

# Beyond Ecosystem-based Adaptation Gaps and Barriers

Overcoming barriers in different regions, no-regret and low-regret adaptation options and avoiding maladaptation

2<sup>nd</sup> Workshop under the Glasgow–Sharm el-Sheikh Work Programme  
on the Global Goal on Adaptation  
31 August 2022

# Dynamic and Compound Climate Risks Constraint Adaptation

Increasing impacts, dynamic risks of climate change beyond 1.5+ degrees, and uncertainties about the nature and scale of risks, gives rise to context-specific barriers to adoption of no-regrets and low-regret adaptation

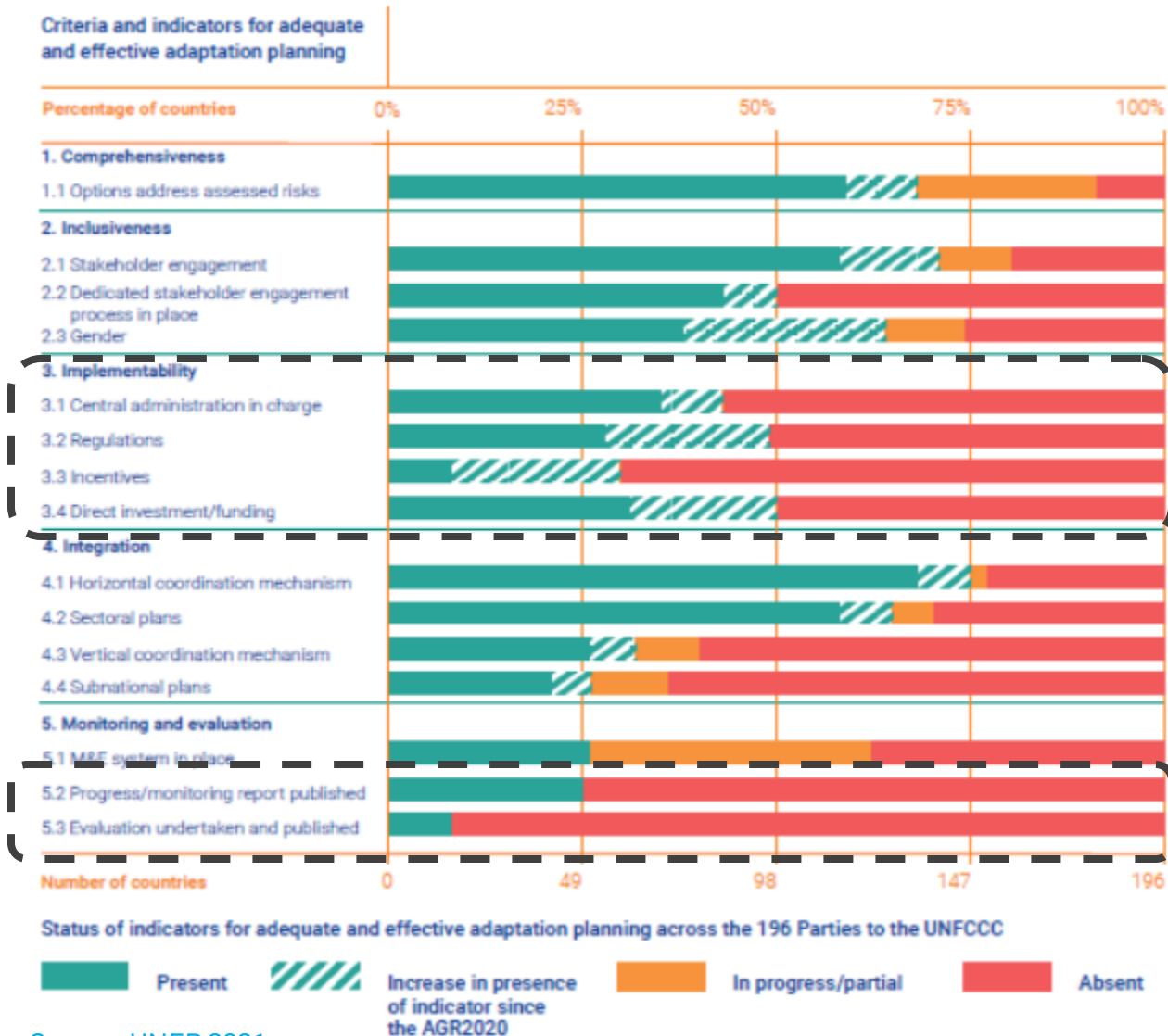


- Poor understanding of climate risk baselines and effectiveness of adaptation investments under changing climate
- Lack of sufficient knowledge and information for scaling up EbA
- Inadequate technical capacity
- Potential effectiveness of EbA options by socio-economic context, ecosystem zone and species combinations
- Ways to address loss of ecosystems + dependent socio-cultural factors

**Vague adaptation goals and targets**  
**Deficit in nature-related investments**

# The Resulting Adaptation Gaps

Adaptation progress is unevenly distributed with adaptation gaps partially driven by widening disparities between the estimated costs of adaptation and deficit in finance allocated to adaptation



