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REDD+ Beyond Carbon:

Supporting decisions on Safeguards and Multiple Benefits

REDD+ Day - CBD COP 11, Hyderabad, India

16 October 2012

FAO FIAT PANIS

UNDP

UNEP

REDD+ Benefits Beyond Carbon

- Actions under REDD+ have the potential to generate a wide range of benefits, including
  - Contributing to biodiversity conservation
  - Securing ecosystem services
    - Hydrological services, regulating water quantity and quality
    - Soil conservation & control of sedimentation
    - Provision of timber and NTFPs
    - Pollination
    - . . .
  - Enhancing human well-being
    - Improved livelihoods
    - Clarified rights to resources
    - . . .

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REDD+ : Risks

- Environmental
  - Replacement of natural forest with plantation
  - Displacement of pressures to locations and systems of conservation importance
- Social
  - Reduced access to resources
  - Limited participation
  - Poor governance

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Safeguards Address Benefits & Risks of REDD+

- Countries have agreed to promote and support them
- Formulation is (necessarily) general – countries need to decide how to apply them
- Some concerns that, especially through emphasis on benefits as well as risks, they:
  - Broaden the agenda
  - Place additional burdens on countries,

For Successful REDD+

- Delivery on climate objectives is not enough
- Multiple benefits may be the key to convincing stakeholders that REDD+ is worthwhile

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Evidence is needed

- Focusing on **environmental benefits**, this paper describes ways of assembling evidence and using it to
  - Address safeguards
    - identify and describe potential benefits (& risks)
  - Explore synergies and trade-offs
  - Present clearly what REDD+ can deliver

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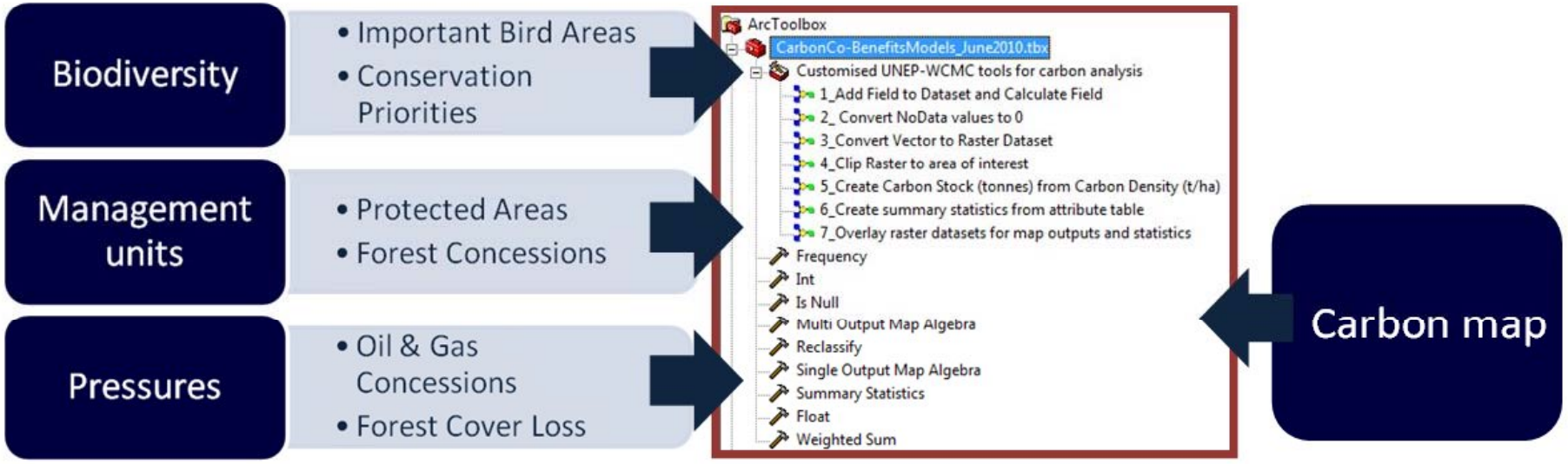
Mapping ecosystems: Identifying areas important for biodiversity & ecosystem services

- Many services and values of interest vary with location
- This makes maps a useful way to identify areas of importance
- Overlaying maps can help to explore relationships and opportunities for synergy



