



National Adaptation Plans in focus: Lessons from Guinea

The Republic of Guinea is located in western Africa on the Atlantic coast, bordered to the north by Guinea Bissau, Senegal, and Mali, and to the south by Sierra Leone, Liberia and Côte d'Ivoire. The country area is 245.857 km²⁽¹⁾ and has a population of about 12.4 million people². As of 2018, about 36 percent of the population lives in urban areas with annual urban population growth of 3.8 percent³. Guinea has a generally flat coastal plain, and a hilly to mountainous interior with mean elevation of 472 metres⁴. The country is comprised of four regions: Maritime Guinea, Middle Guinea, Upper Guinea, and Guinea Forestry. As of 2019, agriculture in Guinea is the main source of employment, providing income for 62 percent of rural households, while employment in industry is 6.2 percent⁵. The country's natural resources and manufacturing and services sectors represent key economic assets for development. Among the natural resources, Guinea has the world's largest reserves of bauxite and largest untapped high-grade iron ore reserves, as well as gold and diamonds⁶. As of 2018, Guinea's Gross Domestic Product (GDP) is US\$10.9 billion with an annual growth rate of approximately 6.2 percent⁷. Nevertheless, 55 percent of the population lives in poverty and about 22 percent of

households are food-insecure⁸. Guinea's Human Development Index (HDI) value in 2019 was 0.466, categorising the country into the low human development category, positioned at 174 out of 189 countries and territories⁹. Guinea has abundant forests, suggesting it could be viewed as a carbon sink. However, significant deforestation has been reported in the country, which reduced the forested area by 33 percent in the period 1972-2000, thus limiting its ability for CO₂ sequestration¹⁰.

Guinea has a typical tropical climate with a long-wet season of eight months (April-November) and a relatively uniform annual temperature (23°C to 29°C)¹¹. The country has a strong east-west gradient in total rainfall received, with more than 1000 mm per month on the east coast, but less than 150 mm per month in the west. Large inter-annual variability rainfall is caused by the El Niño Southern Oscillation. Temperatures in Guinea are lowest during wet season (22-25°C) and increase (25-27 °C) during the rest of the year¹². Guinea is known as Africa's "water tower" because its highlands are home to the headwaters of three large rivers: the Gambia, the Niger, and the Senegal¹³.

Climate change risks

Guinea's primary economic activities (with the exception of mining) are highly vulnerable to the impacts of climate change. The drought that affected the country during 1961 to 1990 has strongly influenced the hydrological model of 23 watersheds, including the Gambia, Niger, and Senegal¹⁴. The severe droughts experienced by Guinea in 2002, and floods in 2015, contributed significantly to the decline in cereal crop yields. Projected climate trends will likely exacerbate climate change impacts. The mean annual temperature is projected to increase by 1.1° to 3.0°C by 2060 to 5.3°C by 2090. These changes could result in precipitation drops deviating 36.4 percent from the current norm in 2050 to 40.4 percent by 2100. This decrease in

precipitation will have significant impacts on economic activities, particularly affecting agriculture, livestock, water resources (surface water and groundwater), forestry, and coastal zones. Climate change may also have a direct impact on the transmission of diseases from animals, such as that of Ebola in 2014. In addition, sea level rise is a threat, projected between 0,4 to 0,7 meter by 2100. This will cause increased salinisation and flooding in coastal regions where about 6 percent of Guinea's population live¹⁵. In addition, shortages in drinking water, compromised infrastructure, and increased pressure on mangrove ecosystems are expected as to further threaten development progress in the country¹⁶.



Groundwork for supporting the NAP process



Policy, planning and budgeting

Guinea ratified the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol in 1993 and 2005, respectively. Since then, Guinea developed a range of strategies to combat the impacts of climate change¹⁷.

Key strategies that are developed include a national vision for development over 25 years (Vision 2040) and a five-year plan to implement the Vision 2040 – referred to as PNDES. The PNDES activities are related to: i) capacity building on the fight against climate change; ii) promotion of clean energy and energy efficiency; iii) mitigation of greenhouse gases in the transport and agriculture sectors; iv) promotion of the use of household appliances with clean technology; and v) increase the capacity of carbon sequestration by means of agroforestry¹⁸.

