



SYNTHESIS REPORT

Progress on Vertical Integration in National Adaptation Plan Processes

Analysis of strategic linkages between
national and sub-national levels



November 2023

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About the NAP Global Network

The NAP Global Network was created in 2014 to support developing countries in advancing their NAP processes, and help accelerate adaptation efforts around the world. To achieve this, the Network facilitates South-South peer learning and exchange, supports national-level action on NAP formulation and implementation, and generates, synthesizes, and shares knowledge. The Network's members include individual participants from more than 155 countries involved in developing and implementing National Adaptation Plans. Financial support for the Network has been provided by Austria, Canada, Germany, Ireland, the United Kingdom and the United States. The Secretariat is hosted by the International Institute for Sustainable Development (IISD). For more information, visit www.napglobalnetwork.org.

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Executive Summary

Vertical integration for climate change adaptation is the process of creating intentional and strategic linkages between national and sub-national governance levels in the planning, implementation, and monitoring, evaluation, and learning (MEL) (Dazé et al., 2016; Ziervogel et al., 2019). Sub-national-level governments and local actors are already taking action to adapt to the climate change impacts being felt by communities. Local-level adaptation needs to be carefully linked to and supported by national-level adaptation planning to channel resources to the people, places, and systems that need them most.

The national adaptation plan (NAP) process presents a critically important opportunity to scale up effective, inclusive adaptation. By building strategic and intentional links with sub-national adaptation planning and implementation through vertical integration, the NAP process can support climate change adaptation priorities so that they reflect local realities, channel resources to sub-national actors and actions, and ensure that sub-national adaptation efforts are captured when progress is tracked and reported.

This report presents an analysis of how countries are advancing vertical integration in NAP processes. The findings are based on data collected through a review of NAP documents submitted to the United Nations Framework Convention on Climate Change's (UNFCCC's) NAP Central as of July 2023, and the recommendations are complemented with information gathered during the NAP Global Network Secretariat's engagement with countries' NAP teams.

Key Findings

From our analysis, this report presents the following key findings regarding vertical integration:

1. **All NAPs reference one or more non-governmental sub-national actor that is relevant for vertical integration in the NAP process.** They reference a broad range of non-governmental actors, such as civil society organizations, small-business owners, local communities, and smallholder producers, as well as specific societal groups, such as women, Indigenous Peoples, youth, and people living with disabilities, as actors that are relevant in the NAP process.
2. **Most countries include a role for sub-national governments in climate change adaptation.** NAP documents assigned different roles to sub-national authorities during the planning and implementation steps of adaptation and, to a lesser extent, in the MEL stages of the NAP process.
3. **Most NAPs mention coordination mechanisms across various levels of governance.** Countries are establishing diverse modes of coordination across levels. For example, some countries are using existing multilevel governance structures, some are creating new multi-scale coordination mechanisms, and others are initiating ad hoc processes, typically for consultation during the development of the NAP.

4. **Many countries' NAPs mention mechanisms to provide financing at sub-national levels.** This includes microfinancing mechanisms or mainstreaming of adaptation finance in sub-national budgets for the implementation of adaptation actions at multiple levels. Mechanisms can also include channelling international funding into the implementation of adaptation measures at local levels.
5. **A significant number of NAPs reference sub-national-level adaptation plans.** Countries are also incorporating the development of sub-national adaptation plans and strategies at different governance scales—for example, at the community, municipal, county, provincial, and state levels. These sub-national plans are determined by countries' multilevel governance structures and decentralization processes.
6. **Several countries are recognizing the local dimensions of adaptation action in their NAPs.** There is an explicit reference to the interrelated concepts of community-based adaptation and locally led adaptation in a significant number of NAPs, which reflects a recognition of the local context in the adaptation process.

Key Recommendations

Recommendations for Government NAP Teams

- Strengthen multilevel institutional arrangements and coordination mechanisms.
- Establish systems to provide financial flows (including budgeting) to sub-national levels for climate change adaptation.
- Engage key non-governmental sub-national-level actors from civil society organizations, small businesses, and local communities, as well as small-scale producers and other relevant parties, in the NAP process.

Recommendations for Sub-National Governments

- Prioritize the strengthening of their institutional and human capacities for moving from the planning stage to the implementation of adaptation.
- Request the building of capacities in MEL systems to track, assess, and report their adaptation measures at the sub-national and national levels.

Recommendations for Development Partners

- Document and share best practices on multilevel coordination in diverse governance systems in the NAP process.
- Assist in the strengthening of data and information systems across levels for the MEL of the NAP process.

Recommendations for Funders

- Provide dedicated funding for vertical integration to advance the implementation of the NAP process.
- Provide predictable, flexible, and strategic funding for long-term capacity building for sub-national governments to enable vertical integration in the NAP process.

Recommendation for the UNFCCC Processes

- Provide technical guidance and training on how to build and sustain the human, institutional, and system capacities of sub-national governments for NAP implementation.

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Acronyms and Abbreviations

CSOs	civil society organizations
CBA	community-based adaptation
EbA	ecosystem-based adaptation
GCF	Green Climate Fund
LEG	Least Developed Countries Expert Group
LLA	locally led adaptation
MEL	monitoring, evaluation, and learning
NAP	national adaptation plan
PCCB	Paris Committee on Capacity-building
UNFCCC	United Nations Framework Convention on Climate Change

1

Introduction

Sub-national-level authorities are already taking action to adapt to the climate change impacts being felt by communities. Local-level adaptation needs to be carefully linked to and supported by national-level adaptation planning to channel resources to the people, places, and systems that need them most.

The significant role of local and sub-national actors in advancing adaptation planning and implementation is already well recognized. In 2014, the Intergovernmental Panel on Climate Change acknowledged “the complementary role of adaptation strategies, plans, and actions at different levels (national, subnational, and local)” (p. 15). The 2015 Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC) notes that “adaptation is a global challenge faced by all with local, subnational, national, regional and international dimensions” (p. 6). The Global Commission on Adaptation’s 2019 flagship report called for greater support for locally led action, launching a set of principles on locally led adaptation (LLA), co-developed and endorsed by more than 70 organizations.

The national adaptation plan (NAP) process presents a critically important opportunity to scale up effective, inclusive adaptation. By building strategic and intentional links with sub-national adaptation planning and implementation through vertical integration, the NAP process can support climate change adaptation priorities in reflecting local realities, channelling resources to sub-national actors and actions, and ensuring that sub-national adaptation efforts are captured when progress is tracked and reported. Vertical integration in the NAP process aims to strengthen multilevel governance systems for adaptation so that climate change can be integrated into development processes and budgets at sub-national levels, in line with one of the objectives of the NAP process (UNFCCC, 2011).

This report presents an analysis of how countries are advancing vertical integration in NAP processes. The findings are based on data collected through a review of NAP documents submitted to the UNFCCC’s NAP Central as of July 2023, and the recommendations are complemented with information gathered during the NAP Global Network Secretariat’s engagement with countries’ NAP teams. This is the NAP Global Network’s first synthesis report on vertical integration in NAPs. The aim of this report is to provide an overview of the themes, trends, and common approaches involved in vertical integration and the lessons that countries are taking to advance its uptake through NAP processes.

2

Background

The following section introduces key elements related to vertical integration in the NAP process as well as other relevant concepts.

