# Action Research in the Peruvian Amazon

*System change in the Amazonia: reversing negative trends in Madre de Dios, Peru*

***Prof. Dr. Armando Valdés-Velásquez***

# Content of this presentation

What am I going to talk about.

About myself so you get to know me a bit (+ positionality)

About Wyss Academy for Nature, both globally and “locally” (in Peru)

About some results from our research (+ opportunities!)

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# Armando Valdés-Velásquez

Advisor & Scientific Lead for the South American Hub / Wyss Academy for Nature

Professor – Universidad Peruana Cayetano Heredia

Lead: *Research Group on Socio-Ecological Systems*

Associated: Latin American Centre for Climate Change and Health (CLIMA)

Dr. rer. nat. in Zoology & Geography – RFW Universität Bonn, Germany.

Interest in relationships between human beings and nature

armando.valdes@wyssacademy.org

WYSS ACADEMY FOR NATURE

## We are a global organization born in 2020 as a result of the collaboration between:

THE WYSS FOUNDATION

Kanton Bern
Canton de Berne

UNIVERSITÄT BERN

# The current “sum” of all the crisis requires transformation

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PARIS2015
COP21·CMP11

Convention on
Biological Diversity

# The current “sum” of all the crisis requires transformation

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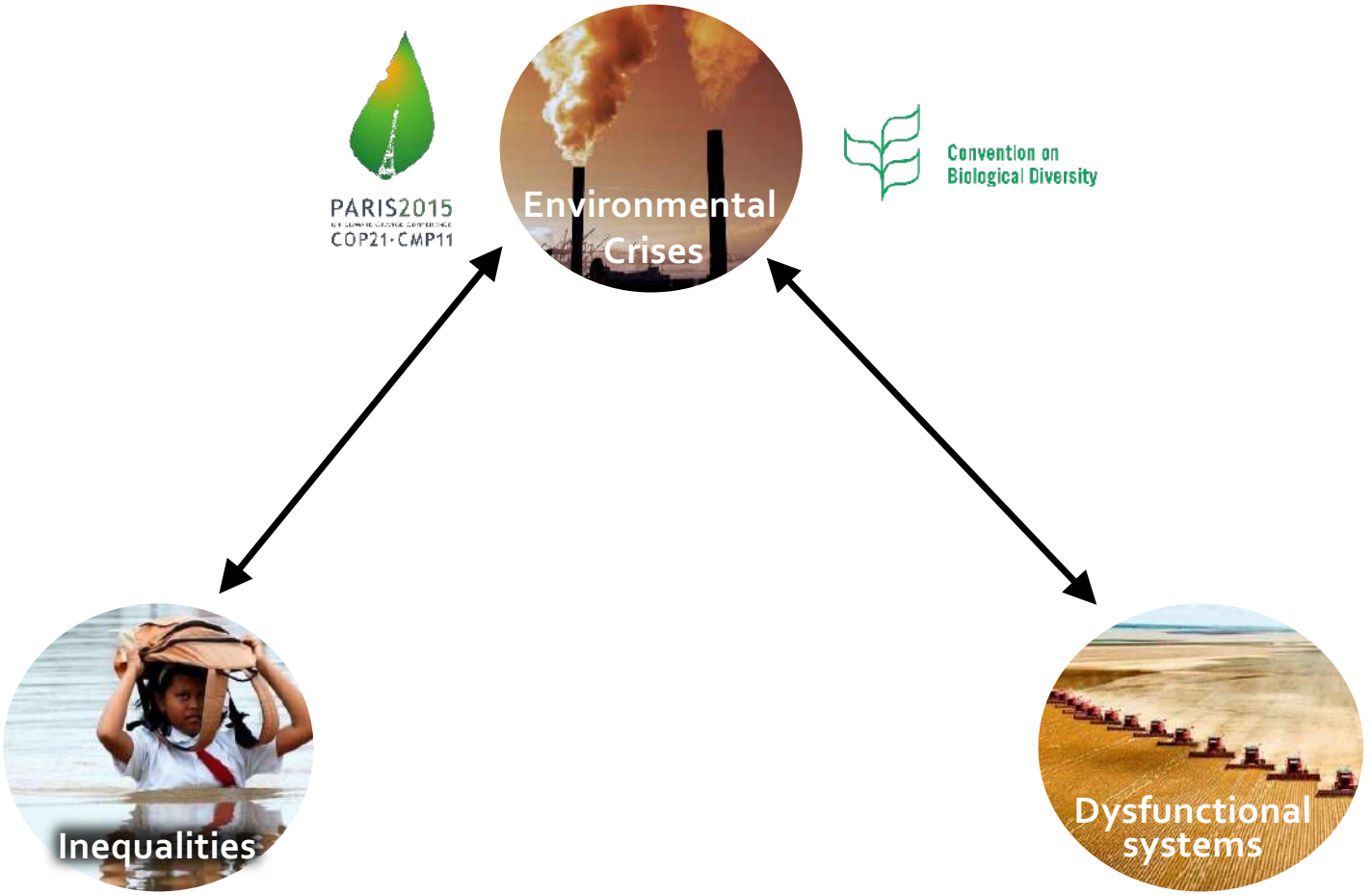

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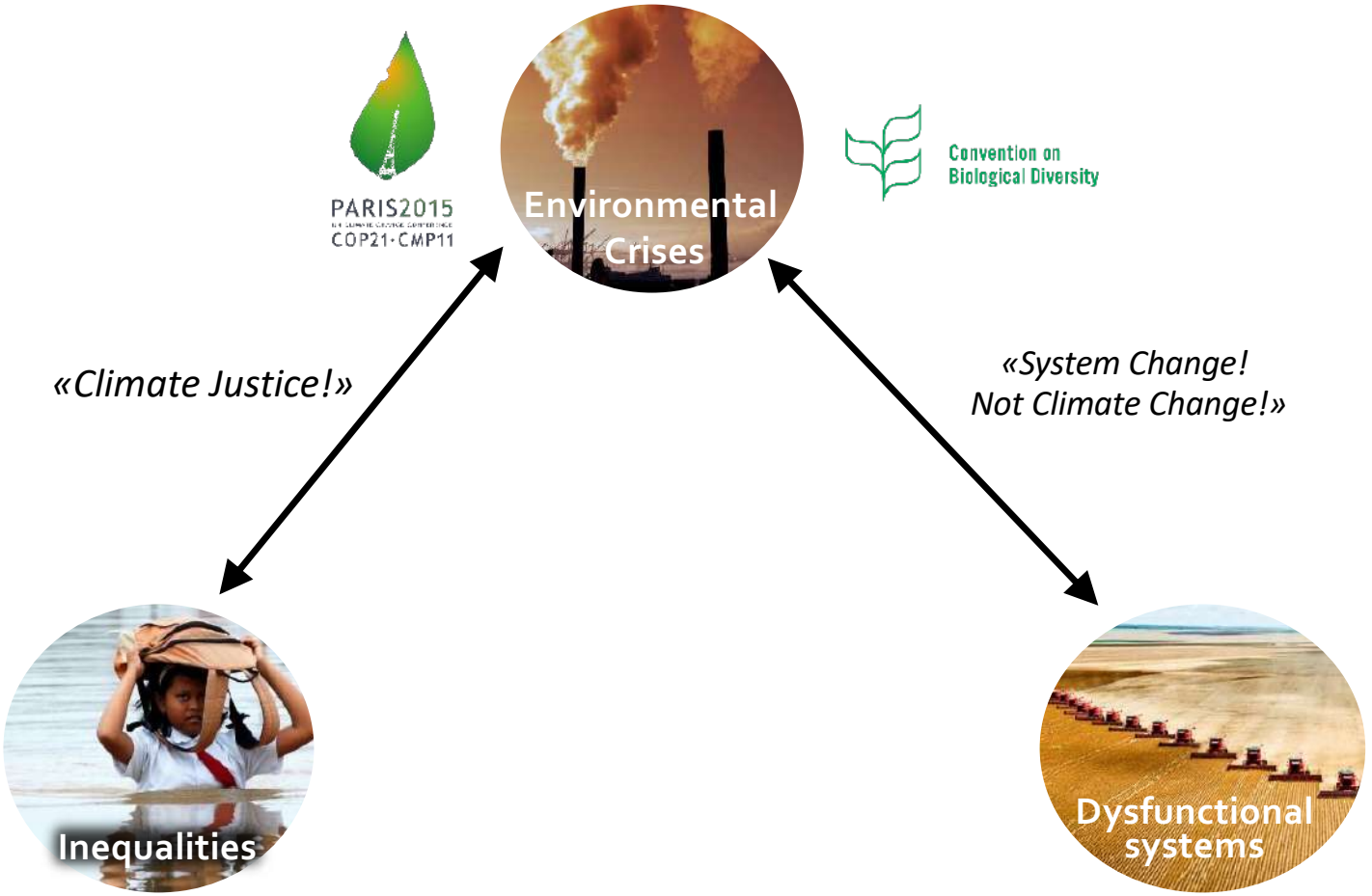

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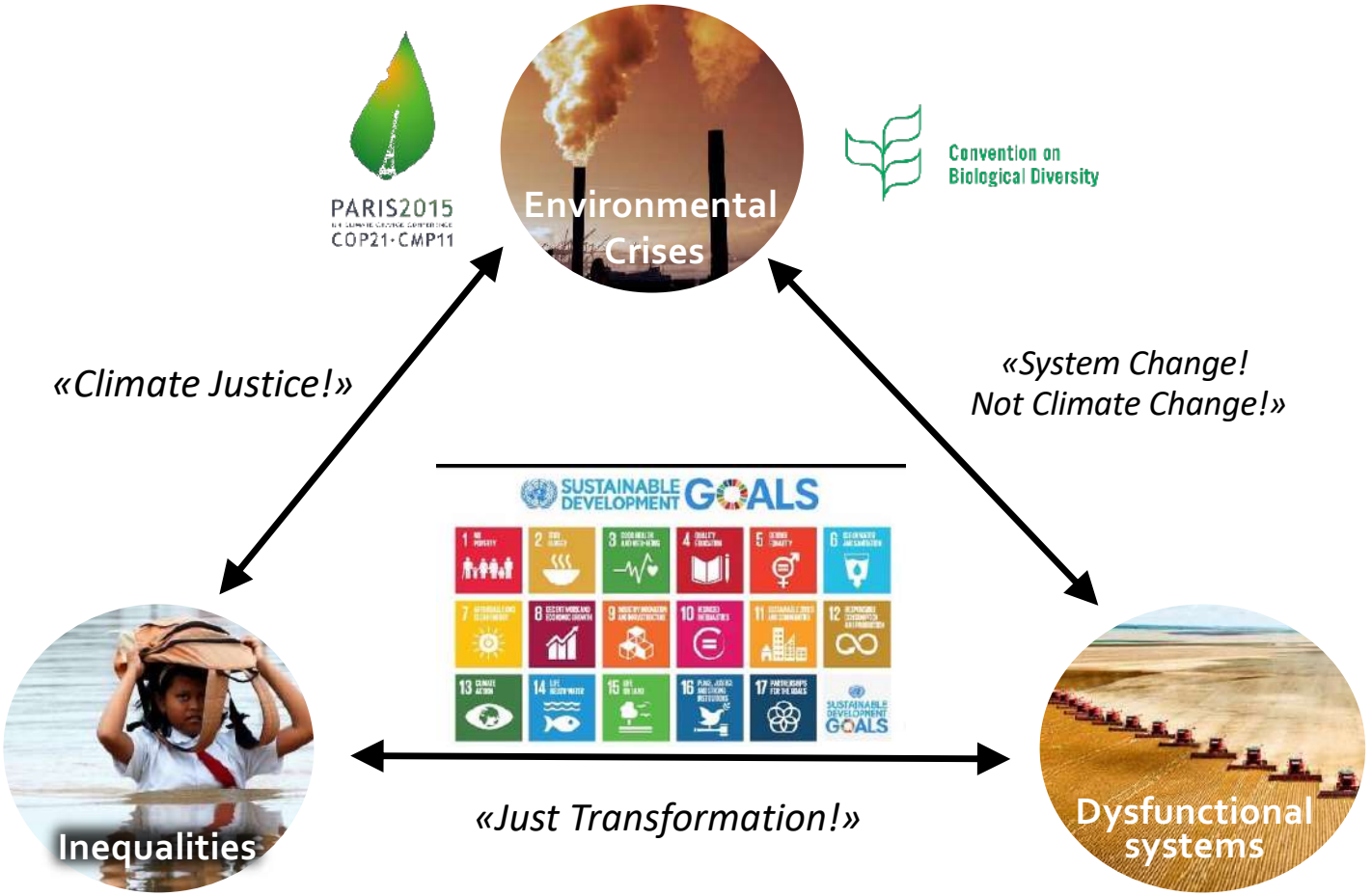

