to select a shorter list (including three or more species) on which to focus. Three criteria for selecting these species are listed in a footnote to GL3.3. These criteria aim to ensure that these chosen species represent as high of a proportion of the biodiversity value of the site as possible, either because of their intrinsic conservation value or the congruence between their conservation needs and those of other species.
- **Step 3: Assess population trends of the selected Trigger species.** This may be done through repeated estimates of population status at the site, or through less direct, but more easily measured, indicators such as relative abundance, site occupancy, intensity of key threats (off-take, mortality, habitat change, and disturbance) and/or key demographic parameters, such as nest productivity. This requirement focuses on indicators of population trends, since estimating absolute population size may be difficult and/or costly for larger project areas and for species that are threatened, rare or cryptic, for example. It is also clarified in the footnote to GL3.2 in the Standards that if a population trend is hard or expensive to obtain through direct evidence, credible local reports, such as interviews with local people, may be used as the basis to determine population trends.
- **Step 4: Establish a causal model** (also referred to as a theory of change) attributing expected reduction in identified threats and/or improvements in projected population trends of the selected Trigger species, to project conservation actions and measures taken (GL3.3). It is

important to also include aspects relating to maintaining and enhancing Trigger species in the project's theory of change analysis outlined in G 1.8 (see section 1 of this document).

- **Step 5: Identify relevant indicators and monitor** to demonstrate the effectiveness of these measures. Indicators selected may aim to directly or indirectly monitor population trends as in Step 3 and/or may focus on monitoring the key threats set out in the causal model.

12.4 How does the Biodiversity Gold Level help with following internationally recommended management practices for biodiversity?

While internationally-recommended safeguards for biodiversity in REDD+ projects are followed even when the mandatory Biodiversity section in the CCB Standards is used, these safeguards are particularly important for sites of biodiversity significance such as KBAs. The CCB Standards require that Project Proponents adopt the minimum set of considerations contained in the Convention on Biological Diversity (CBD) decisions X/33 and XI/19 (see Box 42).

With appropriate safeguards designed and implemented, projects using the CCB Standards may contribute to achieving multiple Aichi Biodiversity Targets which were established as part of the CBD's strategic plan for 2011-2020 (see Box 43).

Box 42: The Convention of Biological Diversity's treatment of potential biodiversity-related adverse impacts of REDD+ projects

Decision X/33 puts forth that parties shall take into account impacts on biodiversity and the provision of ecosystem services through climate change mitigation activities:

- Considering traditional knowledge, including the full involvement of indigenous and local communities;
- Building on a scientifically credible knowledge base;
- Considering components of biodiversity important for its conservation and sustainable use;
- Applying the ecosystem approach; and,
- Developing ecosystem and species vulnerability assessments.

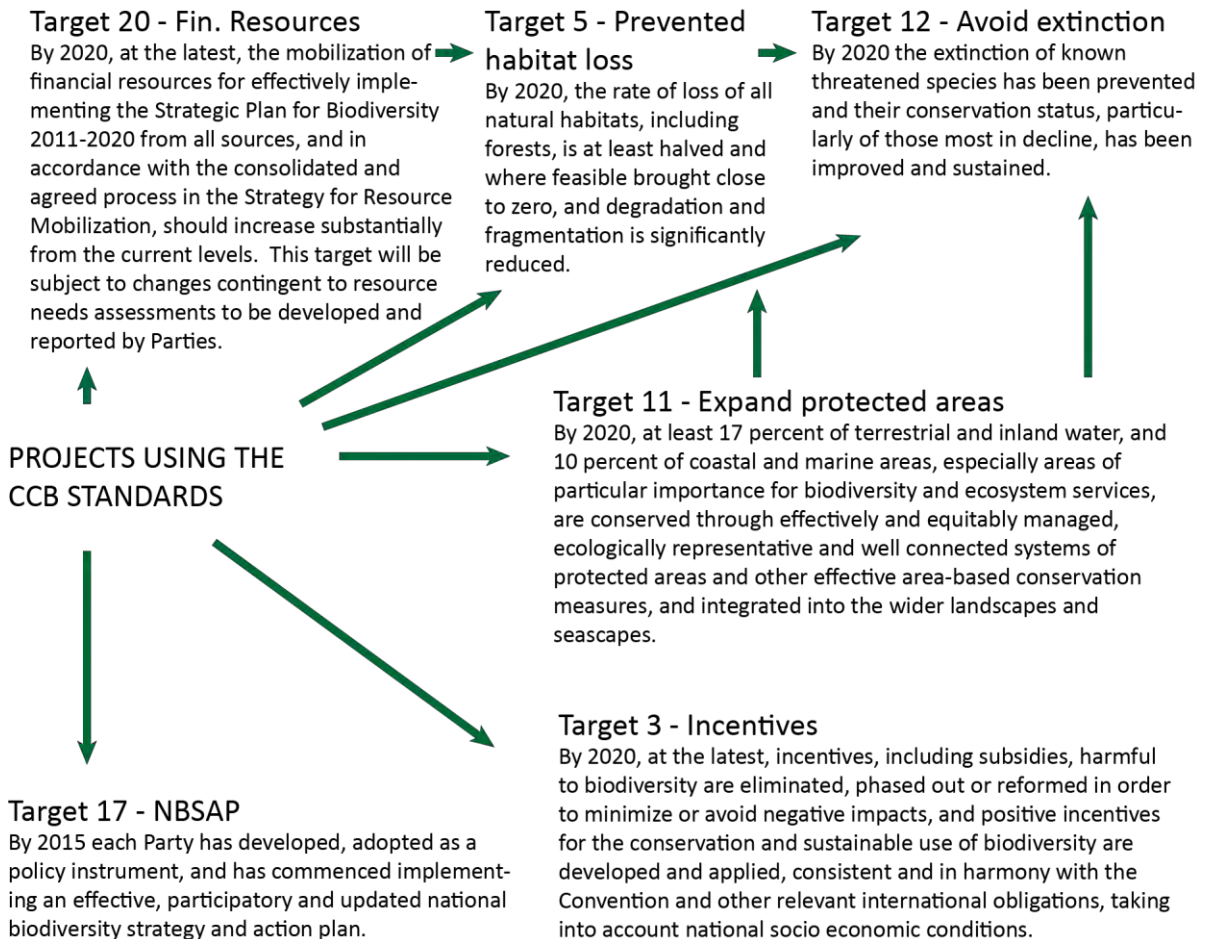
Source: Conference of the Parties to the Convention on Biological Diversity (2010)

The COP's Decision XI/19 puts in place safeguards against the following activities:

- The conversion of natural forests to plantations and other land uses of low biodiversity value and low resilience;
- Displacement of deforestation and forest degradation to areas of lower carbon value and high biodiversity value;
- Increased pressure on non-forest ecosystems with high biodiversity value;
- Afforestation in areas of high biodiversity value; and,
- Loss of traditional ecological knowledge.

Source: Conference of the Parties to the Convention on Biological Diversity (2012)

Box 43: How projects using CCB Standards can contribute to the Aichi targets



Source: Convention on Biological Diversity (n.d.)

12.5 What are good practices for species management?

The Biodiversity Gold Level requires the Project Proponent to take measures to maintain or enhance the population status of Trigger species in the Project Zone, and to reduce the threats to them. Best practices for species management involve not only devising the measures based on the ecological requirements of a species or habitat, but also working with stakeholders to find ways of implementing these provisions in order to achieve sustainable long-term results. All aspects of managing threats to the species and maintaining and enhancing their populations must be identified and appropriate management processes and solutions should be used. Good practices for management processes and solutions differ between projects depending on context. One example is presented in Box 44.

Box 44: Forest management to restore rare species



AFFORESTATION/REFORESTATION

PROJECT PROFILE: Conservation of endangered tree species in the Apennines, Italy

Silver fir (*Abies alba*), spruce fir (*Picea excels*) and yew (*Taxus baccata*) only survive in reduced and fragmented relict populations in Emilia Romagna, Italy. The site consists of very aged individuals with limited natural regeneration possibilities. In addition, forestry practices since the early 20th century together with livestock grazing within the forests have made it harder for these tree species to survive. This project, which was not financed by carbon credit sales, was implemented to help restore these species.

Detailed inventories: A study was undertaken to get an accurate picture of the extent and number of each species.

Combining in-situ with ex-situ management: A nursery was established to produce sufficient numbers of silver fir and spruce fir saplings. Micro-propagation was also used to reproduce trees.

