



WHAT ARE THE MULTIPLE BENEFITS OF REDD+?

THE ROLE OF SPATIAL INFORMATION FOR INTEGRATING THEM IN REDD+ PLANNING

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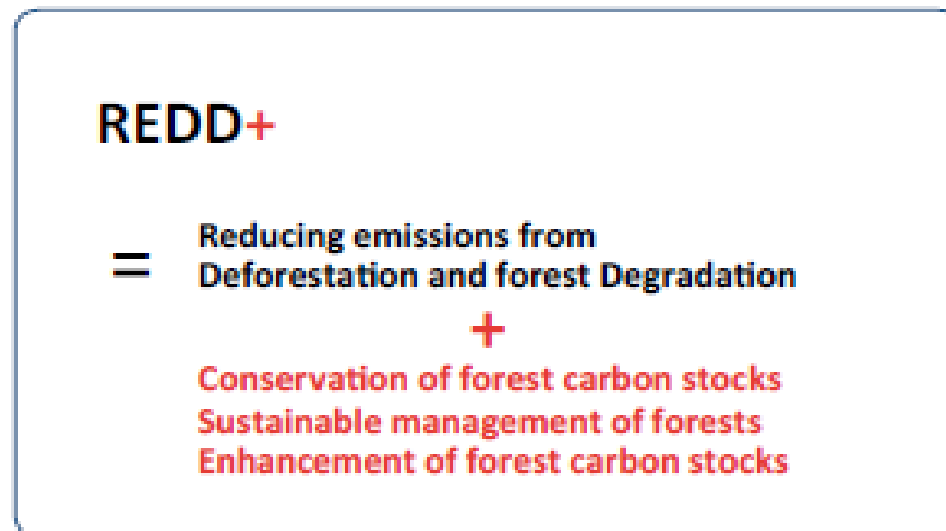
Port Moresby, Papua New Guinea
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OUTLINE

1. Introduction to REDD+ and the UN-REDD Programme
2. What are the multiple benefits of REDD+?
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3. Spatial analysis as a tool to support decision-making in REDD+ planning
4. Examples from other UN-REDD partner countries.



REDD+



- REDD+ is an international initiative to combat climate change by changing the ways in which forests are used and managed, so that greenhouse gas emissions 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

UN-REDD Programme

- United Nations collaborative programme on Reducing Emissions from Deforestation and forest Degradation (REDD) in developing countries.
- Started in 2008; jointly supported by UNDP, FAO & UN Environment
- Supports national REDD+ readiness efforts in more than 60 partner countries.
- PNG joined UN-REDD in 2010.

This collaboration

- Project under UN-REDD Programme, for supporting REDD+ planning in PNG; in collaboration with CCDA
- Objectives:
 - Support PNG to integrate multiple benefits into its national REDD+ strategy and planning processes.
 - Enhance capacity of key national staff on the use of spatial planning and mapping using open-source GIS software to support decision-making in REDD+ planning for multiple benefits.

WHAT ARE THE MULTIPLE BENEFITS OF REDD+?

While the main purpose of REDD+ is climate change mitigation, REDD+ also has the potential to deliver other types of social and environmental benefits.


These benefits are also referred to as “co-benefits”, “additional social and environmental benefits” and “non carbon benefits”.



EXAMPLES OF MULTIPLE BENEFITS OF REDD+

BIODIVERSITY

FORESTS ARE THE HABITAT FOR **77%** OF GLOBALLY THREATENED BIRDS



TOURISM

ECOTOURISM GENERATES USD **77 BILLION** IN ANNUAL REVENUE GLOBALLY



INDIGENOUS PEOPLES

60 MILLION INDIGENOUS PEOPLE DEPEND ON FORESTS




FOREST COMMUNITIES

FORESTS CONTRIBUTE TO THE LIVELIHOODS OF **1.6 BILLION** PEOPLE WORLDWIDE



ENERGY CONSUMPTIONS

OVER **2 BILLION** PEOPLE USE WOODFUEL FOR COOKING AND/OR HEATING



PHARMACEUTICALS

PLANTS CONTRIBUTE TO THE DEVELOPMENT OF AT LEAST **25%** OF ALL PRESCRIPTION DRUGS



NON-WOOD PRODUCTS

FROM FORESTS CAN GENERATE **4 MILLION** PERSON-YEARS OF EMPLOYMENT ANNUALLY



ON A GLOBAL SCALE, FORESTS COVER 31% OF THE EARTH'S SURFACE. IF WE LOSE THEM AT OUR CURRENT RATE, WE WILL LOSE THEM ALL BY 2050.

25 YEARS FOR FORESTS TO REGENERATE

TRADE

SEARCHING FOR AND TRADING FOREST PRODUCTS ESTIMATED TO COST **330 BILLION** PER YEAR



FOREST RESTORATION

IT HAS BEEN HELD THAT TO MEET THE NEEDS OF A GROWING WORLD POPULATION, WE MUST DOUBLE THE AREA OF FOREST AND WETLANDS BY 2050.


DOUBLING WETLANDS IN ONE DECADE



ELECTRICITY PRODUCTION

UP TO 70% OF OPERATIONAL COSTS OF HYDROPOWER DAMS COME FROM SEDIMENT REMOVAL

46% OF KENYA'S POWER SUPPLY IS GENERATED BY HYDRO POWER WHICH DEPENDS ON THE COUNTRY'S FOREST WATERSHEDS



CLIMATE

FORESTS STORE 860 **BILLIONS** METRIC TONS OF CARBON

SECURITY

FORESTS PROVIDE 30% OF THE WORLD'S FRESHWATER

BIG CITIES

33 OF THE WORLD'S BIGGEST CITIES DEPEND ON FORESTS FOR WATER SUPPLY AND PROTECTION



FLOODING

FORESTS CAN HELP TO REDUCE THE RISK OF FLOODING AND PROTECT INFRASTRUCTURE



WETLANDS

ARE VALUED TO PROTECT 2.800 **BILLION** PEOPLE FROM FLOODING AND SALINIZATION



MANGROVES

ARE CRITICAL TO THE SURVIVAL OF 100% OF THE WORLD'S COASTAL FISH AND SHELLFISH



UN-REDD PROGRAMME



POTENTIAL RISKS OF REDD+

REDD+ also carries potential risks, which depend on the 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