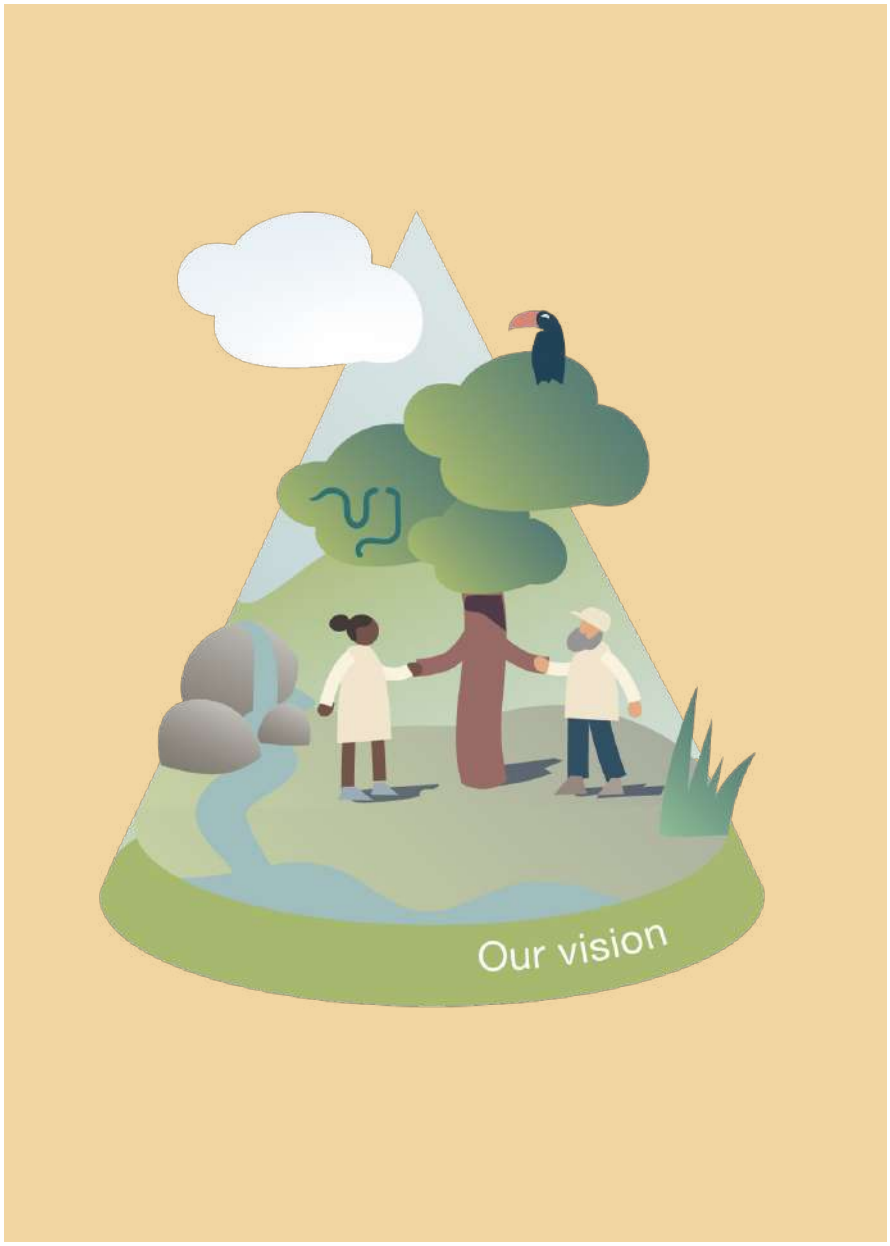


The Wyss Academy wants a just and sustainable world in which ***nature conservation and human wellbeing*** reinforce each other.

# We build bridges between scientific **knowledge**, political power, and action.

By **engaging** with various stakeholders, we develop, test, and **catalyse solutions** *transforming the relationship between people and nature.*

## Engagement

The co-design process involves all relevant stakeholders, from science, government to businesses and local groups.

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## Incubation

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## Incubation

We can only succeed if we learn from failures and the unexpected.

## Revaluation

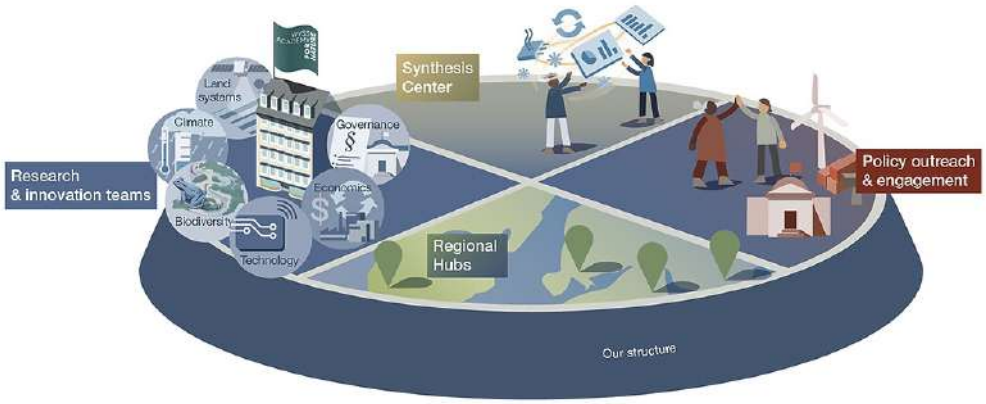
# Our strategy

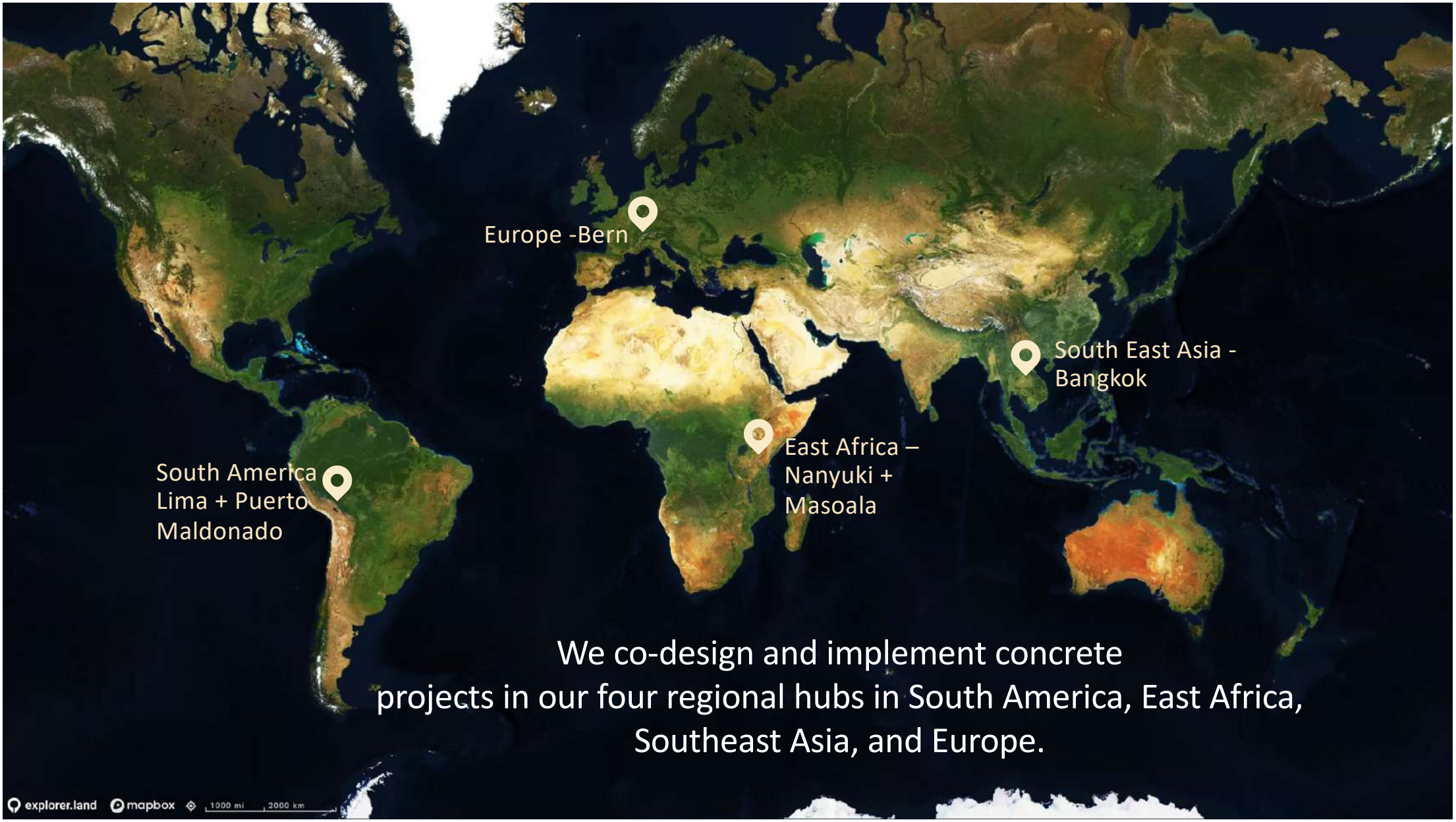
We are committed to identifying and implementing **local solutions** to urgent global challenges.

We try to break down the **silos of research, policy, and practice** and to offer pathbreaking opportunities for **collaboration**.

# Our structure

We bring together **research and innovation teams, policymakers, and action** at our regional hubs on four continents.




Europe -Bern
South East Asia -
Bangkok
East Africa –
Nanyuki +
Masoala
South America
Lima + Puerto
Maldonado
We co-design and implement concrete
projects in our four regional hubs in South America, East Africa,
Southeast Asia, and Europe.
explorer.land
mapbox
1000 mi
2000 km

# “Solutionscapes”

Taking a living lab approach that brings ***global solutions to local landscapes***, we create opportunities to move from insight to action.

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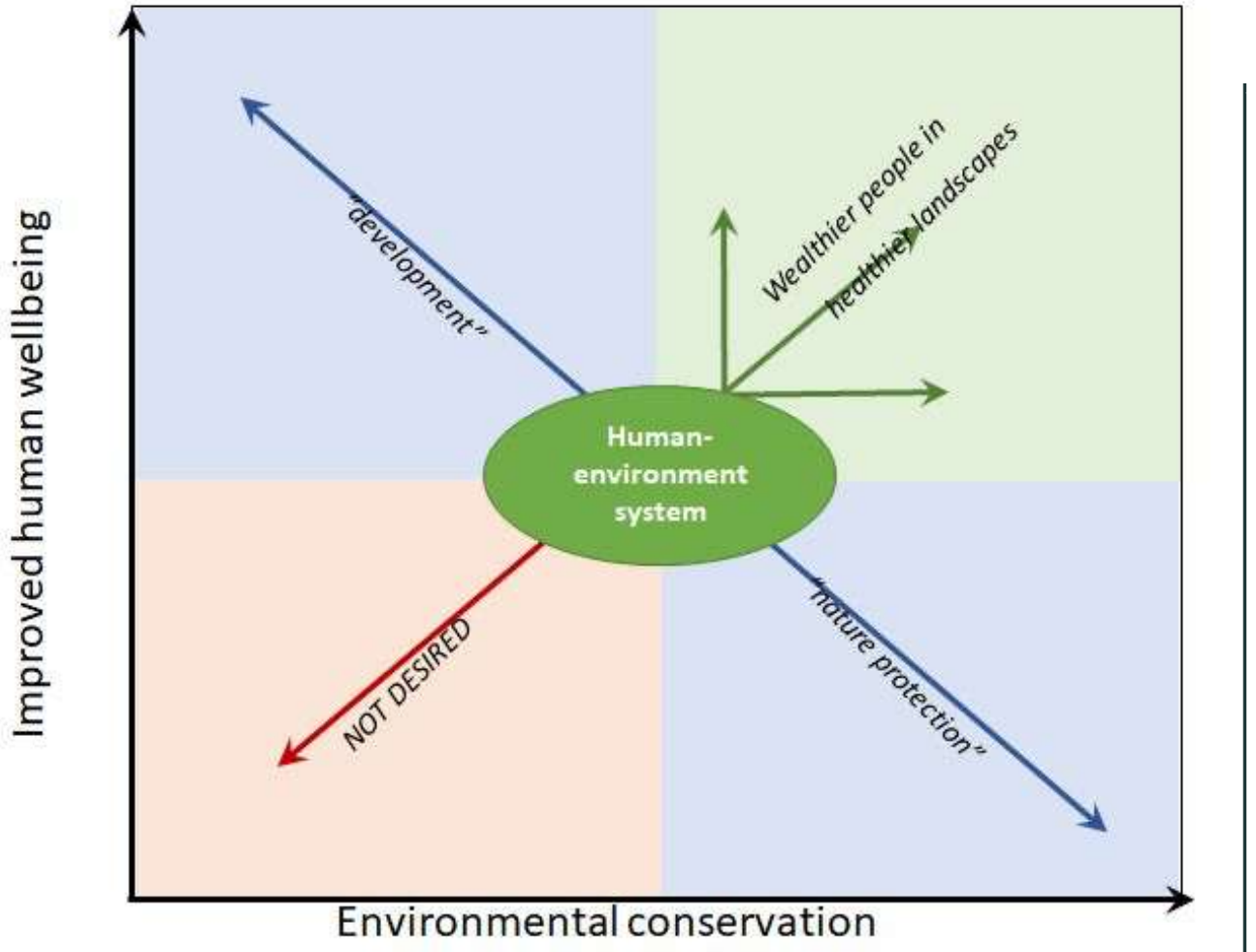
# What success looks like for us



# Hub Southeast Asia

In Laos and in Thailand, we counter illegal resource extraction through local stewardship, and we work to maintain multifunctional landscapes that benefit agriculture, development, biodiversity, and society.

