

Climate Action Trends in East and West Africa—Gabon and Mozambique

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☞ Climate change; Gabon; Mozambique; Sustainable development

Africa's vulnerability to climate change

The African continent is expected to be severely impacted in a manner completely disproportionate to the continent's contribution to global greenhouse gas (GHG) emissions. The latest estimates indicate that, in Sub-Saharan Africa, the gross domestic product (GDP) could be reduced by up to 3% by 2050 because of the impact of climate change. Notably, it is predicted that climate change will: (i) severely impact agricultural production, thus exacerbating food insecurity and increasing food prices; (ii) cause the displacement of vulnerable communities, either to urban areas, which are typically unable to accommodate population surges, or to other already "under-pressure" host nations, which could contribute to increasing migration conflicts in the near future.

Because of its geographical location, Mozambique is particularly vulnerable to the adverse effects of climate change. Over the years, the country has experienced severe floods and droughts, which have caused property damage/loss, food insecurity and the domestic displacement of vulnerable rural populations. More recently, in 2019, two tropical cyclones struck the centre and northern parts of the country, causing more than 500 direct casualties and shattering the existing fragile economic and social structures.

The high level of poverty and frangible existing key infrastructures exponentially place stresses on the country's capacity for rebuilding livelihoods and assisting direct victims and communities affected by severe climate events. In addition, severe climate events present a critical setback to the growth of the country's GDP and the allocation of funds to improve living conditions as significant amounts are frequently targeted to tackle climate emergencies, repair damage and provide critical

assistance to affected populations. Climate change thus raises serious concerns for Mozambique from both a humanitarian and economic standpoint.

As for Gabon, 88% of the country's landmass is covered by tropical rainforest, known not only as the "lungs of the world", but also as being extremely vulnerable to climate change. Although Gabon remains a highly forested carbon-negative country with 13 national parks, it has not been immune to the effects of deforestation, albeit at a less significant pace than its neighbours. The loss of forest cover is leading to habitat-loss for elephants, leading to crop damage and ultimately human deaths. The oil-rich port of Port-Gentil and the tourist destination on Pointe-Denis are threatened by rising waters, and changes in seasonal patterns have led to more frequent flooding in the country. So-called "rural exodus" caused an increase in car-ownership and additional pressure on the still-developing public transportation system, which has led to gridlock traffic in the capital city of Libreville. In addition, ever-increasing energy needs have placed more and more strain on the country's aging electricity grid, leading to frequent power cuts.

Although Gabon has one of the highest living standards among countries in Central Africa, loss of quality of life and impact on human development indicators are a source of concern for the population. The link between climate change and food insecurity, poverty and internal displacement is well-documented, and Gabon is certainly not immune to these risks. As a result, despite the structural differences between the two countries, both Mozambique and Gabon are strongly committed to addressing climate change issues, both at an international and domestic level.

International commitments

In the international arena, both Mozambique and Gabon signed and ratified the key international treaties and conventions on climate change, notably: (i) the UN Framework Convention on Climate Change (UNFCCC); (ii) the Kyoto Protocol; and (iii) the Paris Agreement on Climate Change. As a result, both countries have submitted their first Nationally Determined Contributions (NDCs) under the scope of the Paris Agreement—Gabon on 2 November 2016 and Mozambique on 4 June 2018.

Under its first NDCs, Gabon pledged to reduce GhG emissions by 1,500,000 GgCO₂ between 2010 and 2025, without taking into account carbon capture solutions. On the other hand, under its first NDCs, Mozambique estimated a total reduction of around 76.5 MtCO₂eq between 2020 and 2030 (being 23.0 MtCO₂eq by 2024 and 53.4 MtCO₂eq between 2025 and 2030), which was conditional on the provision of financial, technological and capacity building assistance from the international community.

More recently, both Mozambique and Gabon were represented at COP26 and reaffirmed their commitments to mitigate the effects of climate change and notably

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More recently, both Mozambique and Gabon were represented at COP26 and reaffirmed their commitments to mitigate the effects of climate change and notably

pledged to put a halt to the deforestation and "degradation" of their respective territory by 2030, as well as signing the Glasgow Climate Pact. Gabon also took a key role in leading the African Group of Negotiators in a concerted effort to obtain the best possible agreement for African nations, notably with respect to climate funding.

As agreed under the Glasgow Climate Pact, both Gabon and Mozambique are expected to accelerate the timeline laid out in the Paris Agreement and submit more ambitious pledges to cut emissions by 2030, by submitting revised NDCs prior to COP27, to be held in Egypt in November 2022. Hence, more vigorous measures are expected from both countries in order to accommodate their respective commitments for reducing GHG emissions, halting deforestation, investing in renewable energy sources towards energy transition, developing low-carbon economy initiatives and making available to the general public practical critical information on climate-change threats, potential prevention and mitigation measures.

