ADAPTATION & RESILIENCE DIALOGUES

Learning from National Adaptation Plans:
MEL systems in the context of the
GGA and Belém Indicators

WEDNESDAY
SEPTEMBER
2

7AM NEW YORK
8AM BRASILIA
2PM ISTANBUL
6PM BANGKOK

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AGENDA

Opening remarks (10 mins)
Setting the scene on the UAE Framework, Belém indicators and MEL systems

Insights from the field (10 mins)
Lessons learned from UNDP's National Adaptation Plans' portfolio

Panel discussion (45 mins)
Operationalizing national MEL systems:
Experiences from Thailand, Kyrgyz Republic, Egypt, Tanzania and Panama

Q&A (20 mins)

Closing remarks (5 mins)

Speakers

Rohini Kohli

Head of Adaptation and Resilient Societies, UNDP

Patricia Velasco

Climate Change Adaptation Specialist, UNDP

Teerapat Kamnuantip

Environmentalist, Climate Change Adaptation Division, DCCE, Thailand

Zhamilya Dairova

Chief Specialist, Ministry of Natural Resources, Ecology and Technical Supervision, Kyrgyz Republic

Dr. Saber Osman

Assistant Minister of Environment and Local Development, Egypt

Dr. Hamza Kija

Principal Research Officer, Tanzania Wildlife Research Institute (TAWIRI), Tanzania

Katherine Martínez

Project Coordinator and Negotiator for Adaptation and L&D, MiAmbiente, Panama

Prakash Bista

Climate Change Adaptation Specialist, UNDP

Objectives

- Disseminate key lessons learned from UNDP’s NAP portfolio.
- Explore how to operationalize the targets of the Global Goal on Adaptation and UAE Framework.
- Discuss actionable strategies to overcome the technical, financial and data-related challenges of developing countries when establishing MEL frameworks.
- Demonstrate how robust and transparent MEL systems can build investor confidence, leverage funding and accelerate implementation of national adaptation priorities.
- Align national MEL advancements with international requirements.

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Insights from the field

Patricia Velasco
Climate Change Adaptation Specialist, UNDP

Insights from the field: Lessons learned from UNDP's National Adaptation Plans' portfolio

Adaptation and Resilience Dialogues | Learning from NAPs: MEL systems in the context of the GGA and Belém Indicators

2 September 2026

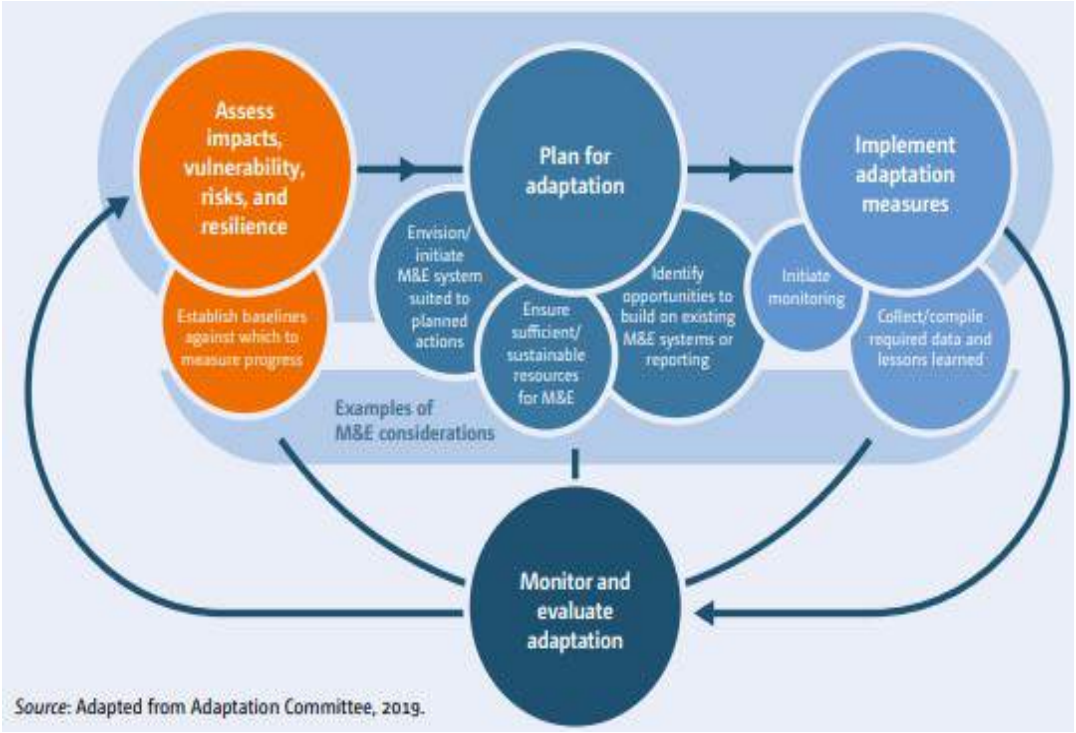
Patricia Velasco, Climate Change Adaptation Specialist, UNDP

Monitoring and evaluation considerations at all steps of the iterative adaptation process

→ **Monitoring** tracks progress through systematic data collection, **evaluation** assesses the effectiveness, impact, efficiency, and sustainability of adaptation actions, and **learning** uses evidence and lessons to identify what works, what does not, and why, helping improve future adaptation decisions and outcomes.

→ MEL should be a core consideration throughout each step of the iterative adaptation process. MEL is not an isolated, final stage; instead, all other stages should be pursued with a view to enabling effective MEL. MEL should inform all future stages of the iterative adaptation process.

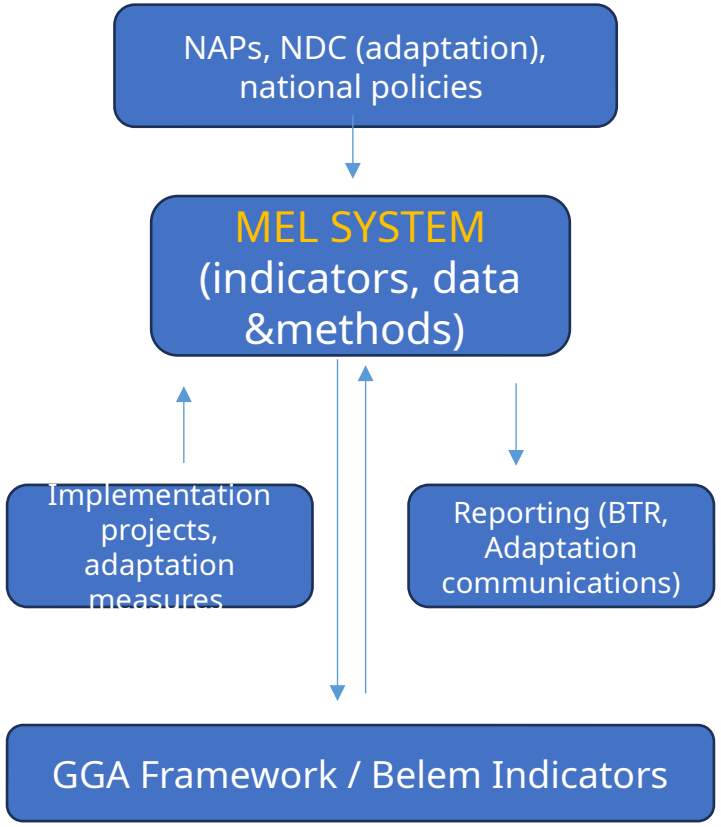
→ As of August 2026, UNDP has supported 47 of the 79 developing countries that have submitted NAPs to the UNFCCC. **Most of these NAPs include activities related to MEL; however, progress in establishing and operationalizing effective Monitoring and Evaluation systems remains more limited.** This reflects the challenges countries face in developing the systems, capacities and processes needed to assess the effectiveness of adaptation



Source: Monitoring and evaluation of adaptation at the national and subnational levels: Technical paper by the Adaptation Committee. 2023 UNFCCC

Links between MEL systems and GGA/Belém Indicators

The MEL system is the backbone that connects national adaptation planning, implementation, learning, and reporting, while enabling alignment with global frameworks like the GGA (indicators).



→ MEL systems establish:
- **Clear indicators** across outputs, outcomes, and impacts
- **Standardized methodologies** for data collection and calculation
- **Baselines and targets** aligned with national adaptation priorities

This ensures consistency, comparability, and credibility of adaptation data across sectors and over time.

→ MEL systems enable systematic monitoring of:
- **Outputs:** Implementation of adaptation actions (e.g., infrastructure, policies, systems)
- **Outcomes:** Changes in adaptive capacity and behaviours (e.g., adoption of climate-resilient practices)
- **Impacts:** Long-term resilience and reduced vulnerability (e.g., decreased climate-related losses)
- Given the complexity of adaptation, MEL systems often combine **quantitative indicators with qualitative assessments** to capture non-linear and context-specific changes.

→ MEL systems support continuous learning by identifying effective measures, enabling policy adjustments, and informing evidence-based planning, transforming them from reporting tools into active decision-support systems.

→ MEL systems allow countries to link their own indicators to global targets while maintaining their national context.

