NAP Technical Guidelines
Updated version May 2025

LDC Expert Group 2025

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Contents

LIST OF ABBREVIATIONS AND ACRONYMS

<to be completed>

GLOSSARY

<to be completed>

1. Introduction

1.1 Mandate to update the technical guidelines for NAPs

CMA 5 requested the LEG to update the technical guidelines for the NAP process, reflecting the provisions of decision 2/CMA.5 (global goal on adaptation) as well as the best available science, including the IPCC AR6. It also called on Parties that have not yet done so to have in place their national adaptation plans, policies and planning processes by 2025 and to have progressed in implementing them by 2030.

1.2 Background on the process to formulate and implement NAPs

COP 16 established the process to formulate and implement NAPs under the Cancun Adaptation Framework through decision 1/CP.16 to enable the LDC Parties to formulate and implement NAPs with a view to identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs; and invited other developing country Parties to employ the modalities formulated to support NAPs.

The objectives of the NAP process are to:

(a) Reduce vulnerability to the impacts of climate change by building adaptive capacity and resilience;

(b) Facilitate the integration of climate change adaptation, in a coherent manner, into relevant new and existing policies, programmes and activities, in particular development planning processes and strategies, within all relevant sectors and at different levels, as appropriate.

COP 17 requested the LEG to prepare technical guidelines for the NAP process based on the initial guidelines for the formulation of NAPs by LDCs annexed to decision 5/CP.17. The technical guidelines were developed in 2012 and have since been supplemented with resources developed by the LEG and various organizations that are relevant to the process to formulate and implement NAPs, such as tools, methodologies and guidance.

The formulation and implementation of NAPs is guided by the following principles: ensuring a continuous, progressive and iterative process that is not prescriptive; facilitating country-owned, country-driven action; following a gender-sensitive, participatory and transparent approach, taking into consideration vulnerable groups, communities and ecosystems; and being based on and guided by the best available science and traditional and Indigenous knowledge (decision 5/CP.17).

Funding related to the formulation and implementation of NAPs is provided through the GCF, the LDCF, the SCCF and other channels. COP 17 approved the governing instrument of the GCF, in which NAPs are identified among the plans to be funded by the GCF. COP 18 mandated the GEF to provide funding for activities to enable the preparation of NAPs through the LDCF for the LDCs and through the SCCF for developing countries that are not LDCs. COP 21 requested the GCF to expedite support for the LDCs and other developing country Parties for the formulation of NAPs and for the subsequent implementation of policies, projects and programmes identified therein (paragraph 46 of decision 1/CP.21).

Technical support for formulating and implementing NAPs is provided by the LEG, other constituted bodies, United Nations organizations, specialized agencies and other relevant organizations, as well as by bilateral and multilateral agencies, including through support programmes. Together with relevant organizations, the LEG created the NAP technical working group, including four subgroups, to advance its work on technical guidance and support for NAPs and to help coordinate activities across all providers of support.

1.3 Adaptation in the Paris Agreement and the global goal on adaptation

Article 7 of the Paris Agreement established the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in Article 2.

To better understand, conceptualize and ultimately achieve this goal, the countries that were signatories to the Paris Agreement (collectively, the CMA) launched the Glasgow–Sharm el-Sheikh work programme on the global goal on adaptation at 26th United Nations Climate Change Conference in Glasgow in 2021, to be carried out by the Subsidiary Body for Scientific and Technological Advice) and the Subsidiary Body for Implementation.

At CMA 4 in 2023, Parties initiated the development of a framework for the global goal on adaptation to guide the achievement of the global goal and the review of overall progress in achieving it with a view to reducing the increasing adverse impacts, risks and vulnerabilities associated with climate change, as well as to enhancing adaptation action and support.

At CMA 5 in 2024, Parties adopted the United Arab Emirates Framework for Global Climate Resilience, as part of the United Arab Emirates Consensus. The framework includes a range of thematic and dimensional targets for climate adaptation and resilience. CMA 5 also established a two-year United Arab Emirates–Belém work programme on the development of indicators for measuring progress achieved towards the targets outlined in the framework, and Parties provided guidance on the structure and modalities of the work programme at SB 60.

The NAP process is part of the evolution of adaptation under the Convention, together with the process to prepare and implement NAPAs created at COP 7 in 2001, along with the LDCF, the LEG and the LDC work programme. See figure 1 for an illustration of the evolution of adaptation under the Convention.

Figure 1. Evolution of adaptation under the UNFCCC (to be updated)

TIMELINE	KEY MILESTONES
1996 (COP 2)	National communications
2001 (COP 7)	LDC support (NAPAs, LEG, LDCF), SCCF, and Adaptation Fund
2005 (COP 11)	Nairobi work Programme
2007 (COP 13)	Bali Action Plan
2009 (COP 15)	Goal of mobilizing jointly USD 100 billion a year by 2020
2010 (COP 16)	Cancun Adaptation Framework: the process to formulate and implement national adaptation plans (NAPs) Adaptation Committee; loss and damage work programme
2011 (COP 17)	Initial guidelines for the formulation of NAPs; NAP objectives; financial and technical support; and reporting
2012 (COP 18)	Technical guidelines for the NAP process published by the LEG GEF mandated to provide funding for NAPs through LDCF and SCCF
2013 (COP 19)	Establishment of the Warsaw International Mechanism and its Executive Committee First NAP Expo held in Bonn
2014 (COP 20)	LDCs and other developing country Parties invited to submit NAPs and related outputs and outcomes of the process NAP Central launched as a repository for NAPs, and for all information pertinent to NAPs
2015 (COP 21)	Adoption of the global goal on adaptation Establishment of adaptation communications GCF establishment of readiness support for NAP formulation Submission of first NAPs (Burkina Faso, Cameroon) Commencement of annual progress reports in the process to formulate and implement NAPs
2016 (COP 22)	First adaptation communication submitted (Argentina)
2018 (COP 24)	Implementation guidelines for the Paris Agreement finalized First assessment of progress in the process to formulate and implement NAPs Compilation of gaps and needs related to the formulation and implementation of NAPs
2019 (COP 25)	Enhanced Lima work programme on gender and its gender action plan Facilitative Working Group of the Local Communities and Indigenous Peoples Platform established Establishment of the Santiago Network
2021 (COP 26)	Establishment of Glasgow-Sharm-el-Sheikh work programme on the global goal on adaptation Mandate for assessment of progress in the process to formulate and implement NAPs
2022 (COP 27)	Encouragement to double adaptation finance from 2019 levels by 2025 Establishment of Fund for responding to Loss and Damage and the funding arrangements
2023 (COP 28)	Conclusion of the first global stock take Adoption of UAE Framework for Global Climate Resilience, and the thematic and dimensional targets of the Global Goal on Adaptation Call to Parties have in place NAPs, policies, policies and planning processes by 2025 and to have progressed in implementing them by 2025LEG to update NAP technical guidelines Invitation to developed countries to share their NAPs and strategies on NAP Central Second five yearly assessment of progress in NAPs initiated 158 NDCs included an adaptation component in their NDCs
2024 (COP 29)	NCQG to support implementation of NDCs, NAPs and adaptation communications Launch of Baku to Belém Roadmap to 1.3T aiming at scaling up climate finance Mandate to establish a support programme for implementing NAPs NAPs identified as one of the channels through which the targets of the Global Goal on Adaptation can be achieved

2. Experience of the LDCs in formulating and implementing NAPs

2.1 General experiences

The process to formulate and implement NAPs has been monitored on an annual basis through reports of the LEG, including an annual progress report on NAPs. Every five years, the COP, through the Subsidiary Body for Implementation, conducts a comprehensive review of progress, which usually includes a meeting with Party experts. A second such review was due in 2024 and is planned to be completed in 2025. The LDCs also share their experience during NAP Expos, side events and workshops on NAPs. Additionally, the LEG conducted a survey of the LDCs and other developing countries in 2024 on how they have used the NAP technical guidelines. These processes and other sources have provided many insights on the experience of the LDCs, including the following:

Foundational work and progress

- The LDCs have been building institutional and technical capacity and laying the groundwork for adaptation through the preparation and implementation of NAPAs since 2001, and their experience in accessing support, conducting assessments, planning and implementation have contributed to their realization. In many cases, there is sufficient groundwork to guide the formulation of the first NAP;

Funding and the roles of the GCF

- Almost all LDCs have relied on funding from the GCF NAP Readiness Support Programme to advance the NAP process. Although in some cases it has taken countries several years to access this funding, they waited until their funding requests were approved to make tangible progress. In cases where it was not possible to access this funding, a handful of LDCs have used funding from other projects or funding sources to formulate and submit their NAP;
- The LDCs have experienced delays in accessing funding for NAP formulation from the GCF NAP Readiness Support Programme owing to many reasons, from complexity in addressing proposal template requirements or multiple cycles of questions to address before proposal approval, to challenges associated with finding a delivery partner and constraints associated with the delivery partner;
- Most LDCs have not succeeded in getting national direct access entities accredited under the GCF or the AF, resulting in the use of regional or international delivery partners, which in turn face limitations in the number of projects they can support, with some countries being unable to secure their services;
- The nature of project contracts between delivery partners and the Funds have made it difficult to introduce agility into the process and to adapt to changing parameters during the lifetime of NAP readiness projects;
- Currently, producing a NAP does not lead to automatic funding for implementation, which may have led to a lack of motivation to produce a NAP promptly. The GCF has not yet responded to the mandate to expedite support for the LDCs for the implementation of policies, projects and programmes identified in their NAPs;

Human and technical capacity constraints

- Human capacity in the LDCs is always limited; this applies to capacity for adaptation as well. In some cases, it has been a cause of delays in making progress on NAPs;
- Limited research and observational networks in the LDCs lead to data limitations in support of adaptation. This is a perpetual challenge that can only be addressed with greater investment in research and data collection over time;

Evolving understanding and roles of NAPs

- The understanding of both the NAP and the process supporting its formulation and implementation has evolved over time. There is now a firm deadline of 2025 for formulating (first) NAPs. The underlying process will continue to be iterative based on assessments, further planning, implementation and so on over time. Implementation of the NAP refers to implementation of the projects, programmes and policies identified in the NAP. Currently, NAPs are treated as resource mobilization instruments for adaptation, directly as investment plans, or with investment plans as the next step after production of the NAP and its identified priority adaptation actions;

Integration and alignment with other reports

- As a national plan, the NAP should include adaptation activities and plans at all relevant levels and scales;
- Adaptation information for a country is included in multiple other reports and documents produced by Parties to the Convention and the Paris Agreement, and there are good source of support materials to guide countries in aligning their activities and reporting on adaptation, notably in relation to alignment between NAPs, adaptation communications, NDCs, national communications and BTRs;

Global goal on adaptation

- While there are multiple entry points to adaptation assessment, planning and implementation, the recently adopted thematic targets of the global goal on adaptation offer a framework for ensuring that all key sectors identified under the Convention and the Paris Agreement are adequately covered.

2.2 What has worked in some LDCs? Lessons learned and good practices

Examples of lessons learned and good practices in formulating and implementing NAPs in the LDCs include the following:

- Countries that have explored multiple sources of support for their NAPs have managed to overcome challenges associated with core funding for the formulation of NAPs under the GCF NAP readiness support;
- Countries that have involved multiple stakeholders in the country have more ownership of the NAP across government entities, as opposed to a single ministry and/or the focal point working exclusively with the delivery partner in formulating the NAP;
- Countries that used the diverse information already available on assessments of hazards, key vulnerabilities and climate risks and options for dealing with them instead of conducting new assessments have been able to formulate a NAP quickly, with additional work being undertaken to broaden future NAP development;
- Some countries have progressed in one or several sectors and produced sectoral plans, with work under way on formulating a national NAP;
- Delinking GCF NAP readiness support from the formulation of the NAP has helped countries to produce a NAP quickly, as they avoided the delays caused by the process of accessing the readiness support and the subsequent necessary arrangements between the GCF and delivery partners before funds are disubursed;
- Having a formal mandate ensures a clear understanding of the obligations of different government entities to deliver adaptation plans, and also ensures an explicit definition of vulnerable groups so that they can be prioritized in the provision of support;
- Formal integration of climate change adaptation in national planning (e.g. through budget processes) has ensured progress in mainstreaming climate change;

- Some countries have put in place institutional structures to ensure effective access to and use of adaptation funding for formulating and implementing their NAPs such as financing strategies, national climate funds and special programmes for particular groups, hazards or themes. These are in addition to the required designated focal points or authorities to the respective entities of the Financial Mechanism.

2.3 Feedback from the LDCs and other developing countries on updating the technical guidelines

As part of the steps in updating the technical guidelines, the LEG conducted a survey of developing countries in 2024 on their experience with the original technical guidelines published in 2012 and related supplementary materials produced by various organizations since then. Responses from 29 countries showed that 86% of them have used the technical guidelines and found them useful in formulating the NAP. The following are some suggestions for the LEG to consider when updating the technical guidelines:

General suggestions

- Capacity-building and outreach on the application of the guidelines is essential and can include training, including online training, leading to certification;
- Drawing lessons from countries and sharing of their experience is a useful way to learn from others, including both positive and negative experience with adaptation planning;
- Providing an example for a specific country of an exemplary NAP based on the application of the guidelines would be a helpful learning resource;
- The application of the guidelines should be regularly monitored to help identify gaps and new topics to be addressed;
- The updated guidelines should be simple and succinct, and could be more prescriptive with less room for individual interpretation by supporting agencies and countries;
- Translation into other languages will always be beneficial;
- There are many cross-cutting issues that are important to highlight, and information can be further summarized to show how these issues are addressed across the NAP, including in relation to gender mainstreaming, mobility, Indigenous Peoples and local communities, and youth;
- Consideration should be given on how to advance NAPs for countries with special considerations, such as war- and conflict-related issues;
- There is a special need for information and lessons learned on transitioning from NAP formulation to implementation;
- There is a need to incorporate more comprehensive guidance on how to assess, address and develop strategies to manage climate-related loss and damage, which is a growing concern for many LDCs, including development of specific response and recovery plans;
- There are multiple synergies to be considered, such as between climate change and biodiversity, and between processes under the Convention and the Paris Agreement, such as adaptation communications, NDCs, long-term low-emission development strategies and BTRs.
- Although some sectors may be more important than others to include in the NAP, it would be important to include best practices and examples of all seven thematic targets under the global goal on adaptation.

Under assessment

- Methods and tools for analysing current and future climate change scenarios suitable for application in the LDCs and SIDS are needed;

- Topics for greater technical coverage include clear frameworks for undertaking climate change vulnerability assessment in terms of impacts, assessment of elements at risk, adaptive capacity assessment, determination of vulnerability indices, and development of adaptation options, detailed methodologies on the selection of adaptation options at the national and subnational levels in relation to the resource base, and status of technology in the specific country or location.

Under planning

- Planning should take into account gaps in global adaptation and regional issues;
- It is important to include in the plan the cost of implementing the NAP at the subnational and community levels and information on practical tools for appraising and ranking adaptation actions;
- The updated guidelines should guide the levels of consideration of the link between NDCs, national risk and disaster management plans and private sector involvement in implementation and financing, as well as other synergies.

Under implementation

- In addition to implementation strategies and road maps involving different financing instruments, the guidelines should include information on developing a long-term national investment and financial plan, including how to gradually and iteratively build capacity for more advanced financing approaches;
- Implementation and financing should cover all adaptation priorities and interventions prioritized in the NAP – in other words, the NAP should be implemented as a holistic programme.

Under monitoring and evaluation

- The guidelines should include high-level metrics and indicators on impacts to enable countries to monitor and assess progress towards achieving the global goal on adaptation through the NAP;
- The guidelines should promote reporting under the NAP to enable comparability and aggregation of country reports at the global level.

3. Guiding principles for adaptation

In decision 5/CP.17, paragraphs 3 and 4, the COP agreed that enhanced action on adaptation in an effective NAP process should:

- Be undertaken in accordance with the Convention;
- Follow a country-driven, gender-sensitive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems;
- Be based on and guided by the best available science and, as appropriate, traditional and Indigenous knowledge, and by gender-sensitive approaches, with a view to integrating adaptation into relevant social, economic and environmental policies and actions, where appropriate;
- Not be prescriptive, nor result in the duplication of efforts undertaken in-country, but rather facilitate country-owned, country-driven action.

Key resources to guide developing countries and implementing partners in strengthening and accounting for these considerations are listed in table 1.

