

GCF SECTOR GUIDE

FOREST AND LAND USE



GREEN
CLIMATE
FUND

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COWI



INTRODUCTION



This sectoral guidance on **Forests and Land Use (FLU)** focuses on:

Paradigm shifting pathways in forest protection, conservation, and sustainable land management as **central to climate change mitigation and adaptation efforts** towards low emissions and resilient development pathways

CONTENT



1. Global Context
2. Paradigm Shifting Pathways
3. Financial structuring:
Catalyzing public and private
sector finance for a paradigm
shift
4. Country Case studies
5. GCF investment criteria for
impactful proposals



1. GLOBAL CONTEXT

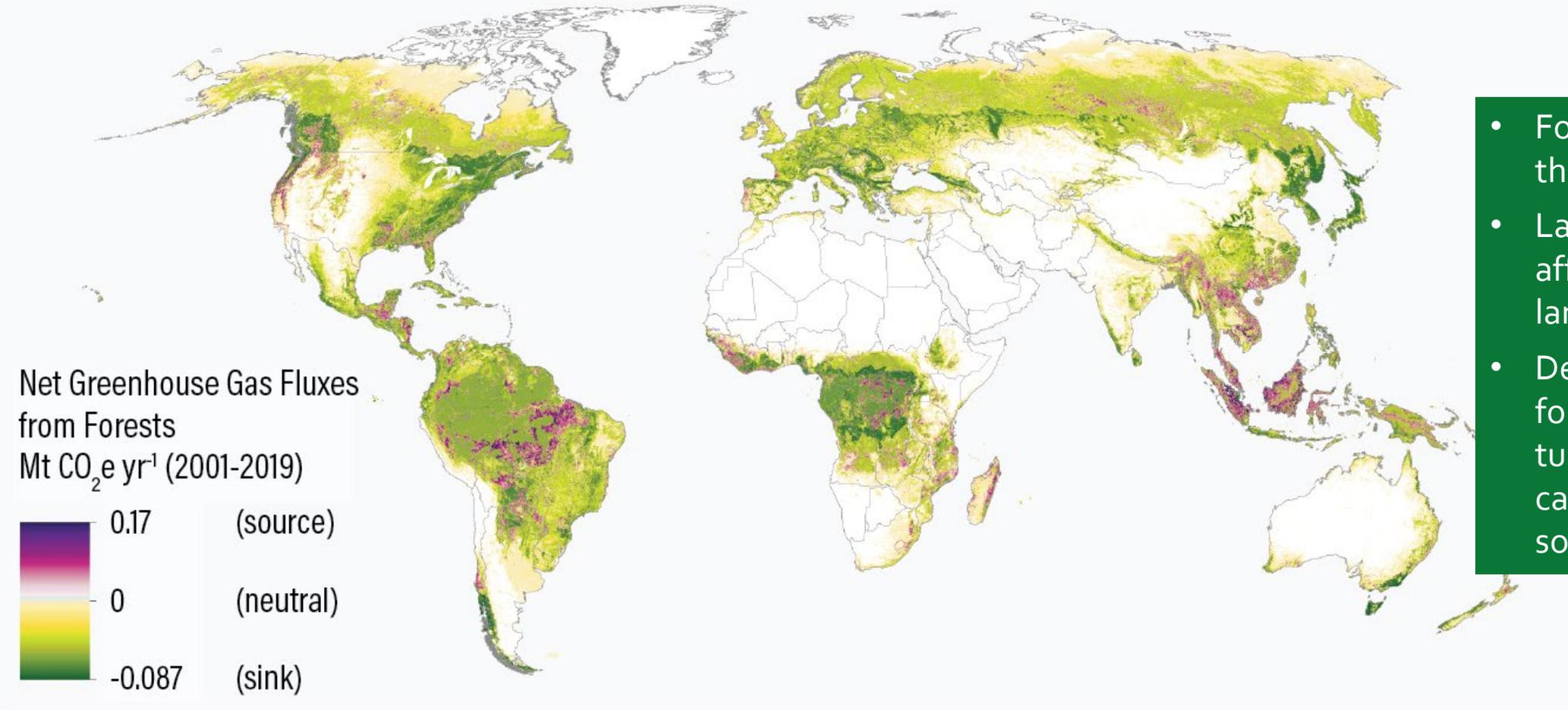




4.2 million hectares of forest
were deforested in 2020....

- ...during this presentation of 1 hour
- 481 hectares of forest will be deforested
 - around 175,000 tCO_{2e} will be released.....

Forests: Carbon Sinks or Carbon Sources?



- Forests cover ca. 1/3 of the global land area
- Land degradation has affected 1/4 of global land area
- Deforestation and forest degradation are turning forests from carbon sinks into sources

