

### **GEF-6 Biodiversity Strategy**

 Global Context and the GEF-6 Replenishment

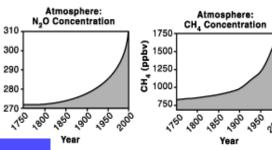
Big tent: Strategic Plan and the GEF

Biodiversity Strategy



### **Global change** with multiple effects

Atmosphere: CO, Concentration 340 320 300



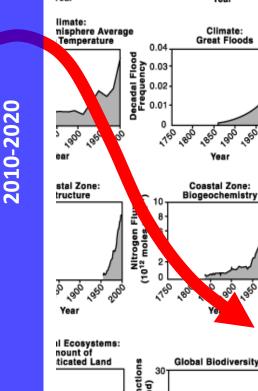
CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub> concentrations

**Overfishing** 

**Land degradation** 

**Loss of Biodiversity** 

**Water Depletion** 



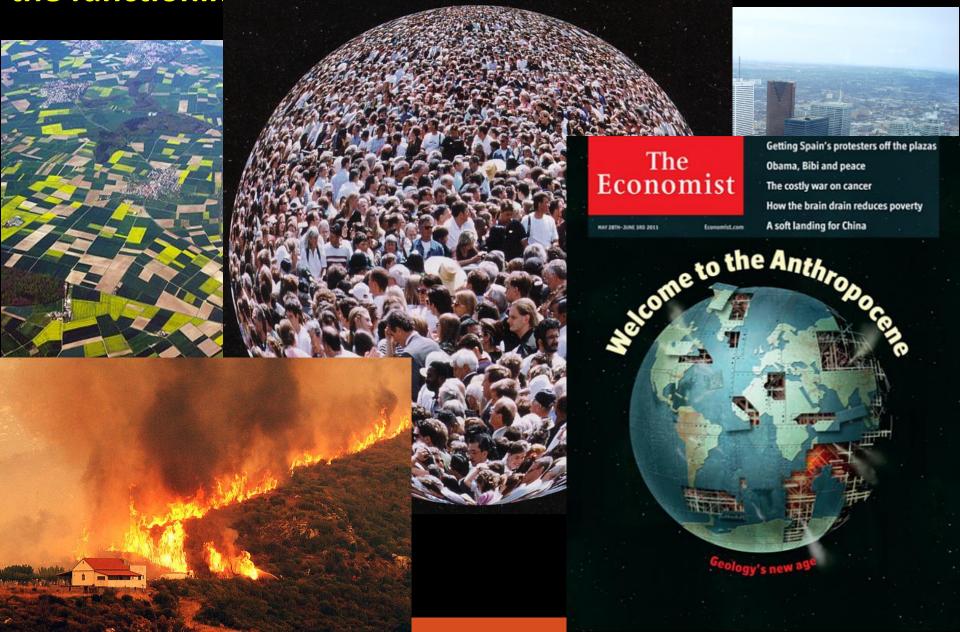
Unsustainable consumption

2000

1900

**1950** 

Antrophocene – humans influence the functioning of the Earth



### Planetary Boundaries

critical natural thresholds ENVIRONMENTAL CEILING The safe and just space for humanit critical human deprivations Oxfam, 2012

nature Vol 461|24 September 2009

#### **FEATURE**

#### A safe operating space for humanity

Identifying and quantifying planetary boundaries that must not be transgressed could help prevent human activities from causing unacceptable environmental change, argue Johan Rockström and colleagues.

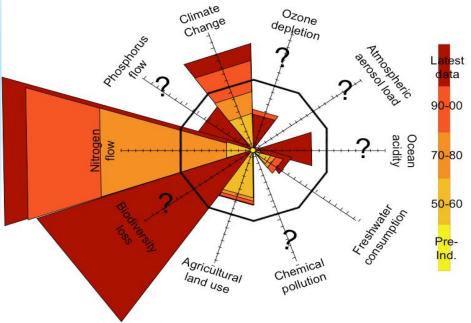
lthough Earth has undergone many periods of significant environmental change, the planet's environment has been unusually stable for the past 10,000 years1-3. This period of stability - known to geologists as the Holocene - has seen human civilizations arise, develop and thrive. Such stability may now be under threat. Since the Industrial Revolution, a new era has arisen, the Anthropocene4, in which human actions have become the main driver of global environmental change5. This could see human activities push the Earth system outside the



- New approach proposed for defining preconditions for human
- Crossing certain biophysical thresholds could have disastrous consequences for humanity
- Three of nine interlinked planetary boundaries have already been