Table 1. Resources developed to support consideration of the guiding principles of the NAP process

Constituted body/partner	**Resource**	**Guiding principle of focus**
LEG and AC (with the NAP Global Network)	Toolkit for a Gender-Responsive Process to Formulate and Implement National Adaptation Plans (NAPs)	Designed to support country efforts to pursue a gender-responsive NAP process
LEG	Considerations regarding vulnerable groups, communities and ecosystems in the context of the national adaptation plans	Provides technical guidance and advice to the LDCs on how to strengthen considerations regarding vulnerable groups, communities and ecosystems in climate change adaptation.
PCCB	Toolkit to assess capacity-building gaps and needs to implement the Paris Agreement	Developed to serve as a resource for developing countries and their implementing partners in assessing relevant capacity needs and determining gaps in implementing the Paris Agreement.
LEG and AC	Joint workshops, technical briefs and synthesis reports	The LEG and AC jointly organize workshops on gender mainstreaming in NAP implementation and inclusive approaches for the LDCs and vulnerable countries. Technical briefs and synthesis reports are often prepared as a result of these workshops.

4. Vision for a well-adapting country by 2030 and 2035: the future as a baseline for adaptation

The following is a vision for a well-adapting country by 2030 and 2035:

- Political will and awareness of climate change is high, leading to a prioritization of adaptation in all aspects of development and planning;
- Chronic changes (slow onset events) are being addressed, with measurable benefits in reducing vulnerability and enhancing resilience (across all thematic targets of the global goal on adaptation), without impacting development trajectories;
- Countries are responding to climate change along the full spectrum of actions needed to build resilience and reduce disaster risk, managing impacts by optimizing pre-emptive, contingency actions and actions to address loss (see figures 2 and 3 below);
- Financing needs for adaptation are being met at scale through a wide range of sources, without increasing indebtedness;
- Climate change adaptation considerations are well integrated into planning and development activities and institutions are operating to support climate change adaptation at all levels of government;
- Efforts to address climate change adaptation are well coordinated and aligned between different actors, leading to a coherent and complementary approach to adaptation;
- Climate risk is well understood and measured, and is informing investment decisions including in credit ratings;

- Technical capacity to deal with climate change is high, covering all aspects such as assessment, planning and implementation, including specific steps related to access to and absorption of adaptation finance;
- The adaptation needs of particularly vulnerable groups, communities and ecosystems are effectively addressed, including through targeted programmes, where appropriate;
- Adaptation efforts are socially inclusive and equitable, prioritizing the needs, involvement and leadership of vulnerable communities, with attention given to gender-responsiveness, the inclusion of local and Indigenous stakeholders, and local communities, among others;
- The capacity of the country is increasing over time in several aspects relating to the formulation and implementation of NAPs, such as in relation to readiness and capacity to engage in and catalyse additional and more advanced and diverse financing instruments and modalities (see figure 4).

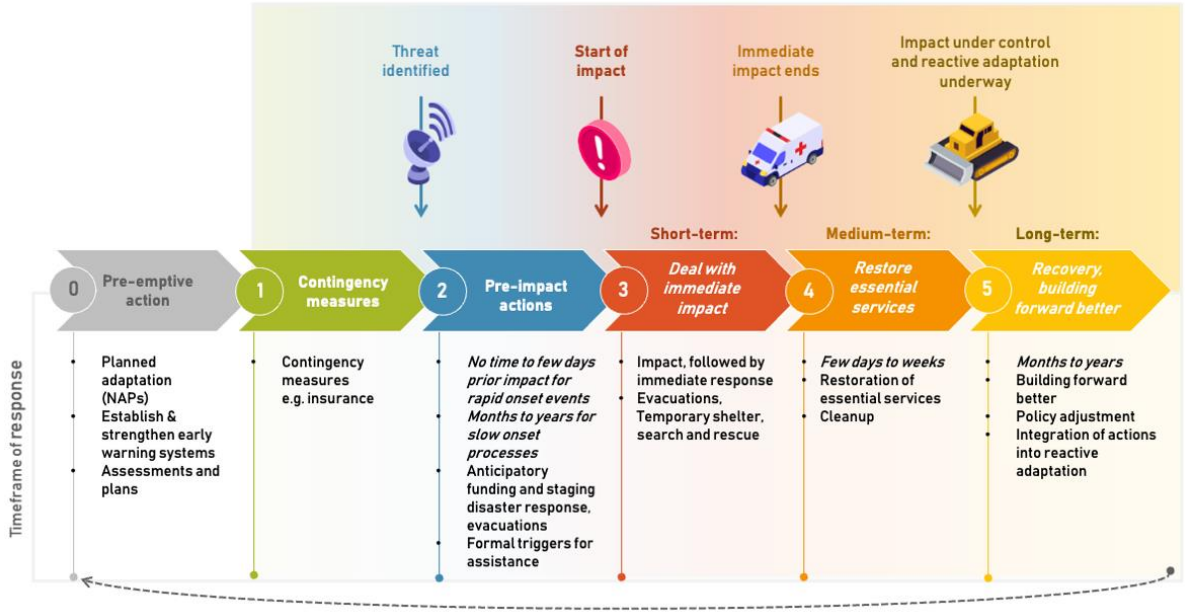

Figure 2. Framing of the spectrum of actions in responding to climate impacts (for time-bound impacts) (source: UNFCCC 2023)

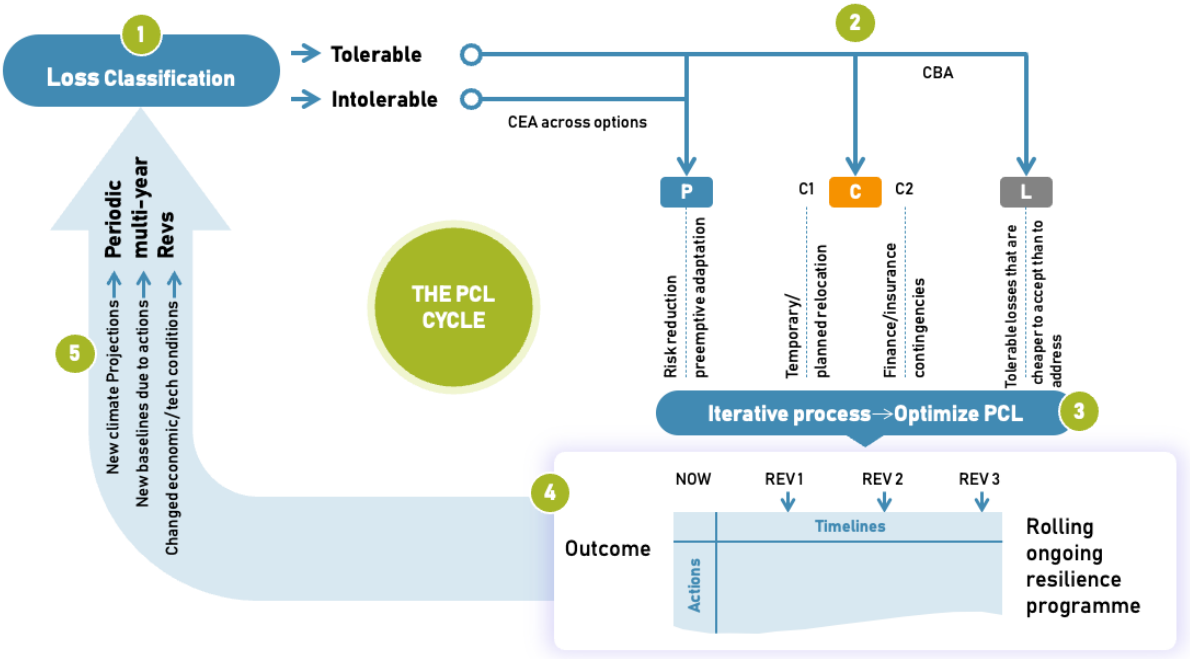

Figure 3. Methods in optimizing the response to climate impacts along the pre-emptive - contingency -loss cycle (Source: Nassef, 1999)

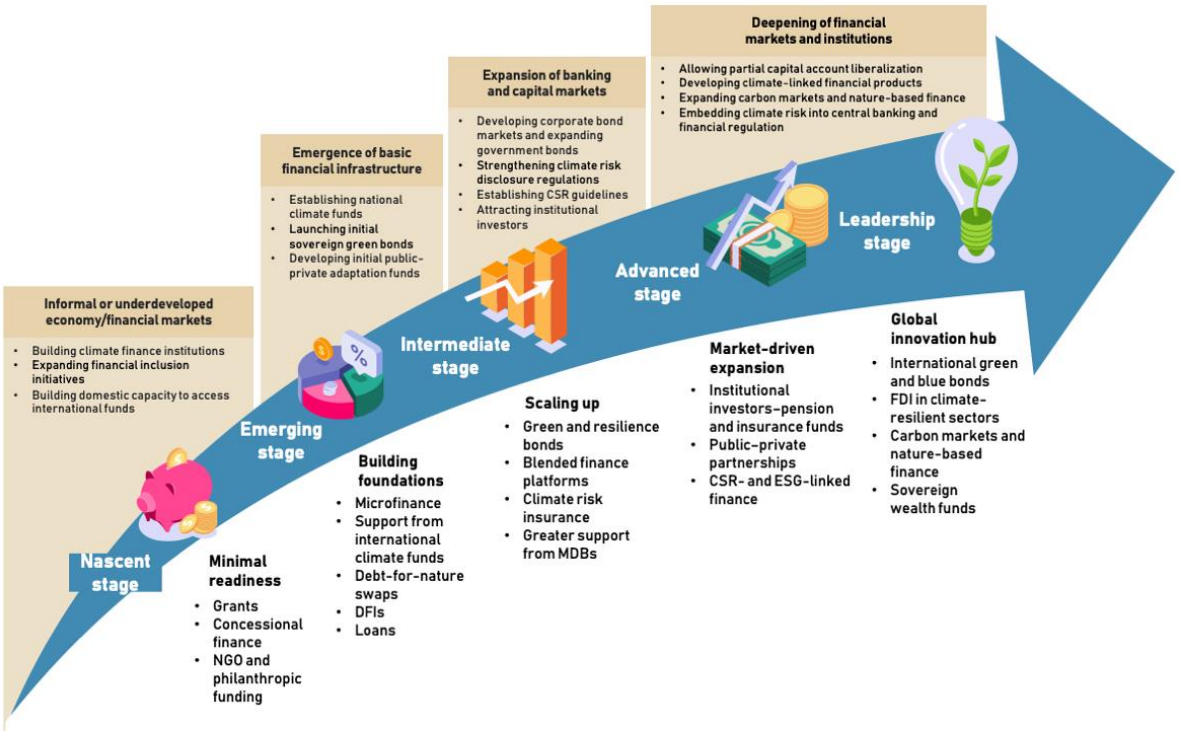

Figure 4. Gradual progression in capacity to engage in and catalyse increasingly complex and innovative financing instruments and modalities

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Box 1. Why adapt? A non-exhaustive list of specific benefits and values of adaptation activities

Below is a non-exhaustive list of benefits of adapting to climate change, listed in no particular order. Each one points to a type of intervention and suggests a funding/financing source and modality for measurement to facilitate decision-making.

1. **Safeguarding lives, livelihoods and heritage:** Protects human life, biodiversity, ecosystems and cultural heritage from permanent loss or degradation.
   - Nepal's preservation of cultural heritage against climate risks: protecting Kathmandu's historical sites saved over USD 50 million annually in income from tourism.
   - The Nigeria Erosion and Watershed Management Project (NEWMAP) restored gully sites and built nearly 60 catchments, improving the well-being and safety of over 12 million people across 23 states in Nigeria.
2. **Mitigating extreme climate impacts:** Shields populations from severe climate events, such as heatwaves, floods, droughts and storms.
   - The Republic of Korea's heatwave adaptation policies: smart cooling strategies prevented USD 1 billion in healthcare costs and heat-related productivity losses.
   - The Bee Branch Creek Restoration project in the US: the restoration has been proven to manage flash flooding from the Mississippi River, protecting over 1,100 properties and preventing **$**11.6 million in damages.
3. **Avoiding disaster recovery costs:** Lowers the economic burden of rebuilding after climate-related disasters by investing in proactive adaptation measures.
   - Japan's disaster preparedness for typhoons: each USD 1 invested in Japan's early warning system saved USD 7 in post-disaster relief and infrastructure repairs.
4. **Strengthening early warning and preparedness:** Enhances forecasting systems, anticipatory financing and rapid response capabilities to mitigate climate hazards.
   - Mozambique's early warning system: by strengthening EWS through a World Bank program, Mozambique issued warnings for at risk communities ahead of Cyclone Freddy, and economic damages were significant lower compared to the previous Cyclone Idai, with an estimated 83% reduction.
   - India's cyclone early warning system: over 1,000 lives were saved and USD200 million in economic losses prevented during Cyclone Phailin in 2013.
5. **Enhancing capacity to cope with new/future climate shocks:** Strengthens the ability of communities, ecosystems and economies to withstand and recover from climate-related shocks.
   - Viet Nam's coastal mangrove restoration: USD 1 million investment in mangroves saved USD 7.3 million annually in avoided flood damage.
6. **Promoting social equity:** Targets support for the most vulnerable (e.g. women, children, the poor) and encourages inclusive decision-making and locally led solutions.
   - Introduction of eco-stoves in indigenous communities reduced reliance on fuelwood, empowering indigenous women in Brazil and improving their health.
7. **Attracting investment and reducing risk:** Countries that manage climate risks effectively can lower their risk ratings, making them more attractive to major investors and lenders.
   - Chile issued a $1.4 billion green bond, attracting investors and funding projects in agriculture and biodiversity protection.
   - Indonesia's green bonds and climate risk reduction: its USD 1.25 billion green sukuk bond attracted investors owing to strong climate risk management.
8. **Managing climate risks through insurance and transfers:** Helps protect production, infrastructure and property by distributing risk across financial mechanisms.

- India's crop insurance scheme (PMFBY): Farmers insured under PMFBY saved up to 25% of income losses during drought years;
- Sovereign insurance schemes through regional risk facilities in Africa, the Caribbean and the Pacific.

9. **Driving economic transformation:** Fosters new industries and productive capacities that align with climate-resilient development.
   - China's green infrastructure investment: adaptation-linked investments in green cities created 1.5 million jobs and generated USD 100 billion in economic activity;
   - Ethiopia's "Green Legacy Initiative": the project has already planted 25 billion seedlings throughout the nation, contributing to environmental protection, restoration of degraded natural resources and the creation of more than 767,000 jobs, mostly for women and youth.
10. **Creating growth opportunities:** Generates economic benefits by fostering innovation and investment in climate-adaptive sectors.
    - Viet Nam's shift to climate-smart agriculture: climate-resilient rice farming improved export revenue by USD 3 billion annually.
11. **Integrating climate resilience into development planning:** Ensures that infrastructure, urban planning and policies are designed to withstand future climate risks.
    - Japan's earthquake and flood-resistant infrastructure: investing 5% more in climate-proofing buildings extended asset lifespan by 20 years or more and saved 40% in reconstruction costs.
12. **Restoring and protecting ecosystems:** Supports rehabilitation and conservation efforts to maintain critical ecosystem services and biodiversity.
    - Pakistan's Ten Billion Tree Tsunami project: the project is expected to generate USD 120 million in ecosystem benefits annually.
    - Bolivia's Conservation efforts: Fundación Natura has succeeded in conserving a little more than 1.48 million acres across 80 municipalities in Bolivia with the participation of 24,000 farmers.
13. **Enhancing policy effectiveness:** Strengthens sustainable resource management and governance to mitigate climate risks.
    - Thailand's water management policies: better irrigation policies reduced drought-related GDP losses by USD 500 million per year.
14. **Reducing climate-driven migration**: Helps minimize forced migration from vulnerable regions by improving local resilience and economic stability.
    - Bangladesh's adaptation in coastal villages: community-led adaptation (embankments, climate-smart farming) reduced climate-induced migration by 30%.
    - Panama's planned relocation of the Guna people: The Guna community on Gardi Sugdub Island is relocating to the mainland due to increased flooding from sea-level rise. This planned move, supported by the government, aims to provide safer living conditions and prevent forced displacement.
15. **Preventing internal displacement:** Reduces both forced and planned relocations within countries, cutting associated costs and social disruption.
    - Brazil's Adaptive Social Protection system: the Bolsa Família program accelerated cash transfers to support families affected by climate-induced floods in 2024, reducing displacement. The government initiated a USD 1,000 reconstruction aid per family targeting those displaced by the heavy rains. Shifting to digital payments has also been key to increasing resilience to shocks.
    - China's Sponge Cities programme (urban flood resilience): flood adaptation measures in 30 cities prevented the displacement of 1 million people, saving billions in resettlement costs.
16. **Indirect private sector benefits:** Government-led disaster risk reduction and adaptation initiatives create indirect benefits for businesses and stakeholders.

