

# INTEGRATED APPROACHES

## Linking mitigation and adaptation

### OVERVIEW

With a growing need to use a systems approach in responding to the impacts of climate change, integrated approaches that address both adaptation and mitigation ambitions are becoming more imperative. Climate change is a multifaceted issue that cannot be resolved easily, even with ideal greenhouse gas emissions reduction scenarios. Its impact will persist due to the energy already trapped in the atmosphere. Mitigation efforts are insufficiently rapid to avert significant effects, necessitating robust adaptation strategies. Conversely, adaptation alone cannot fully address the extensive consequences of substantial climate change, underscoring the importance of sustained mitigation efforts and the management of residual impacts related to loss and damage.

### OBJECTIVE

Integrated approaches seek to reduce the costs associated with climate action while maximizing benefits and minimizing trade-offs from siloed actions. Climate-resilient pathways represent development trajectories that combine adaptation and mitigation to achieve sustainable development (Denton et al., 2014).

### RATIONALE

The interrelationship between climate change adaptation and mitigation has drawn increasing attention since the release of the IPCC's Fourth Assessment Report (AR4) in 2007. There is growing recognition of the opportunities to design and implement climate responses across sectors in ways that foster synergies and minimize conflicts between adaptation and mitigation. To strengthen efforts against the severe threat of climate change, the IPCC Reports and Articles 2 and 7 of the Paris Agreement emphasize the need for deeper understanding and strategic selection of response options that align adaptation and mitigation goals.

### KEY RECOMMENDATIONS

- ✓ Establish a cross-sectoral coordination mechanism to enhance collaboration among ministries.
- ✓ Promote nature-based solutions in climate policies to maximize co-benefits for biodiversity and climate resilience.
- ✓ Enhance capacity-building and knowledge-sharing platforms for integrated climate action.
- ✓ Incorporate a gender responsive and human rights-based approach, with a focus on social protection mechanisms to support vulnerable communities in the transition to low-carbon economies.
- ✓ Integrate climate action into national development plans to streamline resource allocation.
- ✓ Monitor and evaluate integrated approaches to refine strategies and ensure progress.

## HISTORICAL BACKGROUND

In 2018, the Support Project for the Implementation of the Paris Agreement (SPA) focused on identifying ideal approaches to climate action, calling for a reappraisal of climate policy and project design as dynamic processes.

By 2020, efforts centered on identifying linkages between adaptation and mitigation measures, exploring how nature-based solutions could foster synergies. These co-benefits mainly supported “resilience-building” and “vulnerability-reduction” measures to promote integrated action.

The Adaptation Committee of the UNFCCC published an information paper in 2022 to clarify how linkages between mitigation and adaptation are addressed across sectors and within the UNFCCC framework.

2018

2019

2020

2021

2022

2023

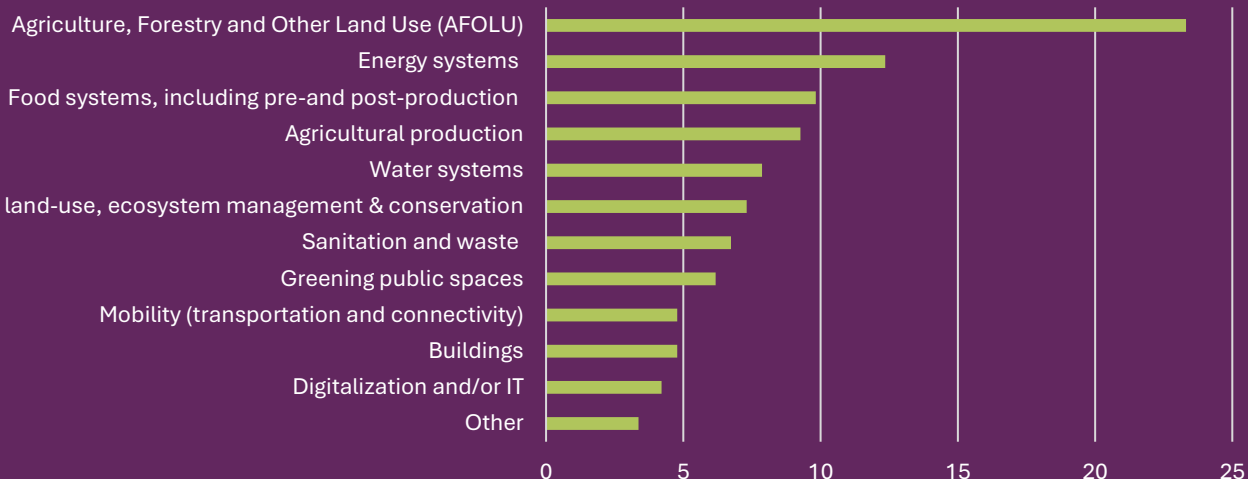
The Adapted Resilience Gap Model was introduced to facilitate political dialogue among stakeholders with varying priorities and capacities, bridging the gap between adaptation and mitigation strategies.