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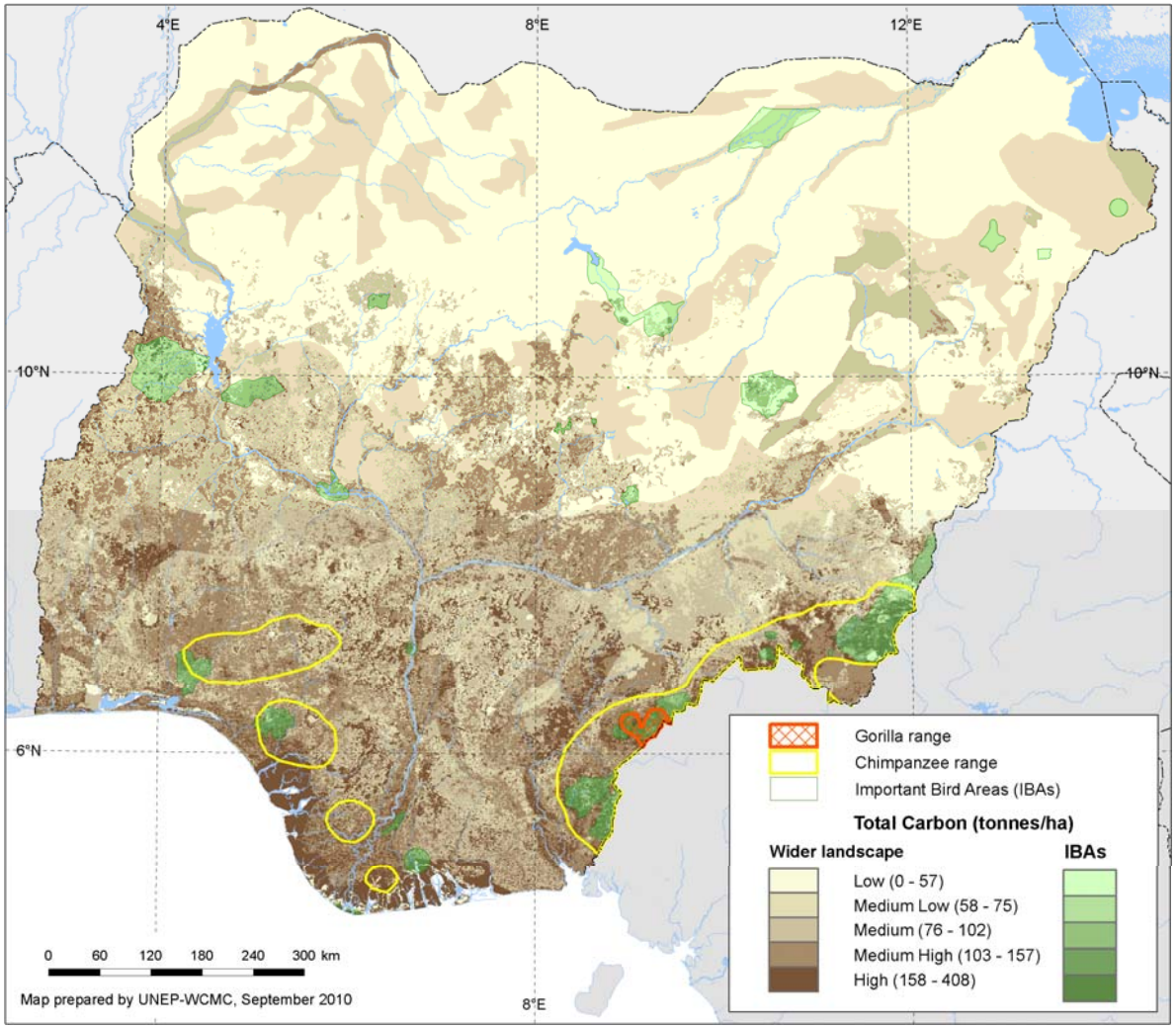
Potential for biodiversity benefits in Nigeria