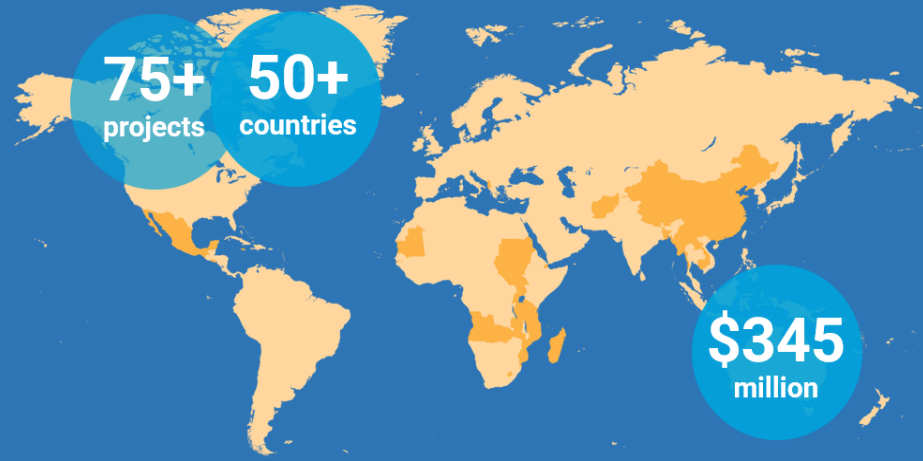
Source: UNEP 2021



## Key Adaptation Gaps

- Estimated annual adaptation costs: US\$ 140–300 billion by 2030 and US\$ 280–500 billion by 2050.
- Global investments that currently degrade nature are found to exceed conservation efforts by US\$ 600-852 billion annually
- Many initiatives prioritize immediate and near-term climate risk reduction which reduces the opportunity for transformational adaptation
- About 25% of the countries have a monitoring and evaluation framework in place, reflecting the difficulty of designing and implementing such frameworks.

## UNEP Climate Change Adaptation Portfolio



UNEP, GEF, AF and GCF are collaborating on climate change adaptation projects across 50+ countries, with grant investment of over \$345 million

## Barriers to adaptation investments and solutions

- Information and awareness of impact and risk chains at different levels of climate change.
- Policy coherence, harmony and standardization across ministries and government entities.
- Locally-led and inclusive processes in policy making yields better implementation and buy-in from communities.
- Financing EbA including de-risking approaches e.g., public-private partnerships, financial bonds, index insurance services

