

# Analysis of West African Countries' Commitments to Climate Change Mitigation and Adaptation through Nationally Determined Contributions (NDCs)

The Independent Global Stocktake (iGST)  
West Africa Regional Hub (WA Hub)

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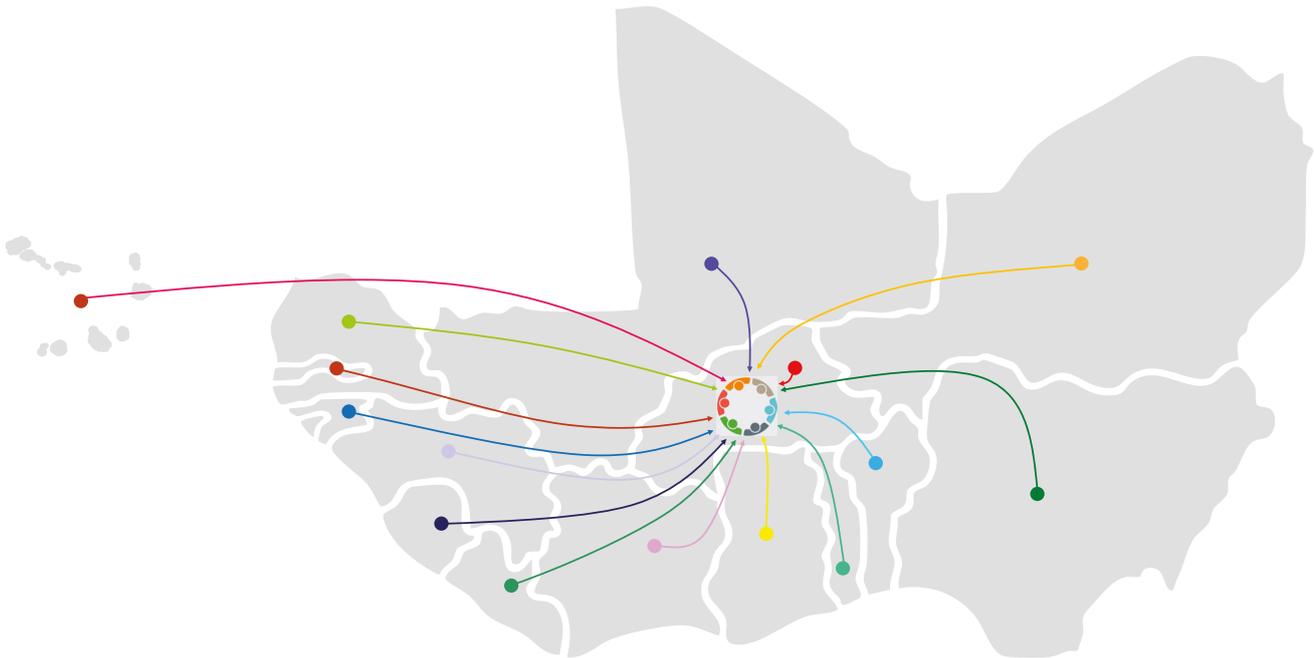




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by

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Regional Hub (WA Hub)



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# Acronyms

AFOLU	Agriculture, Forestry, and Other Land Use
ATT	Agriculture Technology Transfer
BAU	Business As Usual
CDM	Clean Development Mechanism
CSO	Civil Society Organizations
FPIC	Free, Prior and Informed Consent
GCF	Green Climate Fund
GDP	Gross Domestic Product
GHGs	Greenhouse Gases
GST	Global Stocktake
iGST	Independent Global Stocktake
IPCC	Intergovernmental Panel on Climate Change
WA Hub	West Africa Regional Hub of the Independent Global Stocktake
INDC	Intended Nationally Determined Contributions
LULUCF	Land Use, Land Use Change, and Forestry
LT-LEDS	Long-Term Low Emission Development Strategy
M&E	Monitoring and Evaluation
MOFEP	Ministry of Finance and Economic Planning
MRV	Monitoring, Reporting, and Verification
NAP	National Adaptation Plan
NGO	Non-Governmental Organization
NDCs	Nationally Determined Contributions
OGE	Off Grid Electrification
PA	Paris Agreement
PSE	Plan Sénégal Emergent
REDD+	Reducing Emissions from Deforestation and Forest Degradation
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development

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# Executive Summary

Climate change presents significant threats to development, economic growth, and human well-being. In response to this global challenge, world leaders negotiated the Paris Agreement in 2015 and signed it as an international treaty on climate change in 2016 covering mitigation, adaptation, and finance. A core requirement of this treaty is the Nationally Determined Contributions (NDCs) which outline the commitments by each country to climate change mitigation and adaptation. Since the adoption of the Paris Agreement, the 15 West African countries have all submitted their NDCs and updated versions. West African countries experience similar challenges, but also resources. Consequently, understanding of their collective commitments to climate change mitigation and adaptation is important for mutual learning and will help to ratchet up national ambitions during the next round of NDC revisions, ultimately contributing to the fight against climate change at national, regional, and global levels.

The West Africa Regional Hub of the Independent Global Stocktake (iGST WA Hub) aims to bring together the independent (i.e., non-state) community, including researchers, to provide complementary support to the governments of the region to enhance their contributions to the achievement of the goals of the Paris Agreement. To facilitate this, the iGST WA Hub established the Young Fellowship Program with the aim to conduct a regional assessment of the countries' NDCs vis-à-vis the outcome of the first global assessment – the first Global Stocktake (GST).

This report is a comprehensive review of the NDCs of West African countries based on their sectoral commitments and the roles of non-state actors (i.e., Civil Society Organizations (CSOs)) in NDCs development and implementation. Additionally, it evaluates the extent to which West African countries' NDCs align with the outcomes of the first GST. Specifically, the report analyses the data obtained from the NDCs of the 15 West African countries. Data gaps were filled using related documents such as the National Adaptation Plans (NAPs). It also draws information from primary data collected from surveys and interviews with government officials who play key roles in NDCs development and implementation, and 164 West African CSOs, drawn from the members of the iGST WA Hub that are active players in the climate change space. The analyses are guided by three specific objectives, namely to: (1) evaluate sectoral commitments to climate mitigation and adaptation, (2) assess the role of CSOs in supporting climate actions, and (3) compare the current ambitions derived from the NDCs with the first GST outcome. The analyses reveal that West African countries have made notable efforts to enhance their climate ambitions, with many revised targets that reflect more ambitious goals and the potential for significant regional impact. However, several issues remain outstanding, including the following.

- **Important unconditional commitments have been made by West African countries which constitute a notable progress. However, they are insufficient to address the escalating climate challenges as they represent only about 28.0% and 33.0% of the total resources required for adaptation and mitigation, respectively.** With about 70% conditional commitment to climate change adaptation and mitigation, the region has expressed a clear position to put a third of its domestic resources on the table while expecting the gap to be filled with funds from external sources.
- **Shortfall in climate finance flows is a barrier to the fulfilment of conditional commitments.** Despite increased international climate finance, the current financial flows into the region are insufficient

to enable the countries to fulfil their conditional commitments to address critical climate challenges. According to the Climate Policy Initiative, West Africa's annual climate finance needs through to 2030 are projected at \$ 35.2 billion. However, actual financial flows reached only \$ 7.1 billion (20.74%) in 2019/2020 and \$ 10.9 billion (30.97%) in 2021/2022. Thus, there is a big gap between the financial needs expressed in the NDCs and the actual inflow of climate finance to the region.

- **Technology transfer needs are great for all countries and are expressed across all sectors, but the weak enabling environment is likely to be a hindrance.** Barriers to effective technology transfer and adoption in the region include domestic policy challenges, infrastructure limitations, and weak governance. Additionally, insufficient attention and priority are given to the already identified technology transfer needs. These hinder the adoption and deployment of appropriate technologies and innovations to combat climate change impacts.
- **Variations in NDC content, structure, and formats across the region.** West African NDCs show wide variations in content, presentation structure, formats and units, with many countries providing limited information on sector-specific commitments. In addition, some countries have detailed adaptation budgets categorized into unconditional and conditional funding, while others have not.
- **Low involvement of civil society in some countries.** Civil society, as recognized by the Paris Agreement, plays a crucial role in climate action in varying proportions across different sectors. Nevertheless, this study reveals that across West Africa CSO involvement in NDC formulation in some countries was either perceived as insufficient or their opinions were disregarded without justification.
- **Like other regions, West Africa's current ambitions are low compared to the first GST decision.** Although the GST decisions are global in nature, finding alignment in all regions signifies collective progress towards the achievement of the long-term goals of the Paris Agreement. This study reveals that West African countries' commitments in NDCs are still low compared with the expectations expressed in the first GST decision, particularly regarding mitigation ambition and adaptation. For example, the GST decision highlights several key expectations for strengthening adaptation action, such as national inventories of climate impacts over time, which are not explicitly addressed by most countries in their NDCs.

To address these challenges and enhance climate action in the region, the following actionable recommendations are proposed for West African Parties, CSOs, and their international partners:

### Recommendations for West African countries

- **Enhance ambition and transparency of NDCs.** West African countries should prioritize the standardization and transparency in their next NDCs by adopting harmonized NDC templates that clearly define commitments based on targets, baselines, and conditionalities across sectors, in line with UNFCCC guidelines. This will foster trust among national and international stakeholders and establish more robust accountability mechanisms.
- **Increase unconditional commitments.** By reallocating national budgets and promoting domestic investments in climate-vulnerable sectors through fiscal policies and instruments, West African countries can strengthen their unconditional commitments, but also potentially attract greater external support for conditional commitments.

- **Strengthen institutional and technical capacity.** Strengthening institutional climate units, local research institutions, and monitoring, reporting, and verification (MRV) systems will improve NDC implementation and enable localized, data-driven policymaking rooted in both scientific and socioeconomic realities of West African countries.
- **Use the GST outcome, the provisions of the Convention, and the Paris Agreement as a benchmark.** In line with the provisions of the UNFCCC and the Paris Agreement, future NDCs of West Africa should integrate insights from the first GST, particularly in the areas of adaptation, mitigation, and means of implementation. This will ensure alignment with global climate goals while remaining responsive to local and national contexts, enabling the region to advance toward climate-resilient, low-emission development.
- **Enhance collaboration between Parties and non-Parties stakeholders.** West African Parties should establish closer, stronger and institutionalized partnerships with CSOs grounded in shared climate objectives. This could include involving them in advisory bodies and formalizing their roles in steering committees in the mechanisms of NDCs development and implementation.

### Recommendations for civil society organizations

- **Build internal capacity on GST and climate policy.** CSOs should invest in capacity-building efforts to deepen their understanding of international climate mechanisms. Additionally, developing simplified toolkits and resources can help translate complex policy processes into locally relevant narratives that resonate with communities.
- **Strengthen participation in the revision process of the NDCs.** CSOs must move beyond marginal consultation toward the co-development of NDCs by providing data-driven inputs and evidence-based policy recommendations, with a focus on representing local and community priorities, particularly those of vulnerable populations.
- **Monitor and report local-level implementation.** By establishing community-based MRV systems, CSOs can document independent data and uncover local innovation, informing reporting processes and future NDCs revisions.

### Recommendations for international partners

- **Align finance with conditional commitments.** International partners should prioritize financing the clearly articulated conditional commitments in West African NDCs, particularly in high-impact sectors like renewable energy, land restoration, and early warning systems. Financial instruments should be tailored to each country's specific needs, offering streamlined access, and capacity-building support for proposal development.
- **Facilitate technology transfer and innovation.** International partners should respond to the already identified technology needs of countries in the region by facilitating the development and transfer of climate technologies that are tailored to the ecological, social, and economic conditions of West Africa, while also supporting the upscaling of existing technologies to drive digital transformation and regional development.
- **Strengthen capacity building initiatives.** Capacity building should move beyond short-term workshops and focus on comprehensive, long-term institutional strengthening to effectively implement the Paris Agreement. They should focus on capacity gaps, governance and coordination, technical assessment and modelling, as well as strategic policy formulation and implementation.

- **Facilitate GST-responsive policymaking.** International partners must assist West African countries in translating the insights from the first GST into concrete national policies and strategies that emphasize equity, ambition, and long-term climate resilience, while ensuring that their voices are adequately represented in international negotiations.

Addressing climate change in West Africa requires coordinated efforts from governments, international partners, and CSOs. An effective way to practicalize this is through gradual enhancement and implementation of national ambitions through NDCs, supported by strong international cooperation.

# Introduction

Climate change is one of the most significant challenges facing our world today, requiring urgent and concrete global action to mitigate its impacts and adapt to its consequences. According to the World Bank (2020), climate change could push an additional 100 million people into poverty by 2030 with sub-Saharan Africa among the most affected regions. In addition, climate change exerts pressure on the food security system by affecting food production directly through changes in agro-ecological conditions (Shrestha et al., 2017).

Despite their minimal contribution to global greenhouse gas emissions, developing countries, especially those in West Africa, are disproportionately affected by the impacts of climate change. These countries are particularly vulnerable to climate change, including climate variability and extreme weather events due to their heavy reliance on agriculture and natural resources. The Sahel region of West Africa has experienced significant increases in temperature and changes in precipitation patterns which have worsened food and water insecurity (IPCC, 2022). For example, in Burkina Faso, agriculture employs approximately 80% of the population, making the country particularly vulnerable to climate fluctuations (IPCC, 2022; World Bank, 2020). Additionally, the region's economic development is hindered by inadequate infrastructure, financial constraints, and political instability (AfDB, 2017). Similarly, coastal countries along the Gulf of Guinea, including Nigeria, Ghana, Ivory Coast, and Benin are facing challenges due to climate change. Rising sea levels threaten low-lying areas, resulting in displacement and loss of infrastructure. Coastal erosion is accelerating, with shorelines receding by up to 2 meters annually, destroying homes and agricultural land. The increasing frequency and intensity of extreme weather events, such as storms and heavy rainfall, lead to severe flooding, damaging infrastructure and exacerbating food insecurity (IPCC, 2019). Despite these enormous challenges, West African countries have limited capacity to tackle and mitigate them to ensure resilience.

To globally face these climate-related challenges, the Paris Agreement (PA) – an international treaty that aims to strengthen the global response to climate change – was adopted in Paris under the United Nations Framework Convention on Climate Change (UNFCCC) in December 2015 (UNFCCC, 2015). The goal of the treaty is to limit global warming to well below 2°C, with efforts to restrict it to 1.5°C above pre-industrial levels. The main driving force of the PA is the Nationally Determined Contributions (NDCs) which encompass efforts by each country to reduce national emissions while adapting to the impacts of climate change. Thus, in Article 4 (Paragraph 2) of the Agreement, each Party is required to prepare, communicate, and maintain successive NDCs that it intends to achieve through, as much as possible, domestic mitigation and adaptation measures. To ensure that the stepwise increase in ambition in the

NDCs, the Global Stocktake (GST) mechanism, as enshrined in Article 14 – “the Conference of Parties (COP) shall periodically take stock of the implementation of this Agreement to assess the collective progress towards achieving its purpose and long-term goals” (UNFCCC, 2015) – was instituted. Starting from 2023 and subsequently every five years, Parties were to take stock of the implementation of the PA to assess the collective global progress in climate mitigation, adaptation, and financial goals towards achieving the purpose of the Agreement and its long-term goals.

Countries are required to prepare NDCs specifying their targets for reducing greenhouse gas emissions. The NDCs should also include strategies for adaptation and resilience to climate impacts. This framework ensures that all countries contribute to global efforts in ways that reflect their unique capabilities and national circumstances. By analyzing the implementation of the Agreement including the NDCs and the effectiveness of mitigation and adaptation measures, the GST process helps to ensure that the Parties remain on track to meet the targets of the PA (UNFCCC, 2023). The outcome of the GST will inform the preparation of subsequent NDCs, to allow for stepwise increase in ambition and climate action toward achieving the purpose and the long-term goals of the PA.

All 15 countries in West Africa have already developed, submitted and implemented their first NDCs in fulfilment of their obligations under the PA. This has been made possible through collaborative initiatives such as the NDC partnership which has supported several countries in the region to update their NDCs to reflect higher commitments to both mitigation and adaptation actions. The countries experience similar challenges and have similar access to resources. Consequently, understanding their collective commitments to climate change mitigation and adaptation is important for mutual learning and qualitative improvements in NDC revisions, ultimately contributing to the fight against climate change at national, regional, and global levels. This assessment therefore represents an opportunity to highlight the best strategies and practices. Additionally, it will help inform civil society about the regional priorities and commitments that they should mainstream into their climate actions. Consequently, CSOs will have a better understanding of the issues and will therefore be empowered to play their complementary roles toward the achievement of the PA. The assessment will also provide information for advocacy.

The West Africa Regional Hub of the Independent Global Stocktake (iGST WA Hub) aims to bring together the independent (i.e., non-state) community, including researchers, to provide complementary support to the governments of the region to enhance their contributions to the achievement of the goals of the Paris Agreement. To facilitate this, the iGST WA Hub established the Young Fellowship Program with the aim of conducting a regional assessment of the countries’ NDCs vis-à-vis the outcome of the first GST. The Hub was established by the West African Science Service Centre on Climate Change and Adapted Land Use (WASCAL) with technical support from the Council of Scientific and Industrial Research (CSIR) of South Africa and funding from ClimateWorks Foundation (CWF).

The present study aims to: (1) analyze West African countries’ commitments to climate change mitigation and adaptation per development sector, (2) assess the contributions of CSOs to the NDCs development processes; and (3) conduct a comparative analysis between the Parties’ commitments as mentioned in their NDCs and the outcomes of the first GST.

The report is structured into six (6) major sections. Section One covers the general introduction while Section Two provides background information on the PA, NDCs, and the GST as well as on key terminologies. Section Three presents the methodology used for the study. Section Four covers the results and data analyzes. The fifth section presents a synthesis of the analyzed results. The report concludes with key insights derived from the synthesis analysis, providing challenges as well as opportunities to improve the development process and ambitions of future NDCs in West Africa.

# Background Information

This section summarizes the impacts of climate change in West Africa as well as the global treaty (i.e., the Paris Agreement) and its components.

## 2.1. Climate change hazards in West Africa

West African countries' NDCs highlight several climate change hazards that threaten the region. These hazards include floods, droughts, extreme heat waves, changes in seasons, erratic rainfall, sea level rise, and windstorms. Flooding, for example, poses widespread threats to West African countries, with severe impacts particularly reported in Nigeria and Senegal. In the Sahel region, droughts exacerbate water scarcity and reduce agricultural productivity in Niger, Mali, and Burkina Faso. Increasingly, extreme heatwaves, along with rising temperatures in Nigeria and Ghana, present risks to public health and agriculture. Erratic rainfall disrupts water management and agricultural cycles, while sea level rise threatens coastal communities in Nigeria, Cabo Verde, and The Gambia. Additionally, Cabo Verde's unique geographical status as an island further exposes it to hazards such as landslides, earthquakes and volcanic activities.

## 2.2. Climate change induced vulnerabilities and risks

The NDCs of West African countries report that the region is highly vulnerable to climate change which significantly impacts various sectors.

In agriculture, the region faces considerable risks due to erratic rainfall, droughts, and temperature extremes that threaten food security and economic stability. The agricultural sector in all countries is at risk due to its heavy dependence on rainfall. The vulnerability of the sector is exacerbated by the fact that most farmers are smallholders with limited resources to adapt to changes in rainfall, drought, and extreme temperature patterns. For example, Niger reports devastating droughts, bushfires, floods, and desert locust invasions, resulting in huge losses in the agricultural sector. Between 2001 and 2014 alone, over 1.6 million hectares of crops were damaged while more than 17 million livestock died.

The energy sector in the region also faces serious hydropower production challenges. In Ghana for instance, where 38% of national energy production comes from hydropower, changing precipitation patterns lead to fluctuations in water levels due to floods and droughts. Similarly, in Benin, hydroelectric power generation capacity is drastically reduced due to climate-induced droughts, leading to energy insecurity.

Water resources in the region are strained due to reduced groundwater levels, decreased river flows, and increased salinity. For instance, Benin faces severe challenges with decreased water levels in its reservoirs, and future projections indicate that coastal flooding and saline intrusion could worsen the situation. Cabo Verde experiences severe water scarcity due to prolonged droughts and irregular rainfall patterns amid limited freshwater resources leading to low agricultural production and high cost of drinking water.

