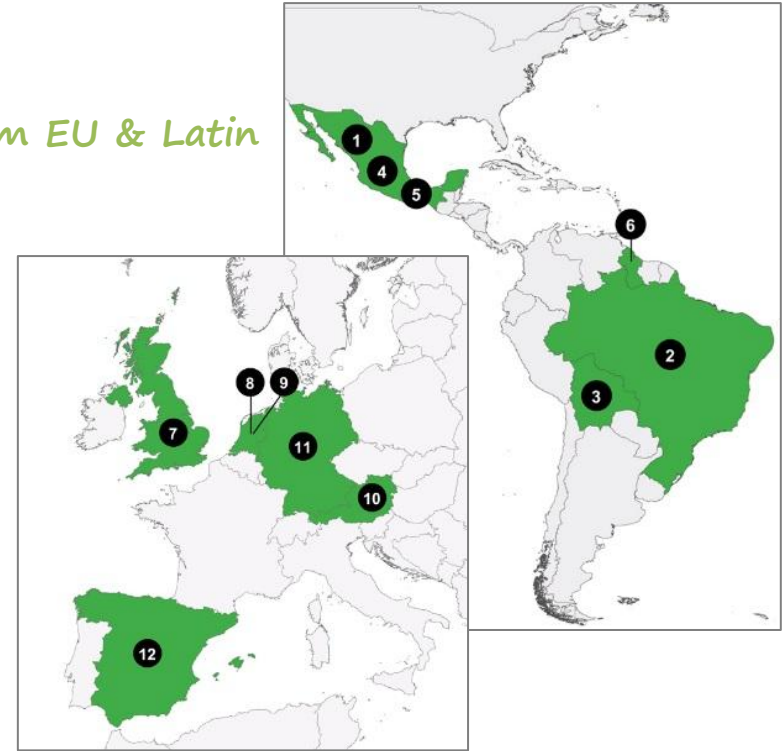




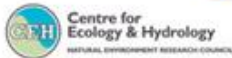
ROBIN

Role of Biodiversity in Climate Change Mitigation

An inter-disciplinary collaboration of 12 partners from EU & Latin America



www.robinproject.info





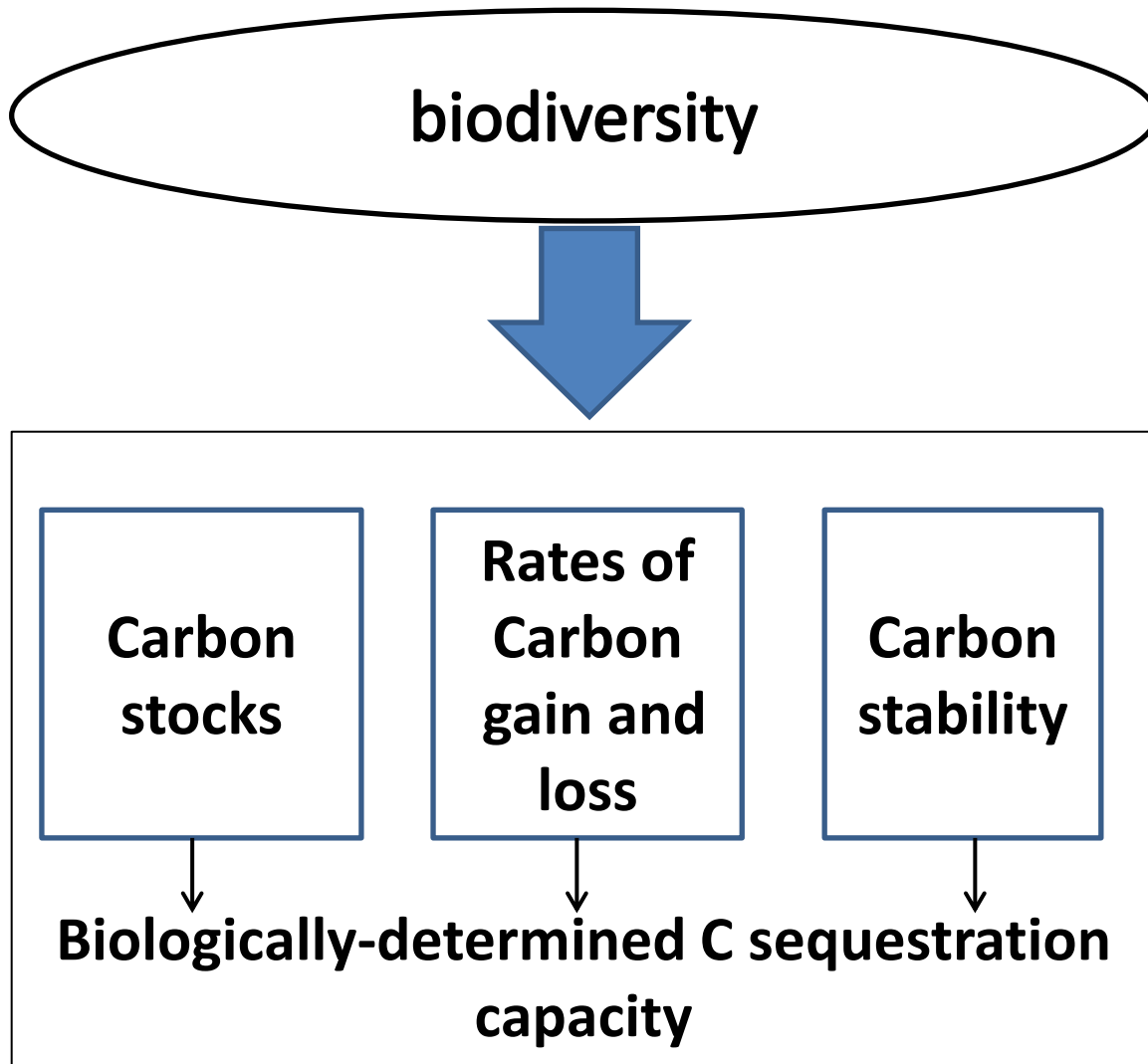
THE ROLE OF NATURE IN MITIGATING AND ADAPTING TO CLIMATE CHANGE

MARIELOS PEÑA CLAROS

WAGENINGEN UNIVERSITY



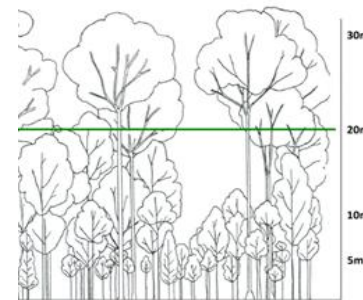
But actually there is a mechanistic reason....