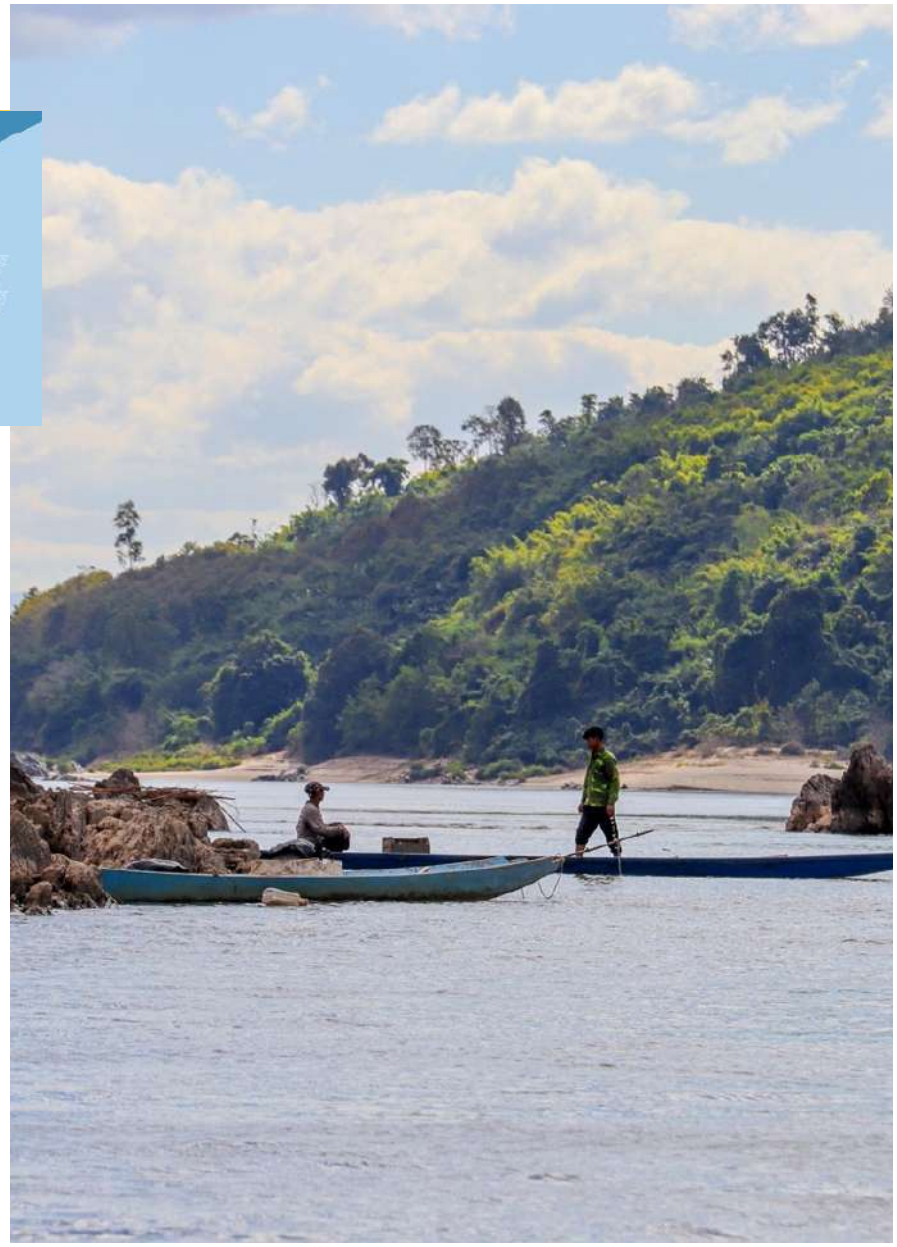
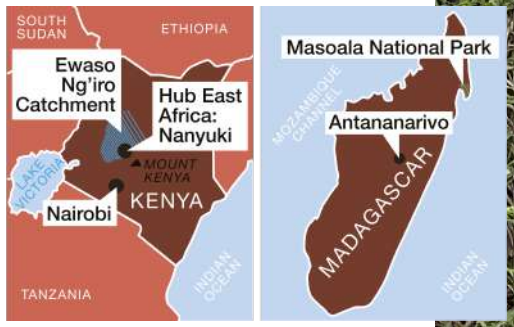


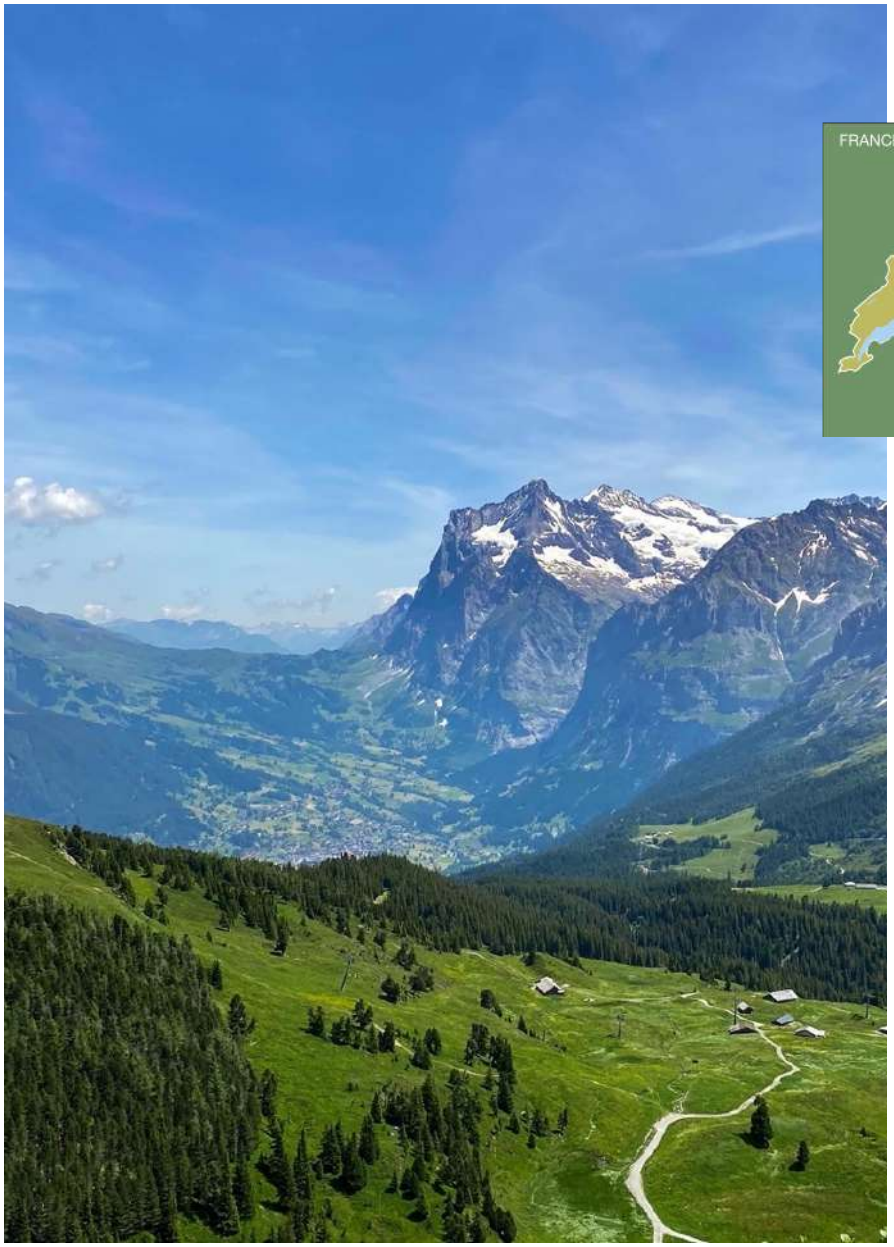
Photo: Anne Fritzenwanker, @Travelbee_photo




# Hub East Africa

In Kenya and Madagascar, we work to enable the coexistence of people and nature by maintaining the connectivity, functionality, and health of ecosystems.

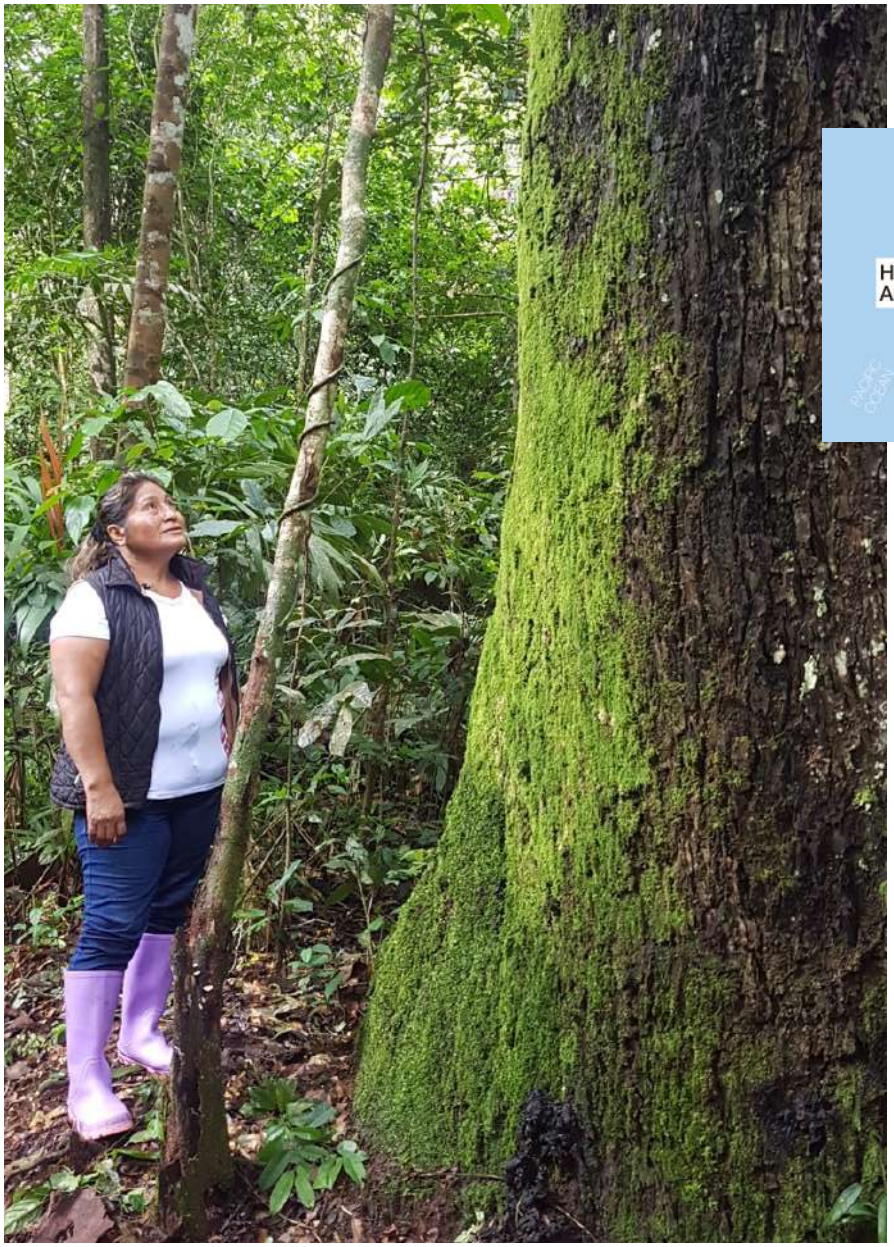
Photo: Peter Messerli, Diversifying agricultural and non-agricultural revenue in Madagascar



# Hub Europe-Bern

In the Canton of Bern, in Switzerland, we promote sustainable human activities and people–nature interactions in ecologically sensitive areas. We strive to enable a transformation to sustainable energy systems in urban and rural regions, including carbon-neutral tourism, and encourage steps toward a more sustainable food system.

Photo: Stopping biodiversity loss in water bodies – despite climate change



# Hub South America

In Peru, we co-design land use models that contribute to forest protection as well as people's livelihoods and offer true development alternatives to exploitative resource use.

Photo: Julie Zähringer, Amazonian Forest, Brazil Nut trees

# Our fields of research

One of their goals is to support the design of pilot projects in the region where we act and guide the implementation through rigorous scientific evaluation.

**Climate Scenarios for Sustainable Development**

**Land Systems and Sustainability Transformations**

**Political Economy and Sustainable Development**

**Integrative Biodiversity Conservation Science**

**Environmental Governance and Global Development**

Prof. Dr. Edouard Davin

Prof. Dr. Julie Zähringer

Prof. Dr. Kai Gehring

Prof. Dr. Margaret Owuor

Prof. Dr. Quynh Nguyen

# Our values

Through continuous reflection and adaptation of our behavior according to our values, we can ensure that we stay on track in our efforts to achieve a more harmonious and sustainable relationship between human beings and nature.

Impact driven

Innovation oriented

Entrepreneurial

Transparent & fair

People centered

# Timeline

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COVID-19 related constraints

Pre-project | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030

Evaluation

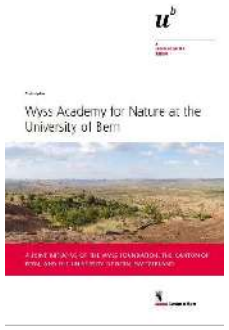
Evaluation

Ramp-up Phase

Strategy 2022-2024

Extension and Adaptation

Strategy 2026-2030



R&I
PO&Synt.
Management
Hub Bern

Regional Stewardship Hubs

# Hub South America

In Madre de Dios, we **co-design** land use models that **protect forests**, **promote sustainable** resource use, and strengthen **people's livelihoods**.