The health sector is also affected, with countries like Senegal already experiencing increased climate-related health impacts associated with the spread of waterborne and other diseases. Coastal infrastructure across the region, particularly in Nigeria, The Gambia, Senegal, and Guinea-Bissau, are at risk from rising sea levels and coastal erosion which significantly impacts human health by causing displacement, loss of livelihoods, and reduced access to healthcare facilities. Ecosystem health is also an issue in the region. For example, in Guinea, in addition to water availability issues, the forestry sector is experiencing climate-induced deforestation and biodiversity loss with long-term effects on ecosystem health and local livelihoods.

### 2.3. The Paris Agreement and Nationally Determined Contributions

In December 2015, the PA was adopted by 196 Parties (countries) to the United Nations Framework Convention on Climate Change (UNFCCC) during the 21st Conference of Parties (COP21) in Paris. At the heart of the PA are the NDCs (Article 4 Paragraph 2 – UNFCCC, 2015), which represent each Party's efforts to reduce national emissions and adapt to the impacts of climate change. The NDCs include voluntary efforts by each Party under the PA aimed at achieving carbon neutrality and ensuring climate resilience for all people by 2050.

In the lead-up to COP21, Parties were invited to submit their Intended Nationally Determined Contributions (INDCs). The concept of INDCs emerged from the Durban Platform for Enhanced Action<sup>1</sup>, established in 2011 during COP17 in Durban, South Africa. The INDCs were designed to allow countries to voluntarily outline their proposed contributions to global climate change efforts (Bodansky, 2016) and were non-binding to allow each Party – developed, developing, and least developed – to determine the content, scope, and ambition of its contributions based on its national context and capacities. INDCs were required to cover:

- Proposed greenhouse gas (ghg) emissions reduction (i.e., Mitigation actions') targets,
- Adaptation measures to address the impacts of climate change,
- Support needed from the international community (including financial assistance, technology transfer, and capacity building) to implement the proposed contributions,
- Methodologies for measuring, reporting, and verifying progress, and
- Any additional information deemed relevant by the submitting country.

The deadline for submitting INDCs was not set, but Parties were encouraged to submit them well in advance of COP21 in Paris, to allow for a thorough review and synthesis of the different proposed commitments (UNFCCC, 2015). The submission of INDCs was vital in shaping the negotiations that culminated in the PA, as it established a foundation for discussions on the necessary level of ambition and the collective effort to combat climate change (UNFCCC, 2015).

Negotiations at COP21 primarily focused on the structure and nature of Parties' climate commitments. Negotiators acknowledged the need for a more formal and structured approach to these contributions to enhance transparency and accountability. The evolution from INDCs to NDCs, which happened

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<sup>1</sup> At the 17th Conference of the Parties (COP17) in Durban in 2011 Parties noted the significant gap between current emission levels and emission reductions required to limit warming to below 2°C as all Parties had agreed to and 1.5°C as some Parties and groups call for. The Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP) was established at COP17 in order to “to launch a process to develop a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties” to be agreed upon at COP21 in Paris and to come into force in 2020 (UNFCCC, 2012a). Source: The Durban Platform for Enhanced Action Workstream-II (ADP WS-II) Author: Erin Roberts

automatically when a Party formally joined the Paris Agreement by submitting an instrument of ratification, acceptance, approval or accession, unless it decides otherwise (Ge and Levin, 2018), signified a more formal commitment by Parties to tackle climate change. Further, Parties were given the opportunity to update and strengthen their initial INDCs to align with the goals and requirements of the PA, thereby increasing their ambition, clarifying targets, and incorporating new development sectors or actions.

Submitted every five years with the next submission round in 2025, NDCs constitute the cornerstone of the PA. They also serve as comprehensive blueprints for Parties to tackle climate change through both mitigation and adaptation measures. The PA emphasizes the need for NDCs to evolve over time, with each submission expected to demonstrate greater ambitions than the previous one. This evolution entails setting more aggressive emissions reduction targets, and leveraging technological advancements, innovative policies, and international cooperation to maximize impact (UNFCCC, 2015). During the revision of their NDCs, Parties are encouraged to engage in inclusive and transparent processes, involving diverse stakeholders from government and civil society (including the private sector and local communities).

In their NDCs, Parties are required to distinguish their unconditional (domestic) and conditional (non-domestic) commitments according to their different national circumstances as defined below.

- Unconditional commitments: These refer to targets that a Party intends to achieve using its own national resources and effort, without the need for external resources and assistance.
- Conditional commitments: These, unlike unconditional commitments, refer to targets that a Party intends to achieve using resource inflows from external sources.

## 2.4. The Global Stocktake

The PA includes the Global Stocktake (GST), one of the key components, as outlined in Article 14 which provides its definition, scope, timelines, and use of its outcome. The full definition and scope as provided in Paragraph 1 states that “the Conference of Parties shall periodically take stock of the implementation of the Agreement to assess the collective progress towards achieving its purpose and long-term goals (referred to as the “global stocktake”). It shall do so in a comprehensive and facilitative manner, considering mitigation, adaptation and the means of implementation and support, and in the light of equity and the best available science” (UNFCCC, 2015). In other words, the GST is an inventory taking process that encompasses every component of the PA while identifying the gaps that need to be addressed to inform the next round of NDCs. Thus, by design, the GST was incorporated to empower Parties to increase their commitments and to take more ambitious climate actions. In addition, the results of the GST are to inform new climate change initiatives, foster international cooperation, and promote the sharing of best practices and lessons learned from the previous implementation period. The GST is a Party-driven process that also involves various non-Party stakeholders to ensure a comprehensive and inclusive assessment of progress.

## 2.5. Summary of key aspects of the Paris Agreement

### 2.5.1. Mitigation

Mitigation refers to actions undertaken to reduce or prevent the emission of GHGs into the atmosphere. This involves efforts in policies, incentive schemes and investment programs translated into actions such as transition to renewable energy sources, improvement of energy efficiency, implementation of sustainable land-use practices, promotion of low-carbon transportation, increasing and protection of forest ecosystems, sustainable management of natural resources, waste management, and adoption of green and cleaner technologies across various sectors<sup>2</sup>.

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<sup>2</sup> Article 4, Paris Agreement

### *2.5.2. Adaptation*

Adaptation refers to the actions taken to strengthen resilience of Parties to adapt to, or cope with the impacts of climate change that have already occurred or are unavoidable. Adaptation actions contribute to minimizing vulnerability and safeguarding communities, ecosystems, and economies<sup>3</sup>. Adaptation measures can range from practicing sustainable agriculture and sustainable land management, building infrastructure resilient to extreme weather events, such as floods and storms, to implementing early warning systems for natural disasters, developing drought-resistant crops, and enhancing coastal defenses against sea-level rise. The PA requires the promotion of more gender-responsive, inclusive and sustainable adaptation measures, considering the needs and priorities of all stakeholders, including indigenous peoples and local communities.

### *2.5.3. Means of implementation under the Paris Agreement*

#### *2.5.3.1. Climate finance*

The PA recognizes that different countries contribute differently to climate change but also have different capacities to adapt to its impacts. For this reason, the UNFCCC envisages the flow of financial support from resource-rich Parties to their resource-poor counterparts. Therefore, the flow of financial resources from developed countries to developing countries to support mitigation and adaptation efforts is a crucial component and a vital enabler of the PA established under the Financial Mechanism. Article 2.1(c) of the PA, for example, stipulates that financial flows should be made to align with pathways towards low GHGs emissions and climate-resilient development.

Furthermore, according to Article 9 of the PA, the developed countries are to provide financial support to developing countries in their mitigation and adaptation efforts, building on their existing commitments under the UNFCCC. These supports include leading climate finance mobilization from a wide variety of sources, instruments and channels in a manner that represents progression beyond previous efforts.

#### *2.5.3.2. Technology transfer*

Climate technologies are defined as technologies that are used to address climate change. An essential component of the UNFCCC process since its inception has been the development and transfer of suitable technologies to support national actions on climate change. These technologies are in two-fold. There are those that help us reduce GHGs emissions, including renewable energies such as wind energy, and solar power and hydropower. There are also those that help us to adapt to the adverse effects of climate change including early warning systems and drought-resistant crops. Accordingly, provisions for technology development and transfer as means of implementation are made under Article 10 of the PA. Paragraph 1 of Article 10 stresses the need for Parties to “share a long-term vision on the importance of fully realizing technology development and transfer in order to improve resilience to climate change and to reduce GHGs”. The achievement of this long-term vision is supported by a technology framework that provides guidance to the Technology Mechanism by promoting and facilitating enhanced action on technology development and transfer. The PA emphasizes the need for Parties to collaborate in the development and transfer of technology, and to accelerate, encourage and enable innovations for an effective and long-term global response to climate change.

#### *2.5.3.3. Capacity building and the Paris Agreement*

The UNFCCC defines capacity-building as the processes used to develop or strengthen skills and competencies, as well as the resources needed by communities and organizations to adapt, survive, and thrive. Capacity-building under the PA and UNFCCC aims to strengthen the abilities and skills of developing country Parties to tackle climate change.

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<sup>3</sup> Article 7, Paris Agreement

The initiative is particularly targeted at high-risk and resource-poor countries, including the least developed and small island developing countries. Capacity building activities for effective climate action include those related to the implementation of adaptation and mitigation actions, as well as those that facilitate technology development, dissemination, and deployment.

Article 11 of the PA outlines the objectives, guiding principles, and procedural requirements on capacity building for all Parties. It urges developed country Parties to increase support for capacity building to developing country Parties. Developed countries are also required to regularly report progress on their capacity building plans, policies, actions, or measures. Article 11 of the Agreement also outlines a pathway for enhancing capacity building activities.



# Methodology

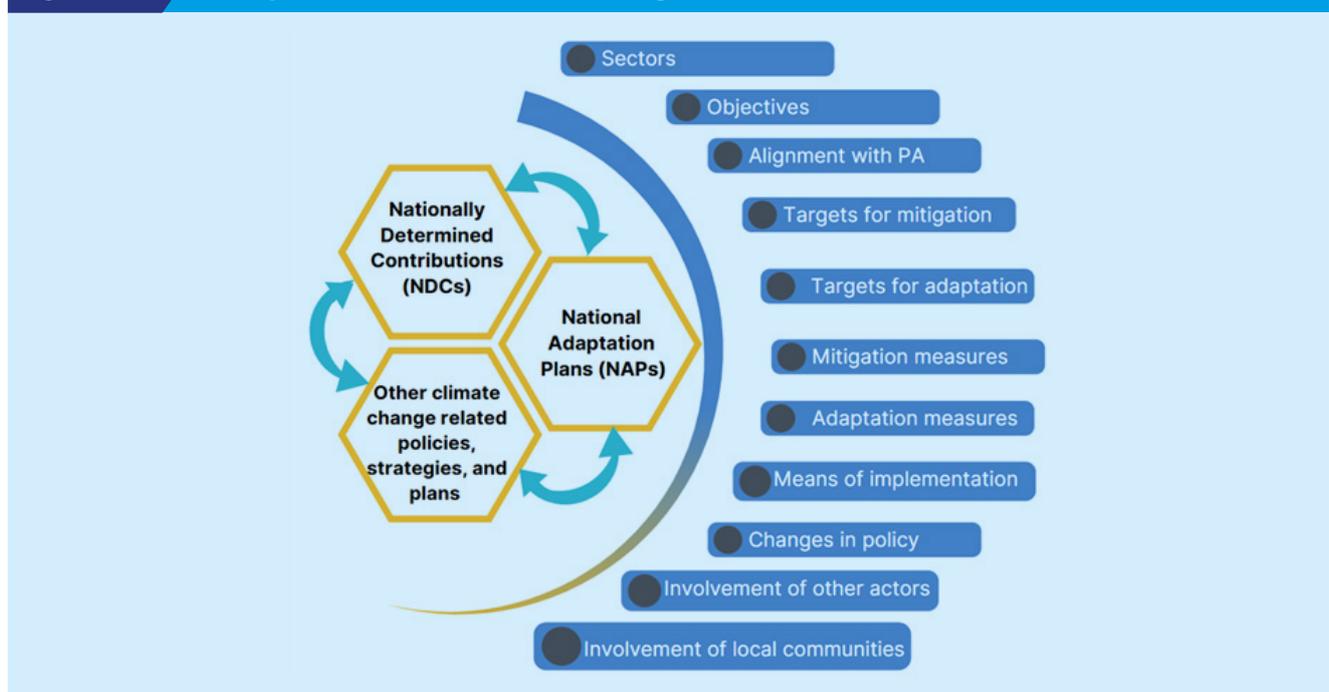
This section provides an overview of the analytical framework as well as the methods for data collection and analysis.

## 3.1. The analytical framework

To conduct a comprehensive review of the commitments of the West Africa countries through their NDCs, a detailed assessment framework was developed. Figure 1 presents an overview of the interconnection between the NDCs, the NAPs, and other climate related strategies, plans, policies.

The assessment framework of the NDCs consists of analyzing the level of commitments of the targeted countries in climate mitigation and adaptation. The framework encompasses the target sectors (e.g., energy, agriculture, forest, etc.), objectives, alignment with the PA, targets and measures for mitigation and adaptation, means of implementation, and changes in policy as well as involvement of relevant stakeholders and local communities. In this study, CSOs, especially NGOs, actively engaged in the climate change arena, together with governmental institutions and agencies participated.

Figure 1. Analytical framework for assessing NDCs of West Africa countries



## 3.2. Data collection methods

To achieve its objectives, the study collected both secondary and primary data using literature review and digital surveys, respectively.

### 3.2.1. Secondary data collection

Secondary data collection focuses on extensive review of the countries' NDCs, national adaptation plans, national communications on climate change, and other related documents. These sources provided critical insights into contents that are central to the analysis of NDCs in the context of the PA including the conditionalities (i.e., conditional or unconditional) of sectoral commitments for mitigation (Annex 1) and adaptation as well as financial investments, technological, and capacity-building needs.

### 3.2.2. Primary data collection

#### 3.2.2.1. Target countries

This study covers all the 15 West African countries, namely, Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, The Gambia, and Togo.

#### 3.2.2.2. Socioeconomic surveys

In each of the countries primary data through socioeconomic surveys was collected from two key groups of actors. The first group of 7 participants included key government officials, climate experts, and other relevant stakeholders (e.g., universities). It was intended to provide insights into the development processes, challenges, and priorities of the NDCs. The selection of study participants in the different countries was guided by the criteria detailed below.

- **Responsibility and expertise:** the individual must hold a key position within the institution and should be directly involved in the development, implementation, or evaluation of NDCs.
- **Experience and knowledge:** the individual must have a strong background and extensive experience in climate change policy, adaptation, mitigation, sustainable development, and related fields.
- **Availability and accessibility:** the individuals should be willing and available to participate in and share their insights and perspectives on NDC development.

The second group of 164 participants were drawn from Civil Society Organizations (CSOs) including Non-Governmental Organizations (NGOs) to understand their efforts and involvement in climate change adaptation and mitigation actions. The identification of CSOs working in the field of climate change adaptation and mitigation was guided by the following selection criteria.

- **Local presence and engagement:** the organization must have a strong national/local presence and be actively involved in the climate change space. The organizations should have a long history of working on environmental issues, climate change awareness, or community development projects in the country.
- **Expertise and experience:** the organization must possess expertise or experience relevant to climate change adaptation, mitigation, or sustainable development.
- **Partnership and collaboration:** the organization must have established working partnerships or collaborations with local authorities, government agencies, or international organizations working on climate-related initiatives. Partnerships should facilitate access to relevant information and resources and enhance the effectiveness of climate action at the local level.
- **Availability and accessibility:** the core staff of the selected organization should be available and accessible for interviews or consultations.

To collect the data, two distinct survey questionnaires, to be self-completed, were designed and coded in digital format using the Kobo Toolbox. The links to the surveys were shared with the identified respondents through emails and mobile phone (via WhatsApp) in the 15 countries. Follow ups were made to increase the number of responses.

### *3.2.2.3. Regional validation workshop*

To validate the findings of the regional assessment, a two-day regional workshop was convened, bringing together 40 participants, including UNFCCC and NDC Partnership focal points from 14 West African countries (excluding Cabo Verde), members of the iGST WA Hub with representatives from its seven existing national networks (Benin, Burkina Faso, Ghana, Mali, Nigeria, Senegal, and Togo), six young research fellows, and experts from partner institutions such as the Council for Scientific and Industrial Research (CSIR) of South Africa, the Alliance Bioversity International and CIAT, and the United Nations Development Programme (UNDP). Prior to the workshop, the draft assessment report was circulated in both English and French. The workshop provided a unique opportunity for the countries to give feedback, which was then used to revise the report.

## **3.3 Data processing and analysis**

Data was processed using Microsoft Excel. The data analysis was carried out in phases, considering the three main objectives of the study. For the first objective, the analysis focused on the sectoral commitments to mitigation and adaptation by West African countries by examining the GHG emission reduction and adaptation commitments along with their conditionality statuses. Financial aspects were also analyzed, including the availability of funding, government financial policies and regulations, and the overall investment requirements. The second objective assessed the role of CSOs in climate action, highlighting their contributions to adaptation and mitigation efforts, and the challenges they face. For the third objective, a comparative analysis was conducted between the current NDC ambitions and the outcomes of the first GST. This comparative analysis helped to identify gaps and provide recommendations for enhancing the ambitions of West African countries in meeting the PA objectives.



# Results and Analysis

This section presents key results of the study from the analyses of both the primary and secondary data.

## 4.1. Overview of submissions and targets of NDCs

### 4.1.1. Status of NDCs submissions

Table 1 summarizes the second4 NDCs' (NDCs 2) submissions of the 15 West African countries. It provides details on the year of submission of their latest (updated) versions. Most of the countries, including Benin, Burkina Faso, Cabo Verde, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Sierra Leone, Côte d'Ivoire, The Gambia, and Togo, submitted the second revised version of their first NDCs in 2021. In contrast, Senegal, submitted its second NDC in 2020 with no reported updates thereafter. Nigeria is the only country to have submitted its third revised version of the second NDC in 2021. According to the PA, the NDCs submission cycle is five (5) years, with 2015 as the base year.

Country	Latest submission of NDC 2	Version of NDC 2 submitted	Submission Year
Benin	Submission of updated version	2	2021
Burkina Faso	Submission of updated version	2	2021
Cabo Verde	Submission of updated version	2	2021
Côte d'Ivoire	Submission of updated version	2	2022
Gambia	Submission of updated version	2	2021
Ghana	Submission of updated version	2	2021
Guinea	Submission of updated version	2	2021
Guinea-Bissau	Submission of updated version	2	2021
Liberia	Submission of updated version	2	2021
Mali	Submission of updated version	2	2021
Niger	Submission of updated version	2	2021
Nigeria	Submission of updated version	3	2021
Senegal	Submission of the first version	1	2020
Sierra Leone	Submission of updated version	2	2021
Togo	Submission of updated version	2	2021

Source: UNFCCC NDC Registry<sup>5</sup>

<sup>4</sup> Here we consider the INDCs as the first NDC

<sup>5</sup><https://unfccc.int/NDCREG> : In accordance with Article 4, Paragraph 12 of the Paris Agreement, NDCs communicated by Parties shall be recorded in a public registry maintained by the secretariat.

#### 4.1.2. Updated NDCs compared to the previous versions

To compare the first and updated versions of the second NDCs, several key elements were considered, including:

1. Revisions to previous submissions
2. Strengthening of overall mitigation strategies aimed at reducing total greenhouse gas (GHG) emissions by 2030
3. The addition or enhancement of specific GHG targets
4. The introduction or improvement of sectoral targets
5. The reinforcement of policies and actions
6. The enhancement of adaptation measures, and
7. The provision of additional information to ensure greater clarity, transparency, and understanding (Table 2).