2.1 What Is the NAP Process?

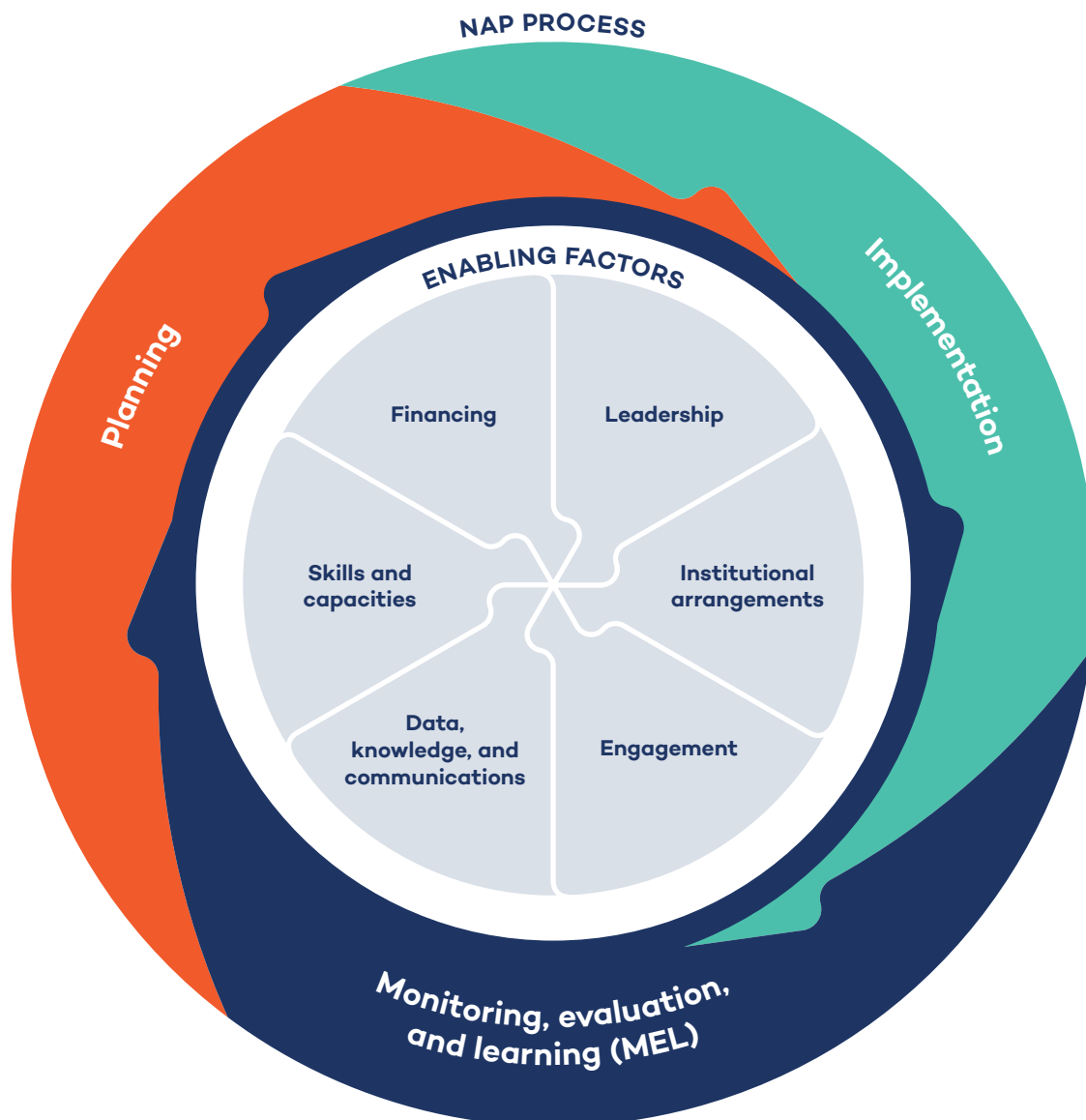
The NAP process is a strategic effort led by national governments through which countries are identifying and addressing their medium- and long-term priorities for climate change adaptation (Hammill et al., 2019; Least Developed Countries Expert Group [LEG], 2012). It was established during the Cancun Adaptation Framework in 2010 under the UNFCCC. The overall objective is to reduce vulnerability to climate change, build resilience, and strengthen adaptive capacity, as well as advancing 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” (UNFCCC, 2011, p. 80). It is a continuous, progressive, and iterative process.

In simple terms, the NAP process can be understood as three broad overlapping phases: planning; implementation; and monitoring, evaluation, and learning (MEL), as shown in Figure 1.¹ These stages require coordination between various levels of governance. Six enabling factors are essential to the NAP process: leadership; institutional arrangements; engagement; data, knowledge, and communications; skills and capacities; and financing (NAP Global Network, 2023).

As of October 2022, 139 of the 154 developing-country parties to the UNFCCC reported having initiated their NAP processes (UNFCCC, 2022). NAPs submitted by developing countries to the UNFCCC can be accessed at [NAP Central](#) (UNFCCC, 2023).

¹ Official technical guidelines for the NAP process were published by the LEG (2012). The Technical Guidelines describe four elements (A. Lay the Groundwork and Address Gaps; B. Preparatory Elements; C. Implementation Strategies; and D. Reporting, Monitoring, and Review) with a series of four to five steps under each element.

Figure 1. Phases and enabling factors in the NAP process



Source: NAP Global Network, 2023.

2.2 What Is Vertical Integration in the NAP Process?

Adaptation to climate change is an inherently context-specific process that requires coordination between different levels of governance. In the context of the NAP process, **vertical integration is the process of creating intentional and strategic linkages between national and sub-national levels in climate change adaptation planning, implementation, and MEL** (Dazé et al., 2016).

National-level governments lead and coordinate the NAP process (LEG, 2012). From national to local levels, it's important to recognize the key role that sub-national authorities play in moving from planning to implementation and tracking progress through MEL. Adaptation action at sub-national levels continues to be a top priority for national governments and an area in need of support for effective NAP implementation (UNDP et al., 2023; Luna Rodríguez, 2023).

Sub-national-level actors include a wide range of interested parties, including those at the local or community level. This may include a range of sub-national government divisions, depending on the country context—for example, they may be at state, regional, provincial, departmental, municipal, or county levels (Organisation for Economic Co-operation and Development, 2022). They may also include civil society and private sector actors that are relevant at sub-national levels (Dale & Neufeldt, 2023). A key focus for vertical integration is strengthening and/or establishing mechanisms for multilevel coordination between national and sub-national government entities (Hooghe & Marks, 2021).

Vertical integration is key for the effective and inclusive implementation of NAPs, and integrating climate change adaptation across different levels of governance is one of the main objectives of the NAP process (UNFCCC, 2011). It also lies at the heart of the NAP Global Network's efforts on advancing climate change adaptation. This is not a single step in the NAP process but, rather, an ongoing effort to ensure that 1) local realities are reflected in the NAP process, and 2) the NAP process enables adaptation at sub-national levels (Dazé et al., 2016).

Box 1. Glossary of terms relevant to vertical integration

Community-based Adaptation (CBA): Adaptation practices that are small in scale and place based—typically driven by grassroots efforts and actively involving development practitioners and strategies—and focused on the active participation of local communities (Schipper et al., 2014).

Decentralization: A complex, multifaceted concept that refers to the transfer of power and accountability for public functions from the central government to subordinate or semi-independent government institutions or the private sector, encompasses a wide range of concepts. (Litvack & Seddon, 1999; Rondinelli et al., 1983). See Appendix A for more information on the diverse types of decentralization.

Ecosystem-based Adaptation (EbA): Approaches that use ecosystem services and biodiversity as a component of a comprehensive strategy to assist people in adjusting to the negative impacts of climate change (Convention on Biological Diversity, 2009). EbA is a type of nature-based solution.

Gender Equality: Equal rights, responsibilities, resources, and opportunities for women, men, girls, boys, and gender-diverse people (CARE, 2019; UN Women Training Centre, 2017). Gender equality means that the similarities and differences between people of different genders, and the roles they play, are equally valued by society (UNICEF Regional Office for South Asia, 2017).

Governance: Refers to the rules, institutions, and procedures that dictate how a society allocates power, makes decisions, and assigns responsibilities (Córdoba-Muñoz, 2019; Graham et al., 2003).

Locally Led Adaptation (LLA): An approach to climate change adaptation interventions and actions through which decision making directly includes actors at the lowest administrative levels, such as local communities, community-based organizations, small businesses, community members, citizen groups, local governments, and local private sector entities (International Centre for Climate Change and Development, 2023). This approach builds on the practice and theory of CBA (Vincent, 2023).

Multilevel Coordination Mechanisms: The rules, regulations, customary practices, and associated organizational structures that enable coordination across actors at all levels. These mechanisms can be based on countries' existing multilevel governance systems (such as sub-national governmental authorities), new climate change-related institutions (for example, multilevel climate change coordination mechanisms mandated by law and decrees), or *ad hoc* processes for coordination across levels (for instance, the multilevel consultation process for NAP formulation) (Luna Rodríguez, 2019, 2023; NAP Global Network, 2023).

