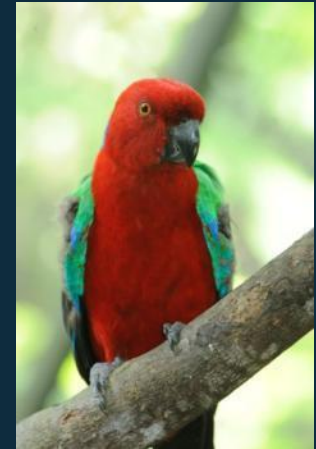


# Achieving biodiversity conservation through REDD+

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# Synergies between climate mitigation and biodiversity conservation goals

- Threats to forest carbon stocks and forest biodiversity are often the same:



Agriculture and livestock



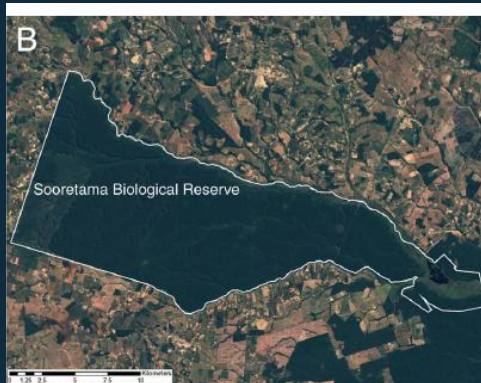
Firewood collection  
and charcoal production



Infrastructure  
development +  
mining



- Approaches that are useful for conserving forest biodiversity will also help conserve forest carbon stocks:



Establishment and expansion of Protected Areas\*

Recognition of Indigenous territories and community-managed areas



Reduced Impact Logging, Community forestry



Certification of sustainable products



Agroforestry systems and agricultural intensification to reduce pressure



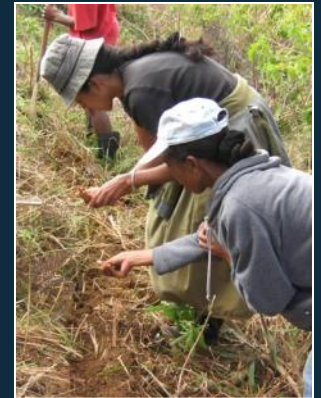
Fire management and prevention

# More synergies...



## 3. Both require good governance

- Strengthening forest governance and improving institutional capacity
- Developing clear legal frameworks and law enforcement to protect forests
- Clarifying land tenure issues and land use rights



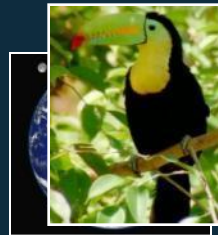
## 4. Success depends on active participation and support of local stakeholders

- Free, prior and informed consent
- Recognition of indigenous land rights and use rights
- Full participation in both decision-making and implementation

