Global Gateway

Unlocking Global Gateway investments in nature and the green economy

Brussels, July 7-10

Global Gateway

Nature-positive Investments and Nbs-Infrastructure

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Joining Link:

https://app.sli.do/event/jPeeavTsyek3jS7X8gp3KT

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Nature-Positiveness & Nature-positive Investments

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Payment for Ecosystem Services

Exploring incentives for conservation and ecosystem management

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Agenda

Introduction to Ecosystem Services and PES

Financing Sources for PES

PES Alignment with EU Global Gateway

Basic Conditions for PES, and how can EUDs support PES schemes

Global Gateway

Introduction to EcosystemServices and PES

Types of ecosystem services and examples

Provisioning Services

Food, water, and raw materials essential for human survival.

Case study: Livelihoods Mangrove Restoration (Senegal)

Cultural Services

Recreation, education, and aesthetic appreciation.

Case study: Wildlife Credits (Namibia)

Regulating Services

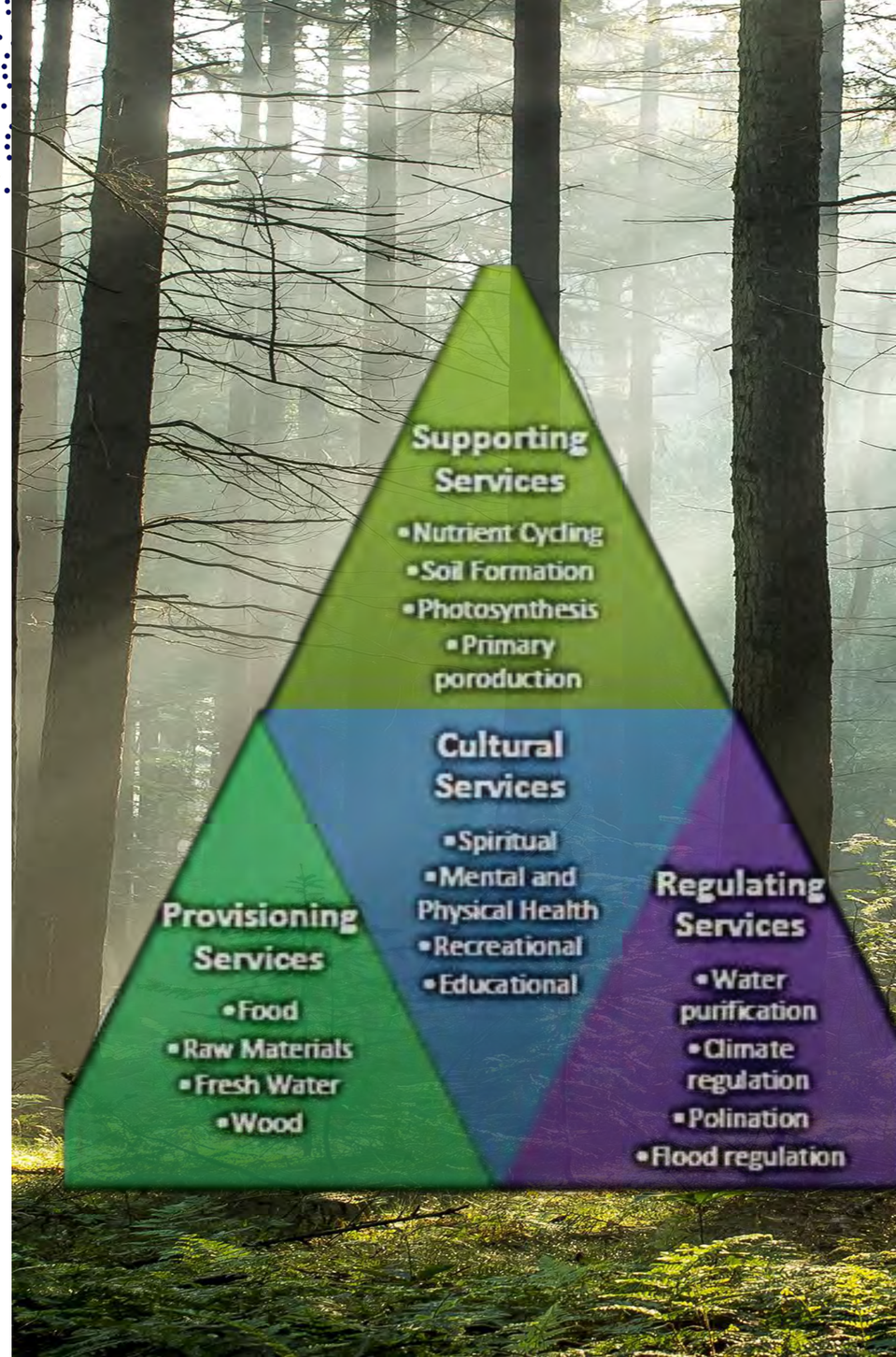
Ecosystem health, providing benefits like climate regulation and pollution control.

Case study: Schéma des Eaux de Paris (France)

Supporting Services

Nutrient cycling and soil formation, essential for sustaining life.

Case study: RISEMP (Costa Rica, Nicaragua, Colombia)



PES incentivises preservation of natural capital

Market-based conservation

PES is a market-based approach that connects those who benefit from ecosystem services (governments and businesses) with their stewards (e.g. landowners, farmers, and IPLCs). Hence, PES promote sustainable use over exploitation.

Cost-effective investment in nature

Investing in the natural environment is more cost-effective for governments and businesses than addressing the consequences of environmental degradation.

Required characteristics of PES (Wunder - 2005) :

1. a **voluntary** transaction (*though public schemes can blur this*)
2. where a **well-defined** ecosystem service (ES), or a land-use likely to secure that service
3. is being 'bought' by an ES **buyer** (minimum one buyer)
4. from an ES **provider** (min. one provider)
5. if and only if the **ES provider secures ES provision** (conditionality).

Examples of PES across sectors

Agriculture: PES for reducing fertiliser and pesticide use (EU's Common Agricultural Policy).

Forestry: paying landowners for forest conservation, reforestation, and sustainable forest management

Tourism and Protected Areas: Galápagos National Park entrance fees

Urban Run-off and Municipal Services: Washington DC storm-water fee

Energy & Hydropower: Sumatra hydropower catchment: proposed payment ladder rewards upstream landholders for agroforestry and riparian buffers

Mining and Extractives: Mining firms finance habitat restoration to compensate for ecosystem-service losses

Financing sources for PES

Financing sources for PES (1/2)

Public funding sources:

❑ Governments and public agencies play an important role in financing PES through public funding, such as:

- Revenue sources for financing PES: taxes (fuel taxes, forestry taxes, water fees or tariffs)
- These revenues can finance PES through grants, public subsidies, direct payments, or tax breaks
- Might be discontinued in case of government changes or policy reforms. Enacting funding provisions in laws can reduce this risk.

Private funding mechanisms

❑ User-financed schemes

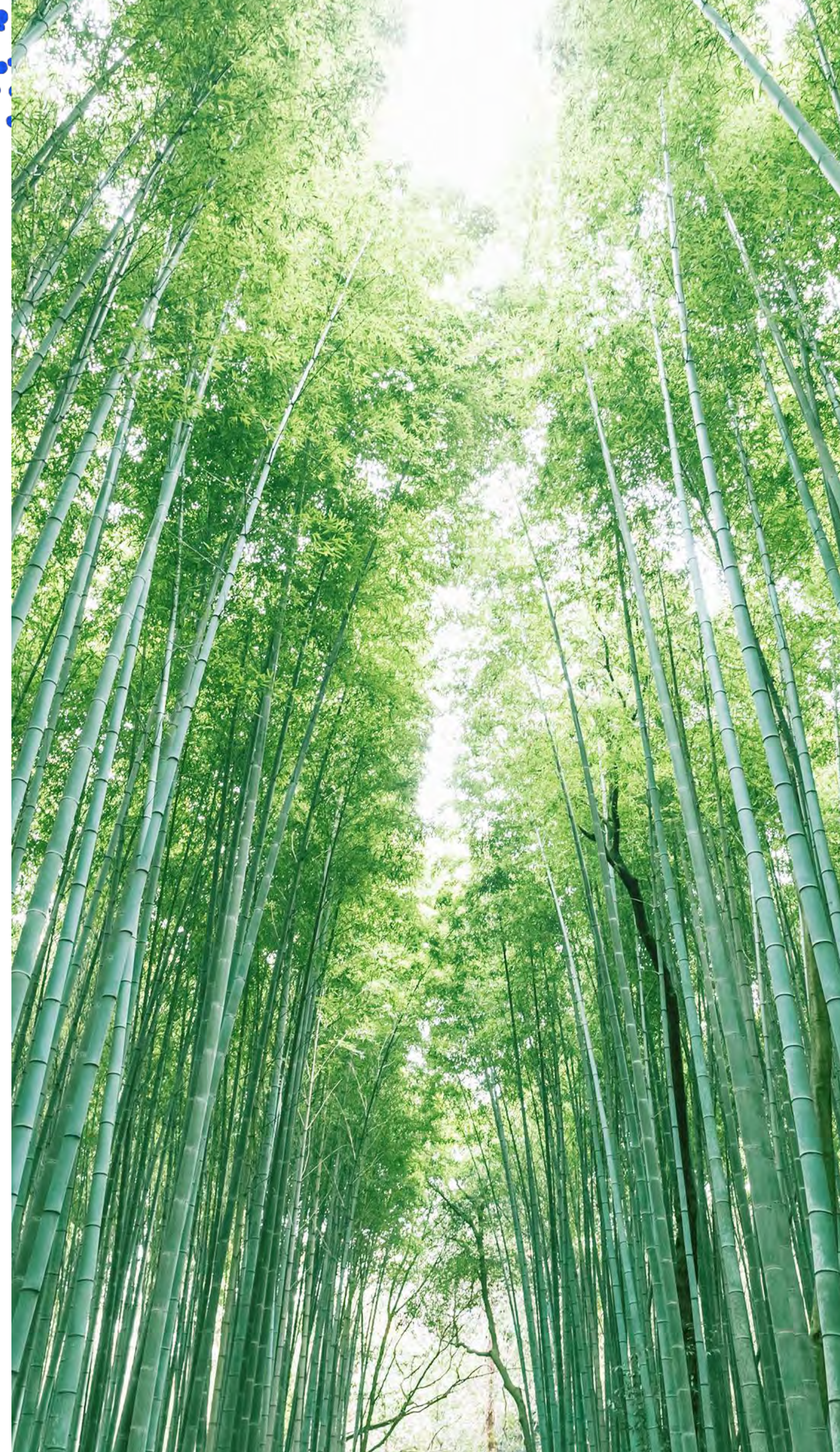
- Examples: hydroelectric companies financing sustainable forest management to reduce erosion.
- Great potential for efficiency due to direct access to information and clear incentives for the mechanism to work.
- But organising dispersed beneficiaries and ensuring consistent payments can be hard.

❑ Voluntary contributions that drive direct payments for ecosystem services.

- Motivations: value added to output, improved public relations with local communities and governments, and the ability to influence potential future regulations.
- Examples: Tourists paying villages for wildlife viewing.

❑ Non-voluntary mechanisms (e.g., tourism, water, energy, eco-certified food…)

- Predictable, scalable funding with lower transaction costs



Financing sources for PES (2/2)

Public-Private Partnerships (hybrid schemes)

- Foster innovation, open new markets, greater investment, often as long-term instruments
- Promote private sector participation.

International Funding Sources

- GEF; World Bank and other IFIs provide finance & capacity building. Vital for initiation but unsustainable. Example: GEF Earth Fund, International PES-REDD+.
- Grants from foreign governments. Ex: Germany' and Norway's contribution to Costa Rica.

Trust Funds and Endowment Funds:

- Increase sustainability of third-party financing; central repository of funds; decision-making body; supports preparatory activities and start-up costs. Ex: Ecuador's Pimampiro programme

Important aspects for Financing PES schemes:

- Both **short-term** (design; capacity building), and **longer-term** (payments, M&V).
- Payments can be cash, in-kind assistance, TA, tax exemption, training, or other benefits.

Handling multiple services as a source of additional finance

Bundling environmental services

Bundling combines **multiple environmental services into a single payment contract**, promoting administrative efficiency.

Stacking/Layering payments

Stacking enables landowners to receive **separate payments for different ecosystem services**, enhancing revenue potential but increasing complexity.