THE CANCUN SAFEGUARDS

b) Forest governance
(transparency and
effectiveness)

c) Knowledge and rights
of indigenous people and
local communities

a) Policy alignment
(national and
international)

ELEMENTS OF CANCUN SAFEGUARDS

d) Full and effective
participations of relevant
stakeholders, in particular
IP and local communities

g) Reduce
displacement of
emissions

e) Natural forest,
biodiversity and social and
environmental benefits

f) Address risk of
reversals

Warsaw Framework – agreed at UNFCCC CoP at Warsaw in 2013

REQUIREMENTS FOR RESULTS-BASED PAYMENTS

**National
Strategy/Action
Plan**

**National Forest
Monitoring
System (NFMS)**

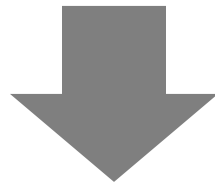
**Safeguards
Information
System**

**Forest reference
emissions level
(FREL/FRL)**

REDD+ MULTIPLE BENEFITS UNDER THE UNFCCC

Key reference in the agreements on safeguards reached at COP 16 in 2010, in Cancun (Mexico).

(e) That actions are consistent with the **conservation of natural forests and biological diversity**, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to **incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits**



ADOPTION OF THE PARIS AGREEMENT

Article 5.2

stocks in developing countries; and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests, while reaffirming the importance of incentivizing, as appropriate, non-carbon benefits associated with such approaches.



NATIONAL NEWS

PNG Govt Ratifies Paris Agreement

PAPUA New Guinea Has Ratified The Paris Agreement With Confirmation That Its Instrument Of Ratification Has Been Deposited At The United Nations Secretary-General's Special Event For The Accord's Entry-Into-Force.

OTHER UNFCCC DECISIONS FROM COP 21 ON NON CARBON BENEFITS

REDD+ countries (under Decision 18/CP.21) **are encouraged to share information on non-carbon benefits** via the web platform on the Climate Change Convention's website

The Convention also invites countries **to communicate information on non-carbon benefits** for consideration by relevant financing entities, which could include the Convention's Green Climate Fund.

However, non-carbon benefits **are not a requirement for receiving financial support for REDD+ implementation, nor for receiving payments for carbon results.**

THEN... WHY MAKE THE EFFORT?

1

Identifying non-carbon benefits, as well as potential environmental and social risks, and reflecting them in national REDD+ strategies can lead to better, more sustainable, REDD+ implementation.

Knowledge of non-carbon benefits can inform better design and location of REDD+ actions in a landscape, as well as the development of countries' approaches to safeguards.



2

Getting REDD+ actions to yield broader environmental and social benefits can contribute to making progress on national policy goals – such as those on biodiversity, green growth and poverty reduction - as well as international policy commitments on the environment and society, including the Sustainable Development Goals.



3

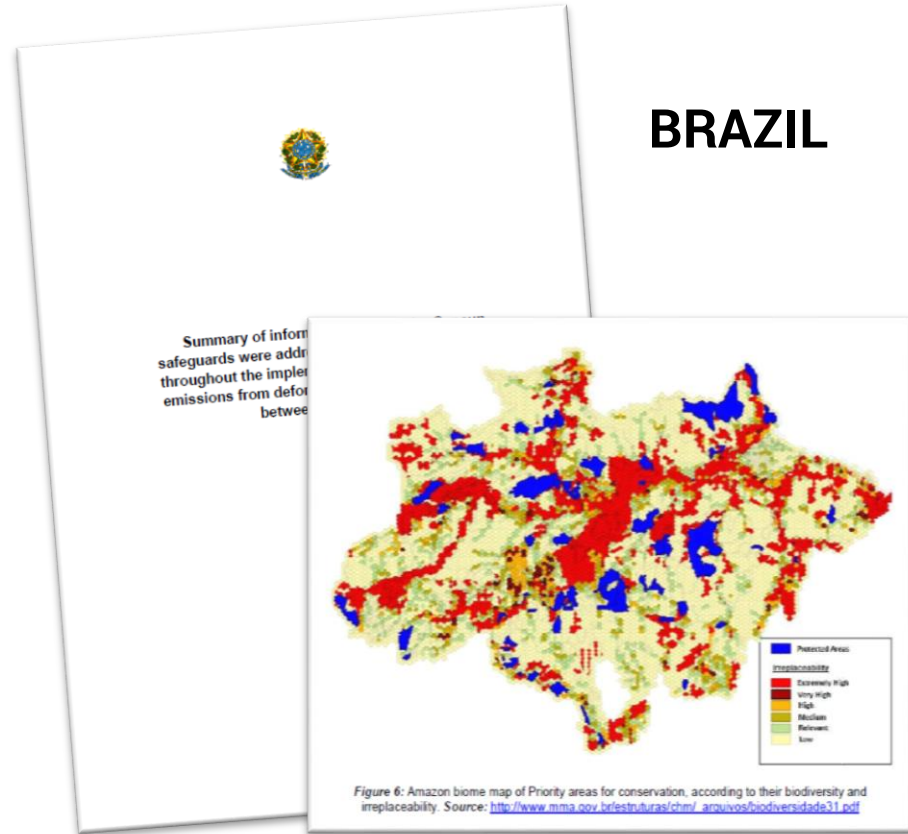
Identifying and providing information on non-carbon benefits could result in better 'market access' in terms of meeting requirements and beyond-carbon objectives of donors looking to finance REDD+ actions or pay for REDD+ results.



EXAMPLES



REDD+ Action Plan



Cancun Safeguards summary of information

QUESTIONS?

But... how can we optimize these multiple benefits in REDD+ planning and add value to REDD+ beyond payments for carbon?



