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Using information on biodiversity and ecosystem services to support decision-making

Mapping of multiple benefits

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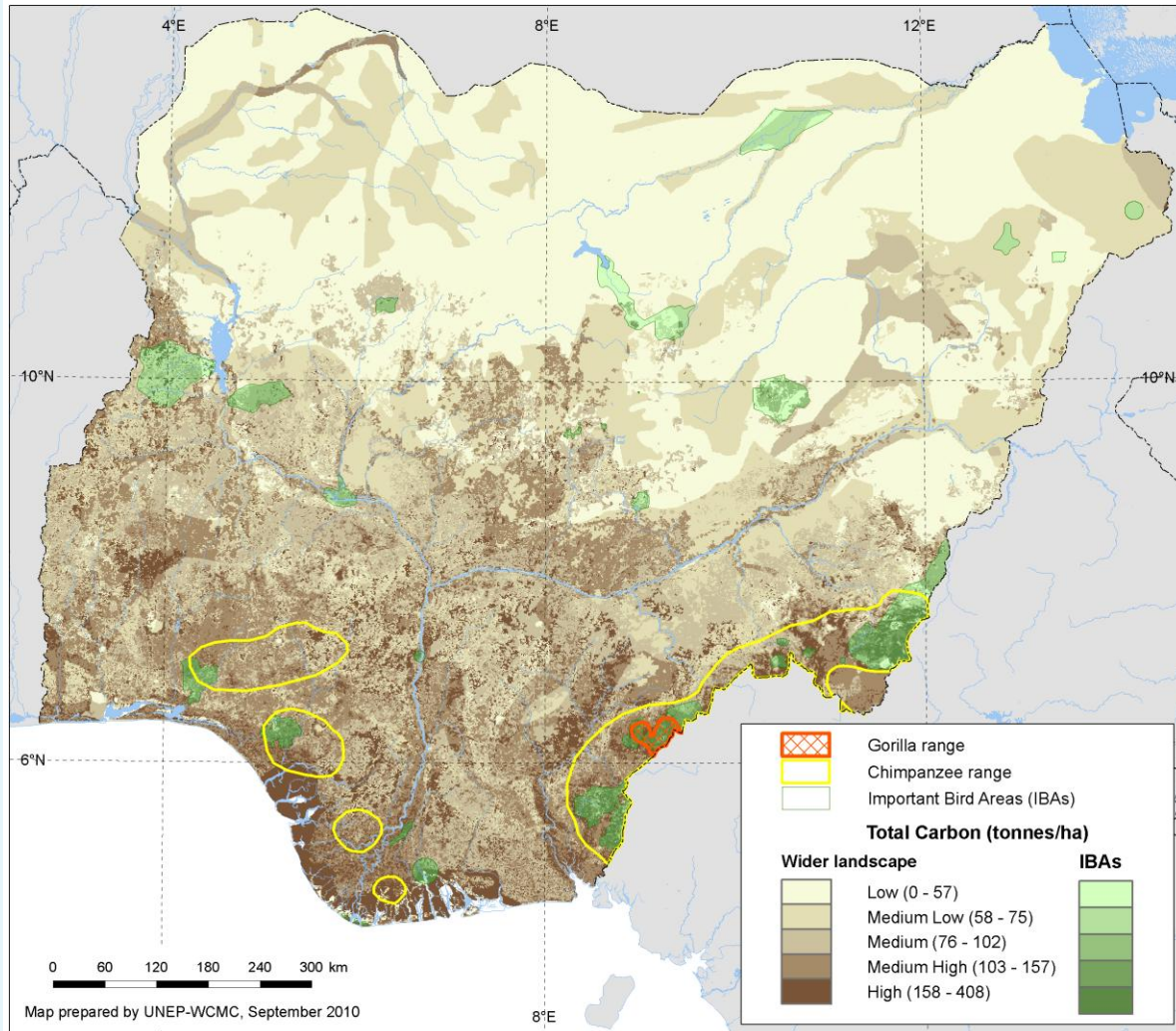
14th November 2012

Why map multiple benefits?