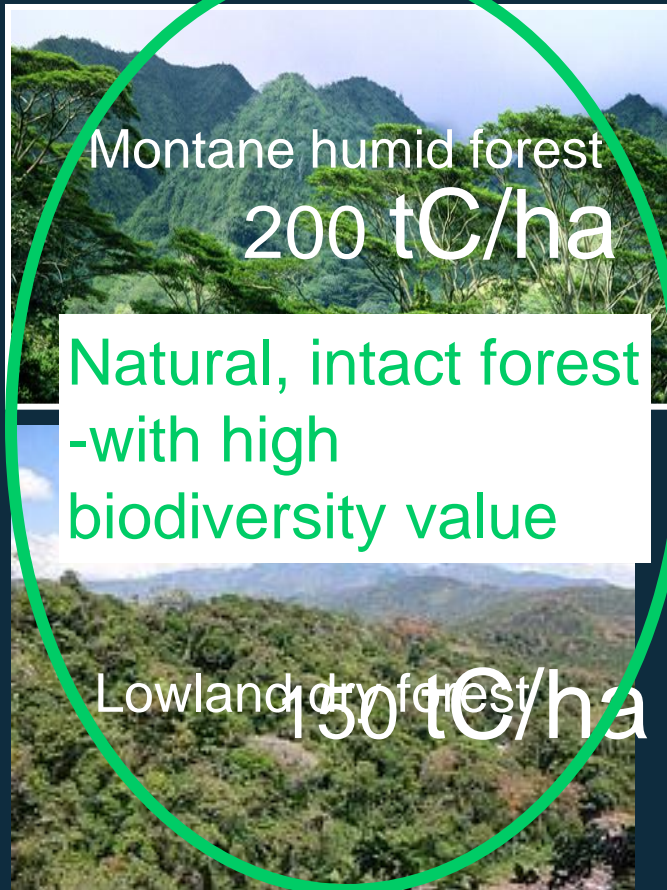




However, there are also some key differences between mitigation and biodiversity conservation agendas....



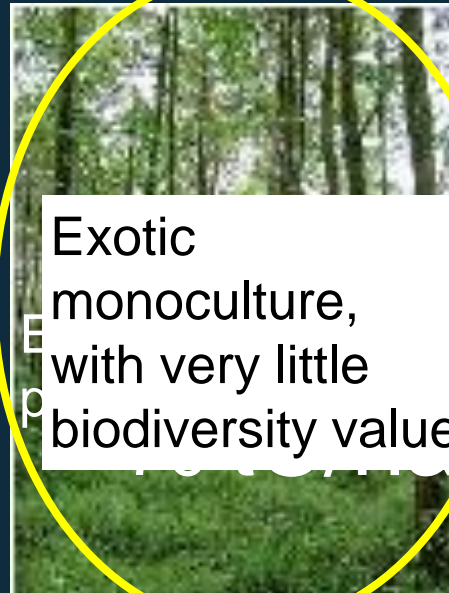
Forests as seen through a 'biodiversity' lens  
Forests as seen through the 'climate' lens



Montane humid forest  
200 tC/ha

Natural, intact forest  
-with high  
biodiversity value

Lowland dry forest  
150 tC/ha



Exotic  
monoculture,  
with very little  
biodiversity value



Oil palm  
plantation  
35-50 tC/ha

**X** not a forest- and  
no biodiversity value

→ The type of forest is critical for conservation efforts, but not for mitigation

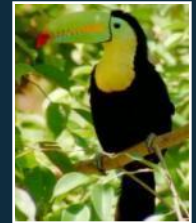
- Areas that are of highest priorities for mitigation are not necessarily the highest priorities for biodiversity conservation

Mitigation:



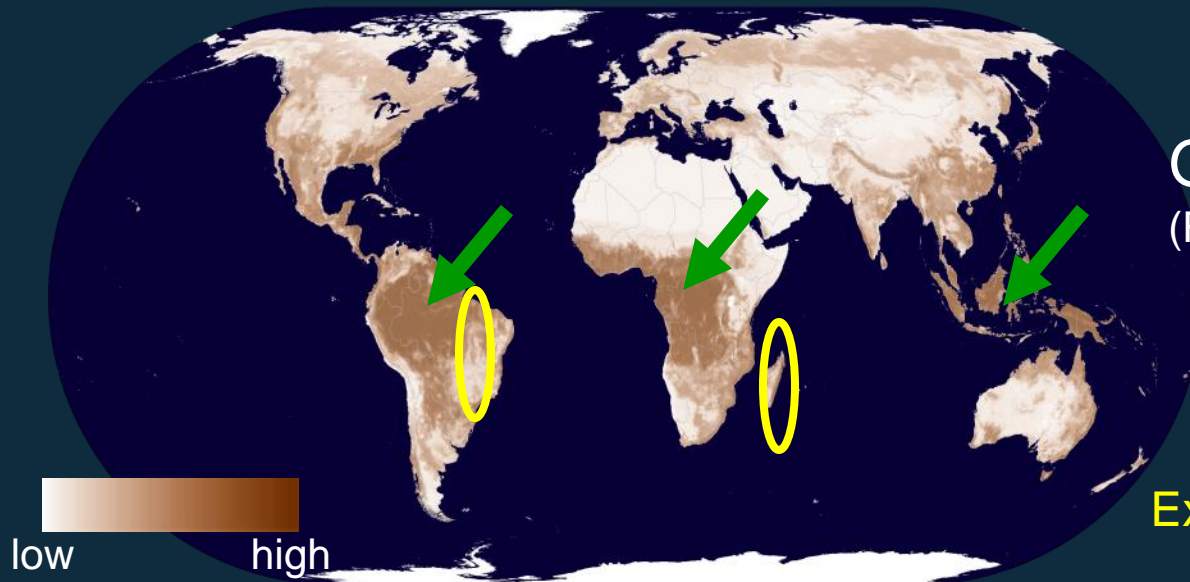
- Areas under high deforestation risk
- Areas with high carbon stock
- Areas with low opportunity costs and low implementation costs