POSSIBLE STEPS FOR ADDRESSING MULTIPLE BENEFITS IN REDD+ PLANNING

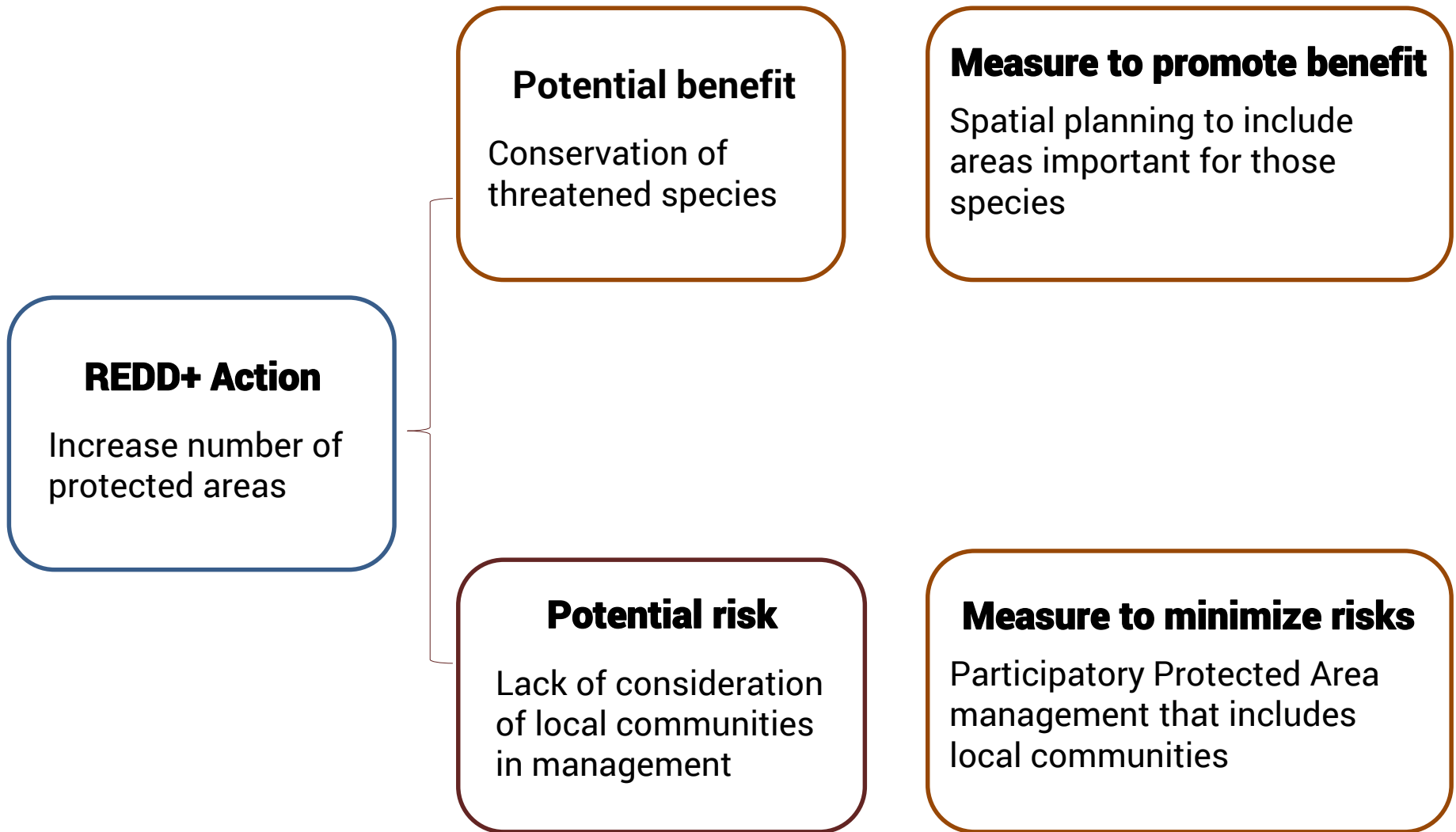
Identify drivers of deforestation and forest degradation, as well as barriers for carbon enhancement activities in the country

Identify REDD+ policies and measures (PaMs) to address such drivers and barriers

Identify the potential risks and benefits associated with these PaMs

Identify priority areas where REDD+ PaMs could be implemented

Design the implementation of the REDD+ PaMs to mitigate risks, promote benefits and minimise costs



Tools to integrate multiple benefits into REDD+planning/strategy



Benefits and risks analysis

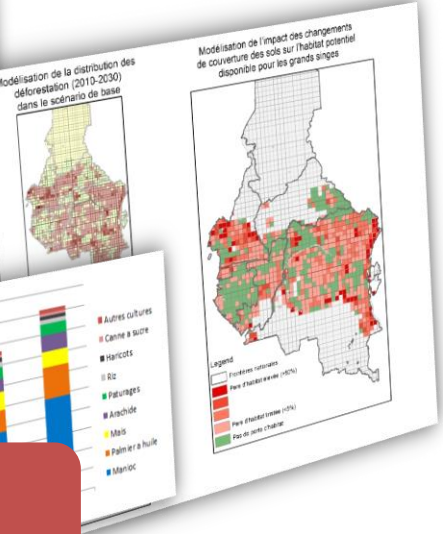


Spatial analysis

Outil d'analyse coûts-bénéfices des options stratégiques de la stratégie nationale de la République du Congo

Options	1. Développement durable	2. Développement durable	3. Développement durable	4. Développement durable
Option 1
Option 2
Option 3
Option 4