Species

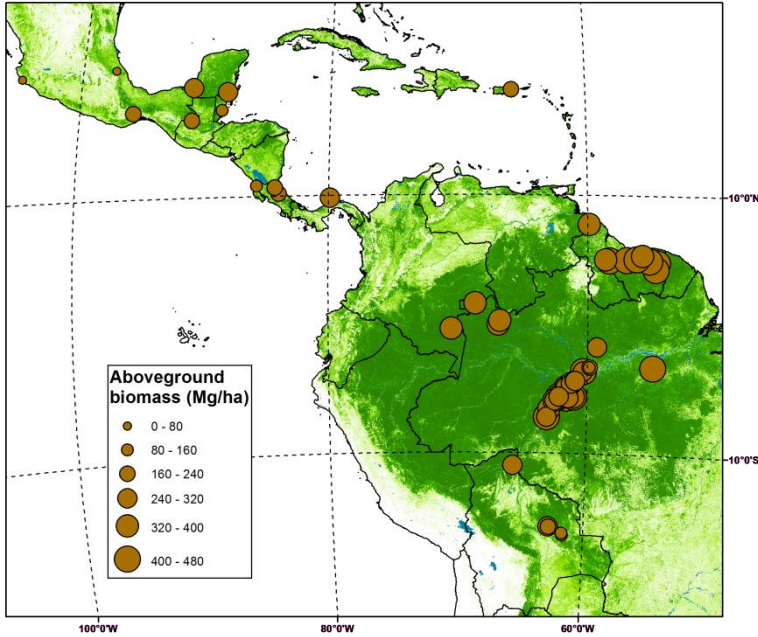


Function

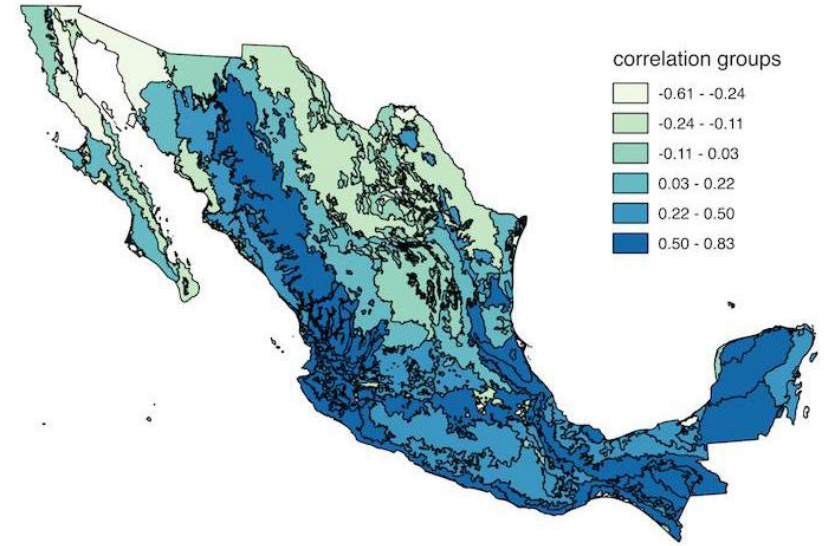


Structure

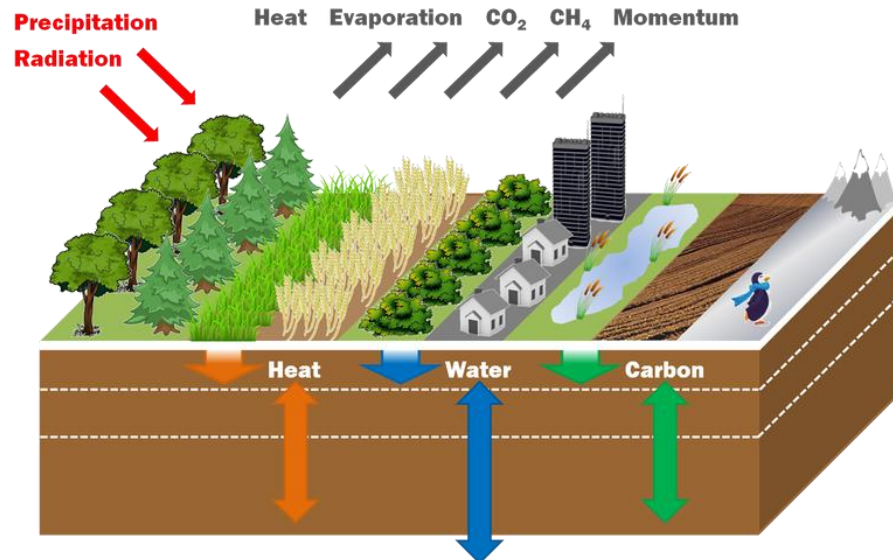
Three complementary approaches



Field studies



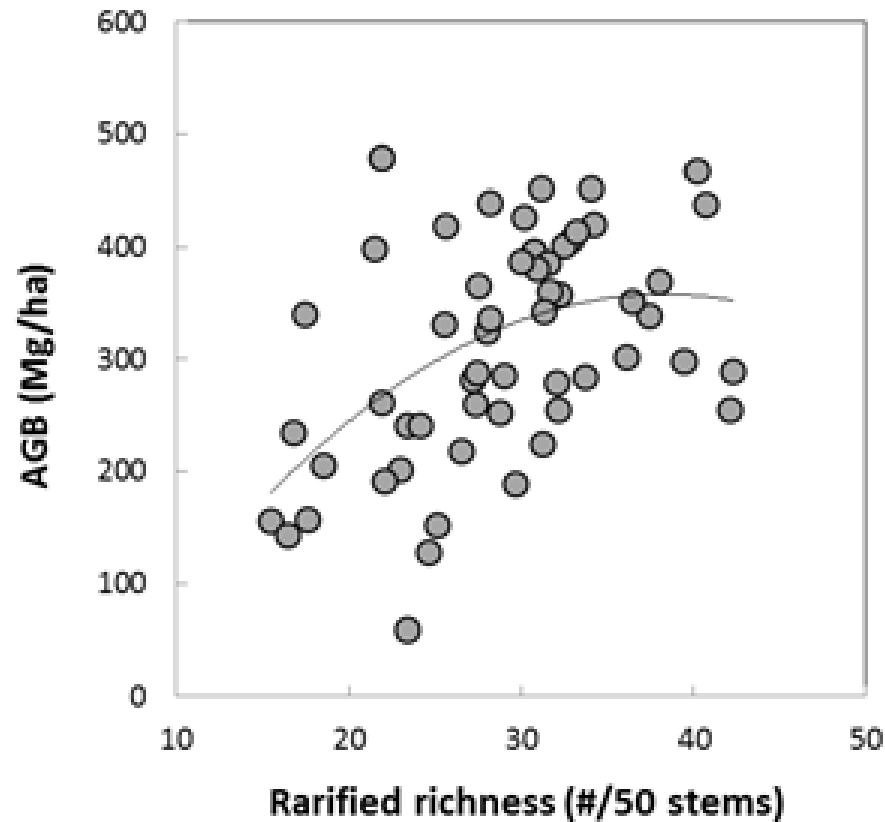
Remote sensing



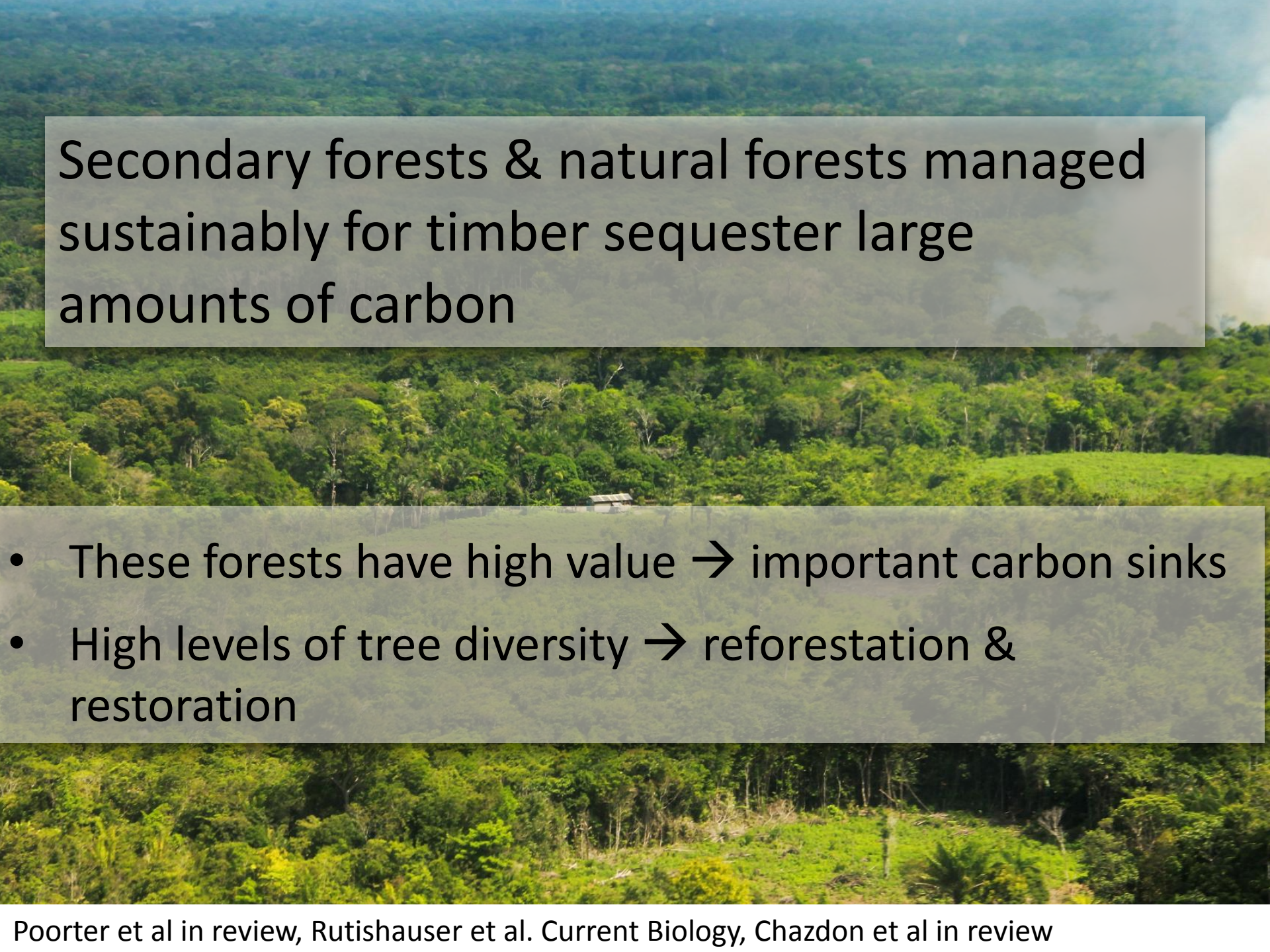
Models

Biodiversity has a **positive effect** on carbon stocks and carbon sequestration!

- Biodiversity component the impact
- Biodiversity sensing & f



Integral
t will reduce
)+)
d on remote



Secondary forests & natural forests managed sustainably for timber sequester large amounts of carbon

- These forests have high value → important carbon sinks
- High levels of tree diversity → reforestation & restoration



Biodiversity enhances the recovery of forest structure and carbon stocks under climate change

Why is this the case?

Plant diversity acts as an insurance against climate change impacts across large spatio-temporal scales

We need paradigm shifts!

Biodiversity matters for forest functioning now and is our insurance for the future

→ Biodiversity is not just a co-benefit.

Biodiversity should be an integral part of strategies and policies such as REDD+.