→ The adoption of the 59 Belém Adaptation Indicators at COP30 provides a new reference point for strengthening national Monitoring, Evaluation and Learning (MEL) for adaptation.

Examples of national MEL systems

Uruguay

- **Comprehensive, multi-sectoral NAP** focused on climate-resilient development.
- **Integrated MEL system** under the National Climate Change Response System (SNRCC), combining quantitative and qualitative indicators.
- **Two-tier indicator structure:** adaptation indicators measure resilience outcomes, while progress indicators track implementation.
- **25 core indicators** covering infrastructure, ecosystems, social systems, governance, and knowledge.
- Strong use of **stakeholder participation, open data/GIS platforms, and city-level monitoring**, covering sectors including water, agriculture, health, infrastructure, ecosystems, and DRR.

Mapping some MEL indicators in Uruguay linked to GGA thematic targets and Belém Indicators

Sector / Goal	MEL Indicators	GGA Thematic Target	Belém Indicator
Cities / Infrastructure	% cities with adaptation plans; resilient infrastructure; urban risk mapping (GIS tools)	Infrastructure & Cities	Output: Climate-resilient urban systems
Coastal Zones	Coastal vulnerability assessments; ecosystem protection; exposure to sea level rise	Ecosystems & Coastal Resilience	Outcome: Reduced coastal vulnerability
Ecosystems & Biodiversity	Ecosystem health indicators; conservation/restoration measures	Ecosystems & Biodiversity	Output: Protected/restored ecosystems

Examples of national MEL systems

Bosnia and Herzegovina

- **Multi-sectoral NAP covering water, agriculture, forestry, health, energy, transport, urban areas, and tourism**, with a focus on reducing climate risks and integrating adaptation into planning.
- MEL structure combines data collection, evaluation, learning, and feedback mechanisms.
- 152 indicators across 13 sectors track adaptation processes, actions, and results, supporting progress monitoring and policy decisions.
- Multi-stakeholder governance, involving ministries, local communities, academia, and civil society.
- **Status:** Proposed framework is **not yet operational**, with ongoing capacity-building and coordination needs (GCF readiness project on going to support on this).

Mapping some MEL indicators in Bosnia and Herzegovina linked to GGA thematic targets and Belém Indicators

Sector / Goal	MEL Indicators (in the framework)	GGA Thematic Target	Belém Indicator
Energy	% hydro projects considering climate risk, energy efficiency measures	Infrastructure & Resilience	Output: Climate-resilient energy systems
Urban & Transport	Flood-resilient roads, % buildings with climate-adapted codes, retrofitted infrastructure	Disaster Risk Reduction	Outcome: Reduced vulnerability of infrastructure & population
Cross-cutting / Capacity	# staff trained, policies mainstreaming adaptation, stakeholder engagement	Governance & Institutional Strengthening	Process: Institutional readiness & stakeholder coordination

Challenges to operationalize MEL systems

- **Attribution and uncertainty:** Adaptation outcomes are difficult to attribute to specific interventions and often emerge over long timeframes amid changing and uncertain climate and socio-economic conditions.
- **Data gaps & quality issues**: Limited availability of reliable, disaggregated, and long-term data
- **Institutional coordination**: Fragmented roles across ministries and weak data-sharing mechanisms
- **Technical capacity:** Limited expertise to design, implement, and maintain MEL systems especially at sectoral level
- **Resource constraints:** Insufficient funding for data systems, monitoring, and reporting
- **Complexity of indicators:** Difficulty measuring adaptation outcomes (vs. outputs) and long-term resilience
- **Non-operational frameworks:** In some countries (e.g., BiH), MEL systems are still under development

Considerations to strengthen MEL systems

- **Keep it simple**: *measure progress with set of 'core indicators' aligned with GGA rather than attempting to identify progress on individual measures*. There's no one size-fits all.
- **Use what already exists**: *build on existing (national) system to avoid duplication of reporting burden and embed in national systems.*
- **Participatory approach**: *distributed responsibilities for reporting of relevant data as required.*
- Maintain consistent financing and capacity-building: *necessary for data collection, analysis, and use to be maintained over time.*
- Ensure MEL systems capture **relevant sector-specific information and indicators**.
- Ensure that the information generated actually informs policy, planning and investment decisions.

Conclusions

- A robust MEL system **links the NAP and NDC by tracking implementation**, **assessing effectiveness and generating evidence for transparency under the Paris Agreement**. It also helps mobilize finance by providing clear data on needs, gaps and results, enabling countries to align resources with their NAP and NDC priorities.
- **MEL systems are essential to operationalize the GGA.** While NAPs provide the policy foundation, MEL systems act as the technical engine that enables countries to measure progress, generate reliable data, and support adaptive management. Strong MEL systems are critical for reporting against the GGA's quantitative, sectorial and data-driven indicator framework.
- **Strengthening MEL systems is both a challenge and an opportunity.** Weak or fragmented MEL systems limit countries' ability to report credible data for the GGA. However, the GGA indicator framework can act as a catalyst to strengthen national systems, driving investments in data, institutional coordination, and long-term monitoring capacity.
- The Belém Indicators are an opportunity to strengthen national systems, not replace them.
- At the national level, MEL systems serves as a diagnostic tool, helping identify data and capacity gaps while encouraging stronger adaptation efforts, peer learning, and international cooperation.

Thank you!


POLICY BRIEF
Adaptation monitoring and the importance of the Glasgow Sharm el Sheikh programme in building national systems


Strengthening monitoring and evaluation for adaptation planning in the agriculture sectors


Capturing Collective Progress on Adaptation
A Proposal to move forward on the UNFCCC Global Stocktake
13 CLIMATE ACTION

Operationalizing national MEL systems

Panel discussion

Teerapat Kamnuantip

Environmentalist, Climate Change Adaptation Division, Department of Climate Change and Environment (DCCE), Thailand

Zhamilya Dairova

Chief Specialist at the Environmental and Climate Policy Department, Ministry of Natural Resources, Ecology and Technical Supervision, Kyrgyz Republic

Dr. Saber Osman

Assistant Minister of Environment and Local Development, and National Climate Change Focal Point to UNFCCC, Egypt