## Global Goal on Adaptation – Measure and Track what Matters

- ❑ Understand impact chain, role of nature in the impact chain and where to invest to reduce impacts
- ❑ 60% of ecosystem services and up to 70% of regulating services are being degraded or used unsustainably.
- ❑ Measure and maintain natural capital stocks as they form the basis for current and future climate resilience
- ❑ 37 countries are currently implementing System of Environmental-Economic Accounting Ecosystem Accounting (SEEA-EA) – we need to increase our level of ambition



# Large Scale Restoration – Gambia

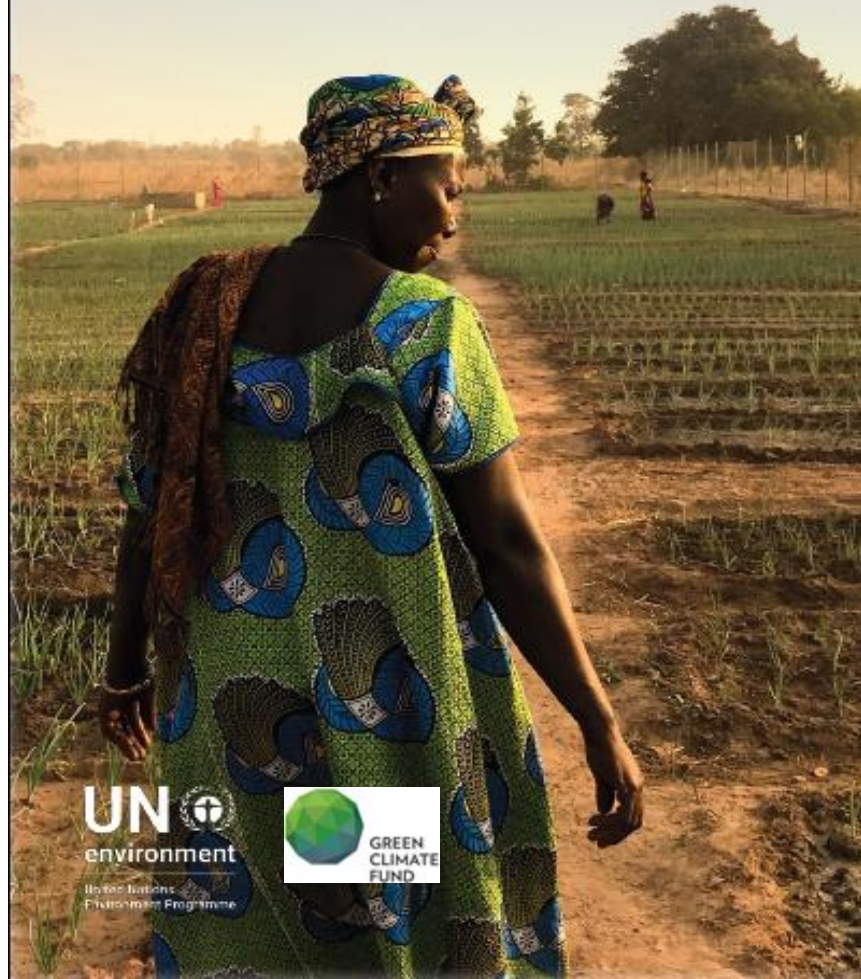
***“This project is the single-largest natural resource development project ever launched in the history of this country.”***

- Lamin Dibba, The Gambia’s Minister of Environment

## GAMBIA

Ecosystem-based Adaptation  
2017-2023

Supported by the  
Green Climate Fund



### PROJECT TITLE:

LARGE-SCALE ECOSYSTEM-BASED  
ADAPTATION IN THE GAMBIA:  
DEVELOPING A CLIMATE-RESILIENT,  
NATURAL RESOURCE-BASED ECONOMY

### EXECUTING ENTITY:



GOVERNMENT OF GAMBIA:  
Ministry of Environment, Climate  
Change & Natural Resources  
(MECCNAR)

### KEY TARGETS:

**13,400**

Hectares rehabilitated in degraded  
forests, wildlife areas and farmland.

