Learning About Cocoa Landscape Approaches

Ghana Guidance Document & Toolbox

SEPTEMBER 2020

NCRC
NATURE CONSERVATION RESEARCH CENTRE

IUCN National Committee of The Netherlands

World Cocoa Foundation

Partnerships for Forests

Acknowledgements

This guidance document and the supporting materials and presentations were developed by the Nature Conservation Research Centre (NCRC) with support from the IUCN National Committee of the Netherlands under the Green Landscapes Alliance, the World Cocoa Foundation with a grant from USAID, and the Partnerships for Forests with funding from UK Aid.

The information, concepts, resources, and lessons shared in this document reflect over twenty-years of NCRC's intellectual and programmatic work on landscape approaches in Ghana, as well as the work, experiences, and funding of many other organizations, agencies and companies who are also leading and supporting landscape efforts. We are immensely grateful for their support, input and sharing about landscapes and for the benefit of this document. In particular, NCRC would like to recognize the following partner agencies, organizations and companies for their significant contributions (in alphabetical order):

- A Rocha Ghana
- Cocoa Board, Ghana
- Ecolimits Project—Ecosystem Services for Poverty Alleviation (ESPA)
- Ecom Trading Ltd.
- Forest Trends
- Forestry Commission—Climate Change Directorate & National REDD+ Secretariat
- Forestry Commission—Wildlife Division
- Lindt Cocoa Foundation
- Man and & Nature / Noe
- Environmental Change Institute, University of Oxford
- Partnerships for Forests—West Africa
- International Union for the Conservation of Nature—Ghana
- International Union for the Conservation of Nature—Netherlands (Ecosystem Alliance)
- The Hershey Company
- The Rockefeller Foundation
- Touton and the 3PRCL partnership
- Tropenbos Ghana
- Verra and the LandScale Secretariat
- Zoological Society of London

NCRC
NATURE CONSERVATION RESEARCH CENTRE

Contents

Acknowledgements iii

List of Acronyms vi

Executive Summary 01

Section 1: Introduction to Landscape Approaches 06

1.1 What is the best way to protect forests and support producers? 06

1.2 What is the purpose of the document? 08

Section 2: Landscape Approaches—Key Questions About the Concept 10

2.1 What is a landscape? 10

2.2 What is a landscape approach and why the urgency? 11

2.3 What does a Landscape Approach look like and what does it entail? 13

2.4 What is a Consortium and how does it work? 16

2.5 What are the opportunities for companies in Landscape Approaches? 17

Section 3: Guidance on Landscape Governance 19

3.1 What is landscape governance and why is it necessary? 19

3.2 What are the main Landscape Governance mechanisms in Ghana? 32

3.3 Examples, opportunities, and benefits of CREMAs and HIAs 24

3.4 How does the HIA get to scale? 25

3.5 How does the HIA fit together—CREMAs, Sub-HIAs, HIA and Consortium? 26

3.6 What is the HIA development process? 28

Section 4: Guidance on Landscape Standards 36

4.1 Who or what will hold stakeholders accountable on sustainability? 36

4.2 Examples of landscape standards and tools 36

4.3 What is LandScale 38

4.4 Why do we need LandScale 39

4.5 How is LS different from traditional certification? 39

4.6 How can LS work for cocoa in Ghana? 40

Section 5: Guidance on Landscape Level Monitoring 43

5.1 M&E System for Cocoa HIA Landscapes 43

5.2 Forest & Social Monitoring under the GCFRP 45

5.3 CFI Monitoring 46

Section 6: Recommendations & Lessons **49**

6.1 What is the time-frame to achieving an HIA? 49

6.2 Why do some landscape governance efforts succeed, and others fail? 49

6.3 What are financing options for HIAs and the private sector 49

6.4 What are options and lessons on benefit sharing? 50

6.5 What is required on tree and land tenure reforms? 52

6.6 What are gender recommendations in landscape governance and CSC? 53

6.7 Which NGOs in Ghana have experience on landscape governance approaches? 54

Annex 1: Methods **55**

Annex 2: List of Toolbox Resources **56**

Toolbox Attachment **60**

Acronyms

AccelREDD+	Accelerate REDD+
AF	Accountability Framework
BSP	Benefit Sharing Plan
CF	Carbon Fund
CBNRM	Community Based Natural Resources Management
CCBA	Climate Community and Biodiversity Alliance
CEC	CREMA Executive Committee
CFI	Cocoa & Forests Initiative
COCOBOD	Ghana Cocoa Board
CREMA	Community Resource Management Area
CRMC	Community Resource Management Committee
CSC	Climate-Smart Cocoa
ERPA	Emissions Reduction Purchase Agreement
ERPD	Emissions Reduction Program Document
ESPA	Ecosystem Services for Poverty Alleviation
FC	Forestry Commission
FCPF	Forest Carbon Partnership Facility
FSD	Forest Services Division
GCFRP	Ghana Cocoa Forest REDD+ Program
GHG	Green House Gas
HIA	Hotspot Intervention Area
HMB	HIA Management Board
IUCN	International Union for the Conservation of Nature
IUCN-NL	International Union for the Conservation of Nature—Netherlands
IDH	Sustainable Trade Hub
LBC	Licensed Buying Company
LCF	Lindt Cocoa Foundation
LS	LandScale
M&E	Monitoring & Evaluation
MESTI	Ministry of Environment Science, Technology and Innovation
MLNR	Ministry of Lands and Natural Resources
MRV	Measurement Reporting & Verification
NCRC	Nature Conservation Research Centre
NERC	National Environment Research Council
NGO	Non-Governmental Organization
NTFP	Non-Timber Forest Products
RA	Rainforest Alliance
REDD	Reducing Emissions from Deforestation and forest Degradation
R-PIN	Readiness Plan Idea Note
SESA	Social & Environmental Safeguards Assessment
SHEC	Sub-HIA Executive Committee
Sub-HIA	Sub Hotspot Intervention Area
SIS	Social Information System
WCF	World Cocoa Foundation
WD	Wildlife Division
WEDO	Women's Environment & Development Organization
UNDP	United Nations Development Program
VSA	Verified Sourcing Area

Executive Summary

Across the developing world, forested countries, global commodity companies, donors, and leading NGOs are engaged in serious efforts to reduce deforestation and degradation, and to conserve forests in an effort to mitigate the negative impacts of climate change and safeguard the invaluable ecosystem services that forests provide.

After years of farm-level and project-scale efforts which have not brought some of the expected results, many are asking, "what is the best way to protect the environment and support producers?". The global consensus is that reducing deforestation, ensuring the sustainability of agricultural systems, and supporting smallholder farmers' livelihoods can only be achieved when they are jointly addressed at landscape or jurisdictional (regional or state) scales, in addition to local levels.

Understanding the concept of landscape approaches is therefore critical if countries, industries and/or initiatives are to pursue landscape sustainability. This is particularly true for the global cocoa and chocolate industry, which in 2017 made a commitment to a no-deforestation supply chain from its two biggest producer countries—Côte d'Ivoire and Ghana.

Unbeknownst to many, Ghana and its cocoa sector are already global leaders in conceiving and testing landscape approaches, including landscape governance mechanisms, landscape standards, and landscape monitoring systems. This comes from over twenty-years of experience in developing and implementing the Community Resource Management Area (CREMA) mechanism, and since 2014 its coordinated effort to develop and implement the world's first commodity-based emission reductions program—the Ghana Cocoa Forest REDD+ Programme (GCFRP).

Therefore, with support IUCN-Netherlands, the World Cocoa Foundation and Partnerships for Forests, this document aims to capture Ghana's knowledge and experiences on landscape approaches and synthesize it into a *Guidance Document* and *Toolbox,* so as to facilitate wider learning and adoption amongst private sector companies, civils society organizations and government agencies.

More specifically, the purpose of the Guidance Document and Toolbox is three-fold:

1. To introduce and explain the concept of Ghana's three main landscape approaches—landscape governance, landscape standards, and landscape monitoring—to the main stakeholders in Ghana's cocoa value chain and those working in cocoa production landscapes.
2. To provide guidance on how to implement landscape governance.
3. To give stakeholders access to a comprehensive toolbox of information and resources about these landscape approaches.

The document is structured to answer a series of questions about landscape governance, landscape standards, and landscape monitoring, which are broadly summarized herein. Much greater detail and explanation is contained in the main body of the guidance document and in the numerous resources and templates contained in the toolbox.

What are landscape approaches?

The adoption of landscape-level initiatives in Ghana's cocoa sector represents a significant shift in focus from the farm-farmer-society scale of engagement, which has been the norm, to a model that also orients outward to address critical environmental, social, and climate issues that extend beyond individual farm boundaries into the surrounding communities, farming landscape, and forests.

For the most part, landscape-scale initiatives are not focused on only one or two communities and a sub-set of farmers. Instead, landscape approaches target large areas of land and hundreds of farming communities with a suite of key interventions:

- Landscape governance and management planning processes and structures.
- Collaborative multi-stakeholder platforms.
- Adoption of sustainable production goals and natural resource commitments.
- Monitoring of environmental and social impacts and outcomes against standards or performance-based targets.

What is landscape governance and why is it important to sustainability?

The concept of landscape governance is to provide a suite of governance processes, bodies, and rules that enable the landowners and resource users to better manage the land, their farms and the natural resources at different scales, while also creating a linked platform for coordination and collaboration with the external stakeholders.

Landscape governance is important because cocoa production landscapes can be complicated places given the mosaic nature of farming and variation in farming practices, the expansiveness of forests that exist under various degrees of degradation, and the broad range of stakeholders who have varied interests, resources, mandates, and capacities. In addition, there is no guarantee that efforts to increase yields and/or implement climate-smart cocoa (or cocoa agroforestry) will necessarily lead to reduced expansion into or exploitation of forests. Therefore, establishing and supporting landscape governance systems is essential to addressing landscape complexities and realizing positive outcomes.

Ghana has two landscape governance mechanisms—the CREMA mechanism and the Hotspot Intervention Area (HIA) mechanism. CREMAs and HIAs are about giving communities, landowners and land-users the right to govern and manage their lands, including the natural resources and farming systems, for socio-cultural, economic, and ecological benefits and sustainability.

CREMAs are the most local level of community-based natural resource governance, typically encompassing five to twenty communities. HIAs (hotspots of forests and cocoa production) cover much larger area—100,000 to 200,000 ha –and use a nested governance structure (CREMAs nested within Sub-HIAs which sit within the HIA) to achieve scale. The HIA is led at the highest level by a locally elected HIA Management Board, made up of landowners, land users, local authorities, and community leaders. Both CREMAs and HIAs go through a straightforward but intensive development process that includes establishing executive committees and boards, drafting constitutions and by-laws which guide and empower the governance bodies, and developing a comprehensive management plan. The HIA closely engages with a formal Consortium of private sector cocoa companies, NGOs, and government partners who will work together to implement activities and bring resources to the ground.

The main roles and functions of CREMAs, Sub-HIAs and HIA include:

- Taking ownership of the concept of a landscape approach in partnership with stakeholders.
- Sensitizing community members on key environmental and cocoa farming issues
- Holding regular meetings
- Setting local rules on what is allowed and not allowed in the landscape
- Developing a management plan and then implementing the plan over time.
- Monitoring and patrolling.
- Enforcing the rules.
- Addressing problems and challenges at local level.
- Benefiting from investments, engagements, revenue generation.

HIAs (hotspots of forests and cocoa production) cover much large area—100,000 to 200,000 ha –and use a **nested governance structure** (CREMAs nested within Sub-HIAs which sit within the HIA) to achieve scale.

CREMAs are the most local level of community-based natural resource governance, typically encompassing five to twenty communities.

What is a Consortium (multi-stakeholder partnership)?

With governance bodies managing the landscape, landscape stakeholders come together in a pre-competitive partnership—a consortium—to collaborate on planning, implementation and monitoring in coordination with the HIA. A consortium reflects a multi-stakeholder partnership of two or more landscape stakeholders (ideally more) who are actively working and/or investing in the landscape and who share common objectives and goals with respect to reducing deforestation, protecting forests, promoting climate-smart cocoa production, and improving farmers' livelihoods and conditions.

For success on the ground at a landscape scale there must be partnerships. The value of a consortium is that it creates a platform for collaboration and pre-competitive engagements which enable partners to share costs, benefit from a much broader range of skill sets and expertise, implement activities more effectively and efficiently, and jointly solve problems as they arise. Consortium members commonly include cocoa and chocolate companies, non-governmental organizations, and government agencies.

Consortium partnerships and activities can start slowly and progress over time, enabling a few partners to focus on a portion of the landscape (CREMAs or Sub-HIA) with a plan for phased expansion and integration of new partners over time. The initial focus of a Consortium is to implement activities in coordination. Partnerships then start to jointly share information and monitor impacts, before compiling results to make claims about sustainability, often using a landscape standard or performance-based framework.

What are landscape standards?

In the past, efforts to address problematic social and environmental issues were often tackled within the supply chain at the farm/farmer/group level, without taking into account the broader factors driving these issues or the real scale of trends and impacts resulting from interventions. This resulted in a number of problematic disparities. For example, a global rise in volumes of sustainably certified products, like cocoa beans, despite a concurrent rise in rates of deforestation.

What is important and exciting about landscape-level standards and related supply-chain tools is that they provide a new opportunity to understand and reliably assess sustainability at much broader scales; either at the scale of the landscape and the population of producers from which commodities are produced, or along the entirety of a company's supply chain.

Some of these efforts, like the Accountability Framework, are focused on providing resources and guidance that can inform and guide sustainability for supply-chain investments and actions. Other initiatives, like IDH's Verified Sourcing Areas, aim to verify the sustainability of landscapes that serve as major sourcing areas for commodities. The majority of these "standards" and tools are global in scope, but some countries, like Ghana, are developing national sector specific standards, like the Ghana Climate-Smart Cocoa Production Standard.

One of the most advanced standards is LandScale; a shared initiative of the Climate, Community, and Biodiversity Alliance (CCBA), the Rainforest Alliance (RA), and Verra, which is being piloted in two HIA landscapes in Ghana.

The value of a consortium is that it creates a platform for collaboration and pre-competitive engagements which enable partners to share costs, benefit from a much broader range of skill sets and expertise, implement activities more effectively and efficiently, and jointly solve problems as they arise

LandScale is a tool to help drive landscape sustainability in rural landscapes dominated by natural resource-based industries and supply chains, including agribusiness, forestry, extractions, and infrastructure. At the heart of LandScale is the assessment framework, which aims to be useful for both global and local landscape actors because it provides measurable indicators on the state and trajectory of sustainability at the landscape level across ecological, human well-being, governance and production dimensions. The opportunity is to use the LandScale framework for assessing and then communicating the sustainability performance of landscapes where key commodities are grown or resources extracted.

How are landscapes monitored?

Landscape monitoring is the critical link between the implementation of coordinated activities across a landscape like governance and climate-smart cocoa, and the reporting of results. Landscape monitoring is about generating landscape level data and information to understand or assess the impacts and outcomes of interventions in a landscape.

Yet the reality is that monitoring at a landscape-scale is not simple—project level data is not broad enough in scope, and private sector indicators may only reflect a small proportion of the producers and total production in a landscape. A key question therefore is, how can HIAs and the stakeholder Consortiums generate or gain access to data and information from an entire landscape in order to report on CFI commitments, demonstrate results under the GCFRP, and/or document progress for LandScale?

The answer is that efficient and focused landscape-specific monitoring and evaluation systems will be required as part of a landscape approach. Such a project is already underway in Ghana to develop a cocoa CREMA landscape M&E system with a grant from the Lindt Cocoa Foundation. The project is adapting and testing a socio-economic and ecological monitoring approach, previously used in an established CREMA in northern Ghana, and combining it with other research and data collection methods which have recently been applied in cocoa and oil palm systems in southern Ghana. The M&E system will focus on indicators that speak to 1) sustainable production, 2) ecosystem health, 3) welling and social inclusion, and 4) landscape governance. The M&E system expects to align with the government's GCFRP monitoring system, including forest and social safeguards monitoring.

What are the final recommendations and lessons?

The document concludes by offering a set of recommendations and lessons on the following topics:

- HIA implementation success factors and timeframes,
- Financing options for companies and for HIA sustainability,
- Benefit sharing opportunities and Ghana's GCFRP benefit sharing plan,
- Tree and land tenure reforms,
- Gender recommendations,
- NGOs with the capacity to support projects and programs related to landscape initiatives.

It also provides links or access to nearly fifty resource documents, templates, and manuals in the Toolbox Annex.

Section 1

Introduction to Landscape Approaches

Across the developing world, tropical forest countries, multilateral institutions, non-governmental organizations (NGOs), and global supply chain companies are developing projects and programs to reduce deforestation and forest degradation. These efforts are driven by the urgent need to help mitigate against the negative impacts of climate change and to safeguard the valuable ecosystem services that forests provide to agricultural production systems, to producer livelihoods, and to national economies.

At the core of this process, there has been significant financial and technical support to tropical forest countries on REDD+ "readiness" and implementation, as well as the development of performance-based financing mechanisms. Even though many of the world's most important global commodities are grown in the tropics and are major drivers of deforestation, the private sector has not typically been a core stakeholder in REDD+ processes or a lead partner to implementation efforts.

This represents a missed opportunity given that global commodity companies make significant investments into production systems and supply chains, and because companies have a strong interest in protecting forests. This interest stems from the need to:

- Secure the sustainability of supply of global food products given that climate change poses significant threats to production;
- Reduce supply-chain carbon footprints and help combat climate change;
- Protect brand image and integrity, and demonstrate accountability for sustainability commitments.

The global cocoa sector is one tropical commodity supply chain which has made a strong commitment to ending deforestation driven by cocoa production, but the companies are now grappling with the question—**what is the best way to protect forests, support producers, and remain focused on core business?** At the same time, many governments, donors and non-governmental organizations are working to develop landscape programs and jurisdictional approaches that substantially reduce deforestation, while also fostering climate-change adaptation, resilience and sustainable livelihoods. These efforts, however, are typically challenged by a lack of long-term funding or real partnerships with which to reach scale.

With a central focus on Ghana's cocoa sector, th**is document aims to provide clear and detailed answers**, as well as **links to resources and other tools**, about how landscape approaches that connect the main stakeholders in a landscape, including the cocoa private sector, government, and NGOs can protect forests and transition the landscape to a more sustainable agricultural production system that is good for farmers.

1.1 What is the best way to protect forests and support producers?

After nearly 20 years of farm-level and project scale work to address environmental and social sustainability issues, including REDD+, we know that **scale** is **crucial to success**. When it comes to protecting forests, supporting sustainable livelihoods for producers, and many other issues, project-scale, farm-scale and supply-chain only efforts are not delivering real sustainability

The consensus is that reducing deforestation, ensuring the sustainability of agricultural systems, and supporting farmers can only be achieved when they are jointly addressed at landscape or jurisdictional (regional or state) scales, in addition to local levels. The emerging approaches that aim to directly tackle the nexus of deforestation and commodity production can be seen in the handful of sustainable landscape initiatives, standards, and supporting tools that are now emerging.

The on-going processes to develop these programs, tools, and standards reflects the belief that major global commodities and agricultural production sectors can play a crucial role in combating climate change, reducing GHG emissions, and protecting forest ecosystems and species.

After nearly **20 years** of farm-level and project scale work to address environmental and social sustainability issues, including REDD+, we know that scale is crucial to success.

> What is now recommended are multi-stakeholder landscape approaches that include landscape governance, monitoring and assessment of environmental and social impacts, coupled with benefit sharing systems and performance-based targets.

It also reflects the knowledge that these sectors face significant sustainability challenges to production stemming from irregular rainfall patterns, increasing temperatures, soil degradation, water shortages, and other direct and indirect effects of climate-change and ecosystem degradation, particularly on producer populations. In order to ensure the supply of food, biofuels and other agricultural products, it will be necessary to move forward with production systems that preserve vital environmental services for rural production development, without neglecting to support the development of vulnerable countries, regions, and peoples.

Ultimately, the vision of commodity landscape approaches is to link local, climate-smart production to emerging markets in a manner that generates responsible investment back into a "sustainable" supply chains so that the social and environmental services, which have traditionally been discounted but are critical to sustaining these production systems, are sufficiently valued and supported both economically and structurally.

1.2 What is the purpose of the document?

Though perhaps not widely recognized, **Ghana and the cocoa sector are already global leaders in conceiving and testing landscape approaches,** including **1) landscape governance, 2) landscape standards,** and **3) landscape monitoring**. However, these initiatives and experiences need to be more widely understood and adopted by all stakeholders, including the private sector cocoa companies, to achieve real impacts at scale. The good news is that we are not starting from scratch. Because Ghana is already a leader in this domain, there is a significant amount of experience, learning, and information that can be shared, adapted and implemented.

Ghana's cocoa sector has reached a historic juncture in transforming itself onto a more sustainable production pathway, and this juncture was not arrived at overnight – it has been a 20-year journey which when understood reveals the magnitude of the work already accomplished, including conceptualization of Climate-Smart Cocoa (CSC), the development and launch of the Ghana Cocoa Forest REDD+ Program (GCFRP), and the launch of the industry's Cocoa & Forests Initiative (CFI).

With support from **IUCN-Netherlands, the World Cocoa Foundation, and Partnerships for Forests, t**he aim of this work is to capture the existing knowledge and experiences about Ghana's landscape approaches into a ***Guidance Document* and *Toolbox,*** and to share and facilitate learning through a series of *Landscape Learning Dialogues.*

More specifically, the **purpose of the Guidance Document and Toolbox** is three-fold:

1. To introduce and explain the concept of Ghana's three main landscape approaches—landscape governance, landscape standards, and landscape monitoring—to the main stakeholders in Ghana's cocoa value chain and those working in cocoa production landscapes.

2. To provide guidance on how to implement landscape governance.

3. To give stakeholders access to a comprehensive toolbox of information and resources about these landscape approaches.

TOOLBOX—SECTION 1.2

- The pathway to sustainable cocoa production in Ghana
- Info Note: The economic case for climate action in cocoa production
- Understanding and Defining Climate Smart Cocoa: Extensions, inputs, yields and practices
- GCFRP Executive Summary
- Overview of Ghana's ERPD
- Overview of CFI

The document is structured into six sections, with two annexes and a digital toolbox of resources.

- **Section 1:** introduces the issues of deforestation and concept of Landscape Approaches and presents the purpose of the document.
- **Section 2:** speaks to key questions and explains the general concept and logic of Landscape Approaches.
- **Section 3:** gives detailed information on landscape governance in Ghana and how to implement it.
- **Section 4:** gives guidance on landscape standards, including the LandScale landscape assessment tool.
- **Section 5:** gives information on monitoring efforts, with guidance about a new landscape monitoring system.
- **Section 6:** makes recommendations and shares lessons on issues of importance to landscape approaches
- **Annex 1:** provides an overview of the process and methods used in preparing the document and dialogues.
- **Annex 2:** provides a list of all of the resources in the Toolbox.
- **Toolbox:** a digital repository of supporting documents, resource, templates, presentations, etc., that can be used to support the use and development of landscape approaches

Section 2

Landscape Approaches—Key Questions About the Concept

2.1 What is a landscape?

There are many descriptions of what constitutes a landscape. Generally, the concept of a landscape refers to a system formed by natural ecosystems, with or without human modifications, that is influenced by historical, cultural, political and economic processes. It is common that within a single landscape, there may be several land uses, such as agriculture, forestry, conservation areas and human settlement.

In **Ghana**, we are focusing on **cocoa production landscapes that cover approximately 100,000 to 200,000 ha** and include farms, rural communities, towns, forest reserves, national parks, rivers, and roads. These landscapes tend to follow administrative (district) or sector-based boundaries, while also recognizing traditional jurisdictions.

Landscapes are made up of natural and/or human modified ecosystems that:

→ **Share similar characteristics:** climate, geology, soils, vegetation, aquatic systems, etc.

→ **Are bound by human-influenced boundaries or natural boundaries:** major roads, district boundaries, regional/state boundaries, traditional jurisdictions, mountains, rivers, savannah-forest transitions, etc.

© Christine Moore/NCRC

2.2 What is a landscape approach and why the urgency?

The adoption of landscape-level initiatives in Ghana's cocoa sector represents a **significant shift in focus from the farm-farmer-society scale of engagement**, which has been the norm, **to a model that also orients outward** to address critical environmental, social, and climate **issues that extend beyond individual farm boundaries into the surrounding communities, farming landscape, and forests**.

For the most part, landscape-scale initiatives are **not focused on only one or two communities and a sub-set of farmers (e.g. supply chain farmers)**. Instead, landscape approaches target **large areas of land and hundreds of farming communities** with a **suite of key interventions**—landscape governance and planning, multi-stakeholder collaboration, adoption of sustainability goals and commitments, and monitoring of social and environmental impacts against performance-based targets or outcomes.

Key Elements of Landscape Approaches

- → Landscape governance and management planning processes and structures.
- → Collaborative multi-stakeholder platforms.
- → Adoption of sustainable production goals and natural resource commitments.
- → Monitoring of environmental and social impacts and outcomes against standards or performance based-targets.

It is **urgent that companies, civil society organizations, and government agencies working in cocoa production landscapes** move to work at the landscape scale and adopt landscape approaches **for six reasons**:

1. **The fate of the world's forests, biodiversity, climate resilience and sustainable production are not farm-scale issues**. These issues can only be addressed when we start to think and work at much larger scales, in order to be able to understand and address the inter-connectedness of the social, economic, and environmental systems.

2. **Under the CFI, the cocoa sector has made ambitious and important commitments on forests, but it will not be possible to achieve forest commitments without going to scale**. A "successful" climate-smart cocoa and forest protection project in one or two villages will have virtually no impact on an 80,000 ha forest reserve which is surrounded by 50,000 people.

3. **Farm-farmer scale interventions cannot benefit the majority of farmers and their farms**. The truth is that investing in 500 farmers across a handful of cocoa societies will benefit those individuals, but it cannot bring broad change or sustainability impacts across a landscape.

4. **It will not be possible to meet commitments without forging collaborations with other stakeholders in the landscape.** No single company, government agency or non-governmental organization can finance, implement, and be responsible for solving all of the challenges in a landscape. Given that many other stakeholders are already present, it makes sense to forge partnerships.