PES alignment with EU Global Gateway

Relevance to Global Gateway

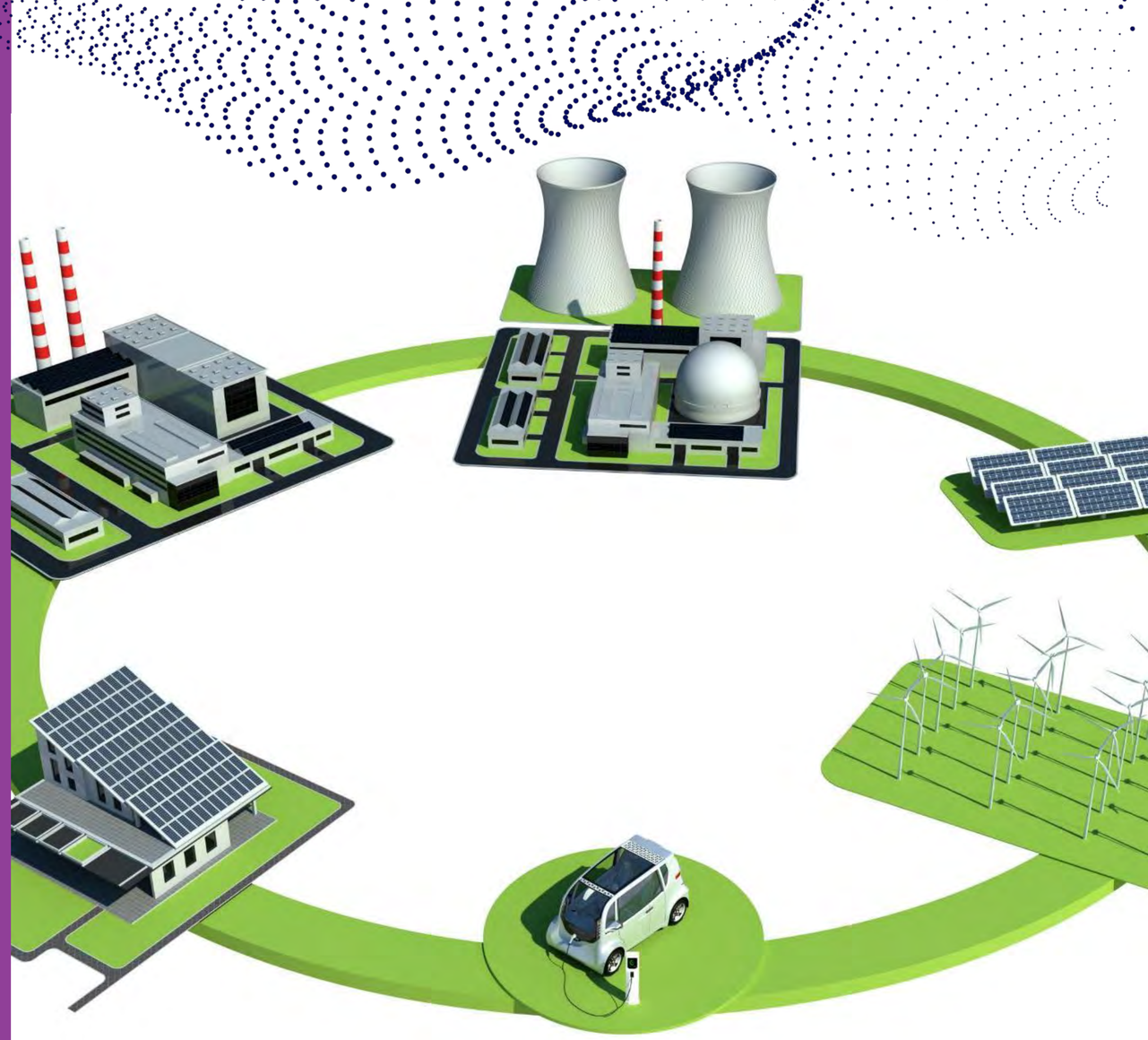
Alignment with the **EU Global Gateway's key sectors**, fostering **ecological and economic resilience**:

- **Climate and Energy :** climate mitigation through carbon management ; e.g. support to hydropower projects via watershed protection.
- **Transport (Indirect):** Erosion control reduces sedimentation in ports/waterways; e.g. slope stabilisation protects road/rail.

Support the *Green and Clean* principle : PES incentivise actions which improve environmental quality and ecosystem health. Enhance ecological functions (e.g. flood/drought buffering) and socio-economic (income) diversification.

Natural Infrastructure Investment: PES as a cost-effective investment in natural infrastructure, providing essential ecosystem services for sustainable development.

Integration into larger investment projects: PES enhance sustainability, mitigate negative impacts, and generate local benefits.



Basic conditions for PES, and how can EUDs support PES schemes

Basic conditions for PES

EUDs can help confirm the potential to develop PES schemes, provided the following basic conditions are met:

- **The Ecosystem Service is valuable:** buyers would be willing to pay, as the Ecosystem service is financially valuable to potential buyers.
- **Buyers of the Ecosystem Service can be clearly identified:** these could be companies, utilities, end users..
- **Public authorities are supportive:** there's a buy-in from relevant authorities (regional or national authorities)
- There's a **minimum land tenure framework**: at least a basic land tenure framework, sufficient to make it possible to articulate the payment system.

How can EUDs support PES schemes

- **Conflicts and Sensitivity Analysis:** Undertaking a risk assessment to explore possible unintended consequences, such as **leakage**, is essential in scheme design. **Mitigation measures** should be reflected in the design.
- **Capacity Building:** Invest in training and technical assistance for all stakeholders (providers, intermediaries, buyers, government).
- **Appropriate Legal and Institutional Framework:** advocate for schemes that include **registries of buyers and sellers**, **enrolment** procedures, publicly-recognised **guidelines** for measuring ES, and **conflict resolution platform**.
- **Robust Monitoring, Reporting, and Verification (MRV):** for assessing whether the scheme is meeting its **objectives** and for enabling adaptive management. **Verification** results should be made public to increase transparency and legitimacy.
- **Financial and social aspects:** support PES schemes that deliver long-term **community benefits**, reduce **inequalities** through fair tariffs, and are **financially viable** in low-risk areas with strong ecosystem health.

Insights for Effective PES Programs by EUDs

Focus Area	Key Takeaways
1. Setting Tariffs	Negotiation; Opportunity cost + transaction costs; differentiated tariffs; benchmark vs. alternatives (e.g. capex); transparency; economic valuation techniques.
2. Convincing Financiers	Cost-efficiency vs. grey infrastructure; co-benefits; alignment with ESG goals; use success stories.
3. Why PES Succeeds	Policy links, legal frameworks, trusted intermediaries; performance-based payments; MRV and third-party verifiers, participatory co-design; combination of livelihood improvement + provision of a critical resource; long timeframe
4. Watch-Outs	**Failures**: overambitious, complexity, donor-dependence, weak incentives. **Risks**: leakage, non-permanence, perverse incentives, fragmented land tenure.

Q&A

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Nature-based Solutions

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Nature-based Solutions in the EU context

How does the EU support the scaling up of NbS through policies, research and capacity building?

Susanna Gionfra –
Biodiversity and Nature-based Solutions Policy Officer – RTD B3

EU political guidelines 2019 - 2024

European Green Deal – 2020

EU Biodiversity Strategy to 2030 - 2020

EU Adaptation Strategy – 2021

EU Climate Law – 2021

EU Forest Strategy – 2021

UNEA 5 Mulitaterally agreed NbS definition - 2022

Global Biodiversity Framework - 2022

Nature Restoration Regulation -2024

EU political guidelines 2024 - 2029

Vision for food and agriculture -2025

European Water Resilience Strategy -2025

NbS in the EU policy context

- At the core of the EGD lies the recognition that building a climate-resilient and sustainable future requires transformative change—one that places **nature at the heart of our solutions**.
- NbS as central in the EGD vision
- Mainstreaming NbS across policies
- From concept to implementation

2024-2029 political guidelines

- Stay the course on the EuropeanGreen Deal and focus incentives andequitable and efficient implementationin the next phase (e.g. implementationof the Nature Restoration Regulation)

- Ensure we reach our internationalcommitments (e.g. Kunming-MontrealGlobal Biodiversity Framework)

A new plan for Europe’s sustainable prosperity and **competitiveness**

A new era for European **Defence and Security**

Supporting **people**, strengthening our societies and our social model

Sustaining our **quality of life**: food security, water and nature

Protecting our **democracy**, upholding our values

A **global Europe**: Leveraging our power and partnerships

Delivering together and preparing our Union for the future

A Competitiveness Compass for the EU

Sustainable prosperity and competitiveness

What role does nature play?

- The green transition is not only an environmental necessitybut also a source of economic opportunity, a strategiccompetitive advantage, and a geopolitical imperative.
- Over 50% of global GDP depends moderately or heavily onnature, and within the EU, more than 72% of companiesrely on at least one ecosystem service.
- On a global scale, land degradation and the diminishingcapacity of ecosystems could cause the global economy tolose $23 trillion in economic losses
- Biodiversity loss, therefore, is not just an environmentalissue; it is a challenge to economic resilience, supply chainstability, and long-term productivity across sectors.
- In 2019, ecosystem services generated a total annual flow ofbenefits worth 234 billion euros in the EU.

Making infrastructure climate-resilient

- It is estimated that NbS working as infrastructure could cost 50% less than grey infrastructure alternatives alone
- NbS as infrastructure can deliver 28% in added value such as carbon sequestration, cleaner air and water, better health, recreational services, jobs and opportunities for growth in other sectors (e.g. real estate and tourism).

Horizon 2020 &
Horizon Europe

EU-funded research and innovation projects tackle the climate and biodiversity crises implementing nature-based solutions in different environments.

Horizon 2020 & Horizon Europe

2024 infographic

Natural and Climate Hazards

Green space management

New economic opportunities and green jobs

Water management

Biodiversity enhancement

Participatory planning and governance

Climate resilience

Land regeneration

Health and well-being

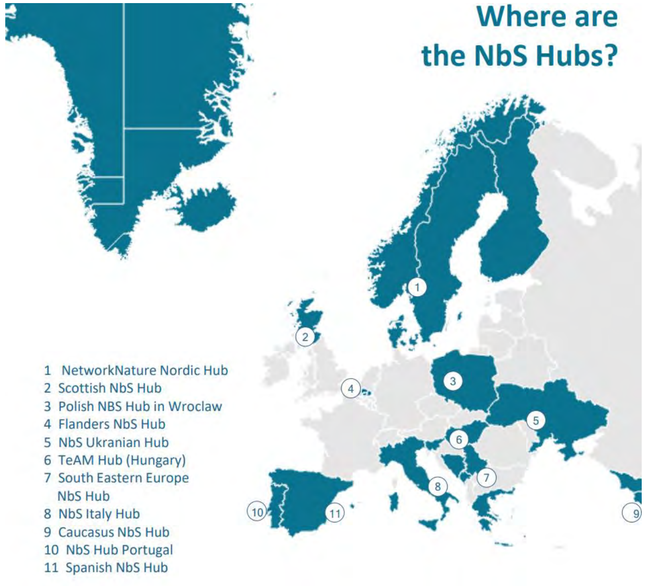
Sustainable urban transformation

Social justice and social cohesion

Air quality

Community & capacity building: NetworkNature

Resources, case studies & events



NbS Hubs

NbS databases

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NATURE SOLUTIONS FINANCE HUB

INTPA Nature Finance Workshop 2025

8 July 2025, Brussels

Yoko Watanabe, Director Environment

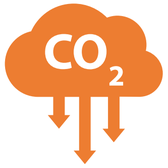
Asian Development Bank

Nature at the Core of Sustainable Development

Economy depends on nature

- Healthy ecosystems contribute to **$18 trillion** or **53%** of GDP in Asia and the Pacific [1] whereas
- Nature-positive development could generate over **$4 trillion** in business and create about **232 million jobs** per year in Asia by 2030. [2]
- The global biodiversity funding gap stands at about **$711 billion annually**. [3]

Climate depends on nature



Interconnected triple crisis of **biodiversity loss and ecosystem degradation, pollutions, and climate change.**

Agriculture, Forest and Other Land Use represents around **22% of greenhouse gas emissions** caused by human activities**.** [4]

Oceans absorb around **25% of CO_2** emissions, and **forests** can net sequester a further **25% of emissions**. [5]

Healthy ecosystems offer enormous and cost-effective **climate adaptation benefits**.

[1] AIGCC, PwC 2024
[2] Temasek 2021
[3] Paulson Institute 2021
[4] IPCC 2019
[5] NOAA

What is Nature-based Solutions?