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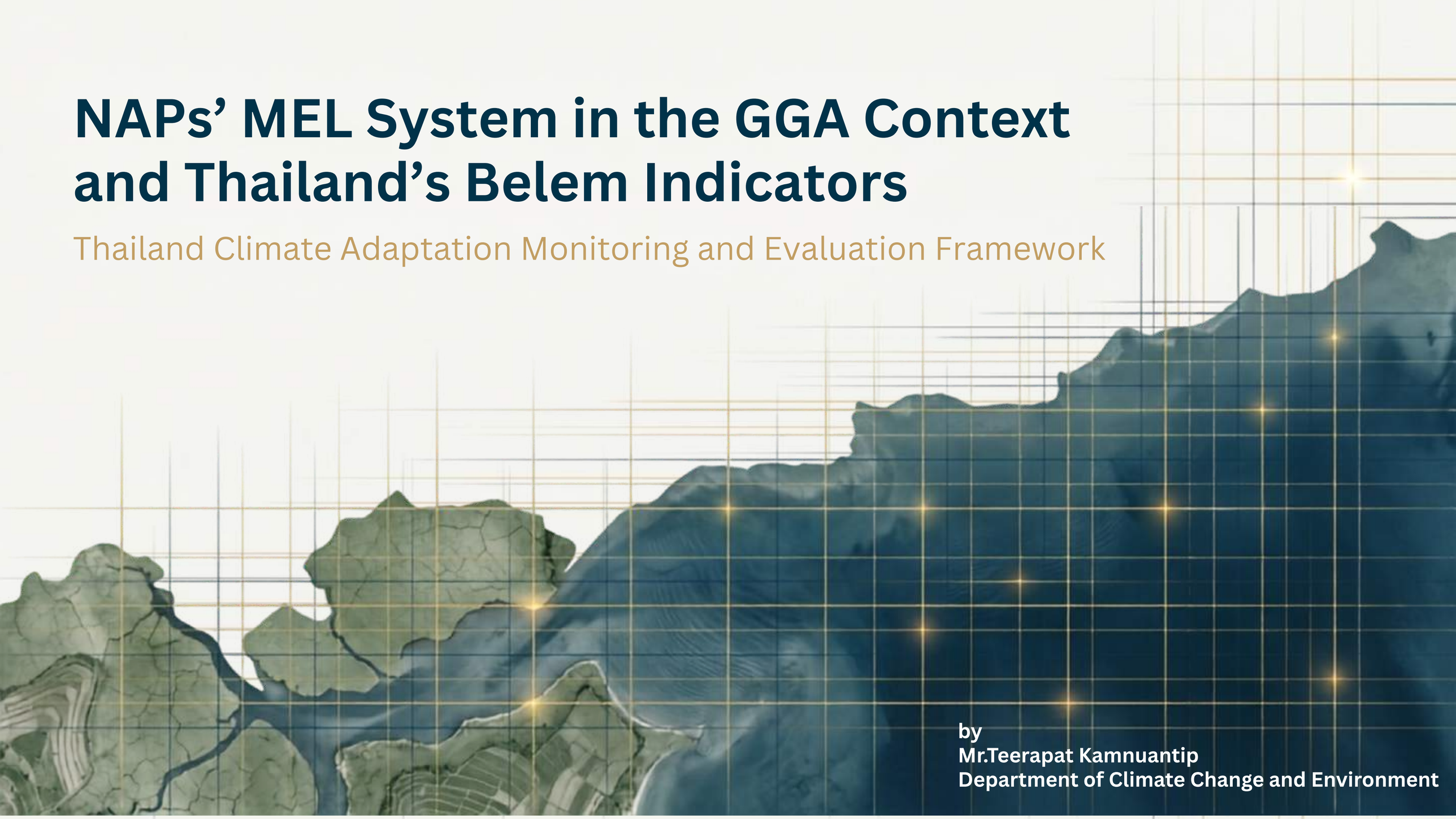
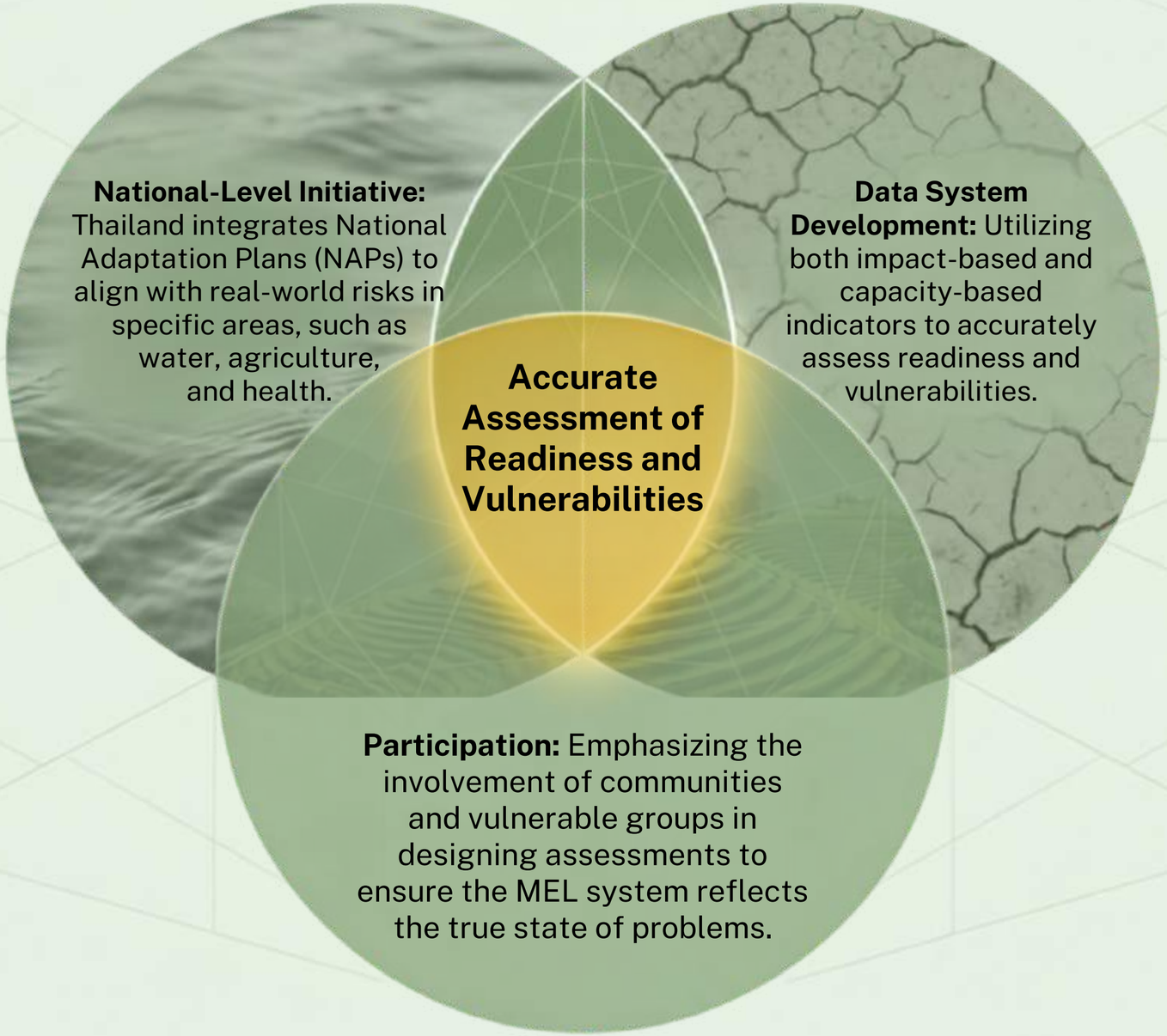
NAPs' MEL System in the GGA Context and Thailand's Belem Indicators

Thailand Climate Adaptation Monitoring and Evaluation Framework



by
Mr.Teerapat Kamnuantip
Department of Climate Change and Environment

Lessons and Implementation in Thailand



5 MEL Indicator Categories under the GGA Framework Framework

1. Establishment of National MEL Systems: Thailand is driving the development of a central database system to support global reporting through the Department of Climate Change and Environment (DCO).

2. Inclusivity & Vulnerable Groups Focus: Focusing on group-specific assessments, such as smallholder farmers in drought-prone areas and coastal communities vulnerable to rising sea levels.

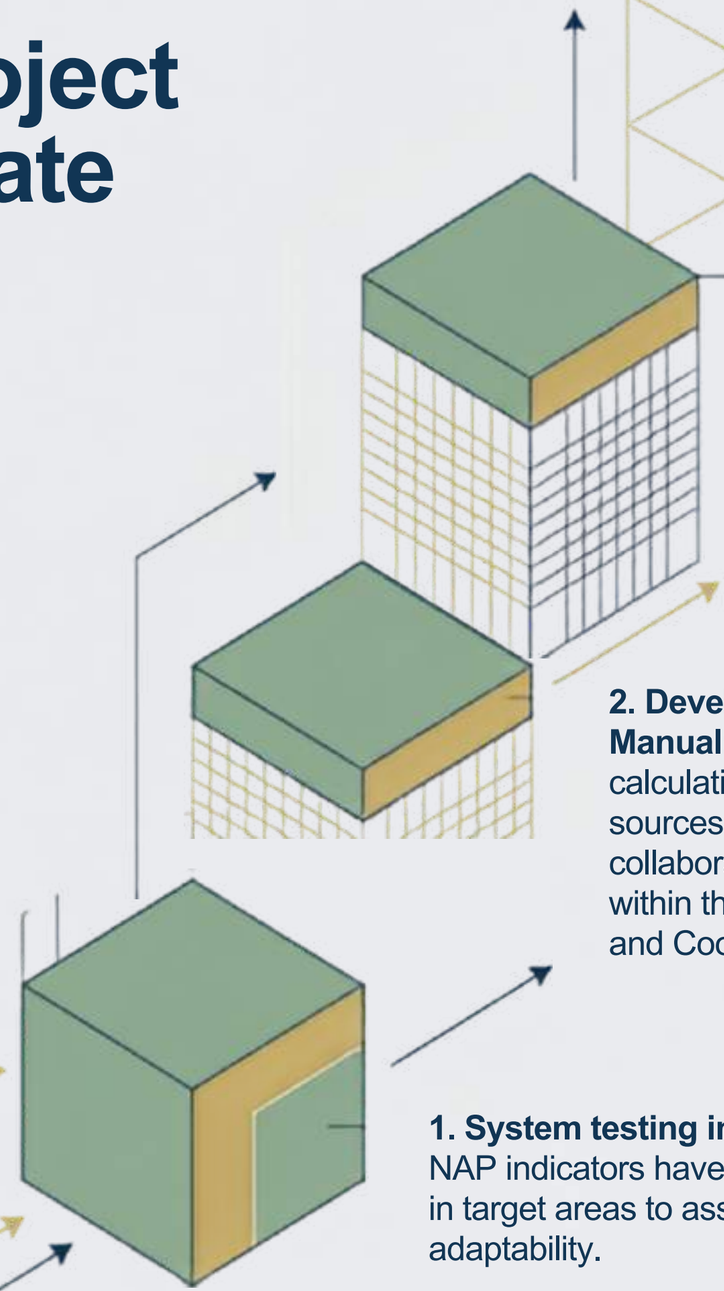
3. Outcome & Impact-Based Evaluation for Real Risk Reduction: In the Thai context, supporting tools have been developed, such as the Impact-based Index, to reflect the actual reduction in damage at the local level.

4. Feedback Loops & Policy Learning: Thailand uses this mechanism to improve targets in preparation for proposing adaptation plans in the Nationally Determined Contributions (NDCs 3.0).

5. Voluntary Global Reporting Alignment: The ability to submit Biennial Transparency Reports (BTR) or Adaptation Communications reports. The MEL system will serve as a bridge for Thailand to present credible data on the global stage, helping to attract more funding to the Climate Finance Fund.

NAP and SCALA Thailand Project and the MEL System for Climate Change Adaptation

Overview:
The advancement of the MEL system under the NAP and SCALA (Scaling up Climate Ambition on Land Use and Agriculture) projects is a significant step for Thailand, particularly in the agricultural and land sectors. This progress will enhance transparency and demonstrate tangible results on the global stage, such as at COP 31.