5. **We need to take measures, at scale, to protect against future regulations, monitoring of corporate commitments, and public opinion.**

2.3 What does a Landscape Approach look like and what does it entail?

FIGURE 1
Conceptual cocoa forest landscape

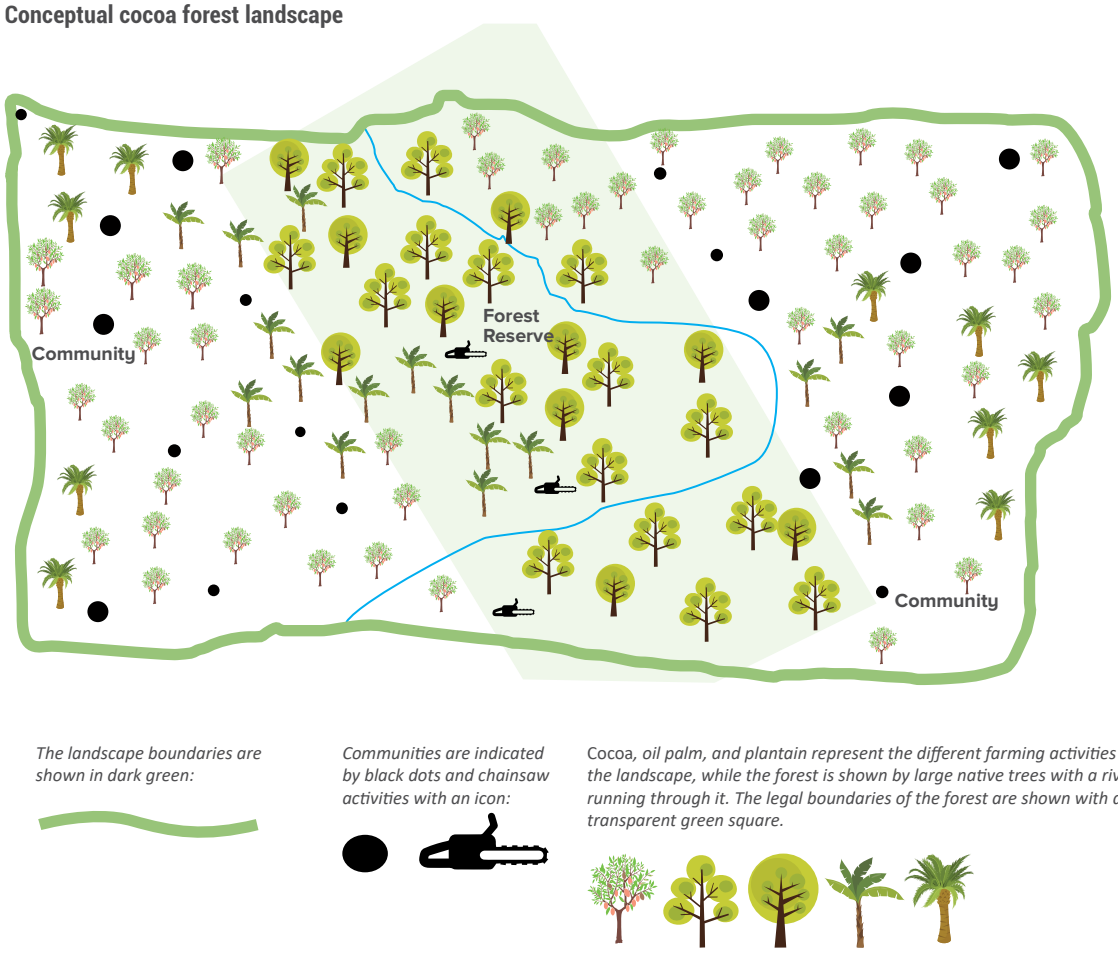


Figure 1 depicts a conceptual cocoa production and forest landscape that has clear boundaries and encompasses a protected forest, different types of agriculture (cocoa, oil palm, plantain), and human features like communities and logging activities.

In this cocoa landscape we can see that there is heavy pressure on the forest reserve from all directions, cocoa and plantain encroachment in the northeast and west, and an expanding presence of chainsaw operations in the west. In addition, there are few places left for planting new cocoa farms or other types of farms.

As a result, **even if there is a cocoa sustainability project focused on two or three communities (e.g. in the southeastern corner of the landscape), this effort alone would have virtually no impact on the protection of the forest** as farmers and forest users from all other directions would continue to cause significant degradation leading to deforestation. And **if we focused a project on approximately 500 farmers coming from four communities in different places in the landscape**, we would also **struggle to protect the forest or improve livelihoods** at scale because **individual farmers cannot address or influence other people's land-use decisions or the or the more complex governance challenges** of encroachment and illegal logging. In the same vein, the benefits to the 500 farmers from the project would be appreciated, but many thousands more farmers would still lack access to basic farming resources.

Sustainability of the landscape, including protection of the forest, productivity of cocoa farms, and support to most of the farming population **requires a change in how we work and invest** in cocoa landscapes. **The first key step in this change is prioritizing landscape governance**.

Figure 2 shows how the landscape could be sub-divided into distinct governance areas. In Ghana these are based upon **the jurisdictions of local landowners** (chieftaincies), which extend into the forest (**orange boundary lines**). **Natural resource governance bodies can then be developed,** including an overarching board of representatives charged to unite the different areas and lead in governing and management for the sustainability of the landscape. The role and value of the landscape governance bodies is outlined in Figure 3.

FIGURE 2
Landscape sub-divided into distinct jurisdictions with NRM governance bodies

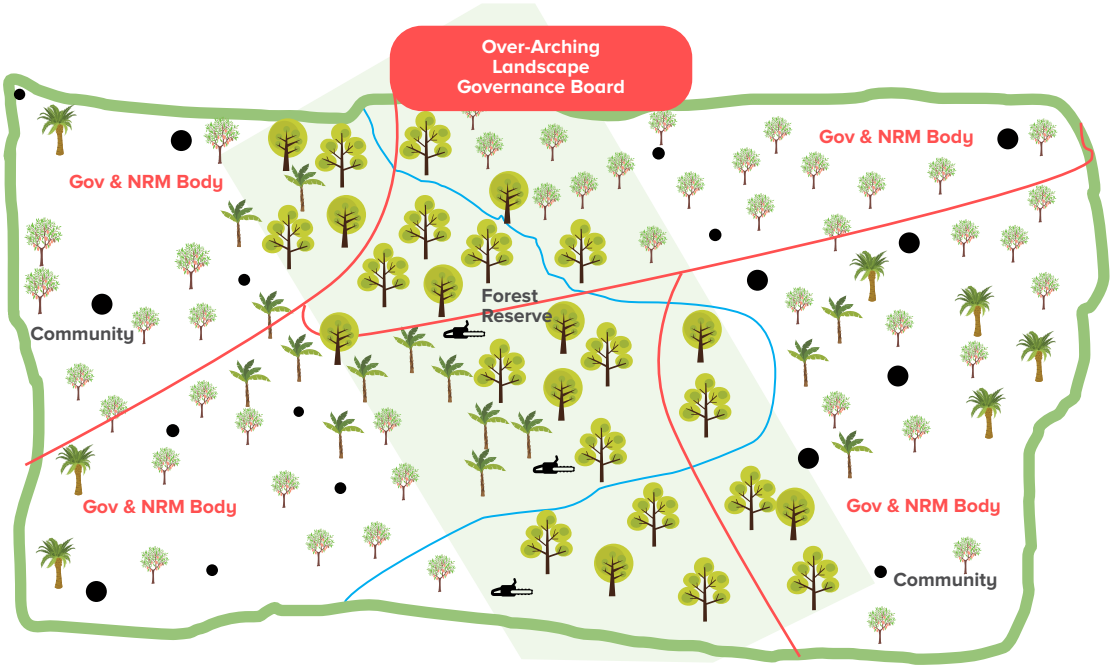


FIGURE 3
The role and value of landscape governance

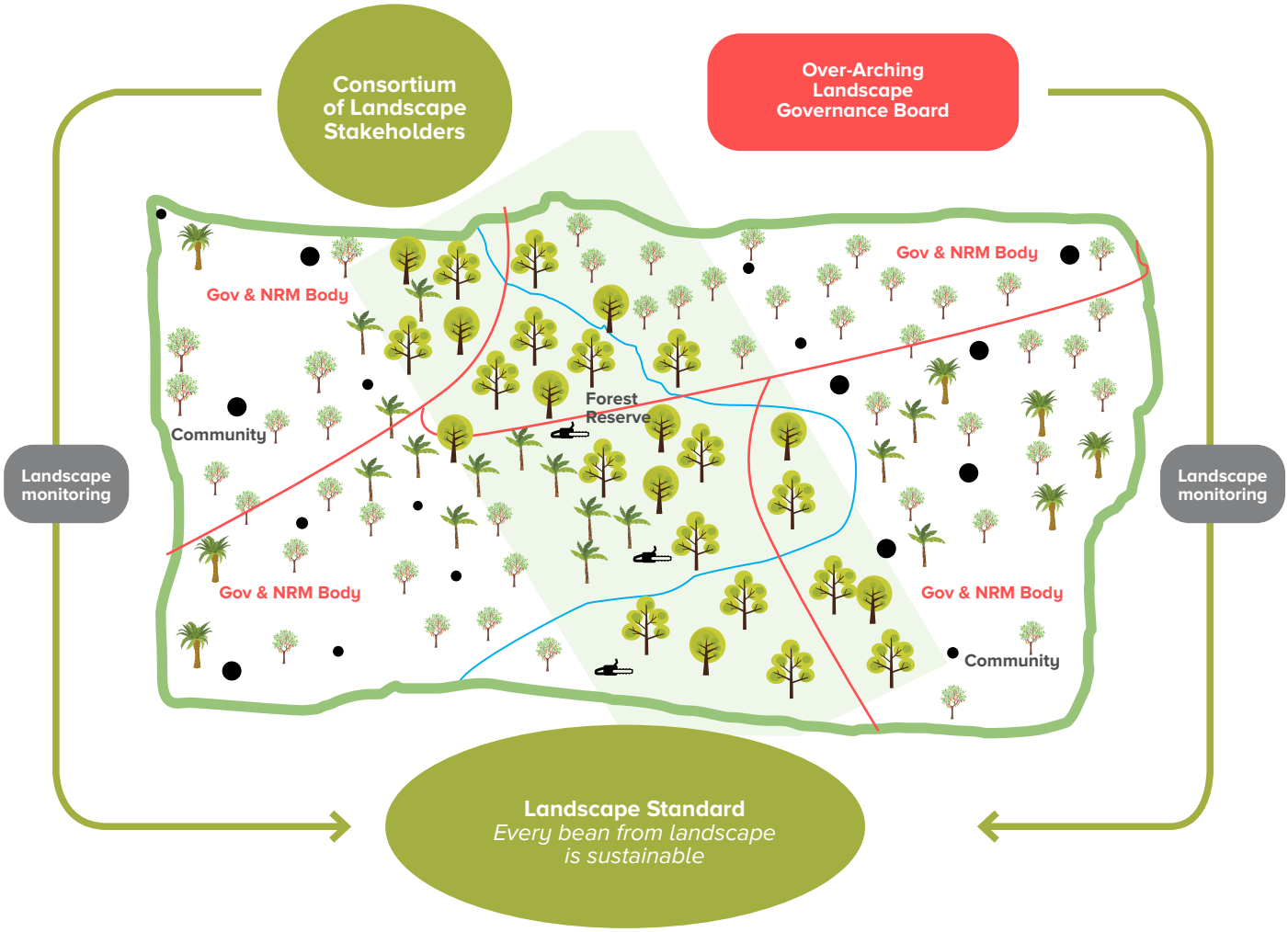
Role of Landscape Governance Bodies

- → Take ownership of the concept of a landscape approach in partnership with stakeholders.
- → Sensitize community members on key environmental and cocoa farming issues
- → Hold regular meetings
- → Set local rules on what is allowed and not allowed in the landscape
- → Develop a management plan and then implement the plan over time.
- → Monitor and patrol.
- → Enforce the rules.
- → Address problems and challenges at local level.
- → Benefit from investments, engagements, revenue generation.

With governance bodies managing the landscape, **landscape stakeholders come together in a pre-competitive partnership—a consortium—to collaborate on planning, implementation and monitoring.** The first step is to **implement in coordination,** then **jointly share and collect data** for **monitoring impacts**, and then to **use landscape standards** to **make claims about sustainability**.

Figure 4 shows how the key elements of a landscape approach—landscape governance and a multi-stakeholder consortium, landscape monitoring, and performance against a landscape standard—come together in a landscape.

FIGURE 4
Landscape approaches in operation



2.4 What is a Consortium and how does it work?

For success on the ground at a landscape scale there must be partnerships. A consortium reflects a multi-stakeholder partnership of two or more landscape stakeholders (ideally more) who are actively working and/or investing in the landscape and who share common objectives and goals with respect to reducing deforestation, protecting forests, promoting climate-smart cocoa production, and improving farmers' livelihoods and conditions.

The value of a consortium is that it creates a platform for collaboration and pre-competitive engagements which enable partners to share costs, benefit from a much broader range of skill sets and expertise, implement activities more effectively and efficiently, and jointly solve problems as they arise. Consortium are best led by an NGO that has strong ties to the landscape and is well regarded by all partners, or another similar "neutral" party. Consortium partnerships and activities can start slowly and progress over time, enabling a few partners to focus on a portion of the landscape with a plan for phased expansion and integration of new partners over time. Consortiums usually operate through a series of monthly or quarterly planning and dialogue meetings, which happen at different levels and follow a common vision for how to achieve "sustainability" of the landscape. Partners then continue with their field-based activities; at times working together and at other times engaging independently.

Consortium members commonly include cocoa and chocolate companies, non-governmental organizations, and government agencies. Figure 5 provides a general description of the type of entities that would be part of a Consortium and the types of roles that each entity is likely to play.

FIGURE 5
Landscape approaches in operation

Cocoa / Chocolate Industry
- Implement CSC activities
- Buy beans
- Support landscape activities
- Support community development

Cocobod
- Implement CSC and other priority activities
- Monitoring & policy support
- Regulation

Forestry Commission
- Manage Forest Reserves and National Parks
- Coordinate GCFRP
- Conduct monitoring of forests and social safeguards

NGOs
- Lead/co-lead consortium
- Implement landscape governance
- Engage in monitoring
- Support HIAs
- Contribute grant funding

World Cocoa Foundation
- Lead/ co-lead consortium
- Ensure alignment and reporting to CFI & GCFRP
- High level convening and communication with government and global chocolate industry

District Assembly
- Support community engagement
- Support management planning and by-laws
- Support with community development projects

2.5 What are the opportunities for companies in Landscape Approaches?

For companies and other stakeholders, there are many opportunities and benefits that come with adopting a landscape approach, and therefore reasons to want to be part of it. These are presented below and in Table 1.

Companies do not have to lead the landscape: Committing to a landscape approach does not mean that a company must lead. In fact, the private sector approach, skill-set and priorities are not always well suited to this role. Instead, Consortiums are often best led by more neutral bodies with a good track record—like environmental NGOs or organizations that represent an industry—which can unite the different stakeholders. But the private sector is an essential partner in a Consortium.

In landscape approaches there is a lot of space for pre-competitive collaboration: End-user chocolate companies or retailers that are not actively competing for the same markets can become co-investors into landscapes, jointly raise-the-bar on achieving key targets, and share positive stories about impacts as well as their collaboration. On the other hand, buyers and traders can work together in the landscape with the non-corporate partners to improve relationships (loyalty) with farmers, reduce overlap and inefficiencies, collectively monitor, and more effectively address sector challenges like traceability, reducing deforestation, reforestation, resettlement, and child labor.

Consortium partnerships bring leveraged resources, expertise, impacts, and access: This means that companies will leverage the funding of other partners working in the landscape, benefit from the outputs, impacts and accomplishments of partners' work, and extend reach on the ground through the governance structure to access more farmers. In particular, stakeholders can directly or indirectly benefit from the government's social and environmental monitoring (MRV and SIS), Cocobod investments into productivity and sustainability, World Bank carbon payments back to people and communities, and NGOs efforts on governance, research and monitoring.

Increase efficiency of "spend" and in implementation: Without knowing it, many organizations and companies end up working on the same challenges in isolation, engaging the same groups of farmers, or competing for beans from a select group of better-resourced farmers. Through better communication and planning there is scope to reduce the amount of overlap in both efforts and investment, and thereby do more for more farmers.

Potential to realize sustainable sourcing / green supply chains from the landscape: Shifting to a landscape approach that includes the use of landscape-level assessments of sustainability impacts or outcomes, Consortium partners can begin to make claims to all of the beans and products that derive from the landscape as being "verified sustainable".

Table 1: Cocoa private sector stakeholders' level, role and benefits in a landscape consortium

Level of Affiliation	Private Sector Stakeholders in Landscape Consortiums: Roles & Benefits
International Level	WCF, Chocolate Brands, Retailers, Preferential Sourcers **ROLES:** Co-finance landscape, Pay premium for sustainably sourced beans/chocolate, Input to activities, monitoring, reporting **BENEFITS:** Make claims about chocolate products; Brand chocolate products; Tell sustainability story of bean-to-bar.
National Level	WCF, Chocolate Brands **ROLES:** Coordinate on CFI, GCFRP, and with government; High level communications and coordination **BENEFITS:** Ability to report meaningfully on commitments

Landscape Level	Chocolate Brands, WCF, Cocoa Traders, Cocoa Bean Processors, Licensed Buying Companies, Cocoa Service Providers, Sustainability Implementers. **ROLES:** Financial support to landscape and implementing NGOs; Host/participate in Consortium meetings, Co-sponsor Consortium; Contribute to planning; Share data and info for monitoring and reporting; Engage in Landscape Standard; Communicate outcomes **BENEFITS:** Access to forest and landscape monitoring; Carbon in-setting; Claim to be member in Consortium, Claim investment in Sub-HIA, Gain access to HIA benefits, Make claims about landscape and impacts;
Sub-Landscape / Field work	LBCs, Service Providers, Sustainability Implementers **ROLES:** Implement CSC and Agroforestry Practices; Collaborate with FC on Reforestation; Collaborate with HIA + NGOs on M&E. **BENEFITS:** Strengthen relationship to farmers and communities; Increase access to beans;

TOOLBOX—SECTION 2.5

- Landscape governance in Juabeso-Bia: The HIA structure, process and lessons learned (powerpoint)
- Learning about cocoa landscape approaches: An introduction to the Ghana guidance document and toolbox (powerpoint)

Section 3

Guidance on Landscape Governance

3.1 What is landscape governance and why is it necessary?

Cocoa production landscapes can be complicated places given the mosaic nature of farming and variation in farming practices, the expansiveness of forests that exist under various degrees of degradation, and the broad range of stakeholders who have varied interests, resources, mandates, and capacities.

In addition, there is **no guarantee that efforts to increase yields and/or implement climate-smart cocoa (or cocoa agroforestry) will necessarily lead to reduced expansion into or exploitation of forests**.

Putting in place a system of **landscape governance is essential to addressing landscape complexities and realizing positive outcomes.** This is because to adequately tackle these challenges we need to:

- Address the broader socio-cultural system and decision-process in which commodities are grown and resource extracted.
- Acknowledge the range of actors and stakeholders who live, work, invest in, or otherwise influence the landscape.
- Accept that good governance, at scales, is necessary to achieve sustainability—it can do the work for us.
- Allow that the main resource users need to be part of the process.

Landscape governance is also not a novel concept as Ghana has decades of experience in implementing landscape governance, and there is much more to draw from in light of global efforts and research on community-based natural resource management and governance approaches. In fact, a lifetime of work on the topic won Professor Elinor Ostrom a Nobel Peace Prize in 2009 for her seminal work—Governing the Commons—and she makes a strong argument for why community-based landscape governance is necessary.

There is no reason to believe that bureaucrats and politicians, no matter how well meaning, are better at solving problems than the people on the spot, who have the strongest incentive to get the solution right.

Professor Elinor Ostrom

The concept of landscape governance is to provide a suite of governance processes, bodies, and rules that enable the landowners and resource users to better manage the land, their farms and the natural resources at different scales, while also creating a linked platform for coordination and collaboration of the external stakeholders.

3.2 What are the main Landscape Governance mechanisms in Ghana?

Ghana has two landscape governance mechanisms—the CREMA mechanism and the Hotspot Intervention Area (HIA) mechanism. CREMAs and HIAs are about giving communities, land-owners and land-users the right to govern and manage their lands, including the natural resources and farming systems, for socio-cultural, economic, and ecological benefits and sustainability.

CREMA

CREMA stands for *Community Resource Management Area*. In Ghana, it is a **20-year old policy that enables community-based natural resource management (CBNRM)**. CBNRM is a people and community-centered approach to the conservation and sustainable management of natural resources, which also prioritizes development. The concept of CBNRM has been practiced all over the world for more than 30 years. It has the underlying philosophy that devolving control of natural resources to local communities improves people's access to and management of those resources, thereby improving the resource base and delivering benefits to communities.

The CREMA mechanism, which **passed into policy in 2000**, is Ghana's approved system for CBNRM. It sits with the **Wildlife Division of the Forestry Commission** (FC). By following the CREMA process, **the management rights to the natural resources—wildlife, trees, non-timber forest products—are devolved back to the CREMAs through the issuance of a *Certificate of Devolution* from the sector Minister** (Ministry of Lands & Natural Resources). Today, there are well over 40 CREMAs in various stages of development across the country, with each covering about 5,000 to 25,000 ha.

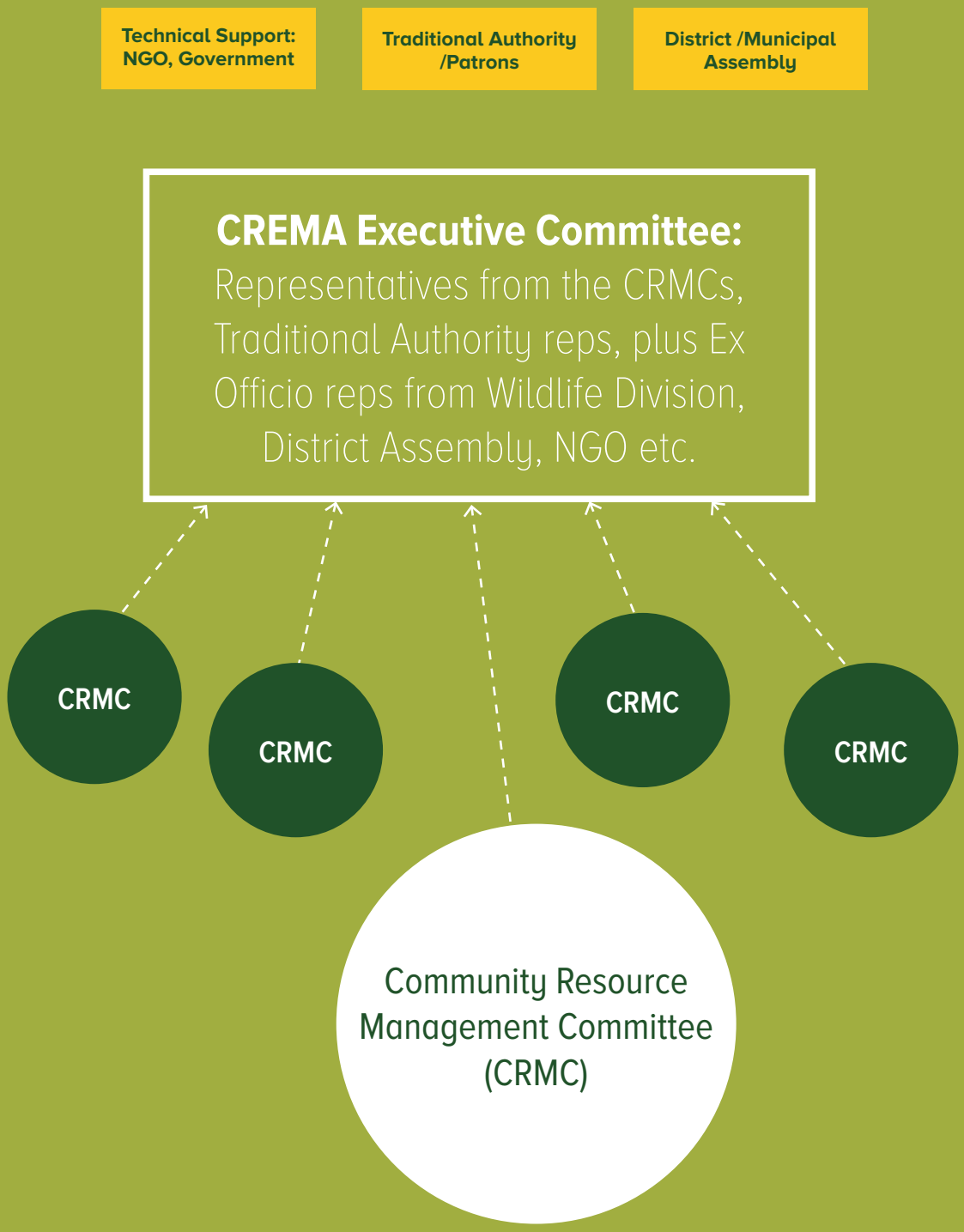
At its core, **CREMA is an innovative natural resource management and landscape-level planning tool** that is **based upon traditional values and systems** which are **underpinned by democratic governance**. Geographically, it is an area that includes one or more communities that have agreed to manage the land and natural resource in "off-reserve" (ungazetted) lands in a sustainable manner. In effect, CREMA gives communities the right to govern, manage and economically benefit from their natural resources. This can include wildlife management, eco-tourism, harvesting and production of botanicals and non-timber forest products, and climate-smart agricultures.

While Ghana's Constitution vests ownership of the land in the Stool or Skin (the traditional or customary leadership structures which preside over a particular ethnic group, clan, or tribe and the associated land and resources), i**t gives the State the right to manage the naturally occurring resources for economic gain, including wildlife, trees and forests, gold and other minerals, water, and most likely carbon.** This situation has **resulted in a series of negative incentives** that, over the decades, have tended to drive "illegal" resource use, like poaching, illegal logging, and illegal farming in forest reserves. Therefore, **CREMA has the potential to dramatically change, in a positive way, how people and communities use the lands and its natural resources**.