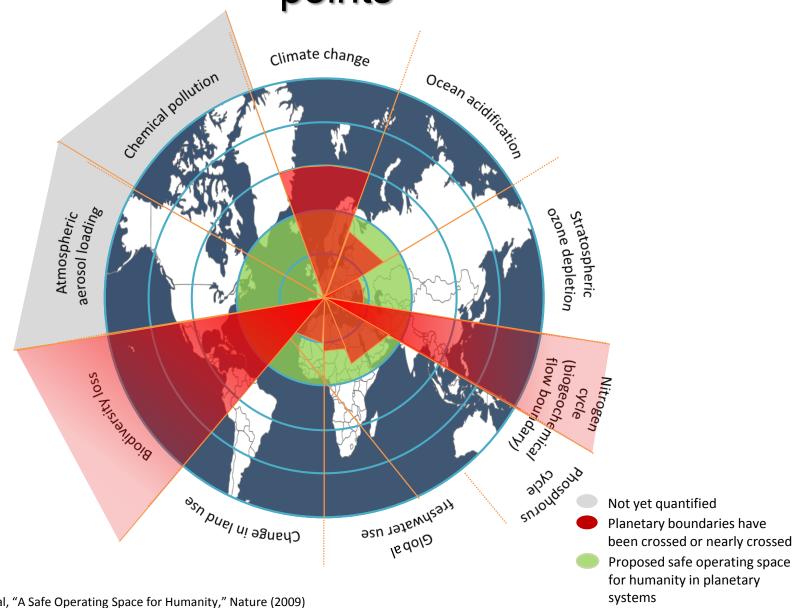
industrialized forms of agriculture, human activities have reached a level that could dam- for humanity with respect to the Earth system age the systems that keep Earth in the desirable

boundaries define the safe operating space and are associated with the planet's bio-



472

Key Earth systems are near or beyond "tipping points"



**Drivers and pressures** Indirect **Underlying** socioeconomic environmental

**Population** growth

trends

Rising middle class

Urbanization

drivers

**Demand for** food production

Demand for buildings

Demand for energy

Demand for transportation

Other

Direct environmental drivers

Agriculture production processes that produce food

Provision/use of transportation

Construction & use of buildings & other infrastructure

Production of electricity

Other

**Environmental** pressures

Pollution e.g., GHG's & ozonedepleting substances

Change in habitat and species loss

Introduction of invasive species

Over exploitation and harvesting

Other

**Changes in state** of environment

> Atmosphere (climate)

**Biodiversity** 

Land

**Oceans** 

Freshwater

**Driver interventions** 

**Pressure interventions** 

Changes in human welfare

Strategic targeting of drivers and pressures within GEF interventions is needed to deliver global environmental benefits at scale: impacts what we do, who we work with, and how we do it.

One-off, site specific driver-based intervention



One-off, site specific, pressure-based intervention

Pressure-based intervention at scale

### Strategic Plan for Biodiversity, 2011-2020





### 20 Aichi Biodiversity Targets

#### Strategic goal A. Address the underlying causes of biodiversity loss

- Target 1: By 2020, People are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.
- Target 2: By 2020, biodiversity values are integrated into national and local development and poverty reduction strategies and planning processes and national accounts.
- Target 3: By 2020, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed.
- Target 4: By 2020, Governments, business and stakeholders have plans for sustainable production and consumption and keep the impacts resource use within safe ecological limits.

#### Strategic goal B. Reduce the direct pressures on biodiversity and promote sustainable use

- Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.
- Target 6: By 2020 all stocks managed and harvested sustainably, so that overfishing is avoided.
- Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.
- Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.
- Target 9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.
- Target 10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

#### Strategic goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

- Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas are conserved through systems of protected areas.
- Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.
- Target 13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives is maintained.

#### Strategic goal D: Enhance the benefits to all from biodiversity and ecosystem services

- Target 14: By 2020, ecosystems that provide essential services, including services are restored and safeguarded.
- Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems.
- Target 16: By 2015, the Nagoya Protocol on Access and Benefits Sharing is in force and operational.

### Strategic goal E. Enhance implementation through participatory planning, knowledge management and capacity building

- Target 17: By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated NBSAP.
- Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities and their customary use, are respected.
- Target 19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.
- Target 20: By 2020, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources,, should increase substantially.



#### Biodiversity mainstreaming



Understand values



Sustainable fisheries



Mainstream biodiversity



Manage within limits



Address incentives



Reduce pollution



Sustainable production



Reduce invasive spp.