→ Forest regrowth promotes the carbon sink

→ High levels of tree diversity should be used in reforestation activities



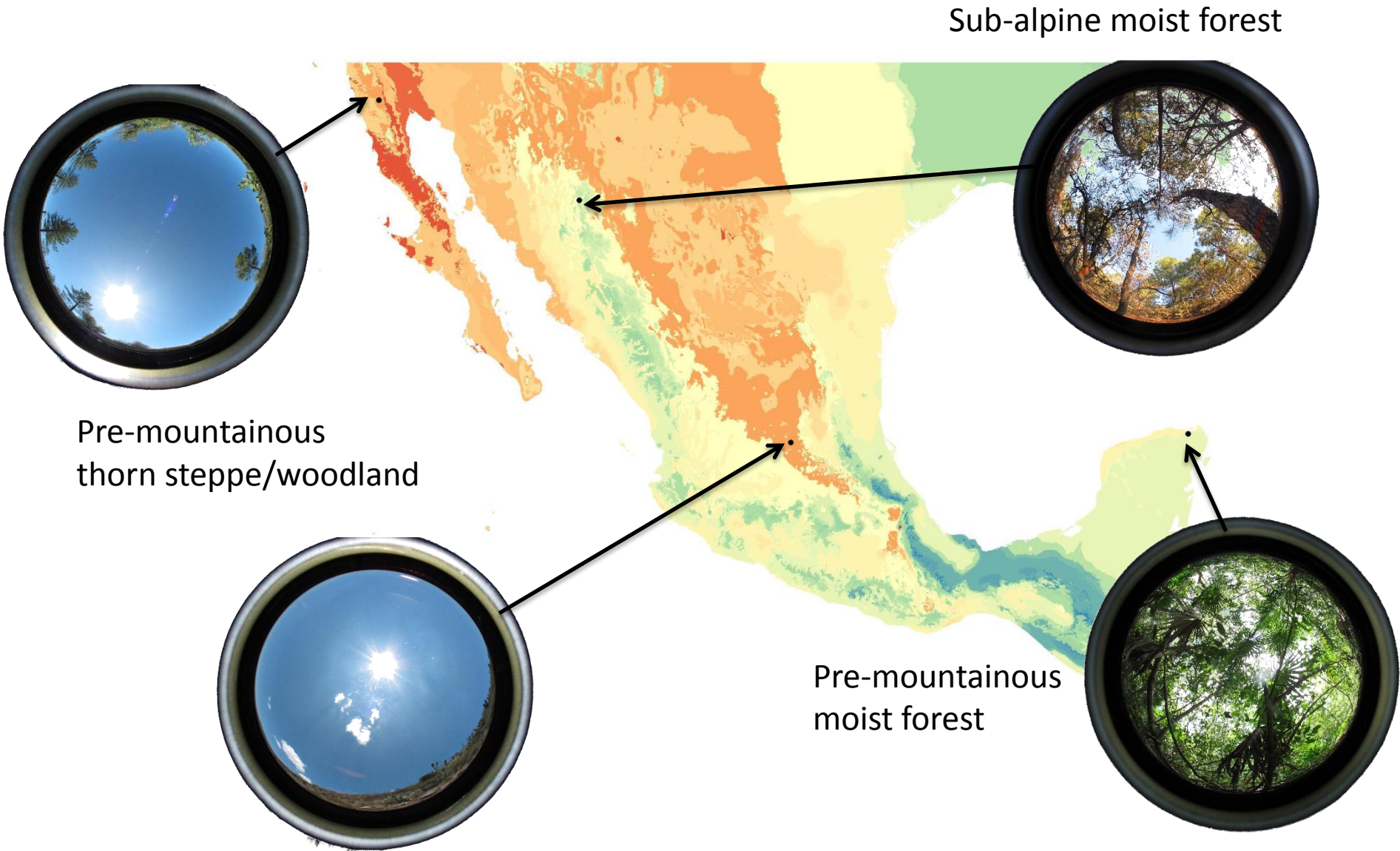


MONITORING OF BIODIVERSITY IN MEXICO