The CREMA is structured and operates at three main levels—individuals, community resource management committees and an executive committee—based on a bottom-up approach (Figure 6).

- *Individual farmers and community members* are the membership (shareholders) of the CREMA who, in cooperate terms, are the major stakeholders of the CREMA.
- *Community Resources Management Committees (CRMCs)* are the local management unit of the CREMA. It is formed at the level of each constituent community through nomination and/election. Ideally, the CRMC comprises 5 to 11 members depending on the social diversity of the community, with representation from all sections of the community (i.e. Traditional Authority, landlords, Youth, Women, community elders, religious groups and settlers).
- *The CREMA Executive Committee (CEC)* is comprised of representatives from various CRCMs and other stakeholders, designated as either voting (members of CREMA) or non-voting (other stakeholders) members. Total membership of the CEC is dependent on the number of constituent CREMA communities as well as the other stakeholders operating in the CREMA landscape.

FIGURE 6:
Diagram of CREMA structure



The main steps in the CREMA development process are outlined in Figure 7. As there are already many manuals, guides and resources available on CREMA it is not necessary to repeat all of this information in this guidance document, however additional resources and tools can be found in the **Toolbox**.

TOOLBOX—SECTION 3.2

- Adapting Ghana's CREMA mechanism to implement CSC land-use planning
- A brief guide to community resource management areas
- CREMA training manual: A guide for CREMA development
- Wildlife Division Policy for Collaborative Community-Based Wildlife Management
- Overview of CREMA

FIGURE 7:
Main steps in CREMA development process

Community Resource Management Committees

- Establishment of Community Resource Management Committees at the village level

CREMA Executive Committee

- Selection of representatives from the CRMCs to serve on the CREMA Executive Committee

CREMA Boundaries

- Identification of the CREMA's boundaries and confirmation of the communities that are part of it
- Defining the area within which the constitution is enforceable

Constitution

- The draftng, reviews and then signing of constitution

Election of CEC Executives

- Chairperson, Vice Chairperson, Treasurer, Secretary
- They serve as interim to draft constitution and then formally elected once constitution ratified.

Drafting of CREMA rules/bylaws

- Identification of the rules about what is allowed and not allowed which will guide the CREMA

Gazettement of by-laws at the District Assembly

- A formal process to gazette these rules into district-level laws recognized in the CREMA

Drafting a Management Plan and Financial Sustainability Plan

- Based on constitution and by-laws, the drafting of a management plan for the CREMA area and its resources
- There should be a clear plan for revenue generation / financial sustainability of the CREMA

Certificate of Devolution

- Once all official steps are completed, CREMA can request devolution via the WD-FC.
- Certificate issued by the MLNR

HIAs and Sub-HIAs

The **CREMA model was not designed to capture a large landscape area**, as currently proposed under REDD+, and it was **not designed to include areas inside of forest reserves or protected areas**. Therefore, **under the GCFRP a decision was taken to adopt and transform the CREMA process and structure into a "sister" mechanism** that would benefit from the same policy and legislation, **but work more effectively at a landscape-scale**.

As a result, the concepts of **HIAs and Sub-HIAs were developed to address the complexities of cocoa landscapes thru nested landscape governance with a strong focus on forest protection and sustainable climate-smart cocoa production.** The term hotspot refers to hotspots of cocoa production, hotspots of threatened forests, and hotspots of stakeholders who can engage the landscape.

Covering between 100,000 and 200,000 ha, each **HIA is governed by a two-to-three level governance structure (CREMAs, Sub-HIAs, HIA)** that is **led at the highest level by a locally elected HIA Management Board**, made up of landowners, land users, local authorities and community leaders**. The HIA engages with a formal Consortium** of private sector cocoa companies, NGOs, and government partners who will work together to bring resources to implement activities on the ground.

Sub-HIAs can be based upon a grouping of CREMAs or serve as a single CREMA-like body that covers a substantial area of the HIA landscape which is united under the leadership of a **Sub-HIA Executive Committee (SHEC)**, and guided by a highly respected Patron (Traditional Authority). Sub-HIAs work to improve and transform cocoa farming to a sustainable and climate-smart production systems, while also protecting forests. The Sub-HIA provides an ideal size and platform for corporate partners (for example an end-user chocolate companies and a licensed buying and trading company) to focus their sustainability activities and investments.

The government initially identified nine potential HIAs (based on district boundaries) across the cocoa-forest landscape which were selected based on a ranking that included the presence of forests, significant threat from deforestation, the area being a significant cocoa production landscape, the presence of major private sector and NGO stakeholders, and no significant landscape-level issues (like galamsey) that could create confounding challenges. At least six of the HIA are to be implemented with stakeholders' support under the GCFRP, and the HIA concept is also supported under the CFI Framework of Action. As of early 2020, three HIAs were yet to begin implementation but this can only happen if there are stakeholders to take them forward."

3.3 Examples, opportunities, and benefits of CREMAs and HIAs

Landscape governance structures like CREMAs and HIAs can act in support of their sustainable natural resource management goals. **Examples of how some CREMAS are managing resources, implementing and enforcing rules, and monitoring outcomes include**:

Regulate allocation of timber permits: A CREMA in the high forest zone was authorized to sell 100 timber permits. This helped to reduce incidences of illegal logging and generate revenue for the CREMA.

Set rules on where people can and cannot farm: Through the management planning process CREMAs and HIAs determine where farming activities are allowed and where they are not allowed, including in conservation areas and protected forests, and then they follow-through with enforcement.

Set rules on trees on farm: A CREMA and Sub-HIA is contemplating setting rules to encourage the inclusion of more trees on farms.

Prohibit expansion into forest reserves and parks: When a CREMA or HIA establishes this by-law then it is responsible to ensure that its members comply.

Enforce by-laws with warnings & fines—A CREMA in northern Ghana set of fine of GHS 300 for anyone who fells the economically important Shea tree.

Arrest illegal loggers—Another CREMA actively halts illegal Rosewood loggers and conveys the logs and perpetrators to the police and Forest Services Division (FSD) for arrest.

Protect key wildlife species and regulate hunting: CREMAs that surround national parks have played important roles in protecting wildlife by regulating hunting thru the revitalization of traditional hunting practices.

Monitor impacts—A CREMA in northern Ghana has been protecting and monitoring hippopotamus and bird population trends for almost 25 years.

The **opportunities** that CREMA, Sub-HIA and HIA **governance structures present** to cocoa and forest sector stakeholders include:

Local problem solving: Companies, agencies and organizations do not need to be solely responsible for identifying the best solution as local governance bodies are highly capable.

Access to funding: Landscape governance approaches bring access to bilateral grants, NGO funds, and World Bank Carbon Fund payments and WB grants like AccelREDD+ (See Section 4 for more information).

Ability to address deforestation and child labor: CREMA, Sub-HIA, HIA bodies can address these important issues through sensitization, by-laws, and enforcement.

Leadership in monitoring and **scaling impacts:** Local-level monitoring and patrol teams can play a strong role in monitoring, data collection, and expanding uptake of sustainable practice.

The **benefits** that these CREMA, Sub-HIA and HIA **governance structures present** to cocoa and forest sector stakeholders include:

Improved governance and resource tenure across a larger area that can more effectively support the protection of forests.

Strengthened relationship with farmers and community leaders: Support to HIA governance will result in an authentic relationship with farmers and communities.

Improved access to beans/volumes: It will be possible to source more beans more efficiently from HIA landscapes as the governance system can aggregates farmers and support new types of relationships with companies.

Leverage other partners' resources in support of HIA governance and CSC activities.

Government benefits from the private sector and NGO partners aligning to key conservation, governance, and development goals.

3.4 How does the HIA get to scale?

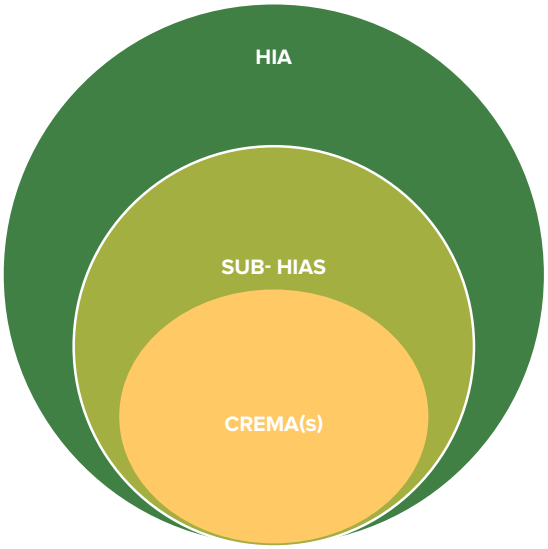
To get to scale, an **HIA uses a nested structure** that facilitates participation and improved decision-making about land-use and natural resources at more local scales to link with higher level governance bodies so that activities and efforts radiate out across the landscape to enable broader geographic coverage and impacts. **An HIA starts from the community-level**, and then moves up and outward **to the sub-landscape level**, before **encompassing the full landscape**. Working within and across nested units is important as rural governance cannot be effective if a single body tries to work across too large of an area.

Structurally, **governance nesting** can start with **CREMAs** (the smallest scale). **Two or three CREMAs** are then **clustered** to form a **Sub-HIA.** An HIA may have anywhere from 2-6 Sub-HIAs encompassing the landscape. **Sub-HIAs** are united by an **over-arching HIA Management Board**. It is also possible to implement an HIA that only has the Sub-HIAs (and no CREMAs) which build up to the HIA level, or an HIA which has a combination of the two—some Sub-HIAs that contain CREMAS and some that do not.

Geographically, the **boundaries of each governance level** will be most effective when they **align with customary jurisdictions and/or district boundarie**s. This ensures that the CREMA or Sub-HIA is directly aligned with the traditional authorities who own the land and hold the traditional resource-use rights. For example, following Paramountcy, Divisional Chieftaincy, and Omanhene boundaries as they fall within the administrative districts of the HIA.

These nested governance bodies, with their expanding scale and reach, then **put in place local rules (which can be gazette as by-laws by the district), implement activities, and draft a management plan** focused on key "**sustainability" goals across the HIA**, and **align all this to** the **activities** and **resources** of the **Consortium partners**.

FIGURE 8:
Nested landscape governance bodies



3.5 How does the HIA fit together—CREMAs, Sub-HIAs, HIA and Consortium?

Figures 9-11 demonstrate how the different bodies of the HIA and the partnering Consortium fit together. Similar to Section 2.3 (Figure 1), Figure 9 shows a theoretical cocoa forest landscape that has been developed into an HIA that encompasses seven CREMAs which are clustered into 3 Sub-HIAs, and a fourth stand-alone Sub-HIA that has no CREMAs.

Figure 10 zooms in to show a single Sub-HIA with two CREMAs. The two CREMA are governed by a CEC, which is made up of representatives of each CRMC. Moving to the Sub-HIA scale, representatives of each CEC are selected to serve on the Sub-HIA Executive Committee SHEC. The purpose of the SHEC is to connect the Sub-HIA to the financial resources and activities of the Consortium. In general, in the process of developing an HIA, CREMAs can either be identified and brought on-board if they already existed in the landscape, developed as part of the landscape governance development process to bring together groups of communities (typically ranging from 5-20), or the CREMA level can be skipped if none exist and the Sub-HIA will be relatively small, is easy to unify, and can stand alone.

FIGURE 9:
Representation of an HIA landscape

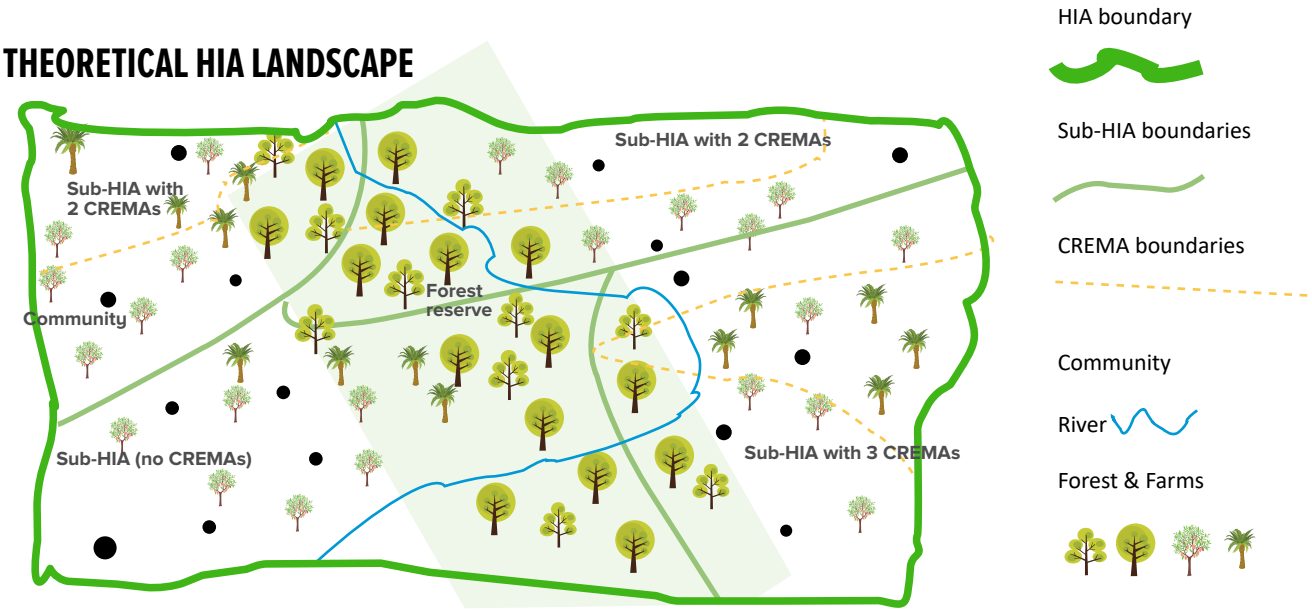
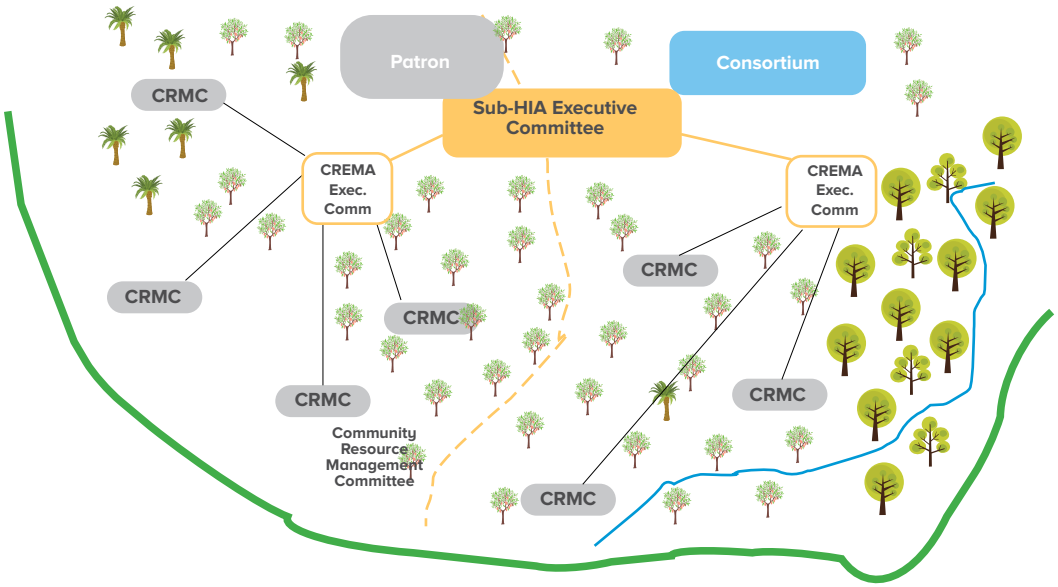


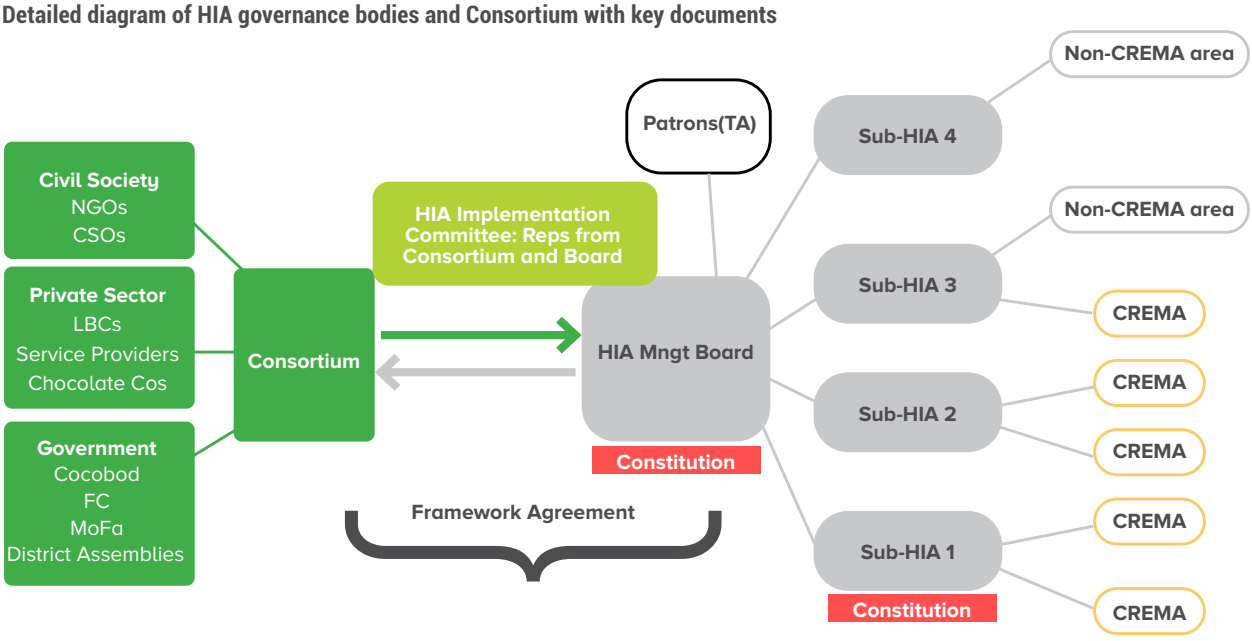
FIGURE 10:
Representation of CREMAs and Sub-HIA in an HIA



If there are multiple companies investing and buying cocoa (or other commodities) in the landscape then each company could choose to "adopt" a single Sub-HIA as the primary focus of its sustainability initiative / climate-smart cocoa package, in concert with the activities of the FC and Cocobod.

Figure 11 shows how the entire structure fits together. CREMA and/or non-CREMA areas are united into Sub-HIAs, and then representatives of Sub-HIA SHECs are elected to sit on the HIA Management Board, with appropriate guidance and oversight by Traditional Authorities at each level. The figure shows the types of stakeholders that make-up the Consortium, and it shows an Implementation Committee that is meant to connect the HMB and the Consortium and oversee the day to day affairs and operations in the HIA, as appropriate. The figure also reflects some of the HIA's foundational documents, including the Framework Agreement and constitutions.

FIGURE 11:
Detailed diagram of HIA governance bodies and Consortium with key documents



3.6 What is the HIA development process?

There is no one-way to establish an HIA. Depending on conditions on the ground, funding opportunities and stakeholders' priorities, the process can take slightly different paths. Nonetheless, the following section is meant to serve as a high-level guide to the process, with Figure 12 summarizing the main steps that are described below.

TOOLBOX—SECTION 3.6

- Socio-cultural survey template
- Example of socio-cultural survey table of contents
- Training manual for community leaders on landscape governance structures formation
- HIA step-by-step development process diagram
- Sub-HIA to HIA governance structure and leadership positions diagram
- Landscape governance bodies, processes, and structures—powerpoint
- Sample outline of constitution
- Sample Sub-HIA / HIA management plan outline
- Template CREMA constitution for HIA GCFRP locations
- Template Constitution of Sub-HIA or HIA
- CREMA/Sub-HIA/HIA Community Rules & Regulations—Informing By-laws Gazettement

Step 1: Identification of a Cocoa Landscape:

HIA development begins with the **identification of a cocoa landscape.** An HIA landscape should be well-known to the NGO stakeholder and a priority for the cocoa company as an important sourcing area. The landscape should also have a significant area of forest that needs protection, and the presence of other stakeholders who could partner.

Step 2: Determine Interest and Willingness at Local Level:

It is then wise to determine if there is an **interest and willingness to partner at the local level**. In most cases, local leaders will express a desire to participate, but if they do not, then it is best to look elsewhere or adjust the conceptual boundaries.

Step 3: Landscape Baseline Assessment & Build Consortium:

With local buy-in, **two major activities can begin**. The first is a **landscape baseline assessment**. This starts with **community engagement—**to reach out to community, traditional, and district leaders (opinion leaders, chiefs and queen mothers, and assembly men and women) in dominant communities to introduce the "project" and the upcoming work. Then the **social-cultural-economic survey** and an **assessment of the forest resources** begins**.** The assessment of forest resources is most informative when it includes an analysis of land use, land use change over the preceding years, and mapping of deforestation. The FC has the capability and resources to conduct this type of analysis.

During the survey and assessment, if it is found that there are **major land disputes** or **extreme and dangerous levels of illegal mining** then it is **advisable to find another site** or redefine the potential boundaries.

The second aspect is to begin the early work to **build the consortium** by identifying the companies, NGO, and government agencies that are active in the landscape and **open-up partnership discussions.**

Socio-Cultural Survey

From the cultural standpoint, efforts to develop and support landscape governance systems should be well grounded within the local socio-cultural context. This means taking the time to understand people's histories, cultural beliefs, values, traditions, experiences land use systems, infrastructures and livelihood practices so as to most effectively and appropriately affect positive outcomes and changes. Identifying traditional environmental values, taboos, and age-old conservation stories can also provide important meaning or direction to present day forest protection and landscape management goals by rooting the current work in the traditions, knowledge, and sites from the past. It can also shine light on what is not culturally valuable to people, which is equally important to identify.

Further, in the 21st Century, Ghanaian communities face myriad stresses and strains from unplanned development, poverty, youth migration, degradation of natural resources, and rapidly changing social systems. Therefore, documenting local histories and beliefs is not only an important step in creating landscape governance structures to protect forests and other natural resources, but also in preserving and reinforcing the socio-cultural systems and traditions of the people who depend upon them for their livelihoods.

In implementing such a survey, bear in mind that not every focus group question yields profound results, however important insights and information can come to light that should be taken forward and integrated into the landscape systems and practices that the project aims to develop. The process is also typically warmly received by the communities. The NCRC team has been told on numerous occasions that despite many years of engagement with projects, no one had ever come to ask them about their beliefs and their histories. The community members and leaders not only appreciated this approach, but they relished the chance to tell their stories and share their knowledge.

Step 4: Determine Where to Start Working in the Landscape:

With a deeper understanding of the landscape due to the survey and assessment, the next step is to **determine where to start working in the landscape.** This is likely to be at CREMA / Sub-HIA level.

Step 5: Initiate Process to Build HIA Governance, CSC, and Hold Consortium Meetings:

This is the point where the heart of the **landscape governance work begins**, in tandem with the **implementation of climate-smart cocoa activities**. It involves the **formation** of **CRMCs**, **CECs**, **SHEC** and eventually an **HMB**. Along the way, CREMA, Sub-HIA and eventually the HIA **constitutions** must be drafted and ratified, and **by-laws** need to be drafted and gazette by the district assembly. In support of this process, there will be multiple workshops, trainings and capacity building exercises. **The process takes time—on the scale of 2-3 years—to fully develop the HIA governance system.** While it is possible to push a rapid process, it will only result in governance problems and failures on the ground.

At the same, there should be **regular meetings of the consortium partners** to discuss how each organization, company, and agency's work is going and to plan for collaboration on the ground.

Constitution

The constitution, and the rules and regulations should be a social contract that gives the governance body its organizational structure, with agreed rules and procedures that the members will abide by. The constitution sets out:

- The purpose / vision / goal of the HIA, Sub-HIA, or CREMA
- The structure of the organization and role of officers;
- Agreed rules and procedures that parties will abide by;
- Defines the geographical location of the intervention area;
- Defines the membership (communities and people).

The constitution and the rules and regulations should be based on the values (traditional norms, taboos, beliefs) and traditional decision-making systems of the communities, while also incorporating newer conservation and sustainable management rules. Constitutions should also be flexible and adaptable to changing circumstances, and thus reviewed and amended as time passes and situations change.

By-Laws

By-laws empower the constitution, and with Sub-HIAs and HIAs, they consolidate and integrate the rules of constituent CREMAs and Sub-HIAs. For the higher-level structures, new or additional by-laws can be included to address specific issues like those related to CSC and forest protection measures. Specifically, by-laws:

- Define actions and activities that are prohibited,
- Set clear limitations and conditions of use of forests and natural resources,
- Define locally appropriate sanctions for infractions,
- Are gazetted by the District Assembly after engagements with CRMC and CEC (CREMAs) and CECs and SHEC (Sub-HIAs).

The CREMA/ Sub-HIA/ HIA is empowered and legalised within the district and in respect of the Local Government Act (Act 462) by the passing of a district by-law. If the CREMA/Sub-HIA/HIA crosses district boundaries, then it must be passed in both districts.

By-laws should be developed with the goal of supporting the CREMA / Sub-HIA / HIA's management plan and monitoring and enforcement systems.

Step 6: HIA Bodies Draft Landscape Management Plan & Consortium Drafts Landscape Vision and Framework Agreement:

Once the governance bodies are sufficiently developed, the leaders of the HMB and/or Sub-HIAs **start the process** to **draft a management plan for the sustainability of the cocoa farms, forests and financing of the landscape**. This process is led by the HIA but receives substantial input from the consortium and technical support from the NGO partner.

At the same time, the **Consortium** agrees upon a **vision for the landscape** (where will the landscape be in ten to twenty years, what will it look like, how will cocoa be produced, etc.) and begins to **draft and negotiate the HIA Framework Agreement** with the government and the World Bank.