**46,200**

Households benefiting from  
project interventions.

**166**

Natural resource-based enterprises  
established.

### FUNDING:



### PROJECT PARTNERS:

Ministry of Environment, Climate Change, Water, Forest and Wildlife (MoECCFW); Ministry of Finance and Economic Affairs (MoFEA); department of Forestry (DoF); Department of Parks and Wildlife Management (DoPWM); Ministry of Agriculture (MoA); Social Development Fund (SDF); Gambia Chamber of Commerce and Industry (GCCI); Department of Community Development (DoCD); National Environment Agency (NEA).

# Tools and Resources

## Toolkits & Resources

1. Guidebook for Monitoring & Evaluating EbA Interventions – [Link](#)
2. Ecosystem-based Adaptation Planning: ALivE - Adaptation, Livelihoods and Ecosystems – [Link](#)
3. Handbook: A Handbook for Ecosystem-based Adaptation in Mountain, Dryland, and Coastal Ecosystems - [link](#)
4. Massive Open Online Course: Nature-based Solutions for Disaster and Climate Resilience – [Link](#)
5. Options for Ecosystem-based Adaptation in Coastal Environments - [Link](#)

## Human Impact Stories

1. Forests and passion: a hero's guide to resisting climate change – [link](#)
2. Six ways nature can protect us from climate change – [link](#)
3. Seawater is coming into our farms and killing the plants'– [link](#)
4. Ecosystem-based adaptation and green recovery: Building back better from Covid-19 - [link](#)
5. Flood walls and forests help Djibouti adapt to climate change- [link](#)

## Videos

1. What is Ecosystem-based Adaptation? - [link](#)
2. Saving the Seychelles: Reforestation to fight climate change- [link](#)
3. Upscaling Ecosystem-based Adaptation in Albania - [link](#)
4. Documentary: EbA South – [link](#)
5. The Living Shoreline: Building a resilient waterfront in Manhattan- [link](#)
6. Mangroves: A Super Solution - [link](#)

Explore More: [@UNEP EbA](#)

[#GenerationRestoration](#)



UNITED NATIONS DECADE ON  
**ECOSYSTEM  
RESTORATION**  
2021-2030



# Thank you



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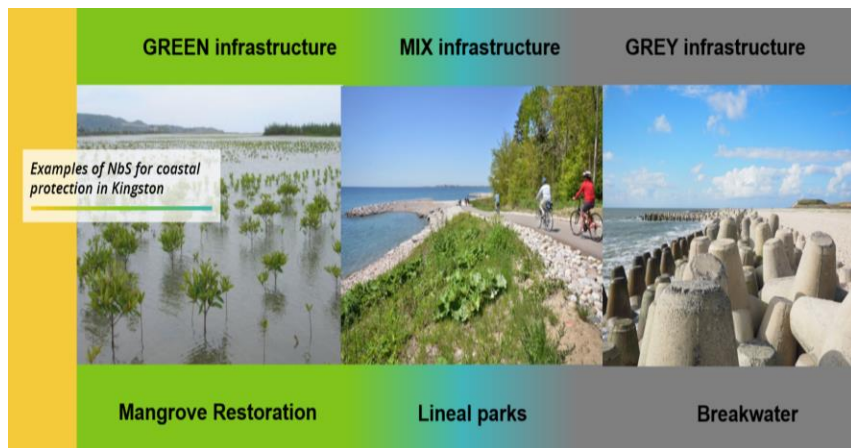
United Nations Avenue, Gigiri  
PO Box 30552 – 00100 GPO Nairobi, Kenya

[www.unep.org](http://www.unep.org)