Cross River State Forestry Commission

UNEP WCMC

FME Federal Ministry Of Environment

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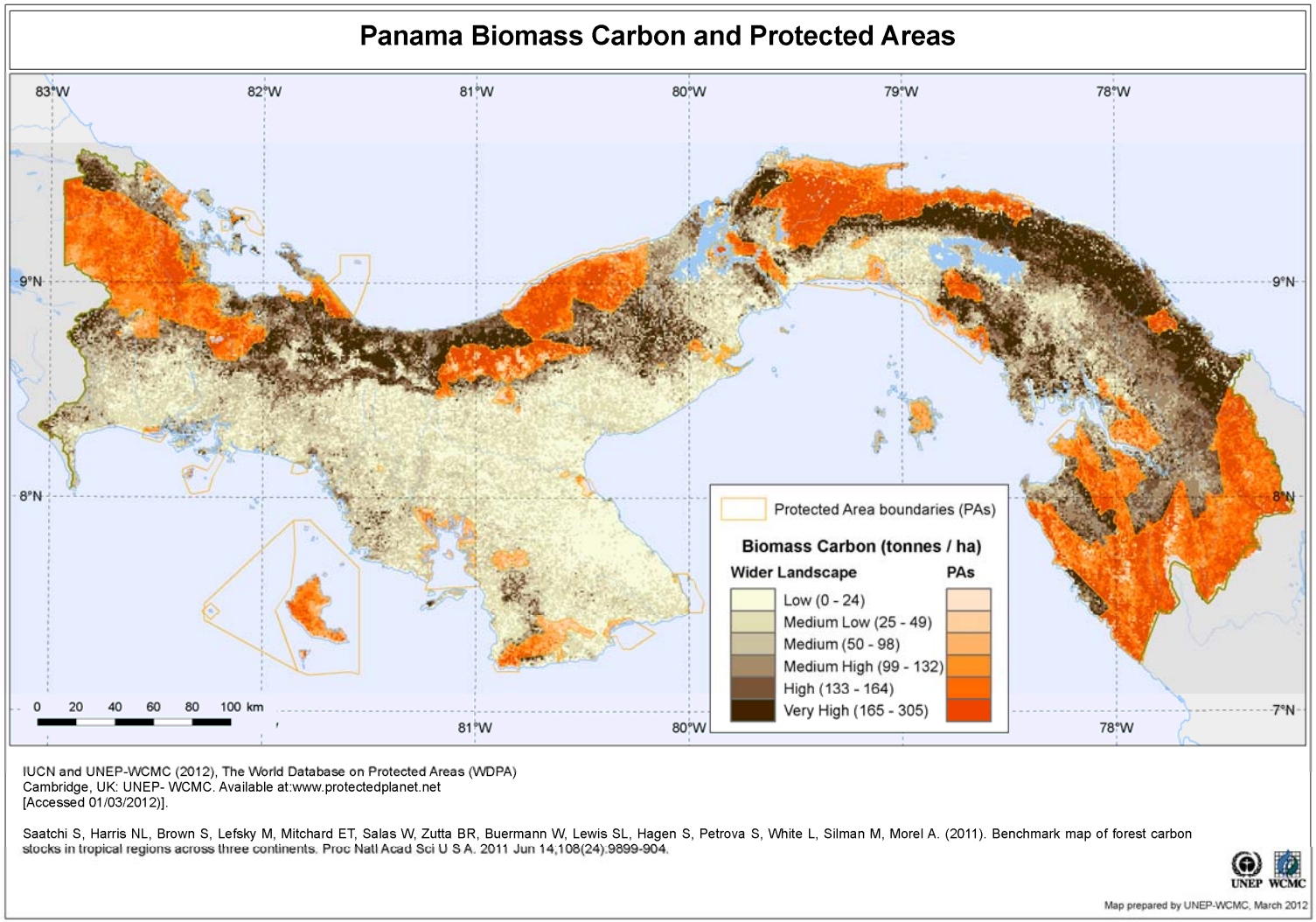
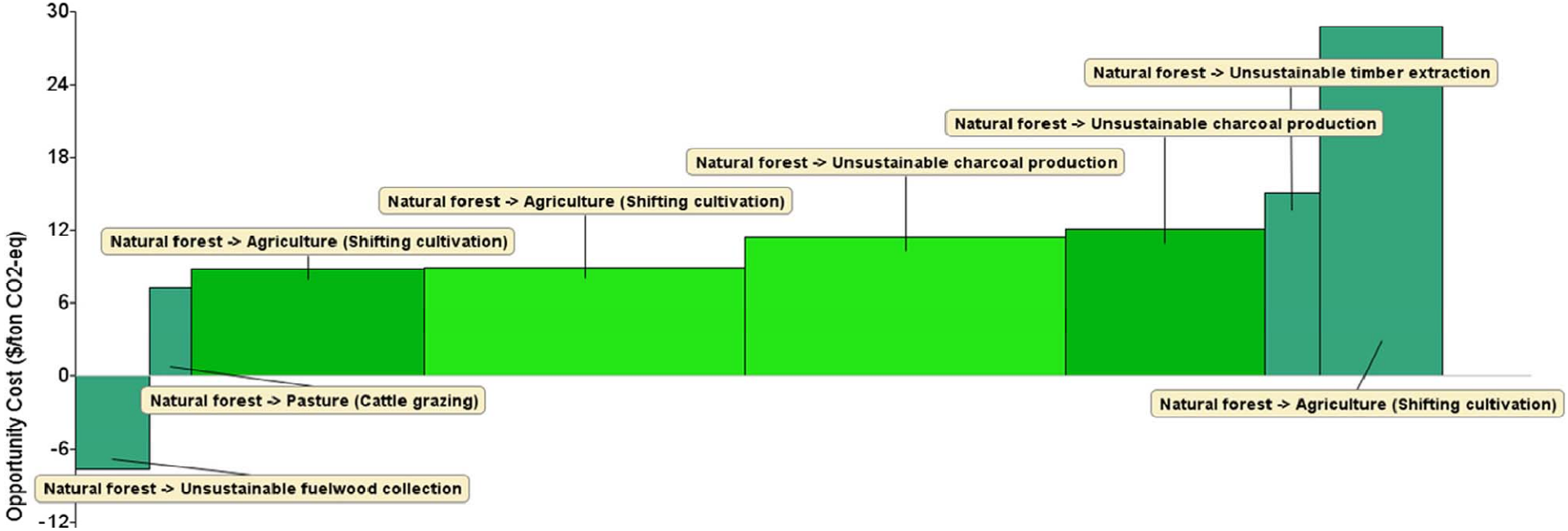
Carbon stock & existing Protected Areas in Panama