Management Plans

Every HIA should have a landscape-level management plan that can be developed from scratch or through the compilation of CREMA and Sub-HIA management plans. A CREMA/ Sub-HIA/ HIA management plan needs to be developed in a collaborative manner with community members and executives, as well as Consortium partners (including governance and the private sector), and other external experts. It should not be developed in an external exercise and then parachuted onto CREMA, Sub-HIA or HIA. The draft management plan should be reviewed and revised with the constituent CREMAs and/or communities, and must reflect the purpose of the Sub-HIA, as well as associated by-laws.

A management plan is backed by the constitution and by-laws, and should describe in relevant detail the natural resource base of the area or landscape, the main land-use activities that happen in the area, and the rules and regulations that apply to the different activities and areas. It should also link to the Consortium partners' roles and responsibilities, as well as benefit sharing agreements. The management plan should have a sustainable financee plan attached to it.

Sustainable financing plans are critical to CREMA, Sub-HIA and HIA sustainability. Given that community-based governance bodies are generally not subsidized by the state to operate, and are typically only supported during the start-up stage by grants given to government or NGO organizations, CREMAs, Sub-HIAs and HIA must therefore generate their own sustainable income or risk collapse over time.

The most successful governance bodies will be those that have diversified and environmentally sustainable sources of income, which are clearly linked to management plans and operated with the support of the HMB, Executives and Consortium partners. This has already been clearly demonstrated with some existing CREMAs across Ghana.

Framework Agreement

A Framework Agreements makes the HIA eligible to receive benefit sharing payments from the World Bank Carbon Fund. It defines an HIA's purpose, commitments, and the associated roles and responsibilities of the various stakeholders. It is a non-binding document that is signed by representatives of the Ghana Forestry Commission and Cocoa Board, the Chairperson of the HIA HMB, and the main partners to the Consortium. A Framework Agreement broadly articulates pre-competitive strategies, and outlines actions and activities to be carried out by different Consortium members to maximize efficiency (leverage resources) and equity (ensure as many farmers and communities benefit as possible). It will also articulate and formalize the partnership between the HMB and the Consortium.

Step 7: Finalize the Management Plan and Framework Agreement:

Completing the management plan requires extensive back-and-forth and review between the leaders of the HIA and the Consortium. The Consortium should ensure that it captures the vision, sustainability priorities, and commitments of the corporate and non-corporate partners. Completion represents a significant milestone. In the same respect, finalizing and signing of the Framework Agreement by all parties is a noteworthy achievement.

Step 8: Adapt a Landscape M&E System:

Once the management plan is agreed, then the HIA needs to adapt a monitoring and evaluation system from existing models and individual partners' efforts. The **M&E should be a system for collaborative monitoring of goals and indicators**, as well as **patrolling to check by-laws**. The Consortium should ensure that the M&E system **incorporates priority corporate KPIs**.

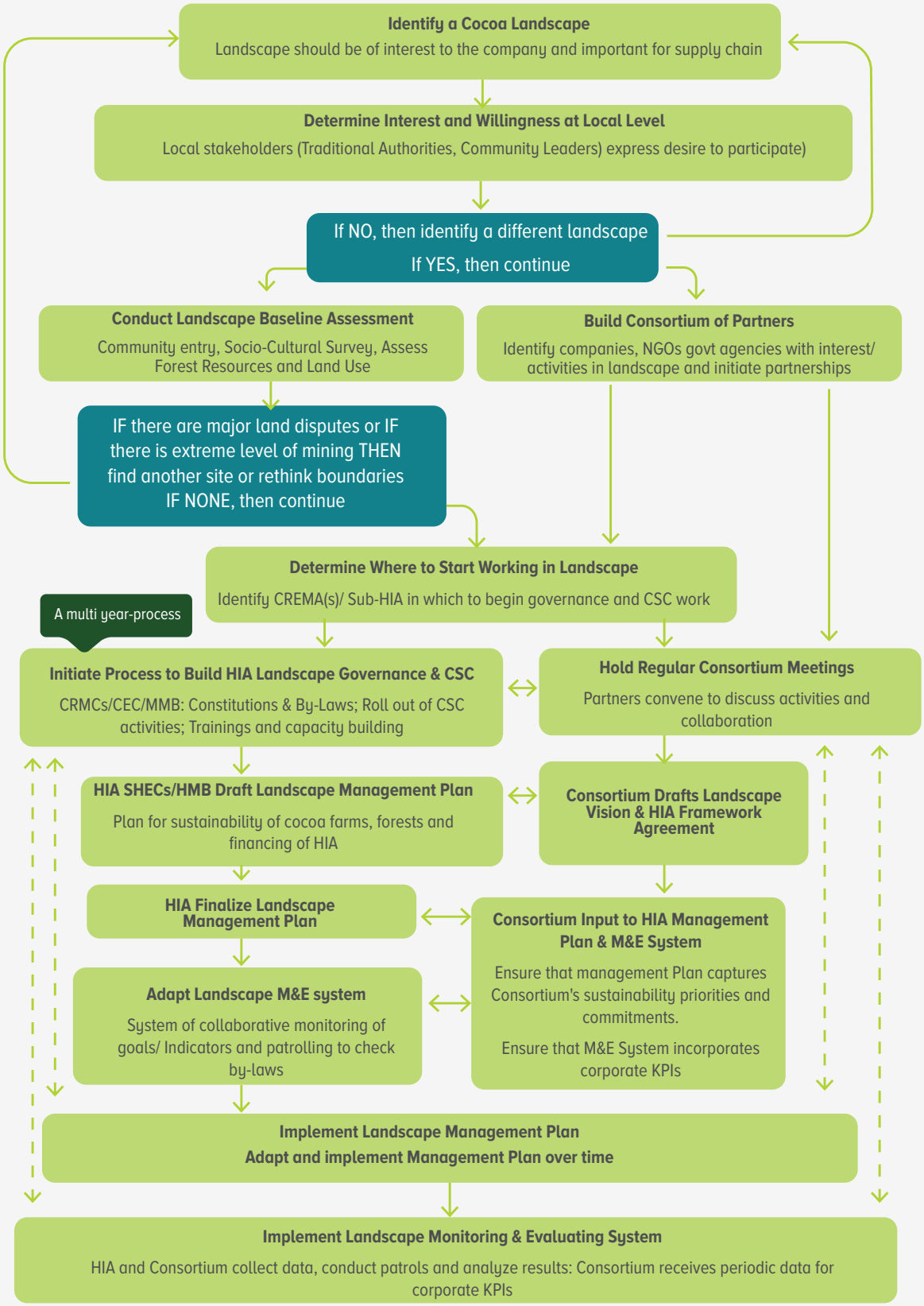
Step 9: Implement the Landscape Management Plan:

Once agreed, the landscape **management plan goes into implementation**. It will be **adapted over time** by the SHECs/HMB and Consortium to reflect progress in the landscape, new challenges, changing conditions, and new opportunities.

Step 10: Implement the M&E System:

The HIA and Consortium work together to **collect data on indicators, analyze results, and use the shared data and results for various reporting purposes**. It is important that the Consortium receive periodic updates on information for corporate and CFI KPIs. This system will also need to be reviewed and **adapted over time**.

FIGURE 12:
Steps in Landscape governance development process



Section 4

Guidance on Landscape Standards

The urgent need to reconcile the production or extraction of global products with climate change, biodiversity conservation, human rights and livelihoods is clear. In the past, efforts to address problematic social and environmental issues were often tackled at the farm/farmer/group-level, without taking into account the broader factors driving these issues or the real scale of trends and impacts resulting from interventions. This resulted in a number of problematic disparities. For example, a global rise in volumes of sustainably certified products, like cocoa beans, despite a concurrent rise in rates of deforestation.

What is important and exciting about **landscape-level standards** and related supply-chain tools is that they provide **a new opportunity to think about and assess sustainability at much broader scales**; either at the scale of the landscape and population of producers from which commodities are produced, or along the entirety of a company's supply chain. Some of these efforts are focused on providing resources and tools that can inform, explain, and guide sustainability for supply-chain investments and actions. Others provide actual assessment frameworks for commodity (and/or extractive) landscapes and lay-out a pathway for making sustainability claims based on outcomes and third-party verification. The majority are global in scope, but some countries, like Ghana, are developing national sector specific standards.

4.1 Who or what will hold stakeholders accountable on sustainability?

Sustainability is a term which has become a catch-all phrase that is widely used to describe donor funded projects and corporate initiatives within the environmental and agricultural sectors. However, **the term sustainability is rarely well-defined**. It is often neither clear how "sustainability" translates into real outcomes, nor at what scale (in terms of geography (area), population (number of beneficiaries out of the total population), and time-frame).

Therefore, in thinking about landscape approaches, it is important to ask, **how are landscape-level initiatives and landscape stakeholders going to be held accountable on sustainability?** What is most important and exciting about the emergence of these tools and standards is that they aim to **do a better job of framing sustainability at the *real* scale of production—a landscape or the entire supply chain—and then supporting stakeholders to demonstrate results and outcomes**. As with performance-based REDD+ programs, which establish baselines to show past trends and then monitor progress and changes on the ground at regular intervals, landscape-level standards **engender accountability by providing frameworks, standards, or norms for assessing results at scale.** This, in turn, creates an opportunity for broadening our understanding of production impacts and risks, and for communicating stories and claims about products.

4.2 Examples of landscape standards and tools

Several different standards and tool are emerging to address corporate commitments and landscape sustainability. This section cannot address all of them, but it does provide a brief overview of 4 initiatives which are relevant to Ghana's cocoa sector

Accountability Framework

The Accountability Framework (AF) (https://accountability-framework.org/) is focused on **fostering accountability of ethical supply chain commitments in the agriculture and forestry sectors.** It is a set of common norms and guidance for setting commitments, taking actions to implement, and then demonstrating progress on these commitments. The AF is focused on helping companies, producers and governments overcome barriers to transform supply chains on a broad scale.

AF is centered on twelve core principles, operational guidance, and definitions. The principles include: 1) Protection of forest and other natural ecosystem, 2) Respect for human rights, 3) Specification of commitments, 4) Company systems and processes to drive effective implementation, 5) Supply chain assessment and traceability, 6) Managing for supply chain compliance, 7) Land acquisition, land-use planning and site development, 8) Land management and long-term protection, 9) Access to remedy and environmental

restoration, 10) Collaboration for landscape and sectoral sustainability, 11) Monitoring and verification, 12) Reporting, disclosure and claims.

The Steering Committee developing the AF includes: The National Wildlife Federation, the Nature Conservancy, Proforest, Rainforest Alliance, Resource Trust, Social Accountability International, Verite, World Resources Institute, and WWF, with additional support from regional teams and the Meridian Institute.

In Ghana, the AF initiative has been working through Proforest to consult key stakeholders from the cocoa, forestry, and oil palm industries.

LandScale

LandScale (https://verra.org/project/landscale/) is **an emerging tool, which is at an advanced stage of development and piloting, to help drive landscape sustainability in any rural landscape dominated by natural resource-based industries and supply chains**, including agribusiness, forestry, extractions, and infrastructure.

LandScale (LS) is useful for both global and local landscape actors because it provides measurable indicators on the state and trajectory of sustainability at the landscape level across environmental, social and economic dimensions. The opportunity is to use the LandScale framework for assessing and then communicating the sustainability performance of landscapes where key commodities are grown or resources extracted.

Since 2017, LandScale is being co-developed and tested in Ghana with a focus on the cocoa sector. Input from the Ghana LS Advisory Working Group has informed development of the assessment framework and its applicability to the cocoa sector, and piloting is happening in two cocoa production landscapes that are also important forest areas.

In light of the intensity of efforts on LandScale in Ghana, Section 4.3-4.6 gives a detailed description of the framework, why it is needed, how it is different from and compatible with certification, and how it relates to the cocoa sector.

IDH—Verified Sourcing Areas

The Sustainable Trade Initiative (https://www.idhsustainabletrade.com/) **brings governments, companies, CSOs and financiers together, in multiple countries and landscapes across the world, in action driven coalitions that use the powers of law, entrepreneurship and investment**s to create solutions for global sustainability issues at scale.

One of IDH's approaches is Verified Sourcing Areas (VSAs). VSAs recognize that sustainability commitments are topping the agendas of supply chain actors. In response, it is working with partners to develop a market mechanism that allows sourcing from sustainable landscapes.

VSAs aim to providing large volumes of commodities in line with sustainability commitments at a competitive scale and price, while lifting the base level of sustainability in producing regions. The objective is to verify the sustainability of an entire jurisdiction (e.g. municipality or district and later province and state), so it's no longer necessary to verify each producer, mill or commodity individually. This way, sustainability targets related to forest and peat protection, labor, land tenure, governance and transparency can be much more ambitious in scale and impact.

In the producing region, a sustainability improvement deal is made between private, public and civil society stakeholders at jurisdictional level, e.g. a municipality, district or province (t**he Compact**). The Compact details priority sustainability topics, targets and responsibilities, seeking to make best use of the strengths of each of the partners involved. The Compact covers four impact themes of global concern: deforestation, labor, land tenure, and livelihoods. In the VSA model, any buyer, trader or interested third party will be able to easily assess the producing region's status and progress on key sustainability targets. Committed end-buyers can get a better understanding of the products in their supply chain and improve sustainability with direct support for the producing region.

VSAs are being piloted in Indonesia and Brazil. With respect to cocoa and Ghana, IDH has been a partner to the CFI.

Ghana Climate-Smart Cocoa Production Standard

Ghana has been a **leader in articulating and developing climate-smart cocoa**. Led by the **Ghana Cocoa Board (COCOBOD),** with the **FC**, the country has moved to develop a standard for climate-smart cocoa production that expands the focus of certification from farm-level efforts to include landscape-level actions.

Released in 2019 for validation, the **goal** of Ghana's CSC Production Standard is to **facilitate the adoption of site-specific sustainable practices that ensure higher yields, conservation, protection, management and use of cocoa landscape resources for better living standards**. To do this, it aims to:

- Build resilience and reduce the vulnerability of the cocoa system to sudden and gradual environmental changes.
- Reduce greenhouse gas emissions (mitigation of climate change).
- Enhance the achievement of food security and diversification of revenues in cocoa landscape.
- Enhance socio-economic and development goals

The Standard **contains best management practice criteria and metrics** for climate smart landscapes. However, it could easily be transformed into a certification system, once other processes (auditing, assurance, claims, chain of custody, marketing, etc.) are defined and followed through. It is anticipated however that entities which comply with the policies and principles of Climate Smart Cocoa Production could easily request third party verification against the Standard.

TOOLBOX—SECTION 4.2

- Accountability Framework URL
- LandScale URL
- IDH URL
- Ghana CSC production standard

4.3 What is LandScale

LandScale is a shared initiative of the Climate, Community, and Biodiversity Alliance (CCBA), the Rainforest Alliance (RA), and Verra. (Visit https://www.landscale.org/) It is an emerging tool to help drive landscape sustainability in rural landscapes dominated by natural resource-based industries and supply chains, including agribusiness, forestry, extractions, and infrastructure.

At the heart of LandScale is the assessment framework, which provides a standardized approach for assessing and communicating sustainability status and trends across landscapes. This can help organizations involved in implementing jurisdictional or landscape approaches, as well as those sourcing commodities from or investing in rural landscapes, to:

- **UNDERSTAND**: The LandScale Assessment Framework and Guidelines includes **indicators** and **performance metrics** to measure progress towards critical landscape sustainability goals. It covers four pillars: **ecosystems**, **human well-being**, **governance**, and **production**.

- **COMMUNICATE**: The results of LandScale assessments can be **verified** and made available on the LandScale **online data and reporting platform** to promote credible communication of landscape sustainability performance. This will help create incentives and rewards for improvements in landscape sustainability performance.

- **ACT**: LandScale provides trusted information that landscape actors can use to design more effective landscape management policies, programs, and investments. The results of LandScale assessments can also help commodity buyers and investors to make informed decisions for sustainable business.

LANDSCALE
Measuring Performance. Powering Sustainability.

A verification mechanism, data and reporting platform and other supporting tools make up the other main elements on LandScale (Figure 13)

FIGURE 13:
Main components of LandScale

In this respect, LandScale works by supporting proponents in selecting a landscape and then identifying boundaries, either pre-defined, such as a jurisdiction or water catchment, or self defined in accordance with the provided guidelines. The next step is to select indicators. 'Core' indicators which apply to all landscapes are combined with the relevant 'landscape-dependent' and 'optional' indicators to balance global consistency with local flexibility. The final step is to conduct an assessment, which is repeated periodically to monitor trends and communicate your results on the LandScale platform.

The first version of LandScale's framework assessment has gone through a public consultation process, and **partners are now working on version two**. Feedback from Ghana's cocoa stakeholders and pilot landscape testing has played an integral role in informing LS and will continue to do so. As such, LandScale is highly compatible with Ghana's model of landscape approaches.

TOOLBOX—SECTION 4.3

- LandScale assessment framework and guidance V0.2
- LandScale 4-pager
- LandScale overview presentation
- Ghana LS pilot fact sheet
- LandScale Flyer

4.4 Why do we need LandScale

Time is running out to solve the complex and far-reaching environmental and socio-economic challenges facing our planet. Issues such as climate change, biodiversity loss, and water depletion will affect us all. Yet no individual, community, business, or government can tackle them alone. We need to look beyond our own borders—be that of a farm, village or supply chain—to fully understand these challenges and implement effective actions to address them.

LS will also foster collaboration between sectors and across entire jurisdictions and landscapes. In theory, landscape governance can use LS as a backbone to successfully implement the structures. The good news is that businesses, government, and civil society leaders are responding to this urgent need with both independent actions and multi-stakeholder collaborations designed to drive improvements in sustainability at landscape scale.

4.5 How is LS different from traditional certification?

In comparison to traditional certification standards (Table 2), **LandScale does not prescribe practices** as seen with e.g. RA and or UTZ certification. Instead, LandScale is designed to provide reliable information about the outcome of efforts to protect ecosystems, promote human well-being, improve governance, and optimize productivity at landscape scale. This information can be verified and made available via an online platform to enable credible communication of landscape sustainability performance.

Table 2: Comparison of certification and LandScale

	Traditional Certification Programs	LandScale
Scale	Improving sustainability within an individual management unit	Drive improvements across entire landscapes
Scope	Focus on a single crop or sector	Assess the outcome of all activities within a landscape - relevant for any natural resource dependent activity
Model	Prescribe best management practices or set threshold performance levels that must be met to achieve and retain certified status	Does not define minimum required practices or performance levels. Focuses on driving improvement in sustainability performance by providing reliable information

4.6 How can LS work for cocoa in Ghana?

Ghana is one of five pilot countries where LandScale is being co-developed from the ground-up through input to the Assessment Framework from a multi-stakeholder Advisory Working Group and through testing in two pilot cocoa landscapes; the Kakum HIA landscape in Central Region and the Juabeso-Bia HIA landscape in Western North.

In the development of LandScale, significant attention has been given to alignment with the CFI. The main pillars and indicators of LS meet the anticipated monitoring needs of CFI, and LS is geared to be able to analyze the sustainability of cocoa production landscapes.

LandScale also aligns with the emerging Cocoa Landscape M&E System, which NCRC is developing with support from the Lindt Cocoa Foundation. The main idea behind this M&E system is to determine the best indicators for reporting on CFI, LandScale, GCFRP and other landscape initiatives, and then explaining in detail the methods and procedures required to collect and analyse the data. In this way, the M&E system will furnish the data and information that will feed into monitoring frameworks like that of LandScale, CFI, or the GCFRP.

The value of LS to the cocoa sector in Ghana, is that it can:

- **Measure progress and impacts**: Through the multi-stakeholder approach, the focus on measuring and monitoring progress will enable companies and partners to more effectively and efficiently share data and information, use their resources to meet their desired goals in a landscape. It will also prove beneficial in helping companies to make sound investment decisions.

- **Assess or monitor risks:** The assessment process—initially and over time—can highlight issues or areas that need attention, and sudden or unexpected changes that do not typically fall within the scope of the sector.

- **Support landscape collaboration:** LS provides a platform through which cocoa companies can successfully collaborate in a pre-competitive environment and work constructively with government and HIA Management Boards to achieve broad impacts and avoid duplication by leveraging funding and expertise. Given that there are multiple commodities produced in cocoa landscapes, it also provides a platform in which to identify and collaborate with other sectors, including oil palm and timber.

- **Enable claims to be made:** Stakeholders working on LS in a cocoa landscape can make commitment claims, landscape performance-based claims (every bean from landscape sustainably produced, sourcing from landscape working towards deforestation-free beans), or claims that simply link organizations to the landscape.

- **Provide 3rd party verification of outcomes and enable claims:** The verification process has the advantage of giving international credibility and transparency

Further, LS was developed to intentionally overlap with the CFI's goals and activities. It is also linked to the emerging Cocoa Landscape Monitoring & Evaluation System that the Lindt Cocoa Foundation has supported for development for cocoa landscapes.

LS with its focus and scope on the entire landscape, provides a good spectrum for implementation in the cocoa landscape of Ghana. Further, LS relies on four pillar (Ecosystem, Human Wellbeing, Production and Governance) which aligns very well with Cocoa Landscape M&E System (which focuses on Ecosystem Heath, Sustainable Production, Well-being and Social Inclusion, and Landscape Governance) and Ghana's CFI as shown in chart 1 below.

A close look at the framework indicates how LS shares a lot of common ground with CFI and also with the Cocoa Landscape M&E System which is being developed. With other research projects feeding into the broad pictures it makes it quite clear that LS which is a bigger umbrella provides a platform to support CFI and its implementation in the cocoa landscapes of Ghana. In addition, NCRC, the site-specific implementing partner of LS in Ghana, has been a strong force in the implementation of the CFI and other key initiatives in the country. With landscape governance already in place in some cocoa landscapes, LS can easily be introduced and tested to strengthen, and at the same time promote CFI implementation.

Section 5

Guidance on Landscape Level Monitoring

Landscape monitoring is the critical link between landscape implementation and reporting results under a landscape standard or similar initiative. Without landscape level data and information, it will be challenging to understand or assess the impacts and outcomes of interventions in a landscape. Yet the reality is that monitoring at a landscape-scale is not simple—project level data is not broad enough in scope, and private sector indicators may only reflect a small proportion of the producers and total production. **A key question therefore is, how can HIAs and Consortiums generate or gain access to data and information from an entire landscape?** If an HIA implements LandScale, for example, where will the landscape data come from to be able to fill-in the various ecological, human well-being, governance and production indicators?

The answer is that efficient and focused landscape specific monitoring and evaluation systems will be required as part of a landscape approach, coupled with alignment to government monitoring systems, and pre-competitive data sharing agreements amongst private sector landscape Consortium partners.

This section describes a new monitoring and evaluation system that is being designed specifically for Cocoa CREMA and HIA landscapes in an effort to fill the "landscape data" gap. It also introduces how the government will monitor the GCFRP program area and HIA landscapes as these systems will also be important for landscape approaches, and it describes the monitoring focus of the CFI to show the relevance of landscape approaches and monitoring systems in reporting on the CFI.

5.1 M&E System for Cocoa HIA Landscapes

It is broadly understood that the **monitoring requirements at the HIA level are significant**, and that they **need to align with GCFRP implementation and CFI commitments**. **Such an M&E system does not exist**, so the **development of the system is a priority** to enable stakeholders (government, private sector, communities) to monitor and evaluate, at the local level, the activities and impacts from the rollout of climate smart cocoa and landscape governance.

With a **grant from the Lindt Cocoa Foundation** (LCF), **NCRC is working to develop such a system** by adapting and testing a socio-economic and ecological monitoring and evaluation approach, previously used in an established CREMA context in northern Ghana, and combine that system with other research/data methods which have recently been applied in cocoa and oil palm systems in southern Ghana.

The project incorporates the successful and relevant elements from these various initiatives for the purpose of monitoring climate-smart cocoa CREMAs and Sub-HIAs in Hotspot Intervention Areas (HIAs) in cocoa landscapes. The project expects the resulting system to incorporate variables and indicators to assess livelihoods and wellbeing, CSC practice adoption and yields, biodiversity and ecosystem health, landscape governance and management, and climate patterns.

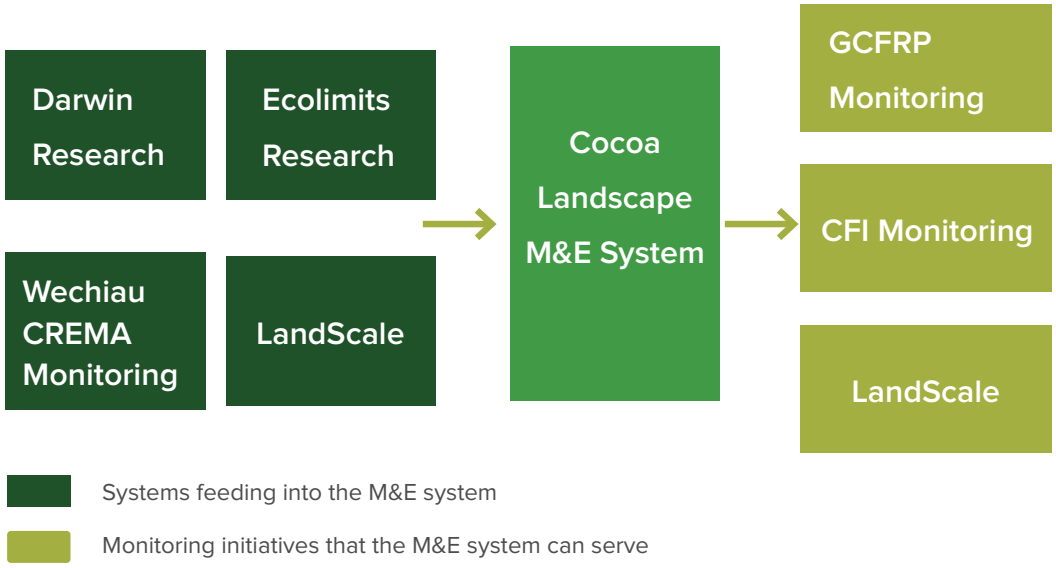
In addition to supporting GCFRP and CFI monitoring, it is anticipated that this monitoring system will play an important role in **furnishing data and information (which is not otherwise available) to support the testing and implementation of LandScale**. The project is using the climate-smart cocoa HIA landscape on the eastern and northern boundaries of Kakum National Park, in Ghana's Central Region to develop and test the resulting M&E system.

Figure 14 captures the relationship between the research and monitoring projects that have informed the drafting of the M&E system, as well as showing the monitoring initiatives that can benefit from the data to be collected.