Biodiversity conservation:



- Areas with high # of endemic spp.
- Areas with high # of threatened spp.
- Areas with biodiversity under greatest threat
- Ecosystems that are underrepresented in current protected areas

...so geographic priorities do not always overlap

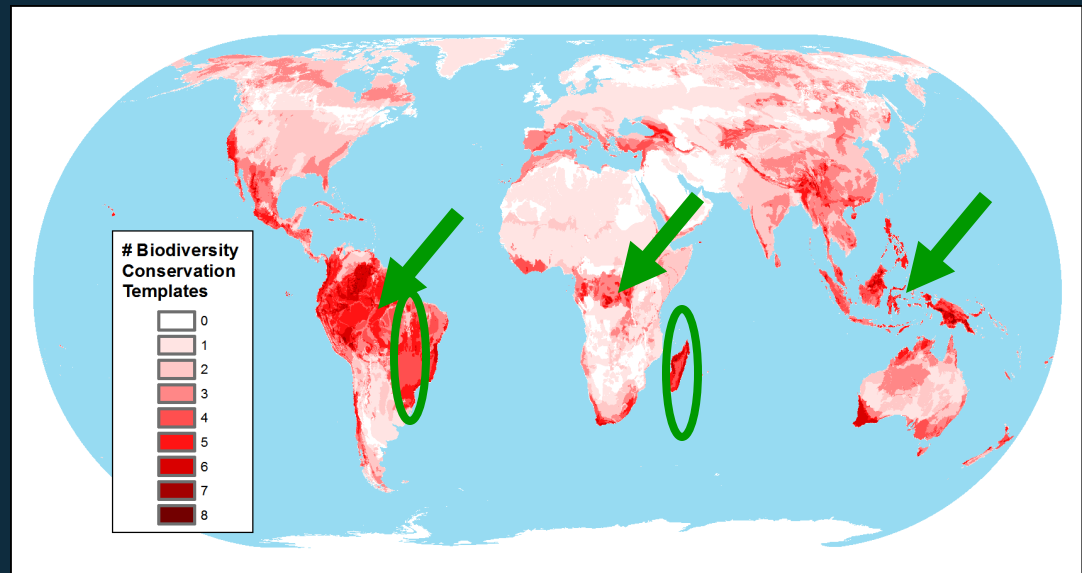


Global carbon stocks  
(Ruesch and Gibbs, 2008)

Examples of synergies

Examples of differences

Global biodiversity  
conservation priorities  
(Brooks et al., 2006)



# Emissions reduction potential

Low  High

Biodiversity  
conservation  
value

High

Low

High importance for  
biodiversity- but  
unlikely to be funded  
by REDD+ ?

Low priority for both  
REDD+ and  
biodiversity  
conservation

High priority for  
both REDD+ and for  
biodiversity  
conservation

REDD+

High priority for  
REDD- but not for  
biodiversity  
conservation



So, how do we ensure that REDD+ not only achieves mitigation goals, but also benefits biodiversity?



# At the international policy level:



- Design REDD+ to maximize the amount of forest covered:

- .Maintain a broad scope of eligible activities (REDD+)
- .Have some flexibility in how reference levels are established, to ensure 'high forest low deforestation countries' (HFLD) are eligible for REDD
- .Ensure sufficient finance is available to implement at scale  
→\$15-30 billion dollars annually needed to reduce deforestation by 50% by 2030)

# •Ensure that REDD+ includes biodiversity safeguards




Possible options:

- Avoid the conversion of natural forests to non-forest ecosystems
- Ensure REDD+ activities comply with national biodiversity laws and relevant international conventions and agreements
- Require MRV of biodiversity safeguards
- Avoid the replacement of natural forests with monoculture timber plantations and/or oil palm\*
- Prevent the expansion of forest management into remaining natural, intact forests?