Protecting the desired species: Fencing was established to prevent livestock from browsing regenerating young silver fir. The fences were regularly checked for damage and illicit livestock movement; private landowners participated in this surveillance. In one area, the local silver fir populations were protected against the ongoing erosion with remedial engineering works. This erosion was caused by previous works for a nearby ski resort and, in some sections, was directly affecting fir stands.

Conversion of coppicing to uneven-aged tall stands of timber: The silvicultural practice of coppicing of Apennine beech species was the direct cause of the fragmentation and disappearance of silver fir and yew. A long term goal of this project is to convert coppiced stands of beech to uneven-aged mixed.

Training foresters: Forest managers were not familiar with the new techniques for managing the rare species, and at first a forestry technician had to give them a great deal of support. Conservation authorities also provided training in the new approach.

Information transfer and seminars: The project was used several press/media measures, including articles in local newspapers, scientific seminars, establishment of hiking trails to the Vezzosa nursery or to relict populations, videos, broadcasts by the local TV and internet sites.

Source: Houston, J., Gazenbeek, A., Eriksson, M., Raeymaekers, G., & Sundseth, (n.d.).

12.6 What is the main change in the Biodiversity Gold Level in the Third Edition as compared to the Second Edition?

In the CCB Standards Second Edition, project activities such as protecting forest cover in a Key Biodiversity Area would have earned the project a Biodiversity Gold Level. However, other threats, such as hunting and invasive species, are often pervasive in such high priority areas for conservation and can

lead to declining conservation status for some important elements of biodiversity even where forest cover is maintained. The Third Edition requires Project Proponents to take explicit measures to conserve the biodiversity that makes the area a KBA by addressing the factors threatening biodiversity at the site, in order to qualify as a Gold Level project delivering exceptional biodiversity benefits. Therefore, it is no longer sufficient for Biodiversity Gold projects to simply be in a KBA. Project Proponents are now required to implement targeted measures specifically to maintain or enhance the population of Trigger species that enabled the site to qualify for KBA status (see an example in Box 45).

Box 45: Conserving a trigger species: differences in the Biodiversity Gold Level between the CCB Standards Second and Third Editions



AVOIDED DEFORESTATION

PROJECT PROFILE: Mai Ndombe REDD Project, Democratic Republic of Congo

The Mai Ndombe REDD project, a joint initiative of ERA Ecosystem Restoration Associates Inc. and Wildlife Works Carbon LLC, is located in the central part of the Congo River basin of the Democratic Republic of Congo (DRC). Its main activity is the conversion of a land-use concession from a logging focus to a conservation focus. The project aims to leverage the financing from the revenues of carbon offset sales to reduce CO₂ emissions from the project area through stopping planned legal logging and reducing illegal logging, charcoal production, and slash and burn agriculture. The Mai Ndombe REDD project is a 'Biodiversity Gold Level' project, a status obtained through evaluation against the Second Edition of the CCB Standards.

The Lac Tumba–Lac Mai Ndombe region was identified as a Key Biodiversity Area based its vulnerability. The area supports a significant population of bonobos, *Pan paniscus*, a social ape that along with the common chimpanzee is the closest extant relative to humans. Bonobos are classified by the IUCN as endangered; their entire global population is estimated at less than 50,000 individuals located only in the DRC. The presence of bonobos in the area was demonstrated by local knowledge and recent biodiversity surveys. Under the Second Edition of the CCB Standards, the project was able to demonstrate that it protected the mature uplands forest and swamp forest habitats for the bonobos, thereby providing a clear positive benefit for the endangered species.

To earn Biodiversity Gold under the Third Edition, the project would have to demonstrate that it directly contributes to maintaining or enhancing populations of a Trigger species, in this case, bonobos. This would involve identifying all threats to bonobos that may include loss of suitable habit, but also other threats that may exist in the area, such as hunting pressures. The Project Proponents would then need to link project activities to a demonstrated reduction in threats and/or improved bonobo population trends.

Source: Frieberg, Holland, Block, Bwangoy Bankanza, Dettmen, Gereau, ..., & Kendall (2012)

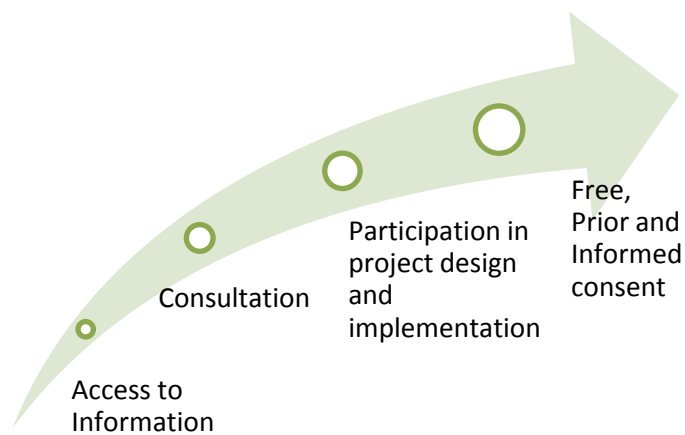
13. STAKEHOLDER ENGAGEMENT AND FREE, PRIOR AND INFORMED CONSENT

One of the key aspects of the CCB Standards is the requirement that Project Proponents use participatory processes and the requirement for full and effective participation of relevant stakeholders. This section will help you understand how to fulfill the requirements for stakeholder engagement in the CCB Standards including Free, Prior and Informed Consent (G3 and G5).

13.1 What constitutes full and effective participation in the CCB Standards?

Full and effective participation means “meaningful influence of all relevant rights holders and stakeholders groups who want to be involved throughout the process, and includes access to information, consultation, participation in design and implementation and Free, Prior and Informed Consent.” These components characterize different levels of participation (see Box 46), and all are required by the CCB Standards.

Box 46: Key components of full and effective participation



Adapted from Lawlor, Madeira, Blockhus, & Ganz (2013)

13.2 What aspects need to be addressed in each phase of the stakeholder engagement process?

A typical process for stakeholder engagement includes gathering information, ensuring full and effective participation in project design and implementation, and monitoring of participation and its impacts. Box 47 lists important considerations (and corresponding CCB Standards indicators) for each phase. Project Proponents need to determine the full range of efficient and effective strategies and methods for ensuring effective stakeholder engagement, as these will vary by project.

Box 47: Phases of stakeholder engagement in land-based carbon projects with appropriate considerations for each phase

1. Gather information

- Conduct a study of starting conditions and identify stakeholder information, including information of who needs and wants to be involved in consultations (G1.5-6).
- Understand local context including local and regional languages, and socially and culturally appropriate methods to inform and engage with the communities (G3.4).
- Understand and map statutory and customary rights to lands, territories and resources affected by the project (G5.1).
- Identify traditional decision- making processes and methods the Communities use to resolve conflicts (G3.8).
- Identify past, current and potential conflicts (G5.5).
- Identify Communities' perceptions and concerns about the project.
- Identify legitimate representatives for the Communities and Other Stakeholders (G3.5).
- Identify local customs, values and institutions (G3.4).
- Conduct an analysis of resources, needs, concerns and roles of the different distinct Community Groups, including women's roles if women are identified as a Community Group (G3.6).
- For a Community Gold project, perform a gender analysis of the role of women (GL2.5).

2. Ensure full and effective participation in project design and implementation

- Ensure access to information about the project (G3.1-3, CL4.3, CM4.3, B4.3):
 - Make full project documentation accessible.
 - Disseminate summary project documentation.
 - Disseminate the process for validation/verification to the CCB Standards including timely information about any upcoming auditor's site visit.
 - Disseminate information about the feedback and grievance redress mechanism.
 - Make monitoring plan and results publicly available.
 - Disseminate summaries of monitoring plan and results.
- Perform participatory identification of local and regional ecosystem services (CM1.2a and CM2.1).
- Do consultation on theory of change (G1.8).
- Include evaluation of impacts by affected communities in impact assessment and monitoring plans (GL1.4, CM2.1, CM4.1, GL2.2-5).
- Ensure consultations are gender and inter-generationally sensitive with special attention to vulnerable and/or marginalized people (G3.4).
- Ensure Communities, including all Community Groups, and Other Stakeholders influence project design and implementation (G3.4).
- Do consultation on suitable third party for mediation and a timeline for resolving conflicts (G3.8).
- Enable effective participation in design and implementation (G3.6).
- Obtain Free, Prior and Informed Consent (G5.2-3).
- For a Community Gold project, ensure that women influence decision making (GL2.5).