Specifically, the M&E system has **benefitted from the participatory monitoring approach** that has been used for over fifteen years to **monitor biodiversity, ecological awareness, household well-being and financial viability in the Wechiau Community Hippo Sanctuary CREMA** landscape of the Upper West Region.

It has also **adapted methods from** the **Ecolimits** and **Darwin Initiative** research projects which were conducted in Ghana and both assessed ecosystem services and functions of tree crop landscapes with significant forest patches. While Ecolimits focused on a cocoa-forest landscape, Darwin focused on an oil palm production landscape with forests.

FIGURE 14:
Systems informing the Cocoa Landscape M&E System and the monitoring initiatives it will serve

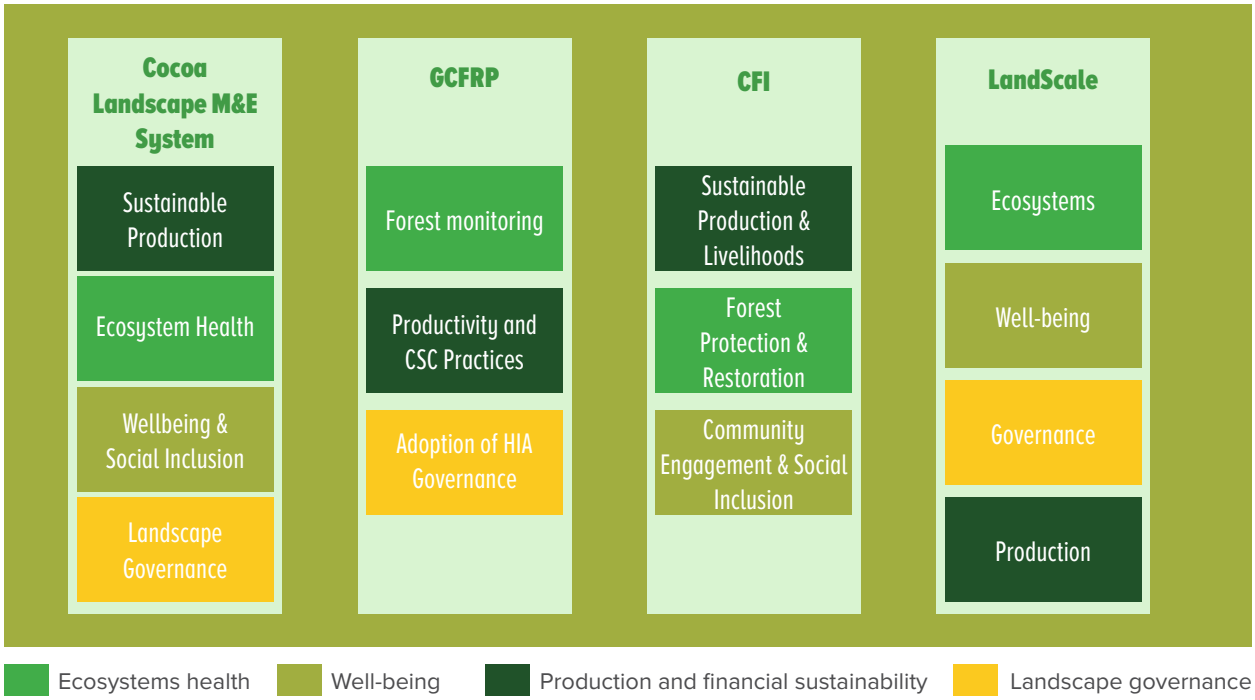


Ecolimits was a multi-disciplinary and international socio-ecological-climate research effort that started in 2014 with funding from the Ecosystem Services for Poverty Alleviation (ESPA) grant mechanism of the UK Government. Additional funding was also secured in 2017 from the National Environment Research Council (NERC-UK) for an El Nino research grant. The research was implemented by the University of Reading, Oxford University and NCRC in two African countries – Ghana and Ethiopia. The research project was dubbed "Exploring the ecosystem limits to poverty alleviation in African forest-agriculture landscapes". Its overall aim was to explore the relationships between forests and the ecosystem services that they furnish to the surrounding agricultural landscape, so as to better understand the ecosystem limits to poverty alleviation through agricultural development. The focus in Ghana was on a cocoa-forest landscape, and in Ethiopia it targeted a coffee-forest landscape.

The Darwin Initiative research project titled, ''Impacts of Crop Management on Smallholder Oil Palm Yields and Biodiversity'' started in April, 2016 and ran until the end of March, 2019. It was funded by the UK Government's Darwin Initiative. As with Ecolimits, this environmental research project was based in Assin Fosu (the greater Kakum Conservation Area landscape) and implemented by the University of Leeds, University of York, NCRC, Solidaridad and KNUST. The over-arching goal of this research project was to better understand and assess the presumed co-benefits of Best Agricultural Practices (BAP) for biodiversity and livelihoods in smallholder oil palm systems.

Figure 15 shows the main pillars the landscape M&E system intends to cover, and alignment to the programs and standards that it can serve.

FIGURE 15:
Main pillars of the Cocoa Landscape M&E System and alignment with other initiatives



TOOLBOX—SECTION 5.1

- LCF Project factsheet: Adapting and testing an approach for monitoring & evaluating climate smart cocoa CREMAs in Ghana
- Summary of findings from Ecolimits
- Ecolimits research impact briefs
- Summary of findings from Darwin Initiative
- Darwin Initiative policy briefs
- Summary of findings from Cadbury-Reading-NCRC research

5.2 Forest & Social Monitoring under the GCFRP

Ghana began implementing the GCFRP in early 2018 with investment and on-the-ground engagement from the private sector, civil society, and with support from the government. The main goal of the program is to significantly reduce deforestation and forest degradation by promoting climate-smart cocoa production, implementing landscape level governance and land-use planning, effecting strategic policy reforms, fostering integrated coordination and monitoring, enabling law enforcement and reducing farmers risk within the priority HIAs.

Under an agreement with the World Bank and the Carbon Fund (CF), the **Government of Ghana has signed an Emission Reductions Purchase Agreement (ERPA)** with the CF. Under this agreement, Ghana will transact 10 million tons of ERs to the CF (Ghana will monitor and report, and CF will validate) for up to USD50 million worth of performance-based payments. These funds are to sit in a REDD+ Dedicated Account, which is to disburse the majority of the "benefits" back to the farmers, communities and traditional leaders who are engaged in the program and demonstrating results in HIAs.

The program will therefore use Ghana's **National Forest Monitoring System** (NFMS) to **monitor and report on total GHG emissions** from deforestation and forest degradation occurring within the entire program area so as to demonstrate overall performance and to trigger payments. In addition, **in each HIA landscape** the program will specifically **monitor deforestation trends**, the **adoption of CSC practices**, as well as **progress on the implementation of HIA governance** so as to determine equitable sharing of the performance payment benefits. In terms of safeguards, Ghana has completed a **Social and Environmental Safeguards Assessment (SESA)** as required by the World Bank, and it has developed a **Social Information System (SIS),** which includes an online data platform, through which social and environmental indicators will be monitored within HIAs and across the program area. Ghana is working to build capacity and to test the NFMS system and the SIS, and it is scheduled to produce its first GCFRP monitoring report by the end of 2020 against ERs from 2019.

TOOLBOX—SECTION 5.2

- Ghana's National REDD+ Strategy
- Framework for National Forest Monitoring
- Link to GCFRP Social Information System

5.3 CFI Monitoring

The CFI's **Joint Framework for Action** is designed around **3 key goals**: **forest protection and restoration**, **community engagement and social inclusion**, and **sustainable production and livelihoods**. To meet these goals, the CFI identifies critical action areas and activities which the committed companies and government agree to implement. Partners to the CFI are now working to define how monitoring, including data collection and data sharing, will work.

Table 3 gives a full outline of the CFI goals and action areas. In addition to the core goals, actions, and activities, the CFI companies and government adopted eight core commitments which include adopting landscape approaches (no. 6) and effectively monitoring and reporting on progress (no. 8). These highlight the relevance and importance of landscape approaches and the Cocoa Landscapes M&E System.

Table 3: Goals and commitments of CFI

Goals	Action Areas
Forest protection and restoration	• Ensuring that there will be no further conversion of forest lands for cocoa production. • Enhancing public-private partnership to identify good practices and technical guidance for forest conservation and restoration, shade grown cocoa and Modified Taungya System in forest reserves. • Excluding cocoa production and sourcing, timber extraction and other production or extractive activities from condition 1, 2 and 3 forests while progressively restoring condition 4 and 5 forests through tree benefit sharing arrangements, targeted restoration and reforestation programs through the Modified Taungya System. • For land-use and tree tenure reforms to incentivize land owners and users to retain naturally regenerated trees on off-reserve farmlands including the approval of Community Resource Management Area (CREMA) mechanism to help secure land owners and users' rights to management and derive economic benefits from forest resources.
Sustainable production and livelihoods	• Promote investment in long-term productivity of high-quality cocoa in environmentally sustainable manner and grow "more cocoa on less land" through intensification of farming practices, provision of improved planting materials, introduction of yield enhancing methods, training in good agricultural practices, crop protection and crop nutrition and soil fertility. • Promote sustainable livelihoods and income diversification for cocoa farmers, including diversification, agricultural intercropping, development of shade-grown cocoa and other income generating activities designed to boost and diversify household incomes. • Promote financial inclusion and innovation to deepen farmers' access to working capital and investment funds required for production and cocoa farm rehabilitation and renovation.

Community engagement and social inclusion	• Full and effective information sharing, consultation and informed participation of cocoa farmers and communities who are affected by proposed land-use changes under the framework. • It will promote community-based models for forest protection and restoration including engagement of local communities and farmers in awareness raising campaigns on the status of protected areas and the critical role that forest play in climate regulation. • Development of action plans for forest protection and restoration and sustainable agricultural intensification that are gender and youth sensitive. • Provision of alternative livelihoods and restoration of standard of living of cocoa farmers and communities that are being affected by the proposed land-use changes.
Core Commitments	• Prohibit and prevent activities that cause or contribute to any further deforestation or forest degradation in the cocoa sector; • Respect the rights of cocoa farmers, including identifying and mitigating social risks, and sequencing the implementation of actions to minimize potential adverse social and economic impacts; • Promote the effective restoration and long-term conservation of protected areas. • Strengthen supply chain mapping, with the end goal of full traceability at the farm-level; • Implement verifiable actions and timebound targets on the basis of sound data, robust and credible methodologies, stakeholder consultation, and realistic timeframes; • Implement agreed actions in the context of a broader landscape-level approach, with strong links with similar initiatives in other commodities, and full alignment with the national REDD+ strategy and other relevant national strategies and plans; • Embrace shared responsibility to implement the Framework actions, including continued engagement in a multi-stakeholder process for dialogue on key issues, development of effective implementation plans, and joint learning and knowledge sharing; and • Provide effective monitoring and reporting on progress on commitments and actions to ensure transparency and accountability.

Section 6

Recommendations & Lessons

Ghana's cocoa sector has been at the global forefront in the development of landscape-level approaches to community-based governance, climate change mitigation and adaptation, and agricultural commodity value chains. Many lessons have been learned in this process and more are emerging with the passage of time (additional lessons are highlighted in the Toolbox). The hope is that these lessons and associated recommendations are not only valuable in the Ghanaian context but are also useful for similar initiatives in other countries.

This section details relevant lessons and recommendations about HIA implementation time-frames and **success factors**, **financing options** for the private sector and for HIAs, Ghana's REDD+ **benefit sharing plan** and **other benefit sharing recommendations**, **tree and land tenure reforms**, **gender recommendations**, and **NGOs with the capacity to support projects and programs related to landscape initiatives**.

TOOLBOX—SECTION 6.0

- Summary of lessons learned from landscape governance implementation
- GCFRP Benefit Sharing Plan

6.1 What is the time-frame to achieving an HIA?

It is neither necessary nor realistic to achieve a whole HIA landscape in a single effort. Therefore, it is recommended to **adopt a phased approach to landscape governance implementation.** A phased approach offers many advantages, including the ability to build a consortium over-time, keeping implementation costs manageable, and learning from the initial effort and activities to make later phases more efficient. In addition, **do not wait for the perfect concept or conditions before beginning** as these do not exist. It is best to **initiate the work and know that others** (local people and landscape stakeholders) **will follow in good time**. Good work will speak for itself and others will want to join.

In addition, **landscape governance should not be rushed.** Supporting the development of the various governance structures, from CREMA to Sub-HIA to HIA requires time and a sustained effort. The dynamics and sensitivities of people, communities and traditional authorities are real. A moderately paced, phased approach will build a strong foundation on which to grow. Rushing (driven by project deadlines) often leads to mistakes, miscommunications and weak structures. Moving too quickly can result in decisions or issues that can undermine the process later-on.

6.2 Why do some landscape governance efforts succeed, and others fail?

There are many reasons why a community-based project may succeed or fail, but over the years it has become clear that certain small, but critical strategies are important to successful outcomes. Given that the **future sustainability of a CREMA/Sub-HIA/HIA depends on local buy-in and commitment, allowing communities to engage with and come to co-own and co-drive the process** is key. In addition, **allow leaders to make mistakes.** The best lessons and learning can come from making mistakes. Over-managing governance at the local level robs people and organizations of taking responsibility, learning lessons, and then finding solutions.

Money can create many stumbling blocks to good governance. Giving money to communities and individuals too early in the HIA development process can derail progress. It replaces the commitment to the communal effort and goodwill with individual jealousies and competition. Handing out money sends a very stark and counter-productive message, and then keeping up with money-expectations in the future is difficult.

6.3 What are financing options for HIAs and the private sector

A mix of public and private financing is a good strategy for supporting the development of HIAs and the roll-out of CSC activities in the landscape**.** Through the integration of public-private finance, company's investments maintain the focus on core business, ensuring the long-

term sustainability of sustainable production activities at scale, while government and donor investments (via NGOs) can fund governance work, exploring diversification opportunities, monitoring and reporting, and other related activities.

In the beginning, it is advisable to **combine grants and existing private sector investments** into sustainable production for the development of the consortium, governance work, and implementation of CSC and cocoa agroforestry. Over-time, the private sector investment may grow, reflecting an increasing interest in commodity sourcing from the HIA landscape. **Corporate social responsibility money to support development priorities** can also complement. Linking to research can open access to **research grants**, which can enable exploration and understanding of ecological, social or economic relationships and trends in the landscape. **Research money can also help to support patrolling and monitoring activities**. Once an HIA is operational to some extent, then **targeted grants can also be used for specific purposes**—i.e. testing tree tenure reform or scaling-up diversification. In general, accessing new donor funding will become easier once an HIA and partners can demonstrate progress on the ground. Over time, **HIAs are likely to receive "benefit sharing payments"** and other in-kind support from the World Bank Carbon Fund (through the government's REDD+ Dedicated Account) for reducing deforestation, and could also be eligible for support from new multi-lateral programs that look for private sector and government partnerships.

If companies are looking to expand their work or incorporate activities—like providing farmers with financial resources—then **there are several different funding opportunities (below) that cocoa companies or HIA partnerships could explore** to support the various aspects of landscape approaches and supply chain investments. It is worth noting, however, that each organization has its own credit and investment criteria, due diligence processes, and minimum loan/deal size requirements, and in general it is not easy to meet these requirements.

For loans to smallholder farmers the following entities are available:

- Root Capital
- ResponsAbility
- AlterFin
- OikoCredit
- Clarmondial—Food Security Fund

For equity/quasi-equity and longer-term debt options look to:

- AgDevCo
- Moringa Fund
- Althelia Fund
- Livelihoods Funds for the Family Farm
- Agri-Business Capital Fund (managed by Bamboo Capital Partners)
- The Palladium Group and Partnership for Forests (P4F)

In addition to financing the development of HIAs, it is essential that **CREMAs, Sub-HIAs and/or HIAs are financially sustainable.** If a landscape and the governance structure do not have financial sustainability, then the system will not function on the ground. This has been the most overlooked and misunderstood element of landscape governance over the years. It is **recommended to develop the resource base and the agroforestry products**—cocoa, eco-tourism, non-timber forest products/botanical, timber harvesting—**to generate sustainable revenue** for the CREMA/Sub-HIA/HIA, which can be **invested in a trust fund** to support governance activities in perpetuity. For this to work, it is also important to hold **financial management trainings** and **develop guidance and guidelines** so that CREMA, Sub-HIA and HIA leaders have the skills to manage money and are held accountable if funds are diverted.

6.4 What are options and lessons on benefit sharing?

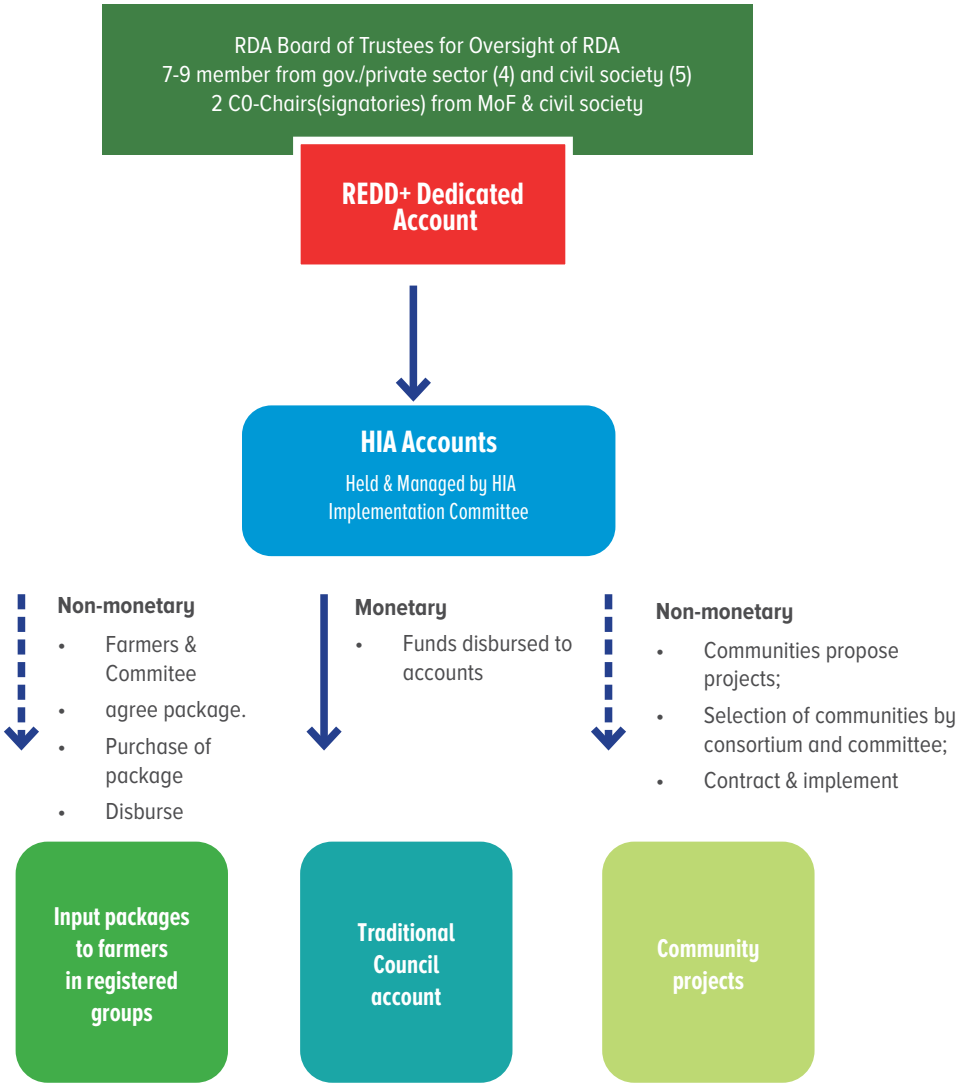
Benefit sharing requires on-going attention as it remains one of the most critical elements to ensure long-term local buy-in, commitment, and satisfaction. Through the establishment of HIA trust funds, it is possible to allocate a portion of fund revenue for benefit sharing in line with communities' and leaders' recommendations on what would be appropriate.

In addition, under the GCFRP, HIAs are earmarked to receive performance-based benefits for registered "CSC farmers", communities, and traditional leaders. A **detailed Benefit Sharing Plan (BSP) has been developed** and jointly approved by stakeholders, the government and the World Bank. Assuming Ghana is able to demonstrate reductions in deforestation, the BSP outlines who is eligible

to receive benefits from the Carbon Fund (up to a total of USD$ 50 million against agreed performance thresholds), what the benefits can and cannot be, and how they are to be disbursed from the REDD+ Dedicated Account (Figure 16). According to the BSP, 69% of funds are to go to HIAs (Government agencies receive 27% and 4% is to cover fixed costs). Of the proportion for HIAs, 58% will be used to provide CSC inputs to farmers in registered farmer groups, 3% with go to Traditional Authorities as a cash payment, and 39% will be available for communities to support development projects. Work is now underway with a consultant to further detail the fund-flow mechanism and process of disbursing such funds.

At the HIA level, regardless of where benefits derive from, it will be important to put in place structures and oversight to significantly limit the potential for elite or government agency capture, and to ensure that there is gender equity in the process. This needs to be monitored to ensure that it happens.

FIGURE 16:
Flow of funds from REDD+ Dedicated Account to HIA stakeholders under the GCFRP Benefit Sharing Plan



6.5 What is required on tree and land tenure reforms?

A significant amount of work is still required on tree tenure reforms to incentive farmers to maintain trees in their farms, and on adaptation of traditional land tenure norms to enable farmers to replant over-aged cocoa farms. To date, both reform proposals have been conceptualized as stand-alone issues that are focused on individual farmers and land-owner, which fails to recognize the integrated nature of the problems and the complexity of tenure in different locations. Therefore, **the best way to tackle tree tenure reform and to adapt traditional land tenure rules guiding replanting is to address them within HIA or CREMA governance structures and processes.** This will require significant leadership and effort from industry leaders, NGOs and HIAs to move the process forward to a realistic and equitable conclusion.

Update on Tree Tenure

In 2014, the **MLNR initiated a process to review tree tenure in Ghana and propose reforms**. Concerned members of the NGO community also convened a working group on the issue and shared recommendations to the MLNR. In 2016, in response to the various pilots, consultations and recommendations, **the FC developed a tree registration process** which seeks to formalize all trees on farms, whether planted or naturally regenerated. This was made possible by the development of a new tree registration form that was developed and approved by MLNR in 2017. The commission then tasked the FC's Resource Management Support Centre, in collaboration with UNDP, to pilot the process in Begoro, Goaso. Though the initial piloting was described as positive, there were major challenges to real implementation at scale.

The first problem is that the **FC does not have the funds nor the human resources to replicate tree registration across the country due to the cost and scale involved.** If, for example, 100,000 farmers decide to register three trees each in a single year, then this would result in 300,000 trees that require individual registration. The FC would need to register 273 trees every day to meet this demand. In addition, if the logistical and data management costs of tree registration cost GHS 20 per tree (a conservative estimate) then it would cost GHS 6 million (just over USD$ 1 million) a year. Sustaining these costs and operations year after year is not sustainable based on project funding and is not realistic in light of government budgetary constraints. This means that most farmers will never benefit from such a process.

The second impasse is that the economic rights to the trees still sit with the government. Though farmers are, in principle, to benefit from naturally occurring trees and receive fair financial compensation when these trees are harvested, the FC and MLNR have not yet determined what portion of the stumpage fees the farmers will receive. The FC does not want to reduce its portion of revenue and has proposed that the private sector timber operators pay an extra percentage (e.g. 15%) to farmers. However, there is no consensus from the timber industry on this proposal, and there is no evidence that proposed operational procedures will be executed in an equitable and transparent process to ensure that farmers would receive any such payment.

Adapting Traditional Norms in Cocoa Replanting

The vast **majority of landholding in Ghana falls under traditional governance structures and follows customary norms and practices**. There are rules governing the systems of farming within the traditional systems, and these rules can vary quite significantly from location to location. **A number of these traditional systems create disincentives to the replanting of old and over-aged cocoa farms**, and other practices that now fall under sustainable and climate-smart recommendations (including practices related to shade trees). This is particularly true for settler farms throughout the cocoa program area.

More specifically, under various land and crop sharing arrangements that are agreed with settler farmers, the settlers' rights to the cocoa farm that they plant are linked to the cocoa trees. This means that if the farmer decides to re-plant or rehabilitate an old farm, he or she will actually lose the rights to the land due to the removal of the old cocoa trees. Under many of these traditional arrangements, the settler farmer must completely renegotiate the agreement, which can come with significant costs or even loss of access to the land.

Work is therefore needed to support dialogues and negotiations in each of the HIAs to seek pathways to promote an evolution away from perverse incentives in traditional land-use norms which directly affect cocoa farming. The GCFRP addressed this need in the implementation plan and full program document, noting that the process will take different pathways across the set of HIAs and will likely support independent studies in HIAs to identify and fully understand the prevailing land use norms. The GCFRP also calls for support to negotiation

with traditional leaderships at HIAs level to encourage progressive traditional leaders to experiment with such change.

6.6 What are gender recommendations in landscape governance and CSC?

Landscape governance approaches will need to integrate gender priorities to ensure that **women** farmers and community members **can fully participate in governance process**, while **monitoring for gender specific negative impacts,** including discrimination and abuse leading to unequal access to land, resources, opportunities, and decision-making power. Women's Environment & Development Organization (WEDO) in partnership with IUCN-Ghana and ABANTU for Development have done considerable research and advocacy work related to women and climate change in Ghana. IN 2008, WEDO and ABANTU conducted a baseline study of the linkages between gender and climate change[1], and in 2011 IUCN-Ghana and WEDO organized a workshop for multiple stakeholders, including women organizations, gender experts and policy experts in forestry and environment on "Mainstreaming Gender Considerations in REDD+ process in Ghana. The outcome of these participatory stakeholder workshops formed the basis of a "Road Map" to support mainstreaming gender in REDD+ processes in Ghana.

Overall, this work has shown that women constitute about 50.5% of the total population and have key roles in several productive sectors, including agriculture. **Women in agriculture constitute 52% of the labour force, produce 70% of subsistence crops, and are in charge of 85% of food distribution in the country.** In spite of women's huge contributions in these and other areas, there is a range of socioeconomic factors that adversely affect both women's actual productivity and their potential for increased outputs and the development of well-being in these sectors.