Multilevel Governance: Refers to a description of how power is distributed vertically across different levels of governance and horizontally between multiple actors (Cairney, 2019). In the context of climate change adaptation, multilevel governance recognizes various levels of governance (global, international, national, sub-national, and local) and the contributing roles of governments, civil society, and businesses that address this complex challenge (Ishtiaque, 2021; Persson, 2019).

Social Inclusion: A continuous process of active and intentional actions to address societal inequities in power and privilege (United Nations Department of Economic and Social Affairs, 2016; University of British Columbia, n.d.).

Vertical Integration (for climate change adaptation): The process of creating intentional and strategic linkages between national and sub-national levels of governance in climate change adaptation planning, implementation, and MEL (Dazé et al., 2016).

3

Entry Points for Vertical Integration in the NAP Process

Existing and new multilevel governance structures can provide entry points that facilitate effective vertical integration in the NAP process. Integration is driven by the recognition of diversity in the impacts of and vulnerabilities to climate change for different communities and marginalized groups (such as women, Indigenous Peoples, and migrants), as well as the vital role played by local and sub-national actors in advancing adaptation actions. Effective vertical integration requires an explicit commitment from national actors to have an inclusive and participatory NAP process, with ongoing dialogue between different levels of governance across adaptation planning, implementation, and MEL.

The NAP process is an iterative policy cycle with three major phases: planning, implementation, and MEL, as presented in Figure 1. Enabling factors for the process include leadership; institutional arrangements; engagement; data, knowledge, and communications; skills and capacities; and financing for actors at all levels. These broad phases and enabling conditions represent opportunities for vertical integration in the NAP process:

- **During the planning phase**, national governments can incorporate a broad range of actors from multiple levels of governance. Among those actors, sub-national authorities, grassroots civil society organizations (CSOs), and local-level businesses can bring different perspectives on adaptation impacts and needs. Articulation across levels during planning also ensures that sub-national and local diversity is reflected when establishing national-level adaptation priorities and builds on what is already happening at local levels. Moreover, this process can create opportunities to integrate adaptation planning and budgeting at sub-national levels and into local decision-making processes.
- **In the implementation phase**, national governments' coordination with sub-national-level authorities is key in advancing adaptation actions. This also presents an opportunity to mainstream adaptation priorities in the implementation of development strategies and budget execution of sub-national authorities. Other sub-national actors, such as local CSOs and the private sector, can contribute to the implementation of adaptation actions prioritized through the NAP process.
- **The establishment of multilevel MEL systems** requires national government collaboration with sub-national governments, as well as with CSOs, and the private sector across levels (Dale & Neufeldt, 2023). Multilevel articulation contributes to the tracking and

reporting of sub-national actions and progress into national MEL systems, and that learning across levels feeds into the iterative nature of the NAP process.

This process also includes key entry points through these enabling factors ([NAP Global Network, 2023](#)):

- **the active involvement of high-level political leadership** and “champions” who are committed to supporting coordinated adaptation actions across levels;
- **institutional arrangements** to strengthen coordination mechanisms between national and sub-national governance levels, and among sub-national authorities;
- **engagement of diverse actors** at all governance levels—including sub-national governments, CSOs, businesses, academia, media, and local communities—to facilitate their participation in and influence on decision making about adaptation (Crawford & Church, 2019; Ledwell et al., 2023; Morchain, 2021);
- **data, knowledge, and communications** to facilitate continuous, two-way information sharing between national and sub-national actors, including climate information at sub-national levels (e.g., downscaled climate models) and for citizen’s science, local, Traditional, and Indigenous knowledge to be reflected throughout the NAP process;
- **strengthening skills and capacities** by enhancing climate-related and context-specific institutional and human competencies at sub-national levels; and
- **incorporating climate-resilience considerations into finance** allocation processes, such as government budgeting across levels, and into fiscal transfers from national to sub-national authorities.

4

Methodology

The following analysis aims to understand how countries are creating intentional and strategic linkages between different levels of governance, or vertical integration, in NAP processes. This section provides an overview of the methodology used for the analysis.

This report’s findings, presented in Section 5, are based on a desk-based review of 45 multisectoral NAP documents submitted to the UNFCCC as of July 31, 2023, available on the UNFCCC’s [NAP Central](#).² Countries’ NAP documents differ in length, format, and level of detail. Despite this variability, a country’s NAP is an important source of information on its adaptation context and priorities and provides an overview of its efforts to adapt to climate change. The recommendations section also benefits from insights gained through the NAP Global Network’s technical support provided to countries and engagement with adaptation practitioners, including a peer learning summit on vertical integration that took place in Nairobi, Kenya, in October 2023.

² For methodological consistency, this analysis reviewed only multisectoral NAPs and does not include the sector-specific NAP from Uruguay.

5

Findings

The following section summarizes the key findings from the review of vertical integration elements in the NAP documents.

5.1 All NAPs reference one or more non-governmental actor at sub-national levels that are relevant for vertical integration in the NAP process.

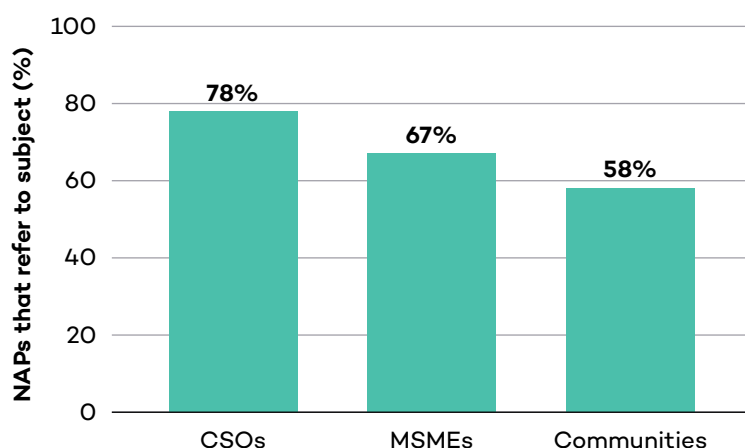
Three quarters of countries (78%) reference actions for CSO groups to inform the NAP process at the sub-national and national levels. For example, in Kuwait, the NAP process is expected to take a participatory approach to provide effective engagement at the local, national, and regional levels of non-governmental organizations and local populations, including women and men (Environment Public Authority of Kuwait, 2019, p. 22). Tonga is currently implementing its second NAP³ and highlights a non-governmental organization forum established under the implementation period of its first NAP as a key accomplishment toward achieving a strong institutional framework for adaptation (Department of Climate Change, 2018, p. 20).

Approximately two thirds of the NAPs (67%) reference local private sector actors and/or micro, small, and medium-sized businesses. For instance, Sierra Leone's NAP recognizes that the private sector can be an engine for empowering women-led enterprises and women entrepreneurs (Government of Sierra Leone, 2021, p. 61). Also, the Democratic Republic of the Congo's NAP highlights the crucial role that the adaptation of the private sector plays in ensuring the livelihoods and security of a vast percentage of the population (Ministry of the Environment and Sustainable Development, 2022, p. 47).

More than half of countries (58%) reference engaging local communities in the NAP process, while most NAPs (91%) mention communities in general terms. The Colombian NAP states that in involving local communities, the process must build their capacities and empower them to plan for and respond to climate change and “that greater visibility of local knowledge is key in community decision-making around the identification, design, and implementation of climate adaptation measures” (Departamento Nacional de Planeación, 2018, p. 57). Other actors referenced in the NAPs analyzed are women (49%), farmers (40%), Indigenous Peoples (40%), youth (38%), persons living with disabilities (24%), and fisherpersons (16%).

³ Tonga's Joint National Action Plan 2 on Climate Change and Disaster Risk Management 2018–2028 serves as its NAP document.

Figure 2. References to non-governmental actors that are relevant for vertical integration



Source: Authors.

5.2 Most countries reference a role for sub-national governments in climate change adaptation.

All but one of the NAPs reviewed mention sub-national governments, and most documents assigned specific roles to sub-national authorities. **Many NAP documents (76%) mentioned planning⁴ roles for the sub-national authorities.** For instance, in Costa Rica, the Ministry of Environment and Energy, along with partners, is working with over 20 municipalities to develop climate change action plans and to integrate adaptation into local development planning processes (Ministerio de Ambiente y Energía, 2022, p. 42). At national, state, *payam* (second-lowest administrative division), and *boma* (lowest administrative division) levels, South Sudan's NAP formalizes the roles and responsibilities for climate change adaptation planning, including specific budgeting responsibilities and powers to be clarified in the amendment of a Local Government Act (Ministry of Environment and Forestry, 2021, p. 83). Timor Leste's NAP aims to provide technical and financial support for *suco* (village) development committees to carry out climate change vulnerability assessments, which will be consolidated to inform prioritization of adaptation in the NAP process (Secretariat of State for Environment, Coordinating Minister for Economic Affairs, 2021).