**Table 2. Comparison of the first and updated versions of the second NDCs of West Africa countries<sup>6</sup>**

Countries	NDC revised	Enhanced mitigation ambition (2030)	Added new GHG targets or enhanced existing ones	Added new sectoral targets or enhanced existing ones	Added new policies and actions or enhanced existing ones	Enhanced adaptation ambition	Supplementary including transparency information provided
Benin	YES	Unclear	NO	YES	YES	YES	YES
Burkina Faso	YES	YES	YES	YES	YES	NO	YES
Cabo Verde	YES	Unclear	YES	Unclear	YES	YES	YES
Côte d'Ivoire	YES	YES	YES	YES	YES	YES	YES
Gambia	YES	NO	YES	YES	YES	YES	YES
Ghana	YES	NO	NO	YES	YES	YES	YES
Guinea	YES	YES	YES	YES	YES	NO	YES
Guinea Bissau	YES	Unclear	YES	YES	YES	NO	YES
Liberia	YES	Unclear	YES	YES	YES	YES	YES
Mali	YES	YES	YES	YES	YES	YES	YES
Niger	YES	NO	NO	YES	YES	YES	YES
Nigeria	YES	YES	YES	YES	YES	NO	YES
Senegal	YES	YES	YES	YES	YES	NO	NO
Sierra Leone	YES	Unclear	NO	YES	YES	YES	YES
Togo	YES	YES	YES	YES	YES	YES	YES



YES      Unclear      NO

From Table 2, all countries in the region, except Senegal<sup>7</sup>, have revised their NDCs, although the levels of ambitions among them vary compared to previous versions. Notably, all parties in the region except Senegal, have enhanced their policies and actions. Most countries have also provided supplementary information to ensure transparency, clarity, and understanding. Except for Cabo Verde's NDC, which does not clearly indicate any improvements, all the countries have also significantly enhanced their sectoral ambitions.

<sup>6</sup> The reader should note that the information presented in this Table 2 reflects only the reported information in the countries' NDCs archived in the UNFCCC's NDC registry as of December 2024. Unreported updates were not accessible and are thus not captured.

<sup>7</sup> Senegal is at its second NDC. The comparison is made with its INDC.

An increase in mitigation commitments is also evident across the region, with eleven out of the fifteen West African countries demonstrating clear advancements in their mitigation targets. Additionally, ten countries have enhanced their adaptation measures in the updated NDCs. Compared to the previous versions, however, there is no manifest changes in the latest NDCs of Burkina Faso, Guinea, Guinea-Bissau, Nigeria, and Senegal.

Burkina Faso, Côte d'Ivoire, Guinea, Mali, Nigeria, Senegal, and Togo have made clear progress on commitments to reduce GHG emissions by 2030. However, evaluating the extent of improvement in GHG targets for Benin, Cabo Verde, Guinea-Bissau, Liberia, and Sierra Leone, is challenging due to unclear documentation in their NDCs. This suggests that while progress has been made, there remains variability in how clearly and comprehensively countries have articulated their enhanced climate ambitions.

## 4.2 Mitigation

### 4.2.1. Base years

All countries are committed to limiting temperature increases to well below 2°C, while also aiming for the 1.5°C target. This shared commitment highlights the region's support for the global climate goals and reflects a unified stance despite differing national circumstances and priorities.

However, in pursuing these shared objectives, West African countries chose different mitigation base years – a reference point in the past used to compare current emissions – in their NDCs, each reflecting various strategic considerations. The choice of a base year influences how countries establish and monitor their mitigation targets. Some countries, including Sierra Leone, Liberia and Burkina Faso chose 2015 – the year the PA was adopted – as their base year demonstrating alignment with global climate policies and frameworks. In contrast, Nigeria, Ghana, Guinea, and Benin have updated their base years to 2018, while Togo, Senegal, and The Gambia chose 2010, Côte d'Ivoire chose 2012, Cabo Verde chose 2013, Niger chose 2014, while Guinea-Bissau and Mali chose 2019.

### 4.2.2. Mitigation target types

The preferred mitigation target types are reduction of emissions compared to a business-as-usual (BAU) scenario, absolute target, and adaptation with mitigation co-benefits (Table 3). For instance, Nigeria, Cabo Verde, and Benin each aim for approximately 20% reduction below BAU. In contrast, Senegal, Togo, and Liberia have set more ambitious mitigation targets, committing to reductions of 29.0%, 50.6%, and 64.0% compared to BAU, respectively, by 2030. This reflects a collective effort to lower projected emissions through the implementation of climate policies and measures.

On the other hand, Ghana and Benin have demonstrated stronger commitments by setting absolute emissions reduction targets demonstrating a stronger commitment. They have also committed to and are continuing pledging to cap their total GHG emissions at specific levels by designated years. For example, Ghana aims to reduce its total emissions by 64 MtCO<sub>2e</sub> by 2030. This is to be achieved through the implementation of nine unconditional programs, which are expected to yield reductions of 24.6 MtCO<sub>2e</sub>. Additionally, twenty-five conditional programs are anticipated to achieve reductions of 39.4 MtCO<sub>2e</sub>. This creates a clear and quantifiable goal for the country. Similarly, Benin commits to reduce cumulative GHG emissions (excluding LULUCF) by approximately 48.75 MtCO<sub>2e</sub>. Targets for the LULUCF sector are expected to result in cumulative reductions of 40.64 MtCO<sub>2e</sub> in net GHG emissions between 2021 and 2030 compared to the baseline scenario. These absolute targets are more stringent, demonstrating a stronger commitment to mitigating climate change, irrespective of the national economic situation.

Sierra Leone lags with the adaptation strategy with mitigation co-benefits. Notably, no country in the region has committed to an intensity target, which would focus on reducing emissions per unit of GDP. Also, neither of the countries has adopted a peaking target, which would establish a maximum emissions level before initiating reductions.

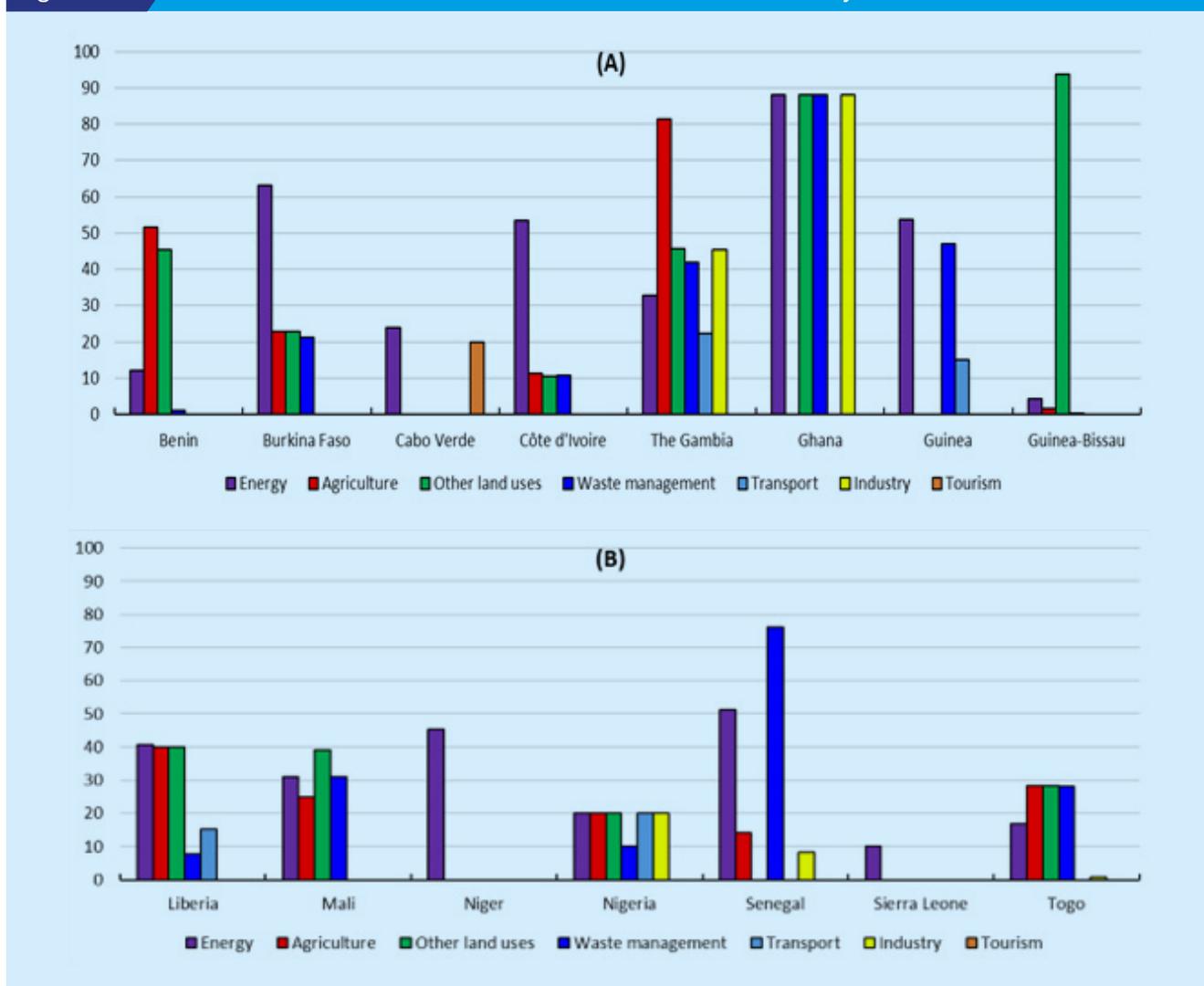
**Table 3.** Climate change mitigation target types in West Africa

Mitigation targets	Countries
Adaptation with mitigation co-benefits	Sierra Leone
Intensity targets	None
Reduction compared to business as usual	Benin, Togo, Cabo Verde, Senegal, Côte d'Ivoire, Ghana, Nigeria, Liberia, Burkina Faso, Mali, Guinea, Guinea-Bissau, Niger, and The Gambia
Peaking target	None
Absolute target	Ghana and Benin

### 4.2.3. Mitigation-focused sectors

West African countries have made diverse commitments to reduce GHG emissions by 2030, reflecting their national priorities and unique challenges. Analyses of these commitments across key sectors including energy, agriculture, LULUCF (including agriculture), waste, transport, industry, and tourism reveal opportunities for increased ambitions. Figure 2 illustrates percentage emission reduction commitments per sector by 2030.

**Figure 2.** Sectoral commitments to GHG emission reductions by 2030



#### 4.2.3.1. Energy sector

Countries like Ghana, Burkina Faso, Guinea, Côte d'Ivoire, and Senegal exhibit the highest ambitions (>50%) in the energy sector, targeting GHG reductions of 88.0%, 63.2%, 53.7%, 53.4%, and 51.2%, respectively (Figure 2). This strong commitment underscores their ambitions to transition to cleaner energy sources or improving energy efficiency as key components of their climate strategies. Niger, Liberia, The Gambia, and Mali follow with lower reduction targets of 45.3%, 40.6%, 32.7% and 31.0%, respectively, indicating a moderate commitment to the energy sector. Cabo Verde, Togo, Benin, and Sierra Leone aim for reductions of 24.0%, 16.9%, 12.2%, and 10.0%, respectively, reflecting even lower, yet meaningful commitment in the energy sector. Guinea-Bissau has the least ambition among the countries that have reported data, targeting a 4.3% reduction.

#### 4.2.3.2. Agriculture and other land use sectors

The Gambia is the most ambitious country in the agriculture sector, targeting an 81.3% reduction in GHG emissions. It is followed by Benin, which targets a reduction of 51.5% (Figure 2 A) and Liberia with 40.0%. Mali and Nigeria present agriculture sector targets of 25.0% and 20.0% (economy-wide), respectively. Senegal and Côte d'Ivoire have set moderate reductions of 14.1% and 11.3%. Guinea-Bissau has the least ambitious target at 1.6%, among the countries that reported agricultural targets. Ghana presents a unique case, as it excludes agriculture from its anthropogenic emission reduction commitments in line with the ultimate objective of Article 2 of the UNFCCC. The exclusion is based on three main factors: (i) the country's food production systems are highly vulnerable, being largely unmechanized and rainfed; (ii) agriculture is the primary source of rural livelihoods; and (iii) significant challenges exist in agricultural data management. Some countries, including Togo and Burkina Faso, reported combined targets for the Agriculture, Forestry, and Other Land Use (AFOLU) sector at 40.0%, 28.4%, and 22.8%, respectively. Others, such as Cabo Verde, Guinea, Niger, and Sierra Leone, did not provide data on their contributions to the agricultural sector.

In the case of other land uses (excluding agriculture), Guinea-Bissau reported the highest reduction target at 93.7%, followed by Ghana with its economy-wide target of 88.0% covering this sector. Significant targets of 45.6%, 45.5%, and 39.0% were set by The Gambia, Benin, and Mali, respectively. Nigeria and Côte d'Ivoire opted for more moderate but still important commitments of 20.0% (economy-wide) and 10.4%. Meanwhile, Cabo Verde, Guinea, Niger, Senegal, and Sierra Leone did not report reduction targets for the land use sector.

#### 4.2.3.3. Waste management sector

Ghana and Senegal lead in waste management, with ambitious reduction targets of 88.0% (economy-wide) and 76.3%, respectively (Figure 2). Following closely are Guinea and The Gambia which aim for 47.1% and 42.0% reductions, respectively, while Mali, Togo, and Burkina Faso have set reduction targets of 31.0%, 28.1%, and 21.2%, respectively. Côte d'Ivoire, Nigeria, and Liberia commit to low targets of 10.6%, 10.0%, and 7.6%, respectively, while Benin and Guinea-Bissau have even lower commitments to the waste sector, with targets at 1.2% and 0.4%, respectively. Countries such as Cabo Verde, Niger, and Sierra Leone have not provided any information about their waste sector emissions reduction goals in their NDCs.

#### 4.2.3.4. Transport sector

The Gambia, Nigeria, Liberia, and Guinea are among the few countries in West Africa that provided explicit emissions reduction targets for the transport sector. They target 22.2%, 20.0%, 15.1%, and 15.0% reduction targets below BAU levels by 2030, respectively (Figure 2). Similarly, Burkina Faso, Ghana, and Guinea have respectively committed to absolute reduction values of 4,439, 109.1, and 58,800 Gg CO<sub>2</sub>eq representing 1.1%, 0.2% and 14.5% of total national emissions reduction efforts, respectively. For the rest of the countries, their transport sector is subsumed under the energy sector.

#### 4.2.3.5. Industry and tourism sectors

Ghana leads in industry sector emissions reduction with an ambitious economy-wide target 88.0% followed by The Gambia with a target of 45.4%. They are followed by Nigeria and Senegal with a reduction target of 20% (economy-wide) and 8.1%, respectively (Figure 2). The lowest commitment of 0.8% is presented by Togo. The remaining countries did not specify their commitments to the industry sector. In respect of the tourism sector, only Cabo Verde is committed to a reduction target of 20%, reflecting its commitment to sustainable tourism within its climate strategy.

#### 4.2.4. Conditionality of the West African countries' mitigation commitments

As required by the PA, countries must indicate their conditional and unconditional commitments in their NDCs. By this, countries are required to show by sectors the proportion (%) of their mitigation commitments to be achieved unconditionally using domestic/own resources and those to be achieved conditionally using external resources. Across all sectors, the aggregate commitment is 33% unconditional and 67% conditional, revealing a strong ambition tempered by significant financial, technological, and institutional constraints (Table 4). The Gambia, Liberia, Niger, and Senegal have the highest conditional mitigation commitments, exceeding 80%. Similarly, the waste, energy, agriculture, and industry sectors show the highest conditional mitigation commitments, exceeding 70%. Collectively, these patterns underscore that while West African countries are striving toward aligning with Paris Agreement goals, their progress in climate mitigation will depend heavily on international cooperation and support. However, this seemingly excessive reliance on conditional commitments is seen by the countries not as a weakness, but as a strategic mechanism to leverage carbon markets and attract finance into the region.<sup>8</sup>

**Table 4<sup>8</sup>.** Share of conditional and unconditional mitigation commitments of West African countries by 2030a

Country	Conditionality	Sector						
		Energy	Agric	LULUCF	Waste	Transport	Industry	All
Benin	Unconditional (%)	69.1	50.0	37.7	52.3	N/S	N/S	59.2
	Conditional (%)	30.9	50.0	62.3	47.7	N/S	N/S	40.8
Burkina Faso*	Unconditional (%)	38.5	N/S	74.5	0.0	80.3	N/S	48.3
	Conditional (%)	61.5	N/S	25.5	100.0	19.7	N/S	51.7
Cabo Verde	Unconditional (%)	N/S	N/S	N/S	N/S	N/S	N/S	74.8
	Conditional (%)	N/S	N/S	N/S	N/S	N/S	N/S	25.2
Côte d'Ivoire	Unconditional (%)	53.4	51.6	N/S	50.0	N/S	N/S	51.7
	Conditional (%)	46.6	48.4	N/S	50.0	N/S	N/S	48.3
The Gambia	Unconditional (%)	0.0	0.0	18.2	0.0	0.0	0.0	3.0
	Conditional (%)	100.0	100.0	81.8	100.0	100.0	100.0	97.0
Ghana	Unconditional (%)	N/S	N/S	N/S	N/S	N/S	N/S	38.4
	Conditional (%)	N/S	N/S	N/S	N/S	N/S	N/S	61.6
Guinea	Unconditional (%)	28.2	N/S	33.4	0.0	46.9	60.0	33.7
	Conditional (%)	71.9	N/S	66.6	100.0	53.1	40.0	66.3
Guinea-Bissau	Unconditional (%)	15.9	N/S	N/S	N/S	N/S	N/S	33.3
	Conditional (%)	84.1	N/S	N/S	N/S	N/S	N/S	66.7

<sup>8</sup>The data presented in the table only represents twelve countries excluding Nigeria and Mali XXwhose NDCs do not specify conditionality ratios for mitigation.

Liberia	Unconditional (%)	N/S	15.6	N/S	N/S	N/S	N/S	6.2
	Conditional (%)	N/S	84.4	N/S	N/S	N/S	N/S	93.8
Mali	Unconditional (%)	N/S						
	Conditional (%)	N/S						
Niger*	Unconditional (%)	18.9	N/S	35.6	N/S	N/S	N/S	6.7
	Conditional (%)	81.1	N/S	64.4	N/S	N/S	N/S	93.3
Nigeria	Unconditional (%)	N/S	N/S	N/S	N/S	N/S	N/S	29.8
	Conditional (%)	N/S	N/S	N/S	N/S	N/S	N/S	70.1
Senegal	Unconditional (%)	19.5	16.5	N/S	14.4	N/S	0	19.4
	Conditional (%)	80.5	83.5	N/S	85.6	N/S	100	80.6
Sierra Leone	Unconditional (%)	10.0	30.0	20.0	20.0	15.0	80.0	36.4
	Conditional (%)	90.0	70.0	80.0	80.0	85.0	20.0	63.6
Togo*	Unconditional (%)	16.9	N/S	28.4	28.1	N/S	0.8	20.5
	Conditional (%)	83.1	N/S	71.6	71.9	N/S	99.2	79.5
All countries	Unconditional (%)	27.0	27.3	35.4	20.6	35.6	28.2	33.0
	Conditional (%)	73.0	72.7	64.6	79.4	64.4	71.8	67.0

N/S: Not specified in the NDC document

\*Countries that have combined Agriculture and LULUCF sectors under the Agriculture, Forestry, and Other Land Use (AFOLU) sector in their NDC.

#### 4.2.4.1. Conditionality of mitigation commitments in the energy sector

The energy sector represents one of the largest sources of GHG emissions in West Africa, and most countries emphasize it as a priority for mitigation. Overall, only 27.0% of commitments are unconditional, while a substantial 73.0% are conditional, underscoring the sector's dependence on international support for clean energy transitions. Countries like Benin (69.1% unconditional), Côte d'Ivoire (53.4% unconditional), and Burkina Faso (38.5% unconditional) demonstrate strong domestic commitment, whereas The Gambia reports 0% unconditional reductions, making its entire ambition contingent on external assistance. This imbalance highlights the recognition of energy's central role in emission reductions, but also the limited national capacity to fund and sustain large-scale renewable energy projects without global support.