Key learning and recommendations from these experiences which **can directly inform landscape level governance**, REDD+ implementation and roll-out of **climate-smart cocoa include**:

- Diversity in leadership drives better governance.
- Women, as a result of socially constructed gender roles, are often more directly or severely impacted by negative environmental changes.
- Women have a unique perspective for creative and appropriate solutions to climate change and other landscape issues.
- Addressing complex environmental problems must incorporate women's human rights to avoid increasing gender inequality and violence against women and to secure sustainable development for future generations.
- For example, although women play a vital role in household and community natural disaster recovery, policies that address the impact of disasters and recovery efforts often favor the livelihoods of men. In many cases, the false policy assumption remains that this will also benefit women, whereas women's own livelihoods must also be secured.
- Projects with economic and social co-benefits for women and men secure project sustainability.
- Involving women in monitoring projects and technologies results in practical suggestions to improve and modify technologies that benefit both women and men.
- Integrating gender equality issues positively affects project efficacy in both large-scale and small-scale initiatives.

Gender-sensitive decision-makers and policies are needed to form inclusive climate mitigation measures and investments.

1 UNFPA, WEDO, (2009). A Resource Kit on Climate, Population and Gender.

6.7 Which NGOs in Ghana have experience on landscape governance approaches?

A number of NGOs in Ghana have decades of experience implementing CREMAs and working on cocoa landscape governance issues. Some also partner cocoa supply chain projects and engage with communities on natural resource management and forest sector issues.

They include:

Nature Conservation Research Centre (NCRC)	CEO: John Mason jos091963@gmail.com +233 50 031 1865 Dir. Programs & Research: Rebecca Asare: rebeccaashleyasare@yahoo.com +233 240687025	http://natureconservationresearchcentre.org/
Tropenbos Ghana	Country Director: Mercy Owusu-Ansah mercyowusuansah@yahoo.com +233 20 821 2799	https://www.tropenbos.org/where_we_work/ghana
International Union for the Conservation of Nature- Ghana	Country Coordinator: Saadia Bobtoya Owusu-Amofah Saadia.Bobtoya@iucn.org +233 54 156 6408; 26 489 3004 Ghana Project Office, West and Central Africa Regional Programme (PACO)	https://www.iucn.org/tags/regions/ghana
A Rocha Ghana	Deputy National Director—Operations: Daryl Bosu daryl.bosu@arocha.org +233 20 255 5727	https://ghana.arocha.org/
Conservation Alliance	Executive Director: Yaw Osei-Owusu yosei-owusu@conservealliance.org +233 302 966999, +233 264 277795	https://conservealliance.org/
SNV Ghana	Senior Advisor Forests & Climate Change: Reuben Ottou rottou@snv.org +233 24 489 3528	https://snv.org/country/ghana

Annex 1: Methods

In preparing this document, the purpose was to capitalize upon the extensive learning from the development of CREMAs and HIA landscape governance mechanisms, development of LandScale in the cocoa HIA context, and monitoring activities and research projects in Ghana. In drafting the document, NCRC sought to consolidate and share "how-to" information about landscape approaches, distill important lessons and experiences, and bring together a wide range of resource materials into a Toolbox to accompany the guidance and learning.

The final product is meant to be a concise guidance document that details the logic, structure and process of the landscape HIA governance mechanism, information about LandScale, and an outline of landscape monitoring systems. It also aims provide to a clear narrative which shows how the three come together into a wholistic landscape approach to reducing deforestation and improving farmers' livelihoods. The hope is that with clear guidance and supporting resources other actors (NGOs, government, and cocoa private sector) in the wider GCFRP landscape will adopt and adapt landscape governance, the use of landscape standards, and landscape-level monitoring into their own landscape interventions.

The second goal of the project was to use the drafting process and the final document as the basis for a series of consultations and dialogues with private sector companies, civil society organizations, and government agencies so as to share learning and experiences in an interactive manner. Unfortunately, the arrival of the Coronavirus epidemic in Ghana and the restriction placed on meetings has meant that some of the final engagements—landscape learning dialogues—could not happen in person and were either transformed into online sessions or postponed indefinitely.

The methods used in preparing this report included: desk review of documents, interviews with key landscape level experts, and discussions with key informant experts in target agencies and civil society groups.

NCRC's team conducted a thorough desk review of all available documents to ensure comprehensive understanding of landscape governance, landscape monitoring and the LandScale experiences in Ghana. This included primary data from technical reports, grey literature, recent landscape level work, and stakeholder consultations and dialogues. The literature review helped in putting together the Toolbox of resources. Stakeholder consultations and dialogues happened through one-on-one meetings with NGOs, a preliminary learning workshop with key NGO organizations, and a cocoa private sector learning workshop with in-country company representatives. Unfortunately, the government learning workshop was delayed due to conflicting schedules and then postponed because of the epidemic.

Questionnaires were also developed to support a qualitative assessment of stakeholders' views, experiences, and priorities on landscape governance, CSC and related issues. One of the questionnaires was conducted with stakeholders in the Central and Western North Regions, as well as with high level officers of government and private sector companies. Written questionnaires were also shared to private sector participants at the learning workshop for their feedback and perspective. Topical discussions were initiated with "experts" to elicit information on key landscape issues.

The original intent was to hold a final learning dialogue with a broader range of stakeholders (NGOs, private sector, embassies, government representatives), and then a similar dialogue for local level stakeholders (CREMA representatives, local government representatives, etc.) in the Kakum landscape. However, because of the Coronavirus epidemic this became impossible. Instead, NCRC was able to hold a private sector oriented "Landscape Approaches Learning Call" in March under the leadership of the WCF, with the sustainability directors and managers of the leading global cocoa and chocolate companies. The main concepts and guidance in the document were shared during an hour-and-a-half presentation, followed by a short questions and answer session. Some companies also followed up with one-on-one calls for further discussion and learning. Following the publication of this document, additional virtual sessions are planned.

Partners who were engaged in Ghana included IUCN-Ghana, SNV, A Rocha Ghana, Tropenbos Ghana, UNDP, Rainforest Alliance, Proforest, MLNR, MESTI, FSD-FC, WCF, Mondelez, Touton, Ecom, Barry Callebaut, PBC, Sucden, and handful of other companies.

Annex 2: List of Toolbox Resources

SECTION 1.2: WHAT IS THE PURPOSE OF THE DOCUMENT?

The toolbox resources under this section aim to provide important background information and context as to how Ghana and the cocoa industry have moved along a pathway to adopt landscape approaches to climate-smart production, no deforestation commitments, claims about sustainability, and improvements in farmer livelihoods and well-being. These resources also share significantly more detail about, and explanations of the above concepts.

- **The pathway to sustainable cocoa production in Ghana (NCRC):** This document contains a table that summarizes key initiatives, programs and activities implemented over the past twenty years which have moved Ghana's cocoa sector to present-day efforts on sustainability.

- **The economic case for climate action in cocoa production (CCAFS):** This info note summarizes why adapting cocoa production systems to climate change is a smart investment.

- **Understanding and Defining Climate Smart Cocoa: Extensions, inputs, yields and practices (NCRC_FT):** Commissioned by Ghana's Climate-Smart Cocoa Working Group in 2013, this was the first document in Ghana to explain the concept of climate smart agriculture and give a detailed explanation of climate-smart cocoa. In describing CSC, the document places a strong focus on the historical context of cocoa expansion, farming practices, and the need for landscape-level attention and interventions.

- **GCFRP Executive Summary (CCD-FC):** This document is the Executive Summary of the Ghana Cocoa Forest REDD+ Program document and contains a link to the Ghana's National REDD+ Secretariat website where other resources on the program are also available.

- **Overview of Ghana's ERPD (CCD-FC):** The PowerPoint describes the Ghana Cocoa Forest REDD+ Program.

- **Overview of CFI (WCF):** This is a summary of the Cocoa & Forests Initiative.

SECTION 2.5: WHAT ARE THE OPPORTUNITIES FOR COMPANIES IN LANDSCAPE APPROACHES?

The PowerPoint presentations which are included as resources under Section 2.5 give an overview of landscape approaches, including landscape governance and multi-stakeholder platforms. Both presentations contain slides that specifically speak to the various opportunities and benefits for companies and other stakeholders who engage at a landscape scale with other partners.

- **Landscape governance in Juabeso-Bia: The HIA structure, process and lessons learned (NCRC_3PRCL_P4F_powerpoint presentation):** This presentation describes the situation in Ghana, what an HIA is, the HIA process and structures, and then many lessons and benefits for stakeholders. Specifically, the final three slides speak to opportunities and benefits for the cocoa private sector, including the precompetitive opportunity, sustainable financing, and alignment to the CFI.

- **Learning about cocoa landscape approaches: An introduction to the Ghana guidance document and toolbox *(NCRC_WCF_PowerPoint presentation)*:** This presentation was shared to WCF member companies. It explains the three main components of landscape approaches—landscape governance, landscape standards, and landscape monitoring. There are a number of slides in this presentation that also speak to the opportunities and benefits for stakeholders.

SECTION 3.2: WHAT ARE THE MAIN LANDSCAPE GOVERNANCE MECHANISMS IN GHANA?

This section describes Ghana's two landscape governance mechanisms—the CREMA mechanism and the Hotspot Intervention Area (HIA) mechanism. CREMAs and HIAs are about giving communities, land-owners and land-users the right to govern and manage their lands, including the natural resources and farming systems, for socio-cultural, economic, and ecological benefits and sustainability. This section contains a general description of CREMA and the policy which supports it. It also provides two manuals on CREMA development and for trainings, and it contains a working paper that lay the foundation for evolving CREMA to enable CSC and landscape planning.

- **Adapting Ghana's CREMA mechanism to implement CSC land-use planning (NCRC):** This working paper was written under the CSC Working Group to explore and explain how CREMA could be used in cocoa landscapes to support CSC and landscape-level planning. The paper helped to lay the foundation and context for the HIA concept.

- **A brief guide to community resource management areas (WD-FC):** This is the official Forestry Commission-Wildlife Division CREMA manual.

- **CREMA training manual: A guide for CREMA development (WD_NCRC):** This is a manual that NCRC adapted with the Wildlife Division for conducting trainings with community leaders on CREMA.

- **Wildlife Division Policy for Collaborative Community-Based Wildlife Management (GoG_WD-FC):** The GoG's CREMA policy.

- **Overview of CREMA (NCRC):** This document provides a brief overview and explanation of CREMA.

SECTION 3.6: WHAT IS THE HIA DEVELOPMENT PROCESS?

This section contains resources that help to understand the steps in developing HIA governance bodies. It also contains practical resources (templates and manuals) that are used to develop an HIA governance body, including the CREMA and the Sub-HIA.

- **Socio-cultural survey template (NCRC):** This is a socio-cultural-economic-livelihood survey that can be adapted and implemented in communities in a prospective landscape to understand key issues of the landscape.

- **Example of socio-cultural survey table of contents (NCRC)**: The results of a survey can be combined with other available information and written up into a report about the landscape. This document is an outline of the sections that NCRC has used in writing such reports.

- **Training manual for community leaders on landscape governance structures formation (NCRC_3PRCL_P4F):** This is a training manual which was developed to be used in training community leaders in the formation of Sub-HIAs into an HIA.

- **HIA step-by-step development process diagram (NCRC):** This is a copy of Figure 12 which is presented in this section.

- **Sub-HIA to HIA governance structure and leadership positions diagram (NCRC_3PRCL):** This is a diagram that shows the governance bodies in a landscape with Sub-HIAs and HIAs (but no CREMA). It shows the CRMC (community level), SHEC (Sub-HIA level) and HMB (HIA level) bodies and explains the different positions or people that serve at each level. It is worth noting that one could also include CREMA as another level in this diagram, but the point here was to speak to a landscape where CREMAs did not exist and was not needed.

- **Landscape governance bodies, processes, and structures—PowerPoint (NCRC):** This presentation contains an assemblage of the specific diagrams, figures, maps and tables used in other presentations and documents to describe and explain HIAs, Sub-HIAs and CREMAs.

- **Sample outline of constitution (WD & NCRC):** This document is the outline of a Constitution, explaining each Article and sub-section.

- **Sample Sub-HIA / HIA management plan outline (NCRC):** This is the outline of what a Sub-HIA or HIA Management Plan should contain in terms of content.

- **Template CREMA constitution for HIA GCFRP locations (NCRC):** This is a generic constitution that can be used for a CREMA. It would require appropriate information to be inserted and adaptations made to reflect the purpose and characteristics of the CREMA.

- **Template Constitution of Sub-HIA or HIA (NCRC):** This is a generic constitution that can be used for a Sub-HIA or an HIA. It would require appropriate information to be inserted and adaptations made to reflect the purpose and characteristics of the Sub-HIA or HIA.

- **CREMA/Sub-HIA/HIA Community Rules & Regulations—Informing By-laws Gazettement (NCRC):** This document explains the purpose of developing CREMA, Sub-HIA and HIA rules and how these are turned into district level by-laws. It also highlights the main issues that rules and by-laws should address. However, given the unique nature of each landscape and the fact that existing HIAs are only now beginning to draft by-laws we did not include specific samples of rules and by-laws.

SECTION 4.2: EXAMPLES OF LANDSCAPE STANDARDS AND TOOLS

The websites for the three examples of landscape standards are provided below. A digital copy of Ghana's CSC standard is also included in the Toolbox.

- **Accountability Framework URL**: https://accountability-framework.org/
- **LandScale URL**: https://www.landscale.org/
- **IDH URL**: https://www.idhsustainabletrade.com/
- **Ghana climate smart cocoa production standard (Cocoa Board):** The toolbox contains the current draft of Ghana Cocoa Board's standard.

SECTION 4.3: WHAT IS LANDSCALE?

The resources for this section give additional information about the LandScale framework and associated tools.

- **LandScale assessment framework and guidance VO.2 (LandScale):** This is the first version of the LandScale assessment framework. The framework went through a public consultation in 2019 and the second version is now being drafted. The framework contains the main pillars, indicators and metrics for assessing a landscape for sustainability.
- **LandScale 4-pager (LandScale):** This is a recent document which explains LandScale.
- **LandScale overview presentation_April 2020 (LandScale):** This is a short presentation that explains LandScale
- **Ghana LS pilot fact sheet (LandScale):** This is a factsheet that introduces LandScale's Ghana pilot landscapes.
- **LandScale Flyer March 2020 (LandScale)**

SECTION 5.1: M&E SYSTEM FOR COCOA HIA LANDSCAPES

The section includes resources that further explain the project to develop the M&E system, as well as information about research projects that have informed its methods or generated key findings of relevance to cocoa production landscapes.

- **Lindt Cocoa Foundation project factsheet: Adapting and testing an approach for monitoring & evaluating climate smart cocoa CREMAs in Ghana (LCF):** This is a brief explanation of the project that LCF is supporting to develop a practical M&E system for cocoa CREMA / Sub-HIA landscapes, which could be adapted and used by companies, NGOs or other stakeholders.
- **Summary of findings from Ecolimits (NCRC):** From 2014-2017 a consortium of Ghana (NCRC, FORIG) and UK (Oxford, Zoological Society of London, University of Reading) research partners conducted a socio-ecological study of the cocoa-forest system of the Kakum landscape. This document summarizes the key findings and recommendation from the research.
- **Ecolimits research impact briefs: 7 research briefs (NCRC):** This folder contains seven 2-page briefs that offer practical explanations, insights and recommendations on issues of cocoa and yields, cocoa and poverty, bean weighing, management and rights of trees on farm, climate resilience, and defining CSC.
- **Summary of findings from Darwin Initiative (NCRC):** From 2016-2017, NCRC, KNUST, and the University of Leeds studied the relationship between oil palm farming, yields and biodiversity in the smaller-holder system north of Kakum National Park. This document summarizes key findings from the research.
- **Darwin Initiative policy briefs: 2 briefs in the folder (NCRC):** The folder contains two briefs that provide practical explanations of the relationship between smallholder oil palm management, biodiversity and yields.

- **Summary of findings from Cadbury-Reading-NCRC research (NCRC):** This document summarizes the findings from a five-year research project (2005-2010) conducted by a group of Ghanaian research organizations (NCRC, KNUST, CRIG) and the University of Reading in the Eastern Region of Ghana on the relationship between cocoa farm management practices, biodiversity and carbon stocks.

SECTION 5.2: FOREST AND SOCIAL MONITORING UNDER THE GCFRP

The toolbox resources in this section provide background and information about Ghana's national monitoring processes and plans under REDD+. These include a copy of the National REDD+ Strategy, document that explains the national monitoring system, and then a link to the social information system.

- **Ghana's National REDD+ Strategy (FC):** This is Ghana's national strategy to reduce deforestation and forest degradation. The strategy specifically speaks to its forest monitoring objectives and social safeguard systems.

- **Framework for National Forest Monitoring (FC, 3PRCL, P4F, SNV):** In 2020, Ghana is to conduct its first monitoring of the forest (commonly known as monitoring, reporting and verification (MRV)) and of the social and environmental safeguards, as contained in the social information system (SIS). This document is an effort to describe the framework that will be used to monitor under both systems.

- **Link to GCFRP Social Information System**: http://reddsis.fcghana.org/index.php

SECTION 6.0: RECOMMENDATIONS AND LESSONS

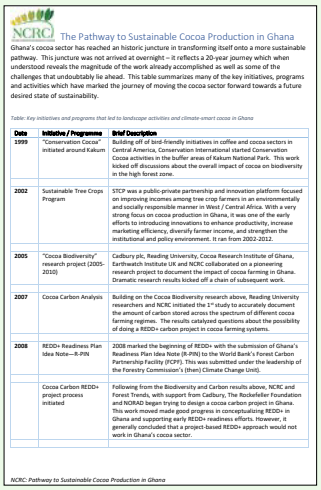
To completement the lessons and recommendations highlighted in the main document, this section of the toolbox provides a concise set of lessons that have been learned on implementing landscape governance. Section 6 also speaks to the lessons and options for benefit sharing; the toolbox therefore contains the final draft of Ghana's GCFRP Benefit Sharing Plan.

- **Summary of lessons learned (NCRC, Touton, 3PRCL, P4F):** In December 2019, at a P4F meeting in Abidjan, NCRC compiled a set of lessons that it has learned in the implementation of the Juabeso-Bia HIA, in partnership P4F, as well as lessons from the Kakum landscape and from CREMA implementation over the decades. This document summarizes these lessons.

- **GCFRP Benefit Sharing Plan (FC):** Under the GCFRP, Ghana has signed an agreement with the World Bank's Carbon Fund to produce 10 million tons of emission reductions. If Ghana is successful, then the CF will pay Ghana up to USD50 million as performance-based payments for the emissions from deforestation that have been reduced. This document is the plan for how these "carbon benefits" (performance-based payments) will be shared amongst stakeholders, including cocoa farmers, communities and traditional leaders in HIAs and key government agencies.

Toolbox Attachment

Resources from Section 1.2



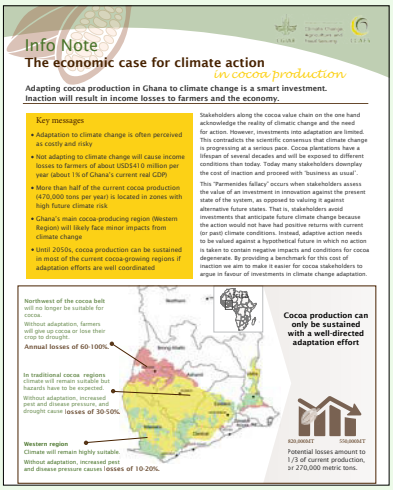
NCRC The Pathway to Sustainable Cocoa Production in Ghana

Ghana's cocoa sector has reached an historic juncture in transforming itself onto a more sustainable pathway. This juncture was not arrived at overnight – it reflects a 20-year journey which when understood reveals the magnitude of the work already accomplished as well as some of the challenges that undoubtably lie ahead. This table summarizes many of the key initiatives, programs and activities which have marked the journey of moving the cocoa sector forward towards a future desired state of sustainability.

Table: Key initiatives and programs that led to landscape activities and climate-smart cocoa in Ghana

Date	Initiative / Programme	Brief Description
1999	"Conservation Cocoa" initiated around Kakum	Building off of bird-friendly initiatives in coffee and cocoa sectors in Central America, Conservation International started Conservation Cocoa activities in the buffer areas of Kakum National Park. This work kicked off discussions about the overall impact of cocoa on biodiversity in the high forest zone.
2002	Sustainable Tree Crops Program	STCP was a public-private partnership and innovation platform focused on improving incomes among tree crop farmers in an environmentally and socially responsible manner in West / Central Africa. With a very strong focus on cocoa production in Ghana, it was one of the early efforts to introducing innovations to enhance productivity, increase marketing efficiency, diversify farmer income, and strengthen the institutional and policy environment. It ran from 2002-2012.
2005	"Cocoa Biodiversity" research project (2005-2010)	Cadbury plc, Reading University, Cocoa Research Institute of Ghana, Earthwatch Institute UK and NCRC collaborated on a pioneering research project to document the impact of cocoa farming in Ghana. Dramatic research results kicked off a chain of subsequent work.
2007	Cocoa Carbon Analysis	Building on the Cocoa Biodiversity research above, Reading University researchers and NCRC initiated the 1st study to accurately document the amount of carbon stored across the spectrum of different cocoa farming regimes. The results catalyzed questions about the possibility of doing a REDD+ carbon project in cocoa farming systems.
2008	REDD+ Readiness Plan Idea Note—R-PIN	2008 marked the beginning of REDD+ with the submission of Ghana's Readiness Plan Idea Note (R-PIN) to the World Bank's Forest Carbon Partnership Facility (FCPF). This was submitted under the leadership of the Forestry Commission's (then) Climate Change Unit).
	Cocoa Carbon REDD+ project process initiated	Following from the Biodiversity and Carbon results above, NCRC and Forest Trends, with support from Cadbury, The Rockefeller Foundation and NORAD began trying to design a cocoa carbon project in Ghana. This work moved made good progress in conceptualizing REDD+ in Ghana and supporting early REDD+ readiness efforts. However, it generally concluded that a project-based REDD+ approach would not work in Ghana's cocoa sector.

NCRC: Pathway to Sustainable Cocoa Production in Ghana



Info Note
The economic case for climate action
in cocoa production

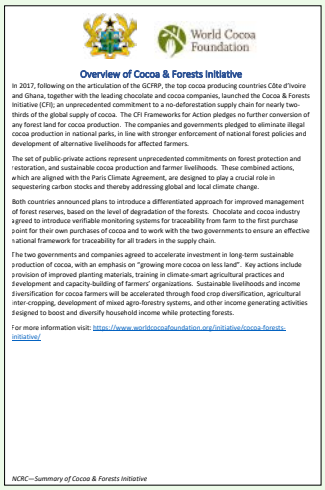
Adapting cocoa production in Ghana to climate change is a smart investment. Inaction will result in income losses to farmers and the economy.

Key messages

- Adaptation to climate change is often perceived as costly and risky
- Not adapting to climate change will cause income losses to farmers of about USD541 0 million per year (about 1% of Ghana's current real GDP)
- More than half of the current cocoa production (470,000 tons per year) is located in zones with high future climate risk
- Ghana's main cocoa-producing region (Western Region) will likely face minor impacts from climate change
- Until 2050s, cocoa production can be sustained in most of the current cocoa-growing regions if adaptation efforts are well coordinated

Stakeholders along the cocoa value chain on the one hand acknowledge the reality of climatic change and the need for action. However, investments into adaptation are limited. This contradicts the scientific consensus that climate change is progressing at a serious pace. Cocoa plantations have a lifespan of several decades and will be exposed to different conditions than today. Today many stakeholders downplay the cost of inaction and proceed with 'business as usual'.

This "Parmenides fallacy' occurs when stakeholders assess the value of an investment in innovation against the present state of the system, as opposed to valuing it against alternative future states. That is, stakeholders avoid investments that anticipate future climate change because the action would not have had positive returns with current (or past) climate conditions. Instead, adaptive action needs to be valued against a hypothetical future in which no action is taken to contain negative impacts and conditions for cocoa degenerate. By providing a benchmark for this cost of inaction we aim to make it easier for cocoa stakeholders to argue in favour of investments in climate change adaptation.



World Cocoa Foundation

Overview of Cocoa & Forests Initiative

In 2017, following on the articulation of the GCFRP, the top cocoa producing countries Côte d'Ivoire and Ghana, together with the leading chocolate and cocoa companies, launched the Cocoa & Forests Initiative (CFI); an unprecedented commitment to a no-deforestation supply chain for nearly two-thirds of the global supply of cocoa. The CFI Frameworks for Action pledges no further conversion of any forest land for cocoa production. The companies and governments pledged to eliminate illegal cocoa production in national parks, in line with stronger enforcement of national forest policies and development of alternative livelihoods for affected farmers.

The set of public-private actions represent unprecedented commitments on forest protection and restoration, and sustainable cocoa production and farmer livelihoods. These combined actions, which are aligned with the Paris Climate Agreement, are designed to play a crucial role in sequestering carbon stocks and thereby addressing global and local climate change.

Both countries announced plans to introduce a differentiated approach for improved management of forest reserves, based on the level of degradation of the forests. Chocolate and cocoa industry agreed to introduce verifiable monitoring systems for traceability from farm to the first purchase point for their own purchases of cocoa and to work with the two governments to ensure an effective national framework for traceability for all traders in the supply chain.

The two governments and companies agreed to accelerate investment in long-term sustainable production of cocoa, with an emphasis on "growing more cocoa on less land". Key actions include provision of improved planting materials, training in climate-smart agricultural practices and development and capacity-building of farmers' organizations. Sustainable livelihoods and income diversification for cocoa farmers will be accelerated through food crop diversification, agricultural inter-cropping, development of mixed agro-forestry systems, and other income generating activities designed to boost and diversify household income while protecting forests.