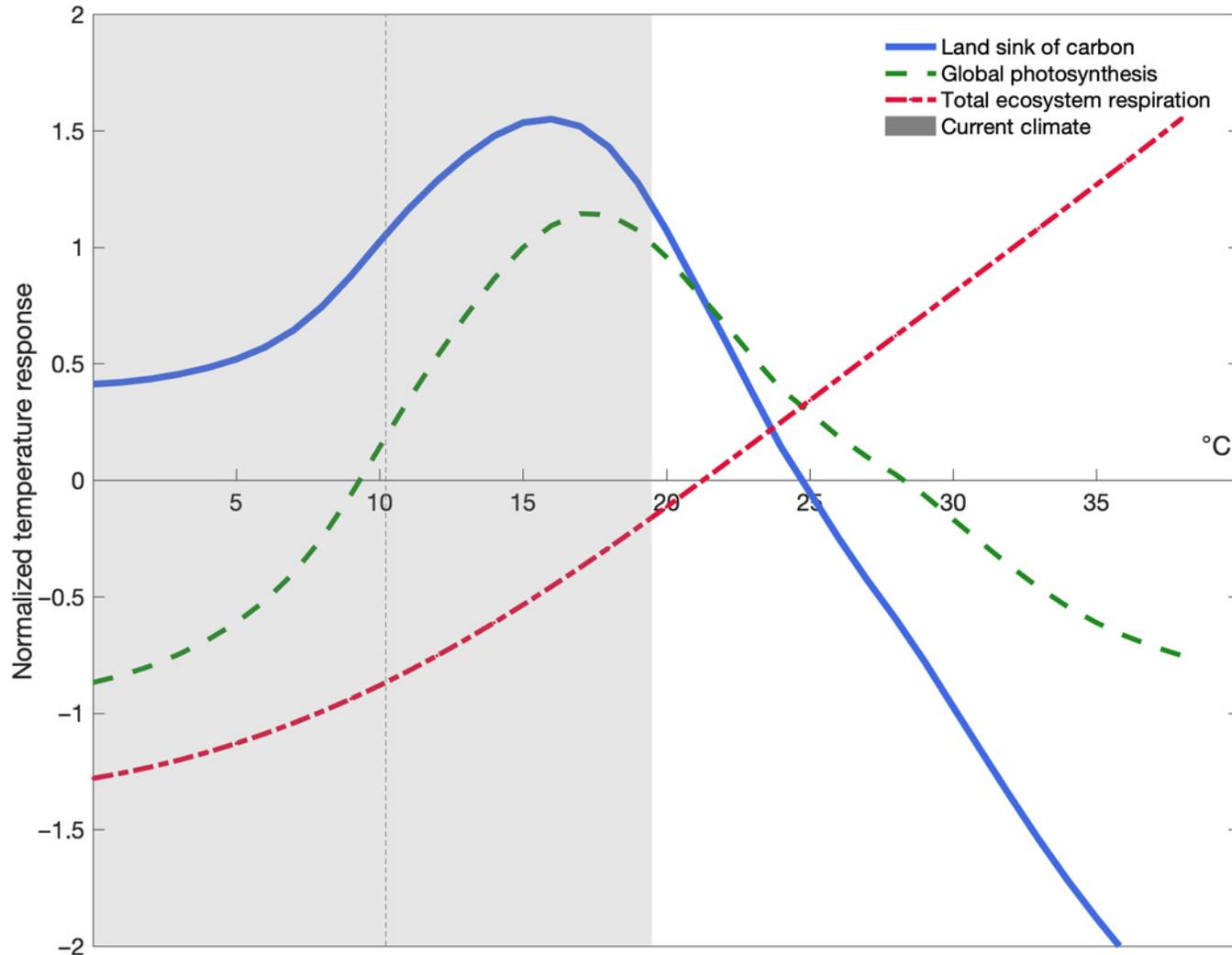
Source: Harris et al. 2021

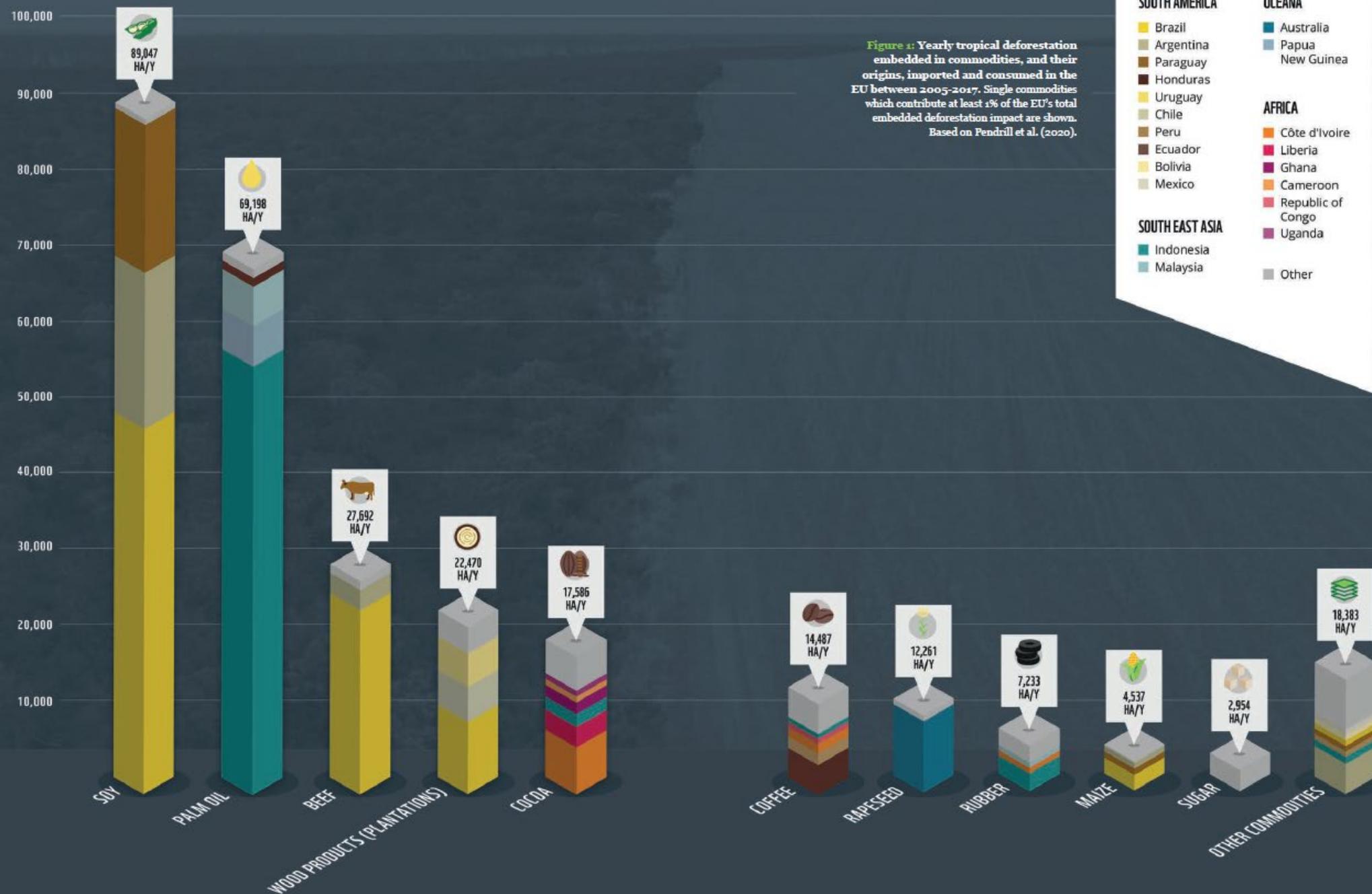
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WORLD RESOURCES INSTITUTE

HOW CLOSE ARE WE TO THE TEMPERATURE TIPPING POINT OF THE TERRESTRIAL BIOSPHERE?



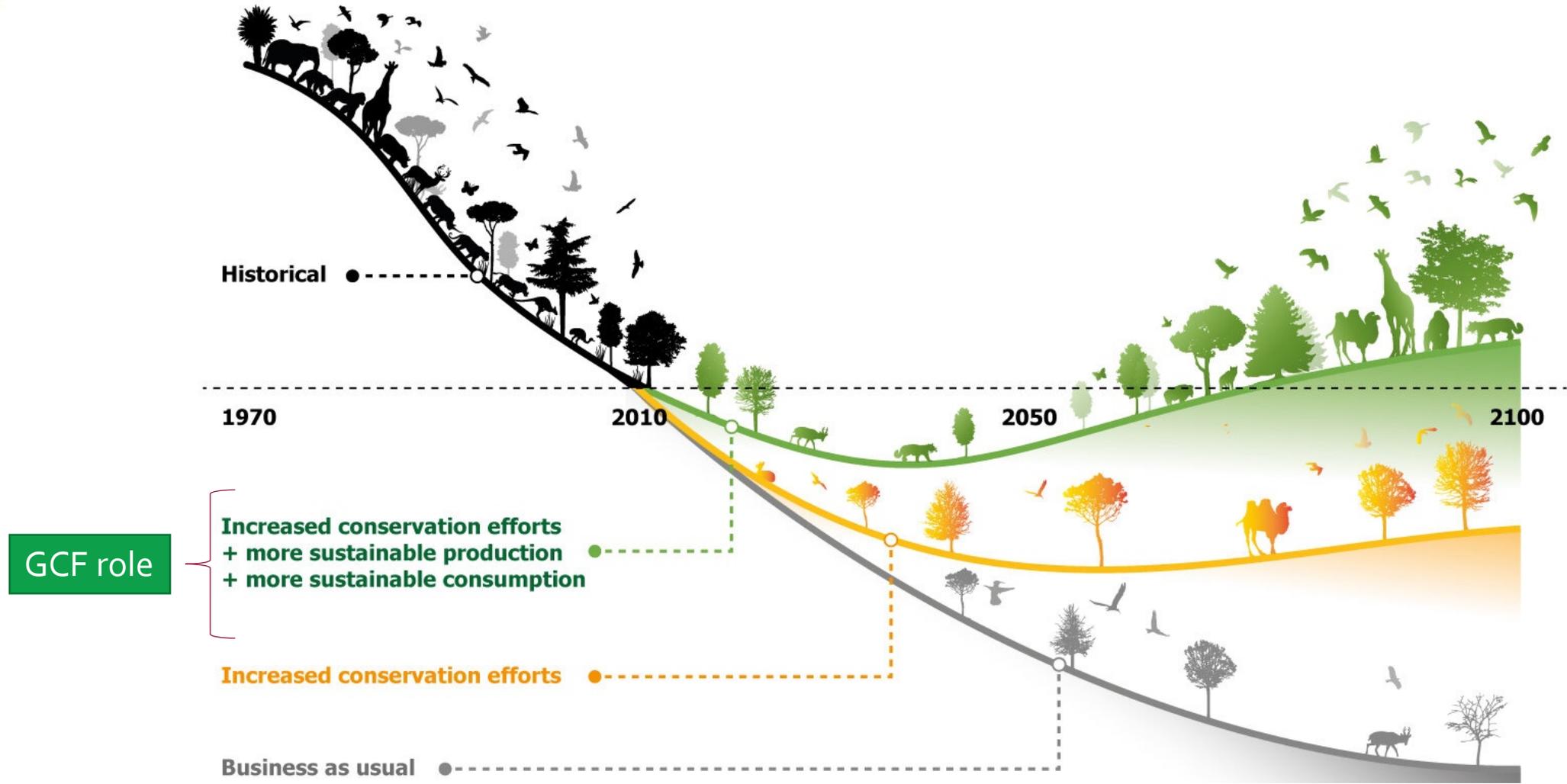


- SOUTH AMERICA**
 - Brazil
 - Argentina
 - Paraguay
 - Honduras
 - Uruguay
 - Chile
 - Peru
 - Ecuador
 - Bolivia
 - Mexico
- SOUTH EAST ASIA**
 - Indonesia
 - Malaysia
- OCEANIA**
 - Australia
 - Papua New Guinea
- AFRICA**
 - Côte d'Ivoire
 - Liberia
 - Ghana
 - Cameroon
 - Republic of Congo
 - Uganda
- Other**