- Malaysia's climate-resilient business incentives: Government incentives for businesses investing in resilience led to USD 2 billion in private sector adaptation funding.
- AI-driven irrigation in Latin America: Kilimo, a company founded in 2014, provides farmers from Argentina, Brazil, Chile, Guatemala, Mexico, Peru and Uruguay with data-based tools to optimize their irrigation and water management, saving 72m cubic meters in two years. This technology has attracted investment from the private sector.

17. **Indirect benefits from transboundary adaptation efforts:** Countries can benefit from climate-resilience investments made in neighbouring regions, reducing shared risks.
    - Mekong River Basin regional cooperation: joint adaptation efforts among Cambodia, the Lao People's Democratic Republic and Viet Nam reduced regional flood risks by 30%, avoiding USD 2 billion in damage.
18. **Leveraging 'virtual water' strategies:** Countries can offset local water scarcity by importing water-intensive products or engaging in agricultural production abroad.
    - The United Arab Emirates' foreign agricultural investments (in Asia and Africa): investments in foreign farmland saved billions of cubic metrs of water, reducing food import costs.

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5. Key design considerations for the updated NAP technical guidelines

5.1 General

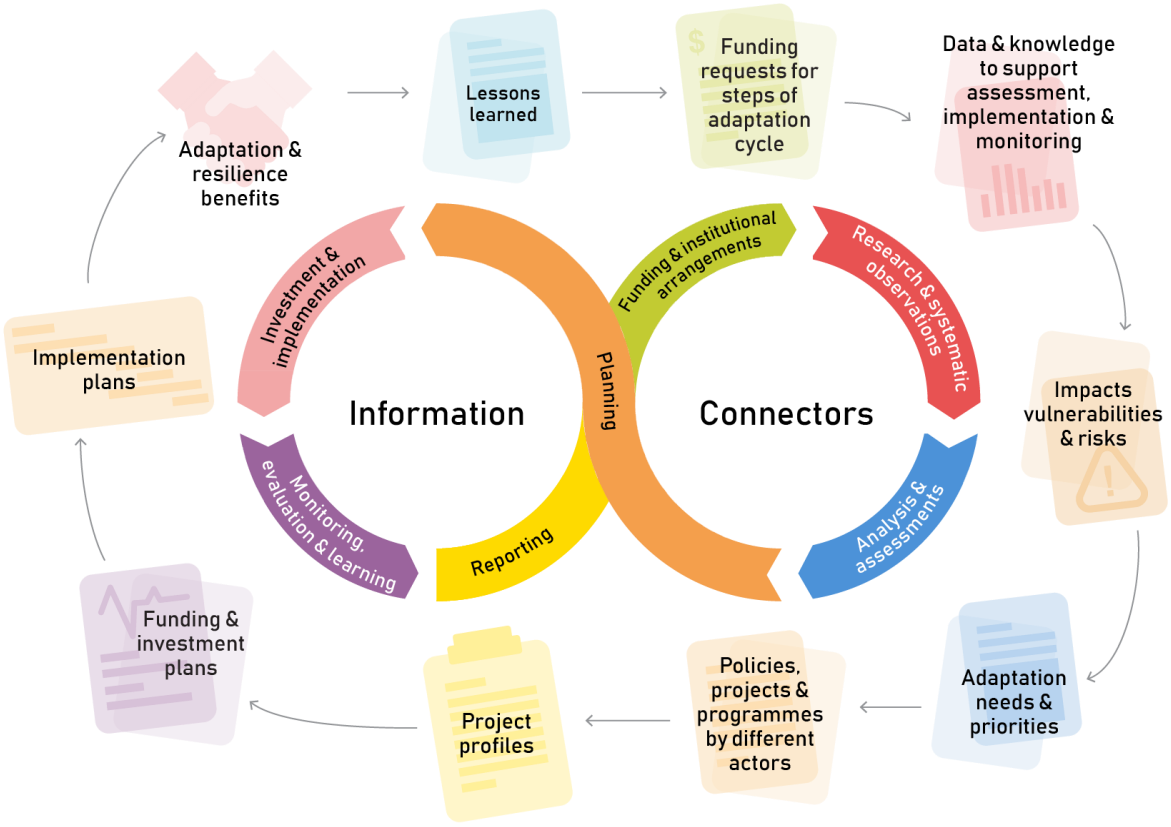


Figure 5. Key data and information assembled under key steps of the adaptation cycle and used in subsequent steps, showing a focus on information to support decision-making and implementation, rather than technical methodologies under each step

The following considerations were taken into account in updating the NAP technical guidelines:

1. **The NAP as a strategy and policy anchor**
   The NAP should serve as the primary national strategy and policy for adaptation, risk management and climate resilience. It defines the vision, goals and objectives for the country and provides a national mandate to guide and coordinate all adaptation efforts. It also promotes national leadership and governance of adaptation efforts at all levels, serving as a convenor of multiple and diverse stakeholders at the national and global level to co-produce solutions and interventions that make sense from a multisectoral perspective (economic, environmental, health and social well-being), and as the main interface with regional and international mechanisms.
2. **Coherent and inclusive adaptation response involving all stakeholders**
   The NAP should serve as an umbrella plan that integrates various subnational and sectoral strategies, through which action plans, programmes and policies are developed to address prioritized adaptation needs. It also supports transformational adaptation and ensures coherence with national development priorities, building on robust stakeholder engagement and taking into consideration guiding principles of adaptation.
3. **Framing the NAP with the global goal on adaptation**
   The thematic and dimensional targets of the global goal on adaptation provide the framing for

adaptation approaches and actions, offering an approach that distributed among various entities/sectors/elements during assessment, planning and implementation. This supports a shift towards implementation without long delays in new assessments and aligns adaptation with broader agendas such as the SDGs, the Sendai Framework for Disaster Risk Reduction 2015–2030, the Kunming–Montreal Global Biodiversity Framework, the Land Degradation Neutrality initiative and the New Urban Agenda framework. The NAPs serve as important channels via which the targets of the global goal on adaptation can be achieved.

4. **The NAP is evidence-based and inclusive, with a focus on vulnerable groups, communities and ecosystems**
   The NAP is evidence-based, drawing on the best available science, innovation and technology, as well as Indigenous and traditional knowledge to justify investment decisions during its implementation. It is designed on principles of inclusion, equity and gender sensitivity, and prioritizes the needs of vulnerable groups, communities and ecosystems, with a focus on local context, ensuring that social and cultural differences are taken into account.
5. **Risk and vulnerability assessment using IPCC AR6 framing**
   The NAP outlines climate hazards, vulnerabilities and risks using the latest science from the IPCC AR6. It prioritizes key risks across sectors, communities and regions, providing baseline data and guiding risk-informed planning, resilience-building and transformation.
6. **Adaptation planning for the medium and long term**
   Adaptation planning should consider plausible future climate scenarios aligned with the goal of limiting the global average temperature increase (to 1.5 °C/2 °C), using shared socioeconomic pathways and integrating compound and transboundary risks across sectors, time frames, and geographies.
7. **Resource mobilization and financing**
   The NAP must evolve into a resource mobilization plan, aligning with the financing modalities of diverse public, private, international and domestic sources. It should be designed to attract and manage adaptation financing at scale.
8. **Policy coherence and integration**
   The NAP provides guidance for integrating adaptation into national and sectoral development policies, ensuring coherence across economic growth, poverty reduction, sustainable development and climate resilience goals. It supports effective decision-making and planning at all levels of governance.
9. **Legal and institutional support**
   Updated guidelines should help countries to design supportive legal and institutional frameworks. The NAP offers clarity on institutional roles, responsibilities and interministerial coordination to ensure long-term adaptation governance.
10. **Capacity-building and public engagement**
    The NAP should identify gaps and promote targeted capacity-building and awareness programmes. This includes education, training, stakeholder engagement and knowledge dissemination to enhance adaptive capacity across society.
11. **Monitoring, evaluation and reporting**
    The NAP establishes systems for tracking progress, assessing effectiveness and informing adaptation communications. It supports learning loops and iterative updates to adaptation strategies, and increasingly includes reporting related to loss and damage.
12. **Maintaining and strengthening the NAP process**
    Many countries already have the NAP process in place. The updated guidelines should focus on maintaining momentum, scaling up efforts and institutionalizing NAP-related functions, rather than redoing initial groundwork.
13. **The NAP as a comprehensive data source**
    The NAP should become a rich data source on how countries are addressing climate risk, supporting transparency, accountability and knowledge exchange. It should encompass the full resilience continuum from early warning systems to recovery.
14. **Support for multilateral and regional coherence**
    The NAP should align with and contribute to multilateral and regional agendas, such as the SDGs, the Sendai Framework for Disaster Risk Reduction 2015–2030, the Kunming–Montreal Global

Biodiversity Framework, United Nations Convention to Combat Desertification and the United Nations Convention on Biological Diversity. It should promote principles such as gender responsiveness, Indigenous Peoples' rights and youth inclusion.

15. **Urgency and transformation**
    Given the increasing impacts of climate change, NAPs should be focused on providing an urgent response to the increasing impacts of climate change. Updated guidelines should help countries to design measures that incorporate transformational change and response to loss and damage.

5.2 Use of the IPCC WGII AR6 results: the fusion of vulnerability and risk assessments and their management

The contribution of WGII to the IPCC AR6 presents a comprehensive framework for understanding and assessing climate risk, moving beyond traditional concepts of vulnerability. It considers risk in the context of climate change impacts as arising from the dynamic interplay between climate-related hazards, the exposure of affected human or ecological systems, and their vulnerability. Additionally, it considers risk in the context of climate responses, recognizing that risks may also emerge when responses fail to achieve their intended objectives or produce unintended trade-offs or adverse side effects. <<to be expanded>>

5.3 Practical considerations in applying the IPCC WGII AR6 framing

- Adaptation is complex, over space, time, policy and many other facets. It therefore requires efforts to recognize the interlinkages and interdependencies between these facets, although adaptation actions will focus on a small window/section of that complexity.
- Adaptation assessment, planning and implementation have multiple entry points, and if done properly and comprehensively the overall end result should be similar.
- Adaptation spans biophysical and human systems and, as such, stakeholder participation in defining criteria for choices made is critical in satisfying their perception of successful adaptation.
- Adaptation is interlinked with development, and its goals are intermingled with those of other agendas. Since there is no optimal pathway to achieve all these goals, stakeholder participation is key in defining success criteria.
- Adaptation is defined and approached from overlapping and complementary entry points, spanning concepts including exposure/hazards, vulnerability, risk, resilience and transformation. The entry point used depends on the context.
- Different actors have evolved their own frameworks for adaptation to govern all stages of the adaptation cycle, leading to silos and a lack of coherence.
- The IPCC provides a global consensus view of how to frame and summarize adaptation, and the AR6 framing of risk and associated approaches to synthesizing risk (key and representative risks and reasons for concern) should provide the basis for a common/shared approach going forward.

5.4 Unpacking the targets of the global goal on adaptation in paragraphs 9 and 10 of decision 2/CMA.5 in new NAPs

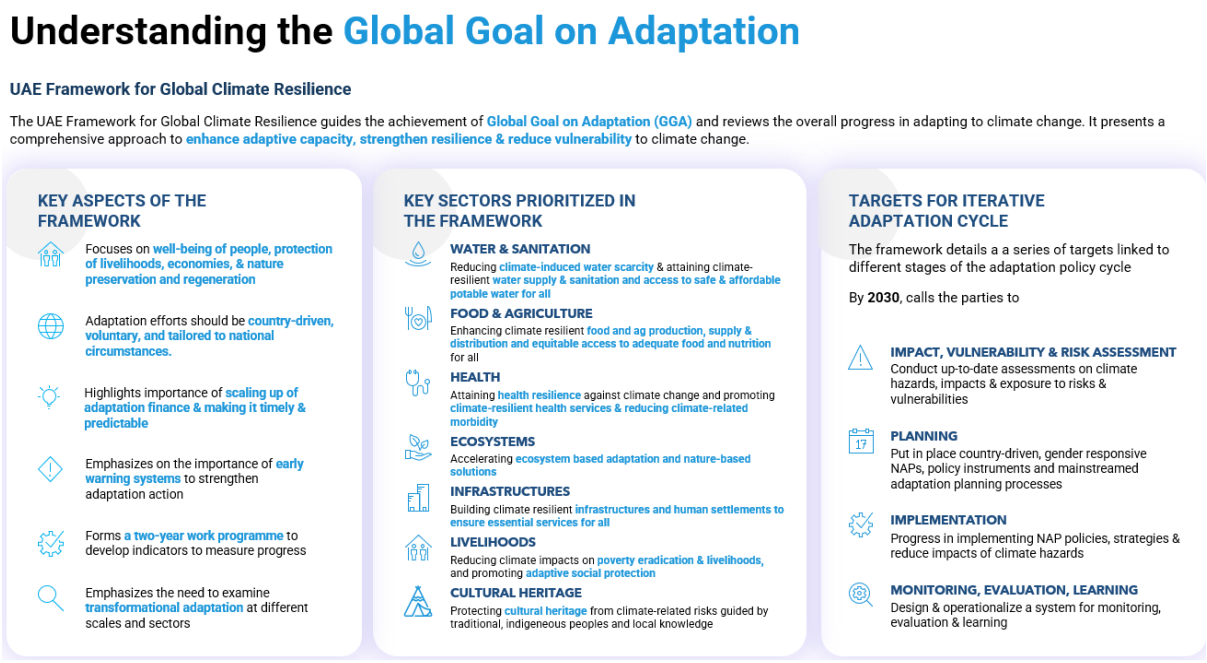


Figure 6. A summary of the key features of the UAE Framework for Global Climate Resilience

The following are main components of the seven GGA thematic targets (based on paragraph 9 of decision 2/CMA.5). These component targets can be viewed as areas that can be the basis for assessment and exploration of adaptation actions, either individually, or as a compound systems (nexus) including components from other GGA thematic areas.