- Biodiversity and ecosystem services are spread unevenly across space

- Spatially explicit data can help identify areas of importance for multiple benefits

- Overlaying data showing areas of importance for different aspects of biodiversity and different ecosystem services can help explore relationships and opportunities for synergy

- Maps can be of practical use in promoting and supporting the Cancun safeguards on natural forest and biodiversity

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Example: carbon and biodiversity in Nigeria

Map prepared by UNEP-WCMC, September 2010

Legend:
- Gorilla range
- Chimpanzee range
- Important Bird Areas (IBAs)

Total Carbon (tonnes/ha)

Wider landscape	IBAs
Low (0 - 57)	
Medium Low (58 - 75)	
Medium (76 - 102)	
Medium High (103 - 157)	
High (158 - 408)	

Data displayed:

- Density of existing carbon stocks (brown)
- Important Bird Areas (green)
- Gorilla range (red)
- Chimpanzee range (yellow)
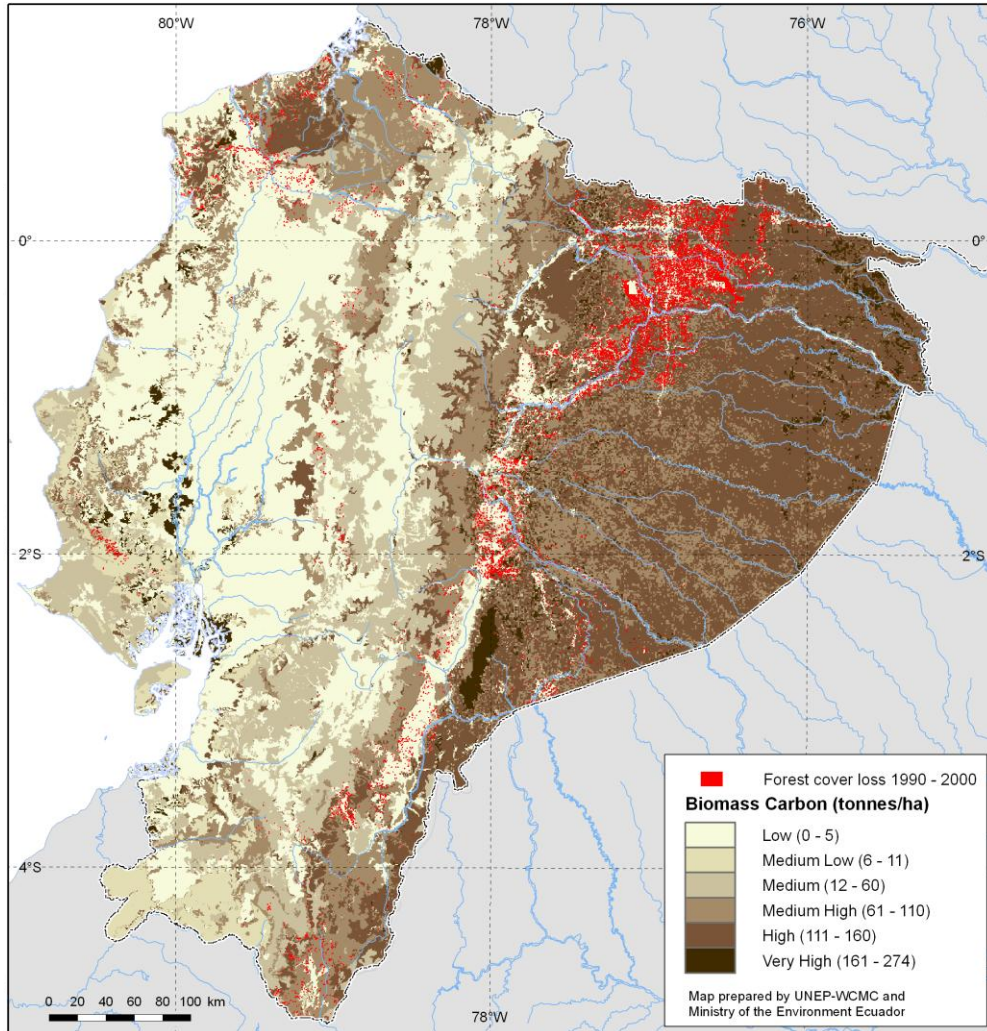
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And other ecosystem services?
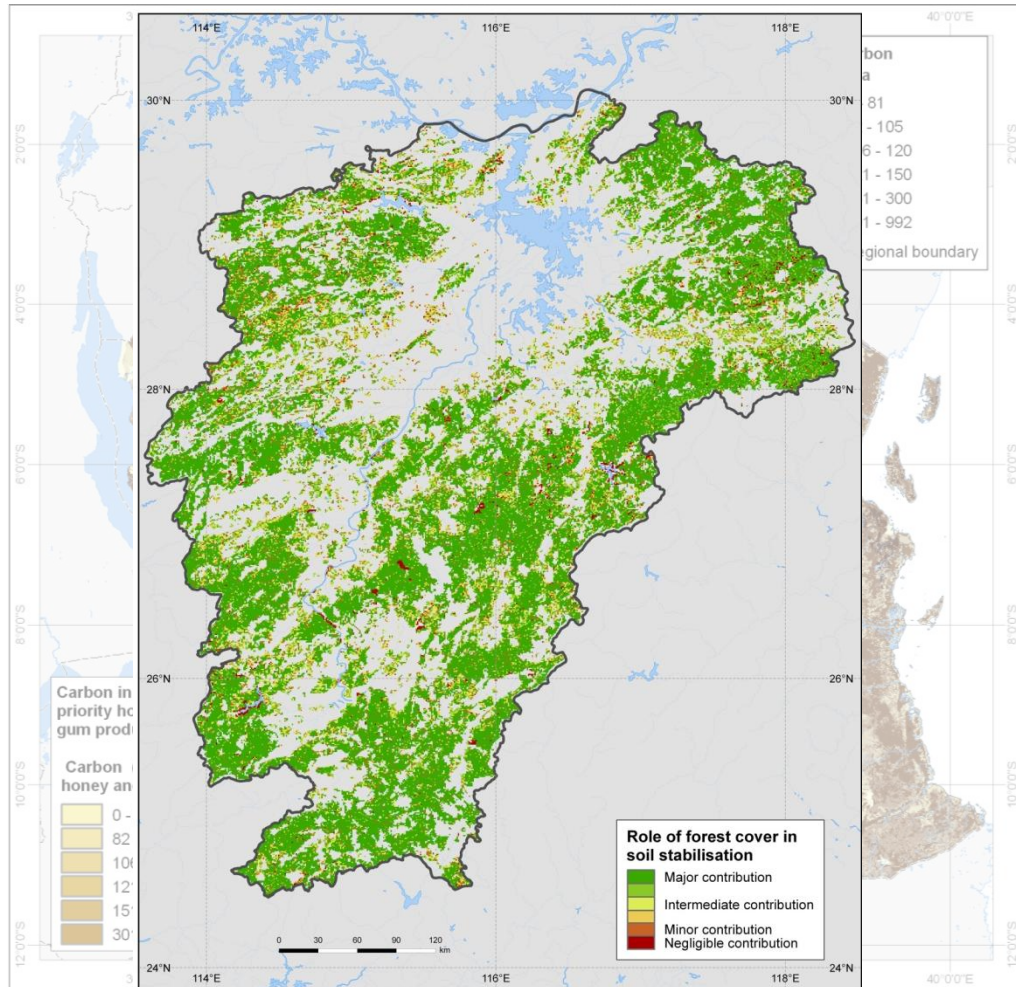
Tanzania: areas proposed as production areas for honey, wax, and gum