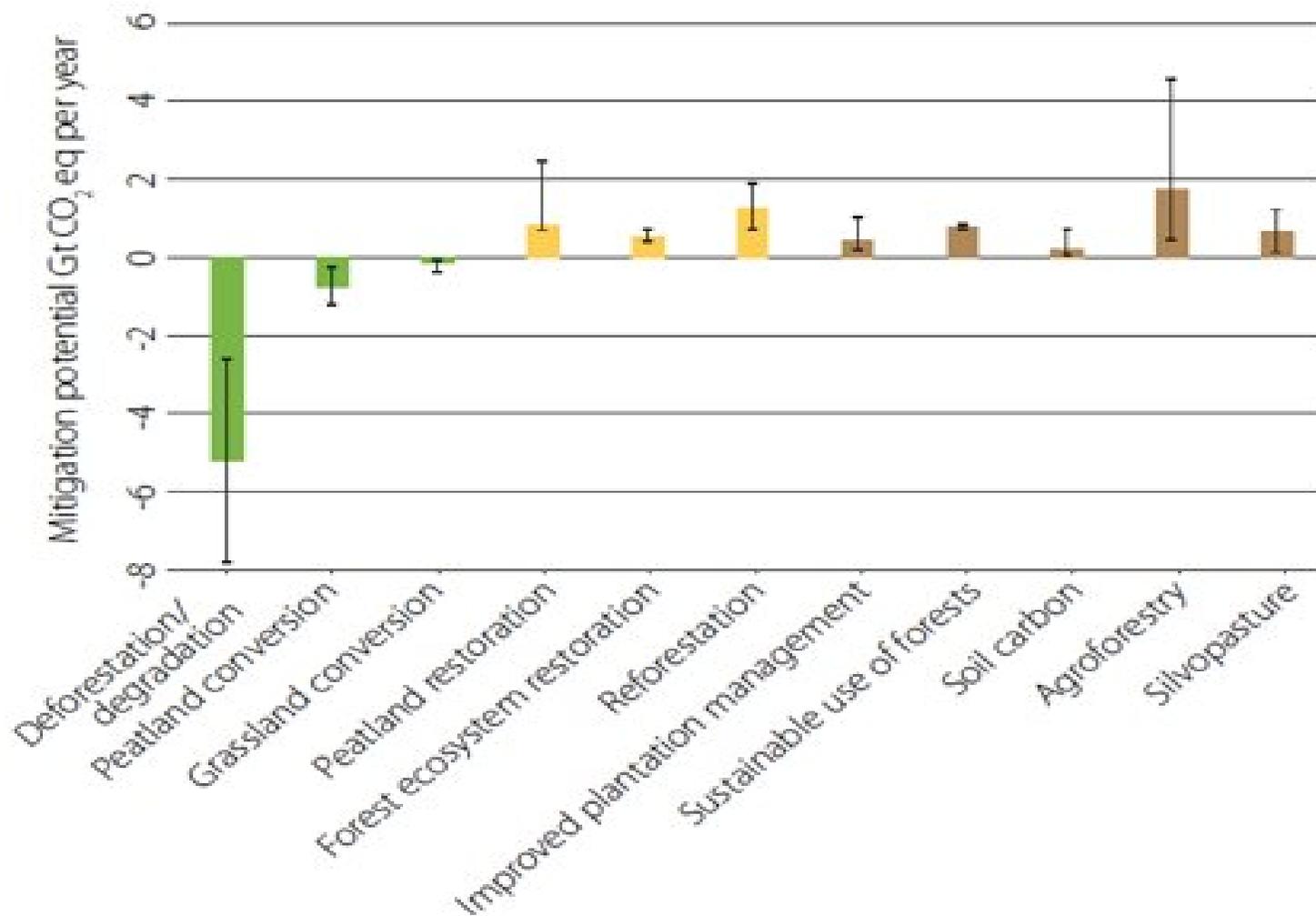


Source: WWF, 2021
<https://www.wwf.eu/?uNewsID=2965416>

...not only forest loss but also biodiversity and ecosystem services are lost following the business as usual

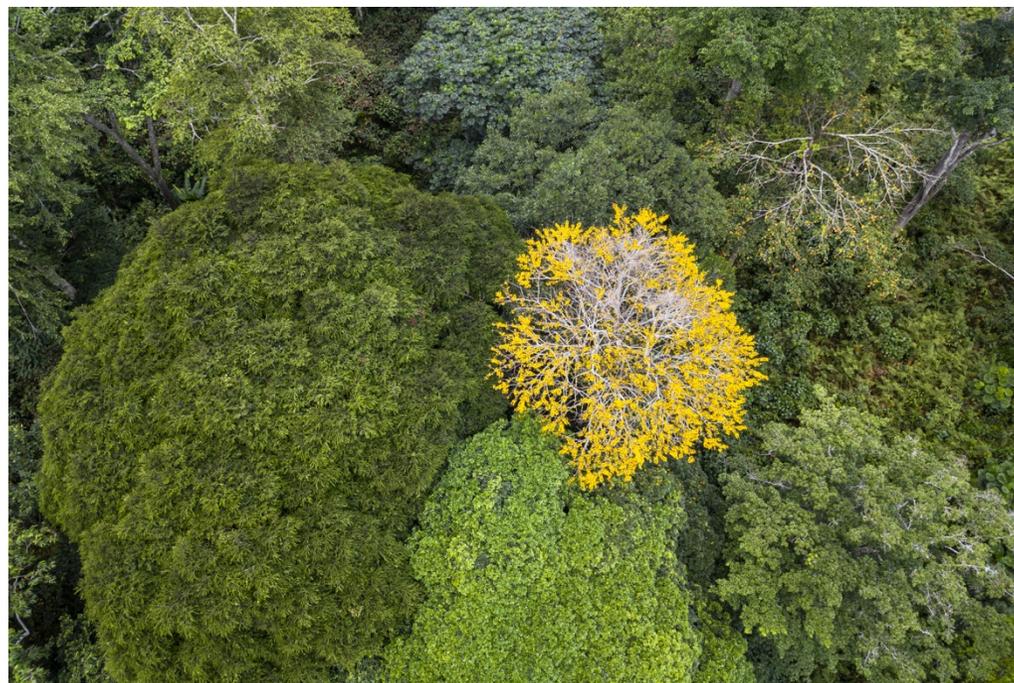


GLOBAL ADAPTATION AND MITIGATION OPPORTUNITIES: WHERE DOES THE SECTOR NEED TO BE?



- The annual mitigation potential identified globally for forests and land use is 13 Gt CO₂/year (by 2050)
- Over two-thirds (10 Gt CO₂/year) can be unlocked in developing countries

2. PARADIGM SHIFTING PATHWAYS



DRIVERS OF CHANGE ACROSS PARADIGM-SHIFTING PATHWAYS

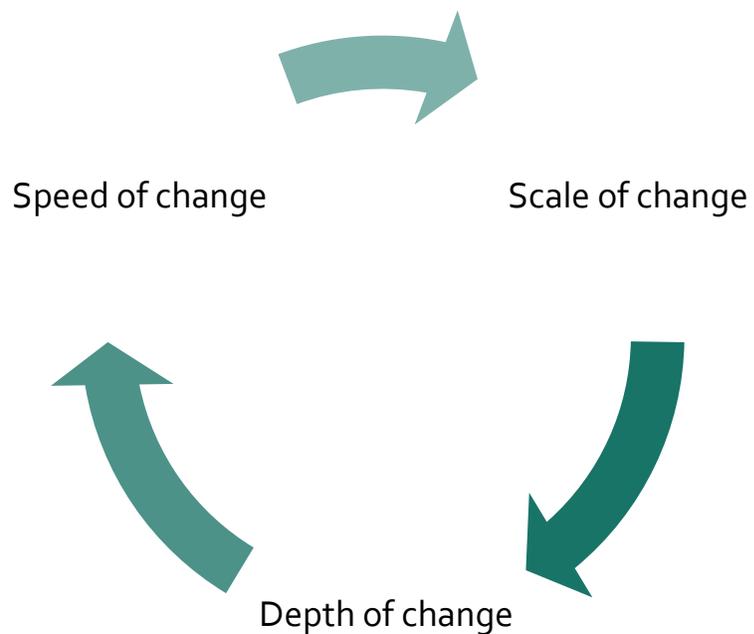


- To build back, maximize and sustainably harness benefits from forests and sustainable land use, a paradigm shift is needed
- GCF high-impact projects and programs can achieve this by addressing multiple objectives based on



