



# CGIAR Consortium's Approach to Healthy Landscapes


*CGIAR is a global research partnership for a food secure future*



Photo: Neil Palmer/CIAT

Frank Rijsberman, CEO CGIAR Consortium  
Landscapes Panel, GFIA  
Abu Dhabi, February 4, 2014

# Healthy Landscapes: What, Why, How?



*"The future of forests, food and climate are so closely bound that it is vital we start developing a shared agenda... We need to build healthy, productive landscapes... that support the livelihoods of billions of people and we must slow climate change ..,"* - Rachel Kyte, Vice President for Sustainable Development at the World Bank (U.N. Climate talks, Warsaw, 2013)




Photo: Neil Palmer/CIAT

# What is the “landscapes” approach?

## Agriculture, nature and people



Photo: Neil Palmer/CIAT

The **landscapes approach** provides a broad framework that can fully integrate agriculture, the natural environment, different livelihood systems and social interactions towards a sustainable development agenda

# Why is a landscapes approach important?



**3** billion people living in **rural areas** depend on agriculture  
**and** forestry for their **livelihoods**



# Why is a landscapes approach important?

Agriculture contributes to **75%** of global deforestation

# Why is a landscapes approach important?



The dynamics between forests **and** agriculture in landscapes determines the flow of ecosystem services

# Why is a landscapes approach important?

We have to tackle **agriculture, forestry and livelihoods** together, and a **landscapes approach** does this