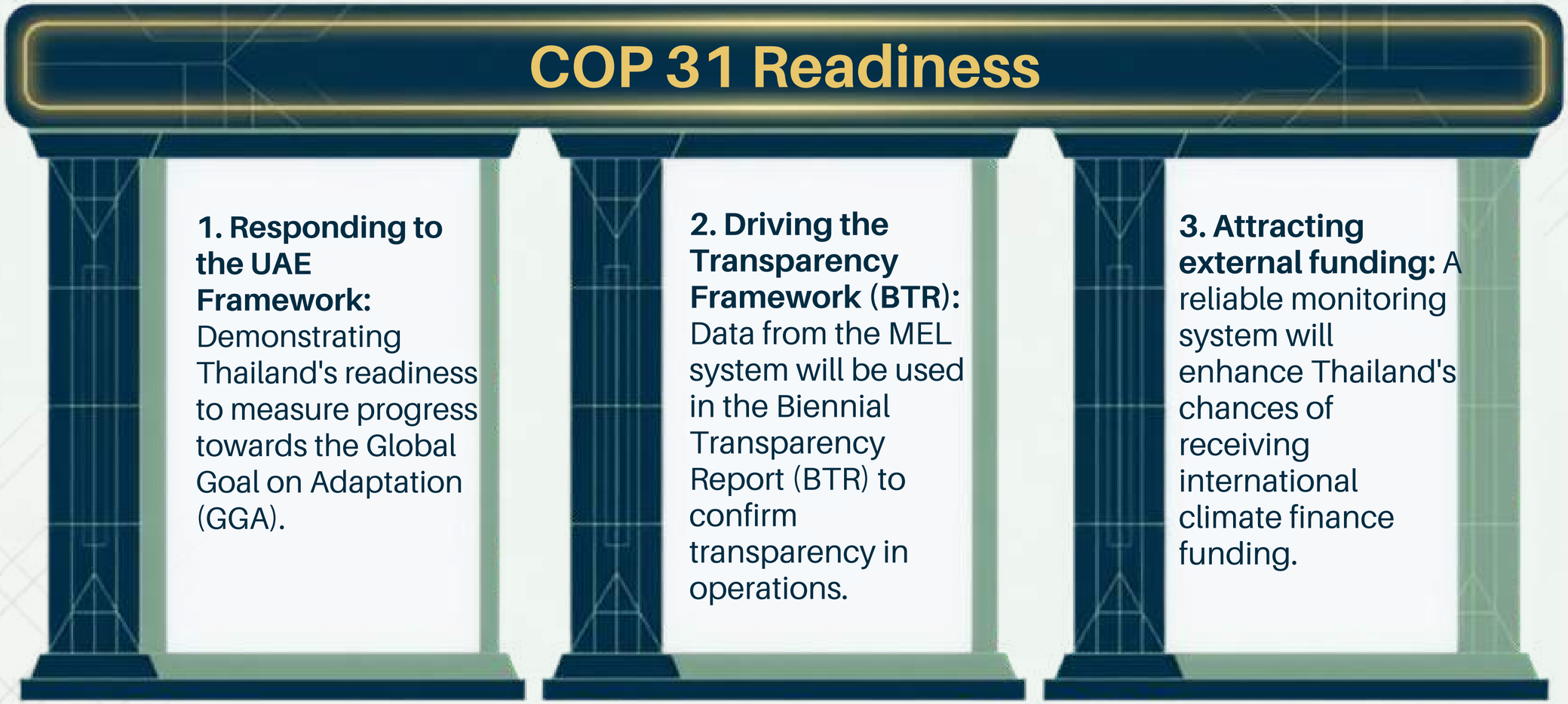


3. Capacity building: Operational staff have been trained to understand the standardized data collection and reporting system.

2. Development of a Metadata Manual: A manual specifying calculation methods and data sources has been developed in collaboration with agencies within the Ministry of Agriculture and Cooperatives.

1. System testing in pilot areas: NAP indicators have been piloted in target areas to assess farmers' adaptability.

Strategic Importance of the MEL System to COP 31

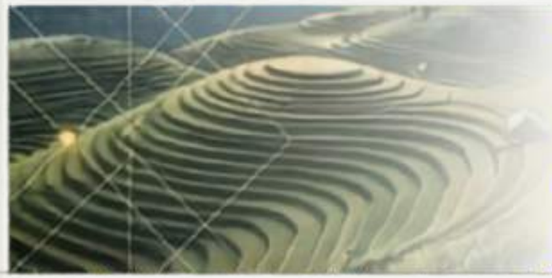


Developing a MEL within the National Adaptation Plan (NAP)

Indicator Selection Process

1. **Sectoral Participation**
   - Hold brainstorming meetings and gather input from representatives of the six key sectors.

2. **Alignment with the National Context**
   - Select indicators that reflect vulnerability reduction and resilience enhancement in line with the NAP goals.



3. **International Framework Linkage**
   - Align with global assessment frameworks such as the UAE Framework for Global Climate Resilience and the Paris Agreement.

4. **Cost-Effectiveness and Feasibility Criteria**
   - Focus on indicators that can collect realistic data and do not create duplicative burdens for implementing agencies.

Types of Indicators Included

Process Indicators

Measure the progress of policy implementation into action plans, such as integrating the NAP into provincial or local programs.

Output Indicators

Measure tangible achievements, such as the number of infrastructure improvements or the number of farmers trained.

Outcome/Impact Indicators

Measure the level of reduced vulnerability or the improved long-term adaptability of each sector.

Exploring Metadata and Data Sources

2. Primary and Secondary Data Sources

Extract data from existing databases of government agencies, such as data from the Department of Irrigation (water sector) or the Ministry of Agriculture and Cooperatives (crop sector), for continuity.

1. Metadata Survey

Clearly define the definitions, calculation methods, units of measurement, data collection frequency, and the primary responsible agency for each indicator.

3. Data Quality Verification

Assess the reliability and readiness of the dataset through the Climate Data Integration Working Group.

LEARNING FROM NAPs · MEL SYSTEMS · GGA / BELÉM INDICATORS

Building the Kyrgyz Republic's National MEL System for Adaptation

Indicator selection, indicator types, and metadata & data sourcing

Zhamilia Dairova
Chief Specialist, Climate and Environmental Policy Department
Ministry of Natural Resources, Ecology and Technical Supervision (MNRETS), Kyrgyz Republic

Stages in the selection of indicators | Typology of MEL indicators

Stage 1 Identification

An analysis of sectoral vulnerabilities, the provisions of the 2024 Adaptation Guidelines, and the priorities of the National Adaptation Plan of Action (NAPA).

Stage 2 Harmonisation

Comparison with SDG indicators, IPCC climate criteria and the Kyrgyz Republic's National Sustainable Development Strategy.

Stage 3 Consultations

Inter-departmental validation involving ministries, experts and regional bodies.

Stage 4 Statement

Recording of indicator parameters and data collection frequencies, and their formalisation within the MEL regulatory framework.

Process & Output

They assess the extent to which the planned institutional and legislative adaptation measures have been implemented.

- **Legislation** The existence of adopted legislation and regulations on climate adaptation;
- **Planning** The number of regions and local authorities that have incorporated adaptation into their development strategies;
- **Education** The number of training seminars and professional development courses held for civil servants.

Outcome & Impact

They measure the actual reduction in climate vulnerability and the increase in the resilience of systems.

- **Water Resources** The proportion of agricultural land with water-saving drip and sprinkler irrigation;
- **DRM** Reduction in material damage caused by mudslides, droughts and landslides (as a percentage of GRP compared with the base period);
- **Healthcare** Reducing morbidity among vulnerable population groups during heatwaves.

A whole-of-government, ten-step process

Indicator selection question 1 — how indicators were chosen

Interagency Working Group

National Statistics Committee
Order No. 34, 4 May 2023

The compilation of MEL data relies on inter-agency cooperation and synergy with the National Statistical Committee (NSC of the Kyrgyz Republic).

Ministry-specific statistics are supplemented by data from national and international emergency response systems.

