



The role of spatial analysis in REDD+ planning

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Outline

This presentation will provide an overview of the role of spatial analysis in supporting REDD+ planning.

1. Background information on REDD+ and UN-REDD

2. Using spatial information to support REDD+ planning



1. Background information

REDD+

REDD+

= Reducing emissions from
Deforestation and forest Degradation

+

Conservation of forest carbon stocks
Sustainable management of forests
Enhancement of forest carbon stocks

- REDD+ is an international initiative intended to combat climate change by changing the ways in which forests are used and managed, so that emissions of GHG from forests are reduced and carbon sequestration is increased.
- REDD+ may require different actions, such as protecting forests from fire or illegal logging or rehabilitating degraded forest areas.

What are REDD+ *activities* and *actions*?

Activity	Example actions
Reducing emissions from deforestation	Eg: reduce conversion pressure through improved land-use planning
Reducing emissions from forest degradation	Eg: more sustainable NTFPs harvesting/production; fuelwood alternatives/efficient cookstoves
Conservation of forest carbon stocks	Eg: improved management of existing protected areas
Sustainable management of forest	Eg: reduced impact logging; community forestry
Enhancement of forest carbon stocks	Eg: forest rehabilitation; afforestation

Warsaw Framework – agreed at UNFCCC CoP at Warsaw in 2013

Four pillars:

National
Strategy/Action
Plan

National Forest
Monitoring
System (NFMS)

Safeguards
Information
System

Forest reference
emissions level
(FREL/REL)

UN-REDD Programme

- UN-REDD = United Nations collaborative initiative on Reducing Emissions from Deforestation and forest Degradation (REDD) in developing countries.
- Started in 2008; joint programme of UNDP, FAO, UNEP
- Supports national REDD+ readiness efforts in more than 60 partner countries.
- Mongolia joined UN-REDD in 2011; prepared a REDD+ Readiness Roadmap in 2014; and will launch its National Programme later this year.

UN-REDD
PROGRAMME



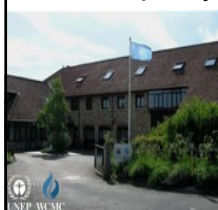
Food and Agriculture
Organization of the
United Nations



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Introduction to UNEP-WCMC

- United Nations Environment Programme World Conservation Monitoring Centre
- Provide support to UN-REDD partner countries on Safeguards & Multiple Benefits:
 - Planning for REDD+ that achieves multiple benefits, including using mapping and other tools, e.g. economic analyses
 - Developing approaches to REDD+ safeguards
- Close collaboration with in-country partners, FAO & UNDP; focus on capacity building & participatory approaches

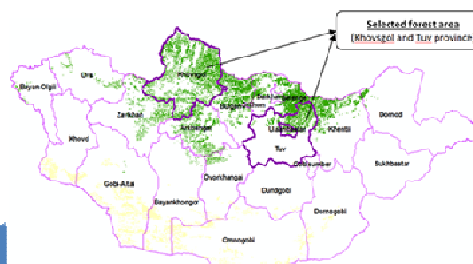


This collaboration:

- Project under UN-REDD for supporting REDD+ planning in Mongolia; developed last year together with EIC/IRIMHE
- Objectives:
 - Support Mongolia to use spatial decision support tools for REDD+ planning, to help deliver multiple benefits and reduce potential risks.
 - Build capacity with Mongolian partners on integrated planning and information systems to support forest sector and REDD+ planning that incorporate multiple benefits and environmental safeguards.

Collaboration, cont.

- Activities:
 - Introduction to use of QGIS to support REDD+ planning
 - Consultations on priority multiple benefits from forests in two focal aimags: Tov & Khovsgol
 - Analysis (using QGIS) of multiple benefits from forests and other REDD+ relevant factors in Tov and Khovsgol
 - Presentation of analysis in final workshop and report
- Timeframe: May 2015 – May 2016



2. Using spatial information to support REDD+ planning

Decision-support tools and analyses

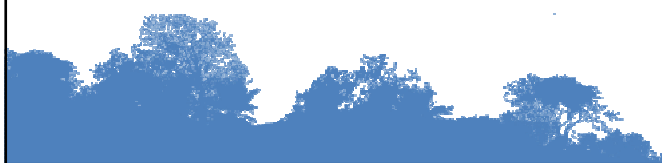
Numerous tools, analyses and studies support planning for REDD+. For example:

- Analysis of drivers of deforestation and forest degradation
- Valuation studies
- Spatial analysis/ mapping
- Stakeholder consultations and participatory approaches
- Costs-benefits analysis

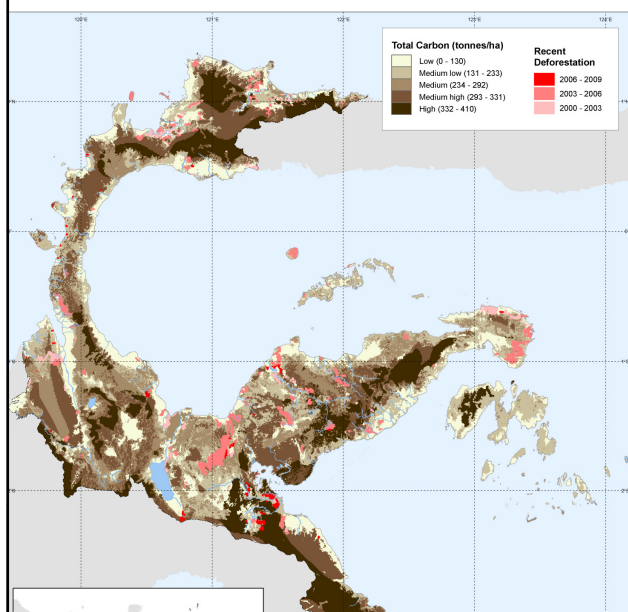


Maps as decision-support

- Map-making is not itself a planning process
- Maps can and should be used together with other tools and approaches
- Maps can help REDD+ planners and stakeholders to:



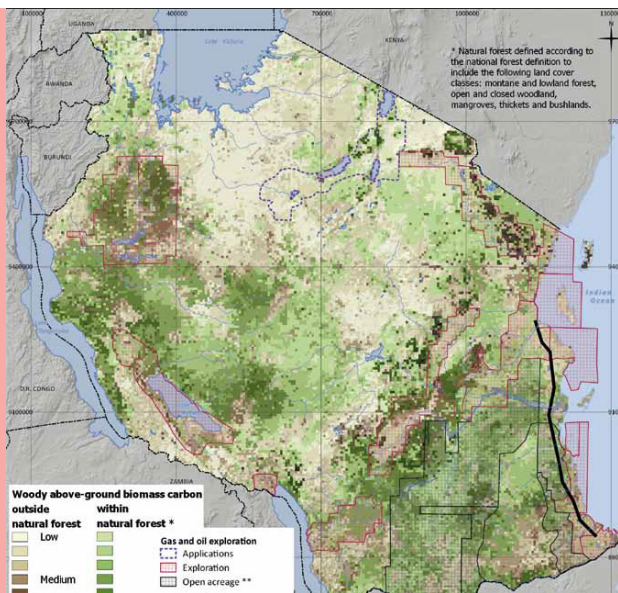
1. Understand context for REDD+ planning



**For example:
Carbon stocks and
areas of recent
deforestation
(2000-2009) in
Central Sulawesi**

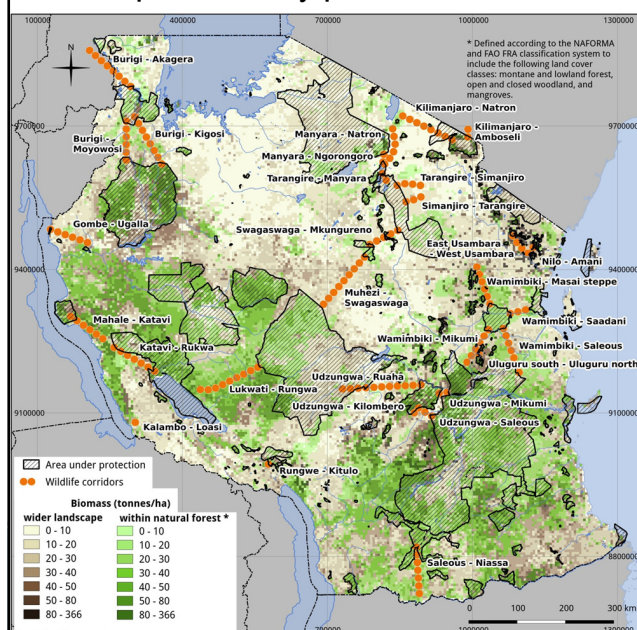
2. Understand past/current/future drivers of deforestation/ degradation