Halve rate of loss



Minimize reef loss

#### Protection



Protected areas



Prevent extinctions



Conserve gene pool

#### Restoration



Restore ecosystems



Enhance resilience

#### ABS



Implement Nagoya Prot.

#### Enabling



Revise NBSAPs



Respect and conserve TK



Improve knowledge



Mobilize resources

### **GEF-6 Biodiversity Strategy**

Goal: To maintain globally significant biodiversity and the ecosystem goods and services that it provides to society

BD1: Improve Sustainability of Protected Area Systems



BD 3: Sustainably Use Biodiversity BD4: Mainstream Biodiversity
Conservation and Sustainable
Use into Production Landscapes/
Seascapes and Sectors









- 1. Improving financial sustainability and effective management of the national ecological infrastructure
- 2 . Nature's Last Stand: Expanding the reach of the global protected area estate.

- 3. Preventing the extinction of known threatened species
- 4. Prevention, control, and management of invasive alien species.
- 5. Implementing the Cartagena Protocol of Biosafety

- 6. Ridge to Reef+: Maintaining integrity and function of globally significant coral reefs
- 7. Securing Agriculture's Future: Sustainable use of plant and animal genetic resources.
- 8. Implementing the Nagoya Protocol on Access and Benefit Sharing.

- 9. Managing the human-biodiversity interface
- 10. Integration of biodiversity and ecosystem services into development and finance planning

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### Biodiversity Strategy: Objectives and Programs

Focal Area Objective	Focal Area Programs
Objective One: Improve sustainability of protected area systems	Program 1: Improving Financial Sustainability and Effective Management of the National Ecological Infrastructure
	Program 2: Nature's Last Stand: Expanding the Reach of the Global Protected Area Estate

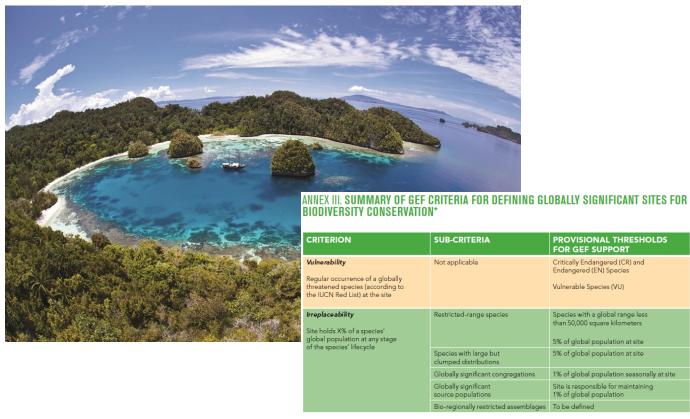


### Program 1: Sustainability of PA Systems





### Program 2: Expanding the Reach



<sup>\*</sup> The global standards for identification of key biodiversity areas are currently under revision through a broad scientific consultation process convened by IUCN's World Commission on Protected Areas/Species Survival Commission Joint Taskforce on Biodiversity & Protected Areas. These will be launched at the 2014 World Parks Congress. In the interim, the criteria and thresholds for key biodiversity area identification as presented above will be applied. It is likely that the great majority of sites meeting these criteria will also be considered key biodiversity areas under the new standard.



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### Biodiversity Strategy: Objectives and Programs

Focal Area Objective	Focal Area Programs
Objective Two: Reduce threats to globally significant biodiversity	Program 3: Preventing the Extinction of Known Threatened Species
	Program 4: Prevention, Control and Management of Invasive Alien Species
	Program 5: Implementing the Cartagena Protocol on Biosafety (CPB)