10

national agencies represented

Environment · Energy · Water & Agriculture · Health · Emergency Situations · Hydromet · Water Resources Service · Land Cadastre · Kyrgyzgiprozem · Forest Service

1. Set up the interagency working group
2. Review international / global frameworks
3. Inventory global indicators for national availability
4. Methodological mapping of indicators
5. Draft national indicator equivalents
6. Develop methodological passports
7. Pilot calculations
8. Draft Climate Statistics Road Map
9. Prepare statistical compendium
10. Design capacity-building programme

95 indicators, spanning the whole climate chain

Indicator selection question 2, what types of indicators are included

Sectoral indicators reflect the sector-specific aspects of the climate agenda across nine sectors:

- ✓ Energy
- ✓ Water resources
- ✓ Cities and settlements
- ✓ Waste
- ✓ Industrial processes and production
- ✓ Biodiversity and forest conservation
- ✓ Disaster and emergency management
- ✓ Agriculture and irrigation
- ✓ Health

9	95	36	59
sectors covered	indicators in the national set	system-wide indicators	sector-specific indicators

By category (aligned to the Global Set of Climate Change Statistics)

25	21	18	21	10
Drivers Changes in atmospheric concentrations of greenhouse gases and aerosols, land cover and solar radiation	**Mitigation** Human intervention aimed at reducing emissions or increasing the absorption of greenhouse gases	**Impacts** The consequences of realised risks for natural and man-made systems	**Adaptation** Adapting to the actual or expected climate in order to minimise harm or capitalise on opportunities	**Vulnerability** The extent to which the system is vulnerable to the adverse effects of climate change

→

ROADMAP

A roadmap for improving climate change statistics in the Kyrgyz Republic

Cross-referenced with the Belém Indicators (adopted at CMA7, 2025)

Thematic indicators for targets 9a–9g (water, food & agriculture, health, ecosystems, infrastructure, poverty, cultural heritage)

- Adaptation-cycle indicators for targets 10a–10d (risk & vulnerability assessment, planning, implementation, MEL)

Methodological passports anchor every indicator

Indicator selection question 3 — metadata and data sources

Each indicator's methodological passport records:

- Definition & calculation formula
- Unit of measurement
- Disaggregation (sector, territory, social group)
- Data source & reporting agency
- Periodicity and update cycle

Core data providers:

National Statistics Committee · Kyrgyzhydromet · sector ministries · State Water Cadastre · MES emergency database (since 1998, linking to UN Sendai-DesInventar)

Worked example — water sector

3 of 9 Belém indicators selected for target 9(a) — water security & resilience

3(b) **Water-use efficiency**

State Water Cadastre; sector reporting

3(e) **Access to safe, climate-resilient drinking water**

National Statistics Committee, 2024 data

3(f) **Access to climate-resilient sanitation**

Drinking Water & Sanitation Dept. (est. 2025)

Where data are still insufficient (e.g. sanitation resilience), this is flagged rather than reported as a default.

From BTR2 to BTR3 a living reporting cycle

The Belém Indicators as the thread linking NAP, BTR and the Global Stocktake

BTR2 (2026)

Did the crosswalk: the Road Map's 21 national adaptation-statistics indicators were matched, sector by sector, against the Belém Indicators surfacing exactly where data are ready and where methodology work remains, as shown on the previous slide.

BTR3 (due 2028)

Moves from mapping to reporting: real trend data against these same indicators, timed to feed directly into the 2028 Global Stocktake.

Voluntary as they are, the Belém Indicators are becoming the shared reference point connecting NAP, BTR and Global Stocktake reporting for Kyrgyzstan an experience we're glad to share with other NAP countries.

1 **Coordination first**

A whole-of-government working group not one ministry is what makes indicators comparable and collectable over time.

2 **Honesty over completeness**

Where data are missing, we flag the gap and plan a methodology rather than force a number.

Thank you

Zhamilia Dairova
Chief Specialist, Climate and Environmental Policy Department
Ministry of Natural Resources, Ecology and Technical Supervision (MNRETS), Kyrgyz Republic

UNDP GLOBAL WEBINAR — LEARNING FROM NAPs: MEL SYSTEMS IN THE CONTEXT OF THE GGA AND BELÉM INDICATORS

Egypt's National Adaptation M&E System Development

Developing sectoral adaptation indicators inline with the NAP framework

Dr. Saber Osman
Assistant Minister –Head of Climate Change Central Department
Arab Republic of Egypt · Egyptian Environmental Affairs Agency- Ministry of Local Development and Environment
2 September 2026

INTRODUCTION

M&E Objectives & Relevant Initiatives

A practical, evidence-based national M&E framework, aligned with the GGA indicators in order to:

1. **Monitor and track progress of NAP implementation**
2. **Periodically evaluate the effectiveness of adaptation measures to improve the plan**

M&E RELEVANT INITIATIVES

NAP (GCF -UNDP)

Egypt's National Adaptation Plan — the overarching framework the M&E system serves: The NAP process helps Egypt build climate resilience by strengthening adaptation planning capacity, assessing climate risks, setting priorities, and integrating adaptation into national and sectoral planning, budgeting, and investment

TFSC-Egypt (AFD - UNDP)

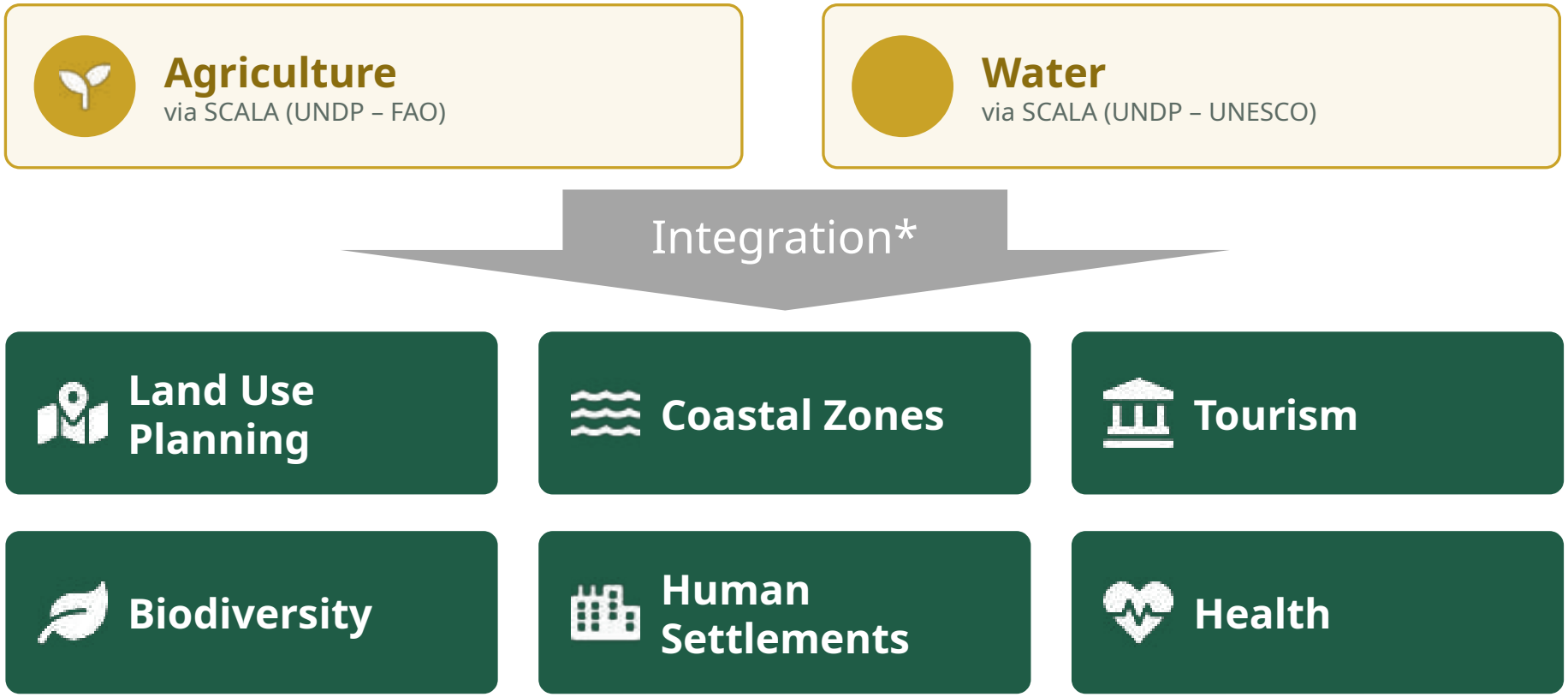
Developing an integrated M&E system for 8 sectors to support NAP: Transforming Financial Systems for Climate (TFSC) — a UNDP-Egypt project financed by the Agence Française de Développement (AFD), Implemented by Ministry of Local Development & Environment.
TFSC aims at supporting Egypt in strengthening climate governance, scale up climate related investments and aligning financial and institutional systems with the NCCS 2050 and NDC priorities.

SCALA (UNDP – FAO - UNESCO)

SCALA, UNDP / FAO / UNESCO program, supports Egypt's NAP process in the agriculture, water, and land-use sectors. It has assessed climate risks and adaptation priorities across six agriculture subsectors, established a sectoral working group to validate NAP priorities, and is partnering with UNESCO and WFP to develop a water-sector M&E framework and an early warning system for smallholder farmers.

INTRODUCTION

EIGHT TARGETED SECTORS



*Agriculture & water indicators enter at the TFSC-Integration stage and feed the unified methodological indicators' sheets for one common standard for data collection forms and indicator communication across all eight sectors.