**MIGUEL EQUIHUA
INECOL**

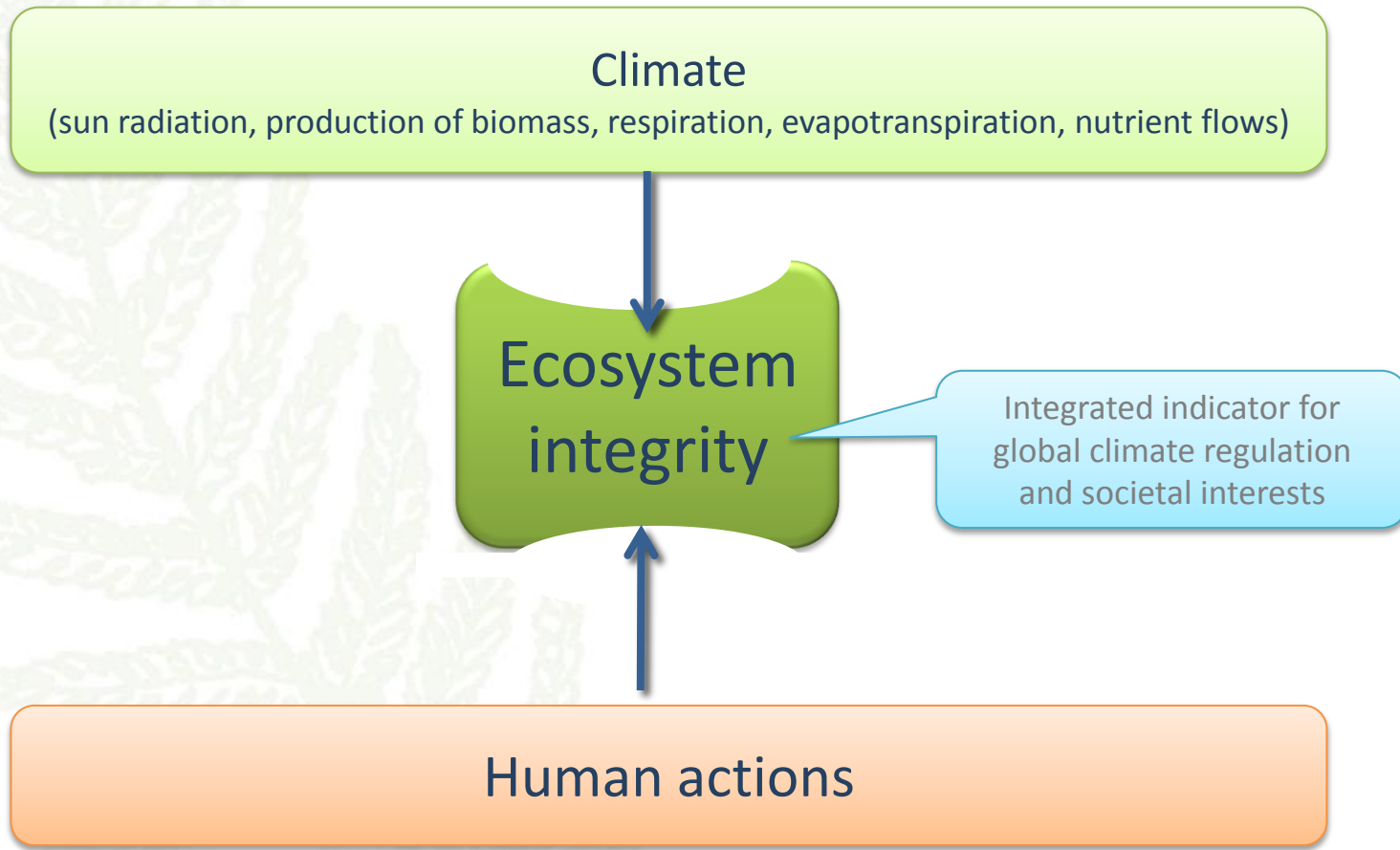


Mexico: megadiverse country

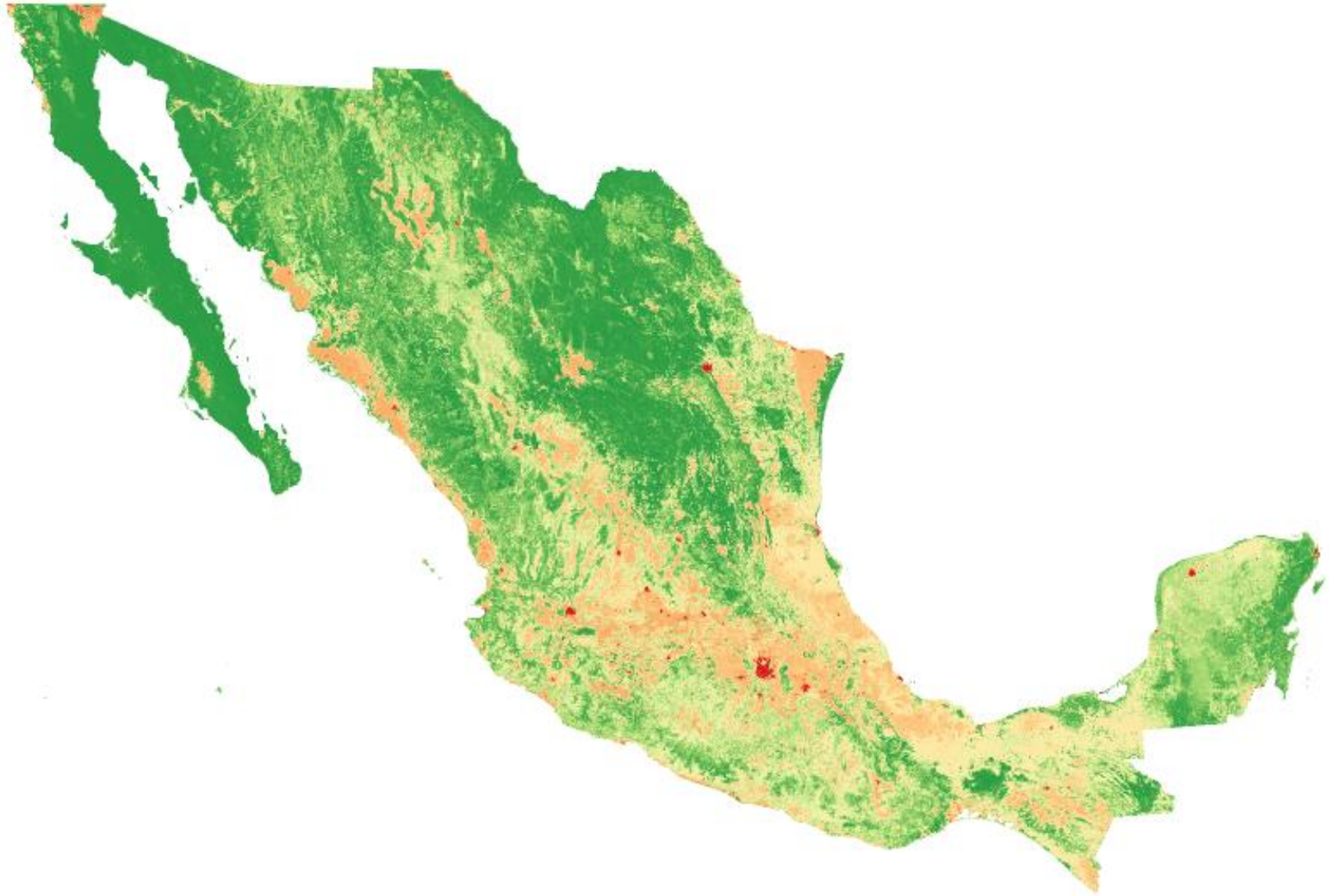


Ecosystem Integrity