*"**Actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems** which **address social, economic and environmental challenges** effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits" (UNEP/UNEA 2022)*

Typology of NbS

Category of NbS Approaches	Examples	Investment Options (samples)
Ecosystem restoration approaches	• Ecological restoration • Ecological engineering • Forest landscape restoration	• Wetland restoration • Meander restoration
Ecosystem protection approaches	• Area-based conservation approaches, including protected area management	• Soil and water conservation activities • Floodplain protection
Ecosystem-based management approaches	• Integrated coastal zone management • Integrated water resources management	• Natural river and watershed management • Beach nourishment and dune stabilization
Issue-specific ecosystem-related approaches	• Ecosystem-based adaptation • Ecosystem-based mitigation • Climate adaptation services • Ecosystem-based disaster risk reduction	• Flood plain widening • Reviving old channels • Embankment removal
Infrastructure-related approaches	• Natural infrastructure • Green infrastructure	• Green embankments • Wetland parks for stormwater retention • Constructed wetlands and biofilters • Bioengineering for slope stabilization

Source: Modified from IUCN (2016)

Multiple Benefits of NbS

Long lasting, prolong the **lifespan of infrastructure**, and reduce project costs

- The economic life expectancy of one of the world's largest Itaipu Hydropower Dam increased six-fold through improved landscape management reducing sedimentation

Provide large **economic benefits**

- Ecosystem services worldwide worth $125 trillion per annum supporting industries (e.g., farming, fishing, forestry, tourism)
- Investments in restoring degraded forests increase thirtyfold
- Tree-growing creating up to 40 jobs per $1 million invested

Provide **co-benefits**, including biodiversity, recreation, livelihoods, and disaster risk management

Promising areas for NbS

- **Flood- and drought-risk reduction**: Natural river and watershed management (e.g., conservation, restoration of vegetation; construction of retention, detention pond; re-meandering of natural rivers, creeks)
- **Water quality improvement**: Wetland restoration, including constructed wetlands
- **Erosion control**: Bioengineering

Food security: Sustainable agriculture practices (e.g., agroforestry, conservation tillage, integrated pest management) promoting soil health, minimizing water use, lowering agricultural pollution

Urban sustainability: Green streets, buildings (e.g., bioswales, permeable pavements, green roofs, rainwater harvesting facilities) addressing flood risk, heat-island effect

Green & Gray Hybrid Infrastructure Solutions

River Basin	Proposed nature-based solutions with traditional and non-structural interventions		Goals	Benefits
Buayan—Malungon	• Planting and restoring mangroves	• Demolition of the Old Buayan bridges and dike • Construction of jetties on each side of the Buayan river • Drainage improvement	• Protecting flood vulnerable population • Improving flood conveyance • Reducing coastal flooding impacts	• Health impact reduction • Recreation potential • Potential fish spawning ground • Increase in biodiversity
Tagum—Libuganon	• Restoring the Ising wetland • Creating a green river connection between Tuganay and Ising rivers	• Protecting urban centers by constructing local protection structures • Improvement of river and drainage works • Building bridges and culverts in the road to accommodate peak runoff during 100-year events • Comprehensive land use planning	• Protecting flood-vulnerable populations • Increasing flood retention/drainage capacity • Improving water quality and biodiversity	• Recreation bird watching and fishing • Increased agricultural production as a result of reduced waterlogging • Water purification and sediment trapping
Abra	• Restoring and accommodating natural river meandering • Erosion protection with vegetation strips	• Protecting urban centers by constructing local protection structures • Quarrying in strategic areas • Implementing land use management • Resettling vulnerable communities	• Protecting flood vulnerable populations • Reducing riverbank erosion and flooding • Promoting livelihoods	• Improved agricultural production, livelihoods and job opportunities • Low investment costs with less river ecosystem disturbances • Improved water transportation

- **NbS measures:** e.g., restoration of mangroves, wetlands, meandering rivers; bioengineering for erosion control; removal of obstacles (e.g., bridges, dikes
- **Complementing engineering solutions:** e.g., jetties, drainage
- **Producing co-benefits**: e.g., water quality, biodiversity, recreational opportunity, jobs

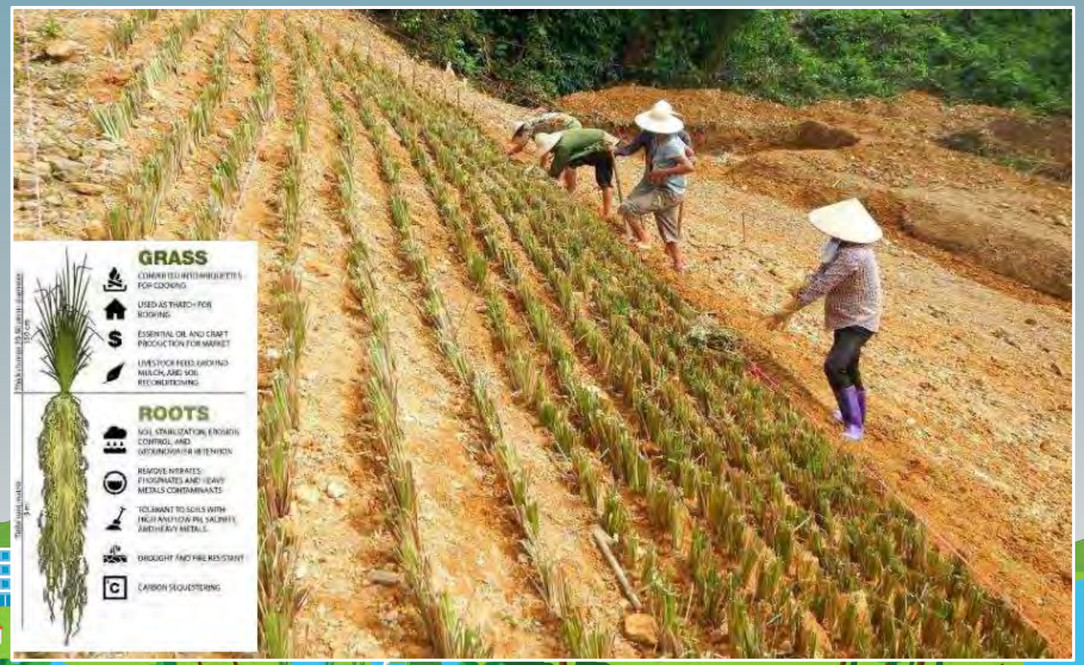
ADB

Challenges and Solutions in Scaling Nature-based Solutions

Awareness & Capacity:

Limited experience and knowledge on NbS design and implementation among , government and other stakeholders.

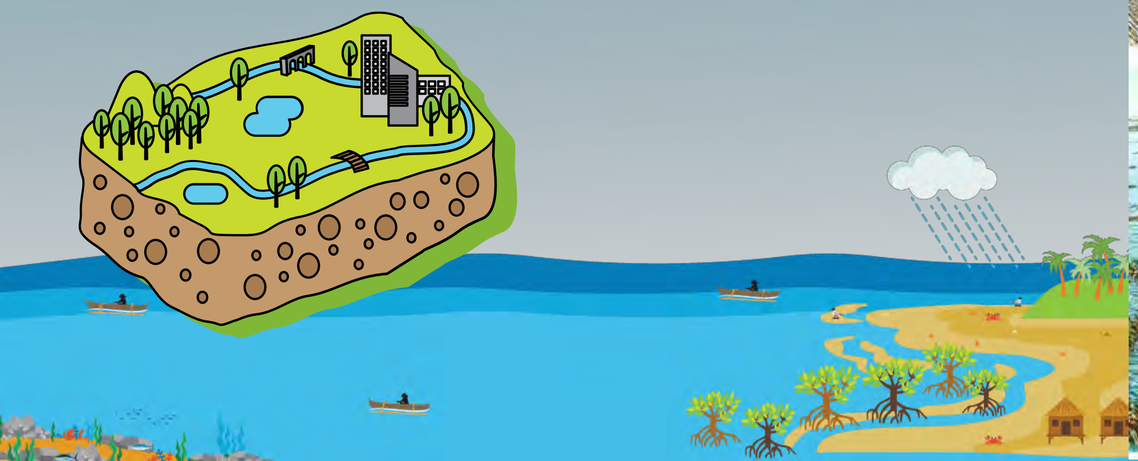
Slope stabilization: The slope and embankment protection combining bioengineering
and traditional infrastructure has increased the resilience of local communities in Viet Nam to natural extreme events such as flooding.

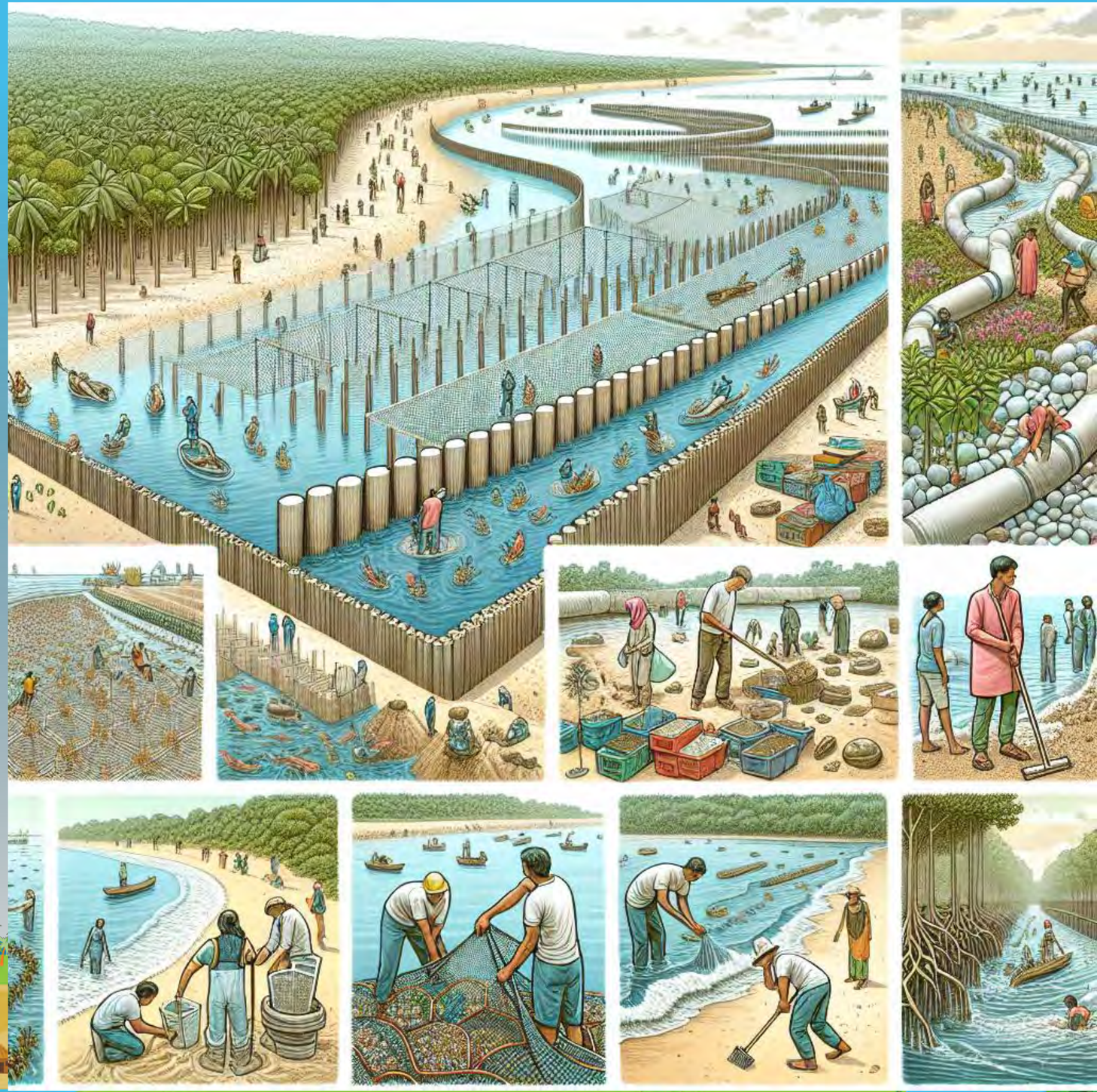


Policy & Regulatory Alignment:

Limited national, local and sectoral policies and legislations related to NbS

Coastal zone laws and regulations have scaled NbS implementation in India.