OUR APPROACH

NAP High Level Methodology

1

Stocktaking & Readiness

Assess readiness and build the evidence base through stocktaking, institutional assessments and climate data review

2

Hazard & Exposure Mapping

Identify key climate hazards and the sectors, regions and populations most exposed to climate risk

3

Risk & Vulnerability Assessment

Conduct climate risk and vulnerability assessments to determine adaptation needs and priorities

4

Prioritisation of Measures

Prioritise adaptation measures and investments by risk reduction potential, feasibility and resilience benefits

5

NAP Development

Develop the NAP: strategic objectives, priority actions, financing and implementation arrangements

6

Mainstreaming Adaptation

Embed adaptation in national and sectoral planning, policies and budgeting for climate-resilient development

ROLE OF M&E | Tracking implementation, evaluating results, feeding evidence into planning

HOW WE DID IT

M&E Development Process, Methodology & Approach

1

Desk Review

GGA, National adaptation policies, sector strategies, existing M&E frameworks and international best practices

2

Preliminary Indicator Lists

Preliminary adaptation indicator longlists developed for each of the six TFSC-led sectors

3

Dissemination, Selection & Evaluation Tools

Indicator screening & prioritization methodology and evaluation tools disseminated to sector experts

4

Consultation & Indicator Refinement

Working groups, workshops and FGDs through H1 2026; feedback consolidated and indicators refined

5

TFSC-Integration

Agriculture (SCALA–UNDP/FAO) and water (SCALA–UNDP/UNESCO) data sheets harmonized into the integrated national system

6

Final Indicator Methodological Sheets

Unified methodological data sheets standardizing data collection and indicator communication forms

ENGAGEMENT & PARTICIPATION

A framework built with its future users

Government entities, academia, research institutions, development partners, the private sector and civil society shaped the indicators through working groups, workshops, FGDs and technical screening forms.

8

Targeted Themes

113

Experts & Stakeholders Engaged

900+

Identified Preliminary Indicators

40

Average Identified Priority Indicators per Sector

**Feedback covered indicator relevance, measurability, data availability, reporting mechanisms and institutional responsibilities — and was systematically incorporated into indicator refinement.*

WHERE WE ARE

Status: Sectors Advancing on Three Tracks

All six TFSC-led sectors completed indicator development, screening and consultation through H1 2026 — and are now progressing at different stages:

Methodological data sheets — final phase

Coastal Zones · Land Use · Health

Developing the methodological data sheets for their priority indicators. Validation workshops and meetings organized ahead of official approval of the final outputs.

Final consensus on indicator prioritization

Tourism · Human Settlements · Biodiversity

Reaching final consensus on priority indicators; methodological data sheets will be developed once prioritization is agreed.

Harmonization into the national system

Agriculture (SCALA – UNDP/FAO) · Water (SCALA – UNDP/UNESCO)

Methodological data sheets built on SCALA (UNDP - FAO – UNESCO) priority indicators are currently being harmonized into the integrated national M&E system.

LESSONS LEARNED

Challenges & Opportunities

Enablers

- NAP anchoring — a clear national framework gave every sector a shared reference point
- Cross-cutting experts (12, from 10 institutions) harmonized indicators and avoided duplication across sectors
- Sector working groups created ownership among the institutions that will run the system
- Screening methodology kept indicators tied to measurability & existing datasets
- Online workshops & FGDs enabled broad, cost-effective participation

Challenges

- Data availability & long-term datasets — uneven across sectors
- Institutional responsibilities — clarifying who collects, reports and monitors each indicator
- Uneven response rates — technical engagement varied across working groups
- Coordination load — aligning eight sectors, cross-cutting institutions and partners (SCALA – UNDP/FAO, SCALA – UNDP/UNESCO)
- Sustaining momentum from consultation into validation and operation

LOOKING AHEAD

Next Steps: Validation & Final Consensus

Approve final outputs for advanced sectors

Official approval of the validated methodological data sheets for Coastal Zones, Land Use and Health, following the validation workshops

Conclude consensus & develop remaining data sheets

Finalize indicator prioritization for Tourism, Human Settlements and Biodiversity, then develop their methodological data sheets

Complete harmonization of partner sectors

Integrate the Agriculture (SCALA – UNDP/FAO) and Water (SCALA– UNDP/UNESCO) data sheets into the unified system — one standard for data collection and indicator communication forms

Operationalize the system

Confirm institutional responsibilities for data collection, reporting and monitoring, and establish the arrangements to run the integrated national adaptation M&E framework

KEY MESSAGE

An adaptation M&E system is operational when the institutions that own the data also own the indicators.

Egypt's sector-by-sector, consultation-driven approach — nested in the NAP and aligned with the GGA indicators — is building a framework its institutions are ready to run.

Thank you | TFSC Project — UNDP Egypt

UNITED REPUBLIC OF TANZANIA

GLOBAL WEBINAR | 2 SEPTEMBER 2026

Tanzania's NAP MEL System

Country-driven indicators in the context of the GGA and Belém Indicators

Learning from NAPs: MEL Systems in the Context of the GGA and Belém Indicators

UNITED REPUBLIC OF TANZANIA

GLOBAL WEBINAR | 2 SEPTEMBER 2026

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A country-driven MEL system - Design and indicator selection

THREE TRACKING STREAMS

01 NAP process

Progress across the four LEG elements — from groundwork to implementation, reporting and review

02 Resilience projects

National long-term projects that reduce vulnerability and build resilience across priority sectors

03 Sector-specific indicators

Locally specific KPIs across 9 sectors: agriculture, livestock, water, health, tourism, wildlife, infrastructure, coastal/marine, settlements

Governance: VPO/DoE → Steering Committee → Technical Committee → Sector TWGs → LGAs

INDICATOR SELECTION PROCESS

1. **Evidence scan**
   LEG guidelines, SDGs, national policies, 2012 M&E framework, sector documents
2. **Co-design**
   Priority sectors, national/sub-national government, academia and partners
3. **Specify + test**
   Process, output and outcome indicators; results-logic, RBM and 12-component model
4. **Validate**
   Three workshops; national steering committee endorsed in Morogoro, November 2024

Selection criteria: locally specific • linked to NAP/NCCRS objectives • measurable • data-aware • harmonized with existing systems

National indicators already map to the GGA architecture

Track	Tanzania Indicator Example	Baseline → Target	UAE Framework / Belém Correspondence
NAP process	Sector-specific vulnerability assessment report in place	0 → 1	**10 (a): risk and vulnerability assessment**
NAP process	Sectoral integration report on adaptation mainstreaming	0 → 1	**10 (b): planning and mainstreaming**
Agriculture	Number of farmers adopting climate-smart practices	0 → TBD	**9 (b): climate-resilient food and agriculture**
Water / WASH	Climate-resilient WASH infrastructure developed	0 → TBD	**9 (a): resilient water and sanitation systems**
Health	Climate-sensitive disease monitoring system operational	0 → 1	**9(c): resilience to climate-related health impacts**

Indicator types

Process, output and outcome organized across five thematic areas: policy review, knowledge management, capacity building, vulnerability assessment, finance mechanism

Metadata defined

Activity/strategy, input/output KPI, baseline, target, means of verification, timeframe, resources, lead institution, status, expected outcome

Data ecosystem

Sector/LGA/research/CSO data → sector M&E QA → VPO/DoE databases → quarterly to annual analysis → reports and feedback to planning

Strategic priorities: operationalize, refine, align

1 Complete baselines and targets

Resolve TBD entries; add outcome, resilience and equity measures to complement existing output indicators

2 Formalize indicator metadata

Define formula, unit of measurement, reporting frequency, custodian institution, disaggregation requirements, QA protocol and versioning

3 Make data interoperable

Clarify ownership and access rights; standardize formats, digital storage and cross-sector data exchange protocols

4 Fund capacity and coordination

Strengthen M&E skills at all levels; embed sustainable financing for the system into national climate budgets

5 Pilot, learn and map to the voluntary Belém indicators

Operationalize the national system first; then systematically map relevant indicators to the voluntary Belém menu as metadata and methodology evolve through CMA 9 — without creating a parallel reporting burden.

Tanzania welcomes international guidance and technical support for harmonizing national NAP indicators with the GGA framework

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NATURE PLEDGE

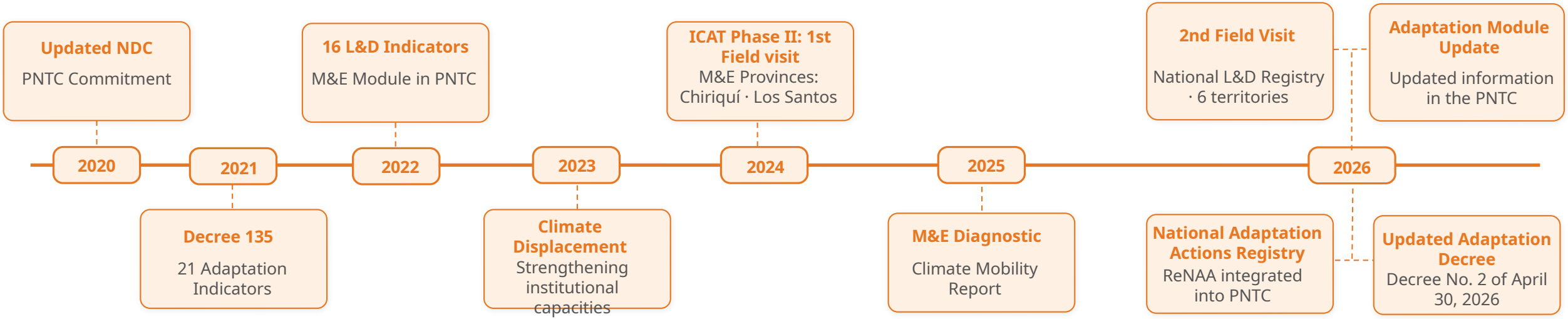
Panama's M&E System:
Climate Adaptation & Loss and Damage