\* this requires that the UNFCCC define 'forests' and 'SMF' more clearly and distinguish between natural and planted forests.



# At the national level (implementation):

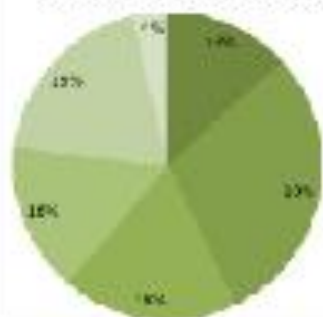
- **Strategically select areas for REDD+ implementation, using spatially-explicit analyses**
    - Generate maps of carbon stocks, deforestation risk, biodiversity, and opportunity costs
- 
- Use these maps to prioritize REDD+ in areas where there are greatest synergies (high C, high biodiversity)
- 
- When there are forests of similar carbon stocks, prioritize REDD+ in those of highest biodiversity value
- 
- Identify areas that are critical for biodiversity conservation that will NOT be priorities for REDD+ and examine alternative options for achieving conservation

Spatial analyses can help identify both potential synergies and tradeoffs... and inform policy-making



## Carbon overlaid with Key Biodiversity Areas (Birdlife

Total carbon inside KBAs: 2.3 Gt

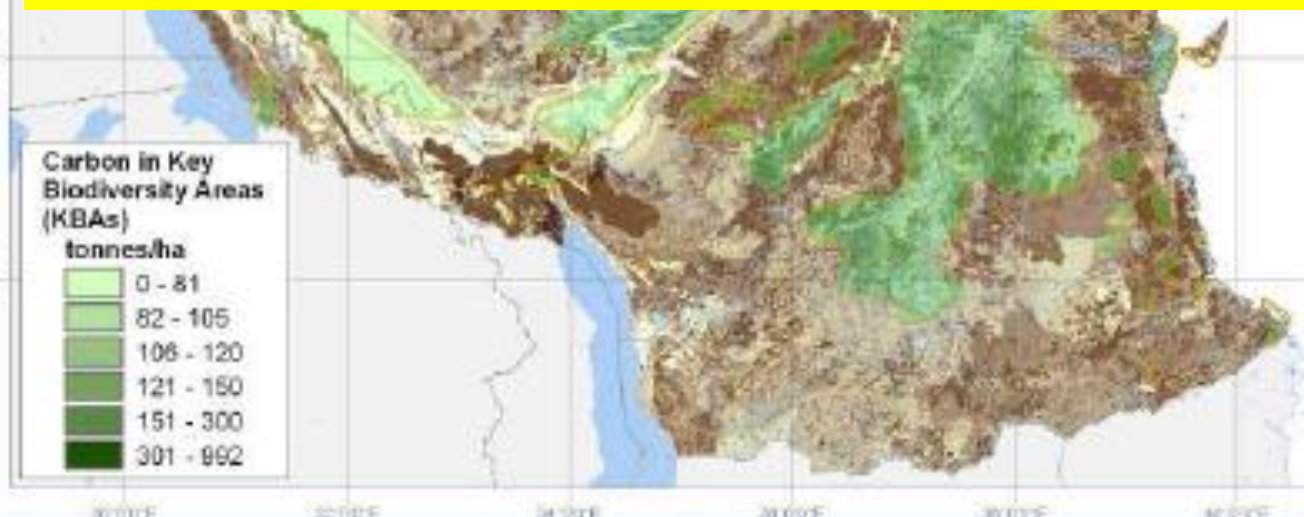


Carbon density risk:  
■ Very high  
■ High  
■ Medium high  
■ Medium  
■ Medium low  
■ Low



Important to include information on:

- carbon stocks
- biodiversity, ecosystem services
- deforestation risk
- opportunity, transaction and implementation costs



- Countries could also consider prioritizing 'conservation' and 'reducing deforestation' within REDD+ implementation