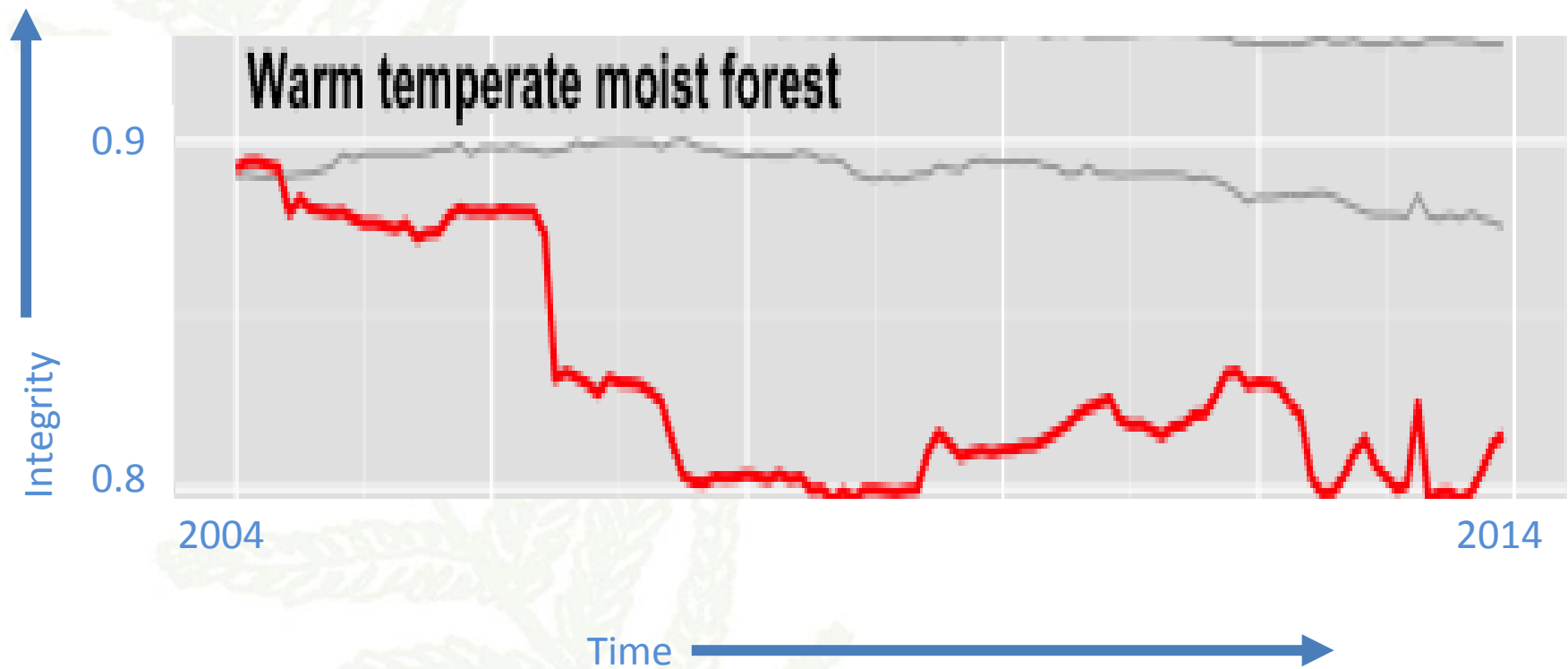
Biodiversity proxy: where the ecosystems keep their auto-regulation property (= intactness, completeness)



Mexican ecosystem integrity 2004



Monitoring change in ecosystem integrity



Framework for biodiversity monitoring in Mexico



Design & implementation of an operational system

Ecosystem Integrity



Pacific Alliance: Chile-Colombia-Mexico-Peru