1. **Climate-Resilient Water Security for all**
   Significantly reducing climate-induced water scarcity and enhancing climate resilience to water-related hazards towards a climate-resilient water supply, climate-resilient sanitation and towards access to safe and affordable potable water for all (paragraph 9a of decision 2/CMA.5);

   - Reduction in climate-induced **water scarcity**
   - Enhanced climate resilience to **water-related hazards**
   - Climate-resilient **water supply** for all
   - Climate-resilient **sanitation** for all
   - Access to **safe potable water** for all
   - **Affordable potable water** for all

2. **Sustainable Food and Nutrition Security for all**
   Attaining climate-resilient food and agricultural production and supply and distribution of food, as well as increasing sustainable and regenerative production and equitable access to adequate food and nutrition for all (paragraph 9b of decision 2/CMA.5);

   - Climate-resilient **food and agricultural production**
   - Climate-resilient **food supply**
   - Climate-resilient **distribution of food**

- Sustainable and **regenerative food and agricultural production**
- Equitable access to **adequate food and nutrition** for all

3. **Climate-Resilient Health Systems and Services**
   Attaining resilience against climate change related health impacts, promoting climate-resilient health services, and significantly reducing climate-related morbidity and mortality, particularly in the most vulnerable communities (paragraph 9c of decision 2/CMA.5);

   - Resilience against climate change related health impacts (particularly in the most vulnerable communities)
   - Climate-resilient health services (particularly in the most vulnerable communities)
   - Reducing climate-related morbidity and mortality (particularly in the most vulnerable communities*)*

4. **Healthy Ecosystems and Biodiversity**
   Reducing climate impacts on ecosystems and biodiversity, and accelerating the use of ecosystem-based adaptation and nature-based solutions, including through their management, enhancement, restoration and conservation and the protection of terrestrial, inland water, mountain, marine and coastal ecosystems (paragraph 9d of decision 2/CMA.5);

   - Reduced climate **impacts on ecosystems** *(through their management, enhancement, restoration and conservation and the protection)*
   - Reduced climate **impacts on biodiversity** *(through their management, enhancement, restoration and conservation and the protection)*
   - Accelerated use of **ecosystem-based adaptation** and **nature-based solutions** (in terrestrial, inland water*, mountain, marine and coastal ecosystems)*

5. **Climate-Resilient Infrastructure and Human Settlements for all**
   Increasing the resilience of infrastructure and human settlements to climate change impacts to ensure basic and continuous essential services for all, and minimizing climate-related impacts on infrastructure and human settlements (paragraph 9e of decision 2/CMA.5);

   - **Climate-resilient infrastructure** to climate change impacts to ensure basic and continuous essential services for all
   - **Resilient human settlements** to climate change impacts to ensure basic and continuous essential services for all
   - Minimized **climate-related impacts** on infrastructure and human settlements;

6. **Climate-proof Poverty Reduction and Livelihoods and climate-social protection measures for all**
   Substantially reducing the adverse effects of climate change on poverty eradication and livelihoods, in particular by promoting the use of adaptive social protection measures for all (paragraph 9f of decision 2/CMA.5);

   - Reduced adverse effects of climate change on **poverty eradication and livelihoods**
   - Use of **adaptive social protection measures** for all;

7. **Climate-proof Cultural Heritage**
   Protecting cultural heritage from the impacts of climate-related risks by developing adaptive strategies for preserving cultural practices and heritage sites and by designing climate-resilient

infrastructure, guided by traditional knowledge, Indigenous Peoples' knowledge and local knowledge systems (paragraph 9g of decision 2/CMA.5);

- Protecting cultural heritage from the impacts of climate-related risks by **preserving cultural practices** *(guided by traditional knowledge, Indigenous Peoples' knowledge and local knowledge systems);*
- Protecting cultural heritage from the impacts of climate-related risks by **preserving heritage sites** *(guided by traditional knowledge, Indigenous Peoples' knowledge and local knowledge systems);*
- Protecting cultural heritage from the impacts of climate-related risks by designing **climate-resilient infrastructure** *(guided by traditional knowledge, Indigenous Peoples' knowledge and local knowledge systems)*;

Components of the four dimensional targets of the global goal on adaptation (based on paragraph 10 of decision 2/CMA.5)

The four dimensional targets of the global goal on adaptation (described in paragraph 10 of decision 2/CMA.5) can be broken down as follows:

1. **Impact, vulnerability and risk assessment and early warning systems**
   Impact, vulnerability and risk assessment: by 2030 all Parties have conducted up-to-date assessments of climate hazards, climate change impacts and exposure to risks and vulnerabilities and have used the outcomes of these assessments to inform their formulation of national adaptation plans, policy instruments, and planning processes and/or strategies, and by 2027 all Parties have established multi-hazard early warning systems, climate information services for risk reduction and systematic observation to support improved climate-related data, information and services (paragraph 10a of decision 2/CMA.5);

   By 2030
   - Each Party to have conducted up-to-date **assessments of climate hazards, climate change impacts and exposure to risks and vulnerabilities**
   - The outcomes of these **assessments used to inform their formulation or updating of national adaptation plans, policy instruments, and planning processes and/or strategies, and the implementation** thereof

   By 2027 all Parties have established
   - **Multi-hazard early warning systems**
   - **Climate information services for risk reduction**
   - **Systematic observation** to support improved climate-related data, information and services;

2. **Plans, processes and mainstreaming**
   Planning: by 2030 all Parties have in place country-driven, gender-responsive, participatory and fully transparent national adaptation plans, policy instruments, and planning processes and/or strategies, covering, as appropriate, ecosystems, sectors, people and vulnerable communities, and have mainstreamed adaptation in all relevant strategies and plans(paragraph 10b of decision 2/CMA.5);

   - The **NAP by 2025** (GST decision)
   - **Policy instruments and planning processes and strategies by 2030** covering ecosystems, sectors, people and vulnerable communities
   - **Adaptation mainstreamed** in all relevant strategies and plans

3. **Implementation and resilience benefits**
   Implementation: by 2030 all Parties have progressed in implementing their national adaptation plans, policies and strategies and, as a result, have reduced the social and economic impacts of the key climate hazards identified in the assessments referred to in paragraph 10(a) of decision 2/CMA.5 (paragraph 10c of decision 2/CMA.5)

   - Progress in **implementing the NAP, policies and strategies**
   - **Measurable reduction** of the social and economic impacts of the key climate hazards identified in the assessments

4. **Monitoring, evaluation and learning**
   Monitoring, evaluation and learning: by 2030 all Parties have designed, established and operationalized a system for monitoring, evaluation and learning for their national adaptation efforts and have built the required institutional capacity to fully implement the system(paragraph 10d of decision 2/CMA.5)

   - **Designed and established a system** for monitoring, evaluation and learning
   - **Operationalized the system** for monitoring, evaluation and learning
   - **Built the required institutional capacity** to fully implement the system for monitoring, evaluation and learning

5.5 Identifying connected systems to promote integrated approaches and avoiding silos

Multiple entry points to systems

To manage interactions between systems and various dimensions of adaptation, the LEG has developed an approach, termed the NAP-GGA-SDG integrating framework or iFrame, to facilitate the mapping of different aspects associated with systems or management units[1]. The approach makes it easy to identify dependencies and synergies between components, and can be extended to any consideration. Figure 7 and 8 shows how the seven GGA themes map to sample systems in the middle of the diagram, and how each of the system in turn, maps to different lenses on the outside, from hazards, spatial scales, development themes, SDGs, etc.

Applying the NAP-GGA-SDG iFrame enables countries to harmonize addressing SDGs, the GGA targets, and national goals (development, disasters, etc.) with activities designed to address adaptation in a *country-driven manner*. It facilitates harmonized reporting on indicators for the SDGs and assessment of outcomes of the adaptation benefits. To do this well, it requires good collaboration between all relevant ministries and supporting agencies and organizations – *avoiding a silo approach*, maximizing synergy and effectiveness.

[1] https://unfccc.int/files/bodies/adaptation_committee/application/pdf/20170517_leg_nap.pdf.

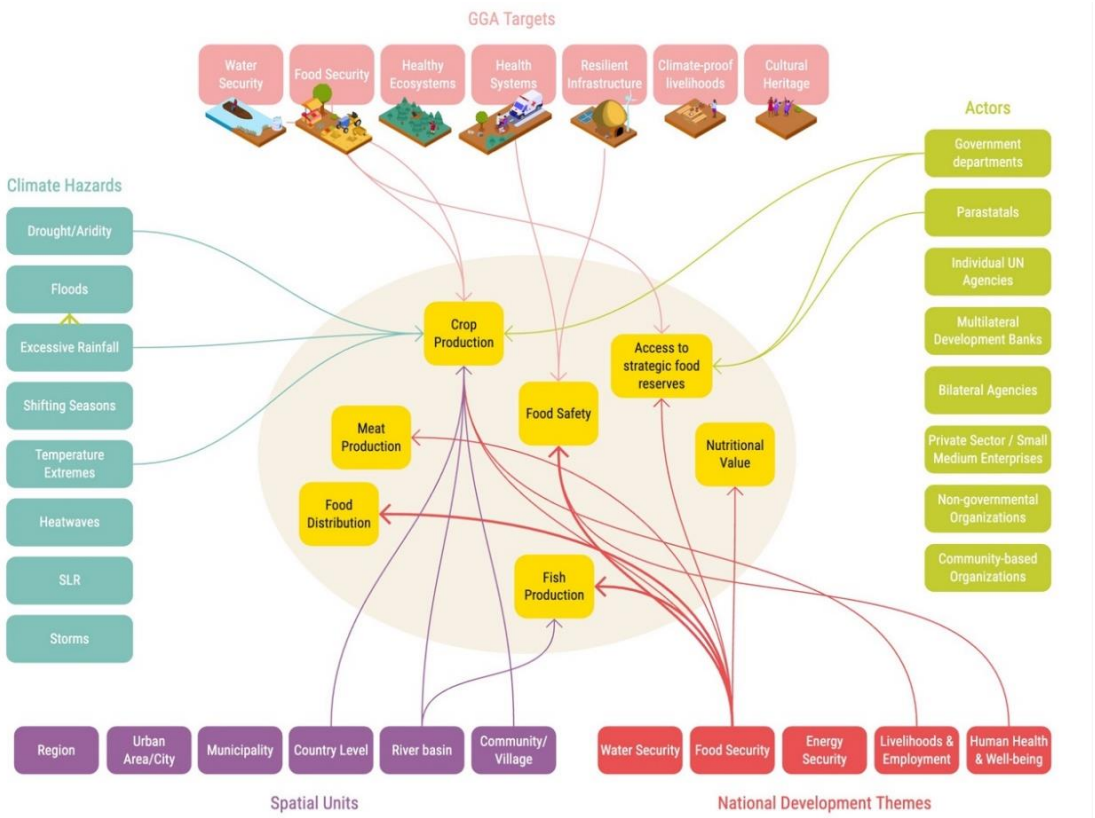


Figure 7. The NAP-GGA-SDG iFrame showing agriculture and food systems mapped to different entry points for assessment

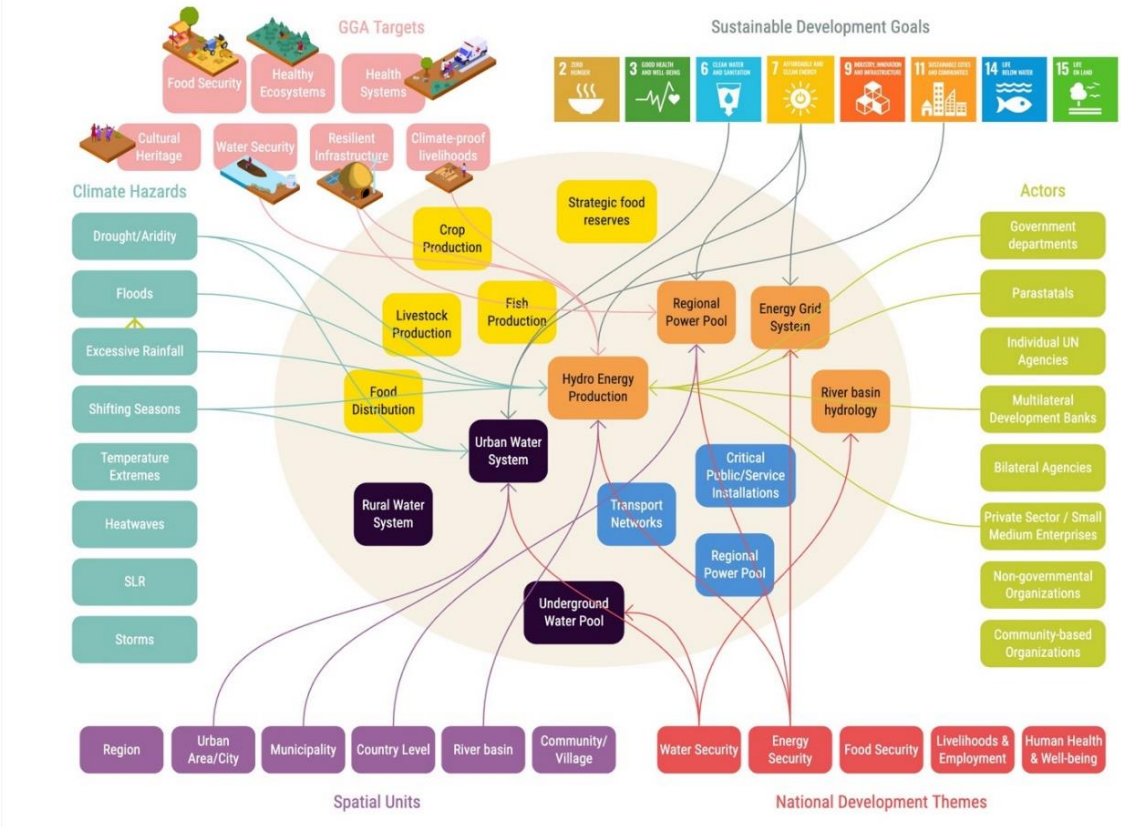
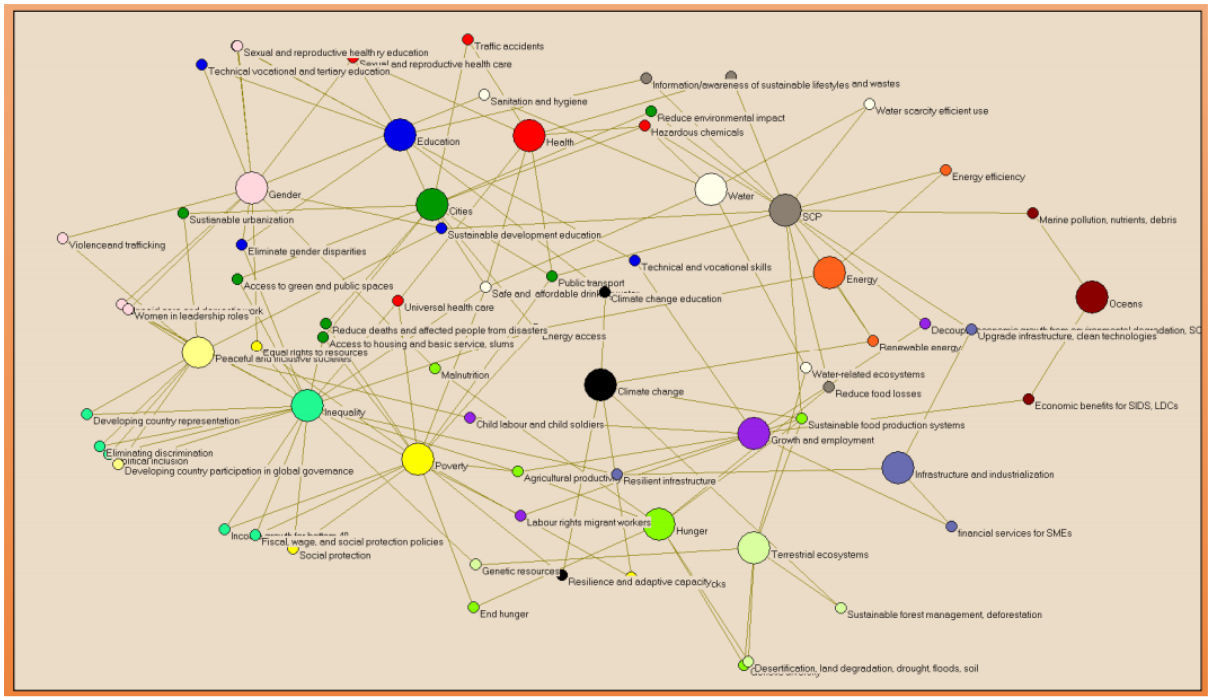


Figure 8. The NAP-GGA-SDG iFrame showing systems from four themes mapped to different entry points for assessment

Interactions between systems (nexuses approaches)

There are many interactions between components of the global goal of adaptation thematic areas, and in fact, most activities on the ground address multiple issues concurrently. Such interactions can be reinforcing, enabling, constraining, counteracting, or cancelling. In the case of the SDGs, the interactions between goal targets and the indicators are well studied and point towards an integrated approach to addressing the SDG and avoiding treating the goals in silos[2] (see figure 9 below). Similarly, a similar approach should be taken for the GGA targets, to avoid a siloed approach and ensure that trade-offs and complementariness are explicitly considered.



Source: David Le Blanc, "Towards integration at last? The SDGs as a Network of Targets," Rio+20 Working Paper 4

Figure 9. Sustainable development goals showing interactions between targets

The so-called nexus approaches are a useful way to recognize interactions between systems and to manage tradeoffs between them. In advancing adaptation in alignment with the global goal of adaptation, a nexus approach between components and systems from different target areas would lead to addressing adaptation in ways that more closely match how issues are dealt with in a country. The following are a few examples of nexuses that have been looked at in detail:

- **WEF (Water-Energy-Food) Nexus:** Highlights the interdependence of water, energy, and food systems, emphasizing the need for integrated resource management to ensure sustainable access and resilience.[3]
- **IPBES (Nexus Report):** Recognizes that the global crises of biodiversity loss, water and food insecurity, health risks and climate change are interconnected. The five nexus elements, including their social, economic, and environmental components: Interact across ecosystems,

[2] https://council.science/publications/a-guide-to-sdg-interactions-from-science-to-implementation.