REDD+ Activity	Importance for Emissions Reductions	Importance for Biodiversity Conservation
1. Reducing emissions from deforestation	XXX	XXX
2. Reducing emissions from degradation	X	X
3. Forest conservation	X(XX)	XXX
4. Sustainable management of forests	X	X
5. Carbon stock enhancement	X	X



- Take a landscape-level approach to implementing REDD+, strategically locating activities to optimize conservation and mitigation goals



### Reforest and restore degraded areas

- restore or recreate habitat
- increase CO<sub>2</sub> uptake

### Protect intact natural forests:

- conserve habitats for biodiversity
- provide ecosystem services to communities
- **reduce CO<sub>2</sub> emissions from deforestation**



### Improve management of existing forest concessions and plantations

- minimize impacts on biodiversity
- **reduce CO<sub>2</sub> emissions from degradation**

# •Develop and apply standards that ensure biodiversity (and social) benefits

- Example: **REDD+ Social and Environmental Standards** = a set of principles, criteria & indicators and a process for monitoring, reporting and verification (MRV) on biodiversity and social issues
- To be applied to policies and measures of government-led REDD+ programs implemented at national or state/provincial level

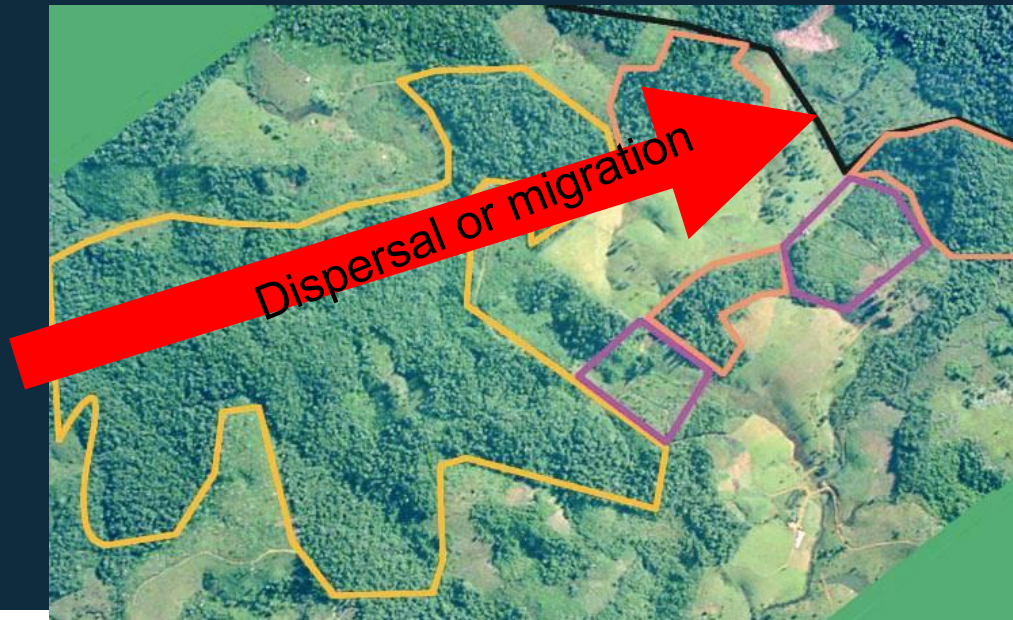
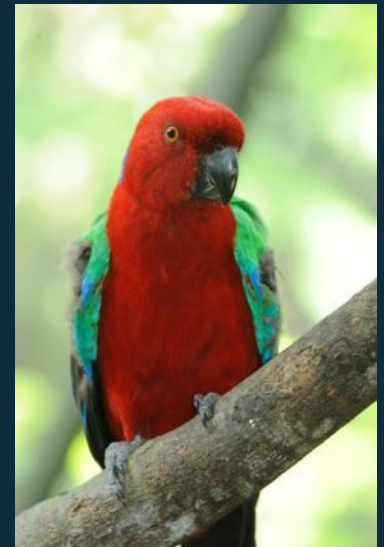
## Principle 5: The REDD+ program maintains and enhances biodiversity and ecosystem services

### Criteria address:

- Maintenance and enhancement of biodiversity and ecosystem services
- Assessment of positive and negative impacts on ecosystem services and biodiversity
- Adaptive management of the REDD+ program in response to impact assessment