Guinea has also submitted a First (2002) and Second (2018) National Communication to the UNFCCC and developed its Nationally Determined Contribution (NDC) in 2015 as part of the Paris Agreement. The NDC outlines priority actions as: i) preserving the quality and quantity of water resources; ii) putting in place the measures needed to protect, conserve and manage ecosystems, revive economic activities and boost the resilience of communities in its coastal zones; and iii) support the adaptation of rural communities to develop Agro-Sylvo-Pastoral techniques¹⁹.

Preparing for adaptation planning

Guinea developed a number of relevant policies and strategies in order to prepare for adaptation planning. Its National Adaptation Plan of Action (NAPA) identified priority activities that respond to immediate needs in the country to adapt to climate change. The impact of climate change on livelihood has been identified in Guinea in the sectors of agriculture, water resources, forestry, and coastal regions. Following

these activities, the National Adaptation Plan Global Support Programme (NAP-GSP) conducted a number of NAP consultation missions to Guinea to inform key representatives in the country on the NAP process and to understand current climate change adaptation initiatives. And finally, the NAP-GSP supported the country in the preparation process of a Readiness and Preparatory Support Proposal, to request financial support from the Green Climate Fund (GCF) to implement a NAP project. The project proposal “Supporting the Achievement of National Development Policies by Building Climate Adaptive Capacity and Planning in Guinea” was approved by the GCF and is effective since 17 August 2020.

Implementation of adaptation actions

- Increased Resilience and Adaptation to Adverse Impacts of Climate Change in Guinea’s Vulnerable Coastal Zones (LDCF) (2009): Mainstreaming Guinean Integrated Coastal Zones Management into development policies, strategies and plans at the local, prefectural and central levels
- Programme for integrated development and adaptation to climate change in the Niger Basin (PIDACC/NB) (GCF) (2017-2020): Improving the resilience of populations and ecosystems in the Niger Basin, including Guinea, by managing natural resources sustainably
- Strengthening Climate Information and Early Warning Systems for Climate Resilient Development and Adaptation to Climate Change in Guinea (GEF-LDCF, UNDP TRAC, Ministry of Agriculture, Ministry of Transport, National Directorate of Meteorology, National Directorate of Hydrology, Agronomic Research Centers, SOGUIPAH, IRD) (2019-2023): Improving climate monitoring, forecasting and early warning for disasters, and strengthening the capacities of key actors in Guinea.



Challenges and successes



Support programmes

The advancement of Guinea's NAP process has been supported by the UNDP-UN Environment National Adaptation Plan Global Support Programme (NAP-GSP) team, the UNDP Guinea Country Office and

the UNFCCC Guinea Focal Point. Additional funding support was provided to support the process, including from the Least Developed Countries Fund and the Green Climate Fund.

Challenges

Climate change adaptation will be expensive, especially balanced against vital development and poverty reduction necessities. Funding needs for adaptation beyond development funding needs are estimated at between US\$670 million and US\$1700 million²³. As is the case in many developing countries, there are massive data gaps. Data explicitly linking climate change impacts to economic variables are especially sparse. Other challenges include a lack of connecting research to policy to inform decision-making processes, fragmented governance, and a lack of private sector involvement in the adaptation landscape.

Successes

Documents, such as the Nationally Determined Contributions (NDCs, 2016) and "Supporting the Achievement of National Development Policies by Building Climate Adaptive Capacity and Planning in Guinea", provide clear directions moving forward. Financed by the GCF and implemented by UNDP, the GCF Readiness Programme is effective since August 2020. A follow-up project will be proposed to fill gaps identified through this phase and develop Guinea's NAP document. The second phase will be informed by the results of this first phase, particularly in consolidation of existing climate risks and vulnerability assessments, and the prioritisation of adaptation options in the priority sectors of agriculture, livestock, forestry, coastal, and water resources.

October 2015

Guinea submitted its Intended Nationally Determined Contribution (INDC)²¹.