Jiangxi, China: contribution of forest cover to soil stabilisation

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Putting maps into context

Map prepared by UNEP-WCMC and Ministry of the Environment Ecuador

Adding data on, e.g., land management units and pressures allows to look at questions, such as:

- What is currently happening in areas of importance for carbon and biodiversity?

- Where are areas of importance for carbon and biodiversity under pressure?
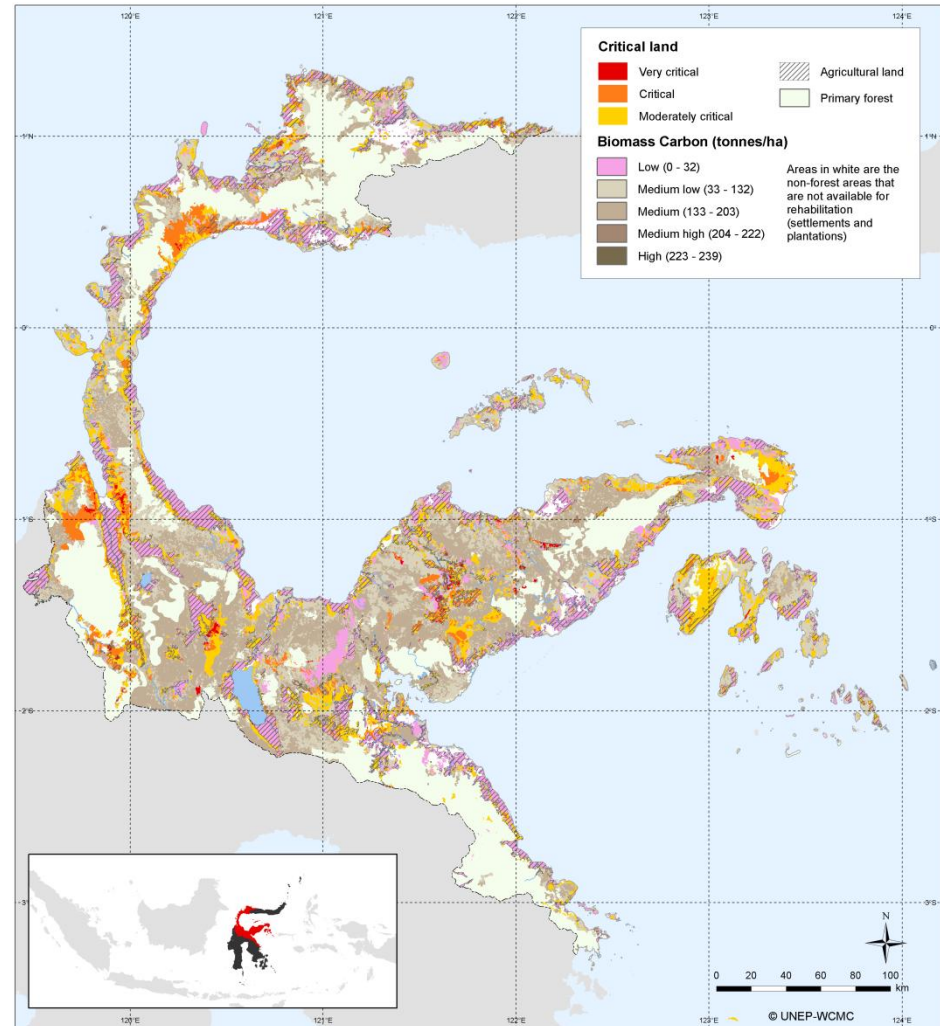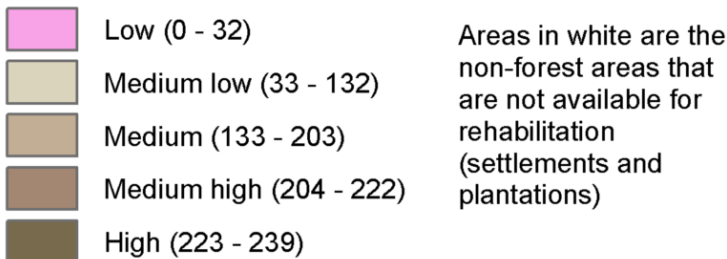
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Mapping for different REDD+ activities

E.g. forest rehabilitation in Central Sulawesi:

= Map showing areas with potential for forest rehabilitation
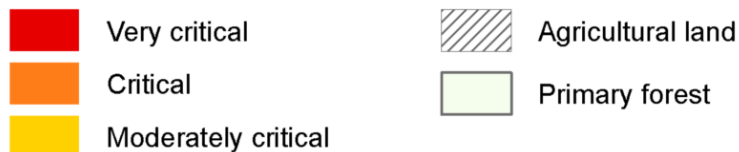
Considerations

- Mapping ecosystem services remains difficult, e.g. because:
  - The concept of ecosystem services is complex (e.g. link with beneficiaries)
  - Spatial data on areas of importance for ecosystem services is scarce or methods are still being tested
- Needs for spatial data can vary for the planning of different REDD+ activities (e.g. conservation of carbon stocks and enhancement of carbon stocks)
- For implementation of the Cancun safeguards (environmental), there may be additional needs for spatial data (more information to follow in the respective break out group this afternoon)

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Thank you for listening!

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