# Reference Slides



# Case Study: EbA solutions – Urban landscapes



## CityAdapt

Ecosystem-based Adaptation in El Salvador, Mexico & Jamaica

2017-2022

### PROJECT TITLE:

CITYADAPT - BUILDING CLIMATE RESILIENCE OF URBAN SYSTEMS THROUGH ECOSYSTEM-BASED ADAPTATION (EBA) IN LATIN AMERICA AND THE CARIBBEAN

### EXECUTING ENTITIES:

- Ministry of Environment and Natural Resources, El Salvador
- Ministry of Land and Environment, Jamaica
- Ministry of Planning and Environmental Policy, Mexico

### KEY TARGETS:

194,090

Individuals benefitting from the project

190

Decision-makers and planning officials trained in ecosystem-based adaptation

55+

Rainwater harvesting systems and water retention structures built

### FUNDING:








### PROJECT PARTNERS:

Mexico: Fondo Golfo de México AC (FGM). Jamaica: Forestry Department of Jamaica; Jamaica 4H Clubs. El Salvador: Fundación Salvadoreña de Desarrollo y Vivienda Mínima (FUNDASAL); Asociación de Proyectos Comunales de El Salvador (PROCOMES)

Supported by the Least Developed Countries Fund

# Case Study: National Adaptation Plan - Costa Rica

- Policy instruments have emerged to address CCA but needed institutional arrangements.
- The NAP process supports the implementation of the legal and institutional frameworks already in place.
- Provides tools and instruments for supporting vertical integration of adaptation planning.

-  Limited awareness and understanding
-  Knowledge and information gaps.
-  Technical capacity constrains.
-  Governance challenges.
-  Finance challenges.

## General strategy to support the NAP:

### 1. Regional



Strengthening of institutional capacity for the effective integration of adaptation strategies in **the six socio-economic regions**.



### 2. Pilot cantonal level

Strengthening of institutional capacity for the effective integration of adaptation strategies in **20 cantons**.



### 3. Resources for remaining cantons

Municipal governments have relevant **information and capacities** to identify adaptation priorities and implement measures.



### 4. Funding strategy

A government-endorsed **resource mobilization strategy** for National and sub-national adaptation initiatives.



### 5. Monitoring, review and communication

The regional councils and the municipal governments are capable of **reviewing, monitoring and communicating** results.

# Case Study: National Adaptation Plan - Costa Rica (ctd)

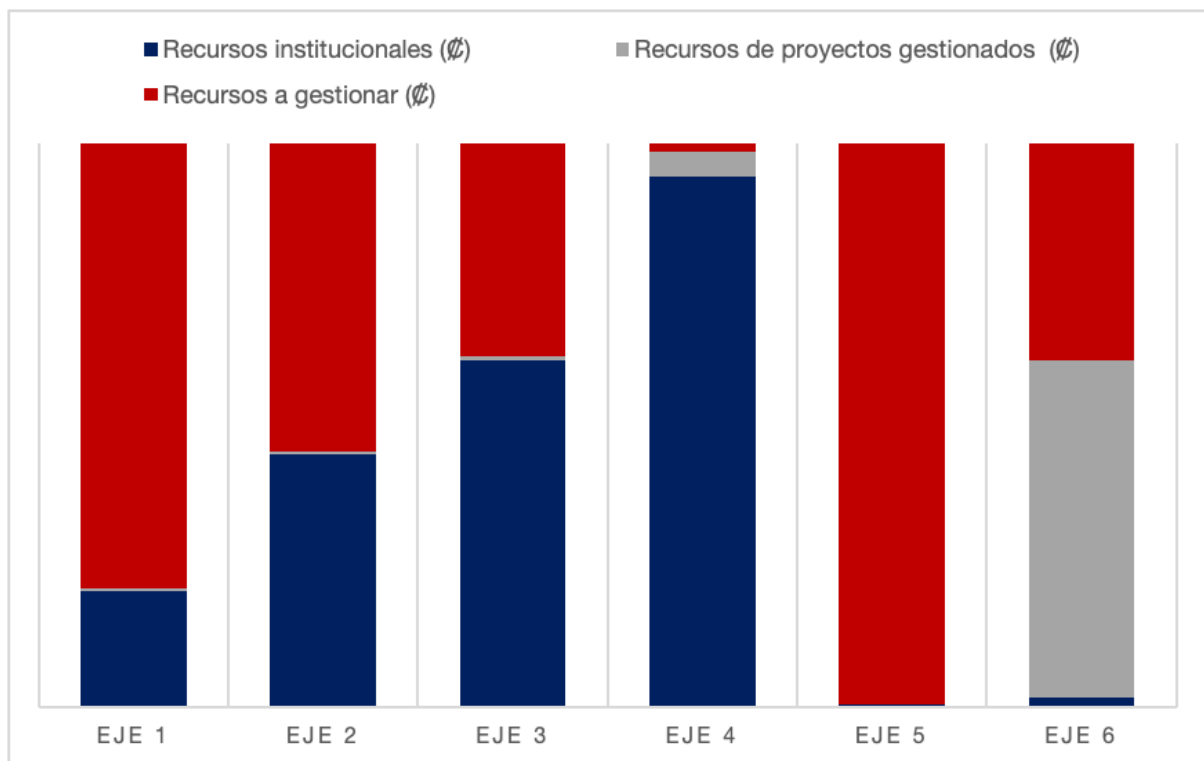
**Specific strategy :** Vertical integration through local adaptation planning processes that helped shape the National Adaptation Plan 2022-2026. This was articulated with the development of a financial strategy of the NAP that provides inputs for the National Development Plan.