January 2016

Guinea requested the NAP-GSP to support with the NAP process and integrate climate change adaptation into national and sub-national plans.

August 2016

Guinea ratifies the Paris Agreement.

June 2018

UNDP organises a stakeholder consultation workshop to obtain information for advancing the NAP process²².

May 2016

Inception meeting and workshop in Guinea with key stakeholders and government representatives on the NAP process.

September 2017

Ministry of Environment, Water and Forests (MEEF) and UNDP convene a workshop related to preliminary plans for a Readiness and Preparatory Support Proposal for submission to the GCF, in which the objectives, outcomes, components and activities are validated.

August 2020

The GCF project "Supporting the Achievement of National Development Policies by Building Climate Adaptive Capacity and Planning in Guinea" is approved and effective²⁴.

The process to formulate and implement NAPs

The Ministry of Environment, Water and Forests (MEEF) is responsible for the coordination of climate change activities and shall oversee the implementation of environmental policies. Under the MEEF, the National Environment Directorate (DNE) is the lead governmental agency on national climate change actions and operational coordination. The DNE hosts the UNFCCC National Focal Point. A National Climate Committee (CNC) was established in 2014 to support DNE's actions and to facilitate the mainstreaming of climate considerations into sectoral policies²⁰.

“Climate-induced extreme weather events are becoming more intense and frequent, increasingly exposing the population of Guinea to significant risks and hampering development efforts. We are determined to climate-proof our country and protect our people.”

Ms Oumou DOUMBOUYA, UNFCCC Focal Point/Guinea

Opportunities and next steps

Several opportunities and next steps are recognised in Guinea: i) provision of regular and reliable climate data, ii) development of procedures and capacities for effective climate coordination in national, sectoral and local development planning, iii) enhancement of linkages between research and policy to support evidence-based adaptation planning, and iv) enhancing existing national funding mechanisms to support climate change action.

Key documents

- [Plan National de Développement Economique et social \(PNDES\)](#)
- [Intended Nationally Determined Contribution \(INDC\) Under the United Nations Framework Convention of Climate Change, 2015](#)
- [Country partnership framework, 2018-2023.](#)
- [National Consultation Platform on COP21](#)
- [National Adaptation Plan of Action \(NAPA\), 2007](#)
- [Poverty Reduction Strategy Paper 2013-2015](#)
- [National Plan for Agricultural Investment, Food and Nutrition Security \(PNIASAN\), 2013-2017](#)
- [National Plan for Agricultural Investment, Food and Nutrition Security \(PNIASAN\) 2018-2025](#)
- [National Water Policy \(PNE\), 2018](#)
- [National Environmental Policy, 2011](#)
- [2040 Vision for Guinea](#)