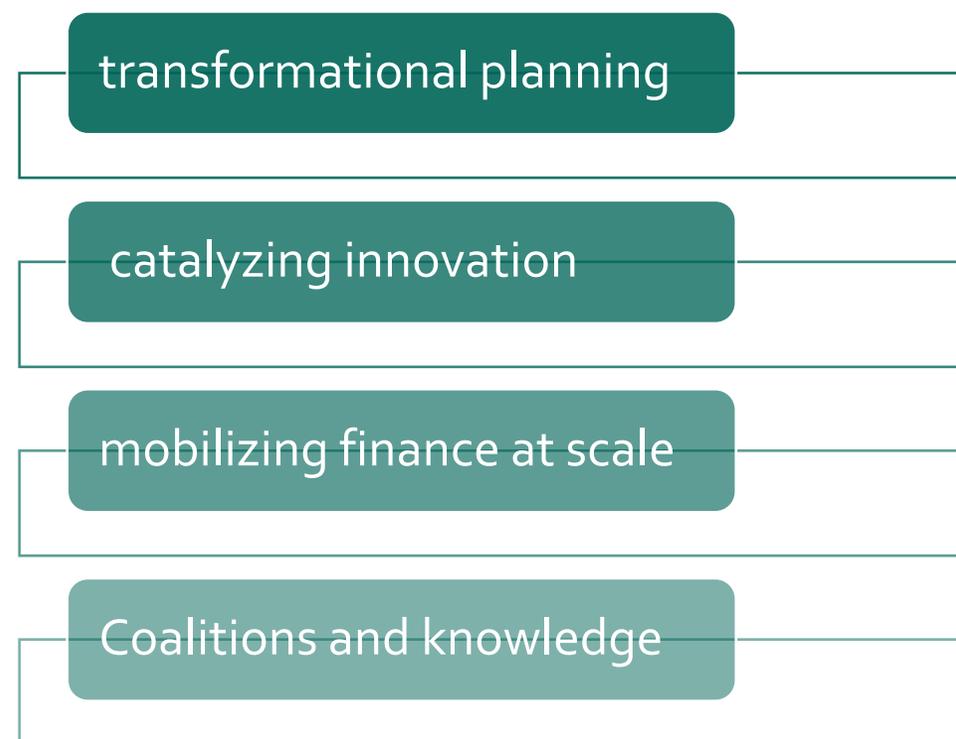
DIMENSIONS AND PILLARS OF CHANGE

- Three **dimensions** define transformational change

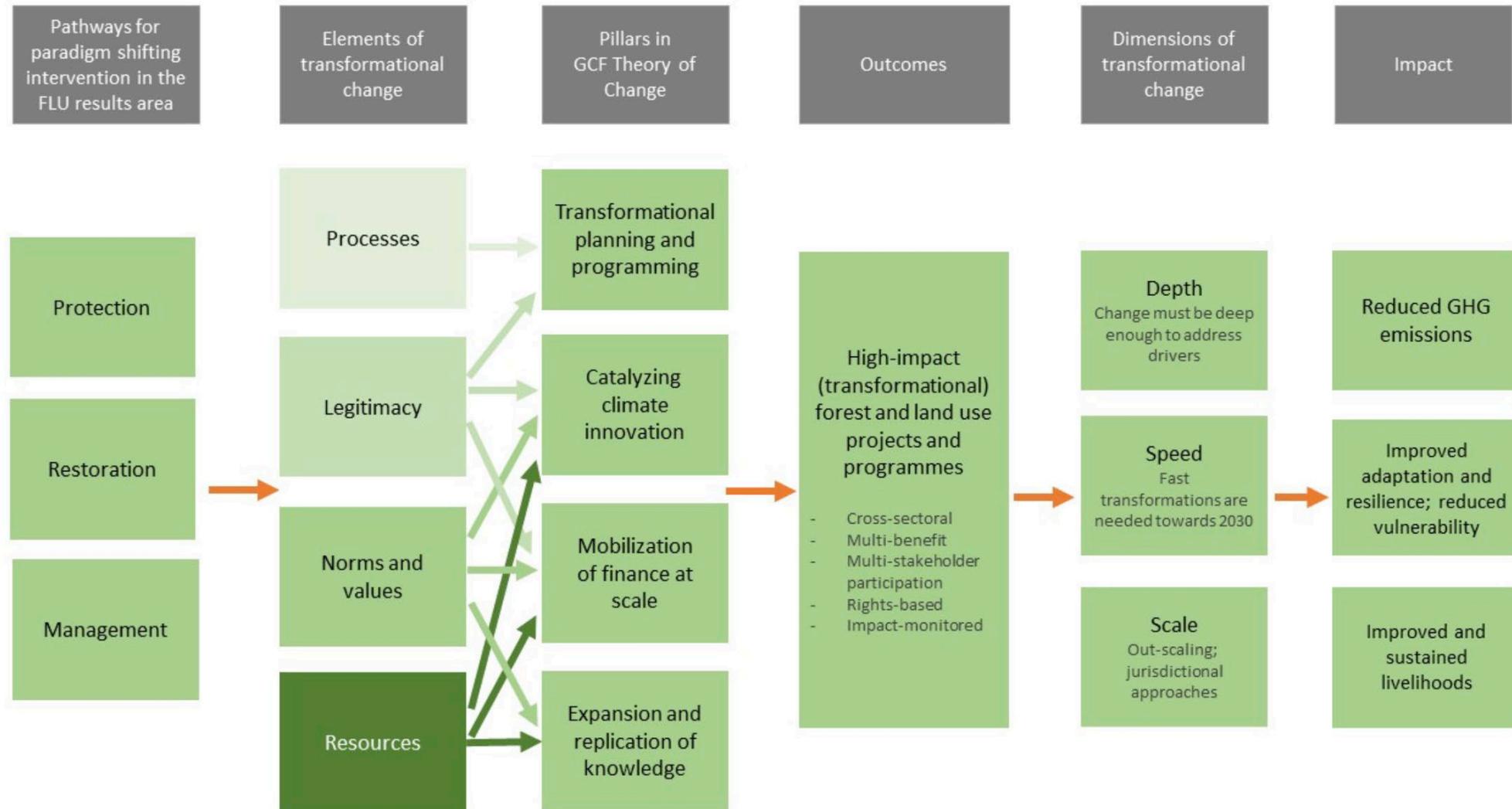


Difficult to achieve the 3 dimensions at the same time

- GCF's Theory of Change (ToC) is based on four **pillars**



DIMENSIONS AND PILLARS OF PARADIGM SHIFT IN THE FORESTS AND LAND USE RESULTS AREA



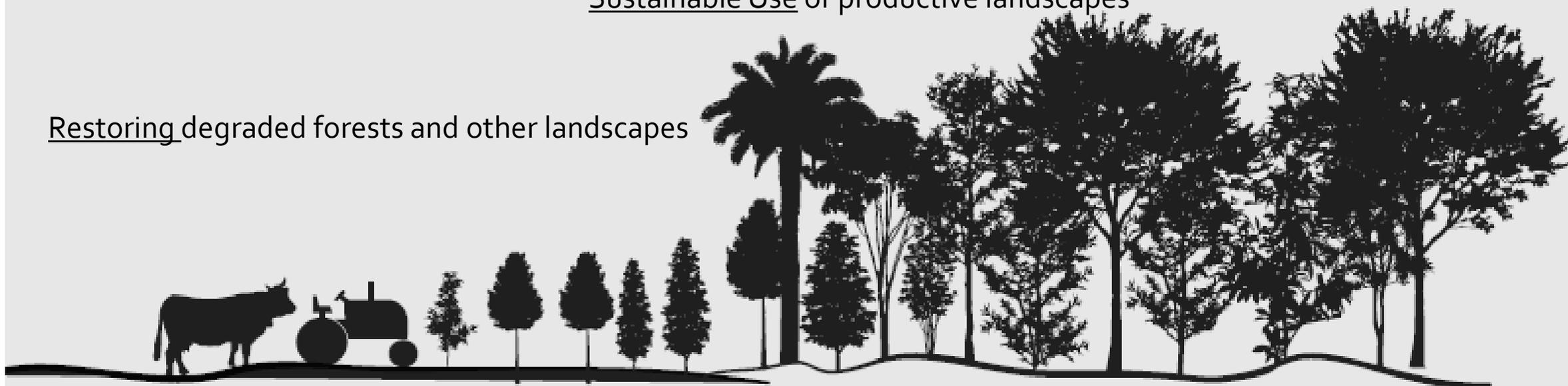
PARADIGM-SHIFTING PATHWAYS IN FORESTS AND LAND USE SECTOR



Protecting natural landscapes

Sustainable Use of productive landscapes

Restoring degraded forests and other landscapes



Agriculture and animal agriculture,
Properties agroforestry

Sustainable forest management, forest management
for multiple use, comprehensive protection