3. Monitor throughout and at the end of implementation

- Perform periodic evaluations to ensure that full and effective participation including Free, Prior and Informed Consent is being respected throughout the life of the project and not merely at one point in time.

13.3 What is the relationship between the impact assessment process for the CCB Standards and the stakeholder engagement process outlined above?

The CCB Standards promote the use of participatory approaches for designing project activities as well as for assessing their predicted and actual impact. The impact assessment process recommended for the CCB Standards is outlined in the SBIA Manual Part 1 (Richards & Panfil, 2011).

A participatory approach to impact assessment is one of the aspects of an effective participatory stakeholder engagement process. The SBIA Manual provides much helpful guidance for the stakeholder engagement process, including detailed explanation and tools. For example, stage 1 of the SBIA Manual Part 1 provides guidance on gathering information in the stakeholder engagement process, such as identifying key stakeholders and initial conditions. Subsequent steps in the SBIA Manual provide guidance on participatory approaches to establishing causal models and theories of change for the design of appropriate strategies for addressing the causes of GHG emissions and other social and environmental conditions targeted for change. Ultimately, an engagement strategy can lead to the design of a monitoring plan for assessing project impacts that may be more effective and appropriate to the local context. Although Project Proponents are not required to use the SBIA Manual or its approaches, many of the ideas and concepts may be useful in designing a stakeholder engagement process that helps inform and develop the design of the project activities and the means for assessing their impact.

13.4 What are the participatory analyses relating to ecosystem services required in the CCB Standards?

The benefits of ecosystem services may be derived at different scales. For example, at the local level, ecosystem services may provide benefits to the Communities and Community Groups by serving as the basis for rural livelihoods and subsistence. Ecosystem services may also provide benefits at the regional level - for example, a forested watershed may provide clean water or help control flooding in downstream communities. At the global scale, examples of ecosystem services include regulating climate and acting as reservoirs of biodiversity.

The CCB Standards promote participatory identification of ecosystem services benefits over different temporal scales, ranging from short-term to long-term impacts, and spatial scales, local and regional. (CM1.2abc). For global scale benefits (B1.2abc), it is also highly recommended for projects to use a participatory approach for identification on topics which Communities may have knowledge, such as local biodiversity in the Project Zone, presence of threatened species, and presence of endemic species. The CCB Standards require the participatory assessment of ecosystem services identified as important for the Communities (including water and soil resources).

- **Local scale benefits:** the CCB Standards require the identification of ecosystem services in critical conditions that qualify as High Conservation Values (CM1.2abc) (for more information on High Conservation Values-CM1.2abc, see the question 9.9 of this document) and highly recommend that this identification should be done in a participatory manner with the Communities. As a part of net positive community impacts analysis, Project Proponents must ensure participatory assessment of ecosystem services identified as important for the Communities (see Box 28 for a list of ecosystem services). CM2.1 requires that Communities play a role in community impact analysis in identifying the types of impacts (including direct and indirect benefits, costs and risks) as well as the magnitude of the impacts, taking into account

"potential impacts of changes in well-being due to all ecosystem services identified as important for communities").

- **Regional scale benefits:** the CCB Standards require the identification of areas that provide critical ecosystem services that qualify as High Conservation Values (CM1.2a) and highly recommends that this identification should be done in a participatory manner with the Communities. Project must maintain or enhance the identified High Conservation Values of areas that provide critical ecosystem services (CM1.2a, CM2.4). Unlike the net community benefit analysis (CM2.1) which only needs to take into account ecosystem services identified as important for Communities, this regional scale analysis in CM2.4, related to CM1.2a, also needs to take into account those ecosystem services derived by 'communities' in general at the local and regional scales (even if they are not identified as important for the Communities since they are not benefits derived at the local level). Note that Communities with a capital C refers specifically to those local communities as defined in the Standards who 'derive income, livelihood or cultural values and other contributions to well-being from the Project Area at start of the project and/or under the with-project scenario' and communities refers generically to all communities, including those who may not be connected to the Project Area/Project Zone.
- **Global scale benefits:** The CCB Standards require net positive benefits for the climate (CL2) as well as for biodiversity (B2). The Standards also require that projects should maintain or enhance the identified High Conservation Values for biodiversity (B1.2abc). It is recommended that Projects Proponents consult with Communities to identify global ecosystem services, particularly when assessing topics that Communities are likely to have meaningful information on, like local biodiversity.

Using participatory approaches to assess ecosystem services also leads to broader benefits such as building community knowledge and/or capacity about ecosystem services. Further, participatory approaches help Project Proponents to analyze the context in which they are working: a good deal can be learned about and from community knowledge and practices around ecosystem services that may be useful in project design.

Participatory mapping is a useful tool that may be used as part of the process for identification of ecosystem services at the local and regional scales. There are several good practice guidance documents besides the SIBA Manual, including:

- *Participatory Mapping and Communication: A guide to developing a participatory communication strategy to support participatory mapping* (International Fund for Agricultural Development, 2010).
- *Common guidance for the identification of High Conservation Values* (Brown, Dudley, Lindhe, Muhtaman, ..., & Synnott, 2013)

13.5 What are the requirements related to stakeholder consultation on the types and magnitude of the impacts?

Participatory impact assessment is an important aspect of full and effective participation and CCB Standards promotes a participatory and transparent process to the identification of costs, risks and benefits to the Communities (footnote to G3.2). Project Proponents are required to consult

communities about the type and magnitude of potential impacts, giving them an opportunity to raise concerns about any potential negative impacts, and must show that such consultations have influenced project design and implementation (G3.4, including footnote). In addition, CM2.1 requires that “the assessment of impacts must include changes in well-being due to project activities and an evaluation of the impacts by the affected Community Groups”.

The primary reason for recommending a participatory approach for impact assessment is because well-being has an important subjective element. CM2.3 requires that “the net well-being impacts of the project are positive for all Community Groups compared with their anticipated well-being conditions in the without-project land use scenario”. ‘Well-being’ is a subjective perception of ‘people’s experience of the quality of their lives’ and, therefore, it is vital for Communities to define the important dimensions of well-being and what constitutes an improvement (for more information on well-being refer to the section 9 of this document).

Participatory impact assessment is an iterative process, since project design and an understanding of the project’s impacts will change over time as a direct result of the participatory process. Some of the project elements that need to be included in this process adequately and in a manner understood by the Communities relating to types and magnitude of impacts are the following:

- The project itself and its impacts or potential impacts to the Communities.
- A comprehensive list of all types of impacts (negative – costs and risks – and positive – benefits), from the perspective of the Communities.
- Impact assessment, including assessment of impacts related to costs, benefits or risks, and direct and indirect impacts – for instance, by providing examples of impacts from a local context.
 - Magnitude of impacts
 - Net positive benefits

For more information on the tools and approaches related to impacts assessments, see the SBIA Manual, Part 2 (Richards, 2011).

13.6 How can projects ensure that consultations are gender sensitive? How is this different from the Community Gold requirement that women influence decision making (G3.4)?

The CCB Standards require that consultation is undertaken in a gender sensitive manner (footnote to G3.4), ensuring that women have the same opportunities as men to participate in consultations (see Box 48). In addition, in situations where women are not traditionally allowed a voice in consultations, the Project Proponent must identify ways of obtaining their input and feedback. Ensuring that consultations are gender sensitive may be done by encouraging women to attend formal/informal meetings, for example by addressing meeting invitations specifically to women, holding meetings with women only, providing child care during meetings, or holding meetings at a time of the day or year when women are most free to participate. If effective approaches to ensure women’s participation are not easily identified, the project may initiate a dialogue with Communities, including decision-makers and women, to develop socially and culturally sensitive approaches to include women more effectively.

Box 48: Definition of 'gender sensitive'

To be 'gender sensitive' is to understand and give consideration to socio-cultural norms and discriminations in order to acknowledge the different rights, roles and responsibilities of women and men in the community and the relationships between them.