[3] https://www.unwater.org/water-facts/water-food-and-energy.

geographic regions and scales; Influence each other (interlinkages) and; Depend on each other to function (interdependences).[4]

- **Biodiversity-Ecosystems-Climate (BEC) Nexus:** Refers to the interconnectedness and mutual influence between biodiversity, ecosystems, and climate change.
- **Climate-Health-Livelihoods Nexus:** Climate driven impacts and interconnected influence on human lives, health, livelihoods, and wellbeing.[5]
- **Urban-Infrastructure-Social Nexus:** Climate change impacts on key urban infrastructure with interactions across social dimensions of wellbeing and livelihoods.
- **Land-Soil-Food Nexus:** Highlights how health and management of soil directly impact food production, security, sustainability, and vice-versa.
- **Water-Sanitation-Public Health Nexus:** Interconnectedness of water systems and health. How water sanitation quality are vital for public health outcomes, especially when impacted by climate-induced stressors such as droughts and floods.[6]
- **Finance-Governance-Implementation Nexus:** Emphasizes alignment of financial resources, institutional governance, and effective implementation mechanisms for delivery adaptation at scale.

Addressing cross-cutting sectors not covered directly by the seven GGA themes

One of the frequently asked questions is about how to deal with sectors that are considered important for a country but which are not included in the seven GGA themes. For example, tourism and hydroelectricity production. If we consider these as cross-cutting issues, then compound systems or nexuses can be built by linking to component systems from the different GGA areas.

For example, hydroelectricity production can be considered a function of water supply; infrastructure in terms of the grid and generation equipment, energy demand dynamics related to water, food, health and livelihoods; and water related hazards in terms of impacts of floods and droughts, or seasonal changes in rainfall.

Tourism on the other hand could be considered to include links to ecosystems, cultural heritage, infrastructure and livelihoods. In this way, any sectors that are considered important for a country can easily be considered by mapping to relevant components of the seven GGA target areas.

[4] IPBES (2024). Summary for Policymakers of the Thematic Assessment Report on the Interlinkages among Biodiversity, Water, Food and Health of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. IPBES secretariat, Bonn, Germany. DOI: https://doi.org/10.5281/zenodo.13850289.
[5] https://www.thinkglobalhealth.org/article/cop28-climate-health-nexus-turned-corner-better-and-worse.
[6] Philip, L. Overlooking the critical nexus between water, sanitation, and health. *Nat Water* **2**, 1042–1043 (2024). https://doi.org/10.1038/s44221-024-00337-z. https://www.nature.com/articles/s44221-024-00337-z.

6. How should the updated technical guidelines be used?

The guidelines will be used by all stakeholders of the NAP process, from providers of financial and technical support, to national stakeholders at all relevant levels in the country. The guidelines provide the anchor to meeting the GGA targets, and should be useful in linking adaptation work to related processes under the Convention and Paris Agreement such as reporting through Adaptation Communications, NDCs and BTRs. In addition, the guidelines support the acceleration of NAP implementation, promoting innovative financing approaches, and enhancing countries' capacity to develop project proposals

The guidelines should be used in designing the process supporting adaptation planning and implementation within a country, and would facilitate aggregation of efforts at different levels into a national effort. The steps apply for an adaptation plan at any level, national to subnational levels, city or sector. They are primarily geared towards the national level, with a collection of actions at regional or subnational to sectoral and local levels, by a wide range of actors from government, UN organizations, IFIs and MDBs, private sector, local governments, and NGOs alike. While the guidelines focus mainly on planning and implementation and monitoring, reference is made to materials relevant for assessment and reporting.

6.1 Use cases at the national level

Given almost all countries are doing something on adaptation and specifically on NAPs, the guidelines are geared towards enriching that ongoing process rather than starting from scratch. A country should select relevant steps to further advance on their efforts. For example, figure 10 below provides four sample use cases:

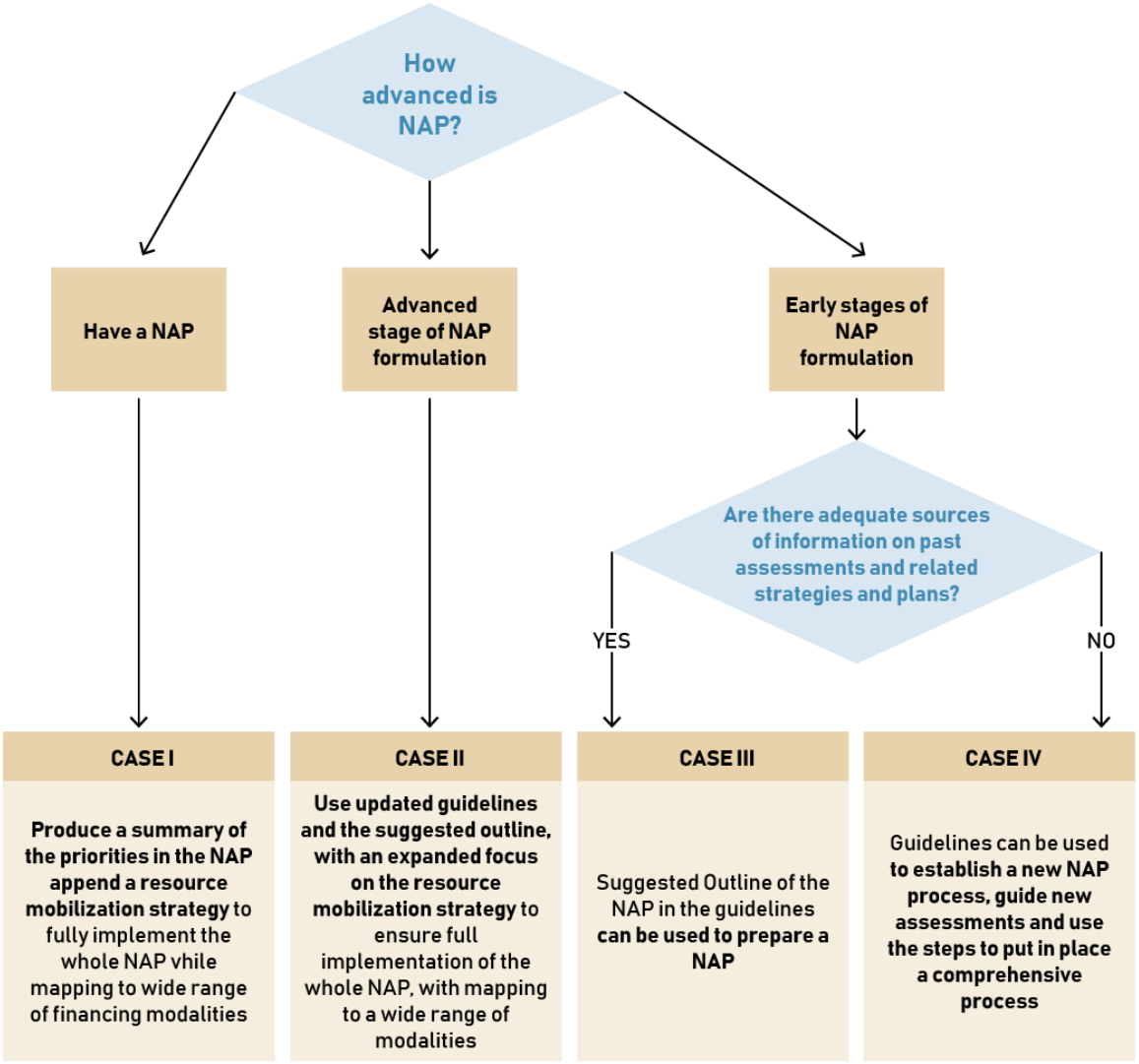


Figure 10. Use cases for the updated guidelines based on the stage of formulation of the NAP in the country

Case I: A country that has a NAP already.

The updated guidelines can support the development of a summary of NAP priorities, along with an appended resource mobilization strategy to enable full implement of the NAP, while mapping to wide range of financing modalities.

Case II: A country in an advanced stage of NAP formulation.

The country would use the updated guidelines as far as possible to address all important areas and apply the suggested outline, while placing expanded focus on the resource mobilization strategy to enable full implementation of the NAP, with a mapping to a wide range of financing modalities.

Case III: A country in the early stages of NAP formulation.

If sufficient information is available from past assessments and related strategies and plans, the suggested outline of the NAP in the guidelines would be used to prepare one, without the need for new assessments.

Case IV: A country in the early stages of NAP formulation, with limited information from past assessments or from other plans and strategies.

The guidelines can then be used to establish a new NAP process, guide new assessments and outline the steps needed to implement a comprehensive process.

7. Recommended contents of the NAP

The following are chapters that would contain information that would be useful to include in the main NAP (the plan), to effectively communicate adaptation priorities, how they would be implemented and information on resource mobilization. It is highly recommended that additional details and lengthy reports be either in annexes, or better yet, in separate outputs of the NAP process that would be referenced in the NAP. Users of the NAP are, therefore, encouraged to look at all the outputs of the NAP process as sources of information related to the formulation and implementation of the NAP for the country. The NAP should contain information that will facilitate subsequent extraction of information for further use, while giving only sufficient background and descriptions of approaches used.

7.1 Best practice contents of the NAP

1. Background and contextual information about the country

    - Information describing the country to provide broad context for the rest of the document and the broad approaches used in developing the adaptation plan (full details given later in the document).

2. Vision, goals and objectives

    - Presentation of a vision for a climate-resilient future, say by 2030/2035 and beyond, to establish a future baseline for measuring progress against
    - Listing of clear and measurable national adaptation goals in the context of the GGA themes as a minimum, and any other additional elements considered important for the country
    - Specific actionable objectives and targets that contribute to achieving the overall adaptation goals

3. Policy and regulatory framework

    - Policies and regulations that support the climate adaptation efforts including mandates at different levels and sectors
    - Inclusion of incentives for adopting resilient practices and disincentives for activities that increase vulnerability to climate change
    - Delineation of areas of interest, e.g., most vulnerable groups and ecosystems, regions of special focus, etc.
    - Institutional and legal arrangements for the NAP process including distribution of work across different actors

4. Framework for the NAP

    - Approach for the NAP using entry points of choice
    - Framing adaptation according to the GGA themes and additional themes considered important for the country

- Exploring a collection of systems and components, including definition of nexuses to be considered
- Description of stakeholder engagement at relevant stages of the process

5. Considerations of guiding principles (best practices) of adaptation

    - Gender responsiveness
    - Considerations of Indigenous Peoples and Local Communities
    - Consideration of youth and other vulnerable groups
    - Descriptions of how all other guiding principles were addressed

6. Key climate risks and vulnerabilities, and adaptation needs

    - Climate and social-economic scenario used
    - Current and list current and recent past vulnerabilities and impacts in relation to main climatic hazards
    - Projected future vulnerabilities and risks and potential impacts and losses in the future
    - Applicable approaches (focus on risk management, vulnerability reduction, avoiding exposure, etc) and also a discussion of resilience and what that means

7. Priority adaptation actions

    - Presentation of priority adaptation solutions and measures as a result of ranking and appraisal of options based on established/agreed criteria
    - Presentation of activities based on stage of response (such as preemptive and disaster risk reduction actions, contingent and anticipatory actions, and references to how to address losses and damages under related workstreams and other planning processes (such as complementary efforts under funding channels for loss and damage, disaster management and response, etc)
    - Presentation of the adaptation priorities into action plans, policies, programmes and projects

8. Integration of the adaptation plan with national development and sectoral plans, including synergies

    - Description of the integration of the climate adaptation priorities and plans into broader development plans to ensure that all development activities consider climate risks and contribute to resilience building
    - Description of the integration of NAP priorities in sectoral plans to align with financing and implementation plans at the national level and as required for some funding channels
    - Description of how synergy with different agendas (e.g., SDGs, biodiversity, disaster management, urban agendas, land etc.) will be promoted

9. Implementation strategy

    - Appropriate approach(es) for implementation: sectoral, thematic, or territorial approach; project or programmatic approach
    - Phased approach to implement adaptation projects, prioritizing based on urgency
    - Political, human, and capacity-related support needs for implementation (in addition to the financial support needs covered in Section 10)
    - Demonstration of how implementation will be distributed between different actors including government agencies, private sector, civil society, and local communities

10. Required financial resources

- Broad estimates of financial resources required for each adaptation action and for the overall NAP
- Amount and sources of financial support that is already being mobilized (from all sources including national budgets) to help identify existing resources and calculate financing gaps to be addressed in the "Resource Mobilization Strategy".

11. Resource mobilization strategy

- Concrete strategy for resource mobilization linked to different funding sources and their applicable modalities, covering international climate funds under the financial mechanism of the convention, other multilateral and bilateral financing, national government budgets, private sector investments, philanthropic sources.
- Cost estimates of the adaptation priorities where possible
- Descriptions of efforts to expand the funding base beyond grants and loans, including a strategy for expanding the pool of available funding
- Mapping to the following common sources:

    - Country Programme for the GCF
    - Country Programme for the GEF, LDCF, SCCF
    - Country Programme for the AF
    - Country Engagement Plans with the IFIs (in parallel to main NAP efforts)
    - Engagement model for philanthropies
    - Plans for innovative finance
    - National budget support for the NAP

- Provisions for complementarity between the activities under the different funding in support of implementing the NAP as a national programme

12. Monitoring, evaluation and learning

- MEL framework

    - M&E framework: Develop/apply a framework for monitoring and evaluating the progress and effectiveness of adaptation actions
    - Indicators and Metrics: Define/apply specific indicators and metrics to track progress toward adaptation goals and objectives

- Learning platform

    - Describe plans for learning and how experiences from other regions would be integrated into the adaptation practice for the country

13. Reporting

- Plans for reporting systems to ensure transparency and accountability in the implementation of the plan
- Alignment with BTRs and other adaptation reporting under the Convention and PA such as the Adaptation Communications and NDCs

Annex: Selected project profiles: essential projects and other priorities

- Profiles for main projects suggested by the GGA dimensional targets:

    - GCF NAP Readiness; other readiness support
    - Multi-hazard early warning systems
    - Climate information services
    - Others

- Profiles of selected priority projects and programmes that are part of the first phase of implementation

8. Modules and steps of the updated technical guidelines

8.1 The adaptation cycle in an LDC

Every country has been embarking on adaptation. These guidelines start from that assumption and work towards enhancing existing efforts and producing a NAP as a key milestone, to advance towards implementation at scale.

The modules and steps are not sequential, in fact, many should be addressed in parallel, and provide inputs to other steps in an iterative fashion.

The four elements of the first technical guidelines (based on the initial guidelines for the formulation of NAPs in the LDCs from decision 5/CP.17, see Annex 1 to this document) have been expanded to six, taking into account the dimensional targets of the GGA (paragraph 10, decision 2/CMA.5) and an extension of the initial guidelines to consider implementation of the NAPs in the LDCs (see Annex I). The six elements of these updated technical guidelines reflect the necessary actions to fully consider maintaining the underlying support process, and the formulation and implementation of NAPs. See Table 2.

Figure 11. The adaptation cycle in an LDC, expanded based on the adaptation cycle described in decision 1/CMA.5, paragraph 10.