**Transformational
planning &
programming**

**Catalyzing climate
Innovation**

**Mobilization of
finance at scale**

**Coalitions and
knowledge to
scale up success**

ROLE OF THE GCF IN FINANCING THE PARADIGM SHIFTING PATHWAYS

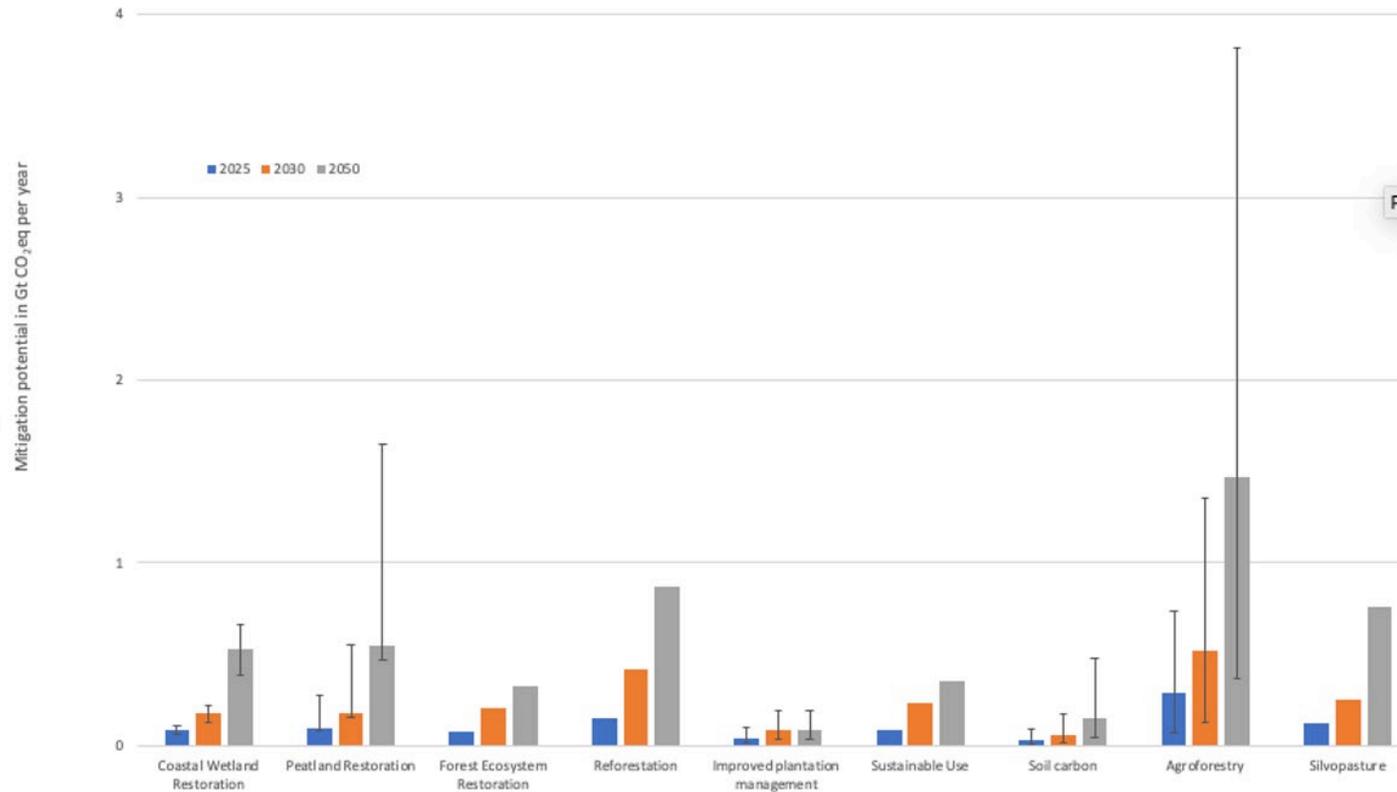


Forest and Land Use		Transformational planning & programming	Catalyzing climate innovation	Mobilization of finance at scale	Coalitions and knowledge to scale up success
Paradigm-shifting pathways	Protecting natural forests and landscapes	<ul style="list-style-type: none"> • Securing land tenure and protecting the rights of indigenous peoples and local communities • Participatory multi-stakeholder processes for dialogue and decision making, with effective FPIC • Protection of forested ecosystems containing irrecoverable carbon (intact forests, peatlands) • Rights of Nature approaches 	<ul style="list-style-type: none"> • Implementing next-generation regional biome-based, community supported forest protection agreements, such as the proposal for a contiguous Andes-Amazon-Atlantic Corridor to protect biodiversity and cultural heritage • Testing the development of alternative policies and markets to incentivize deforestation-free supply chains. 	<ul style="list-style-type: none"> • Increase non-market finance (e.g., debt swaps, levies, REDD-plus RBP) • Leverage domestic REDD-plus to mobilize external funds • Explore blockchain-based systems for transparency and trust building • De-risking private finance (blended finance, guarantees, etc.) 	<ul style="list-style-type: none"> • Support evidence-based decision making and traditional knowledge systems • Capacity building about regulations, policies and REDD-plus • Participatory monitoring, evaluation and learning, based on a context-specific theory of change
	Restoring degraded forests and other landscapes	<ul style="list-style-type: none"> • Inter-institutional coordination of land use and spatial planning and NDCs with multiple objectives • Outcomes and process monitoring with culturally appropriate, level-specific indicators 	<ul style="list-style-type: none"> • Piloting new global incentives or commitments to increase forest restoration • Next-generation PES focusing on multiple benefits to increase the financial and political viability of projects (e.g. reforestation delivering water regulation and carbon capture in tropical mountains) 	<ul style="list-style-type: none"> • Mobilizing international private/public funding to reduce investment risks • Regulation to increase domestic funding sources (e.g. green levies, PES) • Access to climate finance for vulnerable populations 	<ul style="list-style-type: none"> • Develop methods to monitor complex dimensions of change (i.e. governance, voice, empowerment)
	Sustainable management of productive forest landscapes	<ul style="list-style-type: none"> • Jurisdictional climate programs • Integrate land use into NDCs through coherent land use and spatial planning that account for multiple objectives and are coordinated across institutions 	<ul style="list-style-type: none"> • Testing and evaluating forest crops that can be grown in agroforestry systems on marginal, degraded land, avoiding conflicts with food production • Technological advances through new processing methods to harden, soften, impermeabilize and otherwise treat wood for various industrial purposes 	<ul style="list-style-type: none"> • Proactive 'de-risking' of projects and programmes addressing tenure, currency fluctuations, political instability, access to finance • Increase private and public finance and capacity building to enhance value chains • De-risking private finance (blended finance, guarantees, etc.) 	<ul style="list-style-type: none"> • Develop forest curricula that address social and economic dimensions

3. FINANCIAL STRUCTURING: CATALYZING PUBLIC AND PRIVATE SECTOR FINANCE FOR A PARADIGM SHIFT



FINANCING ADAPTION AND MITIGATION: HOW MUCH WILL IT COST TO MEET THESE TARGETS?



- Estimated costs to achieve the 10 Gt CO₂ /year mitigation potential in developing countries:

- USD 151 billion per year in 2020-2025
- USD 192 billion per year in 2026-2030

→ A total of USD 1.716 trillion will be needed in the next decade to achieve synergistic adaptation and mitigation benefits

- Fulfilling the conditional NDCs could bring additional emission reductions of 2.4 Gt CO₂ per year in the FLU sector, which could cost between USD 1.4 and 6.7 billion annually over ten years

CURRENT STATUS OF PORTFOLIO AND PIPELINE IN FORESTRY AND LAND USE RESULT AREA



- 44+ concepts and funding proposals in the pipeline
- Approx. 2.7 billion GCF funding requests in result area financing
- Instrument: Mix of grants and loans

Approved projects	50	
Projects under implementation	25	
AEs	22	
IAEs	16	
National DAEs	4	
Regional DAEs	2	
Countries	76	
	<i>All projects w/ FLU</i>	<i>Specific allocation to FLU</i>
GCF financing (nominal)	\$ 2,885 million	\$ 1,315 million
Co-financing	\$ 8,229 million	
Mitigation impact (tCO ₂ eq)	907,632,783	
Adaptation impact (# beneficiaries)	145,534,300	

FINANCIAL BARRIERS

Almost 80% of projects submitted to the FLU results area identified financial barriers:

- **Lacking access to credit** for rural populations
 - due to low financial literacy, high interest rates, remoteness from credit facilities and cultural barriers for women and indigenous peoples
- **Barriers to private finance**
 - perceived risks of investment in FLU sector
- **Lacking access to international finance**
 - perceived political risks and limited exposure of domestic institutions to the rigors of managing international climate finance
- **No domestic budget availability**
- Limited availability of long-tenor loans
 - long maturity cycle of trees and other crops (agroforestry) and reforestation
- **Lacking financial viability**
 - costs outweighing returns

GCF PORTFOLIO AND FINANCING STRUCTURES



Instrument	Potential GCF role
Grants	Grants for projects and/or (policy-based) programs <ul style="list-style-type: none"> conservation trust funds, tenure resolution, community level sub-grants, and incubators for MSMEs (e.g. non-timber forest products sector) Funding for technical assistance, studies, capacity building, participatory planning and support for policy development
REDD-plus results-based payments (RBP)	GCF RBP is largely jurisdictional rather than project-based <ul style="list-style-type: none"> focus on payments via public actors Technical support can be offered for incorporating private sector REDD-plus schemes within these national or sub-national programs
Loans	High and low concessionality project and/or (policy-based) loans are already offered with a long tenure. GCF could <ul style="list-style-type: none"> further emphasize loan facilities over project-based lending take on subordinated (junior) debt, i.e. the riskiest loan tranches, to catalyze private investors by reducing their risk exposure
Guarantees	Issuing partial (first loss) risk guarantees backing loans and bond issuance, including debt-for-climate swaps