Identifying cost-effective solutions

- Requires assessing costs:
  - Opportunity costs
  - Implementation costs
  - Transaction costs



Assessing options for REDD+ action

APPROACH	Impacts on:						Cost	Ease of measuring carbon benefits
	Carbon	Biodiversity	Soil	Water	NTFPs	Livelihoods		
REDUCING DEFORESTATION:								
Maintaining natural forest and preventing conversion	●	●	●	●	●	■	$	★
Promoting the use of **non-timber forest products (NTFPs) at sustainable harvesting levels** to provide alternative livelihoods	□	▪	□	□	□	○	$	★
Intensification of agriculture (annual or tree crops) with conventional methods using high energy and chemicals input, to decrease conversion pressure	■	■	■	■	■	○	$$	★
Change from conventional agriculture to **organic farming** to decrease conversion pressure by increasing profitability	●	●	●	●	□	○	$	★
REDUCING FOREST DEGRADATION / SUSTAINABLE MANAGEMENT OF FOREST:								
Change from conventional logging to **Reduced-Impact Logging (RIL)** in production forest	●	●	●	●	●	●	$	★
Enrichment planting in moderately degraded / logged over forest	●	●	●	●	●	●	$$	★
Fire control to prevent fire through raised awareness and increased enforcement in forest areas at risk	●	●	●	●	●	●	$	★
ENHANCING FOREST CARBON STOCKS:								
Rehabilitation of significantly degraded land through **(assisted) natural regeneration**	●	●	●	●	●	●	$	★