Financing & De-Risking:

Fragmented, small-ticket NbS projects struggle with investors' risk-return thresholds

Investing in Ecologically Sustainable River Basin Management in the *Philippines*

The project adopts an integrated approach to river basin planning and management to improve sustainability of the flood risk management infrastructure and strengthen climate and disaster resilience of the local communities within the target river basins.

The project will provide co-benefits such as enhance biodiversity conservation and increase carbon sequestration.

Cross-Sectoral approach:

Siloed planning leads to under-sized or duplicated interventions

In Pingxiang, People's Republic of China – "Sponge Cities" Project – wetlands are flooded during heavy rainfall events and used as a park during normal water levels.

Inclusive approach:

Community engagement, women's empowerment, and indigenous peoples and traditional knowledge

Community-managed production and conservation (e.g., managing rangelands) in Pakistan, enhancing water availability, creating income through sustainable agriculture and husbandry, and protecting biodiversity

NbS Projects and Programs

ADB projects with NbS

Regional

Revitalization of Informal Settlements and their Environments using a Water-Sensitive Approach

> Decentralized, green infrastructure

Pakistan

Flood Emergency Reconstruction and Resilience Project

> Bioengineering to stabilize slopes

Viet Nam

Promoting Climate Resilient Rural Infrastructure in the Northern Mountain Provinces

> Bioengineering

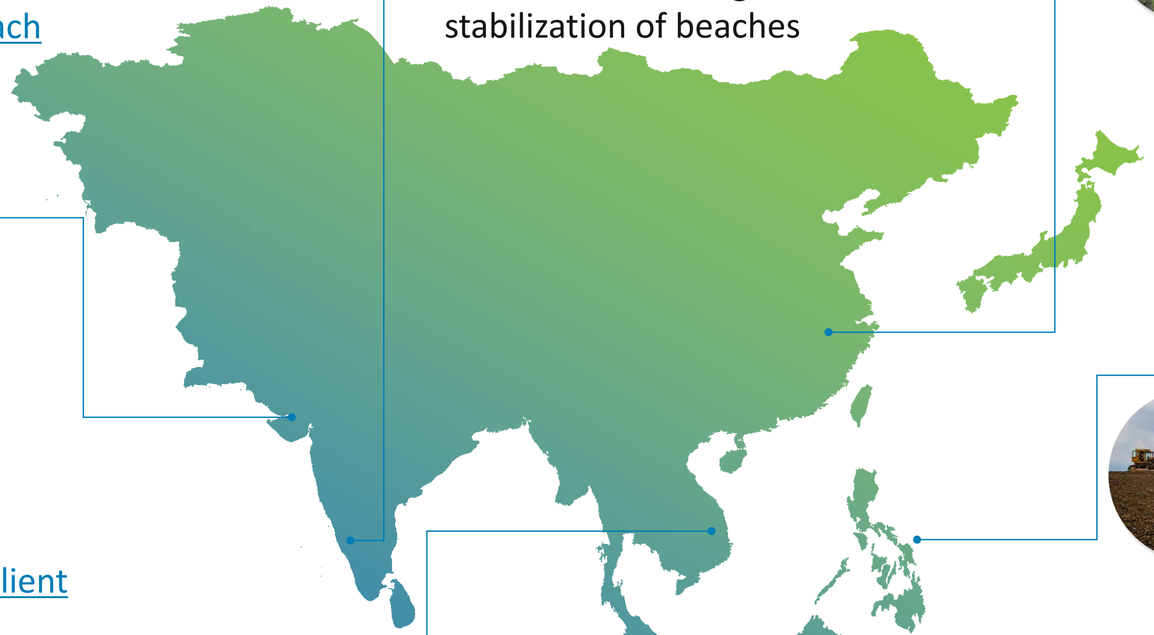
Secondary Green Cities Development Project

> Water-sensitive urban design

India

Sustainable Coastal Protection and Management Investment Program

> Artificial geotextile submerged reefs and the enlargement and stabilization of beaches



PRC

Jiangxi Pingxiang Integrated Rural-Urban Infrastructure Development

> Sponge city

Yangtze River Green Ecological Corridor Comprehensive Agriculture Development

> Protection and rehabilitation of agro-ecosystems

Philippines

Integrated Flood Risk Management Sector Project

> Landscape approach

Indonesia

Revitalization of Informal Settlements

> Green infrastructure to biologically treat water

Key characteristics of NbS projects at ADB

1. Competitive advantage

Water resource and disaster management (e.g., flood and drought management, water quality improvement)

2. Hybrid approach

Combination of green & gray infrastructure

3. Core sectors for NbS

- Agriculture
- Transport
- Urban
- Water

4. Comprehensive and integrated approach

Landscape approach with science-based systematic process and tools based on multistakeholder participation

Sponge Cities

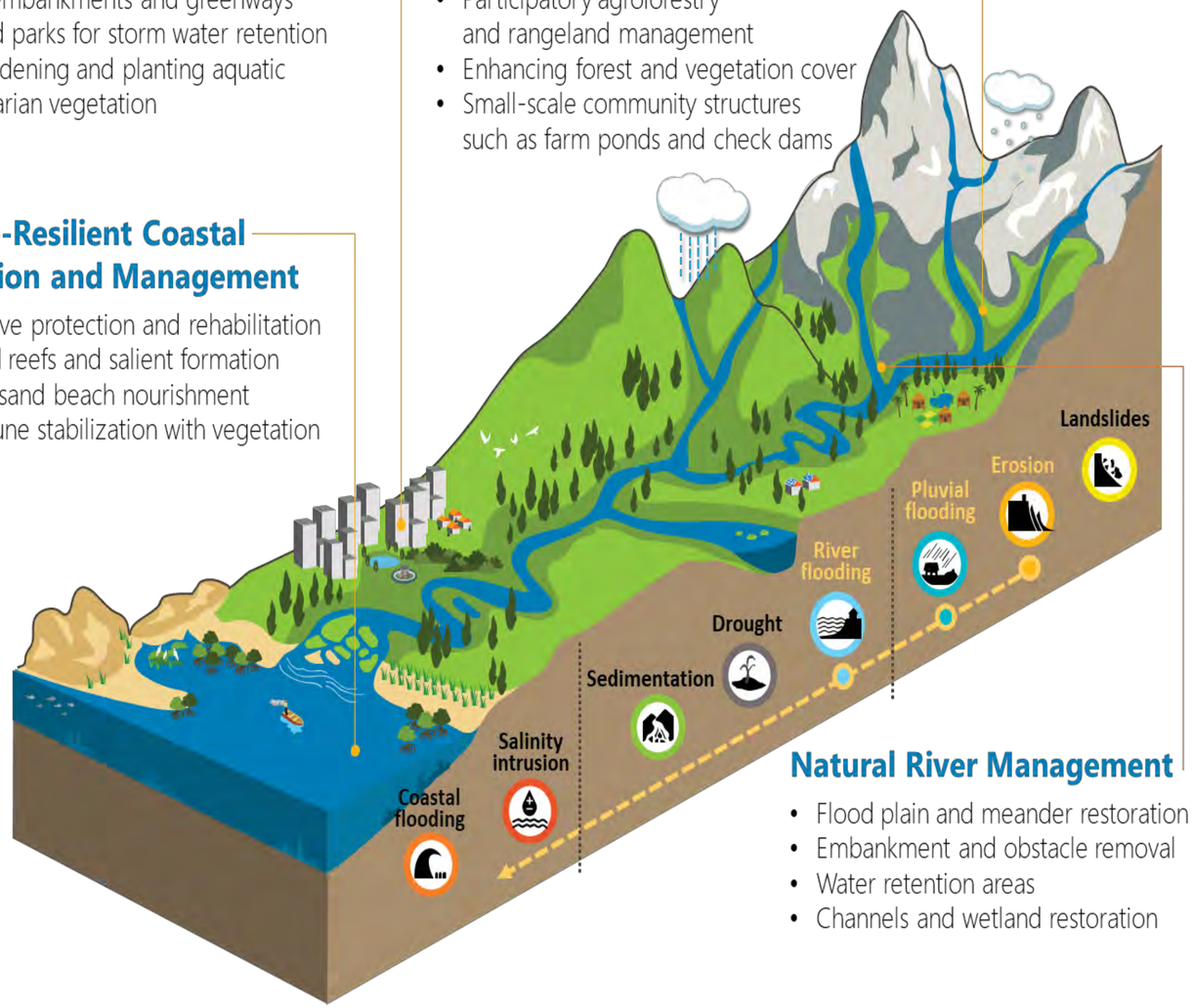
- Green embankments and greenways
- Wetland parks for storm water retention
- River widening and planting aquatic and riparian vegetation

Integrated Watershed Management

- Participatory agroforestry and rangeland management
- Enhancing forest and vegetation cover
- Small-scale community structures such as farm ponds and check dams

Climate-Resilient Coastal Protection and Management

- Mangrove protection and rehabilitation
- Artificial reefs and salient formation
- Coarse sand beach nourishment
- Sand dune stabilization with vegetation



Natural River Management

- Flood plain and meander restoration
- Embankment and obstacle removal
- Water retention areas
- Channels and wetland restoration

Cambodia: Sustainable Coastal and Marine Fisheries Project

About the Project

Enhance sustainability of coastal and marine ecosystems, improve adaptation capacity, food security and livelihoods of coastal communities.

Issues

1. Over 40 percent **decline in fish-stocks due to over-exploitation of coastal and marine ecosystems**;
2. **Insufficient post-harvest infrastructure** and poor food-safety standards;
3. **Lack of private sector investment** in sustainable blue economy initiatives related to coastal and marine fisheries;

Project Focus

- **Adaptive coastal and marine fisheries enhanced**
- Climate-resilient coastal **infrastructure** developed
- **Sustainable and inclusive marine businesses incubated and commercialized**

Total project cost	ADB financing	AIF financing	AFD financing
$104 million	**$63 million**	**$10 million**	**$20 million**

Nepal and Philippines: Harnessing Bamboo Industries for Green Growth and Climate Resilience

RATIONALE

Climate Resilience

Bamboo's carbon sequestration properties superior to many trees; potential carbon sink and source of carbon credits

Ecosystem support

Maintaining soil health and water quality, sustaining habitat for wildlife, and preserving biodiversity

Inclusive Development

Multi-generational livelihoods, increased jobs and income for communities including vulnerable groups

Emerging markets

Strong growth in sustainable construction (use of engineered bamboo) and voluntary carbon markets (bamboo carbon credits)

Hunan South Dongting Lake Wetland Restoration and Sustainable Development Project

- **EA: Yuanjiang Municipal Government** (Hunan)
- Project site: **South Dongting Lake (SDL): Ramsar site**
- Total investment size **$309 million**
  - ADB loan: $150 million
  - AFD loan: $65 million
  - Government finance: $94 million
- **Dongting Lake –** in the top 23 of PRC RFI priority sites
- First dedicated RFI investment and demonstration project