GCF PORTFOLIO AND FINANCING STRUCTURES



Instrument	Potential GCF role
Equity	<p>Anchor investor in equity funds, often in combination with other instruments (grants for technical assistance/market development, or and first loss guarantees)</p> <p>GCF might also develop mezzanine financing = a hybrid of debt and equity that gives lenders the right to convert to an equity interest in case of default</p>
Payments for Ecosystem Services (PES)	<p>Technical assistance to governments (and private sector) to implement and scale up PES</p>
Forest bonds	<p>Provide partial credit guarantees to de-risk bond issuance, or support capacity building for the creation of green bond facilities and forest bonds.</p> <ul style="list-style-type: none"> • Most forest bonds issued so far have been micro or small scale, although forest protection, reforestation and afforestation have also formed part of larger, multi-sectoral green bond issues
Insurance and climate risk finance	<p>Provide initial grant finance (with repayment contingency) for an endowment fund, to fund Ecosystem-based Adaptation (EbA) or restoration activities, and insurance products</p> <p>GCF could also play role in market development, including financing technical assistance for the creation of disaster risk facilities</p>
Public-private partnerships	<p>Technical assistance and institutional strengthening to ensure PPP infrastructure investment or long-term concessions deliver value for money</p>

4. COUNTRY CASE STUDIES



CASE STUDY 1 – BHUTAN FOR LIFE



- **Impact potential**

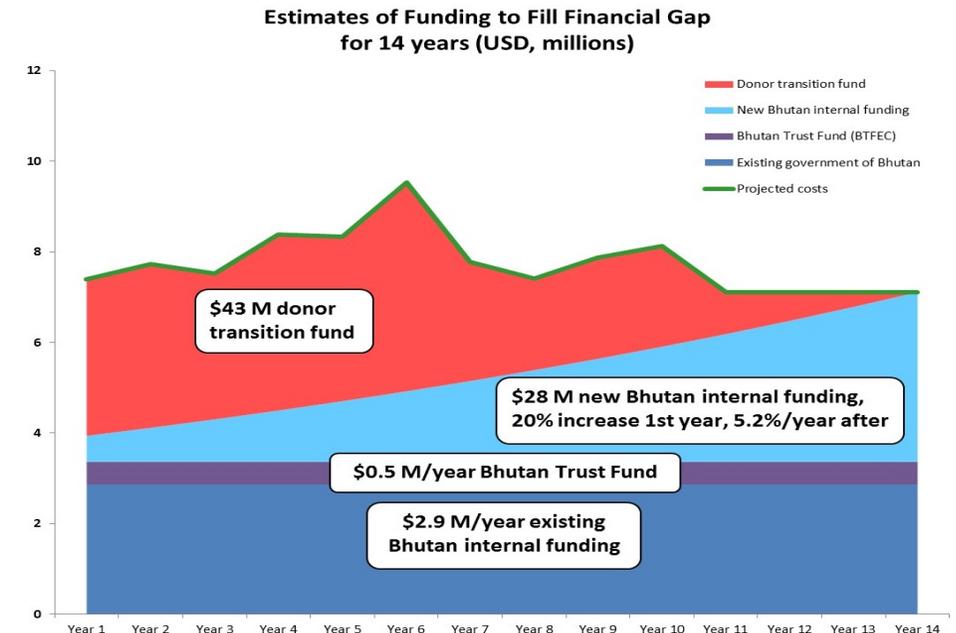
- Over 70% of Bhutan's land area forest-covered
 - 51% of it under protection
- Bhutan is committed to sustainable development and carbon neutrality
- Bhutan for Life addresses mitigation and adaptation objectives and aims to secure Bhutan's protected areas, prevent deforestation and maintain forest resources

- **Barriers addressed**

- Limited domestic financial resources

- **Approach to paradigm shift**

- Combining immediate international support with a longer-term plan to build-up sustainable domestic resources for economic development, natural resource protection and adaptation



CASE STUDY 2 – ECUADOR REDD-PLUS RESULTS-BASED PAYMENTS



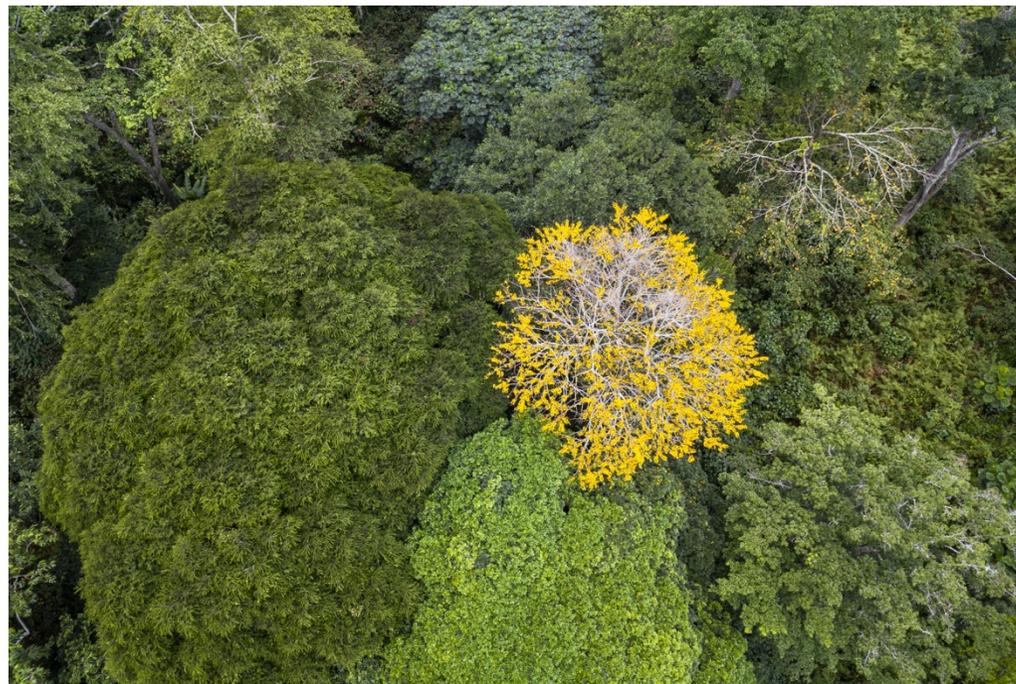
- **Impact potential**
 - REDD-plus results of 28.9 million tCO₂e for 2009-2014
 - Estimated further reduction of 15,7 million tCO₂e for 2014-2018
 - proceeds received will support National REDD-plus Action Plan
- **Barriers addressed**
 - lack of capacity limiting participation and access of marginalized groups to benefits
 - land use planning and conservation initiatives
 - adversely impact cultural heritage, and communities' access to ancestral lands and resources
 - avoidance of areas with land conflicts
 - extractive industries
- **Approach to paradigm shift**
 - Proyecto Socio Bosque (PSB) initiative
 - achieving conservation and restoration of native forests through agreements between indigenous peoples and Afro-Ecuadorians
 - expansion and replication of (often traditional) knowledge
 - design of the conservation management plans and indigenous governance structures
 - deforestation-free production techniques of Amazon peoples incl. non-timber forest products
 - blended-finance, public-private partnership approach

CASE STUDY 3: DEVELOPMENT OF ARGAN ORCHARDS IN DEGRADED ENVIRONMENT - MOROCCO



Women-led enterprises managing an endemic tree to supply high demand

5. GCF INVESTMENT CRITERIA FOR IMPACTFUL PROPOSALS



GCF'S SIX INVESTMENT CRITERIA



Impact

likely and measurable impacts – How many beneficiaries? How will mitigation actions result in low-emission sustainable development pathways and adaptation actions increase resilience?

Paradigm shift

How to ensure impacts continue and can be scaled up? Potential for knowledge exchange, learning, and replicability? Are new markets created?

Sustainable development

Align with international obligations, SDG priorities and GCF policies (e.g., gender, indigenous peoples)?

Recipient needs

How do the actions minimize exposures, and support development to respond to climate risks and impacts? Are monitoring and evaluation systems well established.

Country ownership

alignment with national policies (especially the NDCs and NAP). Supported by variety of stakeholders.

Efficiency and effectiveness

Sources of co-financing. What economic modelling assumptions have been made? Are the financial incentives aligned to the project/program? Are expected revenues sufficient to sustain investment?