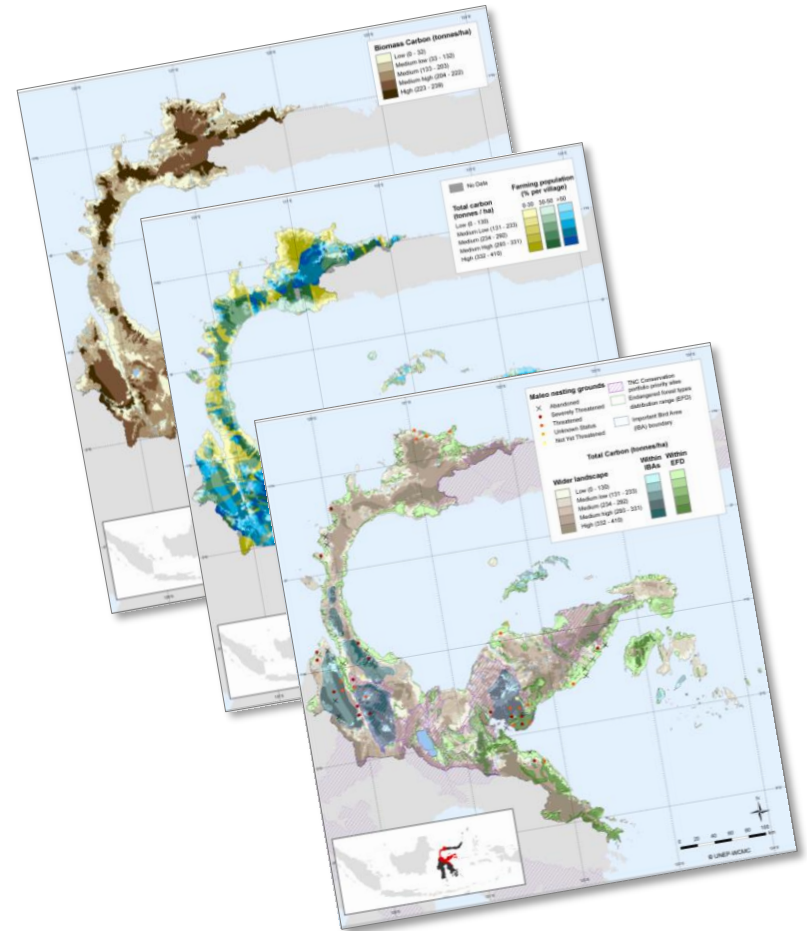
Cost-benefit analysis



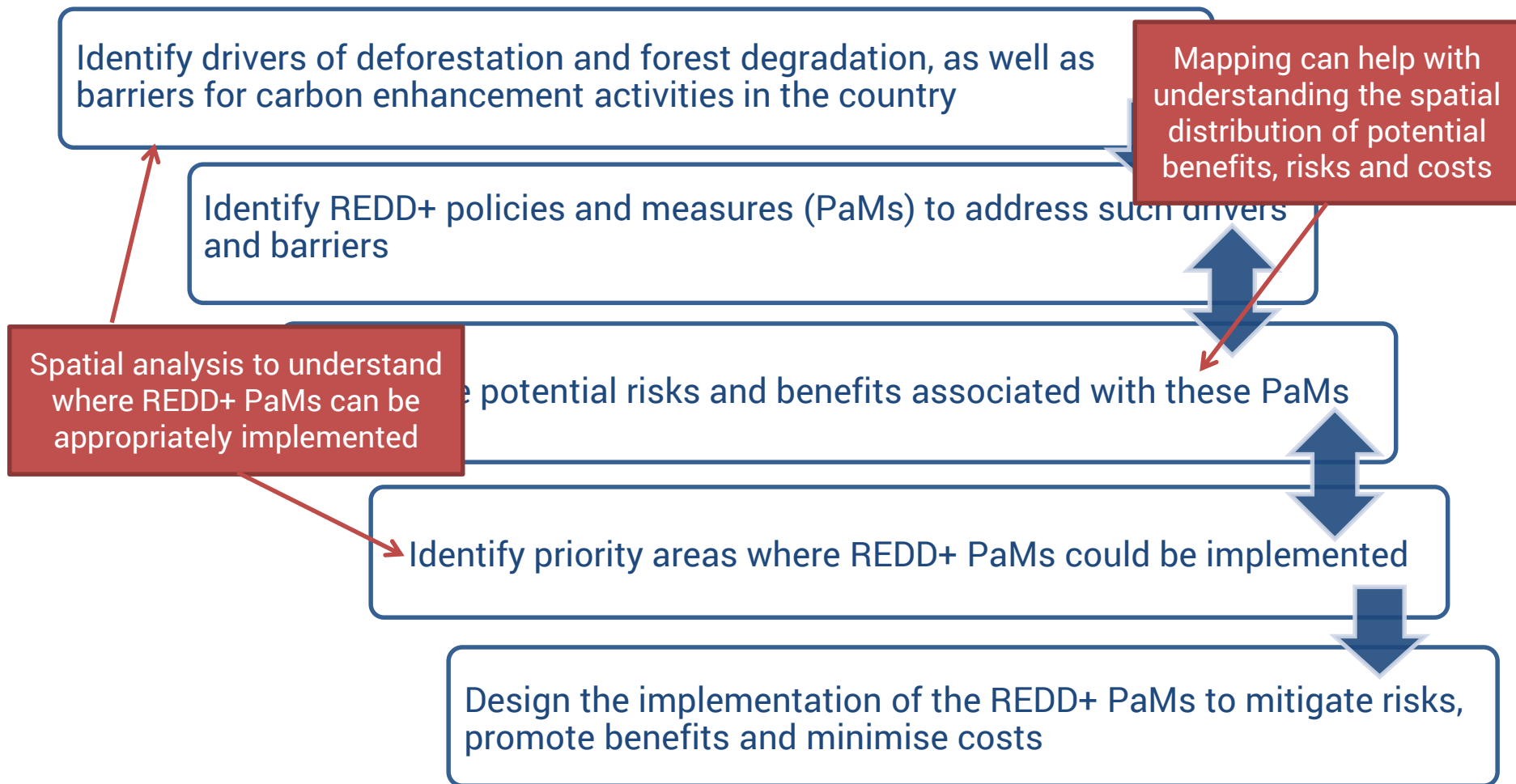
Scenario modelling

Why use spatial analysis and planning?