Notes

- 1 Central intelligence Agency (CIA) (2020). The world factbook CIA (2020). <https://www.cia.gov/library/publications/the-world-factbook/geos/gv.html>
- 2 The World Bank (2020): Guinea. URL: <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=GN>
- 3 The United Nations Development Programme (2019). Human Development Report. Guinea. URL: http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/GIN.pdf
- 4 Intended Nationally Determined Contribution (INDC) Under the United Nations Framework Convention on Climate Change (UNFCCC) (2015). Republic of Guinea. URL: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Guinea%20First/INDC_Guinea_english_version%20UNFCCC.pdf
- 5 USAID (2020). Climate Risk Profile Guinea. URL: https://www.climatelinks.org/sites/default/files/asset/document/Guinea_CRP_Final_0.pdf
- 6 UNDP Climate Change Country Profile (2020). Guinea. URL: https://www.geog.ox.ac.uk/research/climate/projects/undp-cp/UNDP_reports/Guinea/Guinea.lowres.report.pdf
- 7 Green Climate Fund, 2019. Supporting the Achievement of National Development Policies by Building Climate Adaptive Capacity and Planning in Guinea.
- 8 Global Support Programme (2020). Supporting Guinea Conakry to advance their NAP process. URL: <https://www.globalsupportprogramme.org/projects/supporting-guinea-conakry-advance-their-nap-process>
- 9 The United Nations Development Programme (2019). Human Development Report. Guinea. URL: http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/GIN.pdf
- 10 Nationally Determined Contribution (INDC) Under the United Nations Framework Convention on Climate Change (UNFCCC) (2015). Republic of Guinea. URL: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Guinea%20First/INDC_Guinea_english_version%20UNFCCC.pdf
- 11 USAID (2020). Climate Risk Profile Guinea. URL: https://www.climatelinks.org/sites/default/files/asset/document/Guinea_CRP_Final_0.pdf
- 12 UNDP Climate Change Country Profile (2020). Guinea. URL: https://www.geog.ox.ac.uk/research/climate/projects/undp-cp/UNDP_reports/Guinea/Guinea.lowres.report.pdf
- 13 USAID (2020). Climate Risk Profile Guinea. URL: https://www.climatelinks.org/sites/default/files/asset/document/Guinea_CRP_Final_0.pdf
- 14 USAID (2020). Climate Risk Profile Guinea. URL: https://www.climatelinks.org/sites/default/files/asset/document/Guinea_CRP_Final_0.pdf
- 15 USAID (2020). Climate Risk Profile Guinea. URL: https://www.climatelinks.org/sites/default/files/asset/document/Guinea_CRP_Final_0.pdf
- 16 Green Climate Fund, 2019. Supporting the Achievement of National Development Policies by Building Climate Adaptive Capacity and Planning in Guinea.
- 17 Intended Nationally Determined Contribution (INDC) Under the United Nations Framework Convention on Climate Change (UNFCCC) (2015). Republic of Guinea. URL: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Guinea%20First/INDC_Guinea_english_version%20UNFCCC.pdf
- 18 Global Support Programme (2020). Supporting Guinea Conakry to advance their NAP process. URL: <https://www.globalsupportprogramme.org/projects/supporting-guinea-conakry-advance-their-nap-process>
- 19 Global Support Programme (2020). Supporting Guinea Conakry to advance their NAP process. URL: <https://www.globalsupportprogramme.org/projects/supporting-guinea-conakry-advance-their-nap-process>
- 20 Green Climate Fund, 2019. Supporting the Achievement of National Development Policies by Building Climate Adaptive Capacity and Planning in Guinea.
- 21 UNFCCC (2020). INDCs as communicated by Parties. URL: <https://www4.unfccc.int/sites/submissions/indc/Submission%20Pages/submissions.aspx>
- 22 Global Support Programme (2020). Supporting Guinea Conakry to advance their NAP process. URL: <https://www.globalsupportprogramme.org/projects/supporting-guinea-conakry-advance-their-nap-process>
- 23 Global Support Programme (2020). Supporting Guinea Conakry to advance their NAP process. URL: <https://www.globalsupportprogramme.org/projects/supporting-guinea-conakry-advance-their-nap-process>
- 24 Green Climate Fund, 2019. Supporting the Achievement of National Development Policies by Building Climate Adaptive Capacity and Planning in Guinea.

Projected temperature increase by 2090 of **5.3°C**

Projected sea level by 2100 between **0.4 and 0.7 meter.**

Projected decrease in maize production of **5 to 25%**

Funding needs for adaptation estimated up to **\$1700 million**

> 9,600,000 Guineans to benefit from implemented adaptation projects

About the NAP-GSP

The joint UNDP-UN Environment National Adaptation Plan Global Support Programme (NAP-GSP) was launched in June 2013, financed by the Global Environment Facility (GEF) Least Developed Countries Fund (LDCF), and the Special Climate Change Fund (SCCF). The NAP-GSP, together with partners, are assisting developing countries to identify technical, institutional and financial needs to integrate climate change adaptation into medium and long-term national planning and financing. The NAP-GSP provides technical expertise and guidance on country NAP processes, and opportunities for knowledge exchange on NAPs.



Email:

Rohini.Kohli@undp.org
Mozaharul.Alam@unep.org

For media enquiries / dissemination:

Melanie.Pisano@undp.org

Website:

<http://globalsupportprogramme.org/nap-gsp>