Source: Quesada-Aguilar (2013)

The Community Gold indicator GL2.5 goes further on gender by requiring that the Project Proponent demonstrate that women have influenced and participated significantly in decision making. This means that Project Proponents should identify and modify decision-making structures to ensure that both men and women participate fully and effectively in decision making related to the project. Demonstrating the importance of all community opinions, whether gathered formally or informally, to decision makers may be required. Using formal channels, such as community-wide meetings, may not always be appropriate. Using informal methods, such as casual discussions or women's gatherings, may provide a more appropriate channel to achieve this participation. The Project Proponent may also need to undertake training and capacity building to support the ability of women to participate in decision making and to help decision makers understand the value of women's participation. The Community Gold Level further requires demonstration that the final decisions taken regarding the project have been influenced by women.

13.7 How can projects ensure that consultations are inter-generationally sensitive (G3.4)?

The CCB Standards require that consultation is undertaken in a manner that includes the interests and opinions of all generations – including youth and elders – in the Communities (G3.4). For example, it is important that the potential impacts of project activities on youth are considered, that benefits to them are ensured, and that their influence and decision making is enabled. This becomes critical to the success of the project since land management projects may continue over several decades and the youth of today may be managing the project in the future. The approaches to ensuring an inter-generationally sensitive consultation may be similar to the strategies and methods described in the previous question on ensuring gender sensitive consultations (see 13.6).

13.8 How can projects ensure inclusion of marginalized and vulnerable people and groups (G3.4)?

The CCB Standards require that effective consultations must include particular attention to marginalized people and groups (those with little or no influence over decision making) and vulnerable people and groups (those with high exposure and sensitivity to external stresses and low capacity to adapt), even if they are not recognized as a separate Community Group. The approaches to ensuring that the consultation process pays special attention to marginalized and vulnerable people and groups may be

similar to the strategies and methods described in the question on ensuring gender sensitive consultations (see 13.6).

For Community Gold projects, marginalized and vulnerable groups need to derive net positive benefits (GL2.4). Even if the project is not using the Gold level, if any of the marginalized and vulnerable groups are identified as distinct Community Groups, these groups need to derive net positive benefits (see the section 9 of this document for more details).

The Community Forest Program in Nepal has institutionalized some approaches for inclusion of marginalized and vulnerable groups in decision making and benefit sharing (see Box 33).

13.9 Why do the CCB Standards include a requirement for consultations with ‘legitimate representatives’ (G3.5)?

It is important that consultations are undertaken directly with Communities or Other Stakeholders or, when this is not possible, with legitimate representatives, in order to ensure legitimacy of the decision-making and consultation process. If consultation with representatives is involved, the Project Proponent should ensure that there are appropriate processes within the Communities for them to select these representatives and that two-way information flows (sharing of information and feedback) are maintained between the representatives and the Communities.

13.10 What are the requirements for participation relating to the feedback and grievance redress procedure (G3.8)?

The Project Proponent is required to share details about the feedback and grievance redress procedure with the Communities. The CCB Standards Third Edition requirement for the Feedback and Grievance Redress Procedure is for a three tier system. The first level is negotiation, the second level is mediation and the third level is referral of the issue to ‘laws of the relevant jurisdiction’, that may include an option for arbitration. The independent mediator is selected in consultation with the Communities.

13.11 What is meant by allowing different approaches to consultations for different Community Groups and Other Stakeholders?

The Project Proponent may choose to employ different stakeholder engagement strategies with various stakeholders depending on the context and what is most appropriate (see Box 49).

Box 49: Stakeholder engagement strategies that vary between Community Groups and Other Stakeholders



AVOIDED DEFORESTATION

PROJECT PROFILE: Cordillera Azul National Park REDD Project, Peru

The Cordillera Azul National Park (PNCAZ) REDD Project in Peru protects 1,351,964 hectares of the National Park owned by the Government of Peru.

In 2008, there were approximately 180,000 people in the Communities who derive income, livelihood or cultural values from the Project Area. Approximately 72% of the population lived on the western side of the Project Zone, along the Huallaga valley, in 181 communities. Most Huallaga residents are immigrants who migrated from the higher elevations west of the Huallaga River. Approximately 28% of the Project Zone population lived in the Ucayali valley on the park's eastern side in 51 communities. This population is sparse and predominantly indigenous—principally Shipibo, with some Piro/Yine and Cacataibo groups— each group maintaining its cultural identity and mother language. There is one known dweller inside the park – a cattle rancher who does not have legal land tenure. However, the cattle rancher has customary rights to the land. In 2008, there was some evidence that an indigenous group of Cacataibo living in voluntary isolation resided in or near the park. Since then additional evidence has been gathered that suggests the group lives in the Project Zone but not within the Project Area.

The Community Groups in this project are: a) Communities on the west side of the park (mostly immigrants) b) Communities on the east side (mostly indigenous) and, c) Cacataibo who live in voluntary isolation outside the project area but in the project zone. Other Stakeholders include the cattle rancher and numerous local, regional and national government organizations and conservation organizations such as regional REDD groups and non-profits who support the project activities. While the latter organizations do not directly derive livelihood or cultural values from the Project Area, the project activities could affect them.

For the Community Groups on east and west sides of the park, consultation is facilitated by the Project Proponents through Social Asset Mapping, regional meetings and direct interaction between the communities and project field staff. Social Asset Mapping involves community elected facilitators carrying out structured and semi-structured interviews to collect data on social organizations and use of natural resources. The Project Proponents' overall communication program is primarily delivered orally to the communities by its trained field staff who spend most of their time out in the communities. This constant presence also enables solicitation of input or feedback and answering of community questions in "real-time". The staff uses methodological and thematic guides, including support tools such as posters, and other documents, to ensure a consistent, uniform message is delivered to all communities in a manner that respects the local social and cultural characteristics. For example, posters may be used to support communication of potential impacts of deforestation and climate change to all communities, but the specific impacts highlighted on each poster will reflect what the communities have identified as most important to them either economically or culturally.

For the Cacataibo living in voluntary isolation, their voluntary isolation was and continues to be respected and no contact was made to seek input into the project design. Input on their behalf was and continues to be sought from the Peruvian government and Cacataibo tribal leaders in the Project Zone.

Consultations were held with funders and government organizations through regional meetings as well as individual meetings. This allowed individual perspectives to be gathered while also facilitating discussions among the organizations to promote a common regional vision.

Source: CIMA (2012)

13.11 What are the requirements for Free, Prior and Informed Consent in the CCB Standards (G5.2-3)?

The CCB Standards not only requires the Project Proponent to share information and consult with the Communities, but also to obtain Free, Prior and Informed Consent (FPIC) from those whose property rights are affected by the project. This right to FPIC extends to Indigenous Peoples and others in the Communities who have statutory or customary (see Box 50) tenure, use, access or management rights to lands, territories and resources ('property rights') in the Project Zone and is required for both collective and individual rights. The FPIC process, unlike consultation, gives the Communities the option to give or withhold their consent to the project activities and this decision must be respected by the Project Proponent.

FPIC is required under two circumstances:

- When property rights are potentially affected, FPIC must be obtained from property rights holders (G5.2).
- When project activities may lead to the removal or relocation of habitation or activities important to their culture and livelihood (resettlement) (G5.3).

Box 50: Definition of customary rights

'Customary rights' to lands, territories and resources refer to patterns of long-standing community lands, territories and resource usage in accordance with Indigenous Peoples' and local communities' customary laws, values, customs, and traditions, including seasonal or cyclical use, rather than formal legal title to lands, territories and resources issued by the State.

Source: World Bank (2005)

Participatory mapping is an important part of the FPIC process. The Project Proponent must undertake effective mapping of property rights and land and resource use (G5.1) through a participatory process that includes Communities and neighboring communities (so that they can confirm boundaries). All relevant Community Groups must participate in the mapping exercise. The mapping must include any overlapping or conflicting rights. Even rights that are disputed should be recognized and respected, and the Project Proponent needs to ensure that no activity is undertaken that could prejudice the outcome of an unresolved dispute (G5.5).

The FPIC process leads to an agreement on whether project activities will move forward or not. *If a community or rights holder does not give consent to the project activities that affect them, then those activities cannot move forward in their area.* If the community or rights holder gives their consent to project activities, then project planning and implementation of those activities can proceed.

FPIC is location-specific. Some communities or rights holders may give consent to include their areas in the project, while other areas for which consent was not given are kept out of the project. *The right of FPIC is not a right of veto over the whole project.* Consent can be withheld for project activities that affect property rights. This may mean that activities cannot be implemented in a certain area where property rights are held, remembering that property rights include statutory and customary tenure/use/access/management rights to lands, territories and resources in the Project Zone as well as

individual and collective rights. In some cases, depending on the importance of the property rights in question for a particular project, lack of consent could block the implementation of the entire project.