#### 4.2.4.2. Conditionality of mitigation commitments in the agriculture sector

Agriculture is both a vital livelihood source and a significant emissions sector in West Africa. Commitments in this sector are 27.3% unconditional and 72.7% conditional, reflecting the sector's socio-economic sensitivity. For instance, Benin and Côte d'Ivoire split their commitments roughly evenly, showing a willingness to act domestically while still requiring assistance. By contrast, The Gambia (0% unconditional, 100% conditional) and Liberia (15.6% unconditional, 84.4% conditional) illustrate heavy reliance on international backing. Importantly, Ghana does not include agriculture in its targets, citing the vulnerability of its largely rainfed, unmechanized systems and the sector's critical role in rural livelihoods. This omission underscores how adaptation and food security concerns may limit mitigation ambition in agriculture across the region.

#### 4.2.4.3. Conditionality of mitigation commitments in the land use, land-use change, and forestry sector

The LULUCF sector is critical for West African countries, given their large forest resources and potential for carbon sequestration. Here, 35.4% of commitments are unconditional (the highest among sectors) while 64.6% are conditional. Burkina Faso (74.5% unconditional) shows remarkable domestic ambition, indicating strong policy alignment with forest preservation and land restoration. Benin, Niger, and Guinea

commit around one-third of reductions unconditionally, while Togo, Sierra Leone, and The Gambia pledge lower unconditional shares (28.4%, 20%, and 18.2% respectively), relying more heavily on conditional support to achieve their targets. This pattern highlights how, despite strong regional recognition of land use as a mitigation pathway, most countries still depend heavily on external support to implement large-scale reforestation and land management programs.

#### *4.2.4.4. Conditionality of mitigation commitments in the waste management sector*

The waste sector is among the most condition-dependent, with only 20.6% unconditional commitments compared to 79.4% conditional. This reflects systemic challenges such as limited infrastructure for waste collection, recycling, and methane capture. Côte d'Ivoire commits equally to unconditional (50%) and conditional (50%) reductions in the waste sector, Senegal relies more on external support with 14.4% unconditional and 85.6% conditional commitments, while Benin shows a higher level of domestic ambition with 52.3% unconditional and 47.7% conditional commitments. Burkina Faso, The Gambia, and Guinea commit 0% unconditionally, making their ambitions fully reliant on support, while Togo (28.1% unconditional, 71.9% conditional) and Sierra Leone (20% unconditional, 80% conditional) provide modest unconditional contributions. The heavy conditionality demonstrates that while countries recognize waste as a growing emissions source, they lack the technological and financial means to scale up sustainable waste management without external financing.

#### *4.2.4.5. Conditionality of mitigation commitments in transport and industry sectors*

Transport commitments stand at 35.6% unconditional and 64.4% conditional, showing a slightly stronger domestic readiness compared to other sectors. Burkina Faso (80.3% unconditional) leads the region in its willingness to independently act on transport emissions, likely through efficiency measures. Guinea and Sierra Leone show moderate and lower unconditional efforts with 46.9% and 15.0%, respectively. By contrast, The Gambia (0% unconditional, 100% conditional) exemplifies the high dependence of many smaller economies on external support to transition toward low-carbon mobility. While the transport sector remains a priority, its transformation requires significant investment in infrastructure and technology, which explains the dominance of conditional pledges.

Industrial emissions commitments are less common across the region, with 28.2% unconditional and 71.8% conditional. The commitments of The Gambia and Senegal rely entirely on external support (100%), while Togo's commitments are nearly as dependent (99.2%). In contrast, Sierra Leone is an outlier with 80% unconditional, signaling strong domestic intent in industrial mitigation. Guinea also demonstrates a strong national effort, with 60.0% unconditional commitment. By these commitments, Sierra Leone and Guinea have demonstrated strong local commitments to reduce their emissions from industrial processes. The disparity in the level of commitment suggests that while industry is not yet a major emissions contributor in many West African countries, those with more advanced industrial activities recognize the need for mitigation, though external support remains vital for scaling sustainable practices.

#### *4.2.5. Regional investment needs for mitigation measures*

Region-wide, the total investment needs to implement mitigation actions (excluding two countries) is over \$50 billion. Nigeria requires over \$20 billion by 2030 to fully achieve the targets in its NDCs (Table 5). Similarly, Ghana, Côte d'Ivoire, Mali, Guinea, and Guinea-Bissau are classified high needs category, with projected allocations ranging from \$10 billion to \$20 billion. These countries require considerable financial outlays to meet their ambitious climate mitigation goals. Benin and Senegal are in the \$5 billion to \$10 billion range, indicating that a moderate level of investment is needed to tackle their climate challenges. Sierra Leone, Niger, Burkina Faso, Cabo Verde, and Togo are within the low investment bracket of \$1 billion to \$5 billion which is more modest compared to countries in the higher investment needs band. Liberia's estimated costs only cover the period up to 2025 and is projected to be less than \$1 billion.

**Table 5. Overview of the investment needs for mitigation measures across West Africa**

Countries	Domestic commitment (Million \$)	External support needed (Million \$)	Total investment needs (Million \$)
Benin	5,069.03	3,487.77	8,556.81
Burkina Faso	449.12	885.67	1,334.80
Cabo Verde	N/S	N/S	1,037.38
Côte d'Ivoire	N/S	N/S	10,000.00
The Gambia	N/S	N/S	N/S
Ghana	N/S	N/S	N/S
Guinea	N/S	N/S	13,800.00
Guinea-Bissau	133.00	531.00	664.00
Liberia*	24.98	375.66	400.65
Mali	N/S	N/S	4,344.00
Niger	212.70	2,952.40	3,165.10
Nigeria	N/S	N/S	N/S
Senegal	3,400.00	5,300.00	8,700.00
Sierra Leone	N/S	N/S	27.64
Togo	697.72	2,001.64	2,699.36

*N/S: Not specified in the NDC document*

### 4.3. Adaptation

#### 4.3.1. Adaptation measures

West African countries have developed NDCs that highlight their adaptation priorities across different sectors and reflect their distinct socio-economic contexts. The main adaptation sectors captured in the NDCs are biodiversity and ecosystems conservation, forestry and natural resources management, public health, human settlements and coastal infrastructure, tourism, transport, energy systems, and agriculture. It is worth noting that irrespective of the geographical and socio-economic differences that exist among the countries, their priorities are similar. For example, land-locked countries face unique situations that require similar adaptation measures. In contrast, coastal countries are prone to similar challenges that necessitate a common set of adaptation strategies different from those of land-locked countries. Apart from the NDCs, the adaptation strategies are also presented in other policy documents including the National Strategy and Action Plan for Biodiversity Conservation (NBSAP) and the National Adaptation Plans (NAPs).

##### 4.3.1.1. Biodiversity and ecosystems conservation

West Africa is home to several biodiversity hotspots and ecosystems that support a unique array of endemic and threatened plant and animal species. Consequently, the different countries have outlined a set of strategies to enhance adaptation. Some countries did not directly address biodiversity and ecosystems conservation in their NDCs rather preferring to outline them in their NAPs and NBSAPs. Regionally, adaptation options under this sector include expanding protected areas and strengthening their management (Cabo Verde, Sierra Leone, Liberia), ecosystem restoration and nature-based solutions (Burkina Faso, Liberia, Cabo Verde, Niger), climate-resilient biodiversity conservation (Togo, Senegal, Cabo Verde, Guinea) and conservation of coastal and marine ecosystems (Cabo Verde, Liberia, Guinea). However, some countries champion strategies which are unique to their contexts. For example, Cabo Verde's NBSAP outlines the

country's 2015 to 2030 biodiversity conservation measures including promoting sustainable use of natural resources and enhancing ecosystem resilience. Senegal emphasizes strengthening the foundations of biodiversity knowledge and addressing biological aspects related to climate change impacts. Cote d'Ivoire highlights measures to strengthen biodiversity resilience, underscoring the importance of protecting its unique ecosystems as part of its broader climate adaptation strategy. Furthermore, Niger and Burkina Faso indicate protecting water sources to ensure water quality and resilience against any climate-related water stress. Benin and Togo intend to mainstream biodiversity and ecosystem services into comprehensive action planning to help communities adapt to the adverse effects of climate change.

Concerning forest and natural resources management, the adaptation strategies of Cote d'Ivoire and Senegal focus on enhancing land and forest governance and strengthening of forest protection to combat land degradation. Burkina Faso emphasizes the implementation of good and sustainable forestry and agroforestry practices, such as selective logging for fuel and controlled clearing. Liberia's strategy aims to bolster the capacity of forest-dependent local communities to undertake alternative livelihoods activities towards a just transition away from extractive forestry models. The main measures adopted include developing markets for non-timber forest products and promoting sustainable ecotourism. Other adaptation strategies prioritize reforestation and afforestation campaigns to increase forest cover, restore degraded forests and prevent deforestation. For instance, Ghana and Nigeria have integrated the REDD+ strategy into their forestry management, promoting reforestation and afforestation with resilient, preferably endemic and native species.

#### *4.3.1.2. Public health*

Most West African countries prioritize impacts on human health when adopting adaptation measures in their NDCs and other national policy documents due to the significant impact of climate change on public health. Integrating public health into adaptation commitments is one of the most effective ways to enhance health quality, well-being, and resilience. For instance, Senegal emphasizes the need for increased health oversight through integrated epidemiology to monitor and manage climate-related health risks. Similarly, Togo focuses on implementing an early warning system for climate-related risks while supporting the prevention and control of vector-borne diseases with the aim to strengthen the health sector's resilience to climate change impacts. Niger, Benin, and Guinea Bissau did not explicitly address climate adaptation actions for public health in their NDCs. Nevertheless, public health is addressed in their respective NAPs. For instance, Niger highlights the importance of strengthening its health system and infrastructure to effectively respond to climate-induced health issues.

Overall, strategies to strengthen health sector resilience and enhance climate preparedness include integration of epidemiology, early warning systems, and vector-borne disease control. Capacity building, institutional and inter-sectoral collaboration are also employed.

#### *4.3.1.3. Human settlements and coastal infrastructure*

Human settlements and coastal infrastructure are highly vulnerable to climate change impacts. For this reason, West African countries have made significant adaptation commitments in their NDCs targeted at their vulnerabilities. This is particularly important for the coastal countries. All the coastal countries in the region emphasize the importance of adaptation strategies such as integrated coastal management, effective land management in risk-prone hotspots, and human resilience building. For instance, Ghana's adaptation strategy focuses on city-wide resilient infrastructure planning to ensure that cities are smart, sustainable, and are capable of withstanding shocks and stress. In contrast, land-locked countries like Burkina Faso, adhere to strict construction standards while promoting ecological housing and urban development.

Altogether, adaptation strategies for human settlements and coastal infrastructure in West Africa include integrated coastal and land management, resilient urban planning, and ecological housing to ensure sustainability and climate preparedness.

#### **4.3.1.4. Tourism**

The tourism sector is often overlooked by most West African countries in their NDCs as it is perceived to have minimal direct impact on climate change. In a region where various sectors compete for limited financial and technical resources, tourism tends to be neglected. However, some countries such as Ghana, The Gambia, and Benin have considered adaptation measures for the tourism sector in their NDCs. For instance, Benin's adaptation strategy for the tourism sector emphasizes the need to integrate climate change considerations into the management and preservation of natural and cultural heritage sites to promote tourism development and support economic growth and resilience. Similarly, Ghana adopts nature-based solutions to promote eco-tourism, aiming to enhance ecosystem services through forest conservation.

Overall, adaptation efforts in the tourism sector focus on heritage preservation, climate integration, and eco-tourism to enhance resilience and sustainable growth. These strategies aim to protect natural ecosystems while fostering economic benefits through climate-conscious tourism development.

#### **4.3.1.5. Agriculture**

Agriculture is a major contributor to the Gross Domestic Product (GDP) and a source of employment in all the West African countries. Several adaptation strategies including sustainable land and water management, climate-resilient agricultural practices, and enhanced support systems for farmers are common across all countries. Integrated soil fertility management, agroforestry, and land restoration efforts are also widely promoted to counteract land degradation and improve productivity. However, some adaptation options are country specific. Countries such as Togo, Niger, and Cabo Verde prioritize efficient irrigation systems, including micro-irrigation, rainwater harvesting, and the development of water reservoirs to enhance agricultural water use. Togo also prioritizes strengthening the resilience of agricultural systems and production methods while Cabo Verde aims to increase and sustain food-based security on land by creating a resilient agricultural sector and sustainable livestock economy by 2025. The promotion of climate-smart agricultural techniques, such as the use of drought-resistant crop varieties and agroecological practices, is a recurring theme, particularly in Mali, Niger, and Cabo Verde. Additionally, agricultural insurance schemes and early warning systems aim to mitigate climate risks and ensure economic stability for farmers are critical adaptation elements in Burkina Faso, Ghana, Niger, Togo, and Senegal. Investment in agricultural research and extension services is highlighted in Cabo Verde and Niger, fostering innovation and capacity-building among farmers to adapt to climate challenges. The integration of agriculture with livestock and agroforestry is evident in several strategies, particularly those of Senegal and Cabo Verde, promoting circular and regenerative agricultural systems. Benin is focusing on enhancing resilience in agricultural production and processing systems, promoting integrated management of agro-silvo-pastoral resources, and improving access to agricultural credit and infrastructure for women.

Altogether, West Africa's agricultural adaptation strategies focus on sustainable land and water management, climate-smart practices, and farmer support. Key measures include efficient irrigation, resilient crops, risk mitigation through insurance and early warning systems, investment in research, agroforestry, and integrated farming systems.

#### **4.3.1.6. Energy systems**

Hydropower is a primary renewable energy source in all West African countries. The region suffers from power shortages due to the limited number and low capacity of the hydroelectric power stations coupled with fluctuations in water levels. To address the challenge, the countries are focusing on the expansion and modernization of renewable energy systems on solar, wind, and hydro power to meet the increasing

energy demand and enhance energy security while fostering socio-economic development. For instance, Mali aims to achieve a 10% renewable energy mix, while Liberia prefers large-scale photovoltaic plants. In energy efficiency, Burkina Faso integrates energy-saving measures in its urban and rural housing interventions while Togo promotes low-carbon technologies. Off-grid and rural electrification projects are also central to the region's strategy, with Togo advancing hybrid mini-grids and Liberia promoting small hydropower solutions.

Cabo Verde links its renewable energy expansion directly to water security by increasing clean energy capacity for desalination. Similarly, Nigeria prioritizes the resilience of water-intensive energy infrastructure and integrates climate adaptation into its energy planning. Meanwhile, Sierra Leone focuses on capacity building, gender inclusivity, and market intelligence for off-grid solar adoption, thereby aligning technological development with regional goals. In contrast, Liberia focuses on energy sector deregulation, aiming to create an enabling environment for the participation of independent power producers in the energy sector. Togo's strategy includes promoting biofuels alongside traditional energy management, enhancing energy efficiency, and advancing low-carbon technologies. To expand its energy system, Ghana is constructing the largest solar energy plant in Africa. The project is expected to add 155 MW of power to the national grid for use by over 100,000 households. Essentially, all West African countries recognize the need to reduce dependence on fossil fuel and eliminate fossil fuel subsidies. However, the country-specific nuances illustrate how each nation customizes its energy transition strategies to fit its unique socio-economic and environmental contexts, thereby contributing to the broader regional shift towards sustainable energy systems.

#### **4.3.1.7. Transport**

West African countries have, through their NDCs and other national policies addressed adaptation in the transport sector. The countries have prioritized the development and maintenance of road infrastructure to enhance connectivity and accessibility. They are also investing in regional transport corridors to strengthen trade and economic integration. Efforts to improve climate resilience in transport infrastructure include assessing the impacts of climate change on roads and ports, and the implementation of initiatives to expand public transport systems and strengthen institutional frameworks. Specifically, the adaptation strategy for Nigeria, Cote d'Ivoire, Ghana, Senegal and Benin is the development of climate-resilient infrastructure to withstand the adverse effects of climate change. For instance, Nigeria commits to developing flood-resilient road infrastructure to reduce disruptions and damage from extreme weather events. Cote d'Ivoire emphasizes the implementation of climate-resilient road design standards to enhance the resilience of roads to extreme weather conditions and reduce maintenance costs. Additionally, Cote d'Ivoire and Cabo Verde have initiated the electrification of their transport systems. Cabo Verde, for instance, plans to electrify at least 25% of its land-based transport using renewable energy by 2030. Liberia supports the development of infrastructure to facilitate a bus public transport network for its capital city of Monrovia.

#### **4.3.1.8. Co-benefits of climate actions**

Considering the crucial need to optimize their already strained financial and technical resources, West African countries track the co-benefits of climate actions for mitigation and adaptation in their NDCs. This approach allows Parties to measure the benefit streams for adaptation and/or mitigation from specific climate actions. Interventions that provide multiple benefits are deemed cost-effective. In general co-benefits across the region are in the areas of sustainable agriculture and food security, water resource management and disaster risk reduction, and forestry and biodiversity conservation. Additionally, countries are focusing on renewable energy and low-carbon development, health sector adaptation with mitigation benefits, and institutional strengthening and policy development to drive sustainable and inclusive growth. While these are overarching regional themes, countries are implementing specific priorities tailored to their national context. For instance, Ghana is developing a database that integrates the co-benefits of climate actions for mitigation and adaptation while also tracking progress. Liberia commits to reducing GHG

emissions of the health and fisheries sectors by leveraging their mitigation co-benefits associated with the adaptation targets of the country. Similarly, Cote d'Ivoire emphasizes the importance of strategies that simultaneously address both mitigation and adaptation, maximizing the co-benefits. Furthermore, Nigeria underscores the co-benefits of adaptation and mitigation by focusing on the protection and restoration of degraded watersheds and wetlands to safeguard water resources and related ecosystems services.

#### *4.3.2. Research for policy making*

Adaptation-related research is critical for understanding the impacts of climate change and for guiding evidence-based policies and interventions, resource allocation, monitoring and evaluation, and strengthening regional cooperation. Most countries in West Africa actively support and promote scientific, technical, and technological research to inform policymaking on adaptation and climate change mitigation. Across the region, countries are committed to enhancing research capacity, improving data collection, and integrating evidence into their adaptation and mitigation strategies and interventions. Many countries prioritize investments in climate research institutions, real-time climate data monitoring, and data-driven models' development to inform policy and decision-making. Additionally, the need to strengthen collaboration between science, policy, and practice is becoming common.

Specific commitments include Cabo Verde's prioritization of agricultural research to bolster climate resilience. Guinea focuses on gathering accurate data on emissions from different land use practices to guide emissions reduction and carbon sequestration efforts. Liberia has allocated substantial resources for research to address adaptation questions related to the climate-health nexus and fisheries with the aim to enhance the country's adaptive management and policymaking. Nigeria aims to strengthen climate change research capacity by expanding its Centre for Climate Change and Freshwater Resources to ensure real-time access to global climate data and economic models for assessing climate adaptation costs and strategies. Togo has established and equipped research laboratories on climate change and agro-ecological field schools to enhance local expertise. Additionally, Ghana and Liberia leverage data-driven disease modeling to enhance response strategies. Meanwhile, Gambia and Sierra Leone prioritize climate-resilient fisheries and alternative fish farming approaches, alongside investments in coastal monitoring equipment for real-time climate assessment. These diverse research initiatives across West Africa highlight the region's commitment to evidence-led adaptation and mitigation policies that address both national and regional climate challenges.

#### *4.3.3. Contingency measures*

Contingency measures constitute a set of technical assistance actions for the prevention and management of climate-related crises. The countries have not explicitly outlined contingency measures in their NDCs. However, some have provided related actions in other relevant policy documents. For instance, the NAPs of Ghana and Mali emphasize the importance of early warning systems and disaster preparedness which are critical for reducing vulnerability to climate-related hazards. Côte d'Ivoire is developing contingency plans and emergency response strategies to address unforeseen climate impacts and ensure rapid recovery and resilience. The Gambia's National Disaster Management Policy prioritizes disaster management for enhanced adaptation at the community level. Finally, Cabo Verde plans to establish contingency funds to assist vulnerable, low-income individuals to recover from impacts caused by extreme weather events.