Most NAPs (78%) refer to an implementation role for sub-national governments.

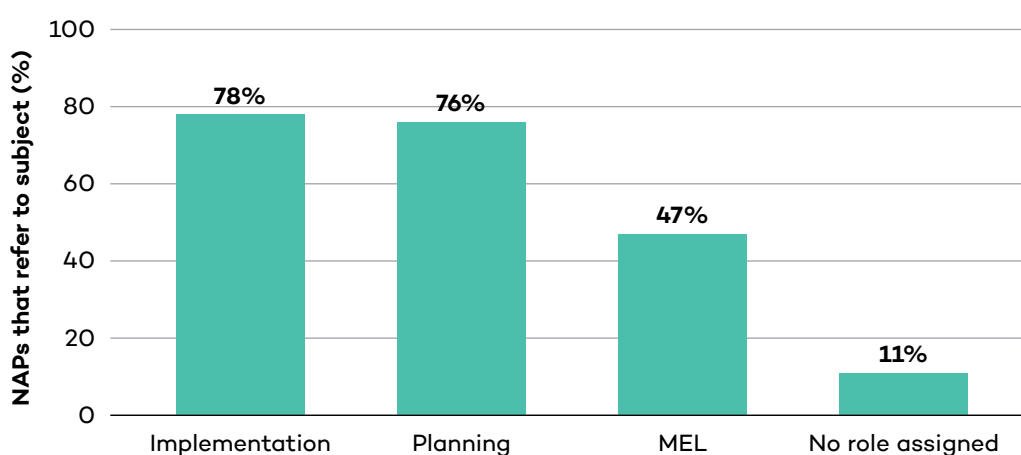
For example, Paraguay's sub-national governments are responsible for the design of cities and the implementation of local policies to ensure an equitable, resilient, and sustainable future (Ministerio del Ambiente y Desarrollo Sostenible, 2022, p. 52). Also, South Sudan's NAP states that sub-national entities will be crucial to planning and implementation and includes a priority

⁴ Key words include "formulation" and "planning" of adaptation for sub-national governments.

action on establishing a pilot program for adaptation actions in three states linked to vertical integration arrangements (Ministry of Environment and Forestry, 2021, p. 83).

Almost half of the NAPs (47%) mentioned a role for sub-national governments in MEL⁵ in the NAP process. For instance, Nepal aims to establish and operationalize a climate change data management system and program monitoring centre at federal and provincial levels and build capacities of provincial ministries to report on NAP implementation (Government of Nepal, 2021, p. 39). Cameroon’s NAP proposed the development of a monitoring and evaluation system that would engage beneficiaries of adaptation measures in monitoring and evaluation by regional and departmental adaptation committees that would report to the governor and prefect (Ministry of Environment, Protection of Nature, and Sustainable Development, 2015, p. 94). Finally, some NAPs assigned other specific responsibilities—for example, data and information collection.

Figure 3. Role assigned to sub-national governments in NAP documents



Source: Authors.

5.3 Most NAPs mention coordination mechanisms across different levels of governance.

Many NAPs (78%) refer to coordination mechanisms across levels. Some countries use existing institutional arrangements for coordination across distinct levels of governance, while others propose new institutional arrangements be put in place. Brazil’s NAP states the need to promote coordination among the three levels of government (federal, state, and municipal) in an effort to promote collaboration between states and municipalities for integrated territorial planning and management to reduce vulnerability to climate change, with the Ministry of Cities serving as a focal point for the Strategy for Cities under the National Adaptation Plan (Ministry

⁵ Key terms include “monitoring,” “reporting,” “verification,” and the abbreviation “MRV”; “monitoring,” “evaluation,” and the abbreviation “M&E”; and “learning” and “MEL” of adaptation for sub-national governments.

of Environment, 2016, pp. 57, 68). Strengthening institutional and actor synergies that can make it easier to include adaptation in sectoral planning and budgeting at several levels—national, sub-national, and local—is a strategic objective for the implementation of the NAP in Niger, with the National Council for Environment and Sustainable Development as the coordinating ministry (République du Niger, 2022, p. 138).

In Madagascar, the Inter-Regional and Regional Directorates for the Environment and Sustainable Development act as regional coordinators for the Ministry of the Environment and Sustainable Development and play a role in monitoring the implementation of strategies and actions emanating from the ministry’s policies, such as the NAP (Ministère de l’Environnement et du Développement Durable, 2022, p. 25). Conversely, Cabo Verde proposes establishing a new institute or agency for climate change, which is expected to interact with the 22 municipalities and local disaster risk reduction platforms as part of NAP coordination at the local level (Ministry of Agriculture and Environment, 2022, pp. 88–89).

Some NAPs present examples of coordination mechanisms that engage non-governmental actors at sub-national levels. In Saint Lucia, the National Climate Change Committee serves as the NAP coordinating mechanism (Government of Saint Lucia, 2018, p. 44) for multistakeholder engagement under the NAP process and incorporates non-state actors (including those from civil society, men, women, vulnerable groups, and the private sector) in national adaptation initiatives (Government of Saint Lucia, 2018, p. 45). Through the Kiribati National Expert Group on Climate Change and Disaster Risk Management, the country aims to ensure that adaptation initiatives are aligned with national development goals. The group includes core and line ministries, development partners, the private sector, and CSOs, which play distinct roles in strengthening coordination across levels and targeting outer islands at the community level (Government of Kiribati, 2019, pp. 64, 78).

5.4 Many countries mention mechanisms to provide financing to sub-national levels.

Almost three quarters of NAPs (69%) refer specifically to the disbursement of funding to sub-national levels. For instance, Papua New Guinea’s NAP identifies multiple approaches for mainstreaming adaptation into sub-national budgets for adaptation activities in provinces, districts, local-level governments, and wards to work alongside transfers from the national level and international sources of climate finance (Climate Change & Development Authority, 2023, p. 55). Sudan’s NAP mentions “tapping the resources available at the micro finance institutions to increase the resilience of the communities” (Ministry of Environment, Natural Resources & Physical Development, 2016, p. 60).

Box 2. Local finance for NAP-aligned adaptation in Benin

Since 2014, the government of Benin has been working with the UN Capital Development Fund's Local Climate Adaptive Living Facility, a mechanism that aims to help sub-national and local governments in developing countries and least developed countries access and deploy climate financing. In the past decade and in partnership with a range of development partners, Benin has made significant advances on national adaptation planning, including establishing a National Environment and Climate Change Fund in 2017 and launching its first NAP document in 2022.

Benin's progress on the NAP process has led to an important milestone to increase investment in local-level adaptation: in 2023, the Green Climate Fund (GCF) approved a USD 9.9 million project for the Benin government, with the National Environment and Climate Change Fund as the Accredited Entity, with support from the UN Capital Development Fund's Local Climate Adaptive Living Facility. The project aims to strengthen local climate governance and boost local-level access to climate finance in the key climate-sensitive sectors aligned with those prioritized in the NAP (GCF, 2023).

More than 35 countries are designing or using such mechanisms for financing local adaptation to climate change—performance-based climate-resilience grants—for vertical integration in their NAP processes (United Nations Capital Development Fund, 2019).

5.5 A significant number of NAPs reference sub-national-level adaptation plans.

Many of the NAPs (60%) mentioned sub-national adaptation plans. In Armenia, alongside sectoral adaptation plans, provincial (*marz*) adaptation plans—MAPs—provide the foundation for operationalizing adaptation planning within the existing government structure. Outlines of regional responses to the challenges posed by climate change can be found under individual MAPs, which also help prioritize climate change adaptation activities across the country (Government of the Republic of Armenia, 2021, pp. 15–16).