The Loss & Damage system transforms invisible experiences into evidence

Departament of Adaptation & Resilience
Directorate of Climate Change DCC
Ministry of Environment - Panama

Panama's M&E System Timeline Panama and the Global Goal on Adaptation Indicators

Climate Adaptation · Loss and Damage · 2020–2026

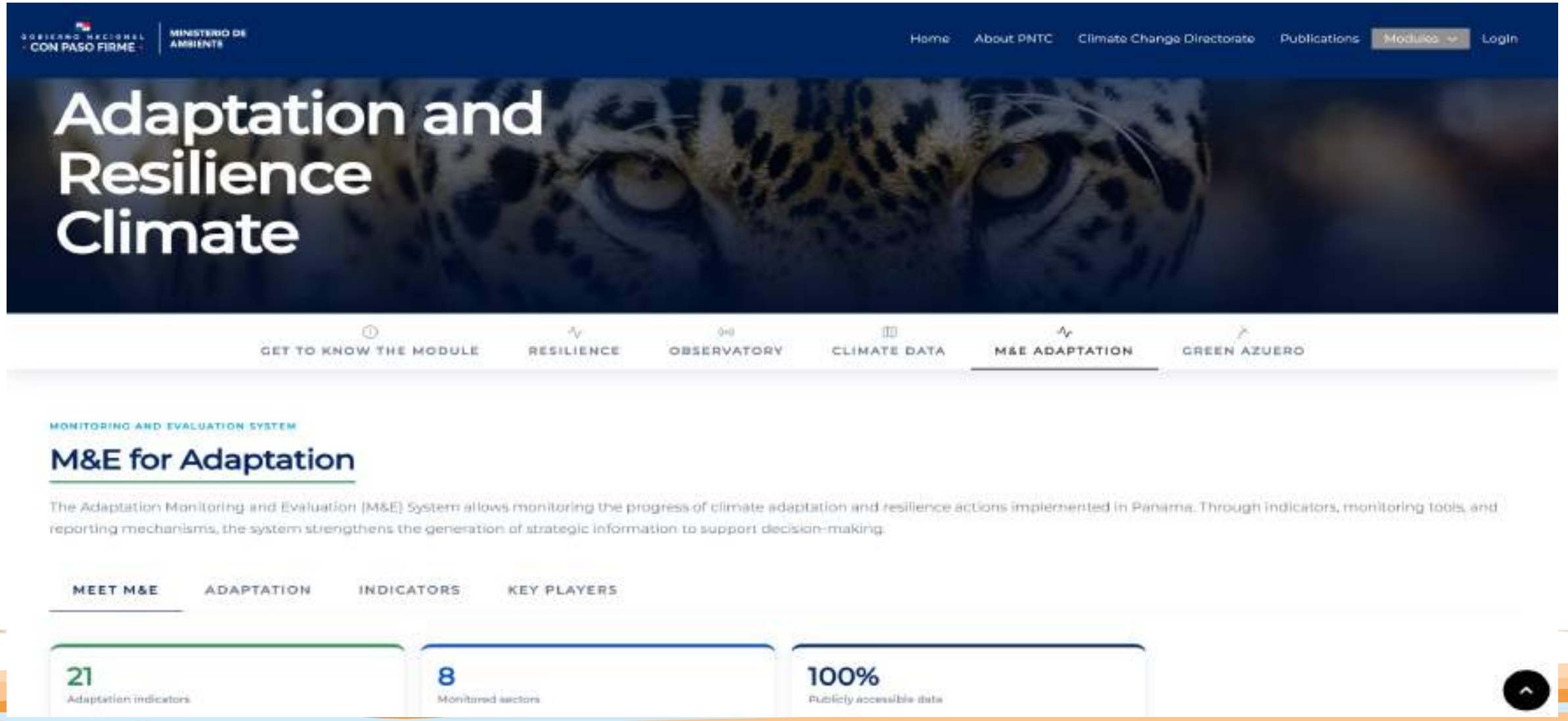


Phase I – 2021
Climate Adaptation M&E System
Adaptation Fund · Fundación Natura

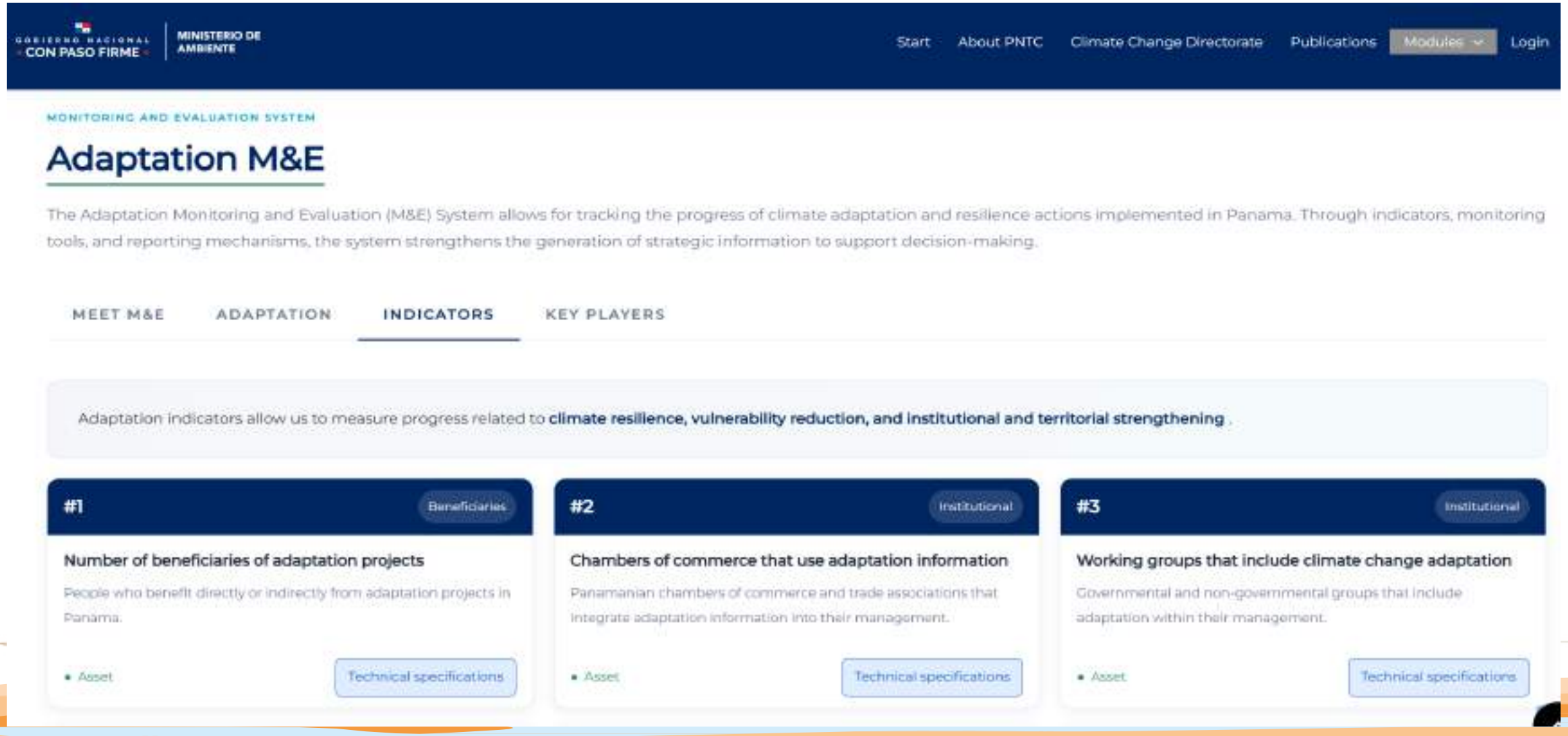
Phase II – 2022
Loss and Damage M&E System
ICAT · Fundación Natura