#### *4.3.4. Adaptation costs and conditionality*

Adaptation cost is the financial investment required to implement measures that address the adverse effects of climate change. For the West African countries, adaptation costs vary significantly reflecting different levels of vulnerability to climate change and the adaptation priorities of the countries (Table 6). While Côte d'Ivoire has the highest estimated adaptation cost of \$12 billion, indicating its substantial need for investment in climate resilience, Liberia has the least estimated adaptation cost of \$89.95 million (Table 6). The figures highlight the extent of climate-related challenges faced by the countries and the urgent need for targeted investments to implement adaptation measures.

**Table 6.** Climate change adaptation costs for West African countries through to 2030

Country	Domestic commitment (Million \$)	External support needed (Million \$)	Adaptation cost (Million \$)
Benin	578.47	1,217.66	1,796.13
Burkina Faso	1,147.25	1,640.81	2,788.06
Cabo Verde	N/S	N/S	1,037.38
Côte d'Ivoire	3960.00	8040.00	12,000.00
The Gambia	N/S	N/S	315.85
Ghana	N/S	N/S	3,130.45
Guinea	N/S	N/S	1,000.00
Guinea Bissau	N/S	N/S	N/S
Liberia*	5.61	84.34	89.95
Mali	N/S	N/S	8,000.00
Niger	2,443.00	4,343.00	6,786.00
Nigeria	N/S	N/S	N/S
Senegal	1,387.11	2,927.95	4,315.06
Sierra Leone	N/S	N/S	1,064.00
Togo	500.60	2,278.84	2,779.44
<b>Total</b>			<b>45,102.32</b>

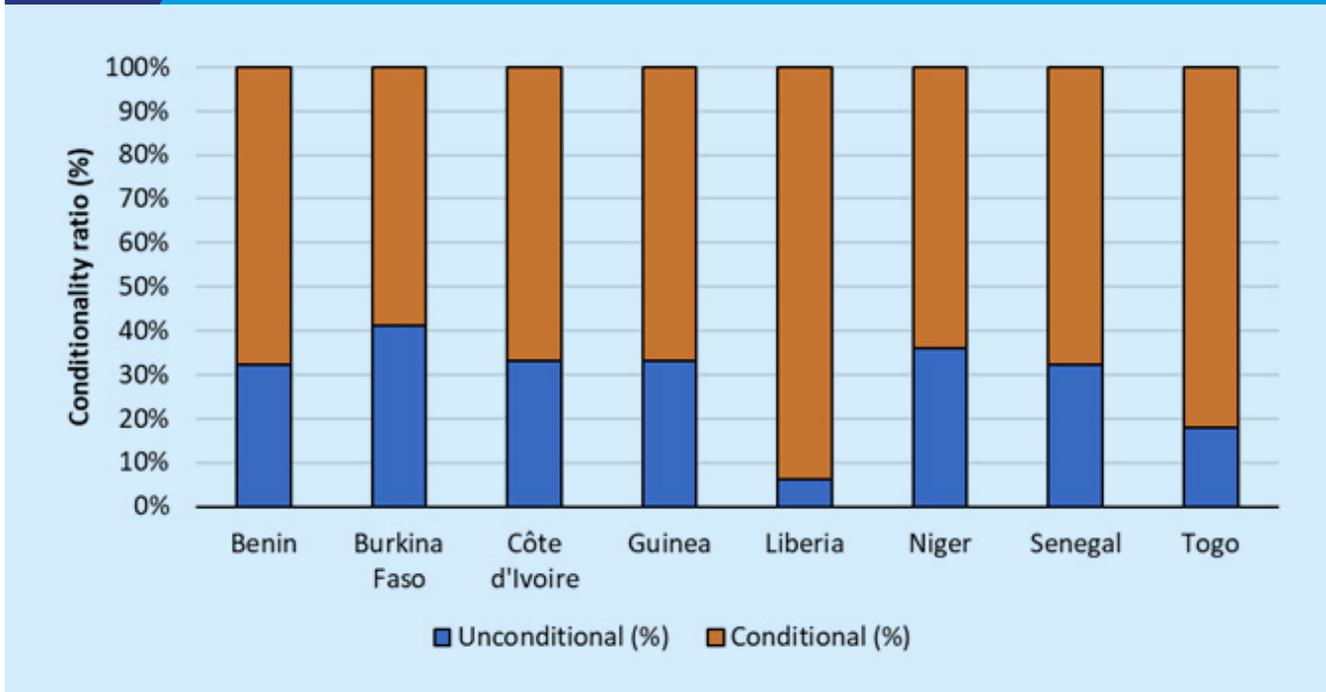
\* Estimated up to 2025

Analyses of the available data (Table 6) on adaptation financing show that West African countries are heavily dependent on conditional financing to achieve their climate adaptation goals (Figure 3). Across the region, the average unconditional commitment stands at ~ 28% of the total financial resources needed for adaptation.

This dependence is particularly dramatic for Liberia and Togo which require conditional financing of 93.76% and 81.99%, respectively. This highlights the limited capacity of these countries to independently finance their adaptation measures. Senegal and Benin also exhibit this trend, although to a lesser extent, with 67.90% and 67.80% of their total adaptation costs, respectively, being conditional. Côte d'Ivoire and Guinea, each require 67.00% external support, followed by Niger and Burkina Faso with 64.00% and 58.90%, respectively of their adaptation costs to be borne by external funds. These figures indicate that the countries are committed to funding their adaptation efforts using their own resources. However, most of their financial requirements rely on the availability of international funding. This dependence on external funding sources raises concerns about the feasibility of the adaptation strategies of the countries, as success is susceptible to fluctuations in global funding situation and donor commitments.

The remaining countries such as Cabo Verde, The Gambia, Ghana, Guinea-Bissau, Mali, Nigeria, Sierra Leone have not provided explicit information in their NDCs regarding the conditionality of their adaptation costs. The lack of detailed data on adaptation costs and the distinction between unconditional and conditional funding for these countries indicates either a gap in reporting or a potential uncertainty regarding their adaptation strategies.

Figure 3. Conditionality of adaptation finance for West African Countries



#### 4.4. Means of implementation and related conditionalities

##### 4.4.1. Technology needs

West African countries have identified several technologies including energy storage systems and smart grids, post-harvest technologies, desalination technologies, and climate monitoring systems as crucial for addressing climate change mitigation and adaptation challenges. These technology-needs cover critical sectors such as agriculture, energy, forestry, water resources, and transportation, reflecting the region's diverse environmental, economic, and social contexts. For example, Benin's emphasis on integrated soil fertility management, reforestation, and energy-efficiency technologies highlights the country's commitment to sustainable agriculture, ecosystem restoration and low-carbon energy solutions. Similarly, Cabo Verde and Nigeria report specific needs for low-carbon technologies including solar power, wind energy, and conservation agriculture as part of their transition towards a more sustainable development pathway. There is general recognition that meeting technological needs of the countries will depend on receiving appropriate technologies from developed countries. For instance, Liberia and The Gambia have explicitly stated that their ability to achieve their NDC targets depends on international support for technology transfer. This conditionality reflects the broader challenge associated with ensuring that developing countries have access to the advanced technologies needed to fulfill their climate commitments.

##### 4.4.2. Capacity building

In addition to technology development and transfer, capacity building is another critical challenge faced by West African countries. Many countries in the region see the need to strengthen capacity at individual, institutional, and systemic levels to effectively implement their NDCs. Capacity building needs, especially at the institutional level, generally revolve around climate policy (e.g., NDCs) development and implementation, techniques for climate action in adaptation and mitigation, and project development for funds mobilization. The training sessions are usually planned for line ministries and agencies, local authorities, civil society, and communities, and are mainstreamed into the NDC development, implementation, and revision processes. For instance, Guinea Bissau and Mali emphasize the importance of building institutional capacity to monitor and evaluate their NDCs implementation, manage energy transitions, and protect ecosystems. Similarly, Nigeria and The Gambia underscore the need for ongoing capacity building to support climate action and enhance the effectiveness of technology transfer. Ghana's priority is to integrate capacity development into

the implementation plan of the NDCs with emphasis on continuous staff training, involvement of academic institutions, research, and information gathering to provide inputs to the NDCs revision processes and the GST. Liberia's training and capacity initiatives are not only targeted at staff of line ministries and agencies, forest and coastal managers, and researchers, but also farmers, agricultural extension agents, and the public to ensure a whole-of-society approach to the implementation of mitigation and adaptation actions in all sectors of the economy.

A summary of specific areas of capacity building interventions is provided below.

- **Mastery of climate tools and decision support:** Strengthening knowledge on climate and hydrological forecasting (Benin, Cabo Verde, Niger, Guinea).
- **Integration of climate change into planning and policy:** Capacity building for local authorities to integrate climate change adaptation into planning instruments (Mali, Benin, Nigeria, Sierra Leone, Côte d'Ivoire, Senegal, Togo). Mainstreaming climate change into national and regional policies (Burkina Faso, Ghana, The Gambia).
- **Agriculture and water resources adaptation:** Training farmers and agricultural extension agents on climate-smart agriculture (Liberia, Cabo Verde, Niger). Strengthening water resource management and efficiency (Nigeria, Benin, Cabo Verde, Côte d'Ivoire). Supporting livestock sector adaptation (Niger, Mali).
- **Research and technology transfer:** Development of research programs on climate-resilient agriculture, water management, and marine resources (Cabo Verde, Niger, Liberia). Strengthening national research capacities on adaptation and mitigation (Guinea, Burkina Faso, Ghana). Institutional and technical support for climate data collection and research (Senegal, The Gambia, Guinea-Bissau, Ghana).
- **Climate finance and resource mobilization:** Building institutional capacity for accessing climate finance (Togo, Côte d'Ivoire, Burkina Faso, Guinea-Bissau). Supporting mechanisms for mobilizing resources for climate adaptation (Burkina Faso, Ghana, Togo).
- **Monitoring, reporting and verification (MRV):** Strengthening MRV systems to track NDC implementation and GHG inventories (Guinea-Bissau, Burkina Faso, Côte d'Ivoire, Senegal).
- **Sustainable waste and energy management:** Training on renewable energy integration, energy efficiency, and waste recycling (Cabo Verde, Guinea-Bissau). Developing strategies for managing organic waste and promoting circular economy solutions (Cabo Verde, Nigeria).
- **Climate education and awareness:** Promoting climate change education and vocational training (Sierra Leone, Liberia, Ghana). Capacity building on climate negotiations and international frameworks (Togo, Burkina Faso).

The success of capacity building is closely linked to the effectiveness of technology development and transfer. Without adequate capacity countries may struggle to fully and effectively utilize the technologies that have been received, potentially jeopardizing efforts to meet the targets outlined in their respective NDCs. This conditionality is consistent with the PA, which recognizes capacity building as a key component of climate action. The Agreement calls for enhanced capacity building in developing countries to strengthen their abilities to implement climate policies and actions effectively.

#### 4.4.3. Finance

West Africa's annual climate finance needs are projected at USD\$ 35.2 billion up to 2030. However, the actual finance flows amounted to only USD\$ 7.1 billion (20.74%) in 2019/2020 and USD\$ 10.9 billion (30.97%) in 2021/2022 (CPI, 2024). Thus, despite some progress, a substantial gap remains, with current domestic contributions covering only about one-third of the required funding.

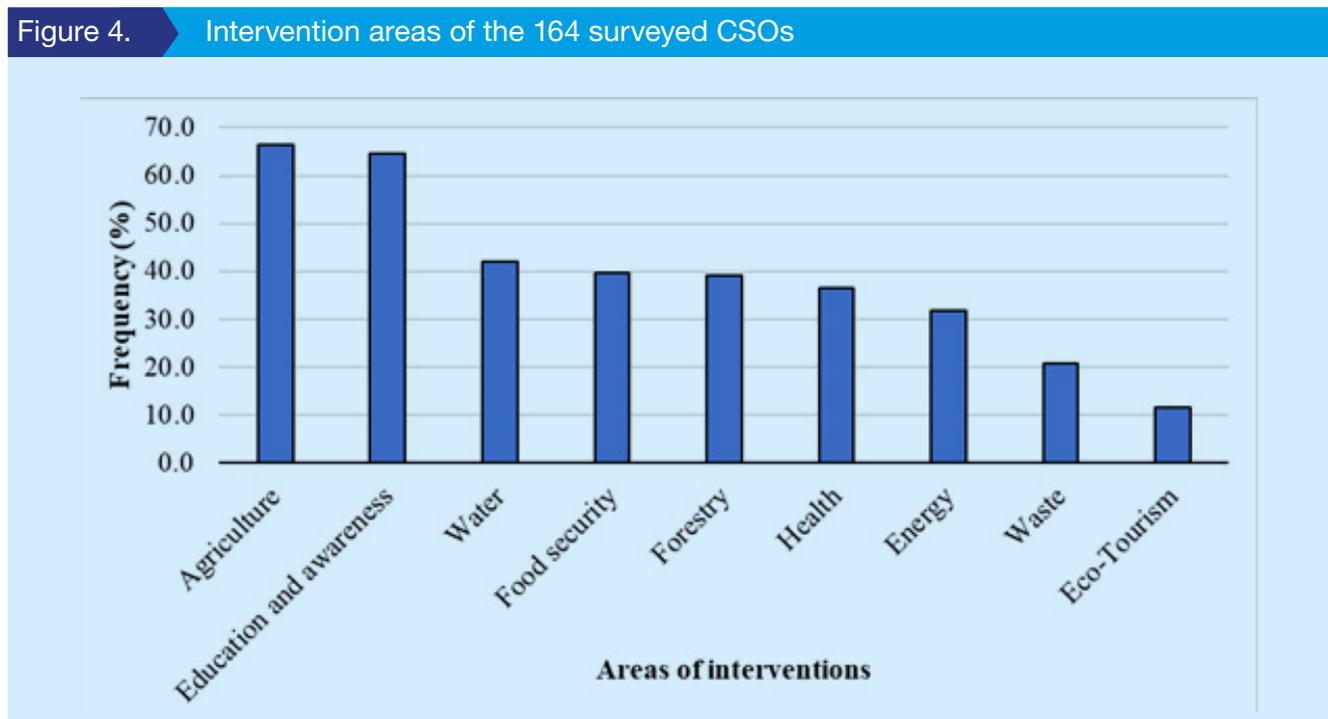
Several mechanisms exist to support funds mobilization from domestic and external sources for climate actions to bridge the finance gap in the region. These entail creating an enabling environment to attract climate funds from development partners (e.g., the African Development Bank) and international climate

finance mechanisms (e.g., the Green Climate Fund (GCF), Adaptation Fund (AF), Climate Investment Funds (CIF)). They also require the development of favorable national policies to promote both public- and private-sector investments under the Clean Development Mechanism (CDM). Additional financing mechanisms include issuing sovereign bonds, establishing national climate change funds, and providing tax exemptions for eco-friendly vehicles. The governments of some countries promote subnational funds mobilization through initiatives such as capacity building on climate grantsmanship to support local climate action. Key strategies include strengthening partnerships, diversifying funding sources, and leveraging opportunities through advocacy and decision-support tools. In general, a combination of financial instruments including grants and debt instruments is pursued.

#### 4.5. Contributions of civil society organizations to climate action

Civil Society Organizations (CSOs) encompass a wide range of non-state actors including non-governmental organizations (NGO), local communities and community groups, advocacy networks and individual activists, faith-based organizations, labor unions, research institutions, and the private sector. In West Africa, CSOs play vital roles in climate change actions ranging from advocacy and awareness raising to project implementation, community engagement and mobilization, research and knowledge sharing, and influencing policy.

Findings from the 164 surveyed CSOs working in the field of climate change reveal a diverse range of intervention areas (Figure 4). Specifically, 66.5% focus on agriculture, 64.6% on education and awareness raising, 42.1 % on water, 39.6% on food security, 39.0% on forestry, 36.6% on health, 31.7% on energy, 20.7% on waste, and 11.6% on eco-tourism.



##### 4.5.1. Climate change mitigation interventions

As a key sector in the West African region, agriculture is benefiting from West African CSOs' climate adaptation interventions through the promotion of climate-smart and resilient practices such as agroecology, permaculture, conservation farming, crop diversification, and organic methods. They support farmers with drought-resistant and early maturing seeds, improved seed multiplication, and training in soil conservation and greenhouse farming. Initiatives also include smart farming technologies, dry-season gardening, and livestock and poultry projects to strengthen food supply. These efforts enhance productivity, reduce climate vulnerability, and secure sustainable livelihoods for smallholder farmers.

Apart from Agriculture, many CSOs are actively driving adaptation and mitigation through extensive education and awareness initiatives, including integrating climate change into school curricula, organizing community trainings, workshops, and webinars, and running media campaigns on issues like waste management, food security, and water conservation. They engage youth, women, and vulnerable groups in climate leadership, advocacy, and citizen science, while promoting practical skills such as climate-smart gardening, renewable energy use, and flood preparedness. These actions not only build knowledge and shift behaviors but also empower communities to adopt sustainable practices and strengthen resilience to climate change.

The water sector has benefited from mitigation and adaptation efforts of CSOs who promote rainwater harvesting, water conservation education, and climate-smart gardening to cope with changing rainfall patterns. The CSOs also mobilize communities along riverbanks for tree planting to protect watersheds, prevent flooding, and reduce erosion. These initiatives improve water access, safeguard ecosystems, and strengthen community resilience to water stress and climate variability.

In the food security sector, CSOs in West Africa are strengthening climate adaptation by promoting climate-resilient and early maturing crops, drought-resistant varieties, and nutrient-rich plants such as vitamin-fortified potatoes to combat hunger and malnutrition. They support community and school gardening projects, dry-season farming, and agroecological practices, while also training farmers in soil conservation, permaculture, and organic farming. Nutrition-focused initiatives, including school feeding through fruit-based gardening, directly improve children's diets and resilience. These efforts enhance local food systems, reduce vulnerability to climate shocks, and secure sustainable livelihoods for farming communities.

CSOs working in the forestry sector contribute to climate adaptation and mitigation mainly through large-scale tree planting, reforestation, and ecosystem restoration efforts. They have launched campaigns across the Volta Basin, semi-arid regions of Nigeria, and other Sahelian areas, planting millions of seedlings to restore degraded land, combat desertification, and improve soil fertility. Organizations are also engaged in mangrove restoration, coconut planting on degraded sites, and community-led land reclamation. These actions not only enhance biodiversity and carbon sequestration but also strengthen local resilience by protecting livelihoods, reducing erosion and flooding, and promoting sustainable land use practices.

West African CSOs contribute to climate adaptation and mitigation in the health sector by promoting climate-resilient and nutritional crops like vitamin-fortified potatoes to address malnutrition, supporting school-based nutrition projects for children, and raising awareness on hydration and avoiding heat stress. They have distributed over 130,000 improved cookstoves and introduced biodigesters, reducing indoor air pollution and smoke-related illnesses. In addition, waste segregation, recycling initiatives, and the development of eco-friendly toilets are improving sanitation and reducing health risks in underserved communities. These interventions directly enhance nutrition, reduce disease exposure, and improve overall community health while also reducing emissions.

In the energy sector, the CSOs are supporting adaptation and mitigation efforts in different ways. Examples include the distribution of over-improved cookstoves, introduction of biodigesters, and promotion of biomass briquettes, pellets, ethanol, and biogas as alternatives to fuelwood, thereby reducing indoor air pollution, deforestation, and greenhouse gas emissions. CSOs are also supporting solar electricity for households, schools, and communities, alongside awareness campaigns and training on energy-efficient practices. These efforts improve public health, reduce reliance on unsustainable fuels, cut emissions, and enhance energy access for vulnerable populations.

Eco-tourism initiatives, although less documented by the CSOs, play a significant role in sustainable development by protecting natural habitats and fostering eco-friendly tourism that benefits local communities while contributing to climate change mitigation.

#### *4.5.2. Climate change adaptation interventions*

Interventions in education and awareness empower local communities with the knowledge and skills necessary to sustainably adapt to the impacts of climate change across various sectors. These initiatives typically focus on environmental stewardship, health practices, and sustainable agricultural methods, promoted through community workshops, school curricula, public campaigns, citizens' conferences, and regional youth climate camps. These initiatives aim to instill long-term behavioral changes that facilitate better adaptation to climate change.