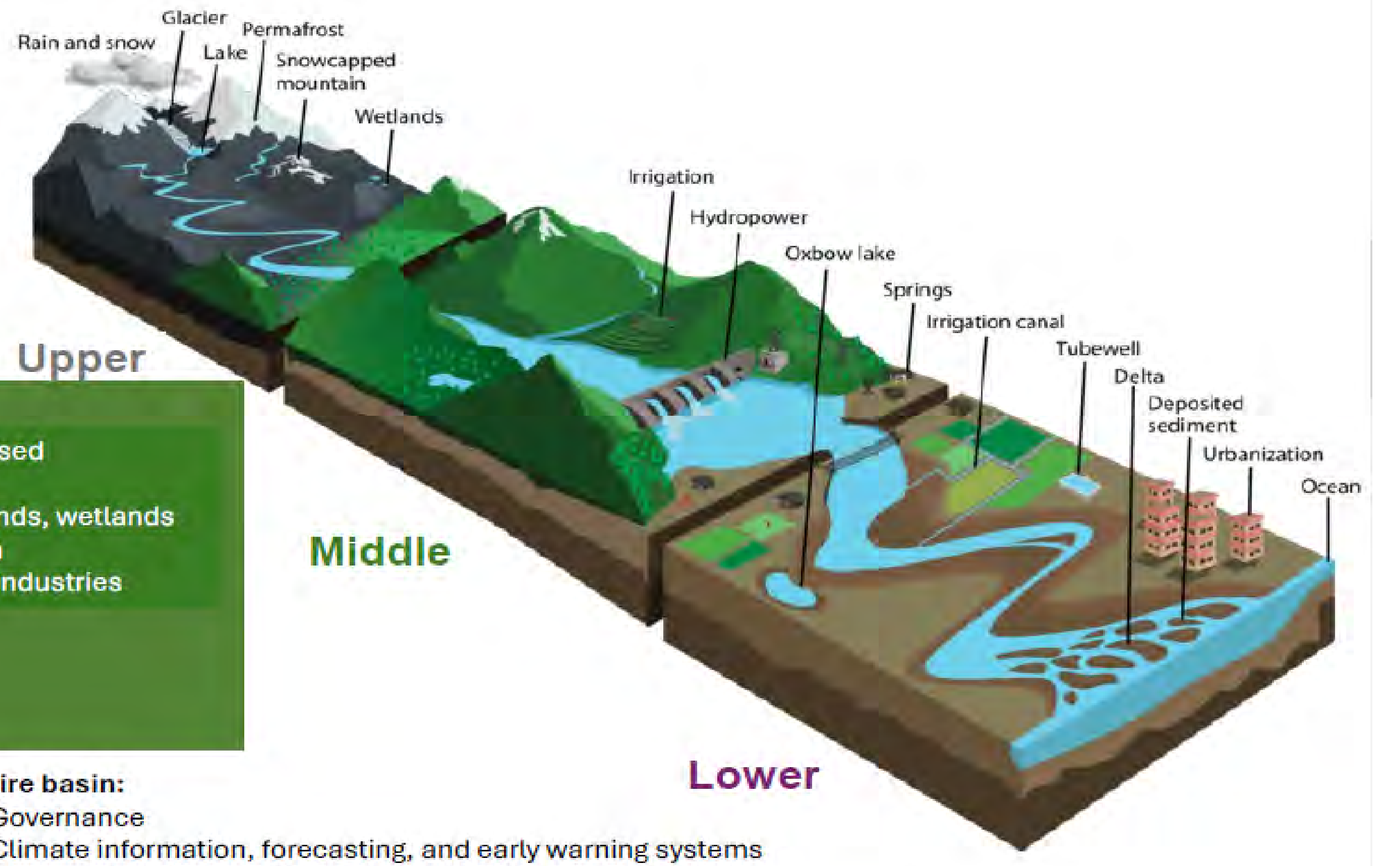
Develop high-impact NBS projects: almost **12,000+ ha of degraded wetland restored** with NBS: saucer-shaped lakes; creation of islands with open water and exposed mudflats providing roost sites and feeding resource wildfowl; land reshaping and hydrological to increase water levels during dry season (adaptation measure)
Strengthen government capacity to incorporate NBS in project design linking climate and nature: pilot a mechanism to improve management of 168,000 ha SDL; and scale-up to provincial level for 430,000 ha DL area
Develop innovative financing instruments to enable NBS projects to scale up the flow of finance: establish eco-compensation mechanism to fund eco-farming, reed utilization, ecological aquaculture; and use of eco-tourism revenues to replenish the eco-compensation mechanism

Resilient Amu Darya River Basin Sector Development Program
Uzbekistan (

Upper basin:
- NBS and Ecosystem-based management
- Management of natural and productive forests and landscapes
- Stream/river erosion protection
- Landslide stabilization or avoidance
- New dams/reservoirs and optimization of existing storages

Middle basin:
- Groundwater recharge
- Urban stormwater harvesting
- Flood and riverbank erosion protection
- Water treatment and sanitation for cities and towns.
- Reuse of treated wastewater (partial or full)
- Climate smart and regenerative agriculture
- NBS and ecosystem-based management
- Forestry, grass/range lands, wetlands
- Irrigation modernization
- Water supply for major industries

Lower basin:
- Same as for the middle basin
- Salinity control
- Desalinization for water supply and irrigation (partial or full)
- Diversified agriculture



Entire basin:
- Governance
- Climate information, forecasting, and early warning systems
- Hydromet systems (stations, data archiving, analysis)
- Water accounting, allocations and land use controls
- Increasing public budget provisions and expenditure for water security
- Use of innovative financing tools for capex and sustainable opex
- Integrating social and gender sensitive dimensions
- Transboundary coordination and cooperation

Approach to maximize water efficiency, from water resource to water user

The Nature Solutions Finance Hub

THE NSFH VISION

Transforming nature finance to integrate NbS into mainstream investment, achieving measurable climate and biodiversity outcomes.

OVERARCHING OBJECTIVE

The NSFH aims to catalyze at least $5 billion in capital flows into NBS investments across Asia and the Pacific.

Nature-positive Investment Project Origination and Pipeline Development

Establish a network of flagship Nature-based Solutions
projects to scale

Innovative Nature Finance and Financial De-Risking

Introducing innovative finance approaches using catalytic financing to crowd-in private and
commercial finance

Capacity and Policy Development

Learning from piloting and demonstration to build the profile of Nature-based Solutions, as feasible solutions to development challenges

- **Priority sectors** includes agriculture, transport, water in urban and rural areas
- **Landscape approach** provides integrated and multi-sectoral solutions
- **Green-Gray Hybrid Infrastructure** provides practical, cost-effective solutions
- Promoting **promising NbS** for addressing weather-related disasters, food insecurity, and urban problems with co-benefits
- Key to success of effective, efficient NbS: **Knowledge and finance**, incentivizing financial flow towards nature-based solutions
- **Partnership and Inclusive approaches** provides opportunities for collaborations and synergies

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Volcanoes Community Resilience Project

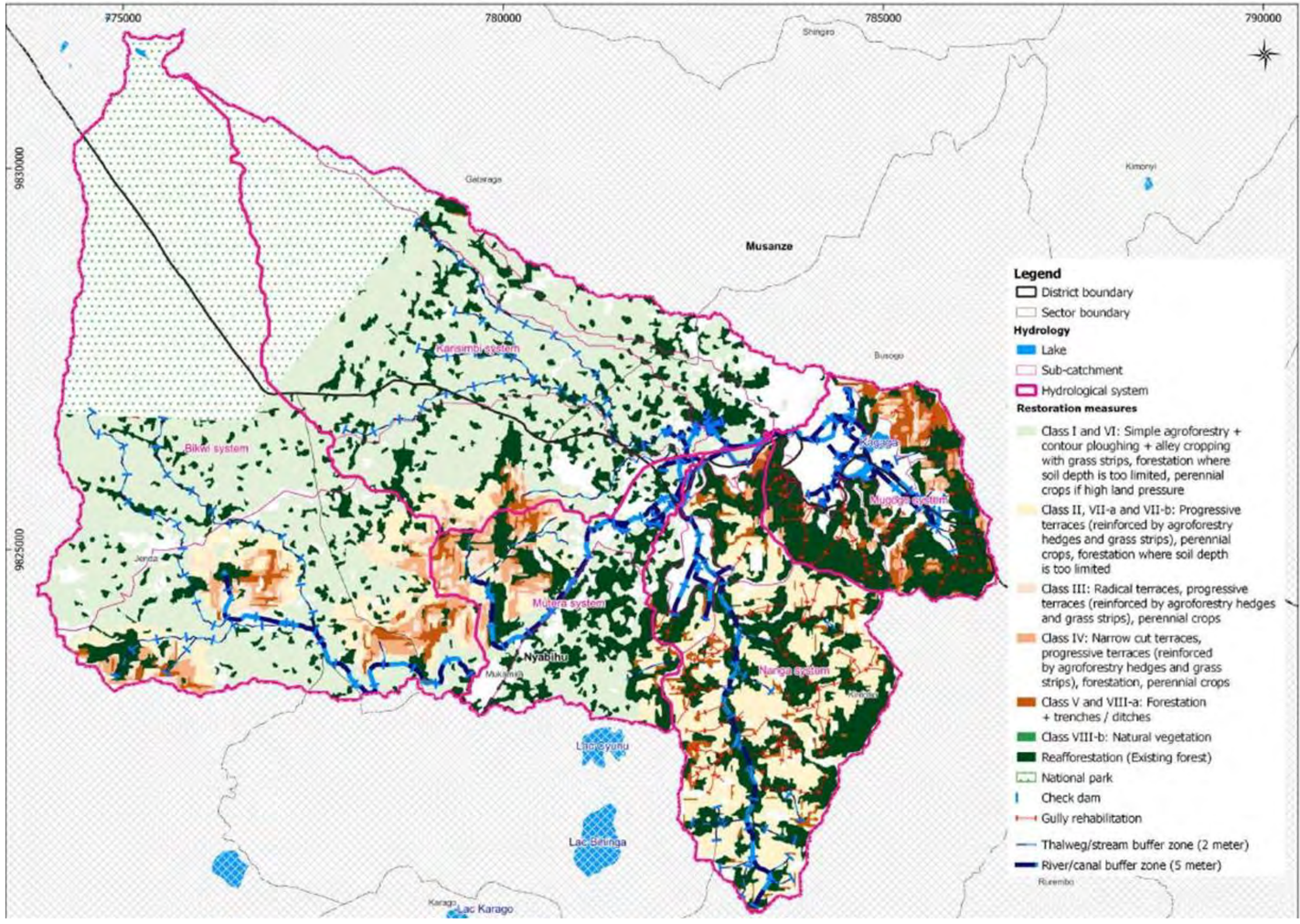
EUD Rwanda

VCRP

Where? Volcanoes National Park in northwestern part of Rwanda

Why?

- High population density in the region
- Biodiversity hotspot (endangered mountain gorilla)
- Tourism destination
- Increased adverse effects of climate change : floods, landslides, rainstorms…
- «expected annual damage in the Volcanoes region from floods amounts to EUR 10 million per year »



What?

- Government-led initiative to improve livelihoods, enhance biodiversity and mitigate and adapt to climate change
- World Bank and EIB funding

Examples of Nature-based solutions (NbS) complementing grey infrastructure (GI) - I

GI: Gabion weirs to divert and spread the flow of rivers = velocity decreases and solid particles settle

NbS: between gabion weirs where sediment deposits, **reconstructed wetlands** are established with **native vegetation**

Results:

1. **Floods are mitigated**
2. **Soil erosion is mitigated (by trapping sediments upstream)**
3. **Native vegetation flourishes**

Examples of Nature-based solutions (NbS) complementing grey infrastructure (GI) - II

GI : sediment traps and gabion weirs

NbS : green catchment management efforts (reforestation, living hedges, progressive terraces) **upstream of GI**

Results:

1. **Minimise sediment production upstream**
2. **Preserve soil fertility for agriculture**

The enabling environment

VCRP: an integrated approach … it's long and complicated

- Component 1: **Flood risk management**
- Component 2: **Landscape restoration and catchment management**
- Component 3: **Expansion and livelihood restoration**

How much ? … and it's expensive!

- Total cost estimated around **EUR 500 million**
- EIB expected to provide a **EUR 150 million sovereign loan**

So why does it work in Rwanda?