In the formulation of Kenya's County Adaptation Plans, counties will be encouraged to identify priority actions from the national priority list and customize the selected actions to suit their contexts, following risk/vulnerability assessments (Government of Kenya, 2017, p. 22). Also, county governments will be expected to integrate climate change actions and interventions into County Integrated Development Plans.

Funds from international sources have been channelled toward the creation of local adaptation plans. In Paraguay, local adaptation plans were designed in 19 municipalities through funding from the GCF (Ministerio del Ambiente y Desarrollo Sostenible, 2022, p. 45). Similarly in Ecuador, climate change assessments and provincial strategies were conducted and formulated, respectively, with funding from the European Union by the Consortium of

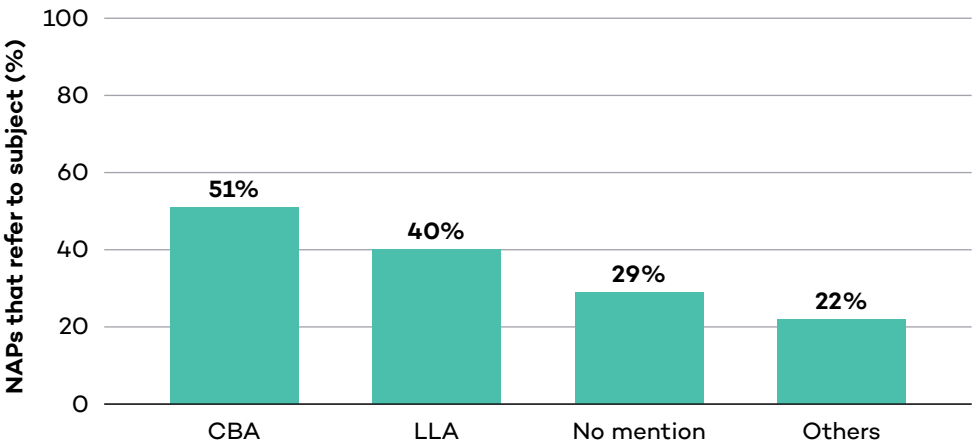
Autonomous Provincial Governments of Ecuador. These activities were aimed at promoting the development and implementation of climate change adaptation and mitigation public policies and actions by autonomous provincial governments (Ministerio del Ambiente, Agua y Transición Ecológica, 2023, p. 106).

5.6 Several countries are recognizing the local dimensions of adaptation action in their NAPs.

Around half of countries’ NAPs (51%) made an explicit reference to the concept of CBA, while some countries (40%) include LLA. For instance, Bangladesh’s NAP incorporates “community-based adaptation in association with [local government institutions] ..., [non-governmental organizations], [and] youth leadership programmes” (Ministry of Environment, Forest and Climate Change, 2022, p. 59), as well as prioritizing “empower[ing] local government institutes, community-based organizations, women, people living with disabilities and youth for locally led adaptation” (Ministry of Environment, Forest and Climate Change, 2022, p.71).

In the case of Péru, its NAP combines the EbA and CBA approaches at the water catchment level, by increasing their storage capacity, and “conserving and sustainably using natural infrastructure under the ecosystem and community-based adaptation approaches” (Ministerio del Ambiente, 2021, p. 260). Another concept the country’s NAP incorporates is “adaptation based in traditional and ancestral knowledges and practices,” which “reclaims, values, and uses the traditional knowledge of indigenous peoples [*sic*] and their vision for a development in harmony with nature in the design of climate adaptation measures, guaranteeing the just and equitable distribution of the benefits derived from the use of this knowledge” (Ministerio del Ambiente, 2021, p. 24). Other references to local dimensions include locally driven resilience programs, community-based social solutions, and community-level interventions.

Figure 4. References to community-based and locally led approaches



Source: Authors.

Box 3. Emerging areas of alignment with international frameworks

A significant number of NAPs reference coordination beyond the national level.

Many countries (62%) reference linking the NAP with transboundary- and regional-level (above national) coordination processes. For instance, at the transboundary level, Niger refers to the institutional framework under the Niger Basin Authority and the Lake Chad Basin Commission as key interested parties in the NAP process “for integrated and concerted cross-border coordination of climate change adaptation actions in the Niger River basin or the Lake Chad basin in Niger” (République du Niger, 2022, p. 46). Also, Brazil’s NAP aims to advance “South American regional cooperation among Adaptation Plans and Strategies, with a view to promoting exchanges of best practices, expansion of regional knowledge, and identification and treatment of the direct and indirect impacts of transboundary climate change” (Ministry of Environment, 2016, p. 19).

Similarly, South Africa mentions that the Southern African Development Community’s Climate Change Strategy and Action Plan highlights the need for enhanced climate change adaptation responses in the continent: “The [action plan] aims to coordinate regional and national climate change responses in Africa, and to ‘climate proof’ [the Southern African Development Community’s] policies, strategies and protocols” (Department of Forestry, Fisheries and the Environment, 2021, p. 15). These approaches may require the collaboration of the NAP teams in integrating transboundary and regional (above national) considerations in assessing climate risks domestically and implementing adaptation actions in a coordinated manner. As a recent NAP Global Network brief highlights, transboundary coordination and collaboration on adaptation planning should be encouraged and supported to help address and manage these risks (Terton et al., 2023).

These examples highlight the emerging call for coordination on adaptation beyond the national level to align with the guidance of the Paris Agreement, its Global Stocktake process, and the Global Goal on Adaptation it established (Persson, 2019; Qi, 2022).

6

Recommendations

The following recommendations highlight how different actors involved in leading or supporting NAP processes can draw on the findings shared above to strengthen and advance vertical integration in NAP processes.

Recommendations for Government NAP Teams

The government teams leading NAP processes should take the following steps:

- 1. Strengthen multilevel institutional arrangements and coordination mechanisms.** Strengthening multilevel coordination—including existing, new, and *ad hoc*—mechanisms between national and sub-national levels and among sub-national actors. National governments should empower sub-national governments' decision making on adaptation while providing necessary technical, human, and financial resources to act on those decisions.
- 2. Establish systems to provide financial flows (including budgeting) to sub-national levels for climate change adaptation.** One of the main barriers identified in the literature and practice of climate change adaptation is the lack of stable and reliable financing at sub-national levels (Omari-Motsumi et al., 2019; Tall et al., 2021). As countries make progress on the development of their own mechanisms to provide adaptation finance to sub-national levels, these experiences should be supported and documented to secure their sustainability and replication.
- 3. Engage key non-government sub-national-level actors from CSOs, small businesses, small-scale producers, local communities, and other parties in the NAP process.** The NAP process requires the engagement of different actors beyond national-level authorities to be successful (Ledwell et al., 2023). On the one hand, CSOs at sub-national levels are key actors in scaling up effective and inclusive adaptation. For example, community, sub-national, and national CSOs can provide a voice to multiple groups that are being disproportionately affected by climate change impacts, such as women, the elderly, youth, Indigenous Peoples, and migrants. These umbrella organizations can bring local voices that would be difficult to capture by national governments alone. On the other hand, the local private sector, small businesses, and small-scale producers employ many people in emerging economies (Crawford & Church, 2019). Therefore, successful participation in the NAP process is crucial to secure jobs, as many of them are found in climate-dependent economic sectors such as agriculture (Dougherty-Choux et al., 2015).

Recommendations for Sub-National Governments

Sub-national governments looking to advance vertical integration in their country's NAP process should take the following steps:

1. **Prioritize strengthening their institutional and human capacities in moving from planning to implementation of adaptation.** They should look to actively participate in and influence the NAP process led by the national government and seek opportunities to access institutional, technical, and financial support for ongoing, sustained capacity building. Climate change adaptation is a knowledge-intensive activity; therefore, developing needs assessments and capacity-building programs can contribute to enhancing the human and institutional capacities of sub-national governments. Critical areas to build technical capacities are 1) integrating adaptation into development planning and budgeting and 2) advancing adaptation project pipelines, including how to access, manage, and implement financial resources for adaptation actions at sub-national and local levels (Paris Committee on Capacity-building [PCCB], 2022; UNFCCC, 2022).
2. **Request the building of capacities in MEL to track, assess, and report adaptation measures at the sub-national and national levels.** As the NAP process transitions from the planning to the implementation of adaptation measures, MEL systems become essential to provide a structured approach to monitoring progress, evaluating results, and capturing learning to understand whether climate change adaptation strategies are achieving their objectives and how (Beauchamp, 2023). Sub-national-level government authorities will benefit from establishing MEL systems that inform the effective use of limited resources for adaptation and the tracking of progress (Dale & Neufeldt, 2023).