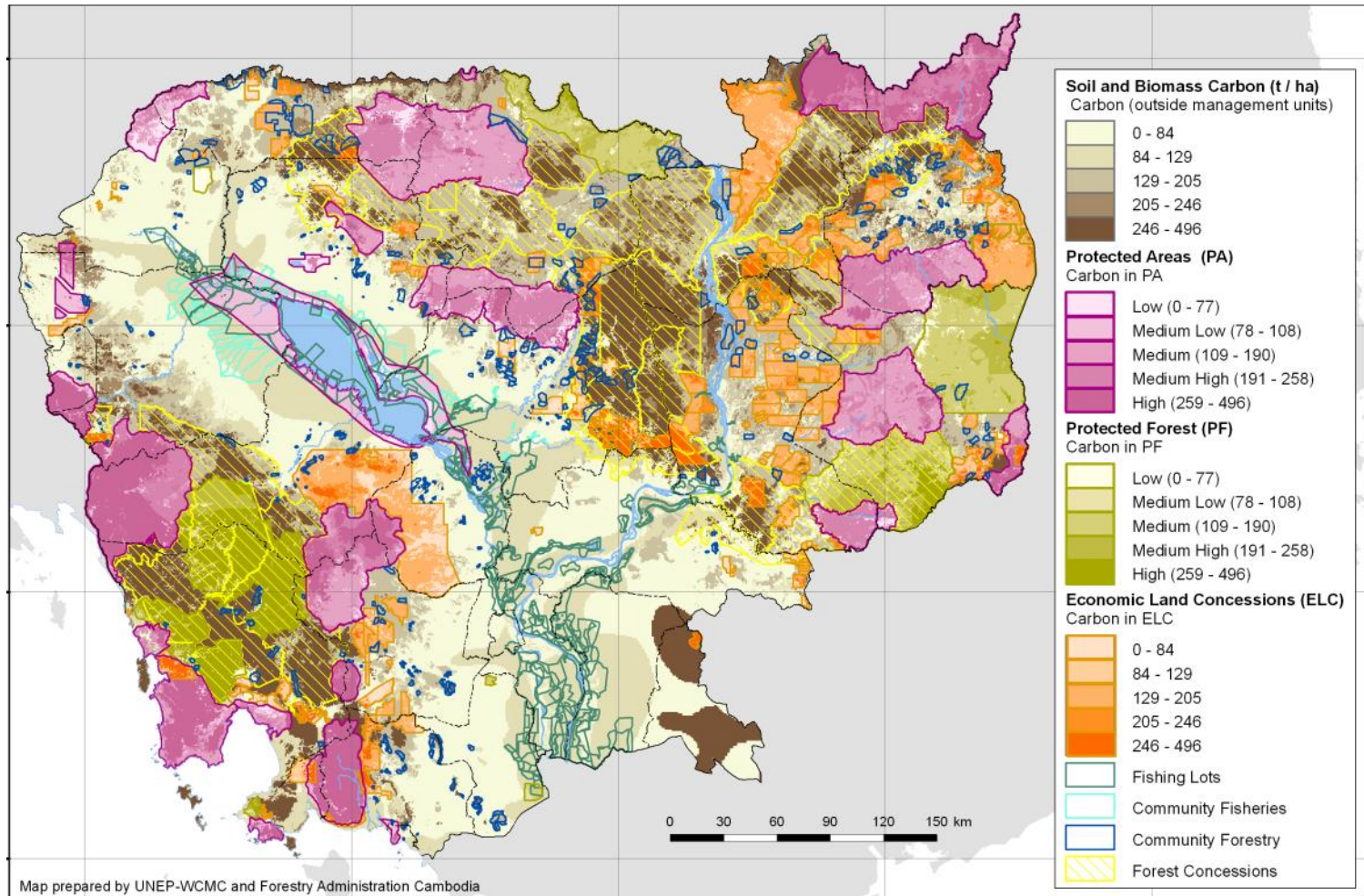
- Benefits and risks are not distributed homogeneously in the landscape
- Solid method to identify areas where priority benefits concentrate
- Good starting point to think about factors that need to be considered during the planning process
- Data collection process also helps to assess what is known and what is not



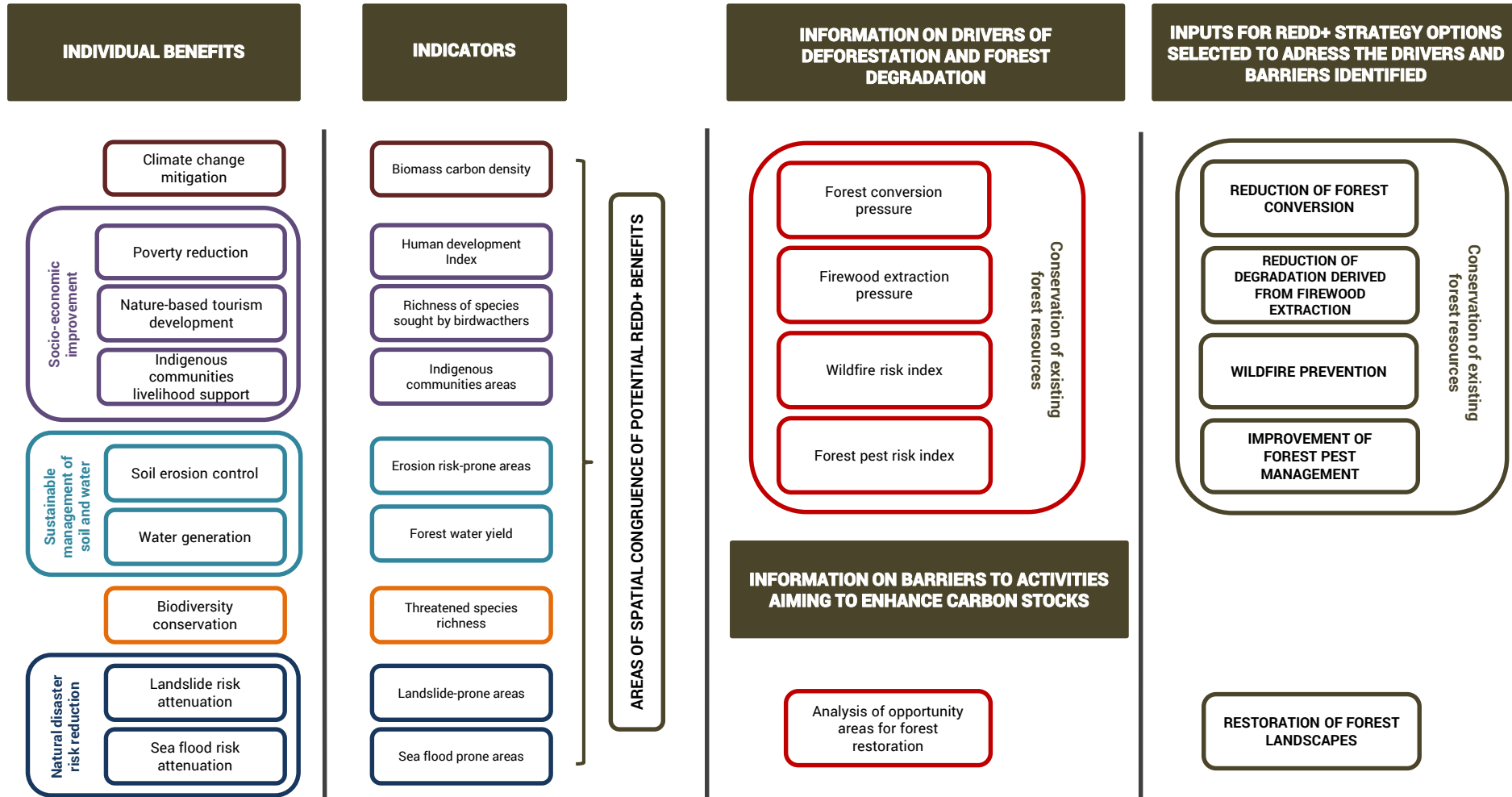
POSSIBLE STEPS FOR ADDRESSING REDD+ MULTIPLE BENEFITS IN REDD+ LAND-USE PLANNING