In the agriculture sector, interventions by CSOs focus on promoting sustainable farming practices leading to the improvement of crop yields and the enhancement of food security. Innovations such as the integration of digital tools in agriculture, climate-smart agriculture, sustainable irrigation techniques, certified seeds, and clean energy are being introduced to help farmers adapt to changing environmental conditions and enhance their resilience.

Food security interventions are closely linked to agricultural practices, emphasizing the need for consistent access to sufficient, safe, and nutritious food within communities. Initiatives include sustainable gardening practices, the establishment of community gardens, enhancing local food production, food distribution, and nutrition training.

Interventions in the water sector focus on improving access to clean water, enhancing water management, and addressing water scarcity issues. Projects include the construction of water harvesting systems, rehabilitation of wells, and community training sessions on water conservation. Additionally, some projects provide agro-meteorological information to farmers, enabling them to manage water resources more efficiently. Other projects also connect water management with waste recovery, supporting sustainable agriculture and sanitation efforts.

Across the region, health-related climate adaptation efforts highlight the critical connections between environmental hazards and public health. These adaptation projects focus on raising awareness and educating communities about the health impacts of climate change. Initiatives are designed to promote community-led adaptation to health challenges posed by environmental changes, ensuring that public health considerations are integrated into climate change adaptation strategies.

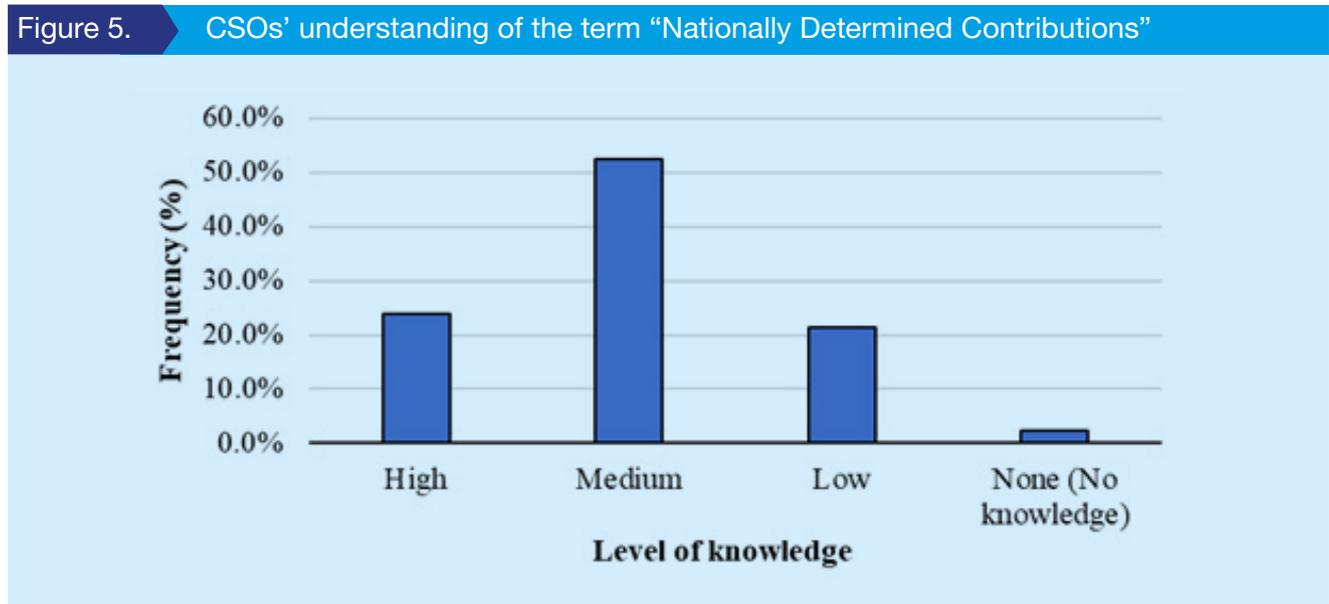
Furthermore, forestry, energy, waste management, and eco-tourism projects illustrate the multifaceted approaches to climate change adaptation across the region. Whereas reforestation initiatives restore degraded lands and protect forests contribution to climate resilience, projects on clean energy solutions, such as improved cookstoves and solar systems, help to reduce reliance on traditional fuels which are increasingly becoming scarce. Waste management projects promote sustainable practices like waste segregation and green charcoal production. Additionally, eco-tourism projects link environmental conservation with sustainable tourism, showcasing the potential of eco-friendly practices in climate adaptation. Together, these diverse initiatives contribute to building long-term resilience and fostering sustainable development in the region.

#### *4.5.3. West African CSOs' and countries' Nationally Determined Contributions (NDCs)*

##### *4.5.3.1. Understanding and awareness of NDCs among CSOs*

The analysis of West African CSOs' understanding of the term "Nationally Determined Contributions (NDCs)" in revealed varied responses (Figure 5). CSOs with "Low" understanding are those that have only heard of NDCs. CSOs with "Medium" understanding are those that have basic knowledge of NDCs, including conditional and unconditional commitments. CSOs that, in addition to basic knowledge, have participated in national NDC elaboration processes are classified as having a "High" understanding.

The majority of the CSOs representing 52.4% have “Medium” understanding. Additionally, 23.8% have “High” understanding while 21.3% have “Low” understanding. The survey also recorded a few CSOs (2.4%) that have never heard of NDCs. This information suggests that there is a reasonable level of awareness of the NDCs among CSOs in West Africa. However, further education and capacity-building is needed to increase awareness and to ensure effective contribution to climate action.

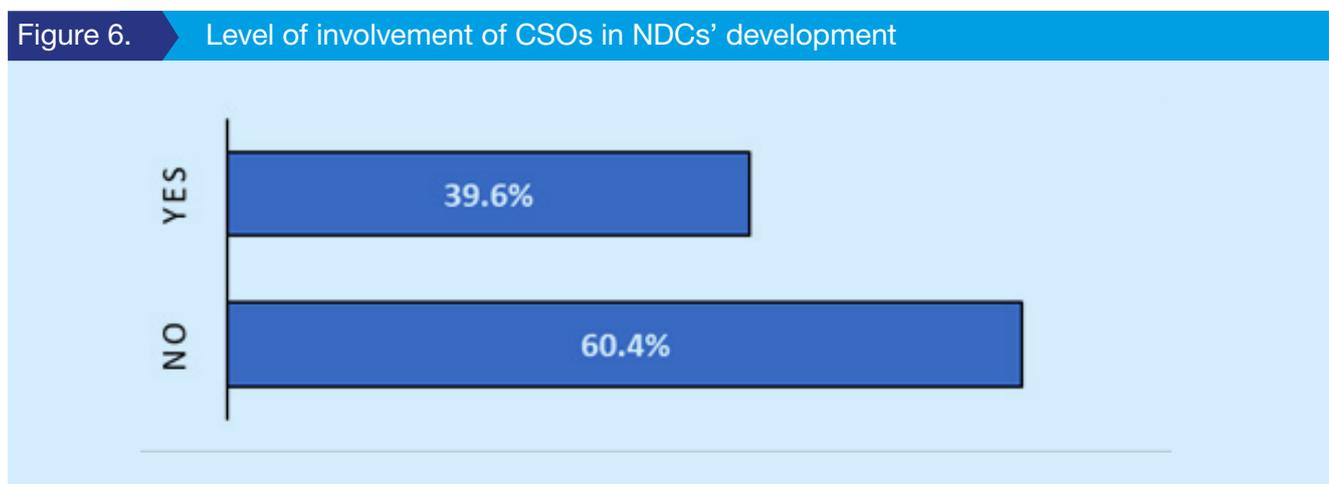


#### 4.5.3.2. Contribution of CSOs to NDCs’ development

Civil society engagement in the development of NDCs across West Africa is uneven. Out of the 164 CSOs surveyed, 65 (40%) reported involvement, while the majority – 99 (60%) – were not engaged (Figure 6). This indicates that, although some progress has been made, overall CSO participation remains limited. Countries such as Nigeria (71%), Niger (89%), Senegal (100%), and Côte d’Ivoire (100%) show relatively strong levels of CSO involvement. Smaller samples from Sierra Leone, Gambia, and Liberia also reported full engagement, although the data points are few.

In contrast, countries like Mali (30%), Ghana (46%), Burkina Faso (13%), Benin (13%), and Togo (20%) reveal weaker engagement. This uneven pattern highlights a regional gap in participatory climate governance, indicating that stronger mechanisms are needed to ensure that CSOs consistently contribute to national climate strategies.

Overall, these findings suggest a significant gap in the direct involvement of CSOs in shaping or refining national climate commitments and instruments.



#### 4.6. Main challenges faced by countries in developing their NDCs

The survey conducted with government institutions across West Africa highlights that the countries encounter several systemic and operational, as well as political and institutional challenges in the development of NDCs. These challenges impact the effectiveness and inclusivity of the NDCs development processes.

The most significant challenge cited by most respondents is navigating political resistance and bureaucratic inefficiencies, which can impede the development and implementation of climate policies. Limited participation and representation of non-state actors was the second most highlighted challenge rendering NDCs bereft of the perspectives and needs of CSOs representing critical segments of West African countries. Weak communication and coordination were mentioned as the third challenge. Weak central coordination creates fragmentation and inefficiencies among different government entities and stakeholders. Participants also mentioned the difficulties associated with decentralizing the NDC processes to sub-national levels of governance and local communities. This underscores the importance of decentralized engagement to enhance inclusivity and participation in NDCs development processes. While data availability and accessibility were less frequently reported, they remain crucial for informed decision-making. Surprisingly, no respondent mentioned challenges related to the availability of financial and technical resources even though they are key inputs to NDCs' development. Addressing these challenges is essential for the comprehensive development of NDCs that support the region's climate goals.



# Key Outcomes from the First Global Stocktake

Article 14 (Paragraph 1), of the Paris Agreement stipulates that the Conference of the Parties serving as the meeting of the Parties to this Agreement (CMA) shall periodically take stock of its implementation to assess the collective progress towards achieving the purpose and long-term goals of the Agreement. This assessment also known as the “Global Stocktake” (GST) was to be conducted in a comprehensive and facilitative manner, considering all aspects of the Agreement (including mitigation, adaptation and the means of implementation and support) in the light of equity and the best available science. The outcome of the GST should inform the preparation of subsequent NDCs, to allow for increased ambitions in adaptation and mitigation toward achieving the purpose of the Paris Agreement and its long-term goals by 2050. In response to the provisions in Decision 19/CMA.1 and Article 14 (Paragraph 2) of the Agreement, the first GST was concluded in 2023 during the 28th Conference of the Parties to the UNFCCC (COP28). The Decision 1/CMA.5 “Outcome of the first global stocktake” provides guidance and follow-up mechanisms on mitigation, adaptation, and means of implementation and support for Parties and non-Party stakeholders in West Africa to consider in the development of NDCs 3.0.

## 5.1. Mitigation

### 5.1.1. Progress and gaps

The GST1 outcome, in Paragraph 19, appreciates all Parties for having submitted their NDCs, demonstrating global progress and transparency towards achieving the Paris Agreement’s temperature goal. It also acknowledges in Paragraph 18 that significant collective progress has been made. Indeed, initial projections suggested a global temperature increase of 4°C before the adoption of the Agreement; however, this is projected to drop down to an increase of 2.1-2.8°C with the full implementation of the latest NDCs. Globally, West African countries have made notable progress in transitioning to cleaner energy and reducing emissions, as reflected in their respective NDCs.

Despite this progress, significant gaps remain, raising concerns that global GHG emissions trajectories are still not aligned with the temperature goal of the Paris Agreement. The conclusion is that Parties are not collectively on track to limit global warming to 1.5°C. According to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), policies implemented by the end of 2020 are projected to result in higher global GHG emissions than those indicated by the NDCs, highlighting a policy implementation gap where existing policies are not aligned with the NDCs’ targets. Additionally, there is inconsistency in global GHG emissions trajectories in relation to limiting warming to 1.5°C.

In this context, West African countries, despite being among the most vulnerable to climate change and contributing minimally to global emissions, face significant limitations in the scale and scope of their mitigation actions. A key challenge in the region is the slow transition away from fossil fuels and the inadequate expansion of renewable energy. Many countries including Benin, Nigeria, and Ghana continue to depend on natural gas as a transitional energy source, without clear roadmaps for a complete shift to renewable energy. The absence of robust electric vehicle infrastructure and incentives in the transport sector is also a challenge, limiting the decarbonization of the region.

### **5.1.2. Key actions and next steps**

To fill the abovementioned gaps while recognizing the need for deep, rapid and sustained reductions in GHG emissions in line with 1.5 °C pathways, the GST1, in its Paragraphs 28, 33, and 34, calls on Parties to contribute to the following global efforts, in a nationally determined manner, considering the Paris Agreement and their different national circumstances, pathways and approaches.

1. Triple renewable energy capacity globally and double the global average annual rate of energy efficiency improvements by 2030.
2. Accelerate and substantially reduce non-carbon-dioxide emissions globally, including methane emissions by 2030.
3. Accelerate efforts towards the phase-down of unabated coal power.
4. Accelerate efforts globally towards net zero emission energy systems, utilizing zero- and low-carbon fuels well before or around mid-century.
5. Transition away from fossil fuels in energy systems, in a just, orderly and equitable manner, accelerating action in this critical decade, to achieve net zero by 2050 in keeping with the science.
6. Accelerate zero- and low-emission technologies, including renewables, nuclear, abatement and removal technologies such as carbon capture, utilization and storage, particularly in hard-to-abate sectors, and low-carbon hydrogen production.
7. Accelerate the reduction of emissions from road transport on a range of pathways, including through development of infrastructure and rapid deployment of zero-and low-emission vehicles.
8. Phase out inefficient fossil fuel subsidies that do not address energy poverty or just transitions, as soon as possible.
9. Conserve, protect, and restore nature and ecosystems including marine and land ecosystems that serve as carbon sinks.
10. Support efforts to halt and reverse deforestation and forest degradation by 2030.

West African Parties are particularly encouraged to undertake these actions within the framework of sustainable development and poverty eradication, adhering to the principles of equity and common but differentiated responsibilities.

As next steps, the GST1 outcome urges all Parties to revisit and strengthen their 2030 NDC targets by the end of 2024 to align with the 1.5°C goal. It encourages the next NDCs to incorporate ambitious, economy-wide emission reduction targets that encompass all greenhouse gases, sectors, and categories. Additionally, it emphasizes the importance of aligning with long-term low GHG emission development strategies (LT-LEDS), addressing the policy implementation gap by developing clear institutional arrangements and legal frameworks for enforcement, and promoting decentralized renewable energy deployment and energy access programs, especially in rural and underserved communities.

## 5.2. Adaptation

### 5.2.1. Progress and gaps

The GST1 outcome indicates that significant domestic efforts have been made by developing country Parties (including West African countries) to formulate and implement national adaptation plans, adaptation communications, and nationally determined contributions, in alignment with their national development plans. The current 63 Parties<sup>9</sup> that have submitted national adaptation plans include 7 West African countries (Burkina Faso, Benin, Cape Verde, Liberia, Niger, Sierra Leone, and Togo). Of the remaining 8 countries in the region, representing an important adaptation planning gap in the region, 7 are in progress (Cote d'Ivoire, Ghana, Guinea, Guinea-Bissau, Nigeria, The Gambia, and Senegal) while Mali's NAP is in the draft review stage. Similarly, gaps exist in adaptation communication. Of the current 66 Parties<sup>10</sup> that have submitted their adaptation communications 6 are West African Countries (Benin, Burkina Faso, Ghana, Liberia, Nigeria, and Togo), while the remaining 9 countries have not yet submitted. These notable gaps in the region related to adaptation planning and communication should be important considerations for the countries concerned. Additionally, there are significant financial gaps that impede national adaptation planning and implementation. Finally, research as well as monitoring and evaluation gaps, also exist regarding the assessment of adequacy and effectiveness of adaptation actions at all levels. Thus, despite the significant progress made, gaps exist in adaptation planning, communication, finance, and related areas, including research, access to early warning and climate information services, and monitoring and evaluation that should inform the development of NDCs 3.0.

### 5.2.2. Key actions and next steps

The GST1 outcome highlights several global calls for action to ensure adequate contribution to sustainable development and adaptation through the global adaptation goal. This goal seeks to enhance adaptive capacity, strengthen resilience, and reduce vulnerability to climate change. These calls for action, enumerated below, are relevant for the consideration of West African Parties in the development of NDCs 3.0.

1. Establish and/or improve national inventories of climate change impacts over time, and build accessible, user-driven climate services systems, such as early warning systems, to strengthen adaptation efforts.
2. Plan and implement integrated, multi-sectoral solutions, such as land-use management, sustainable agriculture, resilient food systems, ecosystem-based approaches (including ocean-based adaptation and resilience measures), and nature-based solutions, as well as protect, conserve and restore nature and ecosystems, including forests, mountains, and other terrestrial, marine, and coastal ecosystems by leveraging all knowledge systems.
3. Prepare and submit new or updated adaptation communications and national adaptation plans as components of, or together with, other communications (including NDCs and reports on impacts and adaptation).
4. Ratchet up country-driven adaptation efforts and ambitions in collaboration with non-Party stakeholders in a manner that does not threaten food production considering the global goal on adaptation, leading to the achievement of the 7 targets in Paragraph 63 and the 5 targets in Paragraph 64 of the GST1 decision.

## 5.3. Means of implementation and support

### 5.3.1. Finance

The GST1 outcome highlights the estimated cost of \$ 5.8 to 5.9 trillion for the pre-2030 period. It calls to developed country Parties and their financial partners, in accordance with Article 9 (Paragraphs 1 - 4) to step up resource mobilization efforts. The GST1 outcome also highlights the estimated annual cost of

<sup>9</sup> <https://napcentral.org/nap-tracking-tool>

<sup>10</sup> <https://unfccc.int/ACR>

adaptation in developing countries, ranging from \$ 215 to 387 billion until 2030, along with the challenges they face in accessing climate finance, and encourages further efforts to simplify access mechanisms. While the primary focus is on developed country Parties, there is a general recognition of the private sector' role in fund mobilization across all countries. This necessitates the strengthening of policy guidance, incentives, regulations, and the creation of enabling conditions to achieve a global transition towards low greenhouse gas emissions and climate-resilient development. All Parties are therefore urged to continue enhancing their enabling environments.

### *5.3.2. Technology development and transfer*

The GST1 outcome highlights the persistent gaps and challenges in technology development and transfer, as well as the differing pace of adoption of climate technologies. It urges all Parties to address obstacles and strengthen cooperative action. Parties are encouraged to collaborate with non-Party stakeholders, particularly with the private sector, to rapidly scale up the deployment of existing technologies and foster innovation and development, and transfer of new technologies. There is also the need for Parties to identify priority technologies, develop appropriate enabling frameworks and foster international cooperation to accelerate digital transformation and development, and ensure increased access to these technologies. Furthermore, there is also the need for Parties to make the necessary provisions in their NDCs for the Technology Implementation Program.

### *5.3.3. Capacity-building*

The GST1 outcome acknowledges the persistent capacity gaps in developing countries which need to be addressed to facilitate effective implementation of the Paris Agreement. The capacity-building needs encompass skills development, institutional capacity for governance and coordination, technical assessment and modelling, strategic policy development and implementation, and capacity retention. Best practices for capacity development include multi-stakeholder engagement, enhancing beneficiary ownership, leveraging international cooperation, and exchanging knowledge through shared experiences and lessons learned at national and regional levels. Parties are called upon to meaningfully engage Indigenous Peoples and local communities and use of Local Communities and Indigenous Peoples Platform to build their capacity for effective participation in the intergovernmental process. A major call to developing country Parties is to assess and identify their capacity-building support needs, integrate them into their national communications, and report them in their biennial transparency reports. Additionally, it is important for developing countries to consider the specific requests in the GST1 outcome regarding the Financial Mechanism and the Adaptation Fund to provide financial support for capacity-building.

# Conclusion and Recommendations

## 6.1. Conclusion

The purpose of this study was to provide a comprehensive understanding of the West African efforts to meet the objectives of the Paris Agreement, while identifying key areas for improvement. The analysis focused on Parties' sectoral commitments to climate change mitigation and adaptation, the awareness and contribution of CSOs to the development of NDCs, and a comparative assessment of current NDC ambitions in relation to the outcomes of the first GST.