PARADIGM SHIFTS

new development paradigm viewing natural forests and ecosystems as global public goods and life support systems

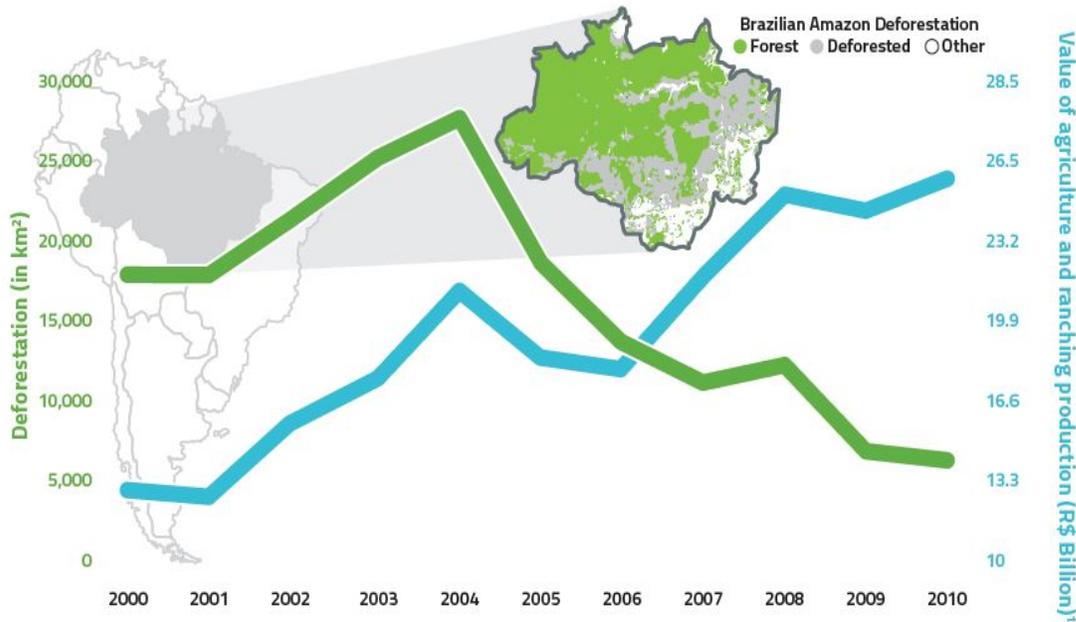
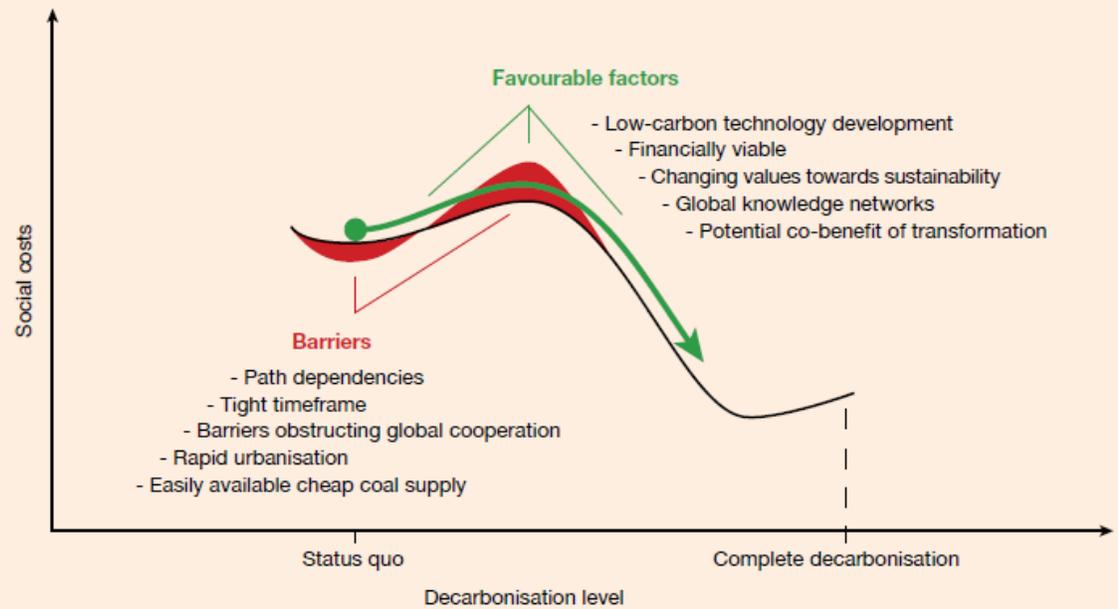


Figure 1. Barriers and favourable factors for transformation



Source: WBGU, 2011¹¹

IMPACT

- greatest mitigation potential is in protection, followed by restoration of degraded forests and deforested areas
- priority areas are all carbon dense forest ecosystems which contain 'irrecoverable carbon'



Protecting irrecoverable carbon in Earth's ecosystems

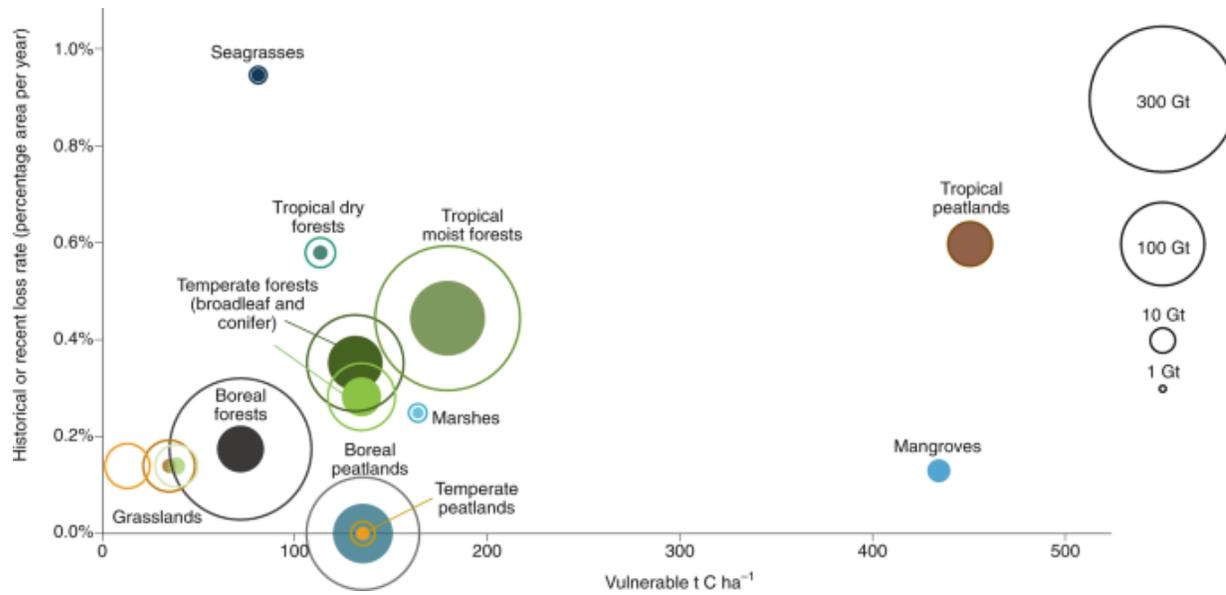
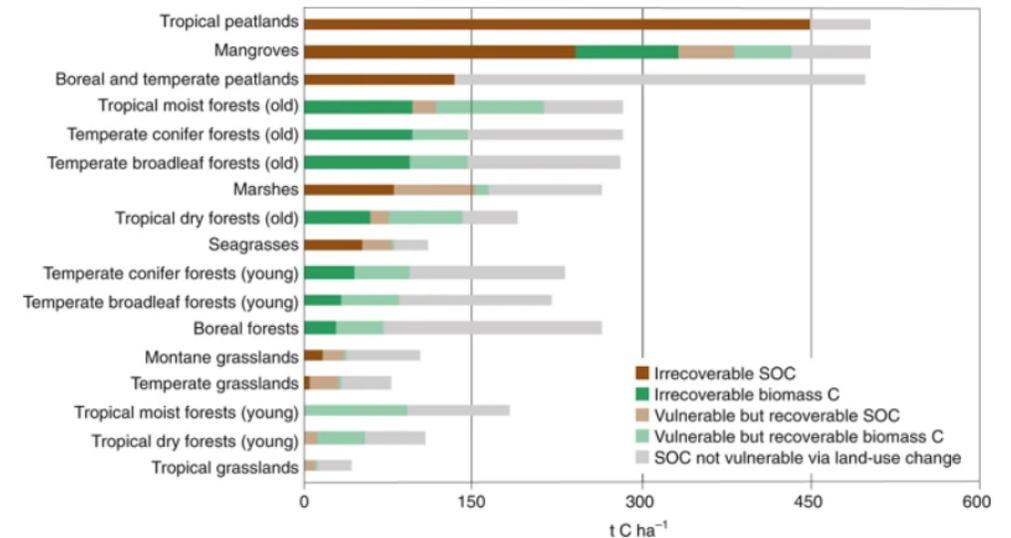