Domestic legal framework

Mozambique has a rather robust legal framework in place aimed at protecting the environment, comprising the following key statutes: (i) Environmental Law, approved by Law No.20/97 of 1 October 1997; (ii) Environmental Impact Assessment Regulations, approved by Decree No.54/2015 of 31 December 2015; (iii) Biodiversity Conservation Law, approved by Law No.5/2017 of 11 May 2017; (iv) Regulations on Biodiversity Conservation, approved by Decree No.89/2017 of 29 December 2017; (v) Regulations on Environmental Quality Standards and Effluent Emissions, approved by Decree No.18/2004 of 2 June 2004; and (vi) Regulations on the Prevention of Pollution and Protection of the Marine and Coastal Environment, approved by Decree No.45/2006 of 30 November 2006. Specific environmental protection regulations applicable to the mining and petroleum sector have also been approved.

Although none of these statutes specifically address climate-change matters, as part of Mozambique's commitments under the UNFCCC, the National Strategy for Adaptation and Mitigation on Climate Change (NSAMCC) for the period 2013–2025 was approved in 2012. In a nutshell, the NSAMCC aimed at establishing action guidelines with a view to increasing resilience, reducing climate risks, and promoting low-carbon and green economic development. To facilitate the implementation of the NSAMCC, a Unit of Climate Change (UCC) was created to ensure the strategic guidance/development thereof, cross-sectorial coordination/monitoring and evaluation of the actions established therein. Later, in October 2014, the government approved the National System for Monitoring and Evaluation of Climate Change (SNMAMC) to follow

up on the NSAMCC's strategic actions, ensure coordination of the various sectoral actors and implement best practices on climate change.

In 2018, within the context of the so-called REDD+ initiative, the government approved specific regulations by means of Decree No.23/2018 of 3 May 2018 aimed at governing the principles and rules for the implementation of projects contributing to the reduction of emissions arising from forest degradation, conservation/development of forest carbon reserves and promotion of sustainable forest management. The efforts made by Mozambique against deforestation were recently acknowledged by the international community and Mozambique was the first country to receive a grant in the amount of US \$6.4 million from the Forest Carbon Partnership Facility—a fiduciary fund of the World Bank—to compensate for those efforts and to encourage the country to continue on the path against forest degradation. Additional grants—up to 50 million US \$—may be made available to Mozambique if the country reduces up to 10 million tonnes of CO₂ emissions until the end of 2024.

Following the Idai and Kenneth cyclones that hit the country in 2019, the government amended the regulations on management and reduction of risk of disasters by means of Law No.10/2020 of 24 August 2020, which was further supplemented by Decree No.76/2020 of 1 September 2020. These statutes expressly provide for climate-change prevention, mitigation, adaptation and resilience-related measures.

Further, a Pilot Program for Climate Resilience (PPCR) was approved by the World Bank and funded by the Strategic Climate Fund (SCF). The PPCR aims at assisting developing countries in integrating climate resilience as part of their development planning policies across various sectors. Importantly for African nations, it also provides grants to put the pilot projects into action. At a national level, in 2011, Mozambique approved the Strategic Programme for Climate Resilience (the so-called SPCR) which has three key components: (i) institutional and political reforms; (ii) investment in pilot projects; and (iii) knowledge-management. Those components are rooted in the basic principle that PPCR pilot investments should be backed by institutional and political reforms with a view to building national capacity, and coordinating and monitoring climate-change resilience activities nationwide.

For the implementation of the SPCR, Mozambique received an initial grant of US \$1.5 million. Subsequently, a combined line—grant and loan—of US \$91 million was also made available by the World Bank, African Development Bank (AfDB) and International Finance Corporation (IFC).

The World Bank and the Nordic Development Fund are also channeling US \$25 Million for funding PPCR pilot projects in Mozambique, and additional resources of the World Bank and the International Development

Association (IDA) in the amount of US \$150 million are also being used to support in-country PPCR political and institutional reforms.

In addition to the foregoing, a number of programmes have been rolled out in Mozambique under the initiative of various governmental bodies, albeit with the majority being grant-funded, to reduce climate-change vulnerability, namely with the overall objectives of: (i) protecting coastal resilience and finding nature-based solutions for vulnerable coastal communities, (ii) boosting aquaculture activities and promoting artisanal fisheries; (iii) strengthening urban resilience in Southern Africa; (iv) developing low-carbon strategies and climate-change adaptation initiatives; and (v) building an integrated risk-management system for farmers and women.