# The problem: mismanaging resources

## We have mismanaged our natural resources



**24**

billion tons of  
soil annually  
lost



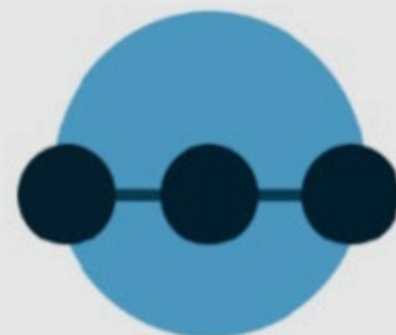
**12,000**

cubic kilometers  
of polluted water



**7.3**

million ha of forest  
loss per year



**12**

million metric tons  
of carbon dioxide is  
from Agriculture

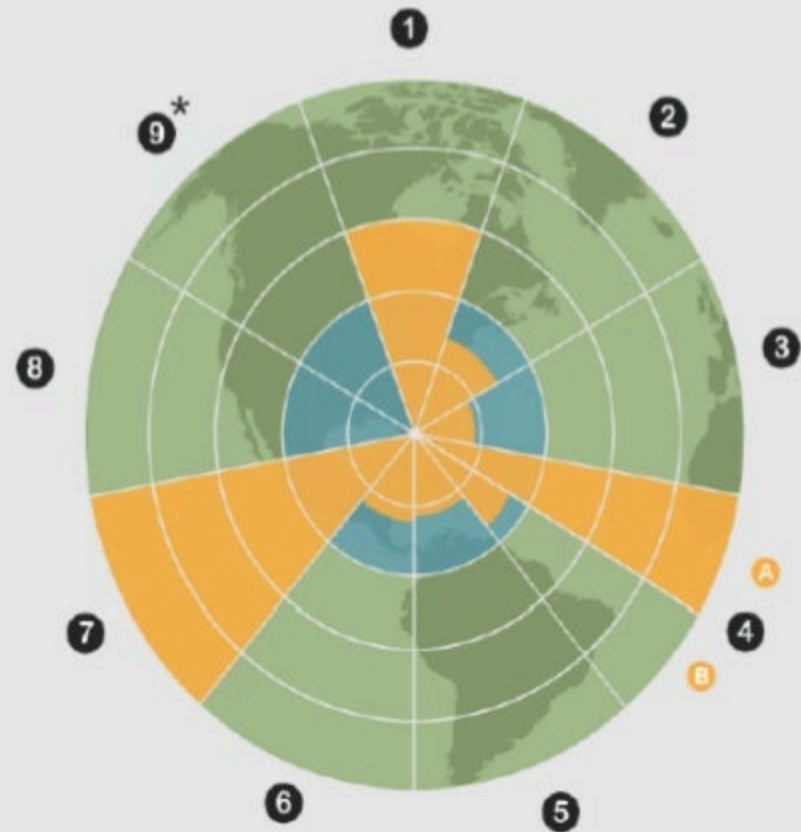


# The problem: exceeding the planetary boundaries

**We have exceeded three of the nine Planetary boundaries.**

Danger of greater risks and uncertainty emerging

**Agriculture is the dominant contributing factor and the solution.**



\*Not yet quantified

- |                                 |  |                               |
|---------------------------------|--|-------------------------------|
| 1 Climate Change                | 4 Biogeochemical flow boundary<br>A: Nitrogen cycle<br>B: Phosphorus cycle | 7 Biodiversity loss           |
| 2 Ocean acidification           | 5 Global freshwater use  | 8 Atmospheric aerosol loading |
| 3 Stratospheric ozone depletion | 6 Change in Land use   | 9 Chemical Pollution          |

# Uniting forestry and agriculture via CGIAR Research Programs

The CGIAR Research Programs (CRPs) set up under the new CGIAR embody this cross-cutting approach to agricultural research



RESEARCH PROGRAM ON  
**Climate Change,  
Agriculture and  
Food Security**



RESEARCH  
PROGRAM ON  
**Forests, Trees and  
Agroforestry**



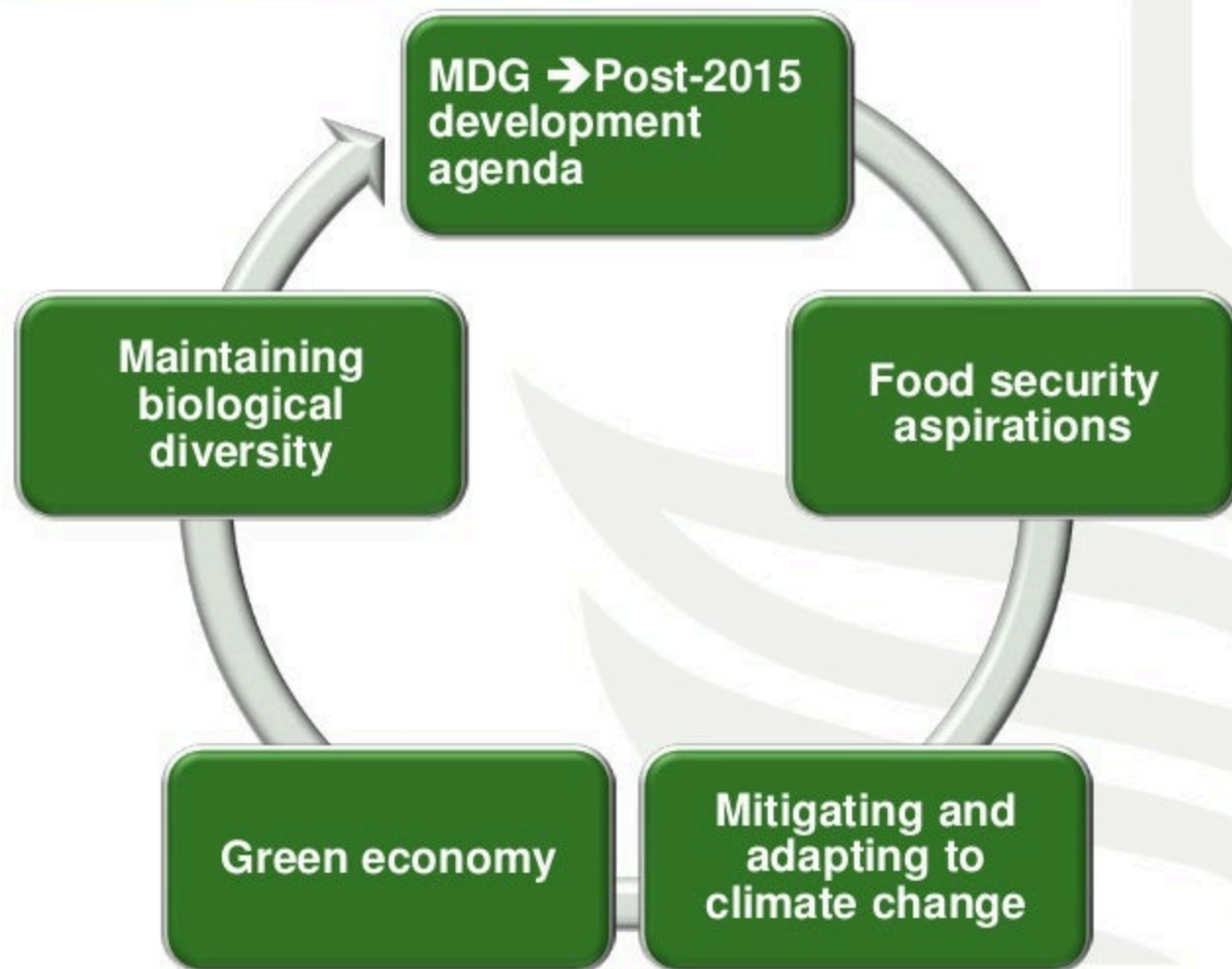
RESEARCH  
PROGRAM ON  
**Water, Land and  
Ecosystems**