Table 2. The six elements and steps of the updated NAP technical guidelines

ELEMENT A: MAINTAINING THE NAP PROCESS BY ACCESSING FUNDING, DATA AND CAPACITY-BUILDING

1. Access GCF NAP Readiness funding, and other sources, to support the process of formulation, and implementation of NAPs, capacity-building and related enabling activities
2. Lay the groundwork for implementation and resource mobilization for addressing climate change
3. Build/update a data and knowledge base for the NAP
4. Strengthen institutional arrangements and regulatory frameworks

ELEMENT B: ASSESSMENT (AND PRE-PLANNING)

1. Develop plausible climate change and socio-economic scenarios for the medium and long-term
2. Document baseline climate hazards, vulnerabilities and risks and impacts of climate change
3. Conduct assessments of climate hazard/exposure, vulnerability and risk

ELEMENT C: PLAN DEVELOPMENT

1. Understand the vision for development for the country and major thrusts of that aspirational vision
2. Frame adaptation at the national level in the context of the GGA thematic targets
3. Synthesize best available information on climate hazard/exposure, vulnerability and risk from relevant assessments
4. Adaptation response: Identify options to address key climate risks and vulnerabilities and build resilience
5. Estimate costs for implementation
6. Compile the NAP and process endorsement and submission to the UNFCCC (after Element D)

ELEMENT D: IMPLEMENTATION AND FINANCING STRATEGY/RESOURCE MOBILIZATION

1. Develop a resource mobilization strategy
2. Implement/execute adaptation/risk management and resilience solutions

ELEMENT E: MONITORING, EVALUATION AND LEARNING

1. Systematic data collection to inform adaptation and monitoring including of progress
2. Periodic evaluation and learning

ELEMENT F: REPORTING

1. National reporting
2. International reporting

8.2 Steps and indicative activities under each element

ELEMENT A: MAINTAINING THE NAP PROCESS BY ACCESSING FUNDING, DATA AND CAPACITY-BUILDING

1. Access GCF NAP Readiness funding, and other sources, to support the process of formulation, implementation of NAPs, capacity-building and related enabling activities

- Access funding from GCF Readiness Support for the formulation of the NAP and development of project proposals for NAP implementation
- Access funding from GCF and other sources for NAP implementation
- Access funding from the other GCF Readiness Support windows, and other funds, for accreditation and related capacity building for engagement with the GCF
- Continue to build capacity for the NAP process based on identified priority needs
- Create and strengthen stakeholder participation processes

2. Lay the groundwork for implementation and resource mobilization for addressing climate change

- Support national entities to get accredited with the FM Funds (GCF and AF)
- Support functions of designated national authorities to process adaptation projects
- Incentivize development of innovative financing solutions
- Integrate adaptation in national and sectoral planning processes
- Create enabling environment for the private sector to participate in the implementation of the NAP

2. Build/update a data and knowledge base for the NAP

- Develop data policies and data-sharing protocols between ministries and different actors
- Conduct a stocktaking, mapping and synthesis of available information
- Assemble relevant goals and plans for development for the country from relevant ministries and other relevant stakeholders
- Assemble relevant data, models, tools and knowledge systems for key NAP-GGA systems

3. Strengthen institutional arrangements and regulatory frameworks

- Create/update formal mandates and legislation for adaptation as appropriate
- Strengthen coordination mechanisms between ministries
- Integrate climate change adaptation in sectoral planning

<Start Box 2>

Box 2, GCF's Readiness Programme

The Readiness and Preparatory Support Programme (the Readiness Programme) supports country-driven initiatives to strengthen their institutional capacities, governance mechanisms, and planning and programming frameworks towards a transformational long-term climate action agenda.

Readiness support is provided to countries through National Designated Authorities (NDAs) and/or focal points (FPs). Readiness funding can also be deployed to strengthen Direct Access Entities.

All developing country Parties to the UNFCCC can access the Readiness Programme.

- Country window:

Total envelope: Countries can access a total envelope of up to **USD 7 million per country over 4 years** for the integrated planning and implementation of adaptation and mitigation measures. This includes previously available support for National Adaptation Plan (NAP) formulation (NAP.1) for countries that have not yet fully utilised it. Additionally, countries can submit an additional request for up to USD 3 million for NAP implementation (NAP.2) if the main envelope has less than USD 250,000 remaining in committed funds. This additional funding is based on a mutually agreed clear need and demonstrable impact on NAP implementation.

- DAE window:

Within the DAE modality, funding is provided to assist accredited DAEs as well as candidate DAEs in the advanced stages of the GCF accreditation process.

The total financial envelope for DAE support includes: Up to USD 1 million per entity over the four-year period[1]. This financing modality is intended for addressing the readiness objectives as they pertain to DAEs, based on coordination with respective NDAs and in line with country priorities. Readiness support is to be requested based on a four-year planning. Activities can be implemented within any period deemed appropriate, so long as a funding request(s) is approved within the GCF-2 period, i.e., 2024-2027.

[1] A one-time allocation of USD 12.4 million approved for the implementation of the GCF Integrated Results Management Framework (IRMF) under decision B.29/01 has been integrated into the overall funding for the DAEs support modality, to ensure ongoing support. This integration provides all DAEs with equal access to USD 1 million per entity over the four-year GCF-2 programming period. Entities previously benefiting from IRMF support will still have access to the full USD 1 million per entity, provided they exclude any overlapping work already covered through the IRMF window.

- GCF expert placement scheme

The Readiness Strategy 2024-2027 aims to help countries build the institutional capacity necessary for effective and consistent engagement with the GCF. As part of this strategy, National Designated Authorities (NDAs) and focal points have the option of requesting the placement of a local expert within their offices or another relevant agency. The expert placed by the GCF serves to assist the country in their interactions with the GCF Secretariat, including, but not limited to country programming, planning readiness support over medium-term, supporting origination efforts for mainstream funding, overseeing readiness activities and climate investments, and monitoring and reporting. This initiative not only aims to enhance the immediate engagement with the GCF but also seeks to build long-term local capacity to address climate priorities effectively.

Budget: For Least Developed Countries (LDCs) and Small Island Developing States (SIDS), the cost will be covered by the dedicated allocation of USD 320,000.

Request: To initiate the process of hiring a GCF expert, NDAs should submit a request via email to their regional desk.

Readiness proposal development

(Source: GCF website, GCF Readiness Strategy 2024–2027, GCF Readiness Knowledge Bank)

<End Box 2>

<Start Box 3>

Box 3. Addressing data related challenges in the NAP process: the NAP Data and Model Initiative

A key element in the formulation and updating of a NAP is the ability to assemble and leverage relevant data, models, tools, and knowledge systems that inform evidence-based decision-making.

Effective climate adaptation planning relies on data-driven insights, including historical and projected climate data, socio-economic and sectoral data, impact and vulnerability models, scenario planning tools, and integrated systems for cross-sectoral analysis. These resources help countries assess risks, identify adaptation options, and track resilience. However, many LDCs face challenges in accessing long-term climate data and applying these tools, which can hinder proactive, evidence-based decision-making aligned with national priorities.

The NAP Data Initiative

The NAP Data Initiative addresses critical data-related challenges faced by many LDCs by promoting the use of open-source climate datasets and flexible modeling tools, making these resources more scalable and accessible to all countries. In addition, it provides NAP teams with accessible and user-friendly tools like RStudio, R Markdown, and GitHub to manage, analyze, share, and store data, visualization, and report creation. It promotes collaboration and facilitates the creation of dynamic, continuously updated documents that help countries stay on top of their adaptation needs. The initiative also encourages interoperability between sectoral data systems, allowing countries to link information across different sectors, like agriculture, hydrology, and health, for more integrated decision-making. NAP teams receive guidance on how to use these tools without needing specialized expertise, with technical assistance available through the LEG.

For more information, see:

The Least Developed Countries Expert Group (LEG). 2024. *Technical brief: The NAP Data Initiative.* Available at https://unfccc.int/documents/645427.

<End Box 3>

ELEMENT B: ASSESSMENT (AND PRE-PLANNING)

4. Develop plausible climate change and socio-economic scenarios for the medium and long-term

- Develop a plausible scenario for future climate, guided by the global temperature goal of 1.5^{o} C
- Develop corresponding socio-economic scenarios for the medium and long-term
- Assemble relevant projections such as for economic growth, social development, population

5. Document baseline climate hazards, vulnerabilities and risks and impacts of climate change

- Synthesize recent changes in climate and observed hazards and general trends in climate variables
- Compile observed impacts of climate change and emergent vulnerabilities and risks

6. *Conduct assessments of climate hazard/exposure, vulnerability and risk*

- Apply the framing of vulnerability and risk based on the IPCC AR6 to define the assessment approach
- Understand and estimate risk and vulnerability using applicable assessment methodologies, models and tools for each NAP-GGA system or combinations of such systems in the form of a nexuses
- Use a multistakeholder process to identify key risks and vulnerabilities to be addressed further
- Produce (and co-produce with different stakeholders) outputs such as risk indices to meet needs of different stakeholders, including the private sector
- Produce an assessment report as part of the GGA dimensional target

ELEMENT C: PLAN DEVELOPMENT

7. *Understand the vision for development for the country and major thrusts of that aspirational vision*

- Consider the aspirational future for the country based on national development plans and strategies to define boundaries for adaptation
- Articulate how climate change will impact that aspirational state in the context of climate change scenarios to inform framing of adaptation

8. *Frame adaptation at the national level in the context of the GGA thematic targets*

- Define institutional and governance arrangements for the NAP as the umbrella programme for adaptation for the country
- Define the vision, goals and objectives of the NAP, in the context of the GGA themes and national development
- Define criteria for choice of systems to focus on, and for ranking adaptation options
- Select NAP-GGA systems for each GGA theme to focus on in the NAP

9. *Synthesize best available information on climate hazard/exposure, vulnerability and risk from relevant assessments*

- Apply the framing of vulnerability and risk based on the IPCC AR6 to define the approach for synthesizing assessment results
- Synthesize risks and vulnerability for each NAP-GGA system or combinations of such systems in the form of a nexuses based on best available science
- Use a multistakeholder process to identify key risks and vulnerabilities to be addressed further

10. *Adaptation response: Identify options to address key climate risks and vulnerabilities and build resilience*

- Propose adaptation, risk management and resilience-building options to address the key risks and vulnerabilities, taking into account guiding principles related to gender responsiveness, IPs and local community issues, youth etc.
- Appraise and rank the response options into priority adaptation solutions and actions to meet the GGA thematic targets

11. Estimate costs for implementation

- Estimate costs of implementing the priority adaptation solutions and actions to meet the GGA thematic targets

12. Compile the NAP and process endorsement and submission to the UNFCCC (after the resource mobilization strategy in Element D), and based on the Section 7 on the recommended contents of the NAP)

- Define an implementation strategy that assigns adaptation actions to ministries and other actors
- Consider transboundary/multi-country, regional approaches to the implementation of actions and projects
- Compile a draft NAP, and include priorities from sectoral, subnational or local plans prepared in parallel, for stakeholder endorsement and validation
- Integrate the NAP priorities into sectoral, subnational plans and local plans as necessary
- Submit the nationally endorsed NAP to the UNFCCC

ELEMENT D: IMPLEMENTATION AND FINANCING STRATEGY/RESOURCE MOBILIZATION

13. Develop a resource mobilization strategy

- Map adaptation priority actions into project ideas and programmes
- Integrate NAP priority projects into applicable country programmes/country assistance frameworks for each actor or funding vehicle
- Develop a 5-year programme for implementing the whole NAP, targeting a variety of funding/financing windows for the projects or combinations of windows in blended financing
- Follow the relevant project or funding cycles to prepare funding requests (in the form of project proposals or other formats as applicable)

14. Implement/execute adaptation/risk management and resilience solutions

- Manage implementation of projects and execute adaptation solutions
- Develop and apply systematic observation and monitoring of systems under adaptation intervention to identify triggers or nodes for changes in adaptation pathways

<Start Box 4>

Box 4: Applying finance mapping to advance NAP formulation and implementation

The Mapping of available sources of finance for climate adaptation for least developed countries by the LEG provides LDCs with a practical tool to identify and apply financing at each stage of the adaptation cycle. It enables countries to navigate funding sources including the UNFCCC financial mechanism, multilateral development banks (MDBs), bilateral partners, philanthropies, the private sector, and domestic funding, while considering their preferred financing instruments. By linking funding opportunities to the specific stages of the adaptation process and categories of need, the finance mapping also serves as a foundation for developing a clear and targeted resource mobilization strategy.

Green Climate Fund (GCF) **Financial Instruments:** Grants, Concessional loans, Guarantees, Equity	• Projects Window (Full Scale) • Simplified Approval Process (SAP) • Private Sector Facility (PSF) • Readiness and Preparatory Support Programme • Adaptation Planning Readiness Window
Global Environment Facility (GEF) Grants	• Challenge Program for Adaptation Innovation
Least Developed Countries Fund (LDCF)	• Country submits proposal through GEF agency and following GEF/LDCF project cycle.
Special Climate Change Fund (SCCF)	• Country submits proposal through GEF agency and following GEF/SCCF project cycle.
Adaptation Fund Grants	• Single Country Funding Window. • Regional Projects and Programmes • Enhanced Direct Access (EDA) Funding • Large (Single/Regional) Innovation Grant • NIE Small Grants for Innovation.
World Bank	• Country Climate & Development Reports (CCDRs) • International Development Assistance (IDA) • International Bank for Reconstruction and Development (IBRD) • Climate Investment Funds (CIFs) • Global Concessional Financing Facility (GCFF)
Bilaterals	• Various
Philanthropies	• Various
Private Sector	• Various

<End Box 4>

ELEMENT E: MONITORING, EVALUATION AND LEARNING

15. Systematic data collection to inform adaptation and monitoring including of progress

- Develop or apply M&E systems to track progress, effectiveness and gaps in adaptation
- Apply protocols for data collection for monitoring key NAP-GGA systems, guided by, as appropriate, metrics and indicators being developed for the GGA thematic targets
- Monitor and document climatic events to improve understanding of impacts, vulnerabilities and risks to inform further adaptation responses

16. Periodic evaluation and learning

- Assess limits to adaptation and identify opportunities for transformation
- Periodically assess/evaluate progress and effectiveness (and other parameters) based on data from the regular monitoring, including through independent assessments)
- Capture lessons learned in addressing adaptation to inform subsequent actions
- Assess effectiveness of adaptation and whether maladaptation is taking place

<Start Box 5>

Box 5. The Progress, effectiveness and gaps monitoring and evaluation tool (PEG M&E 2.0 tool)

The LEG in 2015 developed the technical paper titled “Monitoring and assessing progress, effectiveness and gaps under the process to formulate and implement National Adaptation Plans: The PEG M&E tool”. The PEG M&E tool provides a set of five generic metrics that can be applied when monitoring and assessing progress and effectiveness, and in so doing, helping identify gaps and needs

to further improve the process. The five metrics relate to inputs, process, outputs, outcomes and impacts.

The PEG M&E 2.0 is a tool to monitor and evaluate the progress in the process to formulate and implement NAPs. It uses the approach of defining metrics (scoring system) to measure the progress across six overarching areas:

1. Provision of financial and technical support for adaptation
2. Access to financial support by developing countries for adaptation
3. Science, framing knowledge and methodologies for adaptation
4. Achieving the essential functions of the process to formulate and implement NAPs
5. Addressing the guiding principles of the process to formulate and implement NAPs
6. Achieving the two objectives of the process to formulate and implement NAPs and the targets of the UAE Framework for Global Climate Resilience

<End Box 5>

ELEMENT F: REPORTING

17. National reporting

- Address national reporting needs as per the NAP mandate and relevant national policies
- Prepare a progress report on the implementation of the NAP by 2030

18. International reporting

- Contribute information on adaptation to different reports to the UNFCCC and Paris Agreement (such as national communications, NDCs, adaptation communications and BTRs)
- Include information in the NAP to address needs for information by different workstreams under the UNFCCC and Paris Agreement (e.g., in relation to gender, LCIPP, youth, and other aspects)

<Start Box 6>

Box 6. Aligning NAPs, NDCs, and Adaptation Communications

The LEG policy brief on aligning NAPs, NDCs, and adaptation communications emphasizes the importance of coherence among these instruments to enhance climate resilience. The brief outlines that such alignment can improve the effectiveness of adaptation actions, streamline reporting processes, and facilitate access to climate finance. By integrating the detailed planning of NAPs with the strategic vision of NDCs and the communicative function of adaptation communications, countries can present a unified approach to adaptation that aligns with their development goals and international commitments. The LEG highlights that this synergy can lead to more improved efficiency and coordination, better resource allocation, and comprehensive approach to climate change.