***Healthy forests for People***
***Bosques saludables para vivir bien***

# Our team

**Miguel Saravia**
Director

**Liselot Lange**
MdD Operations Coordinator (Researcher)

**Aquila Soria**
Administration & Finances

**Marco Del Aguila**
MdD Operations Assistant

**Cinthya Taquile**
Administration Assistant

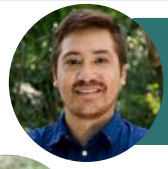
**Renzo De la Peña**
Program Manager MDD

**Gabriela Gonzales (GG)**
Indigenous Peoples Liaison

**Ursula Harman**
Innovation & Entrepreneurship

**Gabriela Wiederkehr-Guerra (Gaby)**
Associate Scientist

**Diana Miranda**
Learning, Monitoring & Evaluation



**Alejandro Portillo (Ale)**
Associate Researcher

**Claudia Lucero**
Communications

**Meredith Castro (Mere)**
Associate Researcher

**Cynthia Gómez**
Policy Outreach & Engagement

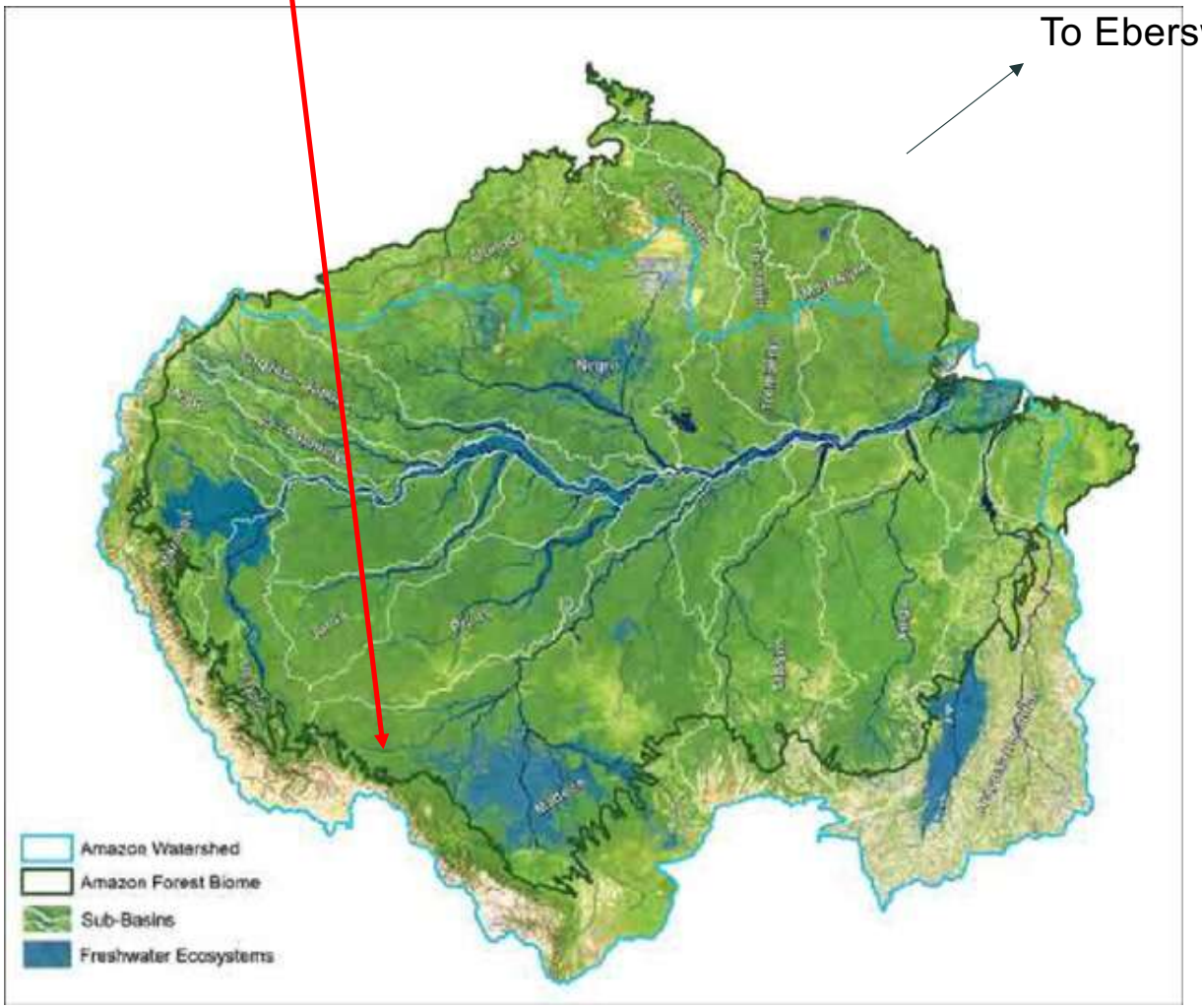
**Armando Valdés-Velásquez**
Senior Advisor

**Ronny Condor**
Associate Researcher

# Where do we work?

***The Amazon watershed/basin/geopolitical region/countries***

*Southwestern Amazon = Southeastern Peru*

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# Where do we work?

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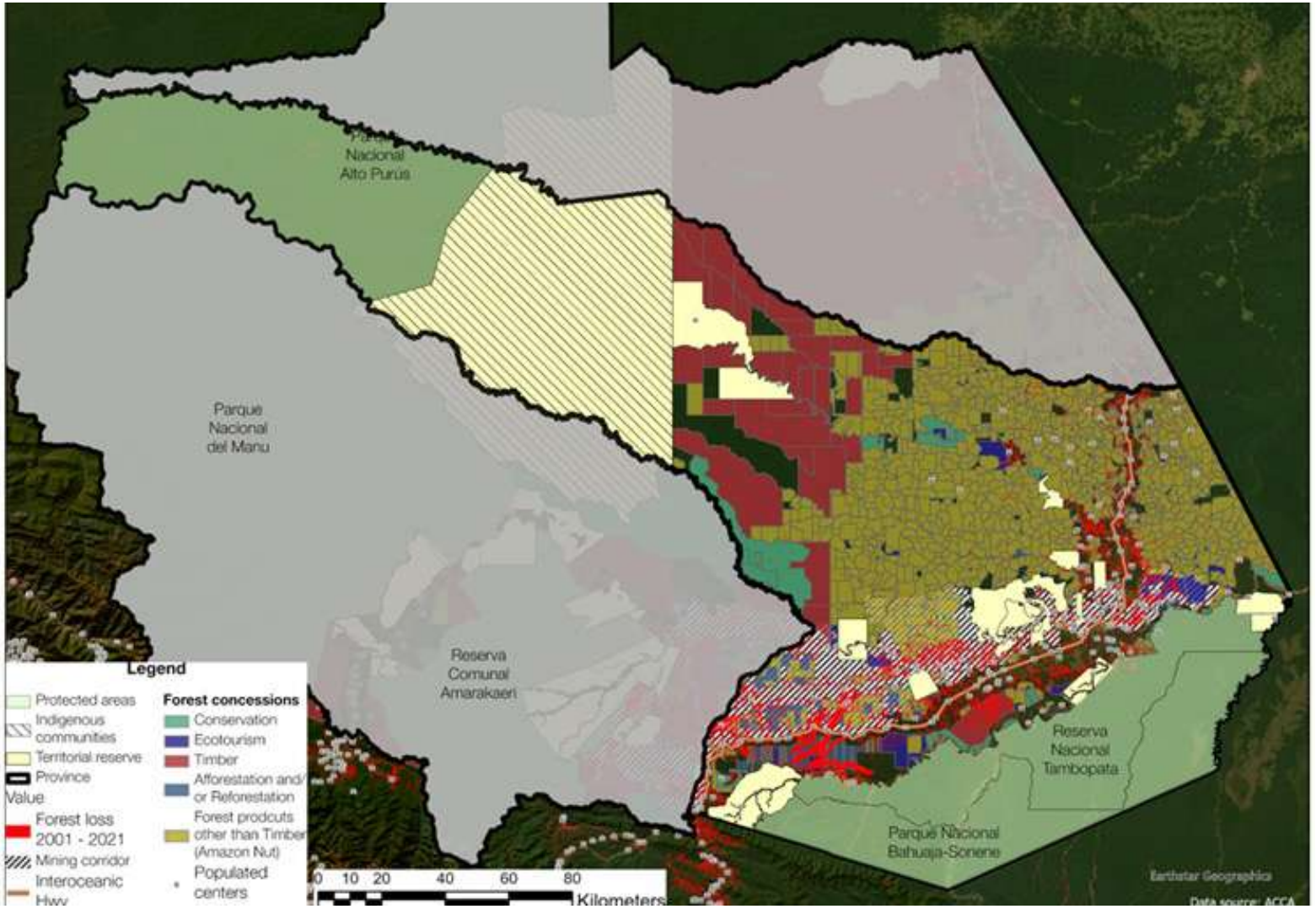
***Tambopata Province***
***Madre de Dios Dpt.***

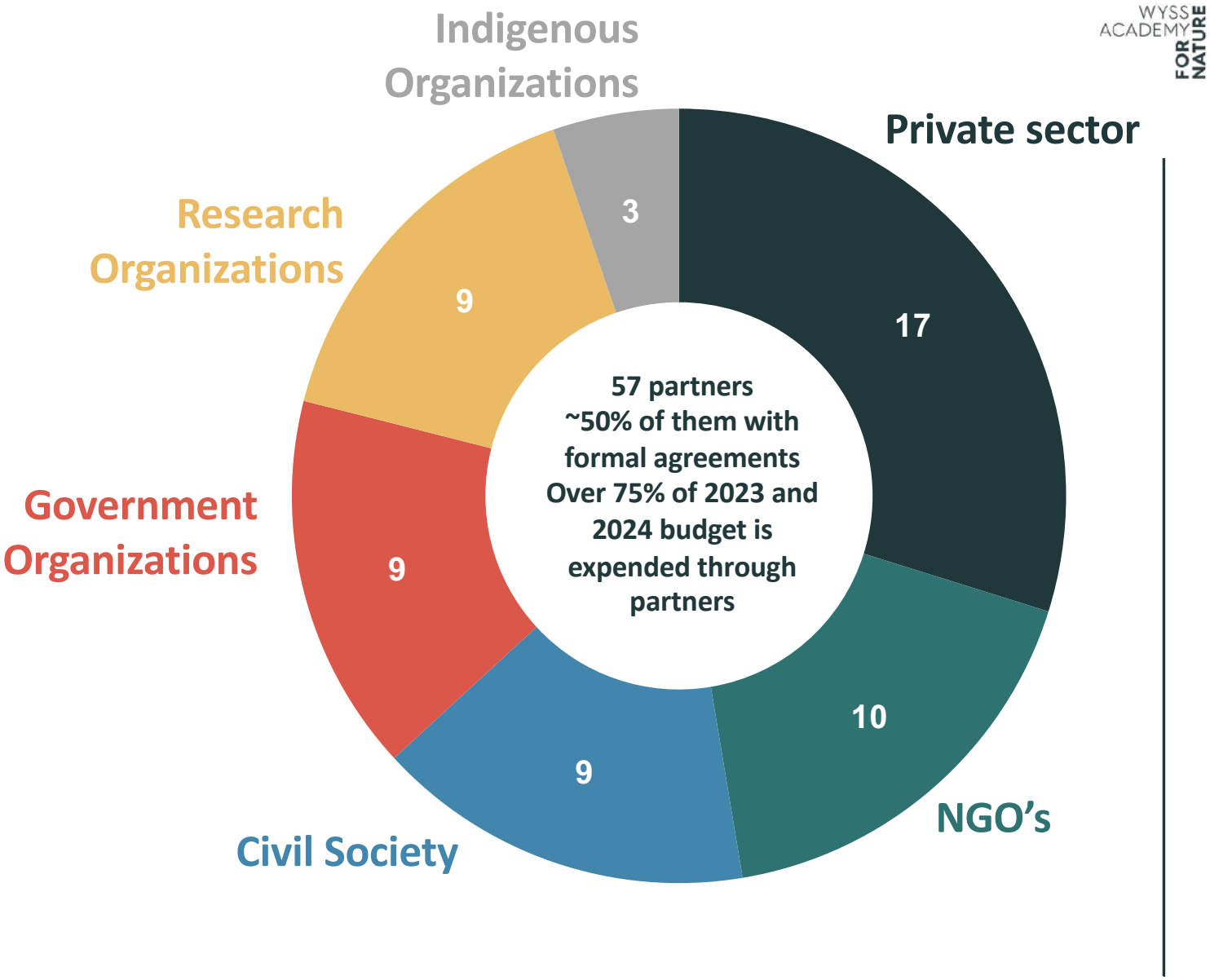
*Mainly Tambopata Reserve Buffer Zone and along the Interoceanic Highway.*



# What do we do?

**We catalyse.**
We **connect** different ***knowledge systems*** and ***actors***, **generating** and offering ***spaces*** for discussion, reflection and co-creation of innovative solutions.

# We engage with partners

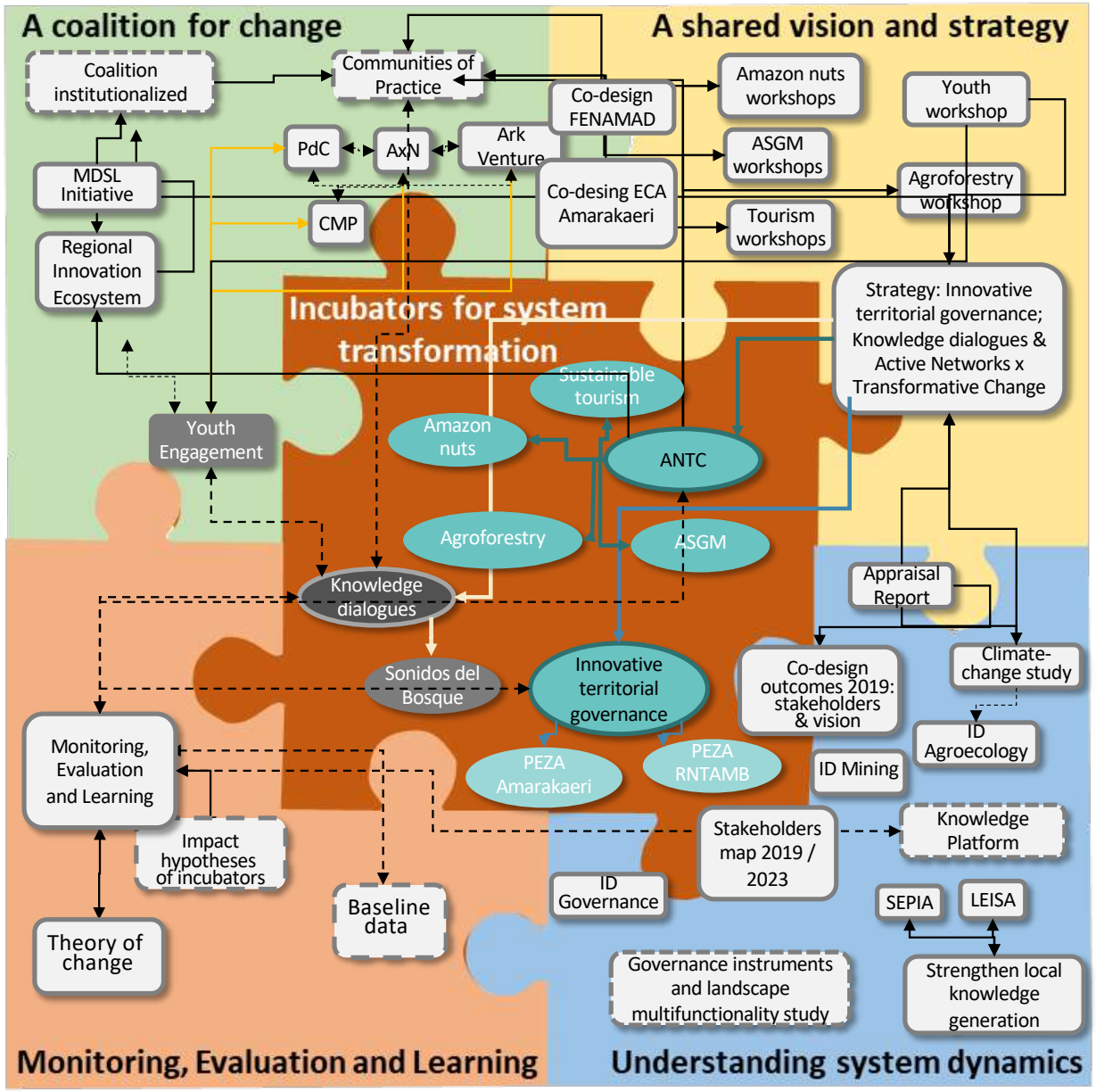


"As a young indigenous person, I have been pleased that all of us (private sector, public sector, NGOs and academia) have been able to discuss and agree on ideas and proposals. We have been able to achieve alliances and links with the organizations we have always wanted to talk to."