In 2021, a Peer Learning Summit provided support for countries to apply integrated approaches across adaptation, mitigation, and development agendas. It presented pathways to enhance understanding of these interrelationships and offered entry points for synergistic planning and implementation in both adaptation and mitigation cycles.

Nature-based solutions were recognized in the Global Stocktake as critical for both mitigating climate change and protecting vulnerable communities from its impacts, with foundations in human rights and gender equality (FCCC/PA/CMA/2023/L.17). Additional opportunities to advance integrated approaches emerged through the Baku Initiatives.

## 2024 SURVEY RESULTS

In a recent survey conducted in the Asia-Pacific region, more than 50% of the respondents are informed of and interested in advancing integrated approaches in climate action. Diverse stakeholders responded and shared their experience. 23% of responses identified Agriculture, Forestry, and Other Land Use (AFOLU) as the top sector for synergistic adaptation and mitigation impacts, followed by energy systems (12%) and food systems (10%).



## Examples of sector-specific and cross-cutting themes from countries' NDCs



### Ocean governance

Fiji includes blue economy ambitions in its NDC targets through enhanced ocean governance to not only achieve national ocean conservation but also contribute towards enhancing the ocean as a carbon sink, including a section on Fiji's Commitment to Adaptation Actions with Mitigation Co-benefits.



### Energy

Armenia emphasizes the development of renewable energy sources and energy efficient technologies, which will abate emissions as well as expand access to 'affordable and reliable energy supply.' Sustainable Hydropower Development Policy (SHDP) 2021 enhances Bhutan's hydropower policy by integrating climate resilience and mitigation.



### Health

Existing NDCs consider health co-benefits by coupling: mitigation of greenhouse gases with reducing air pollution and associated disease burden/cost; low-emission transportation options for pedestrian mobility with improved fitness; and sustainable agriculture practices with improved and healthier dietary choices that avoid high-emission agricultural and livestock products.



### Disaster management

Pakistan seeks to identify and introduce nature-based solutions to foster resilience to flooding and storm surges, such as urban forest projects and wetlands, thereby promoting adaptation and carbon sinks simultaneously.



### Transport

Republic of Korea is seeking to reduce emissions from private vehicles, including through the improvement of public transports. This signals a commitment to consumer welfare via the expansion of low-cost public transport alternatives.



### Ecosystem-based adaptation (EbA)

In Armenia, EbA is anticipated to become an integral part of the policy mix across all sectors, as outlined in the Sectoral Adaptation Plans (SAPs). This approach ensures that mechanisms and policies supporting biodiversity conservation, enhanced ecosystem services, income generation, poverty reduction, adaptive development, resilient infrastructure, and carbon emission mitigation co-benefits are seamlessly integrated into sectoral and sub-national activities, thereby reducing the country's overall vulnerability to climate change.

The complex nature of adaptation and mitigation offers opportunities for integrated climate action. Key priorities include closing knowledge gaps, reducing silos, enhancing co-benefits, minimizing trade-offs, leveraging modeling tools, collecting data for policy, and enabling climate-resilient growth.



### Resilient and low-emission agrifood systems

Most cost-effective options to maximize co-benefits of adaptation and mitigation on the ground; presents opportunities to scale up good practices and accelerate climate action to support countries, in relation to climate resilience, adaptation, mitigation and finance



### Climate finance

To help close the adaptation financing gap is to build a good synergy between mitigation and adaptation climate action.