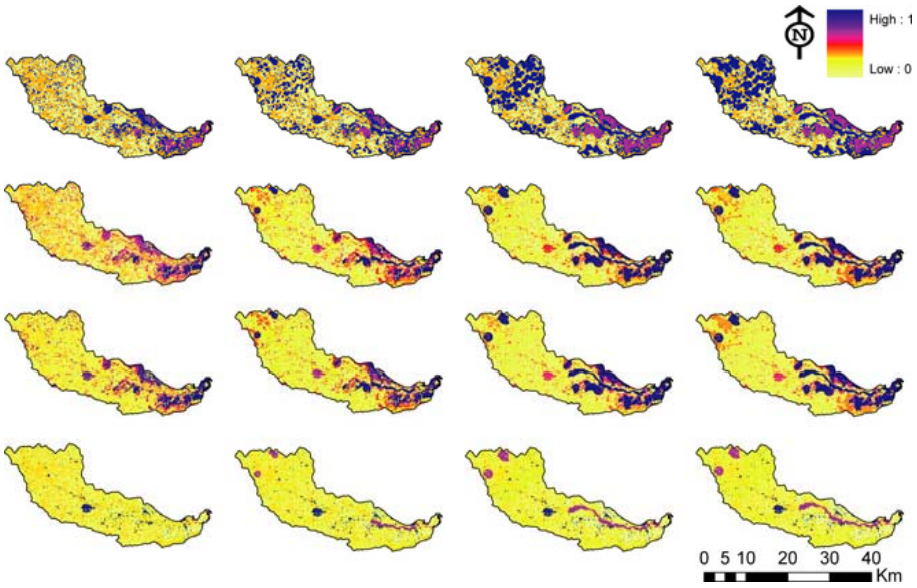
Valuation – establishing economic values of benefits -

Monetary

Tropical forests	No. of estimates	Mean Value (Int.$/ha/y)
TOTAL: 5.088 Int. $/ha/year (n = 139)	**139**	**5,088**
PROVISIONING SERVICES	**62**	**1,886**
1 Food	24	121
2 Water	3	300
3 Raw materials	26	568
4 Genetic resources	4	506
5 Medicinal resources	5	392
6 Ornamental resources		
REGULATING SERVICES	**43**	**2,180**
7 Influence on air quality	2	485
8 Climate regulation	10	358
9 Moderation of extreme events	4	92
10 Regulation of water flows	4	19
11 Waste treatment / water purification	6	261
12 Erosion prevention	11	562
13 Maintenance of soil fertility /nutrient cycling	3	359
14 Pollination	3	45
15 Biological control	*1*	
HABITAT SERVICES	**13**	**649**
16 Lifecycle maintenance (esp. nursery service)	*1*	
17 Maintenance of genetic diversity (gene pool prot.)	13	649
CULTURAL SERVICES	**21**	**373**
18 Aesthetic information		
19 Opportunities for recreation and tourism	21	373
20 Inspiration for culture, art and design		
21 Spiritual experience		
22 Information for cognitive development		

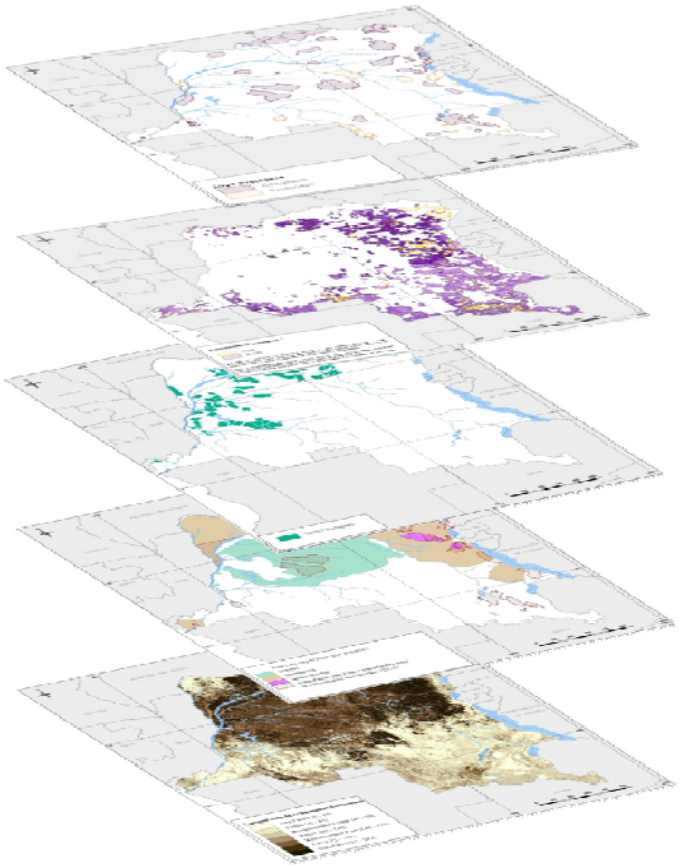
Summary of values (in Int. 2007 $/ha/year) from studies on tropical forests based on TEEB database (van der Ploeg et al. 2010)