Bearing in mind that the decisions for FPIC should be made at the level at which rights are held (i.e. individually for individual rights and collectively for collective rights), and respecting tradition decision-making processes, efforts must be made to ensure that all relevant Community Groups within Communities are included in the decision relating to FPIC. If there are groups within communities with collective rights that are excluded from the decision making process, the Project Proponent must seek dialogue with community leaders on the reasons for this, and determine if there are ways in which their opinions can be included. This may include training or capacity building for both the majority and any potentially marginalized groups or people.

Consent could be a written agreement or an agreement in other forms, such as oral, traditional ceremony, or a show of hands. Box 51 outlines some suggested contents of the consent agreement. The format of the consent should be recognized by both parties. *The decision has to be documented* and documentation methods may include: written document, a video/audio recording of the representative speaking the decision, etc.

Giving and withholding consent is also time-specific and can be revisited and revised. There should be provisions for periodic review of the agreement with the Community throughout the life of the project. The periodicity should be determined in consultation with the Communities. When consent has been obtained, it constitutes a binding agreement for both parties such that if the conditions upon which the original consent was based are being met, ongoing consent is implied. If these conditions change, the Communities may review and either reaffirm or withdraw consent. The feedback and grievance redress procedure must allow for the option of withdrawing consent to be invoked when conditions upon which the original consent was based are not met.

Box 51: Content of a consent agreement

A consent agreement may include the following:

- Agreed signatory parties;
- Mutually agreed substantive documented evidence of consent ;
- Description of location/rights holders/resources;
- Description of agreement details (according to location in the project cycle). For agreements on project implementation this may include: costs to be borne by the community; benefits accruing to the community; risks to be borne by the community; requirements (e.g. patrolling, data collection, reporting, etc.); rules and restrictions imposed on the community (such as limiting, use of forest products);
- Duration/term;
- Arrangements for making agreements binding;
- Independent verification provisions;
- Recourse mechanism/grievance process;
- Monitoring plan;
- Withdrawal of consent terms;
- Agreed next point for consent to be sought; and
- Appendices, such as management plans/details of agreed economic development activities/associated detailed processes for implementation

The consent agreement may not always be a one-off agreement, but could also be a series of agreements that are progressively more detailed over time as project design is developed with communities.

14. RISK MANAGEMENT

The CCB Standards require Project Proponents to identify likely natural and human-induced risks to the expected project benefits and to outline measures to mitigate these risks (G1.10). This section will help you understand what types of risks need to be assessed and addressed and how this can be done.

14.1 What are the requirements in the CCB Standards relating to risk management?

G1.10 requires Project Proponents to identify the full range of potential changes to conditions, either human-induced or natural, that affect the Project Proponent's assumptions and that may reduce either the delivery and/or the sustainability of the project's expected benefits. G1.10 also requires that once the major risks are identified, measures are adopted to address them. G1.11 requires the Project Proponent to identify risks to the project's benefits beyond the project lifetime (commonly referred to as 'permanence') and describe measures adopted to address them.

The integrated approach to project design and implementation required by the CCB Standards, addressing social and environmental considerations using good practices, helps address many of the potential risks to the delivery and sustainability of a land-based project's expected climate, community and biodiversity benefits (see question 14.3).

14.2 What are the recommended steps to ensure adequate risk management of projects?

The following steps are recommended to satisfy the CCB Standards requirements for risk management:

Step 1: Identify all the potential risk factors for the project. The risk assessment should cover the Project Zone and must include all likely risks. Risks may be identified in accordance with G1.8, which requires that the project design must be explained using a theory of change approach explaining how project activities will generate the project's expected climate, community and biodiversity benefits based on a good knowledge of starting conditions and a series of assumptions about the with-out project scenario and the expected effects of different activities. Risks therefore might be related to change in starting conditions or in assumptions along the results chain.

Human-induced risks may include changes in policies and laws, changes in markets that affect prices for carbon credits or for commodities produced in the area, turnover in staff, etc. Examples of natural risks include naturally occurring fires, floods, pest outbreaks, hurricanes, and earthquakes. The assessment should include short-term risks (such as lack of consent from affected rights holders), as well as long-term risks (such as reduction in the water table).

Step 2 (optional): Classify risks into different categories. For example, VCS classifies risks into internal (project capacity), external and natural risks. This systematic approach can help ensure that no risks are overlooked.

Step 3: Rate the potential impact of each identified risk. The likelihood of occurrence, multiplied by probable impact, provides a view on the actual potential of a risk to disrupt project implementation, and the delivery and sustainability of benefits. For example, a detailed mitigation strategy need not be

developed for low risks, however, it is recommended to consider those risks as well given the likelihood of occurrence may change in the future.

Step 4: Identify mitigating factors and actions for the risks and include in project design and implementation and monitoring plans. Mitigation options should be based on a convincing causal model that captures how mitigation options will address the specific factors underlying a risk. The Project Proponent should demonstrate capacity to implement the identified risk mitigation activities.

Step 5: Monitor risks, as well as, mitigating factors periodically, in intervals appropriate for monitoring each risk. A monitoring effort needs to be undertaken at the very least in time for subsequent validation/verifications, but preferably sooner.

14.3 What are the human-induced risks that are addressed through specific indicators in the CCB Standards for which potential changes need to be considered in the risk analysis?

There are several human-induced risks generic to land-based projects that are addressed through specific multiple-benefit, do-no-harm, as well as, capacity-related indicators in the CCB Standards. These indicators address such risks by either precluding the occurrence of factors that underlie the risk or by serving as mitigation actions. An example of precluding the occurrence of factors that underlie risk can be found in the requirement in the Standards for Free, Prior and Informed Consent (FPIC). FPIC requirements would preclude the occurrence of Communities claiming that they were not consulted, which would lead to poor participation or even obstruction of the project. A mitigation action example can be found in reviewing land-based carbon projects where the risk of not achieving climate objectives, due to Communities preferring more profitable alternate uses to the land, is reduced by delivering livelihood benefits to Communities.

The list below identifies risks addressed in CCB Standards indicators for which potential changes in conditions and assumptions should be considered in the risk analysis:

- **Risk related to financial viability of the project:** adequate actual and projected flow of funds for project implementation (G1.12) may be affected, for example by carbon price changes, and could be analyzed through a sensitivity analysis.
- **Risks related to capacity to implement the project effectively:** adequate management capacity (G4).
- **Risks related to land and resource tenure:** respect for rights to lands, territories and resources (G5.1, G5.5) and measures to reduce illegal activities (G5.4) (see also Box 52).
- **Risks related to community engagement and willingness to participate in the project:** effective stakeholder engagement (G3) and earning Free, Prior and Informed Consent (G5.2-3).
- **Risks related to legal compliance:** compliance with all laws and regulations in the host country (G5.6) and approval from appropriate authorities (G5.7).
- **Risks related to double counting for offsets from land-based projects:** measures to avoid double counting (G5.9).

- **Risks related to inappropriate management and use of land that contain biological, ecological, social or cultural values of outstanding significance or critical importance:** no negative impacts on High Conservation Values (CM2.3 and B2.3).
- **Risk related to opportunity costs for Communities** (based on the without-project land use scenario): demonstration of net positive well-being benefits to all Community Groups (CM2.3) and no harm to Other Stakeholders (CM3.3).
- **Risks related to project longevity** (how long the management practices and multiple benefits will be maintained): measures to maintain and enhance the climate, community and biodiversity benefits beyond the project lifetime (G1.11).
- **Risks related to reduced ability of communities and biodiversity to adapt to climate change and its impact on expected project benefits:** the multiple-benefit approach in CCB Standards of ensuring livelihood benefits to Communities (CM2) and net positive benefits to biodiversity (B2) may, in some cases, help address this risk partially or in full (e.g. when community and biodiversity benefits from the project help to build resilience).

Box 52: Risks related to unresolved conflict or disputes to lands, territories and resources

The CCB Standards do not require that there should not be any ongoing disputes or overlapping rights in the Project Area when the project starts. The reasons are:

- Lack of land tenure security, possibly accompanied by disputes, may be a driver of deforestation that will be addressed by the project.
- CCB Standards could be used to leverage the resolution of disputes that involve land grabbers, military or concessionaires who are impinging on community land.
- Conflict can rarely be avoided completely and, in some cases, they may not be relevant to the project and it may not be feasible to resolve them. In some cases, conflicts may even be positively transformative.
- The CCB Standards require projects to have in place mechanisms to manage existing disputes and those which may arise during the project period, whether as a result of project interventions, or from other sources which affect the project.