Axis	Total cost (US\$)
Axis 1. Knowledge management on the effects of climate change, climate services and development of local and institutional capacities.	\$ 65.061.311
Axis 2. Promotion of the conditions for the resilience of human and natural systems through territorial, marine and coastal planning.	\$ 23.766.868
Axis 3. Management of biodiversity, ecosystems, watersheds and marine and coastal spaces for adaptation.	\$ 549.282.416
Axis 4. Adapted public services and resilient infrastructure.	\$ 343.255.253
Axis 5. Adapted and eco-competitive production systems.	\$ 476.031.938
Axis 6. Investment and financial security for climate action.	\$ 7.343.632
<b>TOTAL</b>	<b>\$ 1.464.741.419</b>



## Case Study: National Adaptation Plan - Costa Rica (ctd)



E.g. The axis that requires the most investment for the implementation of the measures is axis 3 (549.2 million dollars) related to the implementation of EbA measures.

For the total cost of axis 3, 61.66% of the needs are covered with institutional resources, 0.52% with international cooperation projects and 37.82% would need to be mobilized.

<b>Financing needs</b>	<b>\$ 1.464.741.419</b>	<b>100%</b>	<b>Financing needs</b>
<b>Financing sources identified</b>	<b>\$ 711.124.646</b>	<b>48.55%</b>	<b>Financing sources identified</b>
<b>Financing Gap</b>	<b>\$ 753.616.773</b>	<b>51.45%</b>	<b>Financing Gap</b>

# Case Study: National Adaptation Plan - Costa Rica (ctd)

## Good practices:

- Ownership of the process at the local level.
- Utilizing existing coordination structures at the regional and local level.
- Continuous adjustment according to local development planning processes
- Participatory process in the identification of adaptation measures.
- Engagement of identified responsible institutions and organizations in the costing exercise of the NAP.
- Exploration of more ambitious goals if non-public funding is leveraged.

## Enabling environment:

- Political support at the national, regional and local level.
- Synergies with parallel adaptation planning processes.

## Challenges :

- Harmonization of political momentum & timing of admin processes (being able to fulfill expectations)
- Adapting to political changes in priorities and timing of development planning processes within the scope of Project Proposal (adaptive management)
- Lack of updated data for risk assessments (Strengthened participatory processes and qualitative data).
- Donor requirements