### Program 3: Preventing Extinction







### Program 3: Preventing Extinction







### Program 4: IAS





### Program 5: Biosafety



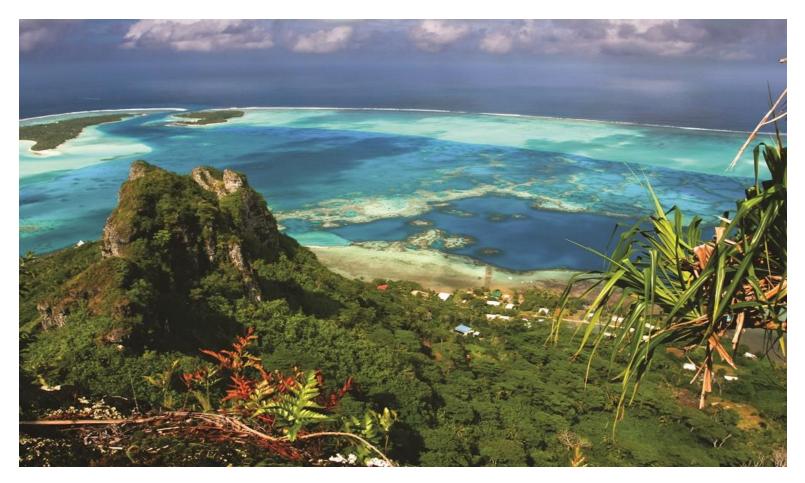


### Biodiversity Strategy: Objectives and Programs

Focal Area Objective	Focal Area Programs
Objective Three: Sustainably use biodiversity	Program 6: Ridge to Reef+: Maintaining Integrity and Function of Coral Reef Ecosystems
	Program 7: Securing Agriculture's Future: Sustainable Use of Plant and Animal Genetic Resources
	Program 8: Implement the Nagoya Protocol on ABS



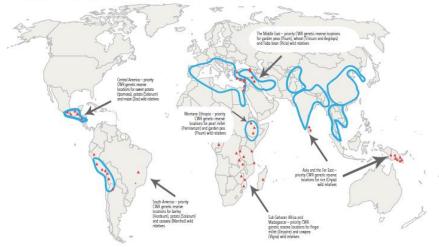
### Program 6: Ridge to Reef+



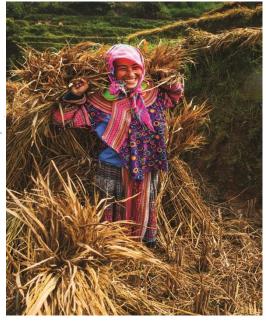


### Program 7: Agrobiodiversity

#### FIGURE 1. GLOBAL PRIORITIES FOR GENETIC RESERVE LOCATIONS'

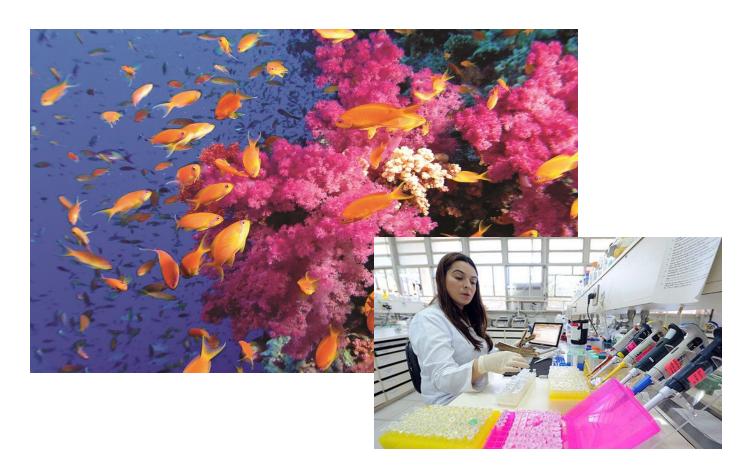


\* Second State of the World's Plant Genetic Resources for Food and Agriculture. 2009 FAO, Rome. The eight Vavilov centres of origin/diversity of cultivated plants, indicated by the enclosed blue lines, are likely to contain further priority sites for other crop genepools.





### Program 8: ABS





### Biodiversity Strategy: Objectives and Programs

Focal Area Objective	Focal Area Programs
Objective Four: Mainstream biodiversity conservation and sustainable use into production landscapes and seascapes and sectors	Program 9: Managing the Human-Biodiversity Interface
	Program 10: Integration of Biodiversity and Ecosystem Services into Development & Finance Planning



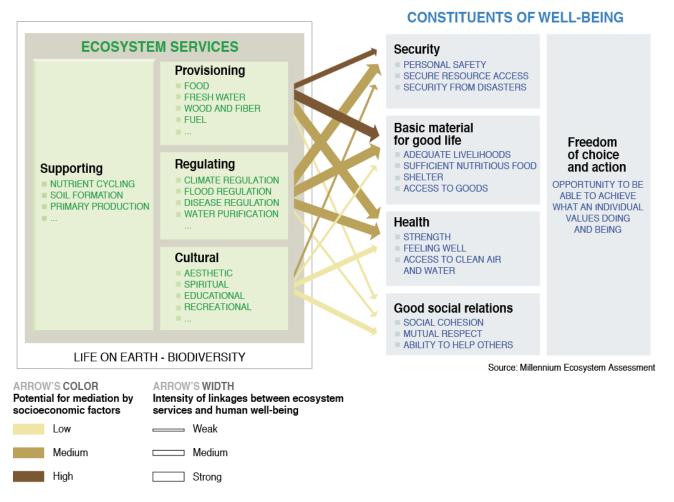
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### Program 9: Human-Biodiversity Interface





## Program 10: Integration of BD and ES into Development and Finance Planning





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### **Sustainable Forest Management GEF-6 Strategy**

Goal: To achieve multiple environmental, social and economic benefits from improved management of all types of forests and trees outside of forests.