# Additional recommendations for REDD+ implementation

- Consider adding specific activities to promote biodiversity conservation within REDD+ areas
  - E.g., prevention of hunting, restrictions on wildlife trade, etc.
- Where possible, locate REDD+ activities in such a way as to enhance landscape connectivity and facilitate animal movement

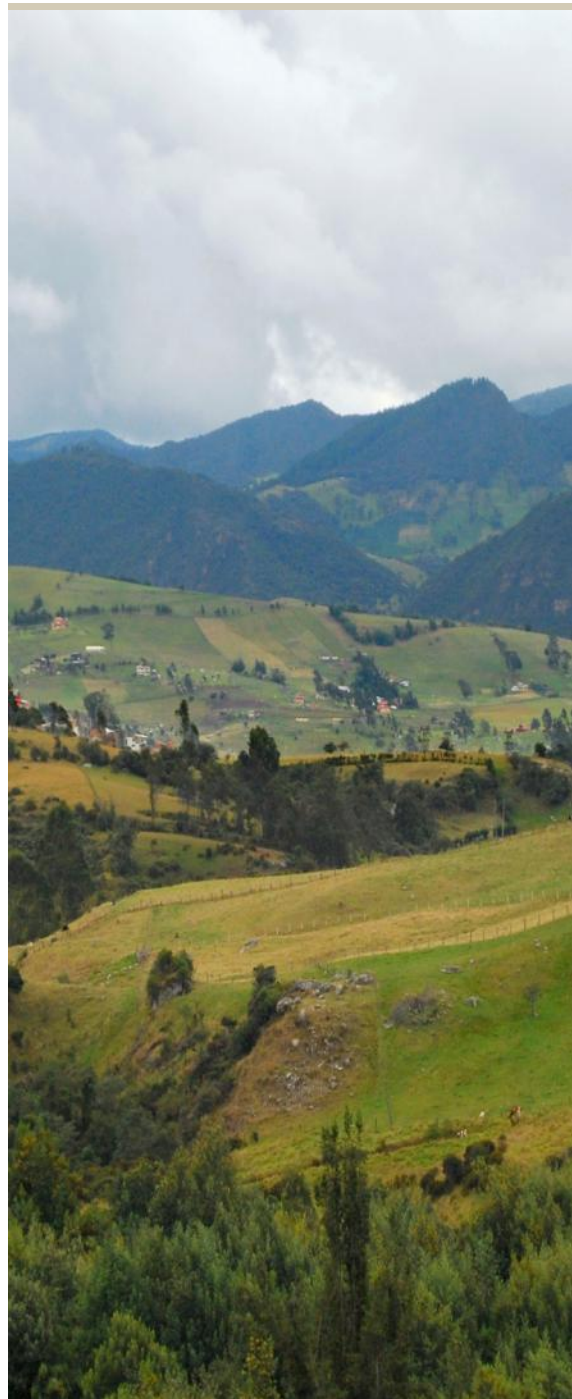






# Conclusions

- REDD+ offers a unique opportunity to conserve forest biodiversity at an unprecedented scale
- However, the ‘REDD+’ and ‘biodiversity’ agendas differ in some fundamental ways, which mean that certain tradeoffs are inevitable and REDD+ will not solve all biodiversity concerns
- There are many options to design and implement REDD+ to promote biodiversity conservation, but some of these may reduce the effectiveness of REDD+ as a mitigation option



# Final thoughts...

- The current REDD+ negotiating text already pays significant attention to biodiversity conservation
- Although there are additional ideas that could be added to the REDD+ mechanism, it may not be strategic to overburden the mechanism with additional biodiversity constraints
- Instead, since many of the biodiversity gains can be achieved at the national level where REDD+ is implemented, it might be most strategic to provide guidance to countries on how to best implement REDD+ to achieve both conservation and mitigation goals
- It will also be key to monitor impacts of early REDD+ initiatives on biodiversity- and use this information to adapt future REDD+ implementation

• THANK YOU!



For more information, see:

#### POLICY PERSPECTIVE

### **Opportunities for achieving biodiversity conservation through REDD**

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