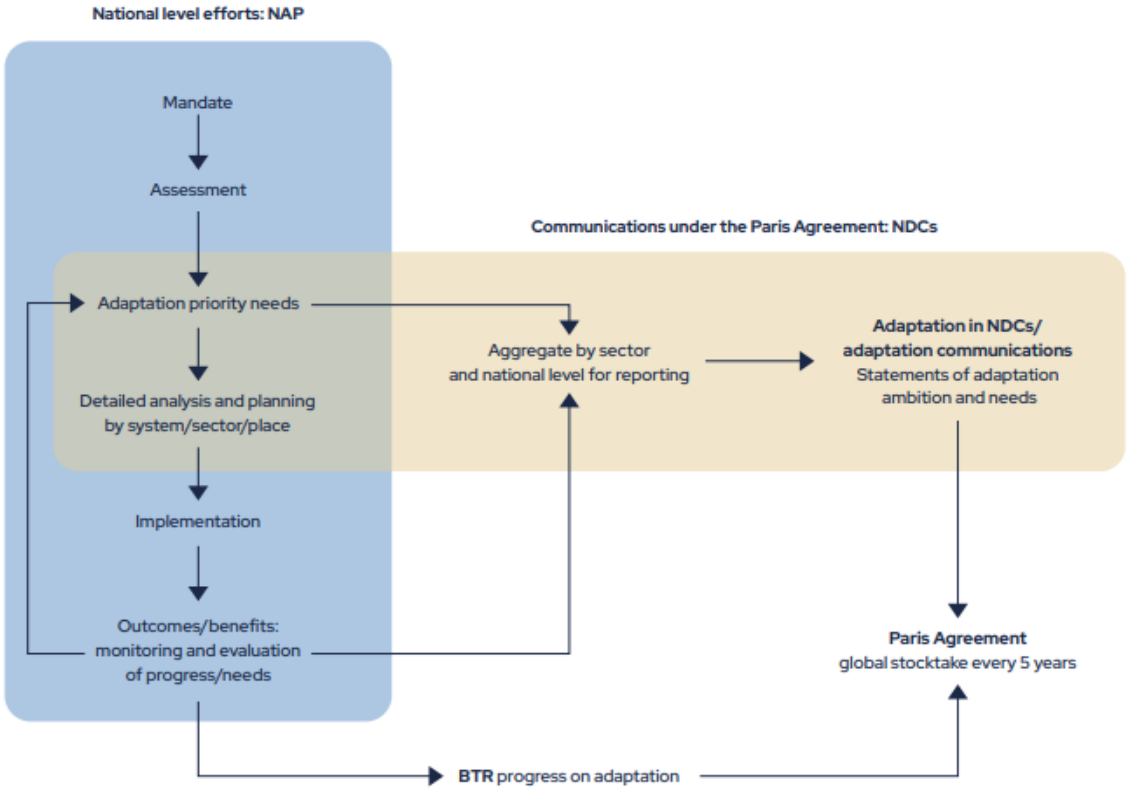


Figure 12: Overview of steps involved in developing a NAP and how these relate to the production of NDCs, adaptation communications and progress reporting in BTRs, ultimately contributing to the global stocktake under the Paris Agreement.

<End Box 6>

8.3 Addressing cross-cutting issues

This section addresses some of the cross-cutting topics that can be incorporated into the NAP.

Consideration of IPs and local communities

Participatory and inclusive planning processes that actively involve Indigenous Peoples and local communities at every stage are essential for meaningful engagement in NAPs. This involves identifying stakeholders early, co-developing culturally appropriate consultation protocols, and establishing mechanisms for sustained engagement. Indigenous and local knowledge should be systematically integrated into climate vulnerability and impact assessments to complement scientific data and ensure locally grounded solutions. The LEG recommends developing participatory tools and ethical guidelines for knowledge sharing to respect the rights and practices of Indigenous groups.[7] Collaboration with community-based organizations and local institutions to facilitate meaningful participation and integrate traditional knowledge into the design of adaptation strategies is crucial.

Gender responsiveness

NAPs can be made gender-responsive by conducting a gender analysis to identify how climate change affects women, men, and gender-diverse people differently, and by embedding gender considerations into every step of the adaptation planning cycle. This includes ensuring gender balance in stakeholder consultations, addressing barriers to participation, and collecting and analyzing sex-disaggregated data. Based on the findings of gender analysis, adaptation actions should include gender-sensitive indicators, budgeting, and monitoring frameworks.

The Toolkit for a Gender-Responsive Process to Formulate and Implement National Adaptation Plans (NAPs), developed by the NAP Global Network in collaboration with the LEG and the AC, provides a structured framework to systematically mainstream gender equality throughout the NAP process.[8] This guidance supports governments in designing inclusive adaptation strategies that recognize the distinct vulnerabilities, knowledge, and capacities of women, men, and marginalized groups. The toolkit outlines a step-by-step approach to gender-responsive adaptation, beginning with gender-disaggregated data collection and analysis to inform evidence-based planning. It emphasizes the critical role of inclusive stakeholder engagement, ensuring the meaningful participation of women and marginalized communities in decision-making processes. To strengthen institutional coherence, the toolkit aligns NAPs with national gender policies and promotes gender-responsive budgeting to allocate resources equitably. Capacity-building is a central pillar of the framework, offering methodologies to train policymakers and practitioners on gender-sensitive adaptation strategies. Additionally, the toolkit integrates a robust monitoring and evaluation system, featuring gender-sensitive indicators to assess whether adaptation interventions reduce disparities and enhance equitable resilience.

[7] UNFCCC. (2012). *National Adaptation Plans: Technical guidelines for the national adaptation plan process.* Least Developed Countries Expert Group. Available at: https://unfccc.int/sites/default/files/resource/NAP_technical_guidelines_EN.pdf

[8] NAP Global Network & UNFCCC. (2019). *Toolkit for a Gender-Responsive Process to Formulate and Implement National Adaptation Plans (NAPs)*. Dazé, A., & Church, C. (Lead Authors). Winnipeg: International Institute for Sustainable Development. Available at: https://unfccc.int/sites/default/files/resource/NAP_Gender_Toolkit.pdf

Just transition

Integrating just transition approaches into NAPs ensures that adaptation efforts are equitable, inclusive and socially sustainable. This involves addressing the needs of vulnerable populations, create and maintain jobs, and fostering social dialogue to manage the socio-economic impacts of climate change. This can be achieved by ensuring meaningful participation of vulnerable and marginalized groups—including workers, women, Indigenous Peoples, and youth—in decision-making, and by designing adaptation measures that protect livelihoods and promote social justice. NAPs could include strategies for workforce retraining, green job creation, and social protection to support communities affected by climate impacts and adaptation transitions. Aligning NAPs with national employment, education, and social development policies ensures that adaptation contributes not only to climate resilience but also to fair and inclusive development.

Nature-based solutions

Integrating nature-based solutions (NbS) into NAPs involves identifying and prioritizing ecosystems that provide critical services - such as flood control, water regulation, and coastal protection - during vulnerability assessments, and selecting NbS as key adaptation options in sectors like agriculture, water, urban planning, and coastal management. Effective integration also requires, aligning adaptation measures with national policies on biodiversity and land use, securing climate finance to support implementation, and incorporating ecosystem-based indicators in monitoring frameworks.

Landscape/spatial approaches

Landscape or spatial approaches in national adaptation planning are methods that take into account the geographic, ecological, and socio-economic characteristics of a particular area - such as a watershed, forest region, coastal zone, or urban-rural interface - to design and implement climate adaptation actions that are well-suited to that specific context. These approaches look at the bigger picture of how land, ecosystems, and human activities interact within a defined area, rather than treating adaptation actions in isolation or based only on political or administrative boundaries. By integrating these approaches in NAPs, it tailors adaptation measures to local conditions, enhances system-wide resilience instead of focusing on individual project outcomes, improves cross-sectoral coordination, and promotes nature-based solutions such as forest restoration, wetland conservation, and agroforestry. It can also be an effective way to integrate multiple strategies (climate-related and others) to a national physical development plan that ensures sustainable development in a holistic manner.

Transboundary risk and collaboration

Addressing transboundary climate risks within NAPs requires identifying and incorporating vulnerabilities that extend beyond national borders, such as shared water resources, migratory species, and regional climate impacts, into the planning process. This requires collaborative and coordinated approaches, including cross-border consultations, joint vulnerability and risk assessments, establishment of shared databases and early warning systems, and coordinated implementation strategies. Adaptation planners should engage with regional institutions and frameworks such as river basin organizations and regional economic communities to align national priorities with regional or basin-wide strategies, thereby reducing the risk of fragmented or conflicting adaptation measures. Ensuring regular dialogue, harmonized planning cycles, and co-financing arrangements can further strengthen resilience to shared risks and create opportunities for mutual benefits across borders. The

development of transboundary adaptation programmes is on the rise, and several resource materials are available.[9]

Transboundary adaptation programmes (TAPs) provide an approach for coordinated actions to be taken by multiple countries or regions to address climate impacts across geographical boundaries. These programmes allow adaptation planners to address cascading impacts and shared risk to enhance resilience to climate change by implementing coordinated adaptation measures leveraging shared knowledge and resources.

The following are activities leading to the development of TAPs, with real-world examples (relevant to LDCs):

1. Securing high-level commitments and political ownership: Several regions have integrated transboundary climate risks into high-level strategies
    - The African Union Climate Change and Resilient Development Strategy and Action Plan (2022-2032) aims to coordinate transboundary and cascading risk management through RECs and basin-wide development plans.
    - The 53rd Pacific Islands Forum (2024) reaffirmed a regional approach via the FRDP.
    - Declarations, such as the 19th African Ministerial Conference on the Environment Declaration, have encouraged cooperation on regional frameworks and indicators.

2. Embedding transboundary risks into policies and assessments: Efforts are being made to assess and integrate transboundary risks into national and sectoral frameworks
    - IGAD's Strategy for Sustainable and Resilient Livestock Development in View of Climate Change (2022-2037) promotes alignment of national policies and expansion of EWS to transboundary risks.
    - NAPs in countries such as Sierra Leone, Chad, Cambodia, and Timor-Leste identify the importance of transboundary issues like shared ecosystems, trade exposure, and regional coordination.
    - Cross-border collaboration is also reflected in mechanisms such as the India-Nepal Joint Committees on Water (Inundation and Flood Management; Joint Commission on Water Resources).

3. Co-developing roadmaps and adaptation strategies: Stakeholders across regions are co-creating pathways for addressing shared risks.
    - A workshop with the African Union Commission and four RECs helped identify entry points for managing transboundary risks.
    - Strategic roadmaps have been developed in Africa, the Hindu Kush Himalaya, and the Pacific, promoting coordinated regional planning and monitoring.

4. Advancing joint programming and finance: Joint programming efforts are merging, linking climate action with economic development.
    - The Pacific 2050 Strategy Implementation Plan and COMESA's regional resilience framework promote regional coordination and joint interventions.

[9] For example, Harris, K., Williamson, K., Klein, R.J.T., Shawoo, Z., Browne, K., Mackey, A., & Zwahlen, J. (2024). Transboundary climate risks and adaptation in mountain areas: shaping the global agenda in 2024 and beyond. Adaptation Without Borders. https://adaptationwithoutborders.org/knowledge-base/adaptation-in-mountains/transboundary-climate-risks-and-adaptation-in-mountain-areas-a-brief-for-parties-and-observers-to-the-unfccc/

- Multi-country financing models including the AIP Transboundary PIDA Water Investment Programme in the African Union and the ADAPT-WAP9 project.

5. Establishing tools, indicators, and MEL frameworks
   - The LDC Group is pushing for indicators on transboundary risks under the UAE Framework. The Pacific Islands align regional indicators and MEL systems through the 2050 Strategy for the Blue Pacific Continent.

Use of AI tools

Artificial intelligence (AI) tools can be leveraged throughout the NAP process to improve the accuracy and efficiency of climate risk analysis, decision support, and stakeholder engagement. AI can process large climate datasets, model future scenarios, and support geospatial mapping of climate vulnerabilities and hotspots. For example, machine learning algorithms can be used to identify trends in climate extremes and project localized impacts, while natural language processing can analyze stakeholder input from consultations. In data-scarce contexts, AI and digital innovations offer valuable support for adaptation planning, particularly when countries engage with research institutions and private-sector technology developers to access AI-enabled tools and platforms. AI can also be leveraged for scenario planning, simulating different adaptation pathways and their potential outcomes to support evidence-based decision making. AI-powered monitoring systems can track implementation progress and the effectiveness of adaptation measures in real time, enabling adaptive management approaches. Capacity building on the appropriate use of AI tools should be prioritized, with special attention to addressing potential biases in AI systems and ensuring that these tools are transparent, accountable, and designed to complement rather than replace stakeholder participation, particularly from Indigenous Peoples and local communities, whose knowledge remains invaluable. The UNFCCC's Technology Executive Committee (TEC) also recognizes AI as an emerging tool in adaptation planning and urges countries to incorporate digital solutions while ensuring ethical use, transparency, and equitable access.[10]

[10] See, Annex III. Leveraging artificial intelligence in the NAP process

ANNEXES

Annex I. Initial guidelines for the formulation of NAPs (updated) and for the implementation of NAPs

The initial guidelines for the formulation of NAPs adopted by COP 17 (decision 5/CP.17, annex) can be updated as follows, to reflect advances in framing of gender, vulnerability and risk, the GGA targets and the global temperature goal in the Paris Agreement, and also mandates to submit the NAP to the UNFCCC:

Updated "Initial guidelines for the formulation of national adaptation plans by least developed country Parties"

I. Introduction

1. The elements described in paragraphs 2–6 below are indicative of the activities that can be undertaken in the development of national adaptation plans (NAPs). The planning of such activities will depend on national circumstances and should be determined by least developed country Parties.

II. Elements of national adaptation plans

A. Laying the groundwork and addressing gaps

2. Activities undertaken under this element would be planned with a view to identifying weaknesses and gaps in enabling environments, and addressing them as necessary, to support the formulation of comprehensive adaptation plans, programmes and policies, through, inter alia:

(a) Identification and assessment of institutional arrangements, programmes, policies and capacities for overall coordination and leadership on adaptation;

(b) Assessment of available information on climate change impacts, vulnerability and adaptation, measures taken to address climate change, and gaps and needs, at the national and regional levels;

(c) Comprehensive, iterative assessments of development needs and climate vulnerabilities and risks.

B. Preparatory elements

3. In developing NAPs, consideration would be given to identifying specific needs, options and priorities on a country-driven basis, utilizing the services of national and, where appropriate, regional institutions, and to the effective and continued promotion of participatory and gender- responsive approaches coordinated with sustainable development objectives, policies, plans and programmes, and aligned to the global goal of adaptation targets. Activities may include the following:

(a) Design and development of plans, policies and programmes by considering decision 1/CP.16, paragraph 14(a), to address the gaps and needs referred to in paragraph 2 above;

(b) Assessments of climate change vulnerabilities and risks in relation to the global temperature goal and in the context of the global goal of adaptation thematic targets;

(b) Assessments of medium- and long-term adaptation needs including financing, and, as appropriate, development needs, climate vulnerabilities and risks;

(c) Activities aimed at integrating climate change adaptation into national and subnational development and sectoral planning;

(d) Participatory stakeholder consultations;

(e) Communication, awareness-raising and education.

C. Implementation strategies

4. Activities carried out as part of the implementation strategies would take into consideration the following:

(a) Prioritizing work according to development needs and climate change vulnerability and risk;

(b) Strengthening institutional and regulatory frameworks to support adaptation;

(c) Training and coordination at the sectoral and subnational levels;

(d) Public dissemination of information on the national adaptation plan process and the national adaptation plans, to be made available to the public and submitted to the UNFCCC secretariat;

(e) Considering other relevant multilateral frameworks and international programmes and initiatives, with a view to building on and complementing existing adaptation planning.

D. Reporting, monitoring and review

5. These activities, including the outcomes documented in the national adaptation plan outputs, could be included/integrated in national strategies and plans, as appropriate.

6. Under this element, Parties should undertake a regular review, at intervals that they determine:

(a) To address inefficiencies, incorporating the results of new assessments and emerging science and reflect lessons learned from adaptation efforts;

(b) To monitor and review the efforts undertaken, and provide information in their national communications and biennial transparency reports on the progress made and the effectiveness of the national adaptation plan process.

As the work on NAPs advances towards implementation, and given the important role that the initial guidelines for the formulation of NAPs played in development of the technical guidelines for the NAP

process and also support programmes that ensued, the LEG has developed a complementary/mirrored set of initial guidelines for the implementation of NAPs, with a view to inform the update to the technical guidelines and also in the design of additional support programmes for the implementation of NAPs in the future:

Initial guidelines for the implementation of national adaptation plans by least developed country Parties

I. Introduction

1. The planning of such activities will depend on national circumstances and should be determined by least developed country Parties.