The CCB Standards have a requirement that Project Proponents “demonstrate that no activity is undertaken by the project that could prejudice the outcome of an unresolved dispute relevant to the project over lands, territories and resources in the Project Zone’ (G5.5).

The Oddar Meanchey project protects 56,050 hectares of Community Forests in northwestern Cambodia. The land-tenure status of forest land used for agriculture by local communities was unclear at the start of the project, but in the course of project activities rural people were assisted in gaining legal tenure rights of their local forests.

15. FINANCIAL HEALTH OF THE IMPLEMENTING ORGANIZATION(S)

The financial health of the implementing organization(s) must be documented. This section will help you understand the requirements related to indicator G4.3.

15.1 What are the requirements in the CCB Standards relating to financial health of the implementing organization?

G4.3 in the CCB Standards requires the financial health of the primary Project Proponent to be documented. Only when one or more of implementing organizations that may be sub-contracted or otherwise engaged on implementation has a significant share of the role as Project Proponent does that organization's financial health need documentation. The primary Project Proponent is the individual or organization that has overall control and responsibility for the project identified in G1.1.

Financial health represents the overall financial situation of the Project Proponent. It is indicative of whether or not the organization is financially stable and has the capacity to reliably support its core programs and activities, including the implementation of the project. The financial health of the organization, therefore, provides important information about the sustainability and long-term prospects of the organization. Since land management projects are implemented over 20-30 years or even longer, it is important that the ability of the Project Proponent to sustain itself over this relatively long period of time is assessed and documented.

In addition, G4.3 also requires that all the entities involved in project design and implementation are not involved in or are not complicit in any form of corruption. *Note that guidance on this portion of the criterion is not given in this document.* Project Proponents are encouraged to refer to Keeping REDD+ Clean: A step-by-step guide to preventing corruption, by Transparency International (Hewitt & Cowling, 2012), for more information on this subject.

15.2 How is the requirement for documenting financial health different from the requirements of G1.12?

Financial health in G4.3 relates to the entire organization and its ability to sustain itself across all programs and activities. G1.12 which requires a Project Proponent to “demonstrate that the financial mechanisms adopted, including actual and projected revenues from GHG emissions or removals and other sources, provide adequate actual and projected flow of funds for project implementation and to achieve the projects climate, community and biodiversity benefits”, is a requirement at the project level and concerns project financing, which is likely a sub-set or budget line of the organization. G1.12 seeks to ascertain whether the cash flows necessary to implement the project, as budgeted and validated, are likely to be available, reliable, and as required to deliver project milestones and deliverables.

15.3 What documents are used to assess financial health?

Implementing organizations will need to provide objective evidence to auditors to support assertions of their financial health made in the project design documentation. The types of documents that help with the assessment of financial health are:

- independently audited financial statements and audit reports,
- annual reports and budgets, and
- grant agreements.

There are two financial statements that form the core of any financial health analysis: income statements and balance sheets. These documents need to be audited and shared with the CCB Standards auditors. Income statements reflect the annual revenues minus expenses of the organization, while balance sheets provide a snapshot of overall financial health at any given time.

15.4 Do the documents have to be shared publicly?

Confidential information need not be made public, but the project design documentation needs to include sufficient non-confidential information and a statement justifying the rationale or determination that implementing organizations have made regarding their financial health, citing the documents that support such assertions. If the documents needed for assessment are considered confidential information by the Project Proponent, and thus not included within or as appendix to the project design documentation, they still must be made available for on-site review by the CCB Standards auditors.

For many non-profit, non-governmental organizations, it is often the case that financial reports, statements, and financial audit reports are publically available.

15.5 What are some metrics for assessing the financial health of the implementing organization?

Metrics that are widely applicable to all types of organizations and can be used as guidance for assessing the financial health of implementing organizations are listed below (Thomas, 2012).

- Related to profitability: What are surplus or deficits as a percentage of expenses? Are full costs of delivering all projects and activities covered by reliable revenue?
- Related to revenue sources: Where does the organization's money come from? Are the revenue sources diversified? Are the revenue streams consistent/reliable?
- Related to expenses: Are expenses adjusted in line with changes in revenue?
- Related to composition of balance sheet: Does the organization have adequate reserves? What amount of debt and plans for repayment? What amount of cash and how liquid is it?
- Related to liquidity: How many 'months of liquidity', and is this sufficient to withstand risk and pursue new opportunities?

See Box 53 for more information on guidelines for metrics for financial health.

Box 53: Metrics for financial health

FINANCIAL INDICATORS	HEALTHY	MODERATELY HEALTHY	REQUIRES IMMEDIATE ATTENTION
Unrestricted surplus/deficit (as % of expenses)	Surpluses <i>consistently</i> cover full costs, contributing to healthy balance sheet and savings (3%+)	Breakeven results or periodic surpluses insufficient to cover full costs (-3% to +3%)	Consistent and/or growing deficits (-3%+)
Months of liquidity	3+ months cash and working capital One or more board designated reserves for risk or opportunity	Sufficient to cover cyclical cash flow (aim for 3 months)	Less than one month and declining

Source: Thomas (2012)

References

- Anderson, P. (2011). *Free, Prior, and Informed Consent in REDD+: Principles and Approaches for Policy and Project Development*. RECOFTC and GIZ. Retrieved from www.forclime.org/images/stories/RECOFTC-GIZ_FPIC_in_REDD_2011.pdf
- Bours, D., McGinn, C. & Pringle, P. (2014). *Guidance note 3 : Theory of Change approach to climate change adaptation programming*. Retrieved from www.ukcip.org.uk/wordpress/wp-content/PDFs/M&E-Guidance-Note3.pdf
- Brown, E., Dudley, N., Lindhe, A., Muhtaman, D.R., Stewart, C. & Synnott, T. (2013). *Common guidance for the identification of High Conservation Values*. HCV Resource Network. Retrieved from www.hcvnetwork.org/resources/folder.2006-09-29.6584228415/cg-for-hcv-identification
- CCBA & Conservation International (2012). *Study on the Demand for Smallholder- and Community-led Land-based Carbon Projects*. Retrieved from www.climate-standards.org/ccb-standards/history-of-the-standards/
- CCBA (2013). *Rules for the Use of the Climate, Community & Biodiversity Standards (December 2013)*. Retrieved from www.climate-standards.org/resources/
- CIMA (2012). *The Cordillera Azul National Park REDD Project documentation*. Retrieved from www.climate-standards.org/2012/09/20/cordillera-azul-national-park-redd-project/
- Conference of the Parties to the Convention on Biological Diversity (2010). Decision X/33 adopted by the COP to the CBD at its tenth meeting. Aichi, Japan. Retrieved from www.cbd.int/decision/cop/default.shtml?id=12299
- Conference of the Parties to the Convention on Biological Diversity (2012). Decision XI/19 adopted by the COP to the CBD at its eleventh meeting. Hyderabad, India. Retrieved from www.cbd.int/doc/decisions/cop-11/cop-11-dec-19-en.pdf
- Conservation International (2012). *The Alto Mayo Conservation Initiative Project documentation*. Retrieved from www.climate-standards.org/2012/06/22/alto-mayo-conservation-initiative/
- Conservation International (2013a). *Constructing theories of change models for Ecosystem-based Adaptation projects: a guidance document*. Retrieved from www.conservation.org/Documents/CI_IKI-ToC-Guidance-Document.pdf
- Conservation International (2013b). *The Nakauvadra Community Based Reforestation Project documentation*. Retrieved from www.climate-standards.org/2013/04/22/the-nakauvadra-community-based-reforestation-project/
- Conservation Measures Partnership (2013). *Open Standards for the Practice of Conservation, Version 3.0*. Retrieved from www.conservationmeasures.org/wp-content/uploads/2013/05/CMP-OS-V3-0-Final.pdf
- Convention on Biological Diversity (n.d.) Aichi Biodiversity Targets. Retrieved from www.cbd.int/sp/targets/