### Alignment of NDCs and NAPs

Represents a useful starting point to integrate adaptation and mitigation, as both policy processes are linked to the Paris Agreement; complementary



### Urban planning and development

Reduction of carbon emissions and building climate-resilience in cities are becoming important objectives to be achieved in order to ensure sustainable urban development pathways



### Climate-health nexus

Actions that stabilize and reduce greenhouse gases, and other processes that drive climate change, will promote positive health outcomes



### Nature-based solutions

Conservation, restoration and improved management of ecosystems that increase carbon storage and/or avoid GHG emissions have the potential to deliver up to 37% of cost-effective mitigation by 2030

## Areas of work to advance integrated approaches

Emerging initiatives and ongoing work that support member States in implementing integrated adaptation and mitigation approaches in the Asia-Pacific region.



### Just Transition

Promotes the equitable and sustainable transformation of economies and societies towards low-carbon, climate-resilient, and environmentally sustainable development; an integrated, whole-system perspective on justice, transboundary climate risk



### Landscape management

Design and implementation aim to deliver the three outcomes of climate-smart landscapes (societal adaptation, ecological adaptation, and climate mitigation); and recognize and minimize the trade-offs between these outcomes



### Cross-sectoral plans

Enhance synergies with existing development policies, build national capacity for low emission development, and increase efficiency and cost effectiveness in multiple sectors



### Forward Faster program

The Target 2 of climate action - taking concrete actions that address social impacts of climate change mitigation and adaptation measures, in partnership with actors such as workers, unions, communities and suppliers

## INTEGRATED MITIGATION AND ADAPTATION APPROACHES - EVIDENCE FROM STAKEHOLDERS

**Youth Co-Lab** is a platform for young people to build entrepreneurship skills and contribute to the Green Transition. The participants are developing/implementing social/environmental business ideas ranging from clean water and sanitation (Sudrain - Cambodia), sustainable agriculture (Cultivera - Japan), air pollution monitoring and control (Urban Air Labs - India), and carbon mobility (MILE - Bangladesh).

The goal of **Indonesia's ProKlim Project** is to address the climate vulnerability of the local communities by helping them to adapt to and mitigate climate effects by promoting a low-carbon lifestyle.

A number of studies have aimed to value both adaptation and mitigation benefits of Nature-based solutions. For example, it is estimated that in **India mangroves protect** 3.3 million people from flooding and \$9 billion worth of property from flood damage annually in addition to acting as a carbon sink (Menéndez and others 2020).

In 2022, the **Net-Zero Nature-Positive Accelerator Integrated Program** (NZNP Accelerator IP) was launched as a GEF initiative aiming to support countries to develop and implement integrated solutions to reach the long-term goals of the Paris Agreement (GEF and World Bank Group, 2022).

The **Sustainable Rice Landscapes Initiative** (SRLI) provides a vehicle to deliver climate-smart agriculture and integrated adaptation and mitigation on the ground through nature-based-solutions, while achieving a broad set of co-benefits across multiple geographies.

The extensive reforestation efforts in the **Republic of Korea** through five **National Forest Plans**, spanning from 1973-2017, contributed to restoring more than a million hectares of denuded forest with fast-growing tree species, which reduced disaster risk, notable from drought (OECD, 2017), and increased carbon sequestration (Lee, and others, 2018).

In Asia including Indonesia, Malaysia, as well as the Philippines and Thailand, peatlands are commonly utilized for various types of land usage such as conservation, cultivation either by community or private sector, industries, etc. The stakeholders involved in the **Peatland Ecosystem** are varied, encompassing the community, business entities, government bodies, each with distinct levels of economic status, educational background, and authority. Better peatland management can be deployed as a nature-based solution to halt biodiversity loss, support climate change adaptation, build climate resilience and support the wellbeing of communities living in these landscapes (UNEP, 2022).

**PROGRESS** is a digital climate assessment tool that assists SMEs in addressing climate adaptation and mitigation through comprehensive assessments and actionable plans. This tool has been developed by UN Global Compact Network **Malaysia and Brunei** ("UNGCMYB").

An example of **Green Climate Fund project** on integrated response for climate change adaptation and mitigation for agriculture was in **Samoa, Vanuatu and Tonga**. This project has been designed to support farmers to adapt to its impacts as well as to mitigate the production of GHG from agriculture in these countries.