II. Elements of implementation of national adaptation plans

A. Building readiness and institutional arrangements for implementation

2. Activities undertaken under this element would be planned with a view to identifying weaknesses and gaps in enabling environments, and addressing them as necessary, to support the implementation of comprehensive adaptation/resilience and risk-management plans, programmes and policies that contribute to meeting the global goal of adaptation targets, through, inter alia:

(a) Assessment of institutional arrangements, programmes, policies, capacities and readiness for overall coordination, leadership and readiness for implementation of adaptation at scale (absorptive capacity), resilience-building and risk management actions;

(b) Assessment of available information on relevant projects and programmes and specific measures being taken to address climate change, and gaps and needs, and opportunities at the national and regional levels;

(c) Comprehensive, iterative assessments of development needs, climate resilience benefits and outcomes of adaptation interventions and investments;

(d) Strengthening institutional and regulatory frameworks to support adaptation including accreditation of fund-access entities and, delivery and executing partners;

(e) Training and coordination at the sectoral and subnational levels;

(f) Participatory stakeholder consultations, communication and awareness-raising;

B. Building climate change adaptation financing arrangements at the national level

3. Activities undertaken under this element would be planned with a view to building capacity for scaled up financing of (climate change) adaptation using a combination of modalities including innovative financing, and identifying weaknesses and gaps in enabling environments, and addressing them as necessary, to incentivize financing that contribute to meeting the rising costs

of responding to climate change and in particular the global goal of adaptation targets, through, inter alia:

(a) Technical assistance and guidance in design and creation of different financing arrangements for adaptation at multiple levels;

(b) Designing and creating project development units, as necessary, to facilitate development of programmes and projects to access available international climate change financing;

(c) Assessment of institutional arrangements, policies, capacities and readiness for creation of innovative financing solutions for addressing climate change and adaptation in particular;

(d) Strengthening institutional and regulatory frameworks to support the implementation of innovative financing solutions;

(e) Promoting incubation of ideas and supporting entrepreneurs to create and implement innovative financing;

(f) Activities aimed at integrating climate change adaptation actions into national and subnational development and sectoral funding arrangements;

C. Project development and access to funding and financing

4. In implementing NAPs, consideration would be given to identifying specific needs, options and priorities on a country-driven basis, aligned with the global goal of adaptation targets, utilizing the services of national and, where appropriate, regional institutions, and to the effective and continued promotion of participatory and gender-sensitive approaches coordinated with sustainable development objectives, policies, plans and programmes. Activities may include the following:

(a) Prioritizing work according to development needs and urgency of climate change vulnerability and risks being addressed;

(b) Comprehensively quantifying and addressing the full spectrum of risk including optimizing between pre-emptive, contingency and actions to address losses;

(c) Developing a funding and investment plan for the whole NAP by exploring all possible sources of financing;

(d) Designing and developing concept notes and project proposals to different sources of funding based on the policies, projects, and programmes prioritized in the NAP including costing of actions, appraisal of costs and benefits over time to identify adaptation pathways;

(e) Assessments of medium- and long-term adaptation funding needs, and, as appropriate, development needs and future climate risks and vulnerabilities;

(f) Activities aimed at integrating climate change adaptation actions into national and subnational development and sectoral plans and strategies;

D. Implementation of adaptation solutions

5. Activities carried out as part of the implementation of adaptation solutions would take into consideration the following:

(a) Implementation arrangements, including procurement procedures, contractual arrangements, financial accounting and concrete actions on the ground to achieve adaptation and resilience outcomes;

(b) Coordination of implementation of actions with all relevant actors including government, bilateral agencies and organizations, implementing entities, private sector, philanthropic organizations, etc;

(c) Monitoring of project adaptation outcomes to quantify resilience benefits and to identify nodes for adaptation pathways and need for transformations;

(d) Considering projects being implemented under other relevant multilateral frameworks and international programmes and initiatives, with a view to building on and complementing existing adaptation planning.

E. Reporting, monitoring and learning

6. These activities, including national adaptation plan implementation and investment plan documents, could be included in national strategies and plans, and national reports, as appropriate.

7. Under this element, Parties should undertake a regular review, at intervals that they determine:

(a) To address inefficiencies, incorporating the results of new assessments and emerging science and reflect lessons learned from adaptation efforts;

(b) To monitor and review the efforts undertaken, and provide information in their relevant national reports (e.g., national communications and biennial transparency reports) on the progress made and the effectiveness of the implementation of the national adaptation plan;

(c) To assess the adequacy and effectiveness of adaptation by applying indicators to be developed under the global goal of adaptation, as appropriate, including identifying limits and maladaptation;

(d) To disseminate information on the progress of implementation of the national adaptation plan publicly and submitted to the UNFCCC secretariat.

Annex II. Template for project profiles

Including project profiles in NAPs is essential because it helps translate broad climate adaptation priorities into concrete, actionable initiatives that can attract technical and financial support. Project profiles provide clarity on activities, implementation timelines, and resource needs, making it easier for governments, donors, and development partners to coordinate efforts and invest effectively. This level of detail enhances the credibility and readiness of a country's adaptation agenda, ultimately accelerating climate resilience at both national and local levels.

Under the NAP Implementation Pipeline Development Initiative, the LEG is supporting all the LDCs to move towards successful adaptation by helping each to initiate and submit project proposals to the GCF and other sources of funding for implementing adaptation priorities associated with their NAPs.

The project ideas developed by the LDCs are compiled and updated on an ongoing basis and are available on NAP Central.[11] The compilation contains project ideas to be further developed into concept notes and project proposals to be submitted by the LDCs for funding.

Countries are encouraged to align their project profiles with the project proposal templates of the funds under the Financial Mechanism of the UNFCCC—such as the Green Climate Fund (GCF)[12], the Adaptation Fund (AF)[13], and the Global Environment Facility (GEF)[14]—to ensure that project ideas are presented in a format consistent with funding requirements. The Mapping of relevant sources of finance for climate change adaptation for the least developed countries (LEG, 2023) contains detailed information on different sources of funding and how to access them.[15]

To facilitate this process, Table 1 below offers a simpler annotated template to help countries arrange their adaptation priorities into projects profiles.

[11] Available here https://www.napcentral.org/projectcatalogues
[12] GCF Concept Note User's Guide, https://www.greenclimate.fund/document/gcf-concept-note-users-guide and GCF Funding Proposal template to be used by Accredited Entities, https://www.greenclimate.fund/document/funding-proposal-template.
[13] The Adaptation Fund application details can be found at: https://www.adaptation-fund.org/apply-funding.
[14] See, GEF-8 project identification form (PIF), https://www.thegef.org/documents/gef-8-project-identification-form-pif.
[15] Available here https://unfccc.int/topics/adaptation-and-resilience/resources/publications/mapping-of-relevant-sources-of-finance-for-climate-change-adaptation-for-the-least-developed

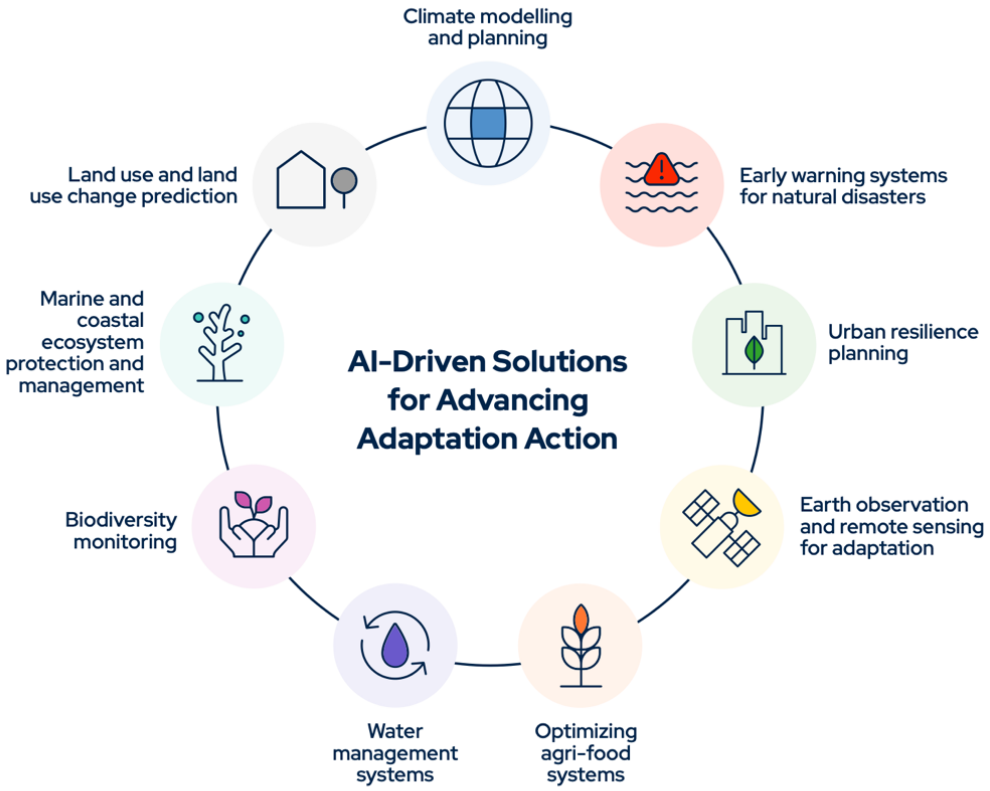
Table 1. Simple template for project profiles

Project title	Provide a concise and descriptive name that clearly reflects the core aim of the adaptation project
Sector(s) (based on GGA targets)	Identify the relevant sectors (e.g., water, agriculture, health, infrastructure, ecosystems and biodiversity, livelihoods, cultural heritage) in line with the Global Goal on Adaptation targets.
Context	Describe the specific climate risks, vulnerabilities, and socio-economic conditions that justify the project. This explains the rationale for the proposed intervention.
Overall objective(s)	State the concrete, long-term goals the project seeks to achieve
Activities	Outline the specific actions or interventions to be implemented. Each activity should contribute directly to achieving the project's objectives and outcomes
Timeline	Provide an estimated schedule for project implementation
Outcomes	Describe the expected medium-term results that will be achieved if the project is implemented successfully. These should be measurable and aligned with the objectives
Indicators	List quantitative or qualitative metrics to track progress and assess the effectiveness of activities and outcomes
Estimated costs	Present a financial estimate for implementing the project, ideally broken down by major components or activities
Source and instrument of funding	Identify the anticipated funding source(s) (e.g., national, MDBs, bilateral, private, etc.) and the type of financing instrument (e.g., grant, loan, blended finance, innovative)
Implementing agency	Name the organization(s) responsible for executing the project on the ground (international, regional or national)
Responsible ministry	Indicate the government ministry (or subnational entity) overseeing the project's strategic alignment with national adaptation priorities and policy coordination

Annex III. Leveraging artificial intelligence in the NAP process

Artificial intelligence (AI) offers powerful tools to support countries - especially LDCs and SIDS - in the formulation and implementation of NAPs. AI can enhance climate and vulnerability assessments, inform planning, strengthen monitoring, and improve the delivery of adaptation actions across key sectors. The following outlines practical entry points, supported by real-world examples, and key risks

This section is informed by the *UN TEC Information Note, "Artificial Intelligence for Climate Action in Developing Countries: Opportunities, Challenges and Risks"*[16]



AI applications for climate change adaptation

1. **Enhancing risk assessment, climate information systems, and climate planning**

- AI can inform the formulation of NAPs by analysing large and diverse datasets (e.g., socioeconomic, climate, geospatial) to support risk and vulnerability assessment and inform evidence-based adaptation planning.
- It can improve long-term climate forecasting, identification of high-risk areas, and helps integrate resilience into infrastructure and spatial planning.
- AI can strengthen multi-hazard early warning systems by improving the accuracy of forecasts for floods, droughts, and cyclones, supporting timely preparedness.
- For example, AI is used to predict deforestation trends in the Amazon, Madagascar, and Mexico, to enable proactive conservation efforts and guide policy responses.

[16] UNFCCC, Technology Executive Committee. *Artificial Intelligence for Climate Action in Developing Countries: Opportunities, Challenges and Risks* *https://unfccc.int/ttclear/misc_/StaticFiles/gnwoerk_static/AI4climateaction/28da5d97d7824d16b7f68a225c0e3493/a4553e8f70f74be3bc37c929b73d9974.pdf*.

- In Ethiopia, AI and satellite data identify communities at risk under the Early Warnings for All (EW4ALL) initiative.
- In Viet Nam, AI-powered remote sensing improves the detection of forest cover changes, supporting forest planning and monitoring.
- In the Caribbean, AI maps housing vulnerabilities to support urban resilience planning and disaster risk management.

2. **Supporting adaptation in key sectors**

- AI can assist in prioritizing adaptation actions through scenario modelling, cost-benefit analysis, and optimization algorithms.
- AI systems can play a key role in analysing climate data and predicting climate impacts such as sea-level rise and deforestation. Countries can simulate the potential outcomes of policies and projects to guide formulation of adaptation strategies under uncertainty.
- In agriculture, AI helps optimize planting schedules, monitor crop health, and predict pest outbreaks - critical for food security in LDCs and SIDS.
- In Kenya, AI-based early warning systems deliver localized crop yield forecasts to smallholder farmers in local languages.
- In Saint Kitts and Nevis, AI supports drought risk modelling for better decision-making on water use.
- In coastal zones, AI combines with satellite data is used to monitor illegal fishing, coral reef health, and coastal erosion, supporting marine adaptation in SIDS.
- AI tools can monitor soil health, land degradation, and water levels, enabling timely adaptation in water and natural resource management.
- AI can predict land use and land cover changes to support integrating planning. In North Sumatra, Indonesia, it forecasts shifts from forest to plantation, informing sustainable land management.

3. Improving monitoring, evaluation, and learning

- AI can automate the collection and analysis of adaptation data, supporting MEL frameworks.
- Natural language processing (NLP) tools can extract insights from reports and community feedback, while dashboards provide real-time tracking of the implementation of adaptation projects identified in the NAP.
- In Colombia, Project Guacamaya uses AI to track deforestation and biodiversity loss via satellite imagery, sensors, and acoustic monitoring.

4. Risks and governance considerations

- Digital divides and limited access to data, infrastructure, and finance constrain AI use in some developing countries.
- Data security and inclusive design are essential to avoid misuse or reinforcement of inequities.
- AI systems have significant energy and water footprints, and if misused, may increase climate risks.
- The #AI4ClimateActionInitiative under the Technology Mechanism supports LDCs and SIDS through the AI Innovation Grand Challenge and capacity-building programmes.
- At COP28, Parties highlights the importance of addressing capacity needs and increasing awareness of AI's potential in NDCs, NAPs, and TNAs.

AI Tool Examples	Use Case for NAPs
ChatGPT and Deep Research (OpenAI)	Drafting summaries, processing technical reports, extracting policy-relevant insights using natural language processing. Deep research employs “active learning” using user query supported by data or documents to conduct in-depth research and searches over 30 minutes
Claude (Anthropic)	Generating and refining documents, supporting inclusive communications for stakeholders
NotebookLM and Gemini Deep Research (Google)	Organizing and querying document repositories to support NAP research and formulation. Deep research employs “active learning” using user query supported by data or documents to conduct in-depth research and searches over 30 minutes
Climate TRACE	Monitoring GHG emissions and land use changes via AI-enhanced satellite data; relevant for MEL frameworks
FAIR Forward Early Warning AI (Kenya)	Localized crop yield prediction using weather, satellite, and soil sensor data; supports agriculture and food security
Digital Earth/Segment Anything Model	Mapping housing vulnerability in the Caribbean using drone imagery and deep learning for urban resilience
AI Forest Cover Detector (Viet Nam)	Neural networks and satellite images to track forest change and degradation for land use planning and conservation
Drought Forecasting Tool (Saint Kitts and Nevis)	Combines weather and water datasets for proactive water management in drought-prone SIDS
Project Guacamaya (Colombia)	Combines satellite, camera traps, and acoustic sensors to monitor biodiversity and deforestation
AI Land Use Model (Indonesia)	Predicts land use change using spatial data and ANN-based cellular automata for sustainable resource planning

Annex IV. Template on NAP finance mapping, key element of the resource mobilization strategy

Sources of finance	**Objective**	**Funding instruments and access modalities**	**Applicable adaptation sectors and activities**
List the funding entity(ies) or mechanisms	*Describe the main goal or purpose for which this source is needed*	*Types of financial tools (grants, loans, bonds, equity, guarantees, venture capital/crowd funding, public-private-partnerships, payment for ecosystem services, etc.) and how they will be accessed (direct access, through international accredited entity, project proposals, etc.)*	*Indicate the specific NAP priority sectors (e.g., agriculture, water) or activities the funding will support*
National sources			
Domestic public finance			
Financial Mechanism under the UNFCCC			
Green Climate Fund			
Global Environment Facility			
Least Developed Countries Fund (LDCF)			
Special Climate Change Fund (SCCF)			
Adaptation Fund			
Multilateral Development Banks			
World Bank			
AfDB			
ADB			
ISDB			
IADB			
Etc.			
Bilateral sources			
Annex I countries			
Private sector entities			

Annex V. About the LEG