Genaro Escalante
Federación Nativa del Río Madre de Dios y Afluentes (FENAMAD)

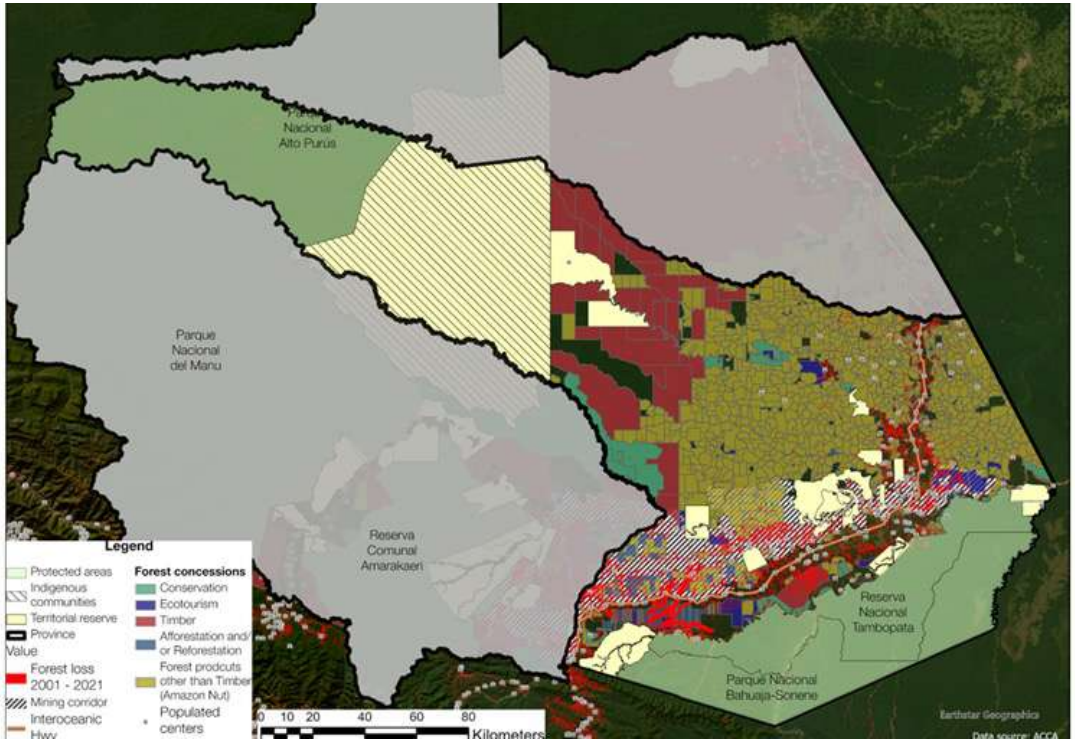
# Healthy forests for people

## Connections towards transformations



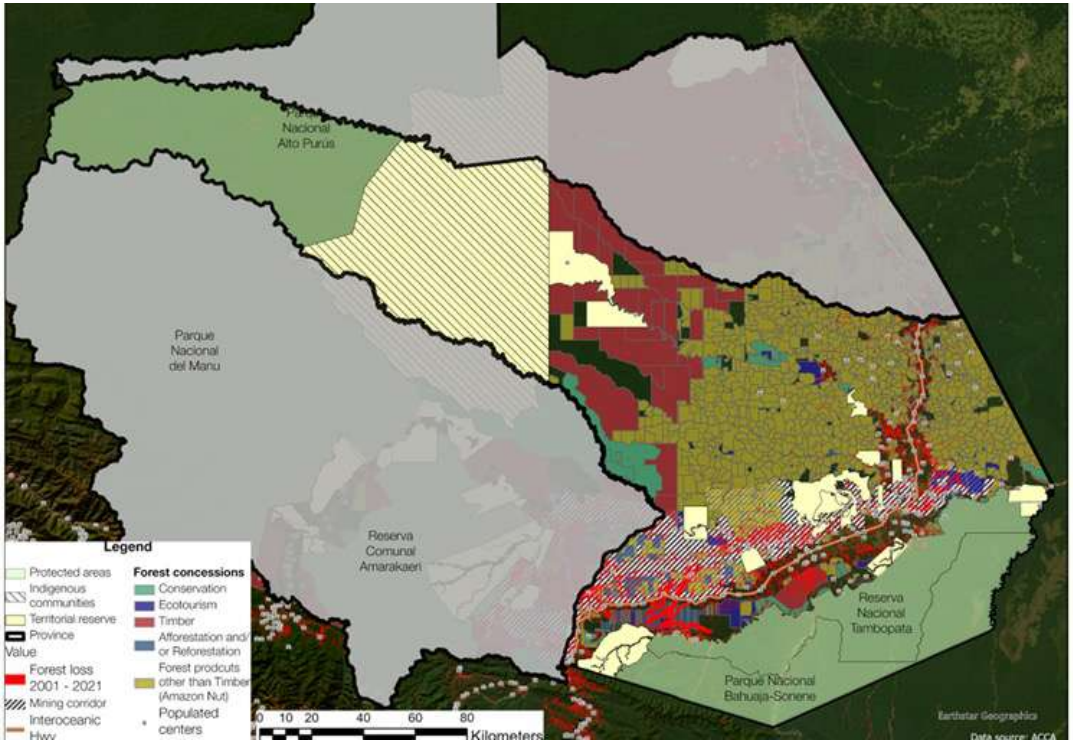
# What do we do?

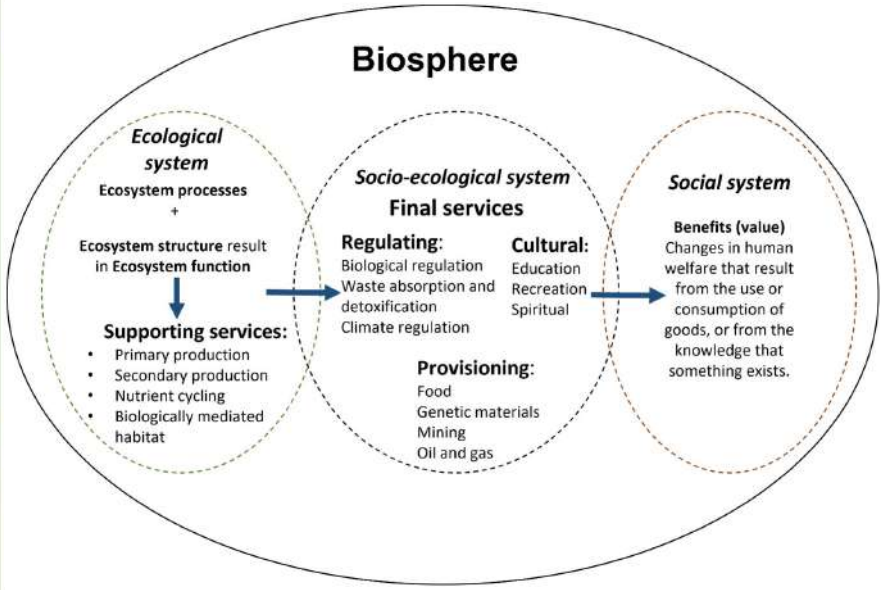
*We are trying to address a challenge here…*



# The Challenges in Madre de Dios, Tambopata



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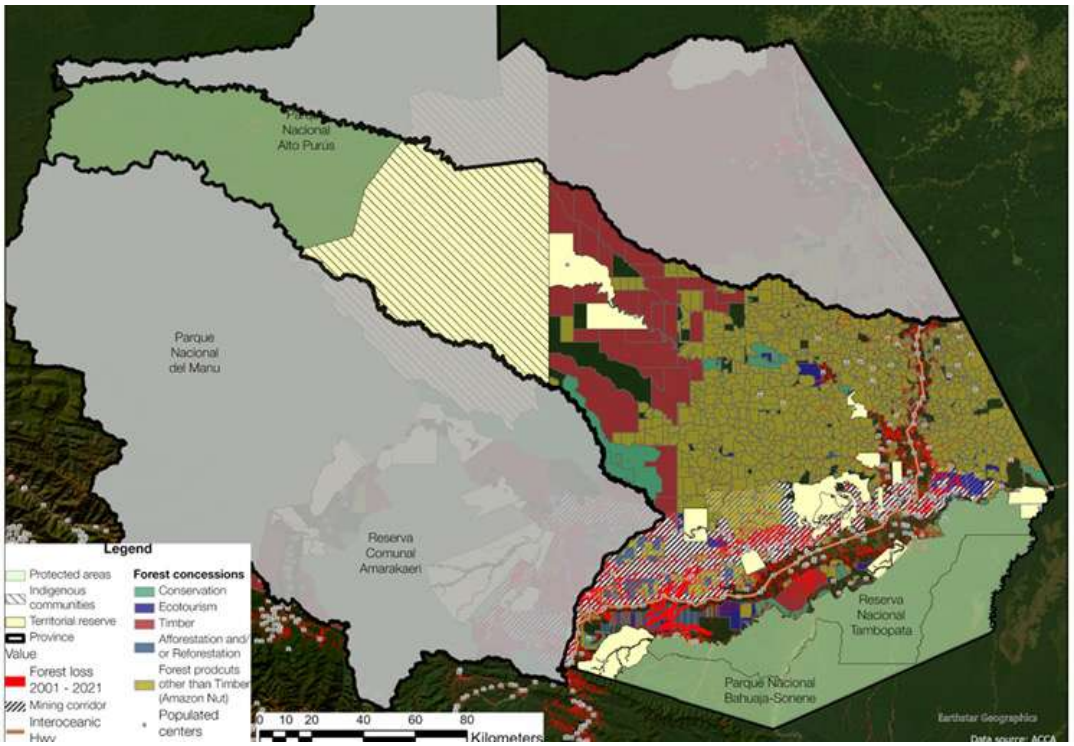
# The Challenges in Madre de Dios, Tambopata





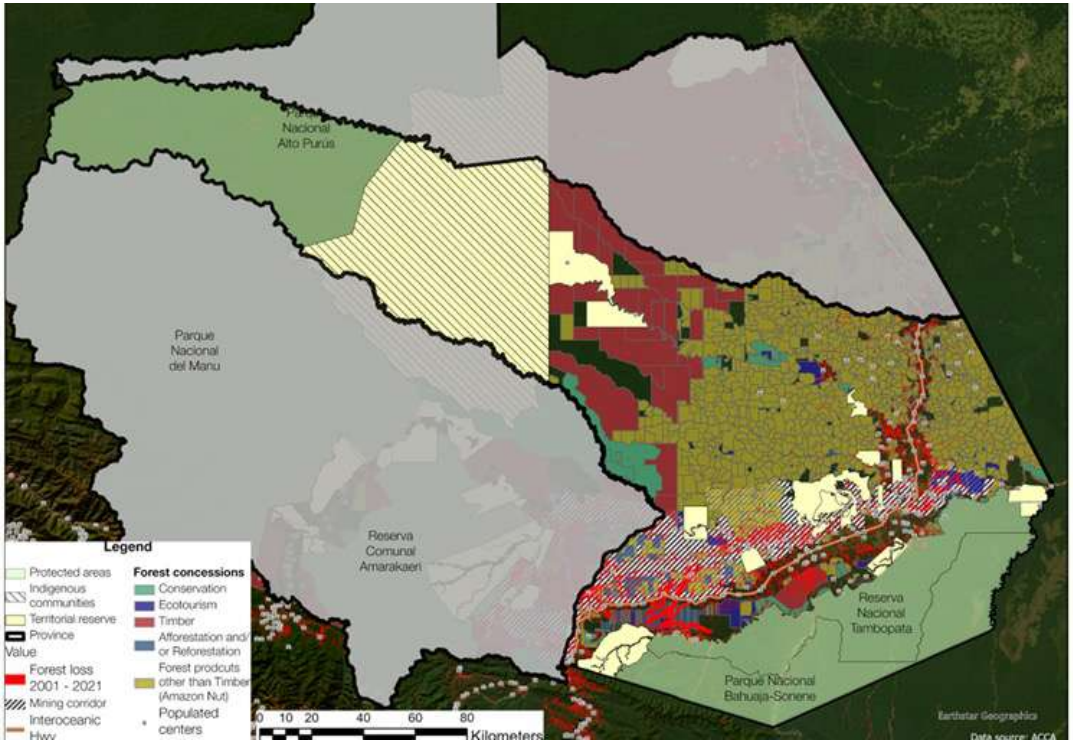

Land

- Old ”primary” forests
- Secondary forests
- Rivers

- Farms (subsistence, mono-crop, AFS)
- Cattle ranches
- Roads
- Settlements (cities, towns)
- Mines (gold)