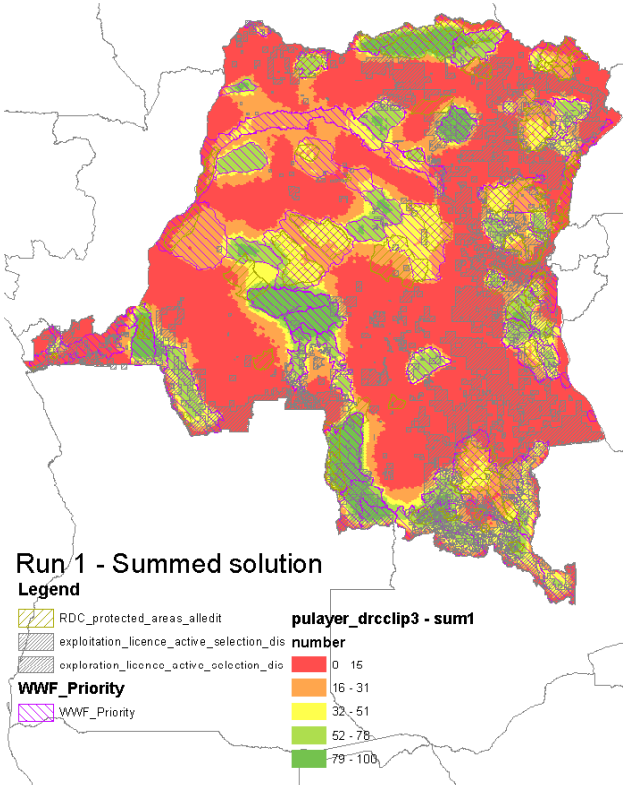
Non - Monetary



Value of multiple ecosystem services across the catchment of the River Frome in Dorset, England (Newton et al. *Journal of Applied Ecology* 2012)

Multi-criterion analyses (e.g. Marxan) identify solutions in relation to priorities, benefits, & costs





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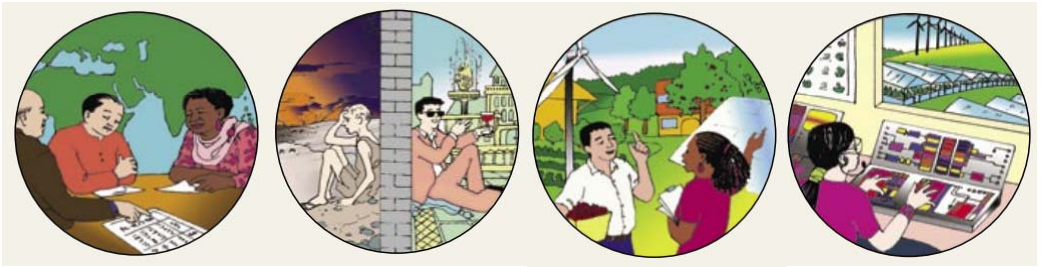
Scenario Analysis: Assessing REDD+ impacts in a complex and changing future

- Range of possible futures (outside REDD remit)
- Examining implications of decisions
- Modelling can assess possible impacts of options