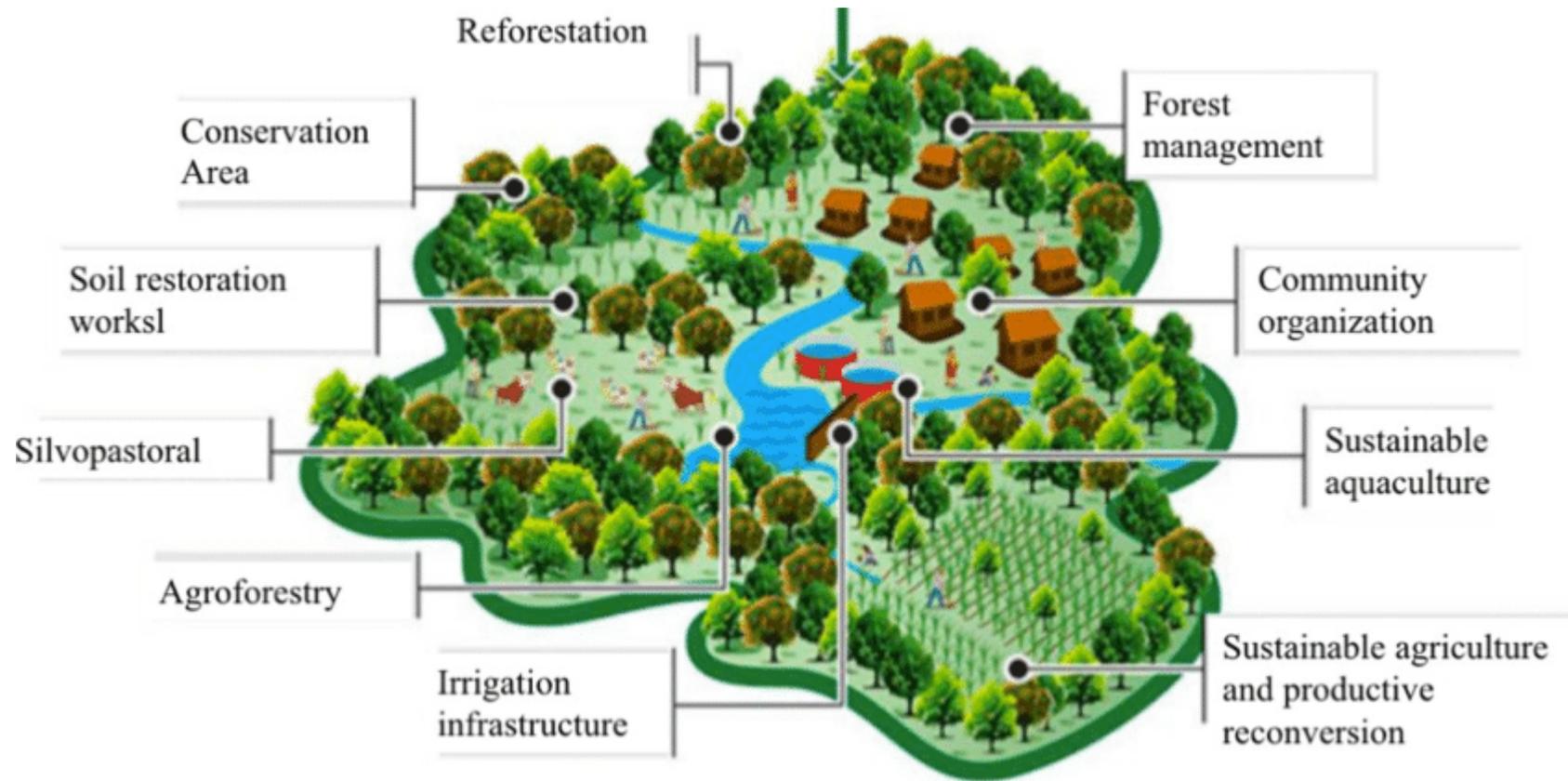
Fig. 2: Estimated amount of carbon that is recoverable or irrecoverable in major ecosystems within 30 years.



Colours distinguish carbon in soil (brown) and biomass (green) pools. Irrecoverable carbon (indicated by dark brown and green shading) is shown separately from carbon that is either not vulnerable (light grey shading) or is vulnerable but recoverable (light brown and light green shading).

<https://www.nature.com/articles/s41558-020-0738-8?proof=t>

SUSTAINABLE DEVELOPMENT POTENTIAL



- 'stacking' multiple benefits: Go for joint environmental, social and economic co-benefits
- **Enhance synergies** between mitigation and adaptation
- Reduce gender inequalities

NEEDS OF THE RECIPIENTS



- multiple benefits for high impact in projects
- Strengthen the capacity of institutions and stakeholders support tenure and rights
- Public procurement
- Capacity development on financial instruments
- Capacity development on monitoring and evaluation

Woman carrying firewood in outskirts of Addis Abeba

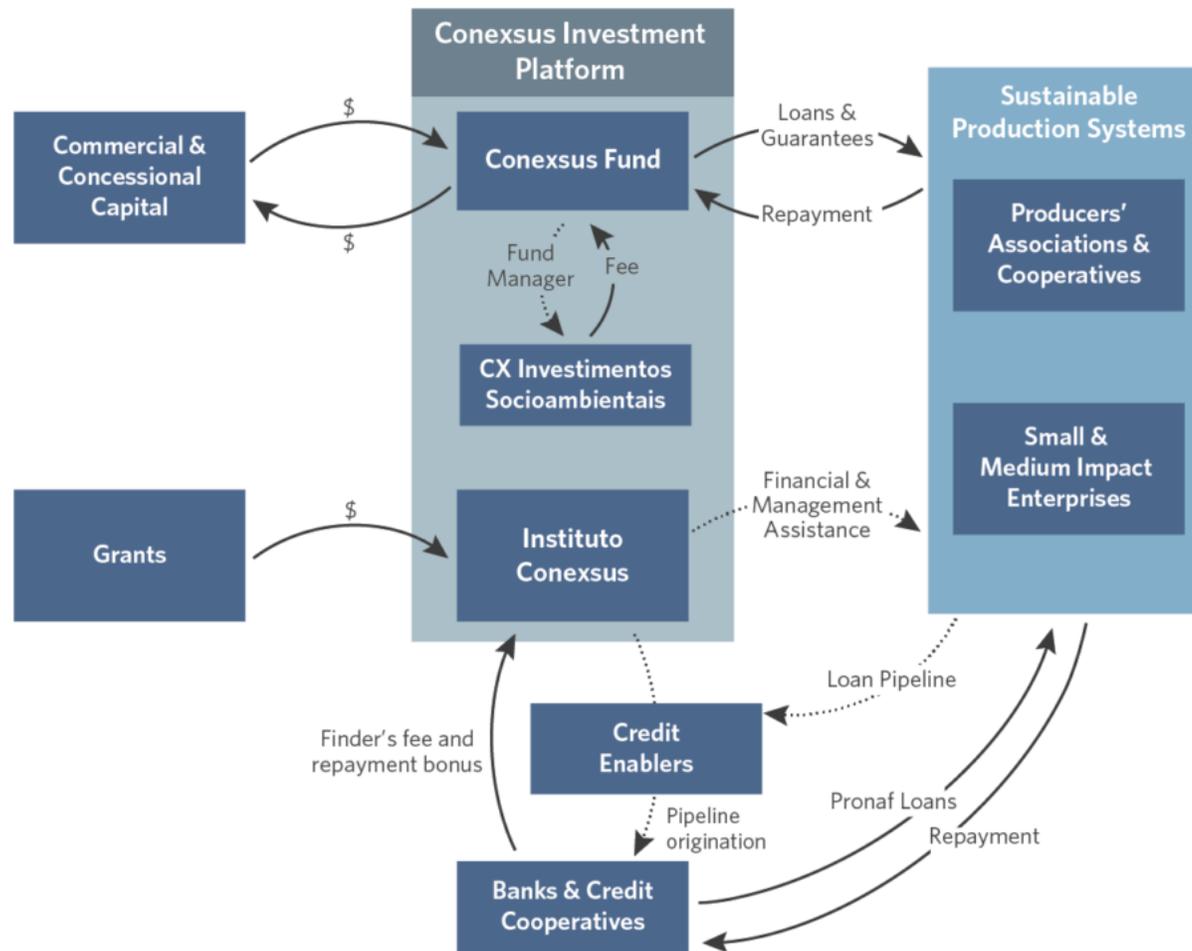
COUNTRY OWNERSHIP



- Support and align with existing national climate strategies and policies
- Support work across sectors
- Integrated approaches
- Full, effective and continuous participation

Foto: CIFOR

EFFICIENCY AND EFFECTIVENESS



- Early identification and assessment of risks
- Co-funding through channeling and blending resources

CONCLUSION



- **protection, restoration and sustainable use of forests and other lands** is a critical component of meeting both the Paris Agreement and the 2030 Sustainable Development Goals
- For paradigm shift to be achieved, **barriers need to be removed** relating to capacities, risks, accountability and transparency
- Transformative pathways require **climate compatible policy frameworks** and **strengthening of institutional capacity** across different levels and actors
- Processes of free, prior and informed consent need to be implemented and indigenous peoples and local communities must be **recognized as substantive rights holders** (rather than project beneficiaries)





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