# The Challenges in Madre de Dios, Tambopata





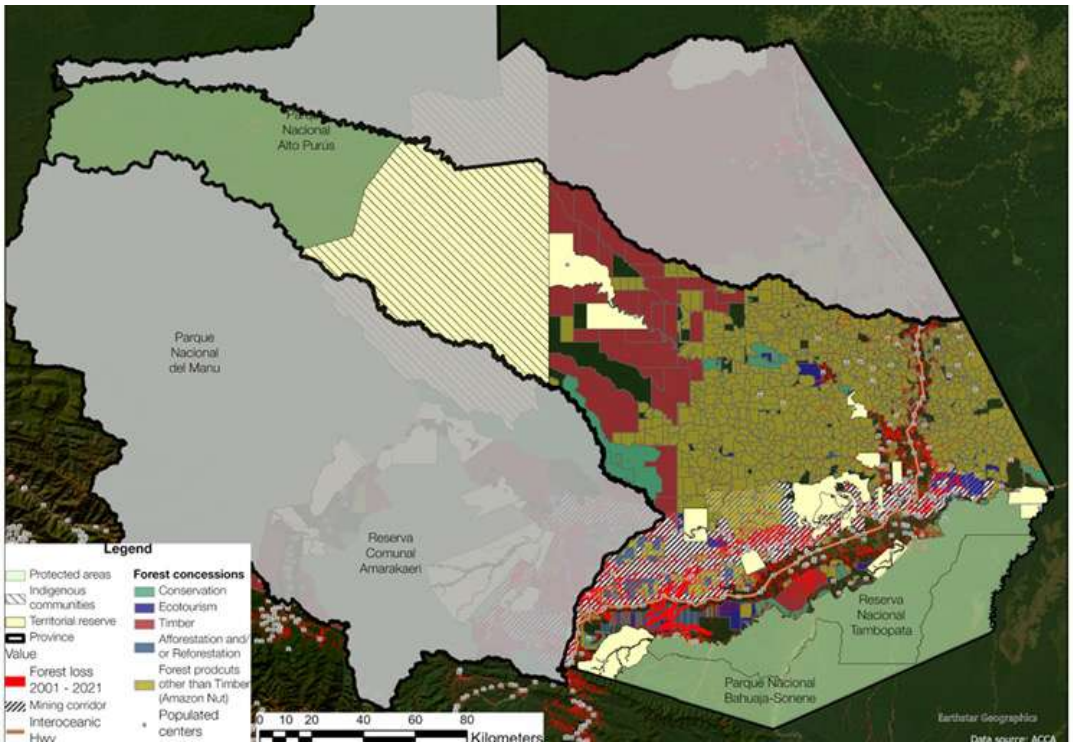

People

- Indigenous
- Old migrants
- Newer migrants

- Urbanites (commercial)
- Farmers (rural)
- Forest dwellers
- Fisher-folk
- Loggers
- Miners

# The Challenges in Madre de Dios, Tambopata






Governance

- Protected Areas
- IP Territories, Communities Nations
- Concessions (NTFP, Timber, Conservation, Tourism, Mining)
- Private Lands

- IOH + Secondary roads
- Rivers

# The Challenges in Madre de Dios, Tambopata



- This area is rich in cultural diversity, home to many indigenous ethnic groups, and contains large tracts of old-growth forests that host some of the world's highest levels of terrestrial species diversity and endemism.

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- This unequal prosperity is accompanied by a significant transformation of the biological and social landscape, including degradation, deforestation, habitat loss, river erosion and sedimentation, changes in hydrological regimes, mercury pollution, increasing population and inequality, and decreasing safety and security.

# The Challenges in Madre de Dios, Tambopata

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*Degraded lands*

*Standing forests*

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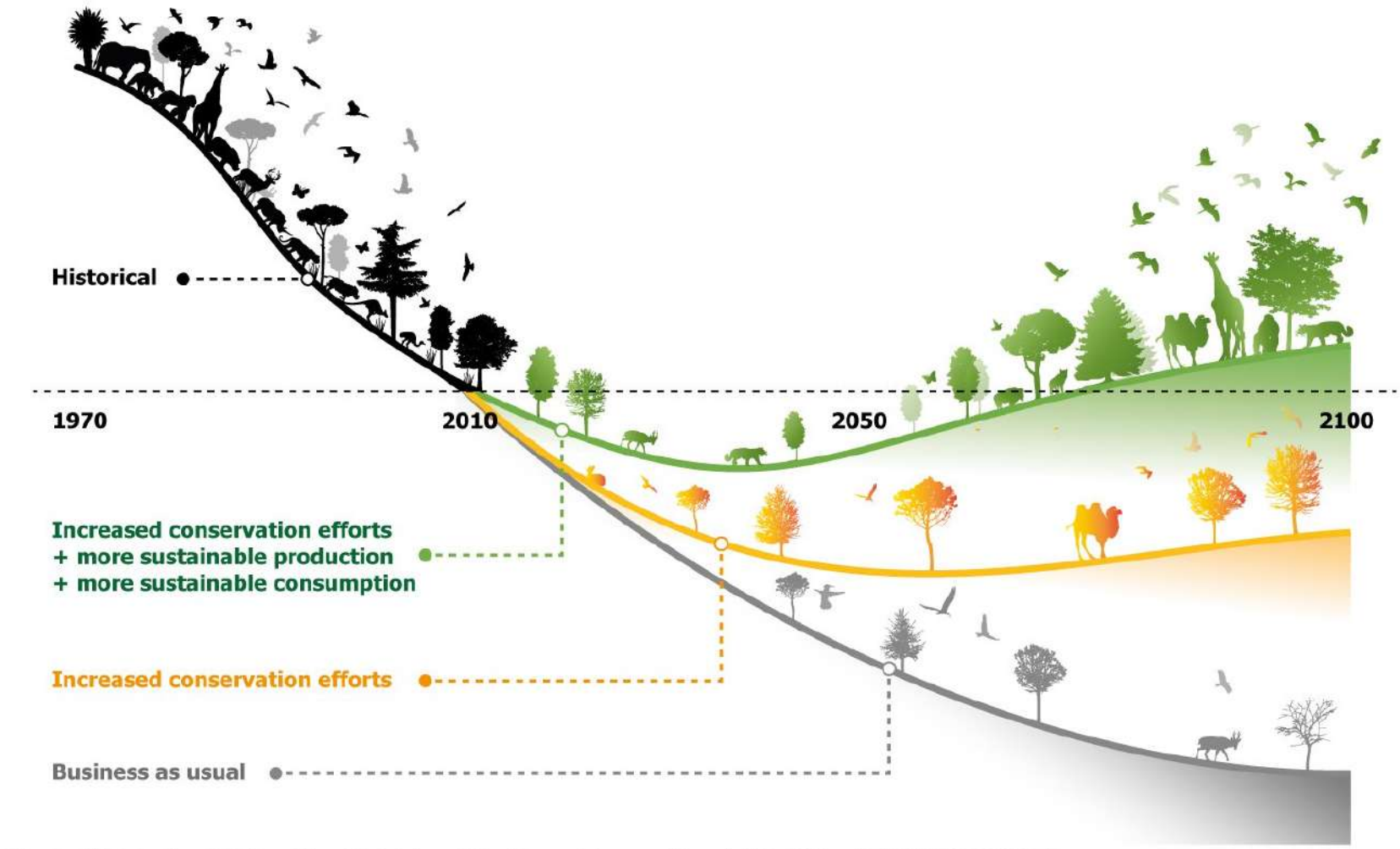
***How can we enhance the value of standing forests and foster a multifunctional landscape in Madre de Dios?***

# A longing for a better world than the one we have…



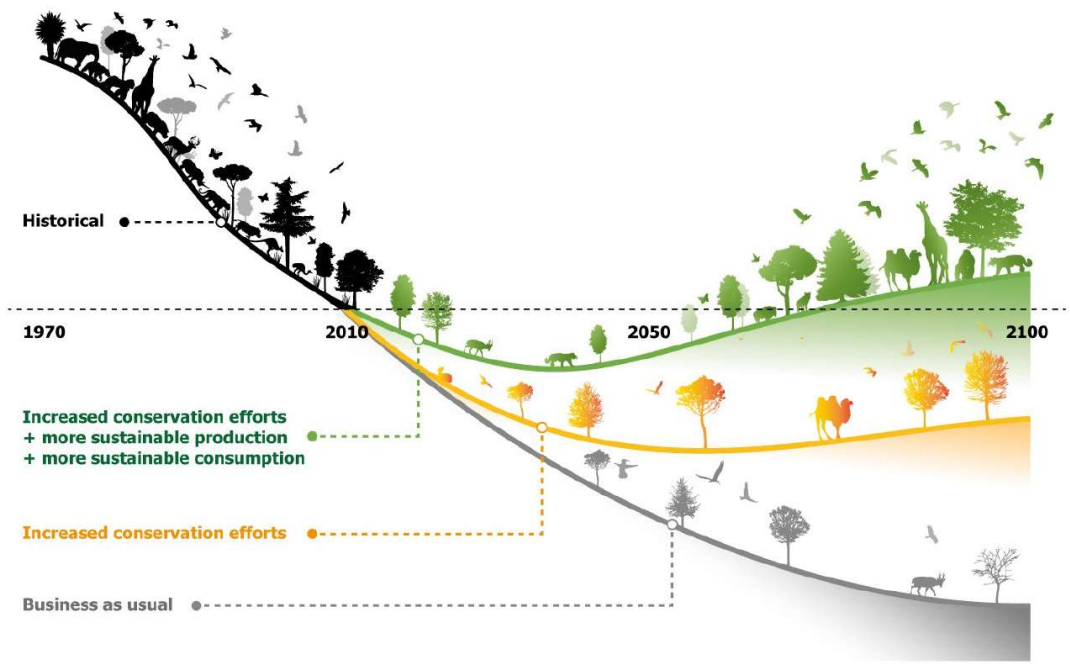



This artwork illustrates the main findings of the article, but does not intend to accurately represent its results (https://doi.org/10.1038/s41586-020-2705-y)

# will probably require a systemic transformation



- Not only ***mitigate*** the adverse effects of the current regime of management and use of biodiversity…
- but also bring about a ***profound change***.
- Adopt a ***comprehensive vision*** that encompasses the diversity of ***actors, voices, institutions and knowledge***, recognising the complexity of change and
- Generate ***long-term learning*** (continuous evaluation) that guides strategic and effective long-term decisions.

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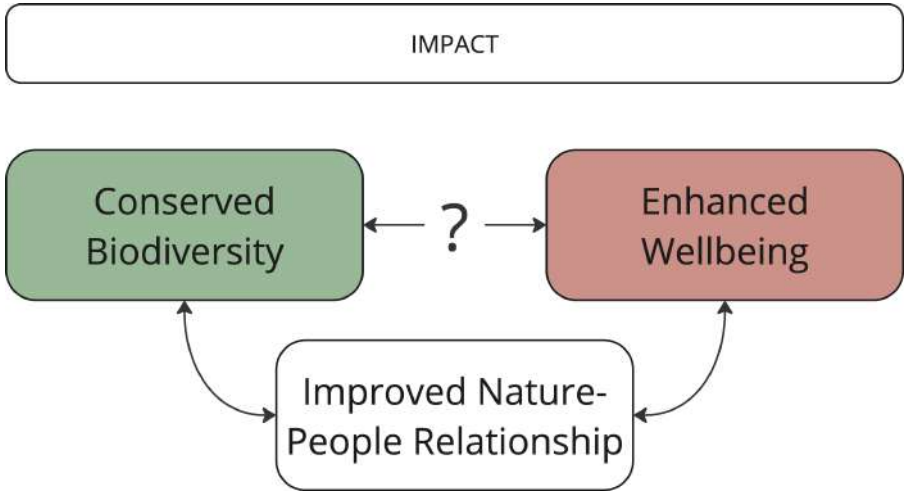
# Challenge: Healthy forests for people