Reconciling demands & constraints on land use

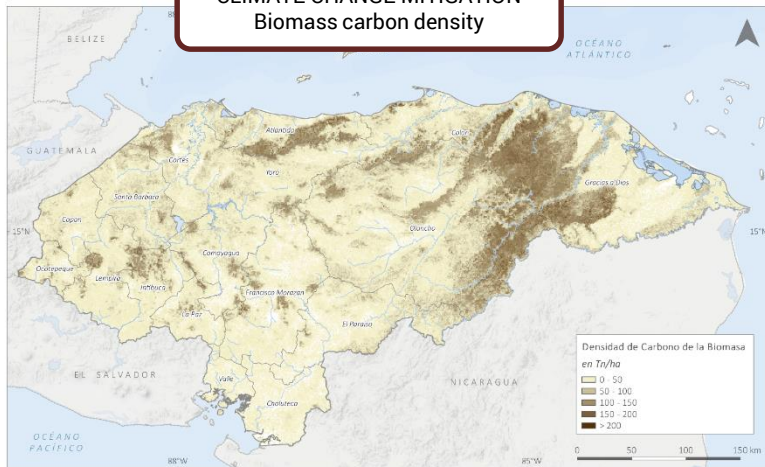


SPATIAL ANALYSIS OF REDD+ MULTIPLE BENEFITS IN HONDURAS

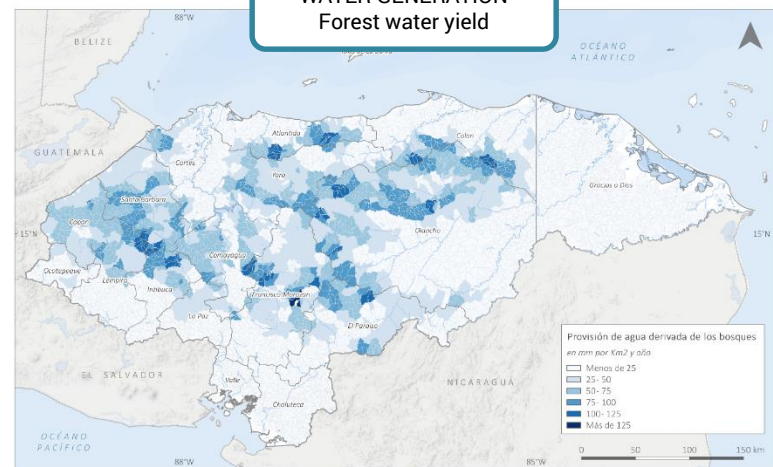


INDIVIDUAL REDD+ BENEFITS

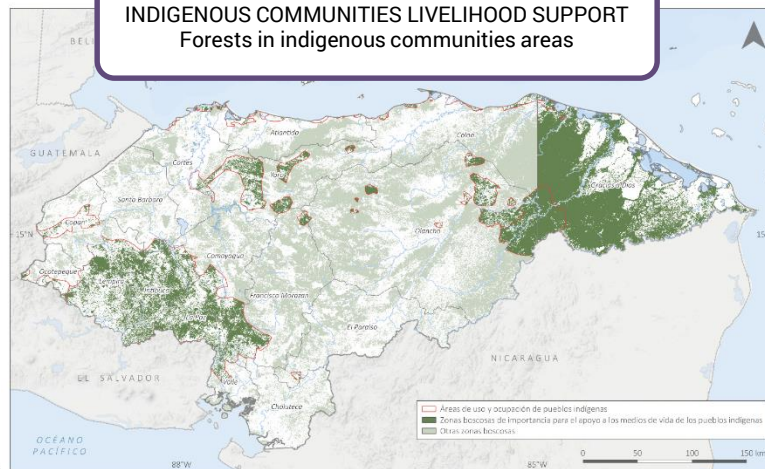
CLIMATE CHANGE MITIGATION
Biomass carbon density