For example:
Current oil and gas
exploration
licenses,
applications and
open acreage in
Tanzania, in relation
to carbon stocks in
natural forests



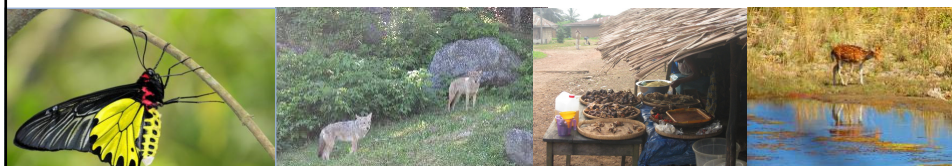
3. Help to identify potential benefits and risks of REDD+

For example:
Important wildlife
corridors, protected
areas, natural forest
and woody biomass
carbon in Tanzania



Additional benefits of REDD+

- While main aim of REDD+ is to reduce GHG emissions and increase CO₂ sequestration from the atmosphere, it has the potential to deliver additional benefits
- Additional benefits of REDD+ are all of these other benefits – social and environmental – that may result from the implementation of REDD+. For example:
 - Enhancement of ecosystem services
 - Biodiversity conservation
 - Livelihoods and social benefits
 - Clarified tenure and improved governance of natural resources



Potential risks of REDD+

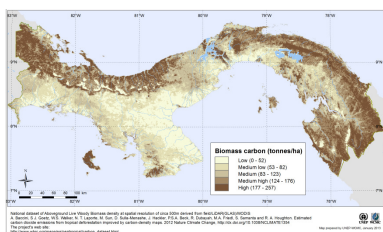
REDD+ also carries potential risks, which depend on specific actions, as well as national and local contexts:

- Environmental risks could include:
 - Conversion of degraded natural forest or other ecosystems to plantations
 - Displacement of pressures to other areas
- Social risks could include:
 - Reduced access to resources for forest users
 - Inequitable sharing of REDD+ benefits
 - Conflicts over land