Daviet, F., Greenhalgh, S. & Weninger, E. (2006). *The Land Use, Land-Use Change, and Forestry (LULUCF) Guidance for GHG Project Accounting*. Washington, DC: World Resources Institute. Retrieved from www.wri.org/publication/land-use-land-use-change-and-forestry-guidance-greenhouse-gas-project-accounting

Dazé, A., Ambrose, K., & Ehrhart, C. (2009). *Climate Vulnerability and Capacity Analysis Handbook*. Retrieved from www.careclimatechange.org/tk/integration/en/quick_links/tools/climate_change.html

Diaz, D. & Delaney, M. (2011). Carbon Stock Assessment Guidance: Inventory and Monitoring Procedures. *Building Forest Carbon Projects*. Washington, DC: Forest Trends. Retrieved from www.forest-trends.org/publication_details.php?publicationID=2862

Food and Agriculture Organization of the United Nations (2010). *"Climate-Smart" Agriculture - Policies, Practices & Financing for Food Security, Adaptation and Mitigation*. Retrieved from www.fao.org/fileadmin/user_upload/newsroom/docs/the-hague-conference-fao-paper.pdf

Friberg, R., Holland, J., Block, J., Bwangoy Bankanza, J.-R., Dettmen, S., Gereau, R., ... & Kendall, J. (2012). *Mai NDombe Project Description Document (PDD), CCB Standards*. Retrieved from www.climate-standards.org/2012/09/03/mai-ndombe-redd-project/

GEF Evaluation Office and Conservation Development Center (2009). *The ROTI Handbook: Towards Enhancing the Impacts of Environmental Projects*. p 2. Washington DC: Global Environment Facility www.thegef.org/gef/sites/thegef.org/files/documents/M2_ROTI%20Handbook.pdf

Global Observation for Forest Cover and Land Dynamics (2013). *A sourcebook of methods and procedures for monitoring and reporting anthropogenic greenhouse gas emissions and removals associated with deforestation, gains and losses of carbon stocks in forests remaining forests, and forestation*. Retrieved from www.gofcgold.wur.nl/redd/index.php

global-woods (2009). *Kikonda Forest Reserve Reforestation Project documentation*. Retrieved from www.climate-standards.org/2009/02/08/kikonda-forest-reserve-reforestation-project/

Gönner, C., Haug, M., Cahyat, A., Wollenberg, E., de Jong, W., Limberg, G., ... & Becker, M. (2007). *Capturing Nested Spheres of Poverty: A Model for Multidimensional Poverty Analysis and Monitoring*. Bogor, Indonesia: CIFOR. Retrieved from: www.cifor.org/publications/pdf_files/OccPapers/OP-46.pdf

Hanson, C., Van der Lugt, C. & Ozment, S. (2011). *Nature in Performance: Initial Recommendations for Integrating Ecosystem Services into Business Performance Systems*. World Resources Institute. Washington, DC. Retrieved from www.wri.org/sites/default/files/pdf/nature_in_performance.pdf

Hewitt, D. & Cowling, P. (2012). *Keeping REDD+ Clean: A step-by-step guide to preventing corruption*. Transparency International. Retrieved from issuu.com/transparencyinternational/docs/2012_keepingreddclean_en?e=2496456/1427494.

Houston, J., Gazenbeek, A., Eriksson, M., Raeymaekers, G., & Sundseth, (n.d.). LIFE in action: case four. Conservation of endangered tree species in the Apennines, Italy. *Forests: Good Management Practices for Natura 2000*. Retrieved from ec.europa.eu/environment/nature/natura2000/management/gp/forest/03case_soderasen.html

International Fund for Agricultural Development (2010). *Participatory Mapping and Communication: A guide to developing a participatory communication strategy to support participatory mapping*. Retrieved from www.ifad.org/pub/map/pm_iii.pdf.

International Institute for Sustainable Development (2013). *Community-based Risk Screening Tool – Adaptation and Livelihoods Focus on Forests and Ecosystems*. Retrieved from www.iisd.org/cristaltool/

IPCC (2006). *2006 IPCC Guidelines for National Greenhouse Gas Inventories, Prepared by the National Greenhouse Gas Inventories Programme*, Eggleston H.S., Buendia L., Miwa K., Ngara T. and Tanabe K. (eds). Japan: IGES. Retrieved from www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html

Lawlor, K., Madeira, E., Blockhus, J., & Ganz, D. (2013). Community Participation and Benefits in REDD+: A Review of Initial Outcomes and Lessons. *Forests*, 4(2), 296–318. doi:10.3390/f4020296 Retrieved from www.mdpi.com/1999-4907/4/2/296

Langhammer, P.F., Bakarr, M.I., Bennun, L.A., Brooks, T.M., Clay, R.P., Darwall, W., ... & Tordoff, A.W. (2007). *Identification and Gap Analysis of Key Biodiversity Areas: Targets for Comprehensive Protected Area Systems*. Gland, Switzerland: IUCN. Retrieved from portals.iucn.org/library/efiles/edocs/PAG-015.pdf

LTS International Ltd & ITAD Ltd (2012). *Monitoring and Evaluation within ESPA: Deliverable 1/5: ESPA Theory of Change*. Retrieved from www.seachangecop.org/sites/default/files/documents/2012_02_LTS_ESPA_Theory-of_Change_Report.pdf

Madeira, E.M., Kelley, L., Blockhus J., Ganz D., Cortez, R., & Fishbein, G. (2013). *Sharing the Benefits of REDD+: Lessons from the Field*. The Nature Conservancy, 10. Retrieved from www.conservationgateway.org/Pages/REDDBenefitsReport.aspx

Milne, E., Neufeldt, H., Smalligan, M., Rosenstock, T., Bernoux, M., ... & Steglich E. (2012). Methods for the quantification of emissions at the landscape level for developing countries in smallholder contexts. *CCAFS Report No. 9*. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Retrieved from cgspace.cgiar.org/handle/10568/24835.

Nature Conservation Research Centre (NCRC) & the Rainforest Alliance (2012). *Case studies of Existing Smallholder- and Community - led Carbon Projects in Africa: A review and analysis of governance and institutional structures and challenges and successes encountered by smallholder- and community-led carbon projects*. Retrieved from www.climate-standards.org/ccb-standards/history-of-the-standards/

Neufeldt, H., Kristjanson, P., Thorlakson, T., Gassner, A., Norton-Griffiths, M., Place, F. & Langford K. (2011). Making climate-smart agriculture work for the poor. *ICRAF Policy Brief 12*. Nairobi, Kenya: World Agroforestry Centre (ICRAF). Retrieved from www.worldagroforestry.org/downloads/publications/PDFs/BR11267.PDF

Ohja, H., Persha, L., Chhatre, A. (2009). Community Forestry in Nepal: A Policy Innovation for Local Livelihoods. *IFPRI Discussion Paper 00913*. Retrieved from www.ifpri.org/sites/default/files/publications/ifpridp00913.pdf

Olander, J., Borges, B., Surui, A., Surui, M., & Nearykosar (2011). *The Surui Project: Building Indigenous Peoples' Capacity for Informed Engagement with REDD Finance, Avoided deforestation (REDD) and*

indigenous peoples: experiences, challenges and opportunities in the Amazon context. Retrieved from www.kaninde.org.br/upload/2012/04/etnozoneamento_surui_1334547167.pdf

Otterstrom, S., González, L., Hodgson, H., Lexama, M., Valerio, L., Fuentes, C., Hernandez, B., Bolaños, G., Marcenaro, R., Barquero, T., Rivera, M., Gaitan, Y., Martinex, J. (2008). *Return to Forest: Mitigating Climate Change through the Restoration and Conservation of Endangered Forest Ecosystem documentation*. Retrieved from www.climate-standards.org/2007/12/12/return-to-forest-nicaragua/

Penman, J., Gytarsky, M., Hiraishi, T. Krug, T., & Kruger, D. (2003). Good Practice Guidance for Land Use, Land-Use Change and Forestry. Intergovernmental Panel on Climate Change. Retrieved from www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_contents.html

Pitman, N. (2011). Social and Biodiversity Impact Assessment Manual for REDD+ Projects: Part 3 – Biodiversity Impact Assessment Toolbox. Washington, DC: Forest Trends, Climate, Community & Biodiversity Alliance, the Rainforest Alliance and Fauna & Flora International. Retrieved from www.climate-standards.org/resources/