Consortium

# What defines the CGIAR landscape approach?

## The Landscapes “Big 5”



Source: CIFOR/FTA

*CGIAR is a global research partnership for a food secure future*



Consortium

# CGIAR Landscape Activities

- **Convening/Advocacy/Collaboration/Debate**
  - For example: [Resilience 2014](#): Montpellier, May 4-8 2014, sessions by CGIAR Centers and Research programs
  - [Global Landscapes Forum](#), Warsaw, 16-17 November 2013 – at COP19, 2200 participants over 2 days
- **Research Program Activities**
  - Forests, Trees and Agroforestry
  - Water, Land and Ecosystems
  - Climate Change, Agriculture, and Food Security
- **Contributing to Sustainable Development Goals**
  - CGIAR System Level Outcomes
  - CGIAR Intermediate Development Outcomes



RESEARCH  
PROGRAM ON  
Forests, Trees and  
Agroforestry

# (FTA): Investing in sustainable landscapes

- FTA's work mainly focuses on healthy landscapes
- Research to understand why forested landscapes transition to other land uses
- How and what impact (s) these transitions have forest-dependent people
- How governance and trade shape these transitions and how “learning landscapes” can adapt sustainable management and governance practices

Photo: Jan van der Ploeg /CIFOR



# FTA: Why invest in sustainable landscapes?

Integrating agroforestry and agriculture is not only logical, but vital

- **Smallholder production systems**
  - **Cameroon:** gender research on non-timber products identified opportunities for improving livelihoods
- **Landscapes research**
  - Understanding the drivers and consequences of forest transitions
- **Social Role Playing Games and Community involvement for participatory landscape mapping and management**
  - Engaging local communities in the learning process so that they can become better partners in future negotiations



RESEARCH  
PROGRAM ON  
Water, Land and  
Ecosystems

# WLE: agricultural sustainability at all scales

- Focuses on the issue of scale and looks at how sustainable intensification impacts environmental services and flows
- WLE works at landscape scales because it is at larger scales that natural resources and ecosystem services flow to beneficiaries and are managed
- Agricultural sustainability depends on sustaining ecosystem services at all scales. Land sharing or land sparing is only a matter of scale

Photo: UNMIL / Christopher Herwig





# WLE: an ecosystem services approach

- Developing benefit sharing mechanisms from ecosystem services:
  - Andes (CIAT & CPWF): working in the Cañete Basin to test different models for estimating hydrological ecosystem services from upstream to downstream.
- Re-thinking investment: the Llanos, Colombia
  - Renewed focus on large and medium-sized agriculture rather than smallholders
  - Includes new business models for producing and marketing the cashew nut, soil restoration,
  - Development of “indicators” of eco-efficiency





RESEARCH PROGRAM ON  
**Climate Change,  
Agriculture and  
Food Security**



# CCAFS: Climate-smart agriculture

- Climate change, agriculture and food security are inextricably linked. To ensure resilience in both, they must be explored and developed together.
- Climate-smart agricultural practices (such as agroforestry, integrated livestock management, conservation tillage, etc.) are all activities that can be a part of, and help form, a sustainable landscapes approach.