Recommendations for Development Partners

Development partners providing technical support for NAP processes should take the following steps:

1. **Document and share best practices on multilevel coordination in diverse governance systems in the NAP process.** As a cross-cutting activity, documentation and sharing of lessons learned between countries in enhancing coordination across governance levels can help advance vertical integration in the NAP process. Given the diversity of multilevel governance systems among the countries (extending from federal to hybrid, and to unitary systems), the identification of good practices in multi-scale governance in diverse systems can serve as inspiration for other countries with similar vertical integration challenges.
2. **Assist in the strengthening of data and information systems across levels for a comprehensive MEL of the NAP process.** Working with national governments, development partners should help address this emerging area of support in vertical integration. As countries coordinate between national and sub-national-level MEL systems, several countries have increasingly communicated their interest in being supported by the NAP Global Network in establishing multilevel MEL systems.

Capacities for the vertical integration of MEL across levels are crucial to inform and report to global MEL processes and initiatives such as the UNFCCC's Global Goal on Adaptation and the Global Stocktake, but also other Rio Conventions (i.e., the United Nations Convention on Biological Diversity and United Nations Convention to Combat Desertification), the Sendai Framework, and the Sustainable Development Goals.

Recommendations for Funders

Funders aiming to support vertical integration in the NAP process should take the following steps:

1. **Provide dedicated funding for vertical integration to advance the implementation of the NAP process.** The vertical integration process requires constant and sustained support to put in place the multilevel institutional arrangements and mechanisms for an effective adaptation process at the sub-national and local levels. A more vertically integrated NAP is a two-way process that can contribute to the implementation of NAP priorities at sub-national levels. It can also support the provision of a voice to sub-national and local actors, including women, youth, small-scale producers, and local communities, contributing to a more equitable and fair adaptation process (Morchain, 2021).
2. **Provide predictable, flexible, and strategic funding for long-term capacity building for national and sub-national governments to enable vertical integration in the NAP process.** Supporting the institutional and human capacities of national and sub-national authorities has been identified as a key element in the NAP process (LEG, 2012; Dazé et al., 2016). Capacity gaps in sub-national-level governments are related to limited institutional, technical, and financial competencies and knowledge (Asian Development Bank, 2023). Sub-national governments would benefit from financial support to strengthen technical knowledge on adaptation planning and implementation, including, for example, how to develop climate risk assessments; how to access and interpret climate information and early warning systems; how to communicate climate risks to different actors at local levels in an inclusive and gender-responsive manner; and how to access financing for adaptation actions from different sources, including international funds, national and sub-national budgeting, and the private sector.

Recommendations for the UNFCCC

Constituted bodies under the Convention should take the following steps:

1. **Provide technical guidance and training on how to build and sustain the human, institutional, and systems capacities of sub-national governments for NAP implementation.** A major challenge of capacity building at sub-national levels is personnel turnover, which affects sustaining individual and institutional skills and abilities built over time by diverse parties. Through the different processes and constituted bodies working on adaptation-related issues (such as the LEG, the Adaptation Committee, and the PCCB), the UNFCCC can support capacity needs assessments and training processes (PCCB, 2022), as well as retention strategies for technical employees to sustain the capacities of sub-national-level authorities in diverse governance systems.

References

- Asian Development Bank. (2023). *How subnational governments can strengthen resilience to climate change* [Policy brief]. Development Asia. <https://development.asia/policy-brief/how-subnational-governments-can-strengthen-resilience-climate-change>
- Beauchamp, E. (2023). *Visualizing monitoring, evaluation, and learning in national adaptation planning processes*. NAP Global Network. <https://napglobalnetwork.org/2023/09/visualizing-mel-in-nap-processes/>
- Cairney, P. (2019). *Understanding public policy: Theories and issues* (2nd ed.). Red Globe Press. <https://paulcairney.files.wordpress.com/2019/03/chapter-8-mlg-2nd-ed-upp-9.3.18.pdf>
- CARE. (2019). *Gender equality and women's voice: Guidance note*. https://www.insights.careinternational.org.uk/images/in-practice/GEWV/GEWV_guidance-note_english_2019.pdf
- Church, C., & Hammill, A. (2019). *Defining adaptation - and distinguishing it from other development investments*. International Institute for Sustainable Development. https://www.adaptationcommunity.net/wp-content/uploads/2019/05/IISD_Defining-Adaptation_05.2019.pdf
- Climate Change & Development Authority. (2023). *Papua New Guinea National Adaptation Plan*. <https://unfccc.int/sites/default/files/resource/NAP-PNG-Finale-2023.pdf>
- Convention on Biological Diversity. (2009). *Connecting biodiversity and climate change mitigation and adaptation: Report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change* (Technical Series No. 41). Secretariat of the Convention on Biological Diversity. <https://www.cbd.int/doc/publications/ahteg-brochure-en.pdf>
- Córdoba-Muñoz (2019). Adjustment. In A. Iza (Ed.), *Governance for ecosystem-based adaptation* (International Union for Conservation of Nature and Natural Resources Environmental Policy and Law Paper, No. 89) (pp. 1–23). International Union for the Conservation of Nature Environmental Law Centre. <https://portals.iucn.org/library/sites/library/files/documents/EPLP-089-En.pdf>
- Crawford, A. & Church, C. (2019). *Engaging the private sector in national adaptation planning processes*. International Institute for Sustainable Development. <https://napglobalnetwork.org/wp-content/uploads/2019/04/napgn-en-2019-engaging-the-private-sector-in-national-adaptation-planning-processes.pdf>
- Dale, T. W., & Neufeldt, H. (2023). *Tracking progress on the ground: Guidance and good practices for integrating subnational and non-state actors into M&E systems for national climate change adaptation policies*. United Nations Environment Programme, Copenhagen Climate Centre, & Initiative for Climate Action Transparency. <https://climateactiontransparency.org/wp-content/uploads/2023/05/Integrating-subnational-and-non-state-actors-into-systems-for-monitoring-and-evaluating-national-climate-change-adaptation-policy-A-guidance-note.pdf>

- Dazé, A., Price-Kelly, H., & Rass, N. (2016). *Vertical integration in National Adaptation Plan (NAP) processes: Guidance note*. NAP Global Network, International Institute for Sustainable Development. <https://napglobalnetwork.org/resource/vertical-integration-national-adaptation-plan-nap-processes/>
- Department of Climate Change. (2018). *Joint National Action Plan 2 on Climate Change and Disaster Risk Management (JNAP 2) 2018–2028*. Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications. Government of Tonga. https://unfccc.int/sites/default/files/resource/JNAP2_Final-2018-2028.pdf
- Department of Forestry, Fisheries and the Environment. (2021). *National Climate Change Adaptation Strategy*. Republic of South Africa. https://unfccc.int/sites/default/files/resource/South-Africa_NAP.pdf
- Departamento Nacional de Planeación. (2018). *Plan Nacional de Adaptación al cambio climático: Reduciendo los impactos del clima en el desarrollo de Colombia* (in Spanish). Republica de Colombia. <https://www4.unfccc.int/sites/NAPC/Documents/Parties/Colombia%20NAP%20Spanish.pdf>
- Dougherty-Choux, L., Terpstra, P., Kammila, S., & Kurukulasuriya, P. (2015). *Adapting from the ground up: Enabling small businesses in developing countries to adapt to climate change*. World Resources Institute and United Nations Development Programme. <https://www.undp.org/publications/adapting-ground-enabling-small-businesses-developing-countries-adapt-climate-change>
- Environment Public Authority of Kuwait. (2019). *Kuwait National Adaptation Plan 2019–2030: Enhanced climate resilience to improve community livelihood and achieve sustainability*. <https://www4.unfccc.int/sites/NAPC/Documents/Parties/Kuwait%20National%20Adaptation%20Plan%202019-2030.pdf>
- Government of Kenya. (2017). *Kenya National Adaptation Plan 2015–2030: Enhanced climate resilience towards the attainment of Vision 2030 and beyond*. https://www4.unfccc.int/sites/NAPC/Documents%20NAP/Kenya_NAP_Final.pdf
- Government of Kiribati. (2019). *Kiribati Joint Implementation Plan for Climate Change and Disaster Risk Management (KJIP) 2019–2028*. <http://napglobalnetwork.org/wp-content/uploads/2019/09/Kiribati-Joint-Implementation-Plan-for-Climate-Change-and-Disaster-Risk-Management-2019-2028.pdf>
- Government of Nepal. (2021). *National Adaptation Plan (NAP) 2021–2050: Summary for policymakers*. https://unfccc.int/sites/default/files/resource/NAP_Nepal.pdf
- Government of Saint Lucia. (2018). *Saint Lucia's National Adaptation Plan (NAP): 2018–2028*. Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development. <https://www4.unfccc.int/sites/NAPC/Documents/Parties/SLU-NAP-May-2018.pdf>