M&E System Strengthening – 2026
Integrated M&E System
ICAT · Fundación Natura

Updated graphic design M&E system



Updated graphic design M&E system



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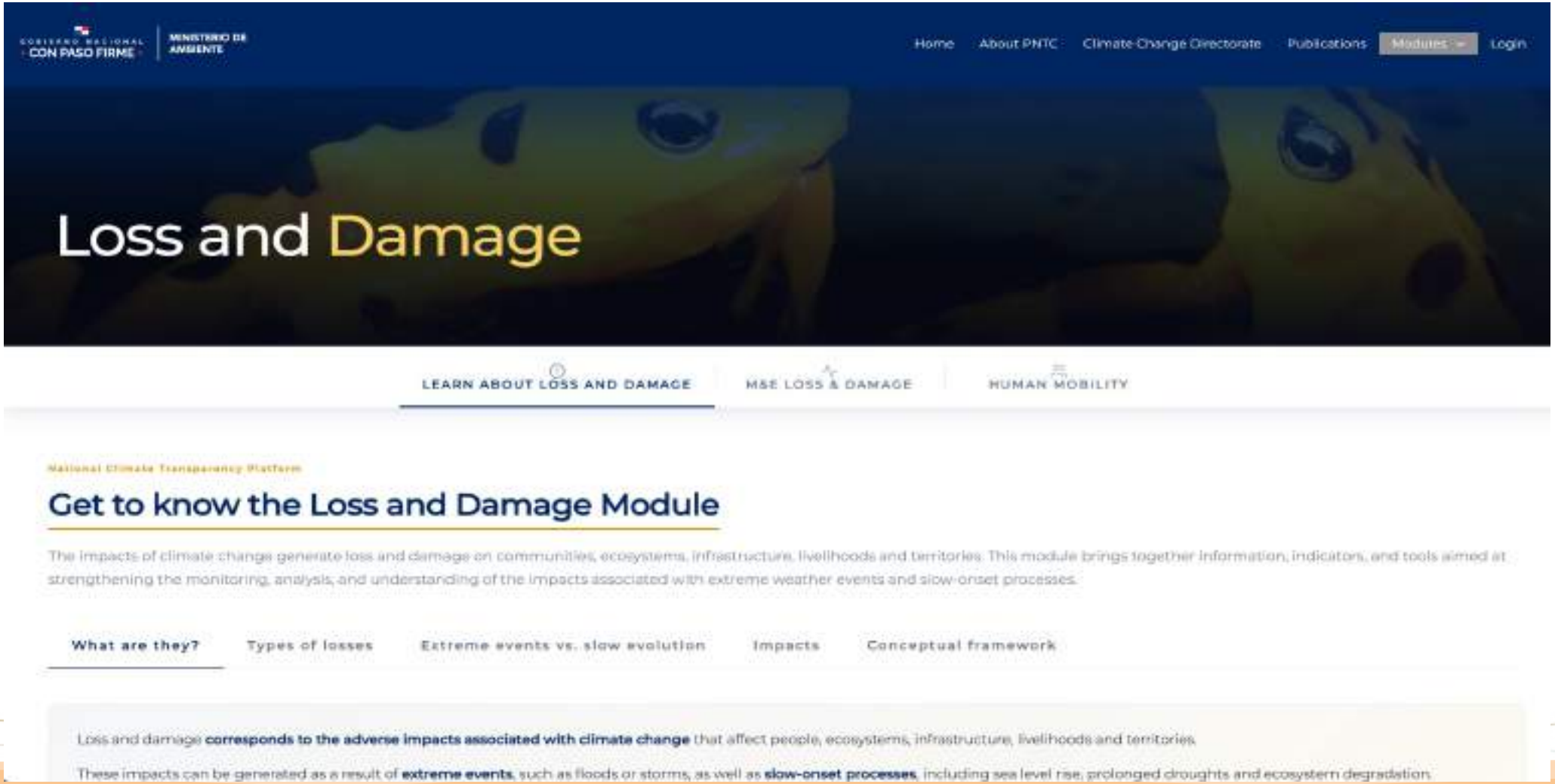

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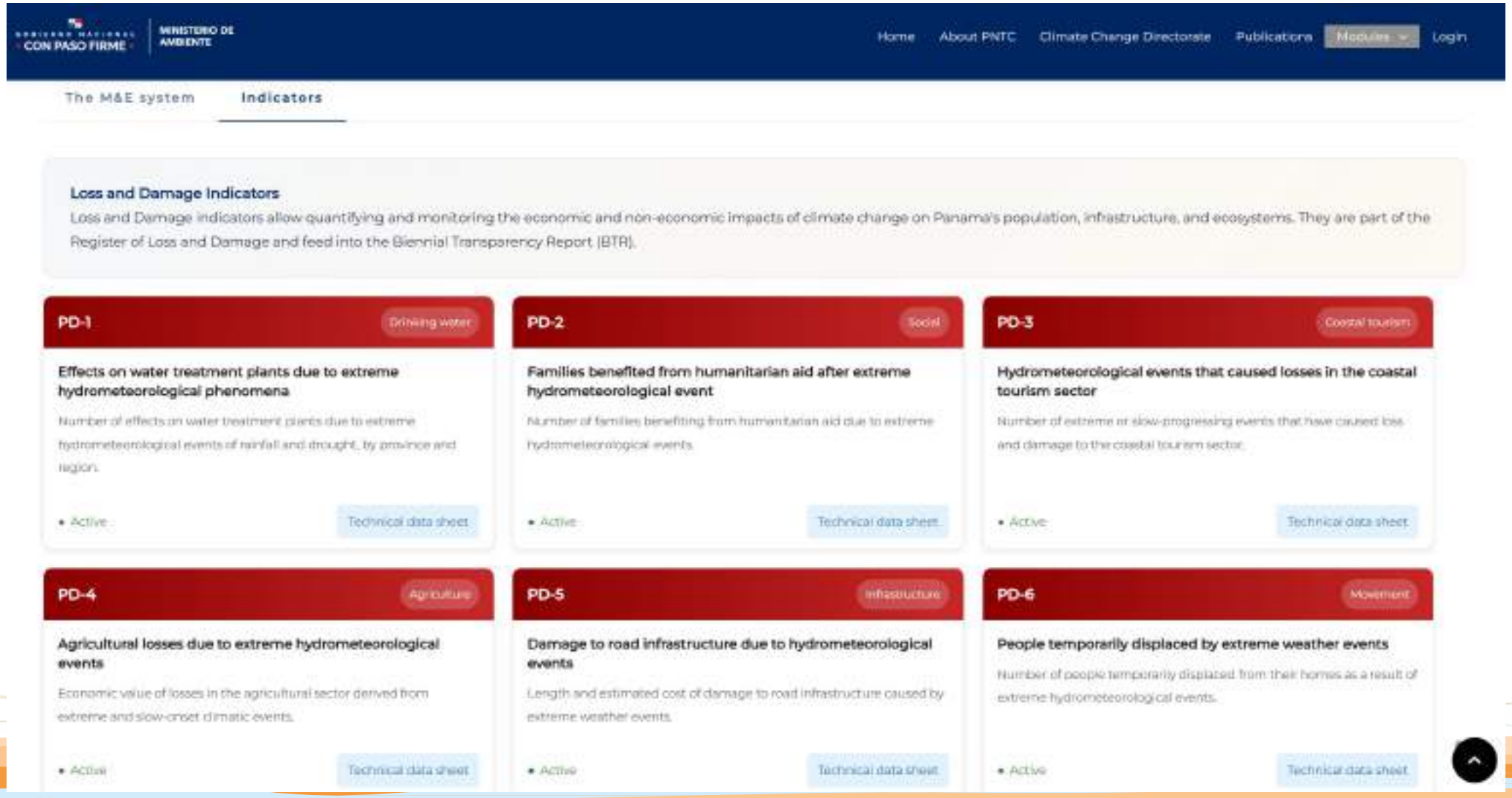

Panama and the Global Goal on Adaptation Indicators

Preliminary assessment of relevance, gaps and conditions for national operationalization

1. NATIONAL FOUNDATION

Panama already has key national frameworks and tools supporting adaptation planning and monitoring:

- National Adaptation Plan (NAP)
- Executive decree updated
- Panama Nature Pledge
  National commitments and targets on nature and resilience
- National M&E System
  37 indicators currently in place
  21 Adaptation · 16 Loss and Damage

2. GGA ASSESSMENT

Highly relevant indicators identified

The assessment identified a set of GGA indicators with high relevance to Panama and strong potential for eventual national adoption.

High relevance ≠ immediate capacity to adopt and report.

Several indicators introduce new data, methodological and institutional requirements that are not yet fully covered by the existing national M&E system.

3. WAY FORWARD

Harmonize existing frameworks
- GGA
- National M&E System
- Panama Nature Pledge
- NAP

Avoid duplication of efforts by identifying correspondences, complementarities and gaps, while promoting a common national information base serving multiple monitoring and reporting purposes.

KEY IMPLEMENTATION CHALLENGES
Inter-institutional coordination · Data & baselines · Methodologies · Interoperability · Technical capacity · Human & financial resources

Lessons Learned, Barriers and Challenges

National Climate Transparency Platform (PNTC) · M&E System

Lessons Learned

1. Digital platforms optimize the visualization of complex information, strengthening evidence-based climate decision-making.
2. Publicly accessible geospatial technologies improve the accuracy of territorial and sectoral climate change impact assessments.
3. M&E sustainability requires institutional ownership and sustained political commitment, regardless of funding cycles.

Barriers

1. Institutional technical capacities are insufficient to administer and maintain specialized climate monitoring platforms.
2. Data fragmentation and the lack of common technological standards limit the effective use of available information.
3. Staff turnover in public institutions erodes accumulated knowledge and undermines the operational continuity of the system.

Challenges

1. Build an integrated, secure and interoperable digital ecosystem to manage information on vulnerability, adaptation and loss and damage.
2. Deploy dynamic dashboards to monitor M&E system progress, results and indicators in real time.
3. Standardize data collection and reporting protocols across institutions to ensure comparability and traceability of climate information.

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¡THANK YOU!

ADAPTATION & RESILIENCE DIALOGUES

Learning from National Adaptation Plans:
MEL systems in the context of the
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Q&A

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Closing remarks

Prakash Bista
Climate Change Adaptation Specialist, UNDP

ADAPTATION & RESILIENCE DIALOGUES

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See you in the next dialogue!