Photo: Neil Palmer/CIAT

*CGIAR is a global research partnership for a food secure future*



Consortium



RESEARCH PROGRAM ON  
**Climate Change,  
Agriculture and  
Food Security**



# CCAFS: Climate-smart agriculture

- Climate-smart agriculture (CSA) in practice in climate smart villages:
  - Farmers in Western Kenya are adopting CSA practices and are starting to see the benefits
- Standard Assessment of Mitigation Potential and Livelihoods in Smallholder Systems (SAMPLES)
  - Aims to establish a low-cost protocol to measure GHG emissions and identify mitigation options for smallholders
- National Adaptation Planning (NAPs)
  - Opportunity for greater ability to find solutions across 'landscapes', forging stronger linkages between ministries and disciplines to find investing opportunities



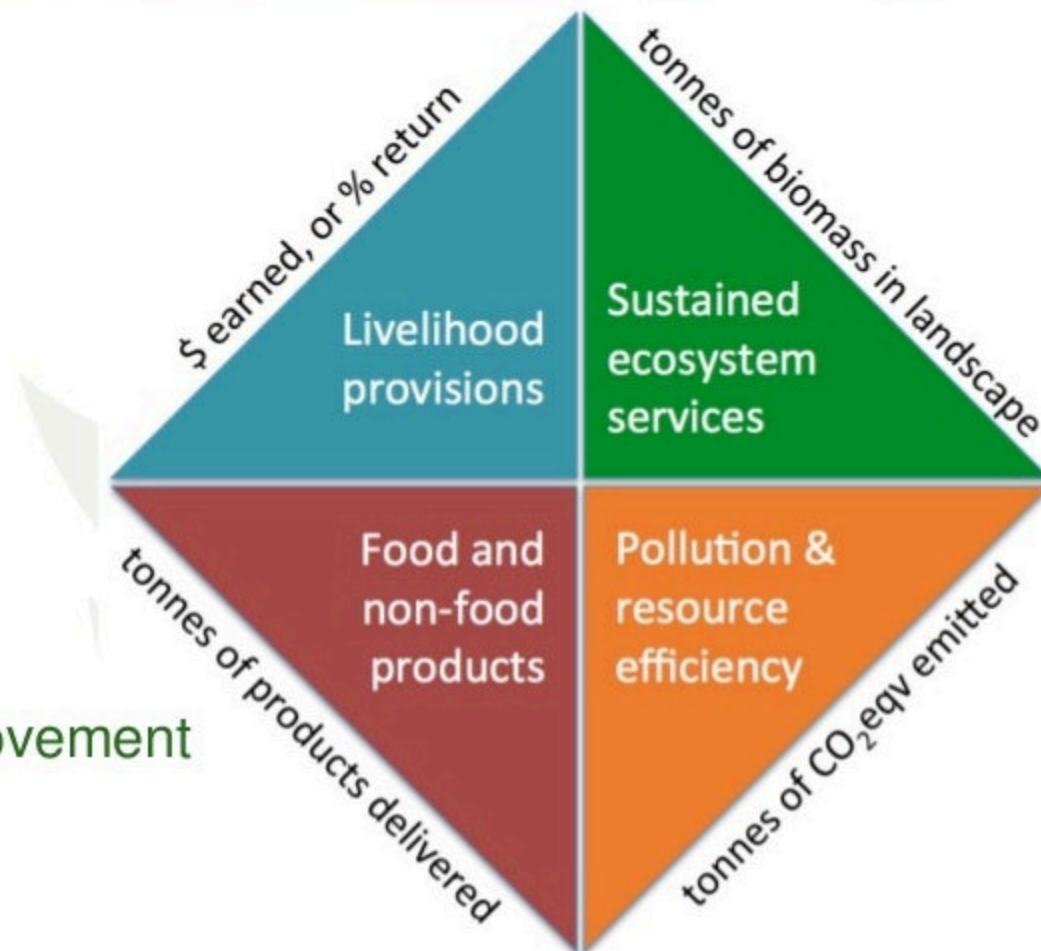
# Finance for Sustainable Landscapes

- **Investors:**
  - There is abundant capital seeking good investment propositions that **also** contribute to sustainable development
- **Farmers / Producers:**
  - Access to long-term, affordable and reliable capital is a major **limiting factor** for our enterprises
- **Public sector:**
  - Desire to use public funds for demonstrable results in **delivering public goods** and sustainable development

# We need a Common Language for Landscapes

## Objectives, measures, performance

- Easy to understand
- Applicable to any scale
- Applicable to any location
- Measurable
- Sustainability can mean improvement over time



# Key messages

**Landscapes are key to the future we want**



# Why is a landscapes approach important?

**Landscapes contain viable investment propositions which can be applied at scale**



# Why is a landscapes approach important?



**People on the ground are in charge**





# THANK YOU

*CGIAR is a global research partnership for a food secure future*



[www.cgiar.org](http://www.cgiar.org)