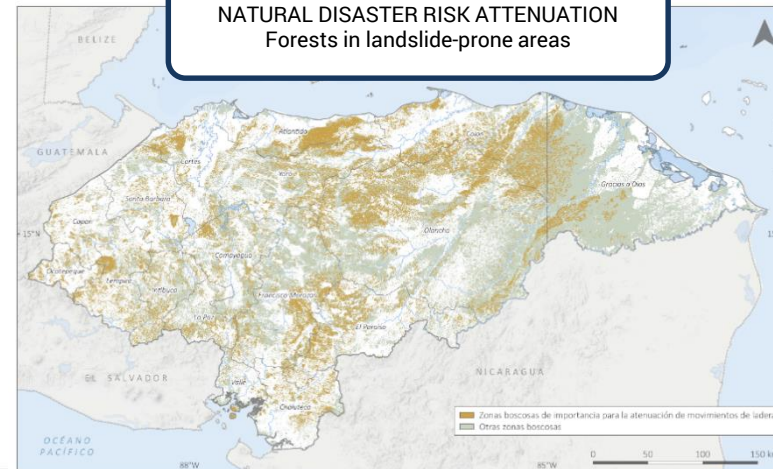
WATER GENERATION
Forest water yield



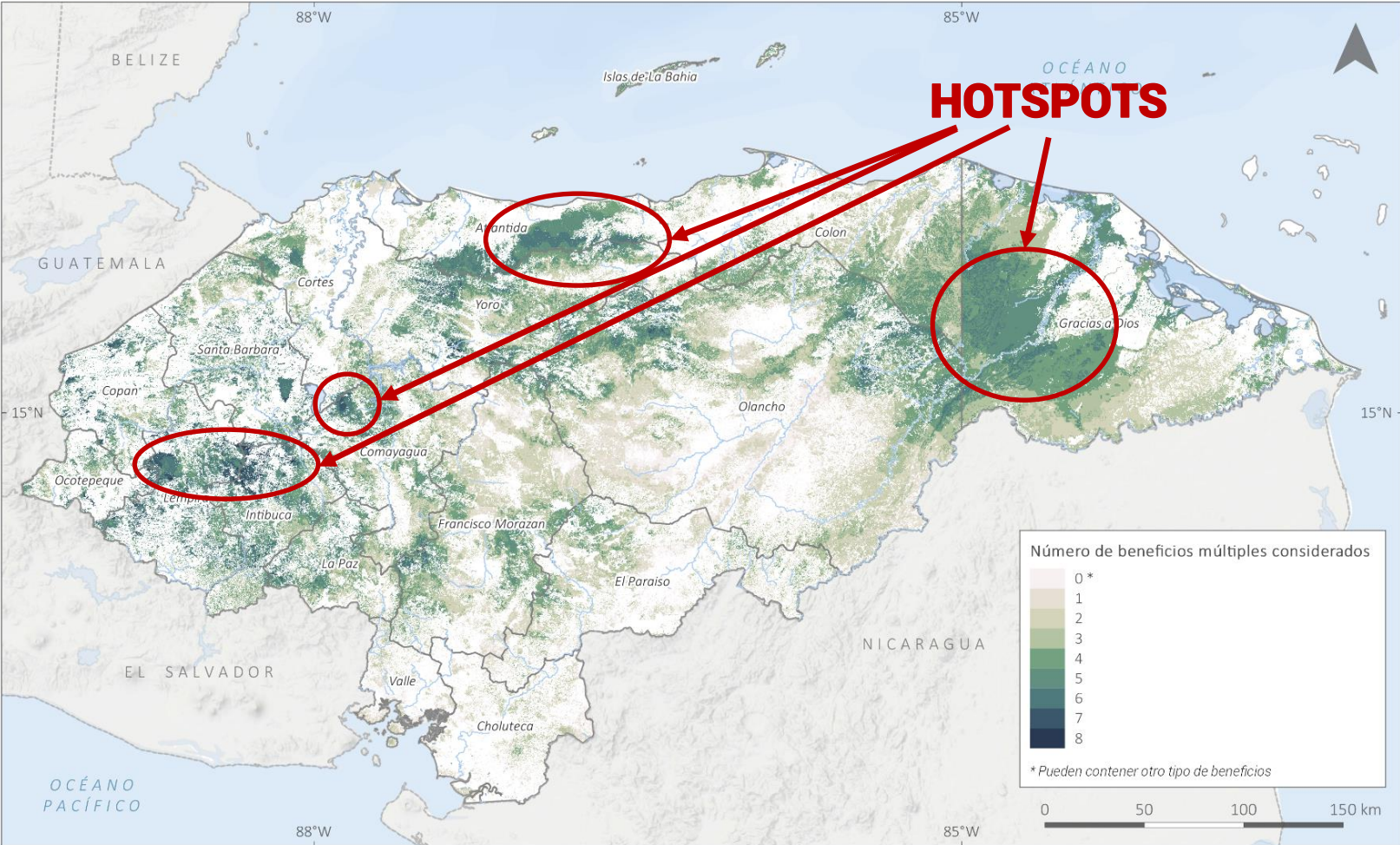
INDIGENOUS COMMUNITIES LIVELIHOOD SUPPORT
Forests in indigenous communities areas