# Challenge: Healthy forests for people

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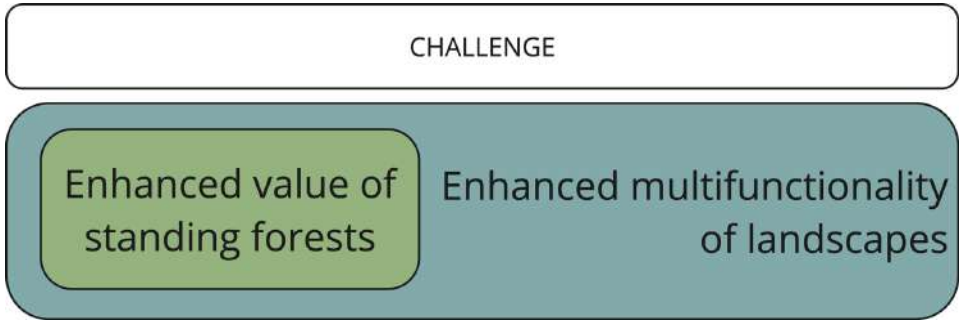
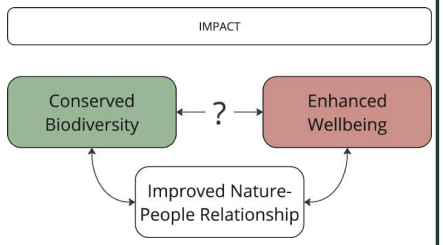
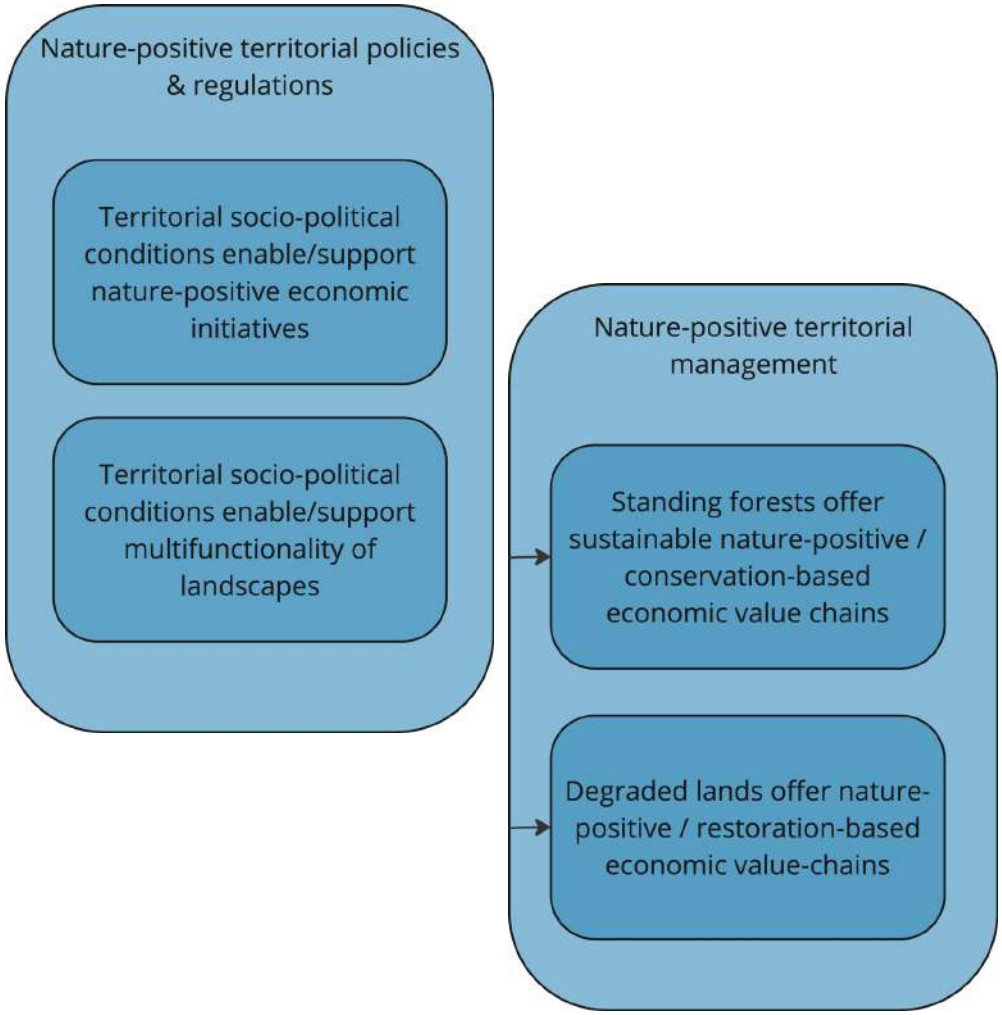
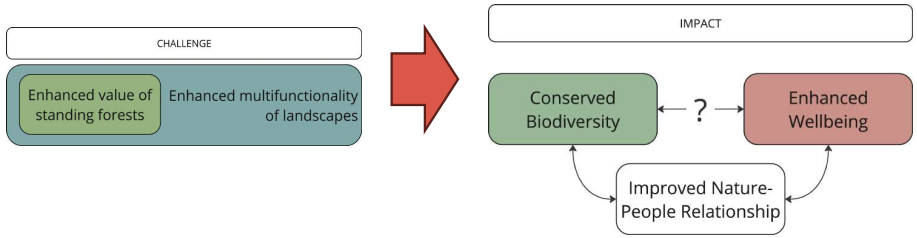


# Challenge: Healthy forests for people



# Challenge: Healthy forests for people

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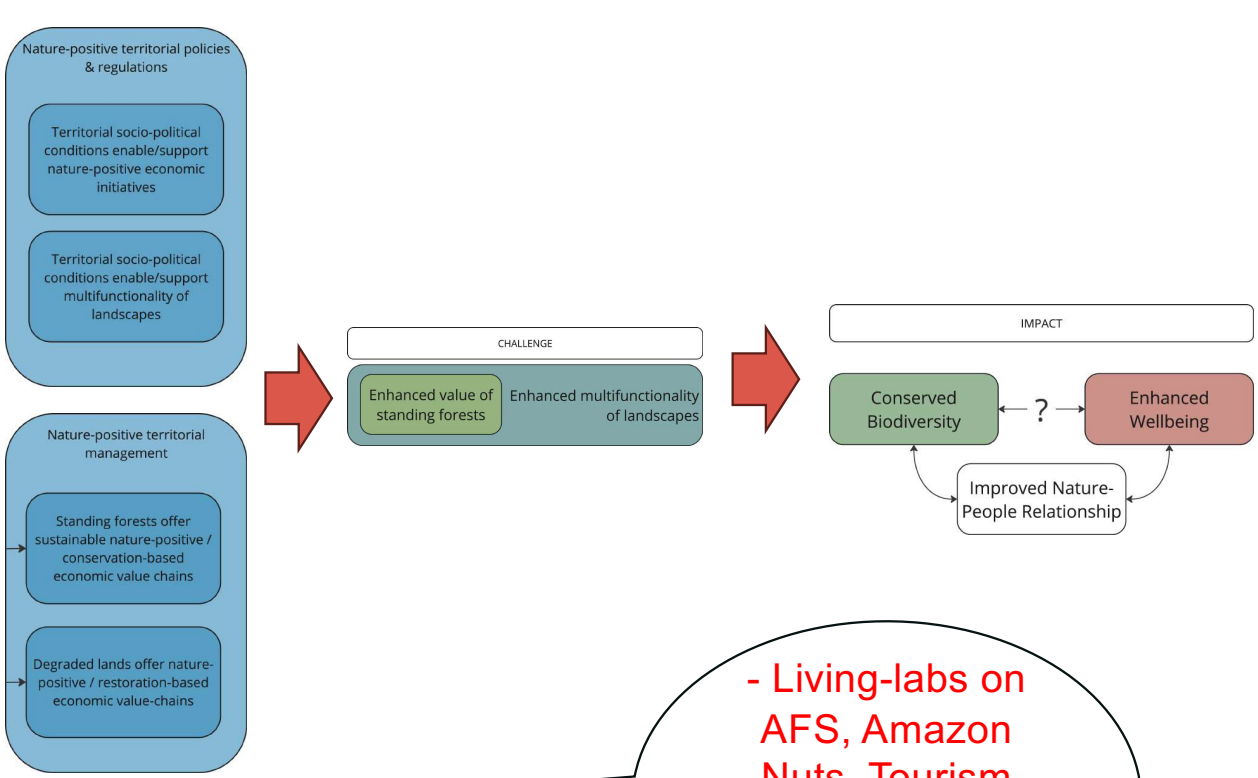
Empowering People for Conservation

- Strengthening viable & sustainable value chains based on:
  - The standing forest (Amazon Nut, Tourism, Fibres)
  - The restoration of degraded lands (AFS: Fruits, Fibres, Timber)
- Understanding how to improve practices (mining)
- Supporting capacity strengthening of talented individuals




- Living-labs on AFS, Amazon Nuts, Tourism
- R&D on Natural fibres
- Research

# Challenge: Healthy forests for people

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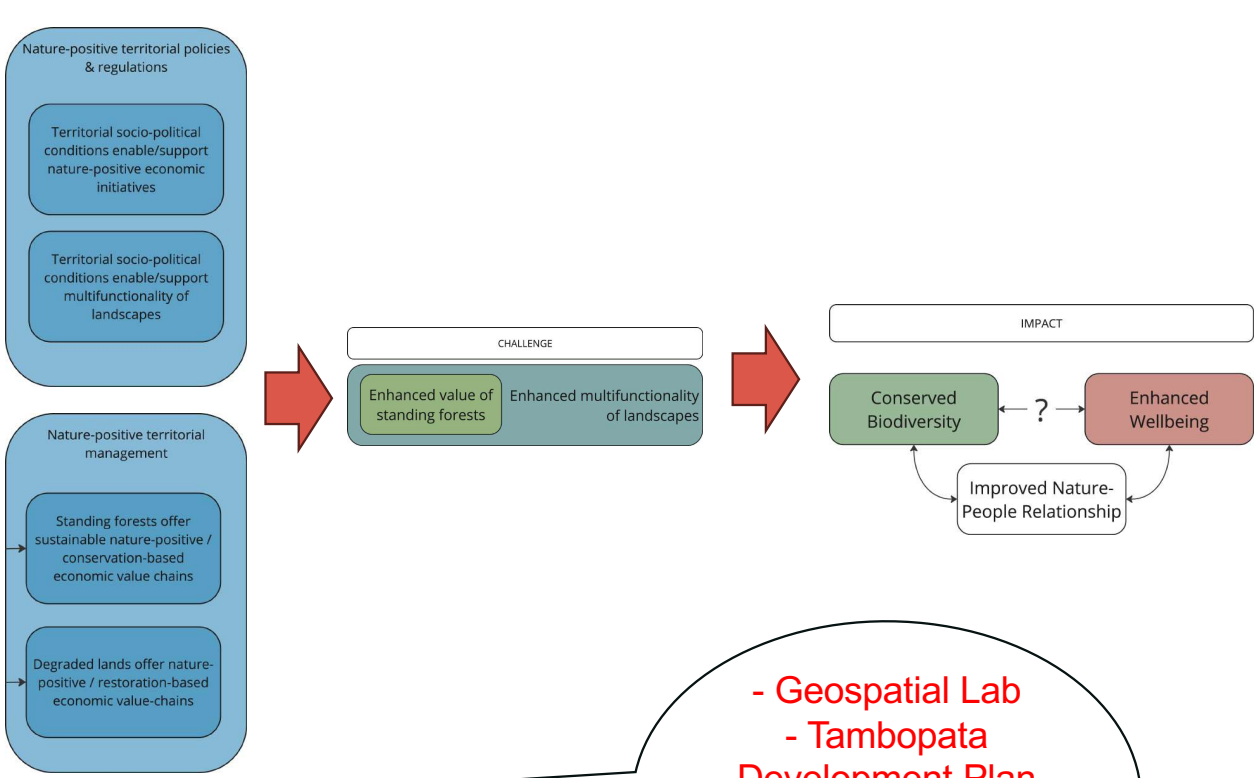
Enabling Conservation at the Landscape level

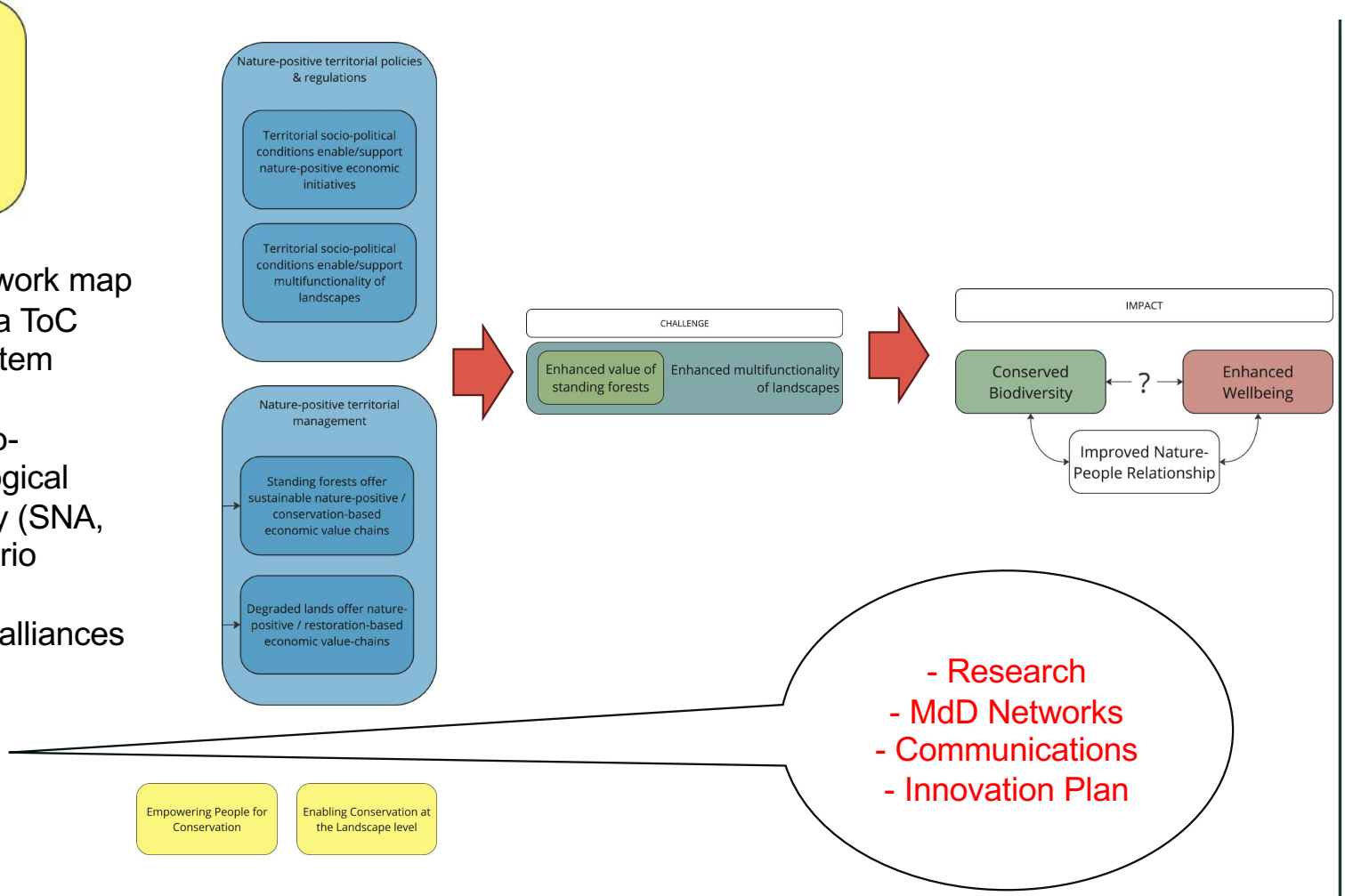
- Improving evidence and accessibility to information for better territorial decision-making (NCPs & values, history of economic development in MDD, geospatial)
- Supporting the development of a territorial plan and sustainable investment projects integrating conservation and economic development
- Supporting capacity strengthening of institutions