- **Ambitious policies and strategies:** Conservation Master Plan ; Climate and Nature Finance Strategy ; Rwanda Green Taxonomy ; Building an identity as a green country
- **Development partners convergence around climate change**: Pushed by EUD budget support on Climate smart Agriculture with indicators on forest cover and restoration of degraded ecosystems

Breakout Groups

Breakout 1: Water (Murray Biedler)

Room AB- 1A

Interactio (same as main session, just stay online)

https://ec.interactio.eu/cmjh-9lj-2wzn-uzi

Breakout 2: Urban (Adriana Vega Sanchez)

Room AB- 1C

WEBEX:

https://meet234.webex.com/meet234/j.php?MTID=m08633097dbf9292c5ef09e29eab41fc5

Breakout 3: Coastal Protection (Geraldo Carreiro)

Room AB-4B

WEBEX:

https://s2gw.webex.com/s2gw/j.php?MTID=m6f380c2e6264464fd3d518a5e1d55ee2

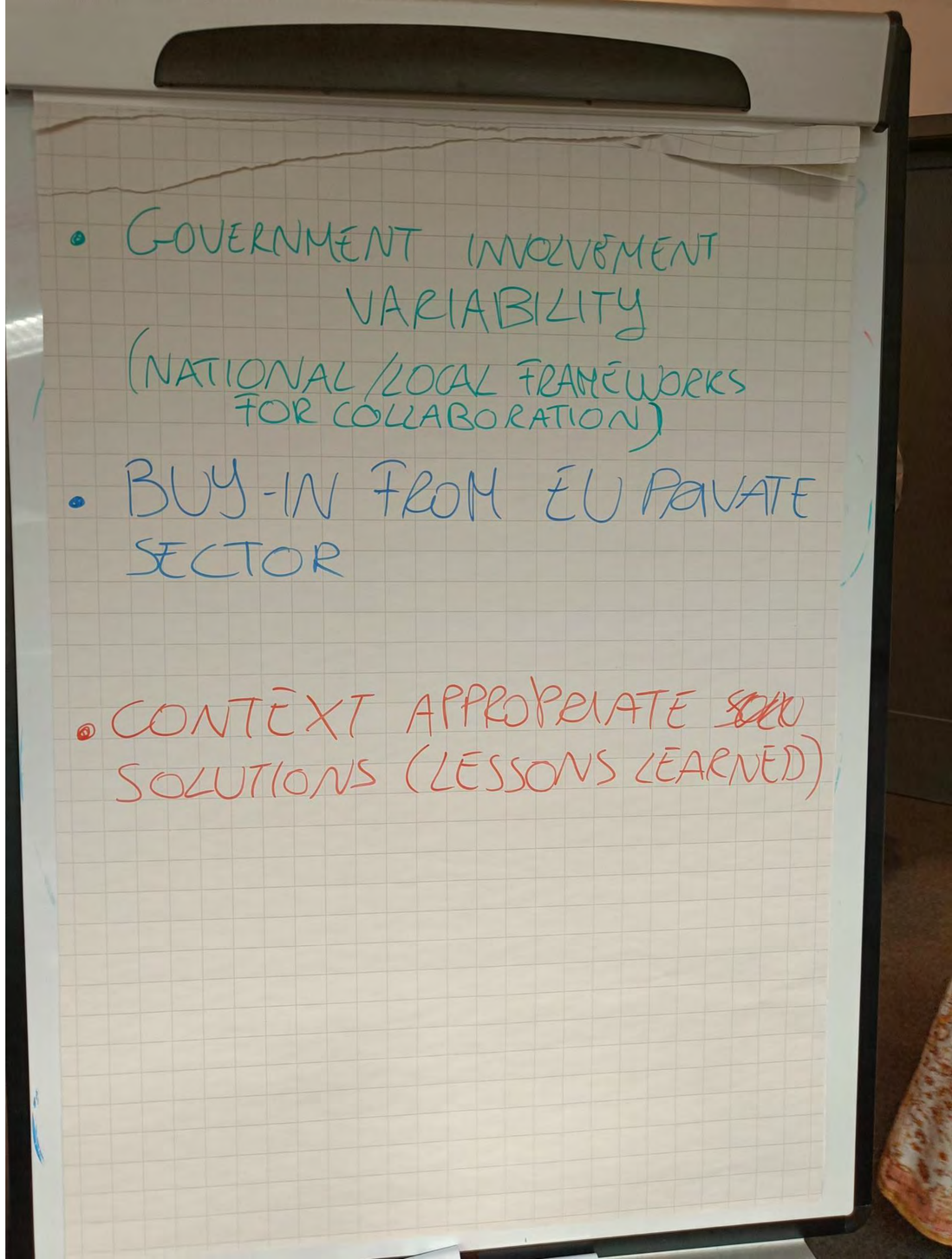
Breakout 4: Hydropower Dam (Nijaz Dizdarević)

Room 5B

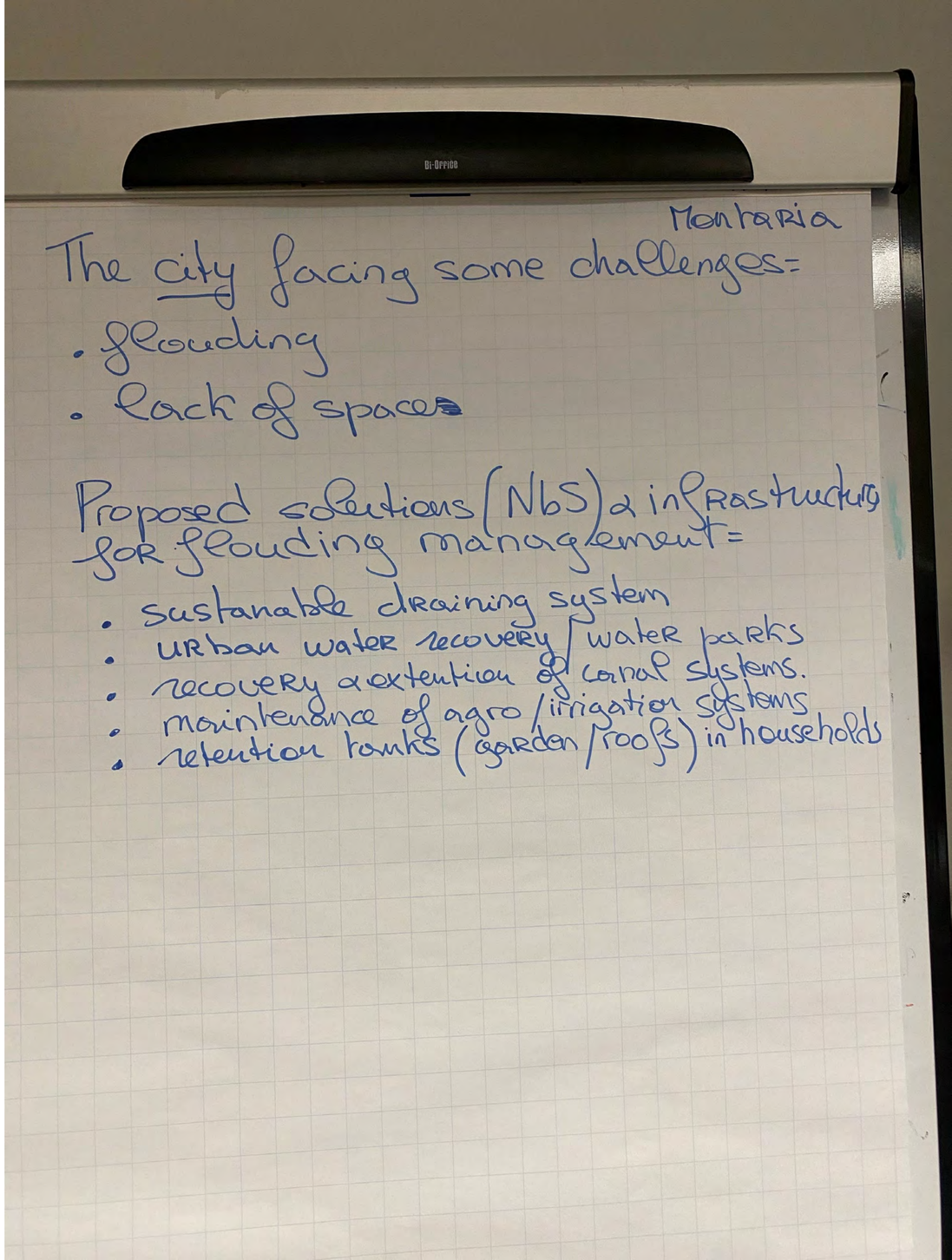
WEBEX:

https://stantec1.webex.com/stantec1/j.php?MTID=m52369828c5b35a6545dd6d4c38bcc9cf

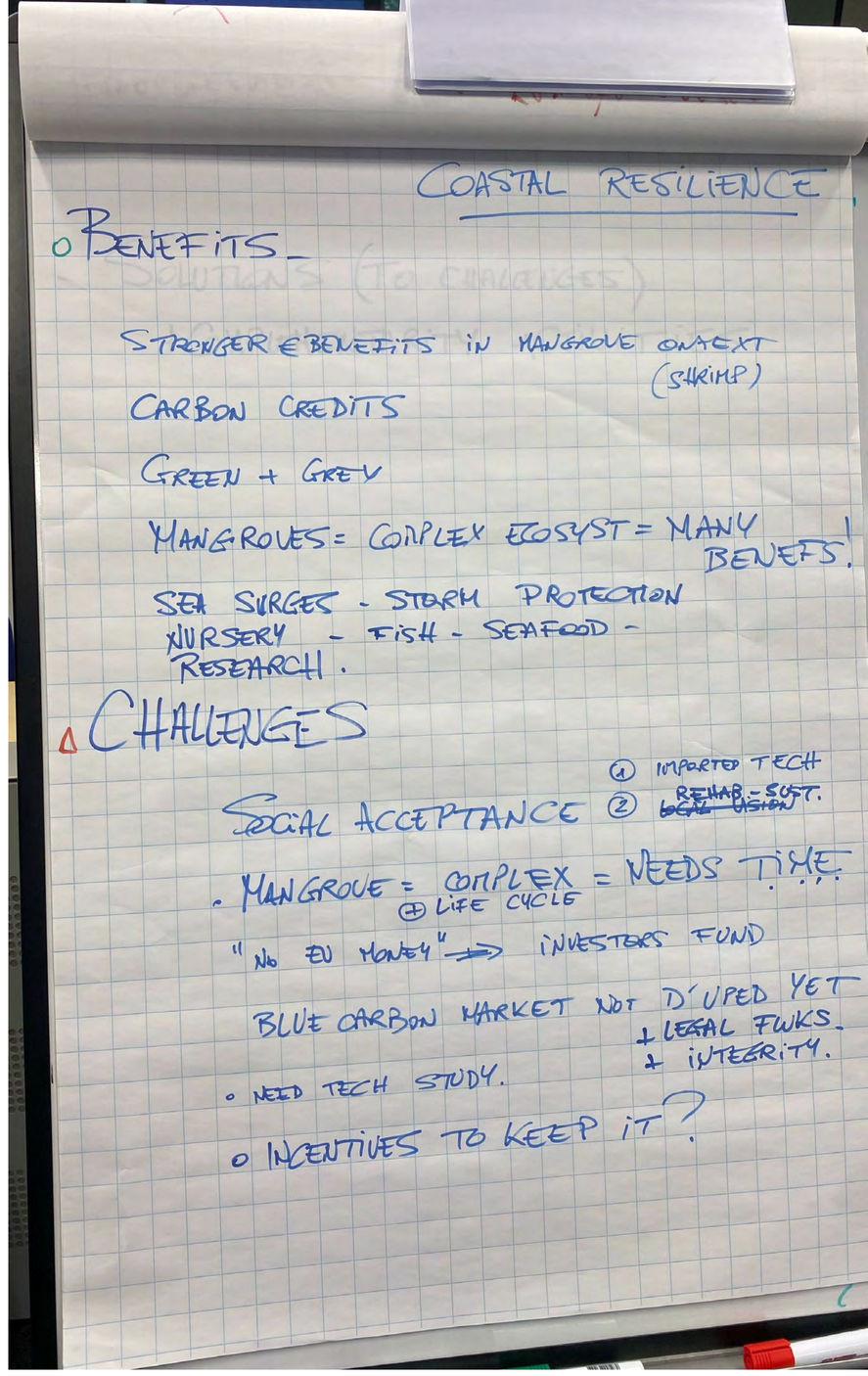
Reporting back from the breakouts - Water