Quesada-Aguilar, A. (2013). *From research to action, leaf by leaf: Getting REDD+ right in Social and Environmental Stans, Booklet 1*. The Women’s Environment and Development Organization (WEDO) and the REDD+ Social and Environmental Standards (SES) Secretariat. Retrieved from www.reddstandards.org/index.php?option=com_eywafm&task=cat_view&gid=56&Itemid=185

Rainforest Alliance (2013). *Forest, Climate and Communities Alliance (FCCA) Climate, Community & Biodiversity Project Design Document*. Retrieved from: <http://www.rainforest-alliance.org/publications/newsletter/ghana-cocoa-conservation>

Rayden, T. (2008). Assessment, management and monitoring of High Conservation Value Forest: A practical guide for forest managers. Oxford, UK: ProForest. Retrieved from www.hcvnetwork.org/resources/folder.2006-09-29.6584228415/hcvf%20-%20practical%20guide%20for%20forest%20managers.pdf

Richards, M. (2011). *Social and Biodiversity Impact Assessment (SBIA) Manual for REDD+ Projects: Part 2 – Social Impact Assessment Toolbox*. Washington, DC: Climate, Community & Biodiversity Alliance and Forest Trends with the Rainforest Alliance and Fauna & Flora International. Retrieved from www.climate-standards.org/resources/

Richards, M. and Panfil, S. (2011). *Social and Biodiversity Impact Assessment (SBIA) Manual for REDD+ Projects: Part 1 – Core Guidance for Project Proponents*. Washington, DC: Forest Trends, Climate, Community & Biodiversity Alliance, the Rainforest Alliance and Fauna & Flora International. Retrieved from www.climate-standards.org/resources/

Rietbergen-McCracken, J., Steindlegger, G., & Koon, C.S. (2007). High Conservation Value Forests: The concept in theory and practice. Gland, Switzerland: WWF International. Retrieved from www.hcvnetwork.org/resources/folder.2006-09-29.6584228415/hcvf_brochure_012007.pdf

Shames S., Buck, L.E. & Scherr, S.J. (2012). Reducing costs and improving benefits in smallholder agriculture carbon projects: Implications for going to scale; *Climate change mitigation and agriculture*. London and New York: Earthscan.

Stewart, C., George, P., Rayden, T. & Nussbaum, R. (2008). *Good practice guidelines for High Conservation Value assessments: A practical guide for practitioners and auditors*. Oxford, UK: ProForest. Retrieved from www.hcvnetwork.org/resources/folder.2006-09-29.6584228415/HCV%20good%20practice%20-%20guidance%20for%20practitioners.pdf

Thomas, R. (2012). *Assessing Nonprofit Financial Health*. Retrieved from www.philanthropynewyork.org/s_nyrag/bin.asp?CID=19838&DID=55460&DOC=FILE.PDF.

UKCIP (2013). *The UKCIP Adaptation Wizard v 4.0*. UKCIP, Oxford. Retrieved from www.ukcip.org.uk/wizard/

Verified Carbon Standard Association (2012a). *Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, v3.0*. Retrieved from www.v-c-s.org/methodologies/VT0001

Verified Carbon Standard Association (2012b). *AFOLU Non-permanence risk tool*. Retrieved from www.v-c-s.org/sites/v-c-s.org/files/AFOLU%20Non-Permanence%20Risk%20Tool%2C%20v3.2.pdf.

Verified Carbon Standard Association (2013). *Agriculture, Forestry and Other Land Use (AFOLU) Requirements*. Retrieved from www.v-c-s.org/sites/v-c-s.org/files/AFOLU%20Requirements%2C%20v3.4.pdf

Watson, C. (2009). *Forest Carbon Accounting: Overview & Principles*. Addis Ababa, Ethiopia: UNDP and UNEP. Retrieved from www.undp.org/content/undp/en/home/librarypage/environment-energy/climate_change/mitigation/forest-carbon-accounting-overview---principles/

Watson, R., Noble, I., Bolin, B., Ravindranath, N. H., Verardo, D. & Dokken, D. (Eds.) (2000). *Intergovernmental Panel on Climate Change (IPCC) Special Report on Land Use, Land-Use Change and Forestry*. Cambridge University Press, UK. Retrieved from ipcc.ch/ipccreports/sres/land_use/index.php?idp=71

Wildlife Works Carbon LLC (2009). *The Kasigau Corridor REDD Project Phase I – Rukinga Sanctuary documentation*. Retrieved from www.climate-standards.org/2009/09/09/the-kasigau-corridor-redd-project/

Women Organizing for Change in Agriculture and Natural Resource Management (2013). *Women's Carbon Standard*. Retrieved from www.gender-climate.org/Content/Docs/Publications/wocan_womens-carbon-standard.pdf

World Vision Ethiopia (2009). *Humbo Ethiopia Assisted Natural Regeneration Project*. Retrieved from www.climate-standards.org/2009/06/08/humbo-ethiopia-assisted-natural-regeneration-project/

Young, B., Byers, E., Gravuer, K., Hall, K., Hammerson, G., & Redder, A. (2011). *The NatureServe Climate Change Vulnerability Index*. Retrieved from <https://connect.natureserve.org/science/climate-change/ccvi>.

Index

- Additionality, 4, 9, 22, 23, 25, 26, 29, 30, 38
- Afforestation/reforestation projects, 6, 14, 68, 73
- Agriculture project, 68
- Approved methodological approach, 4, 33, 35, 36, 37, 40
- Avoided deforestation projects, 6, 12, 13, 14, 40, 68, 69, 70, 72, 73, 80, 81, 83, 86, 96, 104, 117
- Carbon pools, 23, 38, 41
- Carbon stocks, 24, 38, 39, 43, 115
- Climate change adaptation, 44, 45, 46, 114
- Climate change mitigation, 1, 38, 40, 93, 117
- Community Groups, 4, 6, 10, 21, 29, 47, 48, 49, 50, 52, 54, 55, 65, 66, 98, 99, 101, 103, 104, 105, 106, 110
- Defensible methodological approach, 4, 33,, 34, 35, 36, 38, 40, 42, 43
- Consultation, 50, 72, 84, 97, 98, 100, 102, 103, 104, 105, 106
- feedback and grievance mechanism, 98, 103, 106
- Free, Prior and Informed Consent (FPIC), 3, 5, 29, 30, 50, 51, 52, 72, 97, 98, 105, 106, 109, 114
- Full and effective participation, 5, 49, 68, 71, 77, 97, 98, 100
- Gender, 5, 10, 50, 66, 74, 75, 76, 77, 98, 101, 102, 103, 118
- GHG accounting period, 24, 38
- High Conservation Values (HCV), 14, 16, 19, 29, 47, 49, 61, 64, 82, 84, 86, 99, 100, 114, 117
- Illegal activities, 49, 50, 51, 52, 109
- Indigenous Peoples, 1, 50, 54, 105, 117
- Key Biodiversity Areas, 5, 89, 90, 91, 96, 116
- Leakage, 15, 34, 39, 41, 88
- Maps, 4, 9, 10, 16, 17, 18, 19, 20, 21, 59, 60, 91, 116
- Other stakeholders, 4, 15, 20, 47, 48, 50, 51, 52, 54, 57, 61, 98, 103, 104, 110
- Permanence, 38, 108, 118
- Programmatic approaches, 4, 12, 20, 27, 28, 29, 30, 31, 40
- Project Area, 4, 10, 11, 12, 13, 14, 15, 16, 19, 27, 30, 38, 39, 42, 49, 50, 51, 54, 55, 61, 82, 100
- Project Zone, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22, 23, 28, 30, 44, 49, 50, 61, 64, 76, 82, 84, 85, 86, 90, 91, 94, 99, 100, 105, 108
- Recognized GHG Program, 4, 5, 23, 25, 33, 35, 36, 37, 40, 45
- Scalability limit, 30, 31
- Smallholder-led projects, 2, 73, 77
- Theory of change, 3, 4, 5, 6, 7, 8, 24, 45, 47, 54, 56, 59, 80, 82, 83, 87, 88, 91, 92, 98, 108, 114, 116
- Validation, 2, 11, 12, 19, 20, 23, 25, 27, 28, 29, 31, 33, 35, 36, 37, 54, 57, 80, 98, 109
- Verification, 4, 19, 20, 23, 31, 32, 33, 35, 36, 37, 54, 78, 80, 98, 107, 109
- Verified Carbon Standard, 1, 15, 23, 25, 27, 30, 34, 37, 38, 118