The study revealed that all the 15 countries in West Africa have submitted their NDCs. Most of them – 13 in total – submitted the second revised version of their first NDCs in 2021. Senegal submitted its second NDC in 2020 with no updates since, while Nigeria is the only country to have submitted a third revised version of its second NDC in 2021.

All West African countries have revised their second NDCs, demonstrating a strong regional commitment to the PA process. Most countries have enhanced their mitigation ambition, introduced new or strengthened GHG and sectoral targets, and adopted new policies and actions. Notable progress has been made in countries such as Burkina Faso, Côte d'Ivoire, Mali, Nigeria, and Togo. Adaptation ambitions have also been strengthened in most cases, although gaps remain in countries like Burkina Faso, Guinea, Guinea-Bissau, Nigeria, and Senegal. Transparency has improved across nearly all countries, with Senegal being the main exception. However, some countries, including The Gambia, Ghana, and Niger, did not clearly enhance their mitigation ambitions, while Benin, Ghana, Niger, and Sierra Leone failed to add new GHG targets. Overall, the updated NDCs reflect significant progress in ambition, scope, and transparency, but the uneven advancement highlights the need for continued support to address gaps in mitigation and adaptation efforts across the region.

The mitigation commitments of West African countries reveal a consistent pattern of ambition constrained by resource limitations. Across all sectors, only about one-third (33%) of these commitments are unconditional, while two-thirds (67%) are conditional. This reflects a heavy reliance on international finance, technology transfer, and capacity-building to meet the goals of PA. Transport and LULUCF emerge as the priority sectors, with relatively higher unconditional contributions, whereas waste sector shows the lowest level of self-financed ambition. Agriculture demonstrates both importance and vulnerability, with Ghana excluding it altogether due to food security concerns. Overall, while the region demonstrates a strong intent to reduce GHG emissions, achieving these targets will largely depend on sustained external support coupled with strengthened domestic implementation capacity.

Adaptation strategies across West Africa reflect both the shared vulnerabilities of the region and the unique socio-economic and geographic contexts of individual countries. Despite differences between landlocked and coastal states, priorities converge around biodiversity and ecosystems conservation, sustainable agriculture, resilient human settlements, and the modernization of energy and transport sectors. Countries are increasingly committing to integrating nature-based solutions, climate-smart agriculture, renewable energy, and resilient infrastructure into their adaptation frameworks, while also addressing public health risks and enhancing community resilience. However, sectors such as tourism remain underemphasized despite their economic potential. Overall, West African countries demonstrate a strong commitment to building climate resilience. However, like mitigation efforts, the success of these strategies will depend on effective implementation, adequate financing, and regional cooperation to address transboundary challenges.

Furthermore, the study identified several barriers that hinder effective technology transfer and capacity building – both of which are crucial for achieving the objectives of the Paris Agreement. These barriers include political sensitivities and economic constraints which pose significant challenges to the successful implementation of NDCs in the region.

The findings revealed that, while there is a moderate level of awareness about NDCs among West African CSOs, their direct involvement in the NDCs development process remains minimal. This highlights a significant participation gap, which contrasts with the expected role of CSOs as outlined in the PA and the outcomes of the first GST. This situation calls for immediate, targeted capacity-building and awareness-raising initiatives to enhance CSO engagement in the development and implementation of national climate policy instruments. Strengthening CSOs is essential for fostering inclusive, participatory, and effective climate action across the region.

The outcome of the first GST highlights the progress made by Parties, including those from West Africa, while revealing significant gaps in the implementation of the PA – particularly in the areas of mitigation, adaptation, and means of implementation and support. It underscores the urgent need to accelerate efforts to reduce GHG emissions, enhance climate resilience, and mobilize finance, technology, and capacity-building support. Furthermore, GST1 provides clear guidance for the next round of NDCs, encouraging Parties to strengthen their 2030 ambitions, incorporate long-term strategies, improve adaptation planning, and address existing support gaps. For West African Parties, aligning the next round of NDCs with the GST1 outcomes presents a crucial opportunity to intensify climate action within a framework of equity, sustainable development, and regional priorities.

## 6.2. Recommendations

Given the findings and insights from the first Global Stocktake, it is evident that, while West African countries have made commendable progress in their climate actions, substantial efforts are still needed to align with the long-term objectives of Paris Agreement. The identified gaps and challenges underscore the urgent need for enhanced strategies and accelerated action. To address these issues and build on the progress, the following actionable recommendations are proposed for West African countries, CSOs, and their international partners to support a more ambitious, inclusive, and transformative revision and implementation of the next generation of NDCs.

### 6.2.1. Recommendations for West African countries

#### 6.2.1.1. Enhance ambition and transparency of NDCs

West African countries should prioritize the standardization and transparency in their next NDCs by adopting harmonized templates that clearly define commitments based on targets, baselines, and conditionalities

across sectors, in line with UNFCCC guidelines. A well-defined, uniform and transparent structure would enable comparative analysis within the region and between countries, support peer learning, and strengthen credibility and access to multilateral climate funds. Countries must move from broad, declarative commitments to quantifiable targets, supported by timelines, action plans, and measurable, reportable outcomes. This approach will foster trust among national and international stakeholders and establish more robust accountability mechanisms.

#### *6.2.1.2. Increase unconditional commitments*

By reallocating national budgets and promoting domestic investment in climate-vulnerable sectors, West African countries can strengthen their unconditional commitments, demonstrating leadership and ownership of climate action. The adoption of fiscal policies — such as green bonds, tax incentives, and public-private partnerships — can help unlock local financing and reduce risks associated with climate investments. Enhancing unconditional contributions not only builds national resilience but also signals commitment to international partners, potentially attracting greater external support for conditional commitments.

#### *6.2.1.3. Strengthen institutional and technical capacity*

The successful development and implementation of NDCs depends on the capability of national institutions to coordinate sectoral climate actions, generate and manage data, and mobilize resources effectively. In their future NDCs, West African countries should invest in strong technical and institutional climate units within relevant ministries to oversee emissions accounting, adaptation planning, and the development of robust monitoring, reporting, and verification (MRV) systems. Strengthening local research institutions and translating scientific knowledge into national policy will help localize global tools and models, leading to more robust and context-specific NDCs.

#### *6.2.1.4. Use the GST outcomes, the provisions of the Convention, and the Paris Agreement as a benchmark*

The outcomes of the first GST, the provisions of the UNFCCC, and the Paris Agreement offer a critical benchmarking tool for West African countries to revisit and reassess their climate targets. It is essential to establish a systematic process for regularly reviewing their NDCs considering the key findings of the first GST, particularly in the areas of adaptation, mitigation, and means of implementation as outlined in Section 5. This approach will help ensure that future NDCs are not only aligned with global climate goals but are also responsive to local and national contexts, enabling the region to advance toward climate-resilient, low-emission development. The GST outcomes are also expected to support fostering international cooperation and promoting the sharing of best practices and lessons learned among Parties.

#### *6.2.1.5. Enhance collaboration between Parties and non-Parties stakeholders*

West African Parties should establish closer, stronger, and institutionalized partnerships with sub-national authorities including local governments and cities and non-Party stakeholders such as CSOs grounded in shared climate objectives. This could include the creation of civil society advisory bodies within relevant ministries or government institutions, as well as formalizing roles for CSOs in the steering committees responsible for NDC development and implementation. Such partnerships can enable real-time feedback, foster innovation, and incorporate grassroots experiences into national dialogue, effectively bridging the gap between policy design and on-the-ground realities.

### *6.2.2. Recommendations for civil society organizations*

#### *6.2.2.1. Build internal capacity on GST and climate policy*

To contribute effectively to the development and implementation of NDCs, CSOs must deepen their understanding of international climate mechanisms such as the Paris Agreement, the GST, and the Enhanced Transparency Framework. Investing in capacity-building through training workshops and

e-learning will empower CSOs to contribute meaningfully to technical policy discussions and support evidence-based climate action. Additionally, developing simplified toolkits and resources can help CSOs translate complex policy processes into locally relevant narratives that resonate with communities.

#### *6.2.2.2. Strengthen participation in the revision process of the NDCs*

CSOs must move beyond marginal consultation to strategic partnerships in national climate policy processes. This requires active engagement in national dialogues, the presentation of evidence-based policy recommendations, and collaboration with government stakeholders to co-develop ambitious and inclusive NDCs. Leveraging their community networks and technical expertise, CSOs can help ensure that local priorities, particularly those of vulnerable communities, are integrated into national commitments, thereby making NDCs more socially responsive and practically implementable.

#### *6.2.2.3. Monitor and report local-level implementation*

CSOs are well positioned to generate detailed, community-level data on climate action that often goes unrecognized in national reports. By establishing community-based MRV systems, CSOs can document local innovation, identify implementation bottlenecks, and provide independent monitoring of national commitments. These insights are not only useful for integration into national and international reporting processes and can inform the revision of NDCs.

### *6.2.3. Recommendations for international partners*

#### *6.2.3.1. Align finance with conditional commitments*

Climate finance institutions and development partners should prioritize funding the clearly articulated conditional commitments in West African NDCs, particularly in high-impact sectors like renewable energy, land restoration, and early warning systems. Financial instruments should be tailored to each country's specific needs and accompanied by streamlined application procedures, timely disbursements, and capacity-building support for proposal development. Assisting countries in formulating robust climate investment plans aligned with their NDCs will further enhance coherence and predictability.

#### *6.2.3.2. Facilitate technology transfer and innovation*

International partners should respond to the already identified technology needs of countries in the region by facilitating the development and transfer of new climate technologies that are tailored to the ecological, social, and economic conditions of West Africa, as well as the upscaling of existing technologies to accelerate digital transformation and development in the region. This support should include financing the concessional costs of climate technology adaptation, establishing joint research initiatives, and developing innovative incubators. The support should focus on co-developing technologies that not only mitigate emissions but also create green jobs and enhance adaptive capacity among vulnerable communities through partnerships with local institutions.

#### *6.2.3.3. Strengthening capacity building initiatives*

Capacity building should move beyond short-term workshops and focus on comprehensive, long-term institutional strengthening to effectively implement the Paris Agreement. In line with the GST1 outcome, this involves addressing persistent capacity gaps across skills development, institutional governance and coordination, technical assessment and modelling, as well as strategic policy formulation and execution. Support should prioritize the development of regional centers of excellence for climate science and policy, investment in digital infrastructure for climate data management, and facilitation of South-South learning exchange. Capacity-building efforts must be inclusive, ensuring meaningful engagement of Indigenous Peoples and local communities, including using the Local Communities and Indigenous Peoples Platform. Targeted support should be provided to ministries, government institutions, and CSOs to strengthen their ability to develop, implement, and report on NDCs in line with international standards.

#### *6.2.3.4. Facilitate GST-responsive policymaking*

Donors and technical partners must assist countries in translating the findings of the first GST into concrete national strategies and sectoral action plans. This includes providing support for scenario modeling, risk assessments, and inclusive policymaking processes that address identified gaps. International partners should also encourage West African countries to integrate considerations of equity, ambition, and long-term resilience in their NDCs, while promoting inclusive climate diplomacy that ensure West African voices are adequately represented in international negotiations.





# References

1. African Development Bank (AfDB). (2017). Africa Thriving and Resilient: The Bank Group's Second Climate Change Action Plan (2016–2020). Abidjan: AfDB. Retrieved from <https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AfricanDevelopmentBankClimateChangeActionPlan2016-2020.pdf> (Accessed on May 08, 2025).
2. Atedhor, O.G. (2023). Greenhouse gasses emission and their reduction strategies: Perspectives of Africa's largest economy. *Scientific African*, 20: e01705. <https://doi.org/10.1016/j.sciaf.2023.e01705>.
3. Bodansky, D. (2016). The legal character of the Paris agreement. *Review of European, Comparative and International Environmental Law*, 25(2): 142-150. <https://doi.org/10.1111/reel.12154>
4. CPI (Climate Policy Initiative). 2024. Landscape of Climate Finance in Africa 2024. Retrieved from <https://www.climatepolicyinitiative.org/publication/landscape-of-climate-finance-in-africa-2024/> (Accessed on May 08, 2025).
5. IPCC. (2014). Fifth Assessment Report. Retrieved from <https://www.ipcc.ch/assessment-report/ar5/> Accessed on May 2024.
6. IPCC, 2018: Global warming of 1.5°C. Retrieved from <https://www.ipcc.ch/sr15/> Accessed on May 2024.
7. IPCC (2022). Chapter 5: Food, Fibre and Other Ecosystem Products, and Chapter 9: Africa, in *Climate Change 2022: Impacts, Adaptation and Vulnerability (Working Group II Contribution to AR6)*. Cambridge University Press.
8. Natural Resources Defense Council. (2017). The Paris Agreement on Climate Change. Retrieved from <https://www.nrdc.org/sites/default/files/paris-agreement-climate-change-2017-ib.pdf> Accessed on May 2024.
9. NDC Partnership. (n.d.). Country Action. Retrieved, from <https://ndcpartnership.org/country-action> Accessed on October, 2024.
10. Oxfam (2022) Climate Finance in West Africa: Assessing the state of climate finance in one of the world's regions worst hit by the climate crisis. Retrieved from <https://oxfamlibrary.openrepository.com/bitstream/handle/10546/621420/bp-west-africa-climate-finance-270922-en.pdf;jsessionid=DA7F37B942E44EB1D8E951B821D2A246?sequence=3>. Accessed on August 25, 2024.
11. Sack, H., McLean, J., Chibambo, L., & Macamo, C. (2024). Strengthening civil society participation in the NDC revision process: Insights from Mozambique, South Africa and Zambia (Occasional Paper No. 357). Retrieved from [https://saiia.org.za/wp-content/uploads/2024/06/SAIIA\\_OP\\_357\\_](https://saiia.org.za/wp-content/uploads/2024/06/SAIIA_OP_357_)

CivilSocietyParticipation.pdf, Accessed on August 26, 2024.

12. Schneider, Christian & Guenther, Edeltraud & Möst, Dominik. (2024). International technology transfer to Africa in light of the SDGs: What do we know about the barriers? *Journal of International Development*. 36. n/a-n/a. 10.1002/jid.3900.
13. Shrestha, N. K., Du, X., Wang, J. (2017). Assessing climate change impacts on fresh water resources of the Athabasca River Basin, Canada. *Science of the Total Environment*, 601, 425-440.
14. UNDP (United Nations Development Program) (n.d.). Climate Change Adaptation. Retrieved from <https://www.adaptation-undp.org/scala-gender-social-inclusion>
15. UNDP (2024). Climate Finance in Africa: An Overview of Climate Finance Flows, Challenges, and Opportunities. September 2024. [https://www.undp.org/sites/g/files/zskgke326/files/2024-09/climate\\_finance\\_africa\\_v.6\\_lq.pdf](https://www.undp.org/sites/g/files/zskgke326/files/2024-09/climate_finance_africa_v.6_lq.pdf)
16. UNEP (United Nations Environment Program) (n.d.). As Climate Impacts Accelerate, Finance Gap for Adaptation Efforts at Least 50% Bigger Than Thought. Retrieved from <https://www.unep.org/news-and-stories/press-release/climate-impacts-accelerate-finance-gap-adaptation-efforts-least-50>
17. UNFCCC (United Nations Framework Convention on Climate Change). (2011). The Durban Platform for Enhanced Action.
18. UNFCCC (United Nations Framework Convention on Climate Change). (2015). Adoption of the Paris Agreement. Retrieved from <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
19. UNFCCC (United Nations Framework Convention on Climate Change). (2018). Special Report on Global Warming of 1.5°C. Retrieved from <https://www.ipcc.ch/sr15/>
20. UNFCCC (United Nations Framework Convention on Climate Change). (2023). COP 28 Outcome of the Global Stock Taking. Retrieved from [https://unfccc.int/sites/default/files/resource/cma2023\\_L17\\_adv.pdf](https://unfccc.int/sites/default/files/resource/cma2023_L17_adv.pdf)
21. UNFCCC (United Nations Framework Convention on Climate Change). (2023). Global Stocktake Report. Retrieved from <https://unfccc.int/topics/global-stocktake>
22. Pauw, W. P., Castro, P., Pickering J., Bhasin S. (2020). Conditional nationally determined contributions in the Paris Agreement: foothold for equity or Achilles heel? *Climate Policy* 20 (4), 468-484 <https://doi.org/10.1080/14693062.2019.1635874>
23. World Bank. (2020). The World Bank Group's Action Plan on Climate Change Adaptation and Resilience. Retrieved from <https://www.worldbank.org/en/topic/climatechange/publication/world-bank-group-action-plan-on-climate-change-adaptation-and-resilience>
24. World Resources Institute. (n.d.). Understanding the Paris Agreement's Global Goal on Adaptation. Retrieved from <https://www.wri.org>
25. Yuli Chen (2021), Reconciling common but differentiated responsibilities principle and no more favorable treatment principle in regulating greenhouse gas emissions from international shipping, *Marine Policy*, Volume 123, 2021, 104317, ISSN 0308-597X, <https://doi.org/10.1016/j.marpol.2020.104317> (<https://www.sciencedirect.com/science/article/pii/S0308597X20309647>)

# VI

## Annexes

Party/Country	Mitigation priority sector	Baseline scenario (BAU) Emissions	Target contribution by 2030 (and beyond) compared to BAU projections	
			Unconditional	Conditional
Benin	Energy	63 % of a total emission of 16,94 Mt E-CO2 <sup>1</sup>	8.4% reduction between 2021-2030	3.75% of reduction between 2021-2030
	Agriculture	28.6 % of a total emission of 16,94 Mt E-CO2	50% cumulated reduction of a total of 51.4% between 2021-2030.	50% cumulated reduction of a total of 51.4% between 2021-2030.
	LULUCF		37.7% of a total reduction of 40.64 Mt E-CO 2	62.3% of a total 40.64 Mt E-CO 2
	Waste	5.3 % of a total emission of 16,94 Mt E-CO2	0.136 Mt E-CO 2 reduction representing 1.2% compared to the non-measured scenario.	
Burkina Faso	AFAT	59 832.82 Mt E-CO2 in 2015	2025: 7527.3 Mt E-CO2 (8.13%) 2030: 15054.6 Mt E-CO2, and 2050: 13166.8 Mt E-CO2	2025: 2569,5 Mt E-CO2 (2,77%) 2030: 5139 Mt E-CO 2 2050: 17986.4 Mt E-CO 2
			By 2050 the reduction will be 16.76% of global emissions for both conditional and unconditional	
	Energy	4 035.42 Mt E-CO2 in 2015	2025: 1228.66 Mt E-CO2 2030: 2457.34 Mt E-CO2 2050: 7371.98 Mt E-CO2	2025: 1964.05 Mt E-CO2 2030: 3928.11 Mt E-CO2 2050: 11784.31 Mt E-CO2
	Transport		2025: 1210 Mt E-CO2 2030: 3563 Mt E-CO2 2050: 8265 Mt E-CO2	2025: 267 Mt E-CO2 2030: 876 Mt E-CO2 2050: 4153 Mt E-CO2
	Waste	1 762.63 Mt E-CO2 in 2015	2025: 0 Mt E-CO2 2030: 0 Mt E-CO2 2050: 0 Mt E-CO2	2025: 262.00 Mt E-CO2 2030: 614.80 Mt E-CO2 2050: 1246.95 Mt E-CO2
	Contribution of adaptation measures		2025: 4802.69 Mt E-CO2 (5,19 %) 2030: 22230.08 Mt E-CO2 (20,67%) 2050: 33310.44 Mt E-CO2 (17,93%)	2025: 5525.80 Mt E-CO2 (5,97 %) 2030: 10842.62 Mt E-CO2 (10,08%) 2050: 31337.96 Mt E-CO2 (16,87%)

<sup>1</sup> secteur Utilisation des Terres, Changements d'Affectation des Terres et Forêt (UTCATF) exclu