- Government of Sierra Leone. (2021). *National Adaptation Plan*. https://unfccc.int/sites/default/files/resource/SierraLeone_iNAP_Final.pdf
- Government of the Republic of Armenia. (2021). *National Adaptation Plan: National Adaptation Program of Adaptation to Climate Change and the list of measures for 2021–2025*. https://unfccc.int/sites/default/files/resource/NAP_Armenia.pdf
- Graham, J., Amos, B., & Plumptre, T. (2003, June 30). *Governance principles for protected areas in the 21st century*. Prepared for the Fifth World Parks Congress 2003 (Durban, South Africa). Institute on Governance, Parks Canada, & Canadian International Development Agency. https://www.files.ethz.ch/isn/122197/pa_governance2.pdf
- Green Climate Fund. (2023). *Consideration of funding proposals – Addendum III. Funding proposal package for SAP032*. <https://www.greenclimate.fund/sites/default/files/document/gcf-b37-02-add03-funding-proposal-package-sap032.pdf>
- Hammill, A., Dazé, A., & Dekens, J. (2019). *The national adaptation plan (NAP) process: Frequently asked questions*. International Institute of Sustainable Development. <https://napglobalnetwork.org/2019/12/the-national-adaptation-plan-nap-process-frequently-asked-questions/>
- Hooghe, L., & Marks, G. (2021). Multilevel governance and the coordination dilemma. In A. Benz, J. Broschek, & M. Lederer (Eds.), *A research agenda for multilevel governance*. Edward Elgar Publishing. https://garymarks.web.unc.edu/wp-content/uploads/sites/13018/2023/01/2021_Hooghe-and-Marks_-Multilevel-Governance-and-the-Coordination-Dilemma.pdf
- Intergovernmental Panel on Climate Change. (2014). *Climate change 2014: Impacts, adaptation, and vulnerability: Part A: Global and sectoral aspects. Working Group II contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. <https://doi.org/10.1017/CBO9781107415379>
- International Centre for Climate Change and Development. (2023). *Locally led adaptation*. https://www.icccad.net/wp-content/uploads/2022/07/ICCCAD-LLA-Flyer_compressed.pdf
- Ishtiaque, A. (2021). Multilevel governance in climate change adaptation: Conceptual clarification and outlook. In F. Ali (Ed.), *Climate change and extreme events* (pp. 171–185). Elsevier. https://www.academia.edu/45568751/Multilevel_governance_in_climate_change_adaptation_Conceptual_clarification_and_future_outlook
- Least Developed Countries Expert Group. (2012). *National adaptation plans: Technical guidelines for the National Adaptation Plan process*. United Nations Framework Convention on Climate Change. http://unfccc.int/resource/docs/publications/publication_ldc_nap_techguidelines.pdf
- Ledwell, C., Ray, D. B., Hameed, N., & Sawas, A. (2023). *Public engagement on climate change adaptation: A briefing for developing country National Adaptation Plan teams* (NAP Global Network & Climate Outreach report). International Institute for Sustainable Development and NAP Global Network Secretariat. <https://napglobalnetwork.org/resource/public-engagement-on-climate-change-adaptation/>

- Litvack, J., & Seddon, J. (Eds.). (1999). *Decentralisation briefing notes*. World Bank Institute. <https://documents1.worldbank.org/curated/en/873631468739470623/pdf/multi-page.pdf>
- Luna Rodríguez, M. (2019). Institutions. In A. Iza (Ed.), *Governance for ecosystem-based adaptation* (International Union for Conservation of Nature Environmental Policy and Law Paper, No. 89). IUCN Environmental Law Centre. <https://portals.iucn.org/library/sites/library/files/documents/EPLP-089-En.pdf>
- Luna Rodríguez, M. (2023). *Three challenges in the adaptation process that are opportunities for vertical integration*. <https://napglobalnetwork.org/2023/03/three-challenges-adaptation-opportunities-vertical-integration/>
- Ministère de l'Environnement et du Développement Durable. (2022). *Plan National d'Adaptation au Changement Climatique (PNA) Madagascar* (in French). <https://unfccc.int/sites/default/files/resource/PNA-Madagascar.pdf>
- Ministerio del Ambiente. (2021). *Plan Nacional de Adaptación al Cambio Climático del Perú: un insumo para la actualización de la Estrategia Nacional ante el Cambio Climático* (in Spanish). Gobierno del Perú. https://www4.unfccc.int/sites/NAPC/Documents/Parties/Per%20ba_NAP_Spanish.pdf.pdf
- Ministerio del Ambiente, Agua y Transición Ecológica. (2023). *Plan Nacional de Adaptación al Cambio Climático del Ecuador (2023–2027)* (in Spanish). Gobierno del Ecuador. <https://unfccc.int/sites/default/files/resource/PLAN-NACIONAL-DE-ADAPTACION-2.pdf>
- Ministerio del Ambiente y Desarrollo Sostenible. (2022). *Plan Nacional de Adaptación al Cambio Climático (PNACC)* (in Spanish). Republica del Paraguay. https://unfccc.int/sites/default/files/resource/NAP2_PARAGUAY-July2022.pdf
- Ministerio de Ambiente y Energía. (2022). *Plan Nacional de Adaptación al Cambio Climático 2022–2026* (in Spanish). Gobierno de Costa Rica. https://unfccc.int/sites/default/files/resource/NAP_Documento-2022-2026_Costa-Rica.pdf
- Ministry of Agriculture and Environment. (2022). *National Adaptation Plan of Cabo Verde*. https://unfccc.int/sites/default/files/resource/NAP_Cabo%20Verde_EN.pdf
- Ministry of Environment. (2016). *National Adaptation Plan to Climate Change: General strategy* (Vol. 1). Federative Republic of Brazil. <https://www4.unfccc.int/sites/NAPC/Documents/Parties/Brazil%20NAP%20English.pdf>
- Ministry of Environment and Forestry. (2021). *First National Adaptation Plan for Climate Change*. Republic of South Sudan. <https://unfccc.int/sites/default/files/resource/South-Sudan-First-NAP%20.pdf>
- Ministry of Environment, Forest, and Climate Change. (2022). *National Adaptation Plan of Bangladesh (2023–2050)*. Government of the People's Republic of Bangladesh. [https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202211020942---National%20Adaptation%20Plan%20of%20Bangladesh%20\(2023-2050\).pdf](https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202211020942---National%20Adaptation%20Plan%20of%20Bangladesh%20(2023-2050).pdf)