For more information visit: https://www.worldcocoafoundation.org/initiative/cocoa-forests-initiative/

NCRC—Summary of Cocoa & Forests Initiative

Understanding and Defining Climate-Smart Cocoa: Extension, Inputs, Yields, and Farming Practices

January 2014

NCRC FOREST TRENDS

OVERVIEW OF GHANA'S ERPD:
GHANA COCOA FOREST REDD+ PROGRAMME

TOWARDS DEFORESTATION-FREE, CLIMATE-SMART COCOA PRODUCTION IN GHANA

Forestry Commission
GHANA COCOA BOARD
GhREDD+

Forestry Commission GhREDD+

Ghana Cocoa Forest REDD+ Programme
Executive Summary
FCPF Carbon Fund Meeting, Paris
June, 2017

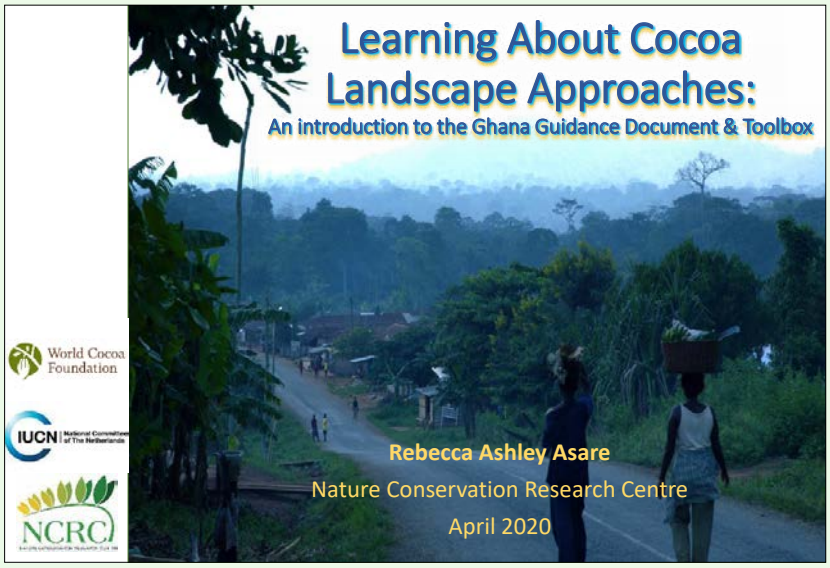
Ghana's cocoa forest + landscape has **one of the highest deforestation rates in Africa**, at **3.2% per annum**. Forest degradation and deforestation across this agro-forest mosaic, which covers 5.9 million ha of Ghana's High Forest Zone (HFZ), is being driven by continued cocoa farm expansion and other types of agriculture, coupled with a recent up-surge in illegal mining and illegal logging.

Historically, over the past hundred years, degradation and deforestation in Ghana's HFZ has been driven by low-yielding, expansive agriculture—predominantly cocoa farming—coupled with the progressive growth of other extractive industries. For much of this time, conversion of forests was not viewed as a problem, but by the mid-nineties it was clear that Ghana's forest reserves were moderately to severely degraded, low-to-no shade cocoa was expanding at the expense of forests and trees, and biodiversity in the landscape had declined precipitously. Concurrent with the loss of forests, Ghana's Cocoa Board and the cocoa private sector also recognized that the country was underperforming in terms of national production, despite the growing area under cocoa.

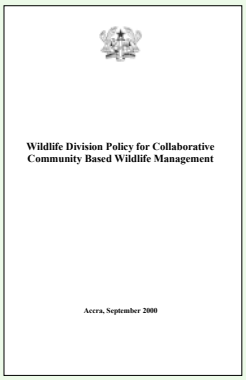
While the cocoa sector responded with a "High Tech" programme (2000-2010) in an effort to boost yields, little was done to address deforestation and degradation, or the loss of critical ecosystem services. Over the past seven years, the scale of these drivers has increased due to: 1) recent declines in cocoa productivity, causing greater expansion; 2) an increase in illegal logging from a growing domestic demand; and 3) an up-surge in illegal, small-scale mining due to market trends, the availability of foreign and local laborers, and landowners giving up unproductive farms for mining. As a result, **the programme's FRL for the period 2005-2014 shows that the area has lost an average of 138,624 ha of forest each year,** and has produced **over 45.1 million tCO2e emissions on an annual basis** from the combined effects of deforestation and degradation, and taking into account carbon stock enhancement. Conversion of forests to agricultural land was identified as the primary driver of deforestation—114,915 ha of forests per annum (1.15 million ha over the accounting period) was converted to agriculture during the reference period and this accounted for 83 percent of deforestation in the programme area. Of this, conversion to food crops, from which cocoa establishment typically follows, accounted for two-thirds (66%) of forest loss. **Over a quarter (27%) of agriculture conversion resulted from cocoa expansion, making it the single most important commodity driver of deforestation in the programme area.**

These numbers signal a worrisome future for Ghana's high forests and its cocoa sector, as well as for the 12 million people who reside in the landscape and rely, in one way or another, on forest resources and cocoa production for their livelihoods. On the other hand, what is highly encouraging is that **Ghana is now prepared to tackle these issues and significantly reduce deforestation and degradation in this landscape through the Ghana Cocoa Forest REDD+ Programme (GCFRP),** which leverages a strong private sector commitment and investment into a climate-smart cocoa production system and standard, and supported by a suite of policy interventions and reforms.

Resources from Section 2.5

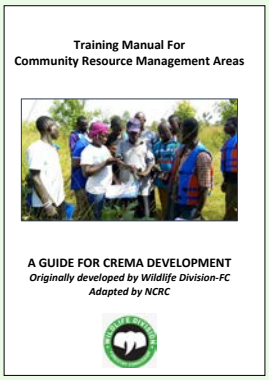


Resources from Section 3.2



Wildlife Division Policy for Collaborative Community Based Wildlife Management

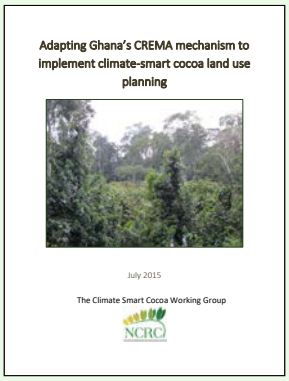
Accra, September 2000



Training Manual For Community Resource Management Areas

A GUIDE FOR CREMA DEVELOPMENT

Originally developed by Wildlife Division-FC
Adapted by NCRC



Adapting Ghana's CREMA mechanism to implement climate-smart cocoa land use planning

July 2015

The Climate Smart Cocoa Working Group

Overview of CREMA

Ghana's cocoa landscape is a mosaic of farms, off reserve forests, gazetted forest reserves, fallows and human settlements adjoining one another. Cocoa cultivation and the absence of land use planning in cocoa distribution is driving deforestation and forest degradation as a result of encroachment of cocoa farms into forest reserves and the loss of shade trees and forest patches in the cocoa farming landscape. Landscape level land-use planning and governance has been identified as a critical tool to reduce encroachment of farms into forest reserves and ensure greater overall environmental sustainability.

At least eighty (80%) percent of Ghana's lands are held under customary tenure arrangements, the principal custodians being traditional rulers, earth priests, councils of elders, and family or lineage heads. Customary tenure is the main tenure arrangement within the cocoa growing landscape.

Though the majority of land is held under customary tenure, its custodians are technically and financially limited in their ability to ensure sustainable land use decisions and reforms without external support. In addition, the existing government mechanism for land use planning focuses on physical urban and infrastructure planning, to the neglect of rural areas where agriculture production is the major land use decision. In effect, the planning and management of rural landscapes is left for the individual or customary custodians. As a result, landscape scale governance and land-use planning within rural cocoa areas does not occur under the business as usual scenario.

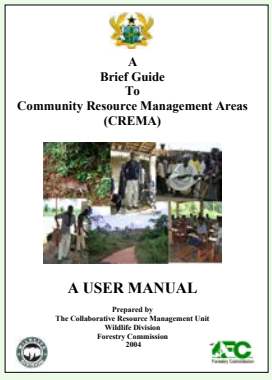
Customary land management institutions are inadequate to facilitate such planning on their own, as they face multiple challenges of significant magnitude. Customary institutions lack the funding and capacity to implement policies effectively. Ownership information and the location of boundaries are often derived from oral tradition and memory rather than with reference to surveyed maps, and this situation provides a fertile ground for litigation and insecurity of land under the customary system.

Since the 1994 Forest and Wildlife Policy, the government introduced a number of innovations to encourage local communities' participation in the management and sharing of benefits from the forest. The most successful of these measures has been the Community Resource Management Area (CREMA).

The CREMA approach has resulted in improved natural resources governance, conservation awareness, and increased collective community action in numerous jurisdictions. It has helped to reduced incidences of the anthropogenic activities underlying deforestation and forest degradation activities. CREMA mechanism is particularly well suited to focus on landscape level land-use planning and governance.

The strengths and unique characteristics of the CREMA mechanism include its constitution, the establishment of a management board or executive committee, community-level committees, and agreed rules and regulations that are ultimately backed by district by-laws and endorsed by the local government and traditional authorities. A certificate of devolution of management responsibility and authority, issued by the Minister responsible for Lands and Forestry, is achievable through the CREMA process. In principle, CREMAs encourage and can facilitate a community-based assessment and planning process, democratic decision making by the local leadership, and benefit-sharing amongst all stakeholders. These and other tenets of the CREMA mechanism provide useful processes and structures to support participatory landscape level planning at the grassroots to reduce encroachment of cocoa farms into forest reserves.

Landscape-level approaches in Ghana's cocoa forests required improved landscape management and the CREMA mechanism has been adapted to deliver collaborative land-use planning for cocoa landscapes through HIA and Sub-HIA structures.

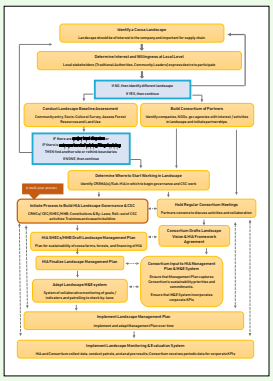


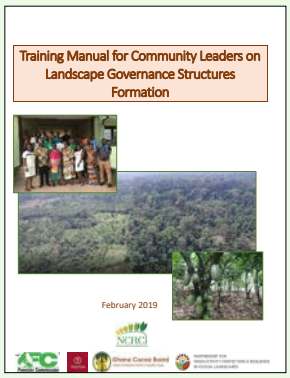
A
Brief Guide
To
Community Resource Management Areas
(CREMA)

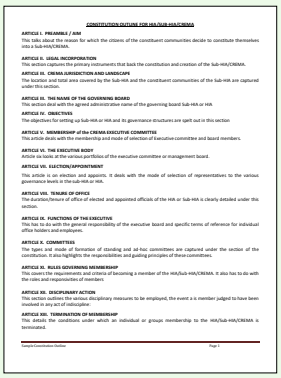
A USER MANUAL

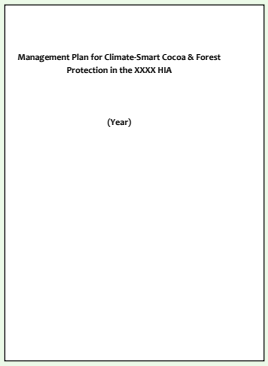
Prepared by
The Collaborative Resource Management Unit
Wildlife Division
Forestry Commission
2004

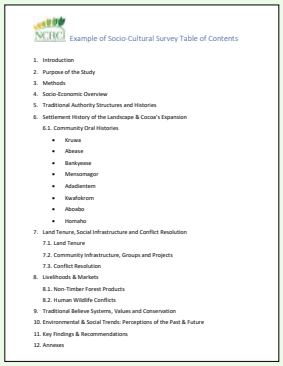
Resources from Section 3.6

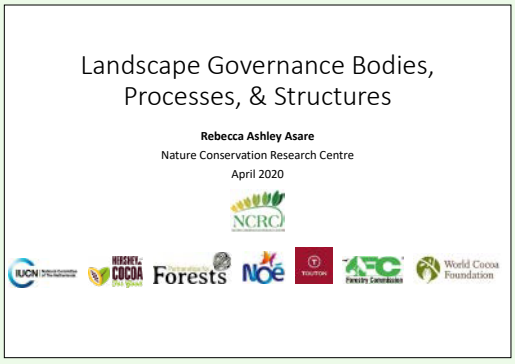


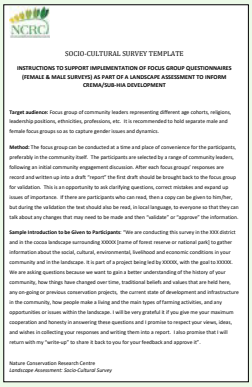


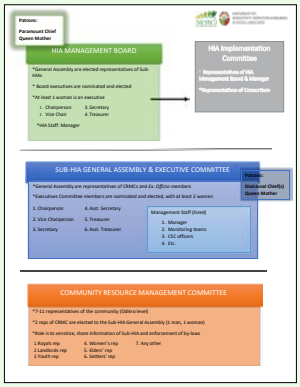


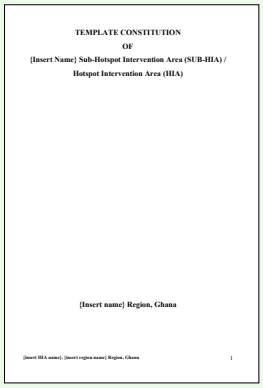


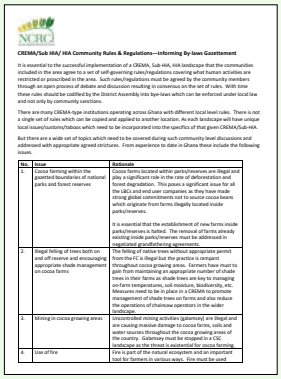




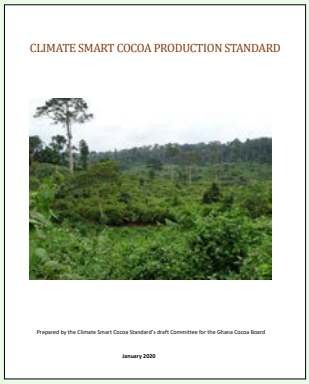








Resources from Section 4.2

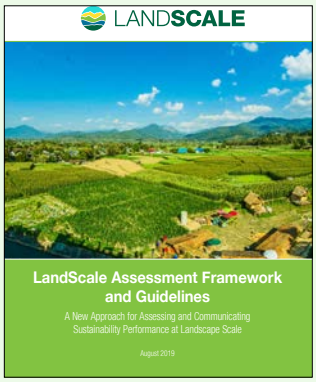


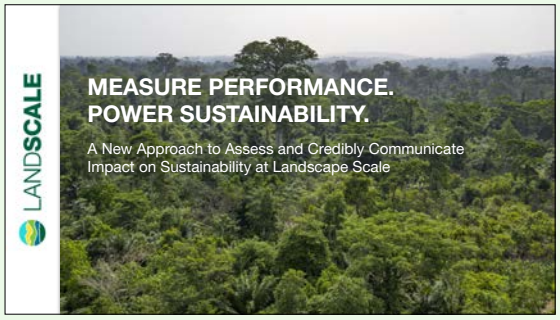
Accountability Framework URL: https://accountability-framework.org/

LandScale URL: https://www.landscale.org/

IDH URL: https://www.idhsustainabletrade.com/

Resources from Section 4.3





Resources from Section 5.1

Ghana Darwin Initiative Biodiversity Policy & Practice Brief

No. 2: Smallholder Oil palm Management and Biodiversity

Key Messages

Ghana's smallholder oil palm farms support high levels of biodiversity.

Smallholder oil palm farmers' adoption of Best Agricultural Practices (BAPs) can increase fruit yields while supporting biodiversity conservation.

Summary

- Smallholder oil palm farmers play a vital role in the global production of palm oil but have much lower yields than large-scale industrial plantations. In recognition of this yield gap, smallholders are increasingly encouraged to adopt 'Best Agricultural Practices' that can potentially boost fruit yields while minimising harm to biodiversity. However, there is little evidence concerning impacts of crop management on biodiversity in oil palm smallholdings.
- We studied the biodiversity of birds, butterflies, moths and ants on oil palm smallholdings in Ghana, first comparing oil palm with protected forest, then examining how the management of oil palm plantings affected species richness and composition.
- We found that smallholder oil palm farms supported high levels of biodiversity compared to large-scale industrial plantations, with little evidence that biodiversity was adversely affected by increasing management intensity in keeping with best Agricultural Practices.
- We identify a number of recommendations focusing on conserving biodiversity in smallholdings through sustainable best practice.

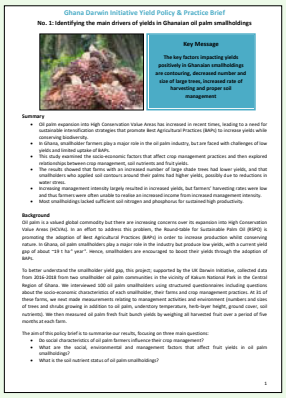
Background

Concern is growing over adverse effects of agricultural expansion and intensification on global biodiversity. Oil palm production is of particular concern, with IUCN recently reporting more than 400 species facing severe threats from oil palm production, largely associated with large-scale industrial plantations.

Smallholder oil palm farmers play an important role globally (~40%) in the production of palm oil. In Ghana, oil palm smallholdings occupy about 300,000 ha (~90% of the total area of oil palm cultivation) and produce 84% of the overall output. Few studies, however, have examined smallholder oil palm systems in West Africa, where oil palm is an endemic species of tree.

Of great important is that biodiversity provides multiple benefits to managed ecosystems'. For instance, in agricultural landscapes, bath ants and termites can enhance soil fertility by improving soil structure, and termites additionally break down cellulose and lignin, which are rich in nitrogen, making it more readily available to plants. In addition, insects and birds may act both as pollinators and as predators of crop pests, so increasing crop production and benefiting farmers' incomes.

Our project, supported by the UK Darwin Initiative, collected data on these issues in 2017 from a smallholder oil palm growing landscape around Kakum National Park in Ghana, with a focus on biodiversity of birds, butterflies, moths and ants. The aim of this policy brief is to summarise our results around three key questions: **(1) What is the species richness of biodiversity in oil palm compared to forest? (2) How do**



Ghana Darwin Initiative Yield Policy & Practice Brief

No. 1: Identifying the main drivers of yields in Ghanaian oil palm smallholdings

Key Message

The key factors impacting yields positively in Ghanaian smallholdings are contouring, decreased number and size of large trees, increased rate of harvesting and proper soil management

Summary

- Oil palm expansion into High Conservation Value Areas has increased in recent times, leading to a need for sustainable intensification strategies that promote Best Agricultural Practices (BAPs) to increase yields while conserving biodiversity.
- Oil palm smallholder farmers play a major role in the oil palm industry, but are faced with challenges of low yields and limited uptake of BAPs.
- This study examined the socio-economic factors that affect crop management practices and then explored relationships between crop management, soil nutrients and fruit yields.
- The results showed that farms with an increased number of large shade trees had lower yields, and that smallholders who applied soil contours around their palms had higher yields, possibly due to reductions in water stress.
- Increasing management intensity largely resulted in increased yields, but farmers' harvesting rates were low and that farmers were often unable to realise an increased income from increased management intensity.
- Most smallholdings lacked sufficient soil nitrogen and phosphorus for sustained high productivity.

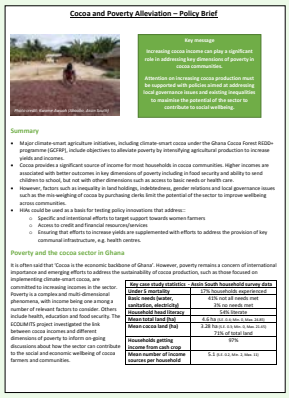
Background

Oil palm is a valued global commodity but there are increasing concerns over its expansion into High Conservation Value Areas (HCVAs). In an effort to address this problem, the Round-table for Sustainable Palm Oil (RSPO) is promoting the adoption of Best Agricultural Practices (BAPs) in order to increase production whilst conserving nature. In Ghana, oil palm smallholders play a major role in the industry but produce low yields, with a current yield gap of about ~3 t ha^{-1} yr^{-1}. Hence, smallholders are encouraged to boost their yields through the adoption of BAPs.

To better understand the smallholder yield gap, this project, supported by the UK Darwin Initiative, collected data from 2016-2018 from two smallholder oil palm communities in the vicinity of Kakum National Park in the Central Region of Ghana. We interviewed 100 oil palm smallholders using structured questionnaires including questions about the socio-economic characteristics of each smallholder, their farms and crop management practices. At 31 of these farms, we next made measurements relating to management activities and environment (numbers and sizes of trees and shrubs growing in addition to oil palm, understory temperature, herb-layer height, ground cover, soil nutrients). We then measured oil palm fresh fruit bunch yields by weighing all harvested fruit over a period of five months at each farm.

The aims of this policy brief is to summarise our results, focusing on three main questions:

- Do social characteristics of oil palm farmers influence their crop management?
- What are the social, environmental and management factors that affect fruit yields in oil palm smallholdings?
- What is the soil nutrient status of oil palm smallholdings?



Cocoa and Poverty Alleviation – Policy Brief

Key message

Increasing cocoa income can play a significant role in addressing key dimensions of poverty in cocoa communities.

Attention on increasing cocoa production must be supported with policies aimed at addressing land governance issues and existing inequalities to maximise the potential of the sector to contribute to social wellbeing.

Photo credit: Kwame Boateng Ofosuhene, Asem South

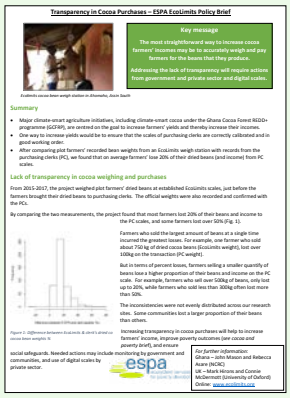
Summary

- Major climate-smart agriculture initiatives, including climate-smart cocoa under the Ghana Cocoa Forest REDD+ programme (GCFRP), include objectives to alleviate poverty by intensifying agricultural production to increase yields and incomes.
- Cocoa provides a significant source of income for most households in cocoa communities. Higher incomes are associated with better outcomes in key dimensions of poverty including in food security and ability to send children to school, but not with other dimensions such as access to basic needs or health care.
- However, factors such as inequality in land holdings, indebtedness, gender relations and local governance issues such as the mis-weighing of cocoa by purchasing clerks limit the potential of the sector to improve wellbeing across communities.
- HIAs could be used as a basis for testing policy innovations that address::
  - Specific and intentional efforts to target support towards women farmers
  - Access to credit and financial resources/services
  - Ensuring that efforts to increase yields are supplemented with efforts to address the provision of key communal infrastructure, e.g. health centres.

Poverty and the cocoa sector in Ghana

It is often said that 'Cocoa is the economic backbone of Ghana'. However, poverty remains a concern of international importance and emerging efforts to address the sustainability of cocoa production, such as those focused on implementing climate-smart cocoa, are committed to increasing incomes in the sector. Poverty is a complex and multi-dimensional phenomena, with income being one among a number of relevant factors to consider. Others include health, education and food security. The ECOLIMITS project investigated the link between cocoa incomes and different dimensions of poverty to inform on-going discussions about how the sector can contribute to the social and economic wellbeing of cocoa farmers and communities.

Key case study statistics - Asein South household survey data	
Under 5 mortality	17% households experienced
Basic needs (water, sanitation, electricity)	41% not all needs met 3% no needs met
Household head literacy	54% literate
Mean total land (ha)	4.9 (SE 0.4, Min. 0, Max. 24.0)
Mean cocoa land (ha)	2.28 (SE 0.2, Min. 0, Max. 15.0)
Households getting income from cash crop	71% of total land 97%
Mean number of income sources per household	5.1 (S.E. 0.1, Min. 1, Max. 11)



Transparency in Cocoa Purchases – ESPA EcoLimits Policy Brief

Key Message

The most straightforward way to increase cocoa farmers' incomes may be to accurately weigh and pay farmers for the beans that they produce.

Addressing the lack of transparency will require actions from government and private sector and digital scales.

Ecolimits cocoa bean weight station in Ahomefia, Asein South

Summary

- Major climate-smart agriculture initiatives, including climate-smart cocoa under the Ghana Cocoa Forest REDD+ programme (GCFRP), are centred on the goal to increase farmers' yields and thereby increase their incomes.
- One way to increase yields would be to ensure that the sales of purchasing clerks are correctly calibrated and in good working order.
- After comparing pilot farmers' recorded bean weights from an EcoLimits weigh station with records from the purchasing clerks (PC), we found that on average farmers' lose 20% of their dried beans (and income) from PC scales.

Lack of transparency in cocoa weighing and purchases

From 2015-2017, the project weighed pilot farmers' dried beans at established EcoLimits scales, just before the farmers brought their dried beans to purchasing clerks. The official weights were also recorded and confirmed with the PCs.

By comparing the two measurements, the project found that most farmers lost 20% of their beans and income to the PC scales, and some farmers lost over 50% (Fig. 1).

Figure 1: Difference between Ecolimits & client's stated cocoa bean weights

Farmers who sold the largest amount of beans at a single time incurred the greatest losses. For example, one farmer who sold about 750 kg of dried cocoa beans (Ecolimits weight), lost over 100kg on the transaction (PC weight).

But in terms of percent losses, farmers selling a smaller quantity of beans lose a higher proportion of their beans and income on the PC scale. For example, farmers who sell over 500kg of beans, only lost up to 20%, while farmers who sold less than 300kg often lost more than 50%.

The inconsistencies were not evenly distributed across our research sites. Some communities lost a larger proportion of their beans than others.

Increasing transparency in cocoa purchases will help to increase farmers' income, improve poverty outcomes (*see cocoa and poverty brief*), and ensure social safeguards. Needed actions may include monitoring by government and communities, and use of digital scales by private sector.

For further information:
Ghana – John Mason and Rebecca Asare (NCRC)
UK – Mark Hirons and Connie McDermott (University of Oxford)
Online: www.ecolimits.org

Defining Climate-Smart Cocoa in Ghana:

Contributions from the ESPA EcoLimits Research Experience

Key message

In defining climate-smart cocoa, research shows that priority should be given to use of fertilizer, incorporating rotting biomass in farms to improve soil moisture and pollinator habitat, conserving forests in the landscape, and promoting at least 40% canopy cover shade at landscape scales.