Party/Country	Mitigation priority sector	Baseline scenario (BAU) Emissions	Target contribution by 2030 (and beyond) compared to BAU projections
		Unconditional	Conditional
Cape Verde	Energy #1: Reducing energy intensity and fostering energy efficiency	Emission: 719 CO <sub>2</sub> e in 2020	
	Energy #2: increasing renewable energy targets		
	Transport #3: Lowering the carbon intensity of mobility		
	Responsible tourism and circular economy		To reduce overall GHG emissions from tourism by 20% per visitor/day by 2030.  To develop a roadmap for the phased transition to a circular economy for the years 2022 to 2040
Côte d'Ivoire	Agriculture, forestry and other land uses: #5: fostering the natural sink function of ecosystems		To increase, through reforestation and afforestation, forest areas by 2030 with resilient and preferably endemic and native species, to protect wetlands and to reduce/replace fuelwood. To prevent forest fires, which threaten livelihoods and ecosystems release large quantities of GHG.
	Energy	39.91 M of TCO <sub>2</sub> e	28.51 M of TCO <sub>2</sub> e
	Agriculture	6.83 M of TCO <sub>2</sub> e	5.85 M of TCO <sub>2</sub> e
	Waste	6.10 M of TCO <sub>2</sub> e	5.31 M of TCO <sub>2</sub> e
	Forestry	68.58 M of TCO <sub>2</sub> e	44.81 M of TCO <sub>2</sub> e
			24.88 M of TCO <sub>2</sub> e 5.48 M of TCO <sub>2</sub> e 5.31 M of TCO <sub>2</sub> e -34.41 M of TCO <sub>2</sub> e

Party/Country	Mitigation priority sector	Baseline scenario (BAU) Emissions	Target contribution by 2030 (and beyond) compared to BAU projections	
			Unconditional	Conditional
The Gambia	Agriculture	2020 1,124 GgCO <sub>2</sub> e 2030: 1,466 GgCO <sub>2</sub> e (a 30.4% increase).		2030: 273 GgCO <sub>2</sub> e (81.3%)
	LULUCF	2020: 1,415 GgCO <sub>2</sub> e 2030: 1,082 GgCO <sub>2</sub> e (a decrease of 23.5%)	2030: 169 GgCO <sub>2</sub> e	2030: 760 GgCO <sub>2</sub> e
	Energy	2020: 241 GgCO <sub>2</sub> e 2030: 535 GgCO <sub>2</sub> e (122.0% increase).		2030: 360 GgCO <sub>2</sub> e. (32.7%)
	Transport	2020: 352 GgCO <sub>2</sub> e 2030: 580 GgCO <sub>2</sub> e (increase 64.8 %).		2030: 451 GgCO <sub>2</sub> e (22.2%)
	Waste management	2020: 506 GgCO <sub>2</sub> e 2030: 1,184 GgCO <sub>2</sub> e (134.0 %)		687 GgCO <sub>2</sub> e (42.0 % decrease)
	Industrial Processes and Product Use (IPPU)	2020: 1,297 GgCO <sub>2</sub> e 2030: 1,771 GgCO <sub>2</sub> e (36.5 % increase)		2030: 967 GgCO <sub>2</sub> e (45.4%)
Ghana	Waste		Emission Reduction: 21,313.0 kt	
	Energy			
	Transport		Emission reduction: 109.9kt	
	Forestry		Emission reduction: 23,565 kt	
	Agriculture			
	Refrigeration and Air-Conditioning (RAC HFO)		Emission Reduction: 3,874.2 kt	
				-1 conditional

Party/Country	Mitigation priority sector	Baseline scenario (BAU) Emissions	Target contribution by 2030 (and beyond) compared to BAU projections	
		Unconditional	Conditional	
Guinea	Energy	2018: 3 863 ktCO <sub>2</sub> eq 2020: 4 475 ktCO <sub>2</sub> eq	2030: 2000 ktCO <sub>2</sub> /year	2030: 5 074 ktCO <sub>2</sub> eq/year + 30 ktCO <sub>2</sub> eq/year
	Agriculture	7 535 ktCO <sub>2</sub> eq 2020: 7 993 ktCO <sub>2</sub> eq		
	Waste	2018: 298 ktCO <sub>2</sub> eq	2030: 0 kt CO <sub>2</sub> eq /year	130 ktCO <sub>2</sub> /year (100%)
	LULUCF		2030: 2 248 ktCO <sub>2</sub> /year	4 480 ktCO <sub>2</sub> /year
	Forest cover and forest protection		Total reduction by 2030: 53,2 MtCO <sub>2</sub> 2030: 4200 ktCO <sub>2</sub> /year	2030: 22 500 ktCO <sub>2</sub> eq /an
	Transport		2030: 1 740 ktCO <sub>2</sub> eq/year 2030: 2 300 ktCO <sub>2</sub> /year	2030: 1 160 ktCO <sub>2</sub> eq /year 2 600 ktCO <sub>2</sub> eq/year
Guinea-Bissau	LULUCF	2020: 5 MtCO <sub>2</sub> e 2030: 8 Mt CO <sub>2</sub> e		87% of the total 22 MtCO <sub>2</sub> e
	Energy	4.3% per year		9% the total 22 MtCO <sub>2</sub> e
	Agriculture	4.5 MtCO <sub>2</sub> e		3% the total 22 MtCO <sub>2</sub> e
Liberia	Waste	4.4% per year		2030: -7%
	Agriculture, Livestock	Agriculture		2030: 11,187Gg CO <sub>2</sub> e (10%)
	Forests, Coastal zones, Fisheries, Health, Transport			

Party/Country	Mitigation priority sector	Baseline scenario (BAU) Emissions	Target contribution by 2030 (and beyond) compared to BAU projections	
		Unconditional	Conditional	
Mali	Energy	2020: 21550 KT eq CO2 2025: 28839 KT eq CO2 2030: 38595 KT eq CO2	2020: 20331 ktCO2 2025: 21235 ktCO2 2030: 26630 ktCO2	Compared with the baseline scenario, emissions will fall by 31% in 2050.
	Agriculture & Livestock	2020: 76 667 KT eq CO2 2025: 77 648 KT eq CO2 2030: 84 903 KT eq CO2	2020: 76 667 KT eq CO2 2025: 62 118 KT eq CO2 2030: 63 677 KT eq CO2	The implementation of various mitigation programs will reduce GHG emissions in the agricultural sector by 25% (i.e. 21,226 KT eq CO2).
	Forestry and ecosystems	2020: -334 386 KT eq CO2 2025: -334 194 KT eq CO2 2030: -334 001 KT eq CO2	2020: -334 386 KT eq CO2 2025: -385 981 KT eq CO2 2030: -463 456 KT eq CO2	Implementation of the various programs in the mitigation scenario will reduce GHG emissions in 2030 from the forestry sector by 38.7% (or 129,455 KT eq CO2) compared to the baseline scenario.
Niger	Waste Management	2020: 506 KT eq CO2 2024: 916 KT eq CO2 2030: 2 232 KT eq CO2	2020: 506 KT eq CO2 2024: 671 KT eq CO2 2030: 1539 KT eq CO2	Implementation of the various programs and projects in the mitigation scenario will reduce GHG emissions in the waste sector by 31% (or 693 KT eq CO2) compared with the baseline scenario
	AFAT	2014: 24 000 ktCO2-eq 2025: 69 434 ktCO2-eq 2030: 107 296 ktCO2-eq	4.2 tons of CO2-eq / ha/year	
	Energy	2014: 2 146 ktCO2 2025: 7 454 ktCO2 2030: 11 756 ktCO2	2020: 4138 ktCO2 2025: 6617 ktCO2 2030: 10515 ktCO2	2020: 4138 ktCO2 2025: 3850 ktCO2 2030: 6432 ktCO2
Nigeria	ENERGY	36% of 347 MtCO2e	To reduce GHG emissions in 2030 by 20% below BAU	To increase her conditional target by 47% below BAU in 2030.
	AFOLU	25% of GHG emissions of 2018		
	WASTE IPPU	9% of 347 MtCO2e 5% of 347 MtCO2e		

Party/Country	Mitigation priority sector	Baseline scenario (BAU) Emissions	Target contribution by 2030 (and beyond) compared to BAU projections	
			Unconditional	Conditional
Senegal	Energy	36.9% of 3 925 Gg CO <sub>2</sub> e	2025: 7.6% 2030: 10%	2025: 35.4% 2030: 41.2%
	Agriculture	43.8% of 3 925 Gg CO <sub>2</sub> e	2025: 1.72% 2030: 2.36%	2025: 8.76% 2030: 11.78%
	Waste	10.8% of 3 925 Gg CO <sub>2</sub> e	2025: 10.99% 2030: 11 %	2025: 65.28% 2030: 65.28%
	Industrial processes	8% of 3 925 Gg CO <sub>2</sub> e	2025: 0% 2030: 0%	2025: 4% 2030: 8.1%
Sierra Leone		a reduction in CO <sub>2</sub> emission levels to 5% by 2025 10% by 2030 25% by 2050,		
	Energy	promote universal access to clean energy by 2030 and meet targets for emissions reduction by 2025.	-	-
	Industrial Processes and Product Use (IPPU)		-	-
	Waste		-	-
	Transport		-	-
	AFOLU		-	-
	Blue Economy		-	-

Party/Country	Mitigation priority sector	Baseline scenario (BAU) Emissions	Target contribution by 2030 (and beyond) compared to BAU projections
		Unconditional	Conditional
Togo	Energy	2626.78 Gg CO <sub>2</sub> -e in 2018	To reduce greenhouse gas emissions by 12.8% and 15.6% by 2025 and 2030, respectively.
	Agriculture	19035.13 CO <sub>2</sub> -e in 2018	Emission reduction of 15% by 2030
	Forestry and other land use sectors,	18138.80 CO <sub>2</sub> -e in 2018	To sequester 12,893,811.19 tons of carbon (tC) and 13,216,035.32 tC through reforestation by 2025 and 2030, respectively; and 15,034,490.58 tC and 15,296,797.06 tC through natural regeneration by 2025 and 2030, respectively.

## Annex 1. West African countries' sectoral commitment for climate change mitigation.

### Annex 2. Survey questionnaires

Survey questionnaire 1. This questionnaire is addressed to Government Agencies (e.g., technical directorates), and climate change experts.

This questionnaire aims to understand the NDCs development process, challenges, and priorities in country name. Your responses will be crucial in informing recommendations for improved NDC implementation and ambition.

#### Part 1: Identification

Name

Title/Position

Organization name

- |                                    |                                     |                               |                                    |
|------------------------------------|-------------------------------------|-------------------------------|------------------------------------|
| <input type="radio"/> Benin        | <input type="radio"/> Ghana         | <input type="radio"/> Liberia | <input type="radio"/> Senegal      |
| <input type="radio"/> Burkina Faso | <input type="radio"/> Guinea        | <input type="radio"/> Mali    | <input type="radio"/> Sierra Leone |
| <input type="radio"/> Cabo Verde   | <input type="radio"/> Guinea Bissau | <input type="radio"/> Niger   | <input type="radio"/> Togo         |
| <input type="radio"/> Gambia       | <input type="radio"/> Ivory coast   | <input type="radio"/> Nigeria |                                    |

Country

Email

WhatsApp number (with country code, e.g., Benin = 00229)

#### Part 2: Process of elaborating NDCs

1. Who are the key stakeholders (non-state actors) involved in this process, and what are their respective roles?

- |                          |                       |                                 |                       |   |
|--------------------------|-----------------------|---------------------------------|-----------------------|---|
| <input type="radio"/>    | <input type="radio"/> | <input type="radio"/>           | <input type="radio"/> | <input type="radio"/>                   |
| Civil Societies and NGOs | Private sector        | Local community representatives | Researchers           | Other non-state actors (please specify) |

Please name the other non-state actors and their respective roles:

2. How involved were civil societies or NGOs in the process?

- Actively engaged throughout the development process
- Actively engaged only at specific stages of the development process
- Not actively engaged in the development process of the first NDCs

3. How involved was the private sector in the process?

- Actively engaged throughout the development process
- Actively engaged only at specific stages of the development process
- Not actively engaged in the development process of the first NDCs

4. How involved were local community representatives in the process?
- Actively engaged throughout the development process
  - Actively engaged only at specific stages of the development process
  - Not actively engaged in the development process of the first NDCs
5. How involved were other non-state actors in the process?
- Actively engaged throughout the development process
  - Actively engaged only at specific stages of the development process
  - Not actively engaged in the development process of the first NDCs

### Part 3: Current priorities

1. What are the current priorities of the government regarding climate change mitigation and adaptation?
- |                               |  |                                  |                              |        |
|-------------------------------|--|----------------------------------|------------------------------|--------|
| Renewable Energy<br>Promotion | Forest Conservation<br>and Reforestation | Climate Resilient<br>Agriculture | Water Resource<br>Management | Others |
|-------------------------------|--|----------------------------------|------------------------------|--------|

Please indicate them:

2. How is Renewable Energy Promotion integrated into developing and revising NDCs?
- |  |                                   |   |        |
|--|-----------------------------------|---|--------|
| Expanding renewable<br>energy capacity | Reducing fossil fuel<br>subsidies | Promoting energy<br>efficiency measures | Others |
|--|-----------------------------------|---|--------|

Please specify the other Renewable Energy Promotion options:

3. How is Forest Conservation and Reforestation integrated into developing and revising NDCs?
- |  |   |  |        |
|--|---|--|--------|
| Commitments to reduce<br>deforestation rates | Increasing afforestation<br>and reforestation efforts | Enhancing forest<br>management practices | Others |
|--|---|--|--------|

Please specify the other Forest Conservation and Reforestation options:

4. How is Climate Resilient Agriculture integrated into developing and revising NDCs?
- |                              |  |  |        |
|------------------------------|--|--|--------|
| Improving Soil<br>Management | Promoting drought-<br>resistant crop varieties | Enhancing water<br>management in agriculture | Others |
|------------------------------|--|--|--------|

Please specify the other Climate Resilient Agriculture options:

5. How is Water Resource Management integrated into developing and revising NDCs?
- |  |   |   |       |
|--|---|---|-------|
| Setting targets for water<br>efficiency improvements | Increasing access to<br>safe drinking water and<br>sanitation | Implementing integrated<br>water resources<br>management approaches | Other |
|--|---|---|-------|

Please specify the other Water Resource Management options

## Part 4: Elaboration Challenges

1. What are the main challenges faced by your country in the development of its NDCs?

Limited participation and representation of non-state actors      Communication and coordination challenges      Political and institutional barriers      Data availability and accessibility problems      Others

Please specify other challenges

2. How are these challenges being addressed or overcome?

- Ensuring meaningful participation and representation of diverse groups, including marginalized communities and indigenous peoples
- Improve communication gaps and coordination channels between government agencies, local authorities, and civil society organizations.
- Fostering political will, prioritizing climate action, and working to counter entrenched interests
- Access to reliable data and information
- Strengthening partnerships between government agencies and civil society organizations
- Others

Please specify:

3. What are some typical challenges when engaging non-state actors in the development process of NDCs ?

- Limited resources and capacity within non-state actors to actively participate in consultations and provide meaningful input.
- Time constraints and tight deadlines for NDC development processes, making it difficult to engage non-state actors comprehensively.
- Power imbalances and lack of inclusivity in decision-making processes, leading to unequal representation and limited involvement of non-state actors.
- Insufficient communication and coordination between government agencies and non-state actors, resulting in missed opportunities for collaboration and engagement.
- Others

Please specify other typical challenges when engaging the non-state actors

4. What measures or plans has the country put in place to ensure enhanced involvement of non-state actors in the development process of the next Nationally Determined Contributions (NDCs)?

- Providing capacity-building support and resources to non-state actors to enhance their ability to participate effectively in consultations and provide meaningful input
- Extending consultation periods and establishing flexible timelines for NDC development to accommodate comprehensive engagement with non-state actors
- Promoting inclusivity and equitable representation in decision-making processes by actively seeking out and involving diverse non-state actors from different sectors and communities
- Strengthening communication channels and establishing regular dialogue between government agencies and non-state actors to foster collaboration and cooperation
- Others

Please specify other measure to enhance the involvement of non-state actors

## Part 5: Monitoring, Reporting and Verification (MRV) system

1. How does the Monitoring, Reporting, and Verification (MRV) system contribute to ensuring progress tracking, transparency, and data availability for NDCs?

- By providing real-time data on greenhouse gas emissions and mitigation efforts, facilitating informed decision-making.
- By enhancing accountability through regular reporting on NDC implementation progress to the international community.
- By fostering transparency through public access to NDC-related data and information
- By supporting countries in identifying challenges and gaps in their NDC implementation, allowing for targeted interventions
- Others

2. What are some current challenges associated with the MRV system for your NDC?

- Limited technical capacity and resources for data collection and reporting.
- Inconsistencies in methodologies and standards for measuring and reporting emissions and progress.
- Difficulties in accessing and sharing data among stakeholders at the national and international levels.
- Challenges in ensuring the accuracy and reliability of reported data.
- Others

Please specify other challenges associated with the MRV system

3. How can these challenges be addressed to improve the effectiveness of the MRV system for NDCs?

- Providing technical assistance and capacity-building support to countries to enhance their data collection and reporting capabilities.
- Harmonizing methodologies and standards for measuring and reporting emissions and progress.
- Enhancing data-sharing mechanisms and promoting transparency and openness in data management.
- Strengthening quality assurance and verification mechanisms to ensure the accuracy and reliability of reported data.
- Others

Please specify other solutions

Please share any additional insights or recommendations you have regarding NDCs and climate action in your country.

Thank you for your time and valuable contribution!

Survey questionnaire 2. This questionnaire is addressed to Civil Society Organizations (CSOs) and Non-Government Organizations (NGOs) engaged in Climate Change Adaptation and Mitigation actions. Your responses to this questionnaire will help us understand the efforts and engagement of Civil Society Organizations (CSOs) and Non-Government Organizations (NGOs) in climate change adaptation and mitigation actions. Please answer the following questions to the best of your knowledge.

### Part 1: Organization information

Name

Organization name

- |                                    |                                     |                               |                                    |
|------------------------------------|-------------------------------------|-------------------------------|------------------------------------|
| <input type="radio"/> Benin        | <input type="radio"/> Ghana         | <input type="radio"/> Liberia | <input type="radio"/> Senegal      |
| <input type="radio"/> Burkina Faso | <input type="radio"/> Guinea        | <input type="radio"/> Mali    | <input type="radio"/> Sierra Leone |
| <input type="radio"/> Cabo Verde   | <input type="radio"/> Guinea Bissau | <input type="radio"/> Niger   | <input type="radio"/> Togo         |
| <input type="radio"/> Gambia       | <input type="radio"/> Ivory coast   | <input type="radio"/> Nigeria |                                    |

Country

Email:

- |                                   |                                     |  |
|-----------------------------------|-------------------------------------|--|
| <input type="radio"/> Agriculture | <input type="radio"/> Waste         | <input type="radio"/> Climate change                   |
| <input type="radio"/> Energy      | <input type="radio"/> Eco-Tourism   | <input type="radio"/> Education and awareness creation |
| <input type="radio"/> Water       | <input type="radio"/> Forestry      | <input type="radio"/> Others                           |
| <input type="radio"/> Health      | <input type="radio"/> Food security |  |

### Sector or focus area

Please mention them

### Geographic scope of the organization's activities

- Sub-national
- National
- Regional (two or more countries within West Africa)
- International (operating in two or more countries in West Africa and beyond)

Number of years the CSO has been active in climate change-related activities

### Part 2: Engagement in Climate Change Actions

Has your organization been involved in climate change adaptation actions in your community?

- Yes
- No

If yes, can you provide examples of past or ongoing climate change-related adaptation projects or initiatives (with the year) your organization has undertaken?

Has your organization been involved in climate change mitigation actions in your community?

- Yes
- No

### Part 3: Awareness and understanding of NDCs

How would you rate your level of comprehension of the term “Nationally Determined Contributions” (NDCs)?

- High
- Medium
- Low
- None (Zero knowledge)

### Part 4: Involvement in NDCs development process

Has your organization been involved in the development of NDCs or similar climate action plans in your country?

- Yes
- No

If yes, to what extent has your organization’s input been considered in the NDC development process?

- Considered and fully integrated into the NDC
- Considered but partially integrated into the NDC
- Not considered for integration into the NDC

### Part 5: Additional comments

Please use this space to provide any additional comments regarding your organization’s engagement in climate change actions or collaboration with the government.

Thank you for taking the time to complete this survey