NATURAL DISASTER RISK ATTENUATION
Forests in landslide-prone areas

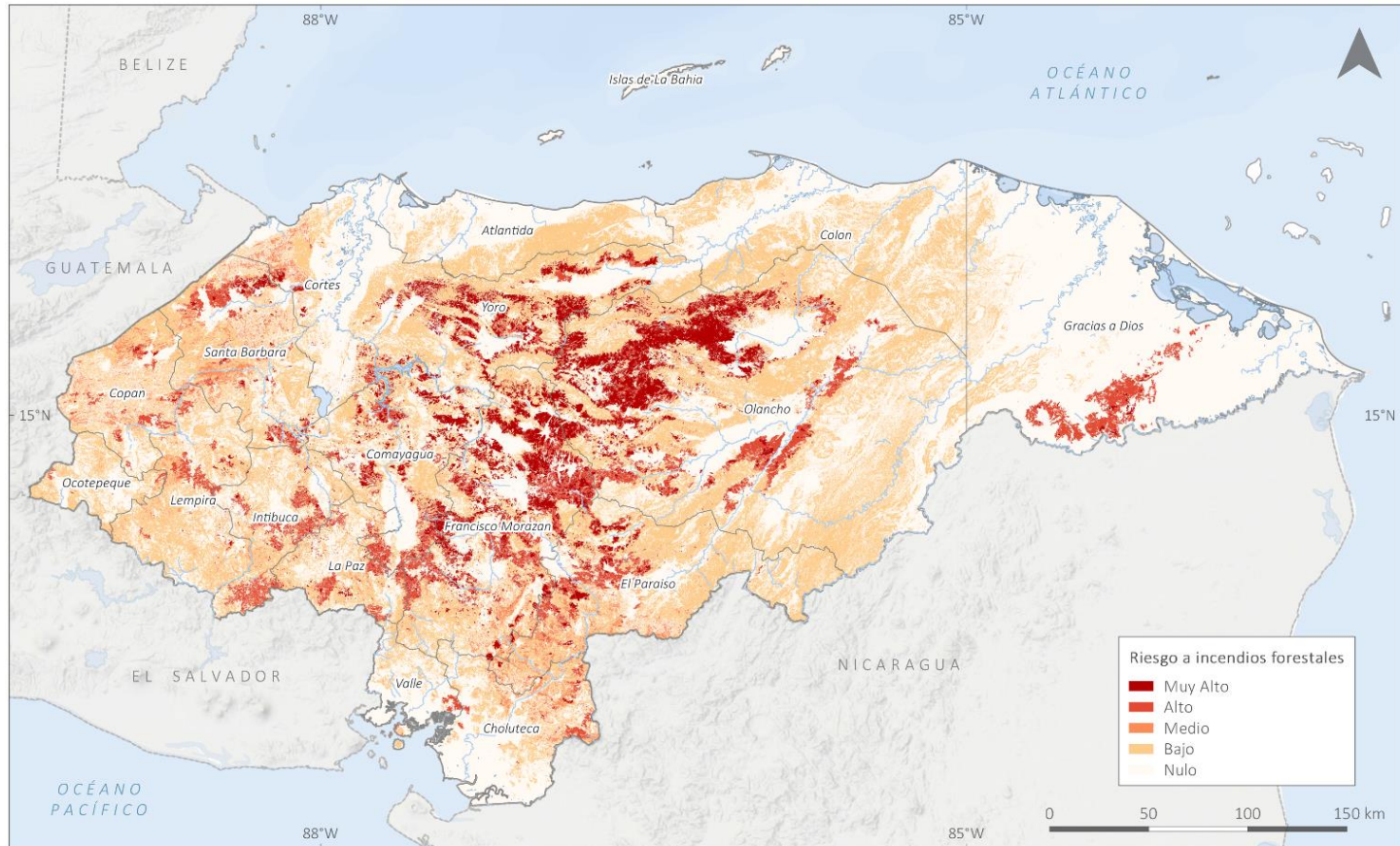


AREAS OF SPATIAL CONGRUENCE OF POTENTIAL REDD+ BENEFITS

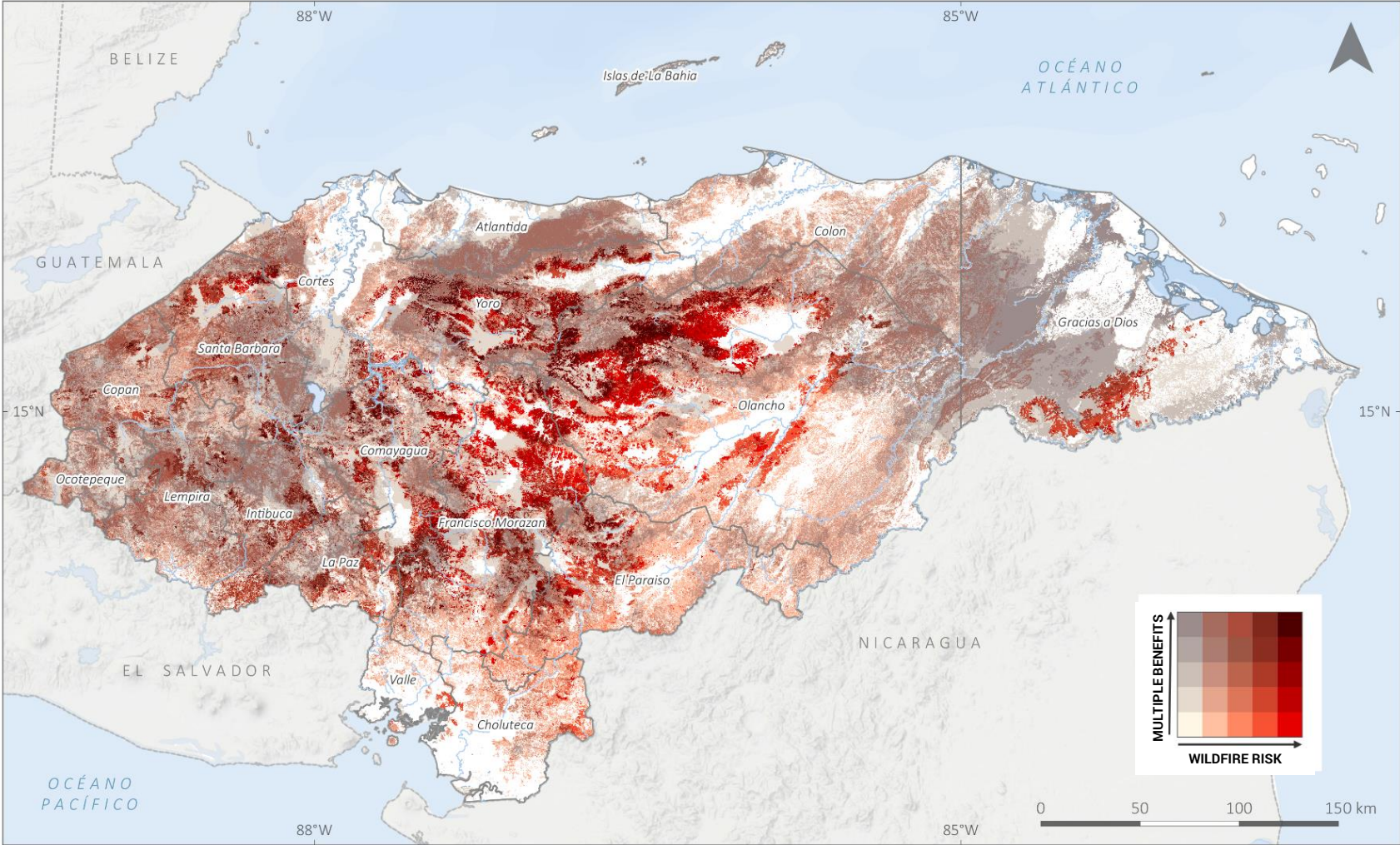


DRIVER OF DEFORESTATION AND FOREST DEGRADATION

WILDFIRE RISK



IN WHICH AREAS COULD REDD+ ACTIONS TO ADDRESS WILDFIRE POTENTIALLY PROMOTE A HIGHER PROVISION OF MULTIPLE BENEFITS?



Summary

- REDD+ also has the potential to deliver other type of social and environmental benefits that can make the programme more sustainable in the long term.
- UNFCCC encourages their consideration and sharing information about how are they integrated in REDD+ planning, but not a requisite for result-based-payments.
- Spatial analysis is a useful tool to help decision makers to take them into account in REDD+ planning.



Thanks a lot!

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PROGRAMME



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