Reporting back from the breakouts - Urban



Reporting back from the breakouts - Coastal Protection



Reporting back from the breakouts - Hydropower

Global Gateway

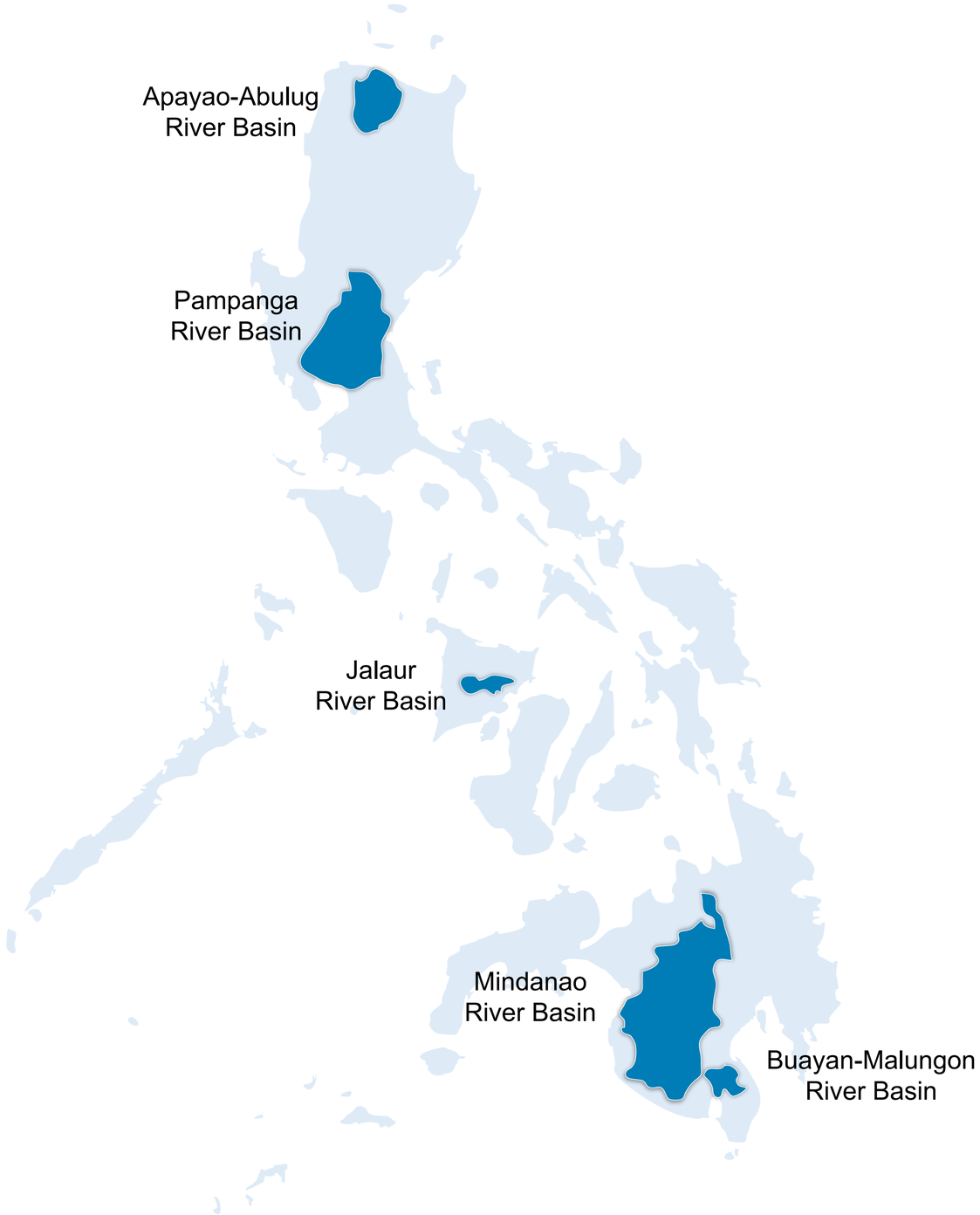
Financing NbS-Infrastructure

Partner logo-flag

CASE STUDY FINANCING STRUCTURING THE PHILIPPINES

INVESTING IN ECOLOGICALLY SUSTAINABLE RIVER BASIN MANAGEMENT

Invest in nature, build water and food resilience, and vitalize rural economies



Project objectives

Integrated approach to

- Improve flood risk management infrastructure
- strengthen resilience of local communities in:
  i. Apayao-Abulug River Basin
  ii. Pampanga River Basin
  iii. Jalaur River Basin
  iv. Buayan-Malungon River Basin
  v. Mindanao River Basin

Co-benefits: Enhancing biodiversity conservation and increasing carbon sequestration.

Project components

1

Agroecological landscape restoration

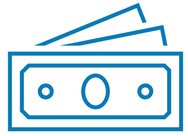
2

Rural livelihoods diversified and improved

3

Capacities and systems for watershed management improved.

4



Sustainable and innovative finance mechanisms

Why Innovative Financing is Critical?

PUBLIC RESOURCES ARE INSUFFICIENT.

RELIANCE ON CONCESSIONAL LOANS EXACERBATES PUBLIC DEBT

$100 MILLION CONCESSIONAL LOAN TO ATTRACT OFF-BUDGET FUNDING.

Innovative Finance Mechanisms

Payments for Ecosystem Services (PES)
Water utilities, industrial users, and municipalities pay fees to maintain watershed health and service reliability

Public-Private Partnerships
Reforestation and sustainable forest management, plant nurseries, and eco-tourism

Outcome Bonds
Investors finance watershed restoration upfront and receive returns based on achieving predefined ecological targets, such as flood control and water quality improvements.

Revolving fund for livelihoods from agriculture and ecotourism

Strategic Approach: Structure Financing $500M

Catalytic ADB Concessional Loan: ~$100M (~20%)

Private and Institutional Investors: ~$250M (~50%) via PPPs, Green and Outcome Bonds

Payments for Ecosystem Services: ~$100M (~20%) from sustainable revenue streams

Revolving Fund: ~$50M (10%) from blended public-private sources and repayments

Reduces dependency on public budgets and increases financial resilience. The numbers are indicative and will be determined during the ongoing process.

Supports the Philippines' global and national climate and biodiversity commitments.

Catalytic Use of ADB Concessional Loan

ADB's $100M concessional loan as catalytic funding, structured to mobilize private and institutional capital by de-risking through:

First-Loss Facility: $30M first-loss capital to absorb initial investment risks and encourage private investor participation.

Subordinated Debt and Equity: $40M to serve as junior investment capital in watershed management projects, enhancing credit ratings and attracting senior institutional investors.

Risk Mitigation Instruments: $30M allocated for guarantees, including political and performance risk insurance, to address investor uncertainties related to governance, currency fluctuations, and project performance.

By applying ADB catalytic loan, the original $100M attracts an additional $400M in private and institutional investments.

Revolving Fund: Livelihoods from agriculture and ecotourism

- **Effective Local Funding Model**
- **Utilization of Ecosystem Services**
- **Supplementary Income Opportunities**
- **Environmental Awareness**
- **Incentive for Conservation**

Illustrative: Revolving Fund for River Basin Management

Application Structure

Component	Details
Fund Capitalization	$50M from blended sources (**public, private, donor**, including **ADB**)
Eligible Investments	Ecotourism, sustainable agriculture, green enterprises
Loan Terms	Low-interest loans (3–5%), flexible repayments, technical assistance provided
Governance	Multi-stakeholder committee including community reps and ADB oversight
Risk Management	**First-loss guarantees** from ADB to attract and reduce risk for private investors

Concept

- **Initial Seed Capital:** Provides loans for sustainable livelihoods and ecosystem restoration.
- **Loan Repayments Recycled:** Repaid loans are continuously reinvested to finance additional projects.
- **Perpetual Financing Mechanism:** Ensures ongoing funding for watershed-friendly enterprises.

Benefits for the Philippine River Basins

- Provides **affordable capital** for communities to establish and scale nature-positive enterprises.
- Creates a **self-sustaining financing mechanism** beyond initial investments.
- Supports **economic diversification and resilience** within watershed-dependent communities.
- Enables scaling and replication of successful models, complemented by PES programs.

Public-Private Partnerships (PPPs) – Concessions ($100M)

Potential Activities for PPPs in Forest Restoration:

- Reforestation and sustainable forest management.
- Establishment and operation of plant nurseries.
- Watershed management.
- Coastal zone protection through sustainable mangrove management.

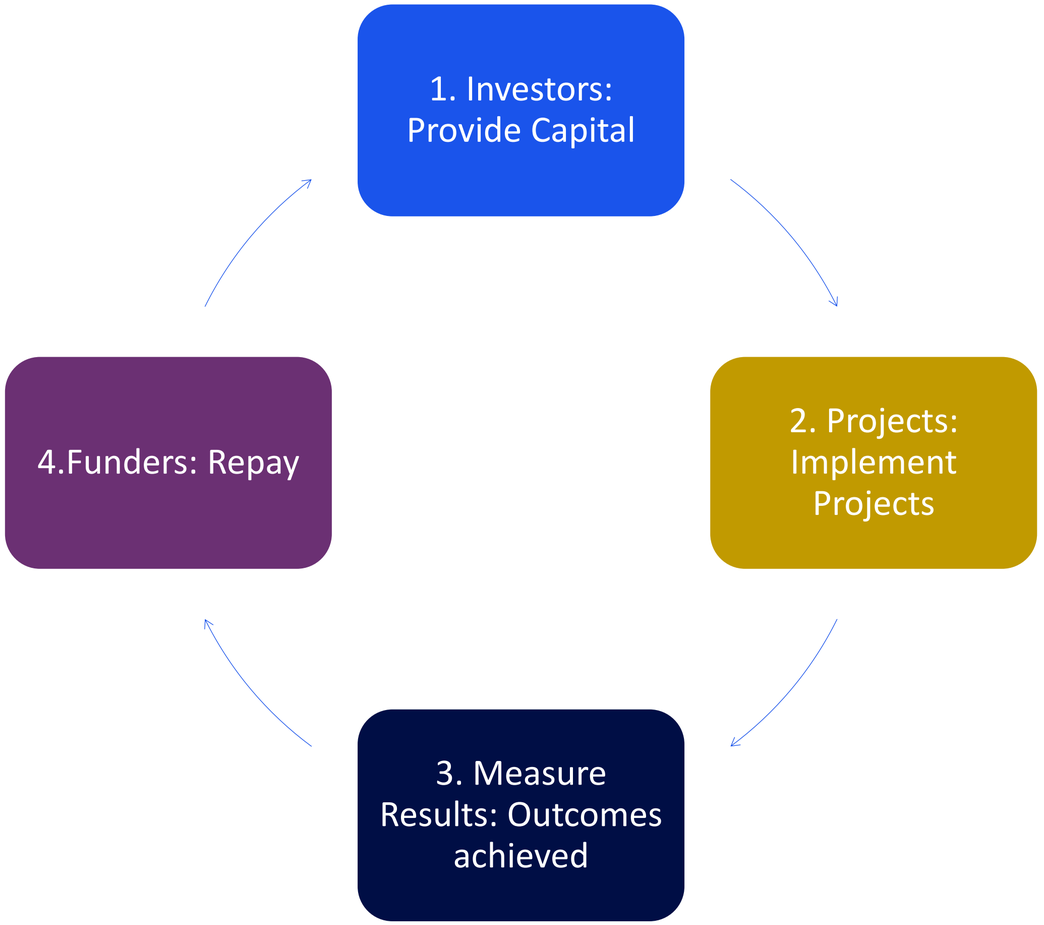
Income Streams: PPPs in forest restoration generate revenue through:

- Future timber production.
- Ecosystem services payments via mechanisms like Payments for Ecosystem Services (PES) or government grants.

NATURE FINANCE

Outcome Bonds: Pay-for-Success Financing

Key Feature: Investors bear the loss if the Outcome is not achieved



Definition: Outcome Bonds are results-based financing instruments where success determines payment

Also Known As: Social Impact Bonds, Development Impact Bonds, amongst others

Sample Outcome Metrics and Verification

- **Hectares of Watershed Restored:** Degraded land rehabilitated or reforested compared to baseline.
- **Forest Canopy Cover Increase:** Increase in tree canopy in target areas
- **Carbon Sequestered:** Greenhouse gas emissions avoided or absorbed
- **Communities with Reduced Flood Risk:** Number of communities (or population) better protected from flooding
- **Baseline & Verification:** A baseline is established and an independent verifier monitors and validates the outcomes.