Understanding climate-smart agriculture

According to the FAO, **climate-smart agriculture (CSA)** reflects an approach for developing agricultural strategies that aim to achieve sustainable food security under climate change. Broadly, this translates to policies that are focused on **food security (sustainably increasing crop yields and improving farmer incomes)**, **improving adaptation**, **building farmer resilience to climate change**, and **improving mitigation** (reducing or removing greenhouse gas emissions). Thus, any CSA approach should strive to encompass these goals.

The process of defining climate-smart cocoa in Ghana

In 2012, Ghanaian cocoa and forestry sector stakeholders initiated a strategic dialogue on "climate-smart cocoa" (CSC), and by 2016 government, multilateral donors, private sector chocolate companies, civil society and traditional leaders had all made strong commitments to implementing a CSC approach to reducing deforestation and forest degradation across the cocoa landscape and improving farmers' yields and incomes.

The collective understanding in Ghana of the CSC concept has also evolved over this time period, with significant work having been completed that recommends CSC practices, discusses cocoa adaptation and resilience under climate-change, and outlines the potential for a Ghana CSC standard. However, much of this work is based upon common knowledge and policies, without benefitting from ecosystem based research or field testing with farmers.

The importance of using research to test what should actually be promoted as "climate-smart" is critically important given the complexity of the socio-ecological relationships between livelihoods, yields, management practices, and environmental conditions and services, particularly in the context of a changing climate. Thus, this brief uses initial findings from the ESPA EcoLimits research, as well as other recent studies, to make some recommendations, based on research findings, towards how CSC is defined in specific practices and strategies that are promoted.

The logic of these recommendations stems from their alignment with the concept that CSA practices and strategies should help to increase yields and incomes, enable adaptation and resilience, and promote mitigation; and that many practices can likely contribute to multiple goals.

Research-based recommendations for climate-smart cocoa

Ghana has clear recommendations for best cocoa practices. Many of these practices were measured under the EcoLimits research and modelling was used to assess the impact on yields.

1. **Apply fertilizer:** At the EcoLimits research site, cocoa yields were higher if fertilizer was used. In fact, application of fertilizer was the most important determinant of higher yields. Across all of the research plots, soils were deficient in some important nutrients, like nitrogen. Ensuring widespread access to fertilizer and its use by farmers should be a key part of a CSC strategy.

Resilience to drought in Ghana's cocoa communities - Policy brief

Key message

Access to wetland areas and credit are key factors in determining people's resilience to drought.

Increasing choice of financial providers and pursuing landscape scale governance arrangements are important arenas for increasing resilience.

Summary

- The 2016-17 Nino event caused a drought in Ghana. The ECOLIMITS project examined the impact on people and what factors made people more or less resilient.
- Two key issues emerged during the research – people's access to wetland areas and ability to access credit and repay debts is critical for their ability to cope with and respond to droughts.
- Long-term implications of converting wetlands to cocoa requires research as it may be mal-adaptive.
- Informal rotating lending arrangements fulfil a vital purpose but can trap people in debt.
- Developing a greater choice of financial service providers in cocoa communities is critical, harnessing mobile technology may be a fruitful avenue worthy of greater investment.

Drought and resilience in the cocoa sector

This brief draws on a range of focus groups and interviews conducted between 2016 and 2017 that examined the impact and response to the drought caused by the 2015 El Niño event, which peaked in severity between November 2015 and April 2016. Respondents reported that the most significant impact of the drought was widespread failure of food and cash crops. This caused food shortages in villages and the lack of cash crop income resulted in children missing school and households being unable to afford healthcare and other costs.

Resilience refers to the ability of people, communities and ecosystems to cope and adapt to shocks. The 2015-2016 drought is an example of the shocks which may become more common under a changing climate and therefore the findings of this research are relevant for future exposure to drought.

The research showed that **people's ability to access wetland and borrow money during the drought** was **critical in determining the resilience of individuals and households** within communities.

Figure 1. Mass. Climatic water deficit (MCWD), a drought metric, 2003 – 2017 (Source: Ecolimits Research Team). The red line shows the line-graph behind that indicate water stress for a farm/cocoa environment.

Accessing wetlands

While crops, including cocoa, were reported to decline during the drought, farmers with access to wetland areas could grow and sell food crops. This was critical for individuals and communities' ability to cope with the drought. Yet, a lack of warning reaching farmers about the drought meant several wetland areas were un-utilised in communities during the drought which could have lessened the impact of the drought.

Many wetland areas have been historically protected through cultural norms (such as not fishing in certain places) in recognition that they retain moisture in the landscape and so provide a suitable environment for agriculture.

On-farm tree management in Ghana – Policy Brief

Key messages

Farmers' benefits from and control over trees on their farms is higher in the informal chainsaw sector than in the formal concessions system.

Formally recognising local and informal tree rights improves the prospects of achieving the aims of REDD+ and the FLEGT VPA.

Summary

- Major policy initiatives such as the FLEGT VPA and REDD+ aim to achieve sustainable forest management by eradicating illegal logging, reversing the expansion of cocoa farms and increasing the shade cover on farms.
- The ECOLIMITS project investigated the formal (state) and informal (customary) rights concerning trees on cocoa farms. The informal system allows farmers greater levels of control and benefits than the formal system, though these benefits are far less than market prices.
- Focussing on eradicating illegality risks undermining local access to timber and benefit-sharing, as well as sustainable landscape management more generally. Governance reform should focus instead on legalising existing informal systems of on-farm tree management.
- **Three steps could be tested in HIAs to advance maintenance and enhancement of tree cover, more equitable benefit-sharing and achievement of climate-smart cocoa shade management recommendations:**
  - **Grant farmers full management rights over their farms.**
  - **Legalise chainsaw operators and tax processed timber.**
  - **Phase out timber concessions/permits on farmland.**

Background: On-farm trees – linking REDD+ and FLEGT VPA

On-farm timber is a key issue that links two major forest policy initiatives. Ghana's REDD+ strategy aims to address deforestation caused by cocoa farming and enhance carbon stocks by increasing shade levels on cocoa farms. The voluntary partnership agreement (VPA) is a bilateral agreement between Ghana and the EU which aims to eradicate illegal logging. Understanding how formal and informal rights influence the management of trees on cocoa farms is essential for the success of both policy strategies and associated legislative reform. The ECOLIMITS project studied cocoa farming communities in the Central region for 4 years. This policy brief outlines the key findings of the research.

Formal rights to on-farm trees and their local impact

In Ghana, the economic rights to naturally occurring trees are vested in the state, while trees that are planted belong to the person who planted them. These are then granted to timber companies through a variety of concessions. Farmers rights are limited to: 1. Right to refuse concessionaires permission to fell trees; 2. Compensation for cocoa tree losses; 3. Community-level benefits received through social responsibility agreements (*see social responsibility brief*) and the paramount chief on behalf of the community. Our case study revealed challenges with all of these mechanisms.

Limits to cocoa yields and their implications for livelihoods and poverty

Key Message

We identify key ecological factors that could be manipulated by farmers to improve cocoa yields and income. These improvements could reduce aspects of poverty, but they would need to be accompanied by developments in communal infrastructure to be completely effective

Summary

- A range of policy initiatives aim to reduce poverty by improving cocoa yields and incomes, but it is unclear how these goals might be achieved.
- We show that cocoa yields appear to be limited by a few key ecological factors e.g. farms closer to the forest had higher yields, and some of these factors can be manipulated by farmers to improve yields.
- If these improvements can be realised, net incomes from cocoa could be increased significantly.
- We also show that only certain dimensions of poverty (education, assets, food-security and life satisfaction) are likely to improve in response to improvements in cocoa yields and income.
- Communal infrastructure (e.g. health centres, water supplies) in addition to agricultural development will be required to reduce poverty in cocoa farming communities.

Background

A policy goal for the cocoa-sector in Ghana is to improve yields and hence cocoa livelihoods. The evidence-base underpinning this goal is largely based on experimental farms, in which crop x (e.g. shade, fertiliser use) can be spatially explored in any single study. In contrast, little is known about the multiple factors affecting yields on actual farms in forest-agriculture landscapes, which is a critical knowledge gap if yields and livelihoods are to be improved at landscape scales.

How is – factors that might affect cocoa yields?

There are two main groups of factors that might affect cocoa yields – ecological and farm management. Cocoa production potentially relies on a range of ecological factors – proximity to forest habitats, rainfall to provide water, fertile soils, insect pollinators and pest control. Farmers can also potentially affect their yields through the management of cocoa planting density, shade, fertiliser and pesticide applications. Lastly, yields change as the cocoa trees age. Our project aimed to understand the importance of these factors in affecting cocoa yields, and then explore the potential for improving cocoa production in order to improve livelihoods and poverty.

Our project ECOLIMITS has been collecting data relevant to these issues for the last four years from cocoa growing landscapes around Kakum National Park (Box 1). The aim of this policy brief is to summarise our results around three key questions:

- What factors affect cocoa yields?
- How might yields be improved and what implications might this have for livelihoods?
- How might yield improvements contribute to poverty alleviation?

What factors affected cocoa yields?

To identify the most important factors affecting cocoa yields around Kakum National Park, we set-up 16 study plots on cocoa farms in three areas around the park. On each plot, we measured the productivity of cocoa trees (the data used here are from the heavy crop in 2014/15), and we collected measurements relating to the various ecological and farm management factors listed in Box 1. We then used a statistical analysis to identify the most important factors affecting cocoa yields.

Environmental Change Institute

Multi-stakeholder Policy Brief | November 2018

On-farm tree management in Ghana

Key messages

Farmers' benefits from and control over trees on their farms is higher in the informal chainsaw sector than in the formal concessions system.

Formally recognising local and informal tree rights improves the prospects of achieving the aims of REDD+ and the FLEGT VPA.

Summary

- Major policy initiatives such as the FLEGT VPA and REDD+ aim to achieve sustainable forest management by eradicating illegal logging, reversing the expansion of cocoa farms and increasing the shade cover on farms.
- The ECOLIMITS project investigated the formal (state) and informal (customary) rights concerning trees on cocoa farms. The informal system allows farmers greater levels of control and benefits than the formal system, though these benefits are far less than market prices.
- Focussing on eradicating illegality risks undermining local access to timber and benefit-sharing, as well as sustainable landscape management more generally. Governance reform should focus instead on legalising existing informal systems of on-farm tree management.
- Three steps could be tested in HIAs to advance maintenance and enhancement of tree cover, more equitable benefit-sharing and achievement of climate-smart cocoa shade management recommendations: 1) Grant farmers full management rights over their farms; 2) Legalise chainsaw operators and tax processed timber; 3) Phase out timber concessions/permits on farmland.

Background: On-farm trees – linking REDD+ and FLEGT VPA

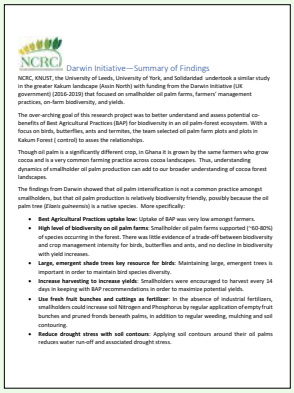
On-farm timber is a key issue that links two major forest policy initiatives. Ghana's REDD+ strategy aims to address deforestation caused by cocoa farming and enhance carbon stocks by increasing shade levels on cocoa farms. The voluntary partnership agreement (VPA) is a bilateral agreement between Ghana and the EU which aims to eradicate illegal logging. Understanding how formal and informal rights influence the management of trees on cocoa farms is essential for the success of both policy strategies and associated legislative reform. The ECOLIMITS project studied cocoa farming communities in the Central region for 4 years. This policy brief outlines the key findings of the research.

Formal rights to on-farm trees and their local impact

In Ghana, the economic rights to naturally occurring trees are vested in the state, while trees that are planted belong to the person who planted them. These are then granted to timber companies through a variety of concessions. Farmers rights are limited to: 1. Right to refuse concessionaires permission to fell trees; 2. Compensation for cocoa tree losses; 3. Community-level benefits received through social responsibility agreements (see social responsibility brief) and the paramount chief on behalf of the community. Our case study revealed challenges with all of these mechanisms.

FOR FURTHER INFORMATION:
UK: Mark Hirons (mark.hirons@ouce.ox.ac.uk) and Connie McDermott (connie.mcdermott@ouce.ox.ac.uk) | University of Oxford
Ghana: John Mason and Rebecca Asare (NCRC)

www.ecolimits.org



Darwin Initiative—Summary of Findings

NCRC, KNUST, the University of Leeds, University of York, and Solidaridad undertook a similar study in the greater Kakum landscape (Asin North) with funding from the Darwin Initiative (UK government) (2016-2019) that focused on smallholder oil palm farms, farmers' management practices, on-farm biodiversity, and yields.

The over-arching goal of this research project was to better understand and assess potential co-benefits of Best Agricultural Practices (BAP) for biodiversity in an oil palm-forest ecosystem. With a focus on birds, butterflies, ants and termites, the team selected oil palm farm plots and plots in Kakum Forest (1 control) to asses the relationships.

Though oil palm is a significantly different crop, in Ghana it is grown by the same farmers who grow cocoa and is a very common farming practice across cocoa landscapes. Thus, understanding dynamics of smallholder oil palm production can add to our broader understanding of cocoa forest landscapes.

The findings from Darwin showed that oil palm intensification is not a common practice amongst smallholders, but that oil palm production is relatively biodiversity friendly, possibly because the oil palm tree (*Elaeis guineensis*) is a native species. More specifically:

- **Best Agricultural Practices uptake low:** Uptake of BAP was very low amongst farmers.
- **High level of biodiversity on oil palm farms:** Smallholder oil palm farms supported (~60-80%) of species occurring in the forest. There was little evidence of a trade-off between biodiversity and crop management intensity for birds, butterflies and ants, and no decline in biodiversity with yield increases.
- **Large, emergent shade trees key resource for birds:** Maintaining large, emergent trees is important in order to maintain bird species diversity.
- **Increase harvesting to increase yields:** Smallholders were encouraged to harvest every 14 days in keeping with BAP recommendations in order to maximize potential yields.
- **Use fresh fruit bunches and cuttings as fertiliser:** In the absence of industrial fertilizers, smallholders could increase soil Nitrogen and Phosphorus by regular application of empty fruit bunches and pruned fronds beneath palms, in addition to regular weeding, mulching and soil contouring.
- **Reduce drought stress with soil contours:** Applying soil contours around their oil palms reduces water run-off and associated drought stress.

Ecolimits—Summary of Findings

In 2014, NCRC and partners at FORIG, Oxford University, University of Reading and the Zoological Society of London launch a project with funding from the Ecosystem Services for Poverty Alleviation (ESPA) grant mechanism (UK Government) and later the National Ecological Research Council (NERC—UK), to explore the relationships between tropical high forests , the ecosystem services that they furnish to the surrounding agricultural landscape, and poverty so as to better understand the ecological limit and trade-off to poverty alleviation through agricultural development. Dubbed "Ecolimits", the project was implemented from 2014-2017 in Ghana and Ethiopia. In Ghana, the focus was on a the Kakum National Park cocoa-forest landscape, and in Ethiopia it targeted a coffee-forest landscape in Oromia.

More specifically, the research in Ghana focused on understanding the relationships between forest ecosystem services, climate variables, and management practices on yields, and the relationship between yields, other social-economic factors and poverty. With additional funding from NERC, the research was also able to measure these relationships during the 2015 drought and El Nino event.

Using a combination of natural science and social science methods, across three 5 km forest-cocoa transects, 30 research plots, and 6 cocoa farming communities in the Kakum landscape, the research found that:

- **Increasing cocoa income can play a significant role in addressing key dimensions of poverty** in cocoa communities.
- **Attention on increasing cocoa production must be supported with policies aimed at addressing local governance issues** and existing inequalities to maximize the potential of the sector to contribute to social wellbeing.
- **Key ecological factors that could be manipulated by farmers to improve cocoa yields and income** were identified (*fertiliser application, leaving rotten biomass for pollinators, soil moisture and proximity to forests*). These improvements could reduce aspects of poverty, but they would need to be accompanied by developments in communal infrastructure to be completely effective.
- **In defining climate-smart cocoa**, research showed that **priority should be given to** use of **fertilizer, incorporating rotting biomass** in farms **to improve soil moisture** and **pollinator habitat**, **conserving forests in the landscape**, and **promoting at least 40% canopy cover shade at landscape scales**.
- **Farmers' benefits from and control over trees on their farms is higher in the informal chainsaw sector** than in the formal concessions system.
- **Formally recognizing local and informal tree rights improves the prospects of achieving the aims of REDD+** and the FLEGT VPA.
- **Access to wetland areas and credit are key factors in determining people's resilience to drought.**
- **Increasing choice of financial providers** and **pursuing landscape scale governance** arrangements are **important arenas for** increasing **resilience**.
- The **most straightforward way to increase cocoa farmers' incomes** may be to **accurately weigh and pay farmers for the beans** that they produce.
- Addressing the **problems in bean weighing** will **require actions from government and private sector**, like digital scales.

Project Factsheet

Project duration: July 2016 – June 2022
Implementation partner: Nature Conservation Research Centre (NCRC)
Further partners: –
Project countries involved: Actions involved in cocoa sustainability
Focus areas involved: Increasing the understanding about the farmers and their environment

Adapting and Testing an Approach for Monitoring & Evaluating Climate Smart Cocoa CREMAs

Ghana

Background

Ghana is currently implementing the Ghana Cocoa Forest REDD+ Programme (GCFRP), which aims to achieve a nationally balanced emission reductions program, all while sound private sector support from the Cocoa

Ghana, the key implementation strategy for implementing the GCFRP is the Cocoa Resilient and Productive Landscapes (Areas – which will adopt the Community Resource Management Areas (CREMA) governance model to implement the GCFRP at the scale of these ten initiatives, as it will empower traditional landowners and communities to take charge of the management of their forest resources. Nature Conservation Research Centre (NCRC) is to take on to implement CSC- and related aggressively practices into a more forest landscape with the full support, involvement and benefit of the local stakeholders.

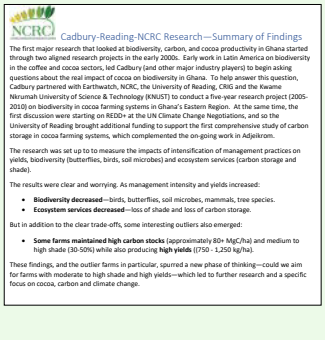
In at least two HIAs, implementation efforts are already underway, with the establishment of Community Resource Management Areas (CREMAs), as well as the operationalization of Community Resource Management Committees (CRMCs). The CREMA model is a multi-stakeholder platform for the management of community resources, initiated by higher-level executive committees and landscapes boards to ensure that the management of forest resources is governed by clear and transparent rules. Other institutions are will also be involved in a co-opted manner through the establishment of Memoranda of Understanding (MoUs) and Agreements about the management of the landscape and the terms of collaborating. Through the CREMA model, communities are also able to develop bye-laws that can be enforced by the Forestry Commission in a partnership that ensures transparency and accountability in the utilization of forest resources. Ultimately, the CREMA model is used to channel benefits

Project context

The Nature Conservation Research Centre (NCRC), with support from the Lindt Cocoa Foundation, is there to implement climate-smart cocoa practices in the areas in the Central Region of Ghana to develop and test an NGO system that can be applied across these landscapes. Implementation efforts in these areas will adopt and focus on a community monitoring system. NGC approach that it has been using in a market CSRI, in Southern Ghana, and combine it with research methods NCRC has used in cocoa and oil palm sys... Ghana and Indonesia. Through the use of this approach, key climate-smart cocoa CREMAs in HIAs in the areas implemented in 2019 and 2020. The project will also ... economic sustainability, (2) ecological sustainability, and (3) linkages between cocoa and CREMA-related activities. Project activities will include: (1) community mapping, livelihoods and wellbeing, (2) practice adoption and yields, biodiversity, and ecosystem health, landscape governance and (3) linkages between cocoa and CREMA. NCRC also anticipates that this monitoring system can play an important role in furnishing data and information that is necessary for the successful design, monitoring and implementation of a newly developing global cocoa standard. Certificate of sustainability aimed at developing programs across community, and executive workshops on a range of topics.

The project, which started in July 2019, will be implemented in the climate-smart cocoa HIA landscape on the western and northern boundaries of Kakum National

Lindt Cocoa Foundation, Street name 234, CH-8810 Kilchberg



Cadbury-Reading-NCRC Research—Summary of Findings

The first major research that looked at biodiversity, carbon, and cocoa productivity in Ghana started through two aligned research projects in the early 2000s. Early work in Latin America on biodiversity in the coffee and cocoa sectors, led Cadbury (and other major industry players) to begin asking questions about the real impact of cocoa on biodiversity in Ghana. To help answer this question, Cadbury partnered with Earthwatch, NCRC, the University of Reading, CRIG and the Kwame Nkrumah University of Science & Technology (KNUST) to conduct a five-year research project (2005-2010) on biodiversity in cocoa farming systems in Ghana's Eastern Region. At the same time, the first discussion were starting on REDD+ at the UN Climate Change Negotiations, and so the University of Reading brought additional funding to support the first comprehensive study of carbon storage in cocoa farming systems, which complemented the on-going work in Adjeikrom.

The research was set up to to measure the impacts of intensification of management practices on yields, biodiversity (butterflies, birds, soil microbes) and ecosystem services (carbon storage and shade).

The results were clear and worrying. As management intensity and yields increased:

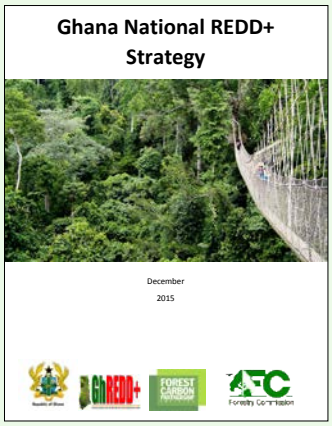
- **Biodiversity decreased**—birds, butterflies, soil microbes, mammals, tree species.
- **Ecosystem services decreased**—loss of shade and loss of carbon storage.

But in addition to the clear trade-offs, some interesting outliers also emerged:

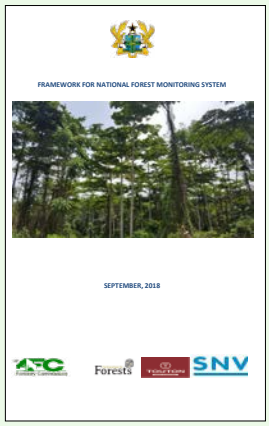
- **Some farms maintained high carbon stocks** (approximately 80+ MgC/ha) and medium to high shade (30-50%) while also producing **high yields** (750 - 1,250 kg/ha).

These findings, and the outlier farms in particular, spurred a new phase of thinking—could we aim for farms with moderate to high shade and high yields—which led to further research and a specific focus on cocoa, carbon and climate change.

Resources from Section 5.2


Ghana National REDD+ Strategy

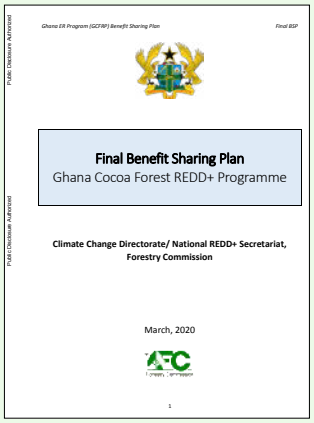
December
2015


FRAMEWORK FOR NATIONAL FOREST MONITORING SYSTEM

SEPTEMBER, 2018

Link to GCFRP Social Information System:
http://reddsis.fcghana.org/index.php

Resources from Section 6.0


Ghana ER Program (GCFRP) Benefit Sharing Plan — Final BSP

Public Disclosure Authorized

Final Benefit Sharing Plan
Ghana Cocoa Forest REDD+ Programme

Climate Change Directorate/ National REDD+ Secretariat, Forestry Commission

March, 2020

Summary of Lessons Learned from Landscape Governance Implementation

In October, 2019, NCRC and Touton (partners under the Partnership for Productivity, Protection and Resilience (3PRCL)) participated in a Partnership for Forests (P4F) workshop in Abidjan to share lessons on the implementation of landscape-governance. NCRC drew these lessons through the experience of building landscape governance structures in the Juabeso-Bia HIA, similar work in the Kakum landscape, and decades of experience supporting the development and implementation of CREMAs.

Lessons on landscape governance implementation

- **Landscape governance is not complicated:** Organizations or companies who want to implement or support landscape governance should not be intimidated by the concept. It is not complicated; it just requires commitment and time. With the appropriate approach (described herein), communities, their leaders, the private sector, NGOs and government stakeholders can understand the model and take it forward together.
- **Just get started:** Do not wait for the perfect concept or conditions. It is best to initiate the work and know that others (local people and landscape stakeholders) will follow in good time. Good work will speak for itself and others will want to join.
- **There is room for all stakeholders:** Implementing and supporting landscape governance is not a single entity's responsibility. There is space (and the need) for multiple stakeholders to support the work and play roles in implementation. In doing this, there is also scope for learning, and learning by new stakeholders should be recognized as key part of the process.
- **Landscape governance should not be rushed:** Supporting the development of the various governance structures, from CREMA to Sub-HIA to HIA requires time and a sustained effort. The dynamics and sensitivities of people, communities and traditional authorities are real. A moderately paced, step-wise approach will build a strong foundation on which to grow. Rushing (often driven by project deadlines) often lead to mistakes, miscommunications and weak structures. Moving too quickly can result in decisions or issues that can undermine the process later on. Landscape governance building is not a race. The best teacher is time and experience.
- **HIA / Landscape financial sustainability is essential:** If a landscape and the governance structure do not have financial sustainability, then the system will not function on the ground. This is the most overlooked and misunderstood element of landscape governance. It is recommend to develop the resource based to generate sustainable revenue which can be invested in a Trust Fund to support governance activities in perpetuity.
- **Adopt a phased approach to landscape governance:** It is neither necessary nor realistic to achieve a whole HIA landscape in a single effort. A phased approach offers many advantages.
- **Multiple Goals/Objectives are required for success:** Reducing emissions from deforestation and forest degradation (REDD+) is the foundational goal across all types of landscape

NCRC
NATURE CONSERVATION RESEARCH CENTRE

Nature Conservation Research Centre (NCRC)
T: +233(0) 302264634
E: info@natureconservationresearchcentre.org
PO Box KN925, Kaneshie-Accra-Ghana
www.natureconservationresearchcentre.org