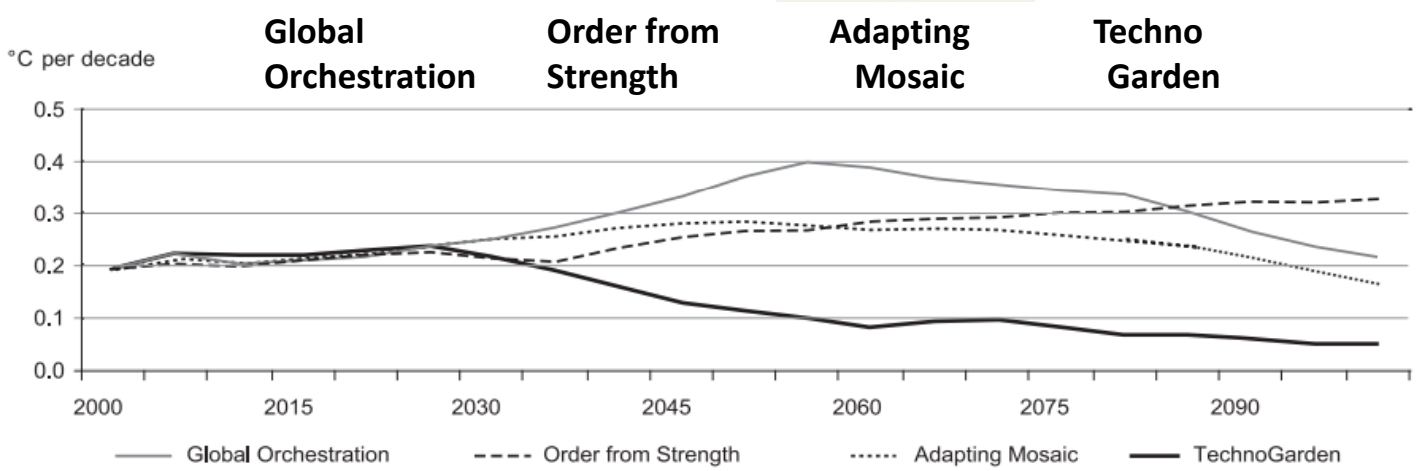
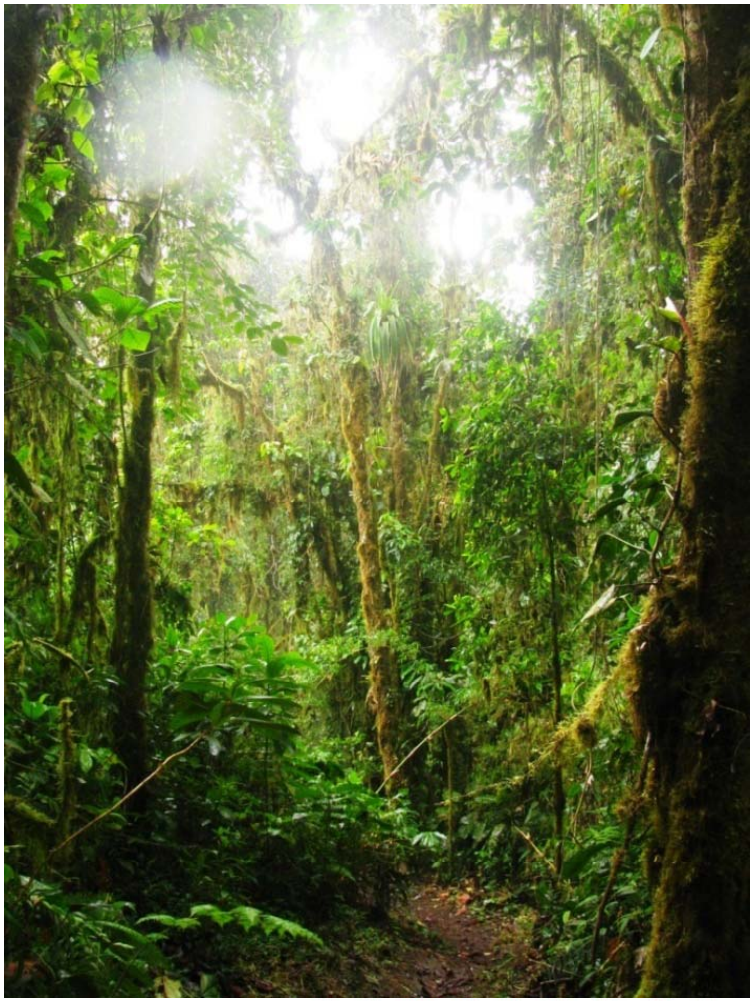


Figure 9.11. Decadal Rate of Change of Global Temperature in MA Scenarios (IMAGE 2.2)

Conclusions

- Taking account of risks & benefits can strengthen case for REDD+ action
- Informed decisions & factors considered are up to countries
- Need to understand consequences of choices on how & where REDD+ is implemented
- Relevant tools exist & are being applied
- Sharing experience & monitoring results can help to move forward



Paper available at:
http://www.unredd.net/index.php?option=com_docman&task=doc_download&gid=8419&Itemid=53

Thank you for listening!

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