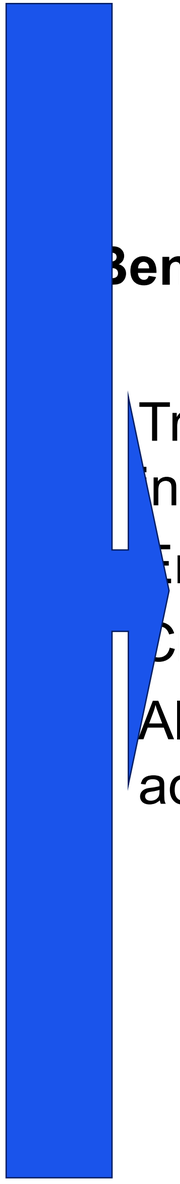
Illustrative: Outcome Bonds for River Basin Management

Concept

- Investors provide capital
- Repayment only if predefined targets are achieved
- Independent evaluator

Application Structure

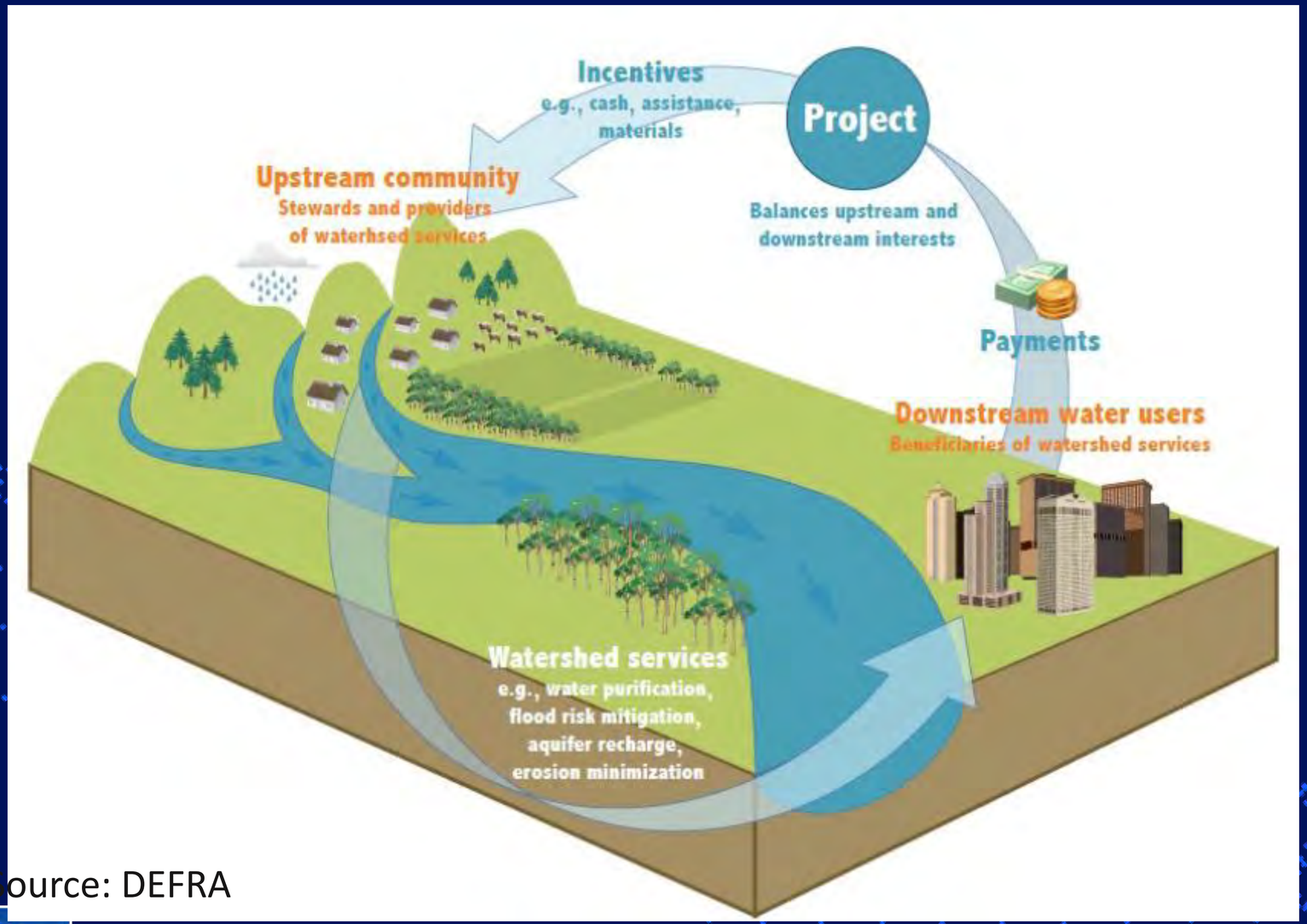
- **Project Types**: Wetland restoration, riverbank stabilization etc.
- **Measurement Metrics**: Reduced flood damage (%), water quality improvement, hectares restored
- **Stakeholders**: Private investors, communities, government agencies, and intermediary
- **Timeframe**: 3-5 years for clear verification of outcomes
- **Financial Returns**: 5-8% for investors upon successful achievement of targets



Benefits for the River Basins

- Transfers implementation risk to investors
- Enables larger-scale interventions
- Creates accountability
- Aligns flood management and climate adaptation goals

The PES Concept and Objectives



Source: DEFRA

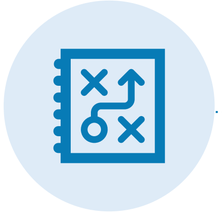
Protecting and preserving natural ecosystems

Providing livelihood opportunities for local communities

A phased approach to project implementation

A ten-year phased project focused on landscape restoration and livelihood improvement

Phase 1



Investment planning

Phase 2

Forest and agroecological restoration and community livelihood options

Phase 3

Community-based and river basin management restoration plans implemented

Phase 4

Monitoring and evaluation

Capacity building activities

A 10-year Multi-tranche Financing Facility

MFF Tranche	Tentative Timeframe	Indicative Allocation	Key Activities / Outputs	Readiness & Release Triggers
Tranche 1 – “Kick-Start & Pilots”	2027–2029 (Years 1-3)	US $150 m	Detailed engineering & community mobilization Basin Restoration Fund is legally constituted Pilot PES contracts & first restoration (≥15 000 ha) Capacity-building modules rolled out	All ESS documents cleared & disclosed Pilot sites validated Counterpart budget secured
Tranche 2 – “Scale-Up & Market Entry”	2029–2032 (Years 3-5)	US $150 m	Scale restoration to ≥30 000 ha & launch livelihood revolving fund Issue first green/outcome bond; PPP pre-feasibility completed Digital basin M&E platform fully operational	≥30 % of Tranche 1 physical progress achieved One PES revenue agreement signed with downstream off-takers
Tranche 3 – “Replication & Integration”	2032–2035 (Years 5-8)	US $150 m	Replication in additional basins; integration of NbS into flood-risk infrastructure PPP concessions signed; PES portfolio expanded Mid-term review (MTR) completed with “satisfactory” rating	≥50 % repayment rate for revolving fund Independent MTR action plan adopted
Tranche 4 – “Performance	2035–2037	US $50 m	Results-based payments against verified indicators O&M transfer to basin councils; knowledge	Verification of outcome metrics by third-party auditor Sustainability & financing

Conclusion

Characteristics	Outcome Bonds	Payment for Ecosystem Services (PES)	Revolving Funds
Best Use Cases	•Measurable environmental impacts •High upfront costs & long-term benefits •Public entities with a limited budget but can commit to future payments	•Watersheds with clear upstream-downstream relationships •Ecosystem service providers and beneficiaries are identifiable	•Financing multiple small projects over time •Communities needing sustainable access to affordable capital
Complexity Level	**High**	**Medium**	**Low to Medium**
Key Stakeholders	•Intermediary organizations •Private investors •Project implementers •Outcome funders •Independent evaluators	•Ecosystem service providers •Service buyers •Technical facilitators •Local communities •Monitoring entities	•Fund managers •Loan recipients •Initial capital providers •Local financial institutions
Capital Characteristics	•Risk transferred to private investors •Upfront private financing •Repayment contingent on verified environmental outcomes	•Regular, ongoing payments •Multiple funding streams •Output or input-based payment structures	•Recycling of capital (Initial seed funding leveraged) •Lower capital intensity

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Thank you!

Q&A

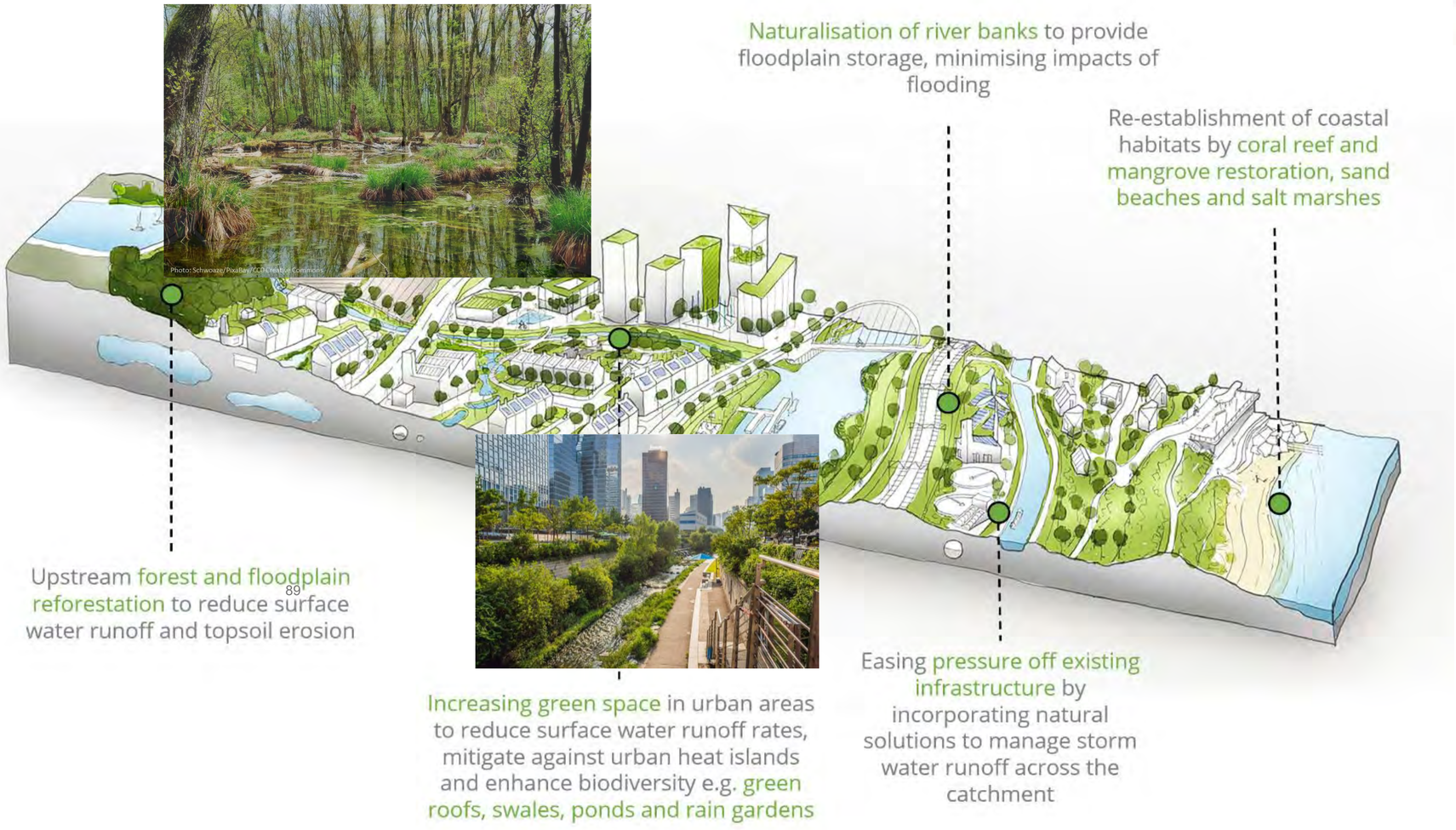
Global Gateway NbS-Infrastructure Incubator

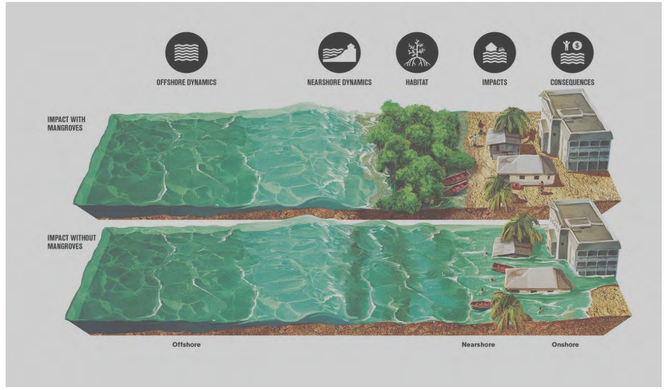
INTPA & Team Europe

Partner
logo-flag

The Global Gateway NbS-Infrastructure Incubator

#TEAMEUROPE





Source:
Infrastructure Pathways

Quick Facts
Timeline: Contracting & Setup in 2026
Total Amount: EUR 18.5 million (+ co-funding + blending + guarantees)
Reach: Global

#TEAMEUROPE

Network Nature

Training & Capacity development

Knowledge Component

Training & Capacity development

Consortium of specialised entities

International Partnerships

EUD

Support to country work & Opportunities

Opportunities & requests for strategic engement

European Platform

Team Europe Banks and Implementing Agencies

Pipeline Reviews & Opportunities

Opportunities & requests for strategic engement

European Investment Bank

AFD

giz

Private Sector

KFW

aecid

1 Coordination, Synergies and Match-making

TA Component:

2 **Work at the country level**
Enabling policy environment & upstream NbS pipeline building

3 **Work at the project level**
Ad-hoc support at points of difficulty, complementing existing TA

LAC	Sub-Saharan Africa	Asia-PAC
Euroclima+	AFD, Global Gateway	ADB, NSFH

Q&A

Global Gateway

Thank you for your attention

Unlocking Global Gateway investments
in nature and the green economy