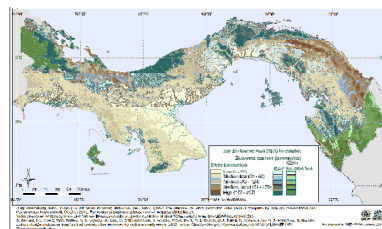
Benefits & risks vary geographically

For example:
individual benefits of
forests in Panama

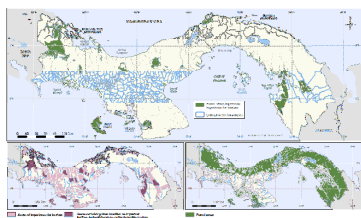
Importance for biomass carbon stocks



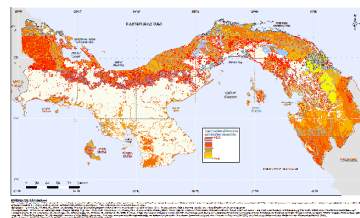
Importance for biodiversity



Importance for tourism

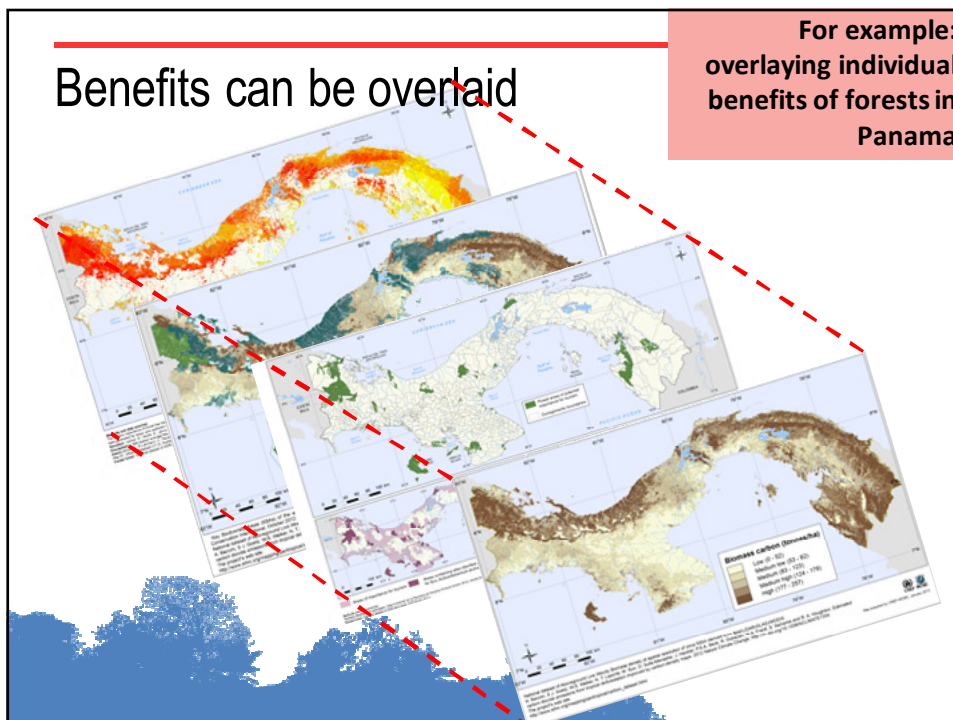


Importance for soil erosion control



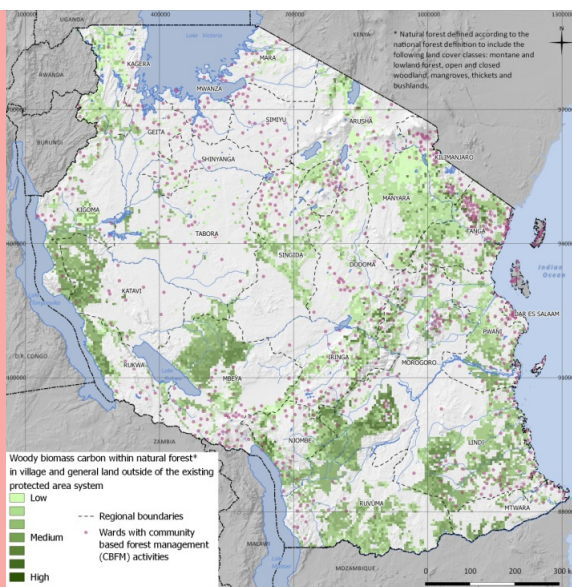
Benefits can be overlaid

For example:
overlaying individual
benefits of forests in
Panama



4. Analyze suitability of different areas for different types of REDD+ actions

For example: Potential zones for REDD+ actions to extend areas community-based forest management in Tanzania



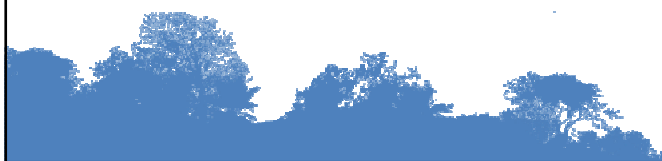
How can mapping help to identify priority areas for REDD+ actions?

- Based on existing conditions, where are the areas where REDD+ actions **can** be implemented?
- Which areas are under **pressure**?
- Which areas would **enhance benefits, mitigate risks and reduce costs**?
- Are there particular areas that should be **included or excluded**?



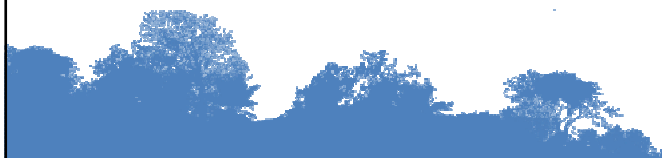
Summary: the role of spatial analysis in planning for REDD+

- Spatial analysis provides **decision support** for REDD+ planning, among other tools and approaches
- Spatial analysis can help plan for REDD+ that is **feasible, enhances potential benefits, reduces potential risks and minimizes costs**
- Spatial analysis can also help planners and stakeholders to **identify suitable REDD+ actions and priority zones** for those actions



Summary: the role of spatial analysis in planning for REDD+

- It is important to **integrate stakeholder priorities and needs** into wider consultation and planning processes for REDD+, including in spatial analysis
- UN-REDD Programme/other initiatives provide **guidance on tools, methodologies and other resources** for spatial planning, and case studies from countries/states designing and implementing REDD+:
 - www.unredd.net
 - www.un-redd.org



Thank you!

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