- Ministry of Environment, Natural Resources & Physical Development. (2016). *National Adaptation Plan*. Higher Council for Environment and Natural Resources, Republic of the Sudan. <https://www4.unfccc.int/sites/NAPC/Documents%20NAP/National%20Reports/Sudan%20NAP.pdf>
- Ministry of Environment, Protection of Nature, and Sustainable Development. (2015). *Plan National d'Adaptation aux Changements Climatiques du Cameroun* (in French). Republic of Cameroon. https://www4.unfccc.int/sites/NAPC/Documents/Parties/PNACC_Cameroun_VF_Valid%c3%a9e_24062015%20-%20FINAL.pdf
- Ministry of the Environment and Sustainable Development. (2022). *National Adaptation Plan to Climate Change (2022–2026)*. Democratic Republic of the Congo. https://unfccc.int/sites/default/files/resource/DRC-NAP_EN.pdf
- Morchain, D. (2021). *Progress and challenges in achieving vertical integration in adaptation processes* [Briefing note]. <https://napglobalnetwork.org/wp-content/uploads/2021/09/napgn-en-2021-vertical-integration-in-adaptation-processes.pdf>
- NAP Global Network. (2023). *What we are learning about effective national adaptation plan processes*. <https://napglobalnetwork.org/2023/03/effective-national-adaptation-plan-figure/>
- Omari-Motsumi, K., Barnett, M., & Schalatek, L. (2019). *Broken connections and systemic barriers: Overcoming the challenge of the “missing middle” in adaptation finance* (Global Commission on Adaptation Background Paper). <https://gca.org/wp-content/uploads/2020/12/Missing-Middle-Adaptation-Finance-Background-Paper.pdf>
- Organisation for Economic Co-operation and Development. (2022). *Regional governance in OECD countries: Trends, typology and tools*. OECD Multilevel Governance Studies. <https://doi.org/10.1787/4d7c6483-en>
- Paris Committee on Capacity-building. (2022). *PCCB toolkit to assess capacity building gaps and needs to implement the Paris Agreement*. <https://unfccc.int/sites/default/files/resource/230306%20BLS21379%20UCC%20PCCB%20Toolkit%20ENG.pdf>
- Persson, Å. (2019). Global adaptation governance: An emerging but contested domain. *Wiley Interdisciplinary Reviews: Climate Change*, 10(6), Article e618. <https://doi.org/10.1002/wcc.618>
- Qi, J. (2022). *Introduction to adaptation in the global stocktake* [NAP Global Network briefing note]. International Institute for Sustainable Development. <https://napglobalnetwork.org/resource/brief-adaptation-global-stocktake/>
- République du Niger. (2022). *Plan national d'adaptation aux changements climatiques* (in French). Cabinet du Premier Ministre, Conseil National de l'environnement pour un développement durable secretariat executif. https://unfccc.int/sites/default/files/resource/Plan-National-d%27Adaptation_Niger_Version-Finale.pdf
- Rondinelli, D. A., Nellis, J., & Cheema, G. S. (1983). *Decentralization in developing countries* (World Bank staff working paper No. 581). World Bank.

- Schipper, E. L., Ayers, J., Reid, H., Huq, S., & Rahman, A. (2014). *Community-based adaptation to climate change: Scaling it up*. Routledge.
- Secretariat of State for Environment, Coordinating Minister for Economic Affairs. (2021). *Timor-Leste's National Adaptation Plan: Addressing climate risks and building climate resilience*. Democratic Republic of Timor-Leste. <https://www4.unfccc.int/sites/NAPC/Documents/Parties/Timor%20Leste%20NAP.pdf>
- Tall, A., Lynagh, S., Blanco Vecchi, C., Bardouille, P., Montoya Pino, F., Shabahat, E., Stenek, V., Stewart, F., Power, S., Paladines, C., Neves, P., & Kerr, L. (2021). *Enabling private investment in climate adaptation and resilience: Current status, barriers to investment and blueprint for action*. World Bank. <https://openknowledge.worldbank.org/server/api/core/bitstreams/127de8c7-d367-59ac-9e54-27ee52c744aa/content>
- Terton A., Qi, J., & Tadgell, A. (2023). *Transboundary climate risks and the national adaptation planning process* [NAP Global Network briefing note]. International Institute for Sustainable Development.
- United Nations Capital Development Fund. (2019). *Financing local adaptation to climate change: Experience with performance-based climate resilience grants (PBCRGs)*. [www4.unfccc.int/sites/NAPC/Documents/Supplements/Financing local adaptation to climate change UNCDF.pdf](http://www4.unfccc.int/sites/NAPC/Documents/Supplements/Financing%20local%20adaptation%20to%20climate%20change%20UNCDF.pdf)
- UNICEF Regional Office for South Asia. (2017). Gender equality. *Glossary of key terms and concepts*. <https://www.unicef.org/rosa/media/1761/file/Gender>
- United Nations Department of Economic and Social Affairs. (2016). *Identifying social inclusion and exclusion*. Report on the World Social Situation 2016, pp 17-31. <https://doi.org/10.18356/5890648c-en>
- United Nations Development Programme, United Nations Environment Programme, NAP Global Network. (2023). *What we heard on scaling up implementation of National Adaptation Plans*. <https://www.unep.org/gan/news/blogpost/nap-expo-2023-what-we-heard-scaling-implementation-national-adaptation-plans>
- United Nations Framework Convention on Climate Change. (2011). *National adaptation plans (Decision 5/CP.17)*. https://unfccc.int/files/adaptation/cancun_adaptation_framework/national_adaptation_plans/application/pdf/decision_5_cp_17.pdf
- United Nations Framework Convention on Climate Change. (2015). *Paris Agreement*. https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english.pdf
- United Nations Framework Convention on Climate Change. (2022). *Accelerating adaptation in the world's least developed countries*. <https://unfccc.int/news/accelerating-adaptation-in-the-world-s-least-developed-countries>
- United Nations Framework Convention on Climate Change. (2023). *NAP Central*. <https://napcentral.org/submitted-naps>

- UN Women Training Centre. (2017). *Gender equality glossary*. <https://trainingcentre.unwomen.org/mod/glossary/view.php?id=36>
- University of British Columbia (n.d.). *What is EDI?* <https://vpfo.ubc.ca/edi/what-is-edi/#:~:text=socio%2Deconomic%20situations-,Inclusion,opportunities%20to%20flourish%20for%20all>
- Vincent, K. (2023). Development geography II: Community-based adaptation and locally-led adaptation. *Progress in Human Geography*, 47(4), 604–612. <https://doi.org/10.1177/03091325231166076>
- Ziervogel, G., Satyal, P., Basu, R., Mensah, A., Singh, C., Hegga, S., & Abu, T. Z. (2019). Vertical integration for climate change adaptation in the water sector: Lessons from decentralisation in Africa and India. *Regional Environmental Change*, 19, 2729–2743. <https://doi.org/10.1007/s10113-019-01571-y>

Appendix A. Types of Decentralization⁶

Each type of decentralization—political, administrative, fiscal, and market—has distinct characteristics, policy implications, and conditions for success:

1. **Political decentralization:** Aims to give citizens and their elected representatives more power in public decision making. Political decentralization often requires constitutional or statutory reforms, development of pluralistic political parties, strengthening of legislatures, creation of local political units, and encouragement of effective public interest groups.
2. **Administrative decentralization:** Seeks to redistribute authority, responsibility, and financial resources for providing public services among different levels of government. Administrative decentralization has three major forms—deconcentration, delegation, and devolution—each with distinct characteristics.
 - i. **Deconcentration:** The redistribution of decision-making authority and financial and management responsibilities among different levels of the central government; it is often considered the weakest form of decentralization and is used most frequently in unitary states.
 - ii. **Delegation:** A more extensive form of decentralization. Through delegation, central governments transfer responsibility for decision making and administration of public functions to semi-autonomous organizations not wholly controlled by the central government but ultimately accountable to it.
 - iii. **Devolution:** The transfer of authority for decision making, finance, and management to quasi-autonomous units of local government with corporate status.
3. **Fiscal decentralization:** Financial responsibility is a core component of decentralization. If local governments and private organizations are to carry out decentralized functions effectively, they must have adequate revenues—raised locally or transferred from the central government—as well as the authority to make expenditure decisions. Fiscal decentralization can take many forms, including
 - i. self-financing or cost recovery through user charges;
 - ii. co-financing or coproduction, in which users participate in providing services and infrastructure through monetary or labour contributions;
 - iii. expansion of local revenues through property or sales taxes or indirect charges;
 - iv. intergovernmental transfers of general revenues from taxes collected by the central government to local governments for general or specific uses; and
 - v. authorization of municipal borrowing and mobilization of national or local government resources through loan guarantees.

⁶ From Litvack & Seddon, 1999.

4. **Economic or market decentralization:** The most complete forms of decentralization from a government's perspective are privatization and deregulation; they shift responsibility for functions from the public to the private sector.
 - i. **Privatization:** Can range in scope from the provision of goods and services based entirely on the free operation of the market to public-private partnerships in which government and the private sector cooperate to provide services or infrastructure.
 - ii. **Deregulation:** Reduces the legal constraints on private participation in service provision or allows competition among private suppliers for services previously provided by the government or by regulated monopolies.



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