#### **SFM Objective 1: To maintain forest resources**

- Integrated land use planning; Identification and monitoring of HCVF;
- Identifying and monitoring forest loss

#### SFM Objective 2: To enhance forest management

Capacity development for SFM within local communities; Supporting sustainable finance mechanisms for SFM

#### SFM Objective 3: To restore forest ecosystems

 Building of technical and institutional capacities to identify degraded forest landscapes and monitor forest restoration; integrating plantation management in landscape restoration

### SFM Objective 4: To increase regional and global cooperation

Private sector engagement

Global technologies for national progress

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Target 7

Target

14

Target 15

#### **International Waters Strategy: Objectives and Programs**

Goal: To promote collective management of transboundary water systems and implementation of the full range of policy, legal and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services

Objective 1: Catalyze
Sustainable Management of
Transboundary Waters

Objective 2: Balance
Competing Water-uses in
the Management of
Transboundary Surface and
Groundwater

Objective 3: Rebuild Marine Fisheries, Restore and Protect Coastal Habitats, and Reduce Pollution of Coasts and LMEs

1. Foster Cooperation for Sustainable use of Transboundary Water Systems &

**Economic Growth** 

**3.** Advance Conjunctive Management of Surface & Groundwater systems

**5.** Reduce Ocean Hypoxia

Target 14

RO

IN'

**6.** Prevent the Loss and Degradation of Coastal Habitat

**2** .Increase Resilience & Flow of Ecosystems Services in Context of Melting High Altitude Glaciers

**4.** Water/Food/Energy/ Ecosystem Security Nexus

Target 6

**7.** Foster Sustainable Fisheries

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## Land Degradation Strategy: Objectives and Programs



#### **LD-1: Agriculture and Rangeland Systems**

- Agro-ecological Intensification
- SLM for Climate-Smart Agriculture

Target 7 & 8



#### **LD-2: Forest Landscapes**

• Landscape Management and Restoration

Target 14



#### **LD-3: Integrated Landscapes**

Scaling up SLM

Target 15



#### LD-4: Institutional and Policy Frameworks

Mainstreaming SLM in Development

### **GEF-6 CCM Strategy**

Goal: To support developing countries to make transformational shifts towards low emission, resilient development path

Objective 1: Promote innovation & technology transfer

Objective 2: Demonstrate systemic impacts of mitigation options

Objective 3: Foster enabling conditions to mainstream mitigation concerns into SD strategies







**1.** Low carbon technologies and mitigation options

**3.** Integrated low-carbon, urban systems

**5.** Convention obligations for planning and mitigation contributions

**2** . Innovative policy packages and market initiatives

**4.** Forests and other land use, and climate smart agriculture

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### **Integrated Approach**

# Taking Deforestation Out of the Supply Chain: Beef, soy, palm oil, pulp and paper



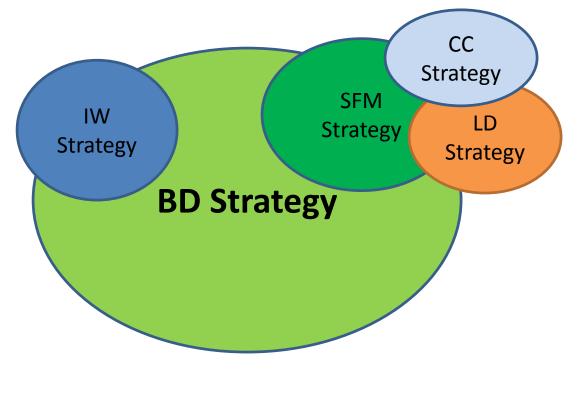
Financial institutions, producers, buyers, and consumers

# Integrated Approach: Sustainability and Resilience for Food Security in Sub-Saharan Africa



# Strategic Plan Implementation and Aichi Target Achievement Will Benefit from Multiple Funding Streams in GEF-6

Integrated Approaches: Commodities, Food Security





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