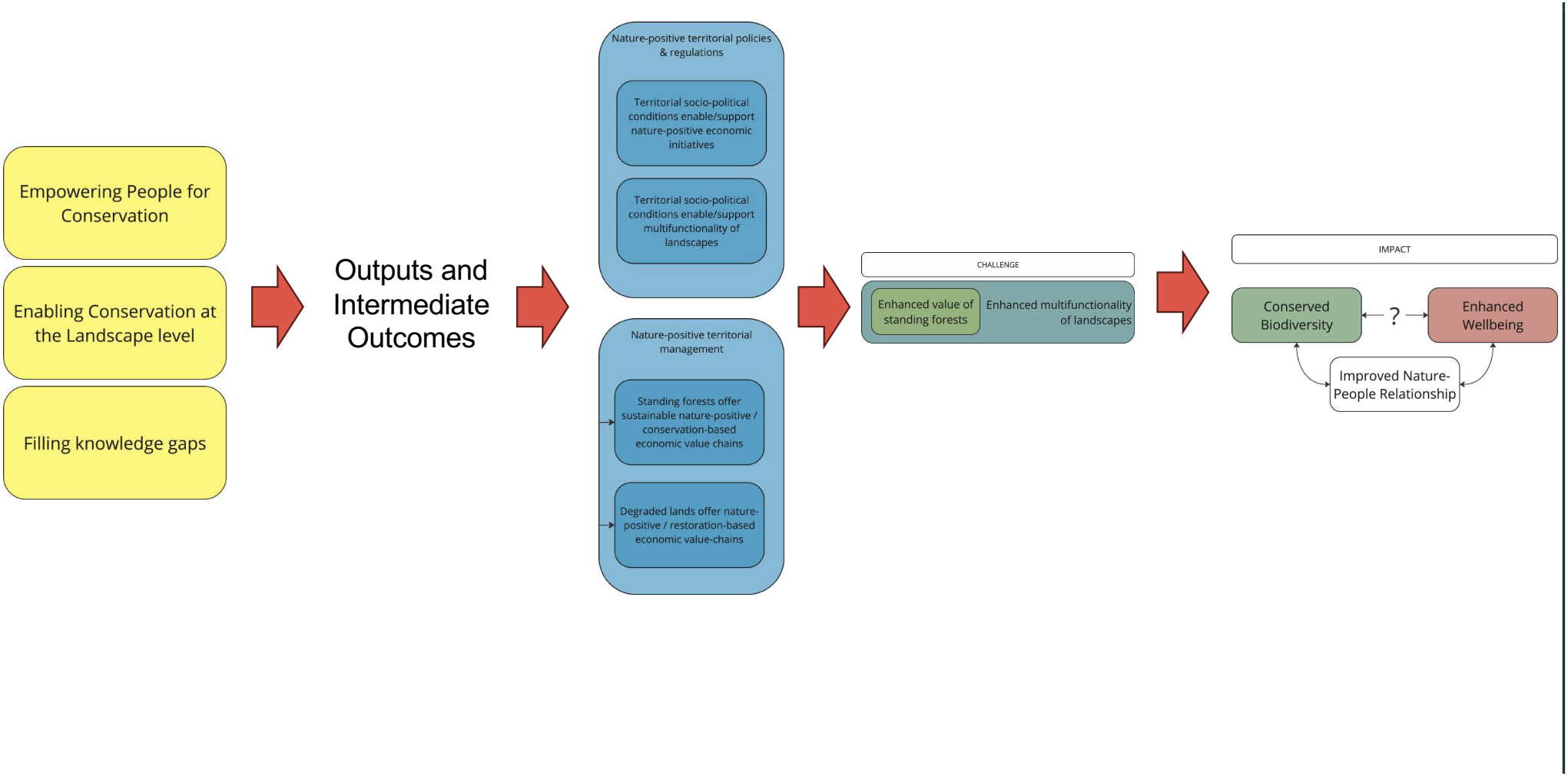
# Challenge: Healthy forests for people

Filling knowledge gaps

- Co-developing a SES network map of the Solutionscape and a ToC detailing pathways for system transformation
- Generating pertinent socio-economic and socio-ecological information for the territory (SNA, relationship values, scenario planning, etc)
- Coalescing networks and alliances for a sustainable future



# Challenge: Healthy forests for people

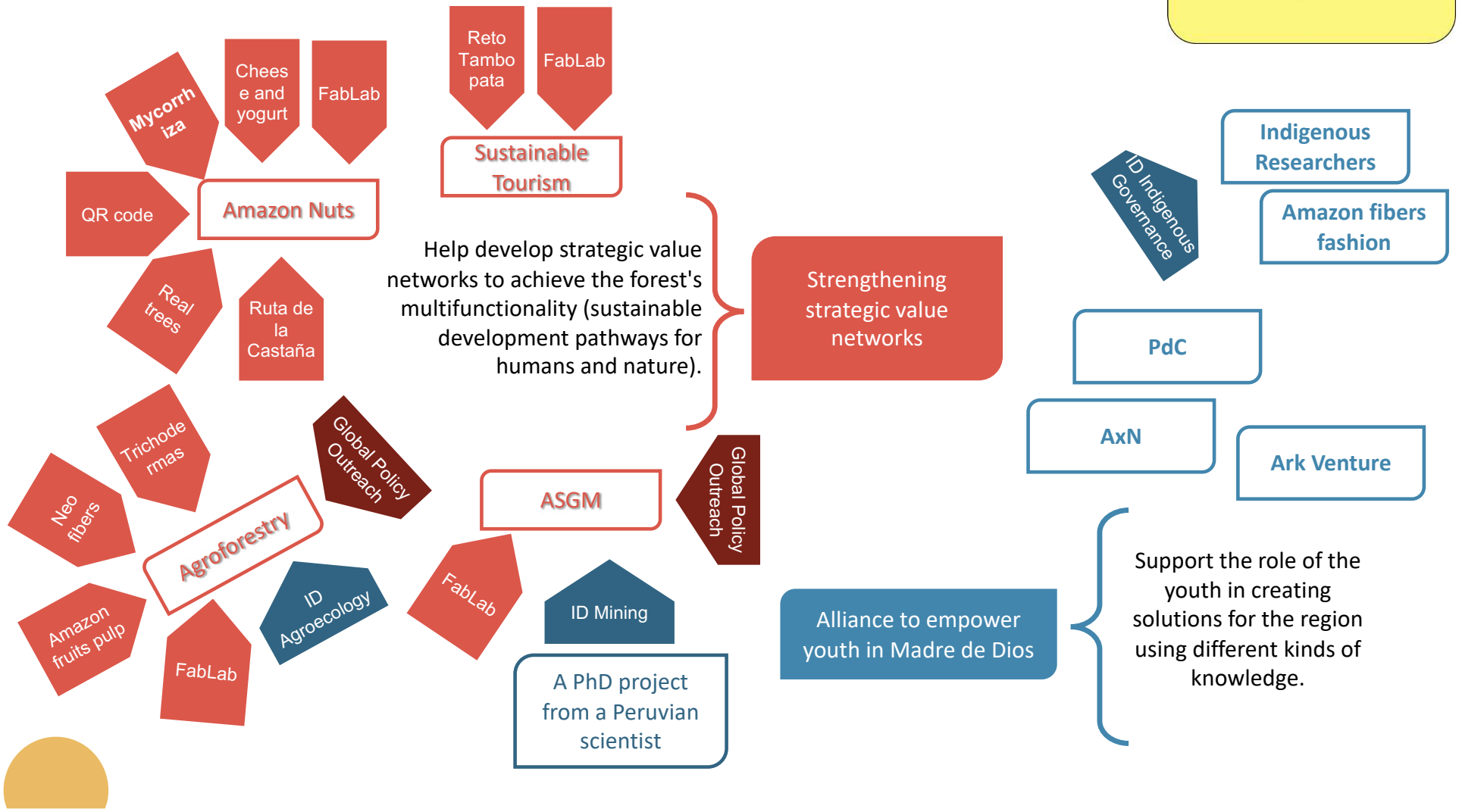


# What do we know now? What have we done?

Empowering People for Conservation

WYSS ACADEMY FOR NATURE





# What do we know now? What have we done?

Enabling Conservation at the Landscape level

WYSS ACADEMY FOR NATURE



Spatial Analysis backstopping

Geoportal and Explore.Land

Geospatial regional hub

Develop capacities in local partners for data collection and geospatial analysis, integrating social, productive, and environmental processes to support governance in Tambopata.

Regional geospatial knowledge hub

R&I Team on Land Systems
Climate Change

Territorial governance and forest multifunctionality

Generate an analytical framework to assess the relationship, barriers, and opportunities in policy and regulation regarding the multifunctionality of the landscape in the solutionscape.

A PhD project from a Peruvian scientist

R&I Team on Land Systems

Support local development planning process

The Concerted Local Development Plan (PDLC) is a management instrument that contributes to achieving objectives and goals for the territory's integral benefit. It contains the vision, actions, and strategic route for the territory.

CEPLAN support to TPM

Integrating local plans into PDLC

TPM investment for restoration of degraded land

DER

MDSL

Transformative Innovation

RIEE

Strengthen the governance and system thinking for sustainable transitions and capacities of multiple actors of the region.

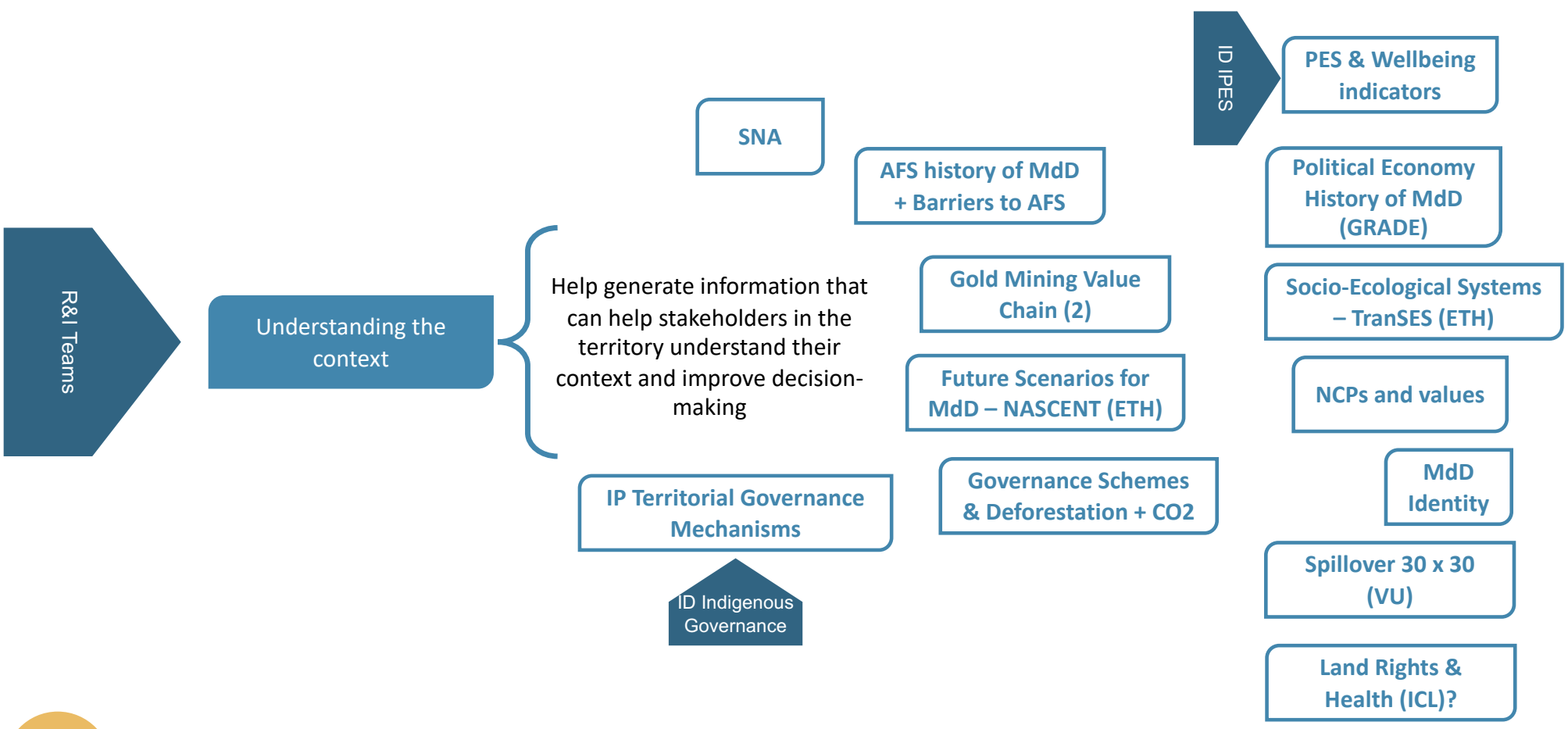
Support regional innovation & entrepreneurship ecosystem

# What do we know now? What have we done?

Filling knowledge gaps

WYSS ACADEMY FOR NATURE





# What do we know now? What have we done?

# What do we know now? (after 2 years)

WYSS ACADEMY FOR NATURE



- There aren't many options (currently) when talking about sustainable economies in standing forests (i.e., Amazon Nut, Tourism, Fibres, Timber, Palm fruits, PES?).
- AFS based on Cacao has not worked. Highly diversified AFS (i.e., multi-strata AFS, regenerative cattle-ranching) are needed to render degraded lands economically viable (PES?).
- Gold mining is impossible to stop (i.e., Global demand, price, and markets). Best practices and no-go areas are the best we can do.
- The local government must lead the transformation and create incentives for sustainable and just economies.

***Systems transformation is possible and necessary***

# What do we know now? (after 2 years)

WYSS ACADEMY FOR NATURE



- Many actors (local, national, regional, and global) in the region could benefit from collaboration.
- We have created safe spaces for stakeholders to discuss the context and co-create potential solutions.
- We still need to understand many aspects of the context, so there is much room for experimentation and learning.
- We have created a nice setting for researchers (basic, applied, transdisciplinary, transformative)

***This is an invitation***

# What do we know now? (after 2 years)

WYSS ACADEMY FOR NATURE



***Systems transformation is possible and necessary***

***This is an invitation***

WYSS ACADEMY FOR NATURE
Together, we create a new relationship with nature.
Thank you.