Despite the foregoing, and in spite of a variety of different provisions currently in place, Mozambique has not, at the present time, approved a comprehensive legal framework on climate, which, in the opinion of the authors of this article, might suggest that perhaps the time has come for Mozambique to consider enacting a Climate Change Law setting forth, in a consolidated fashion, the vision and strategic actions to be adopted to properly accommodate and comply with the country's international commitments on climate action, together with resilience, climate funding and carbon trading. The future will, of course, tell, but this seems to be the natural path towards the materialisation of the commitments undertaken under both the Paris Agreement and the Glasgow Climate Pact, notably meeting the agreed GHG reduction targets, as well as the need to properly address the Mozambique's future challenges on climate change issues.

Gabon, on the other hand, is ahead of its peers in the Central African sub-region as well as Sub-Saharan Africa when it comes to both environmental and climate change initiatives. Gabon's development strategy for 2025 is built on several pillars, including the Green Gabon initiative, through the preservation of its ecosystem and encouraging its green economy. Gabon's National Climate Plan links these principles to its sustainable development strategy, endeavours to take into account climate change initiatives in the country's socioeconomic development and is implemented by the National Climate Council, established by means of Decree No.0122/PR/MRPICIRNDH of 23 April 2010.

Gabon has had a framework Environmental Law since 26 August 1993, a Forestry Code since 31 December 2001 and a Law on National Parks since 27 August 2007. Since the adoption of Decree No.00161/PR of 01 June 2017, Gabon has also established protected aquatic areas. The former Environmental Law was repealed in favour of two more ambitious legal instruments in 2014: (i) the Law on the Protection of the Environment; and (ii) the Law on Sustainable Development, both adopted on 1 August 2014. Only a small number of implementing regulations have thus far been adopted with respect to the 2014 laws; although, those adopted under the 1993 Law continue to apply in practice. The most recent development under the 2014 Law is the adoption of a

Decree establishing the legal framework for special facilities having regard to the protection of the environment, which is yet to be published in the *Official Gazette*.

Gabon also has a sturdy environmental regulatory framework across various sectors, and is making considerable efforts to improve implementation and monitoring through better allocation of human and material resources. Under the Gabonese Penal Code, pollution is not just an environmental offence but a criminal one as well.

In addition to a general statute on industrial activities, sector-specific laws in the extractive sector, such as Law No.037/2018 of 11 June 2019 regulating the mining sector and Law No.002/2019 of 16 July 2019 regulating the hydrocarbons sector, put special emphasis on the sustainable development of Gabon's mineral and petroleum resources. Order No.000937/MEFEDD/SG/DGFAP of 11 July 2018 establishing the Fauna Protection Plan in Forestry, Agroindustrial, Mining and Petroleum Concessions requires permit-holders to present preservation plans, which must be validated by the General Directorate for Fauna and Protected Areas of the Ministry of Environment. In the transport sector, instruments such as Orders No.1364/PM and 1365/PM of 3 November 2017, making mandatory GHG reduction and prevention equipment on board motor vehicles and establishing a centre for the dispensation of said equipment, seek to depollute a "traditionally polluting" sector even though the framework is not yet fully operational in practice.

Gabon has also instituted mechanisms and procedures for the carrying out of activities that may impact the environment. Decree No.000539/PR/MEFEPEPN of 15 July 2005 and Decree No.000405/PR/MEFEPEPN of 15 May 2002 regulate Environmental Impact Studies (EIS), setting forth the obligations that economic actors must comply with should their activities cause environmental impact. Subsequent regulations have extended the scope of these obligations, including an Order from 6 October 2020, which requires a prior EIS for any economic activities carried out in mangrove areas. Gabon has also established a legal framework for facilities with activities that might have a negative impact on the environment through Decree No.000543/PR/MEFEPEPN of 15 July 2005 on classified installations. Waste treatment has also been a priority for Gabon, which adopted, on 15 July 2005 Decree No.000541/PR/MEFEPEPN regulating waste disposal, Decree No.000545/PR/MEFEPEPN on retrieval of waste oils and Decree No.000542/PR/MEFEPEPN on the disposal of waste in shallow, underground and marine waters.

More recently, an Ordinance on Climate Change was adopted on 13 September 2021. The enactment of this statute is considered to a crucial step aimed at implementing strategies to address climate-change issues and meet the envisaged GHG emissions' reduction targets. Notably, it aims to maintain Gabon's carbon neutrality by 2050, encourage sustainable development initiatives,

and ensure compliance with the Paris Agreement and other international agreements to which Gabon has adhered. Gabon plans to reach these targets by establishing a framework for measuring and reducing GHG emissions, implementing adaptation/mitigation initiatives and initiating climate funding. Gabon has also strived to implement a cohesive framework for the certification of its timber products, notably with respect to the tracing of timber across the logging chain and, in particular, exports from the Nkok Special Economic Zone.

In addition, the country is vocal with respect to its fight against deforestation, having become the first country in Africa to receive funding under the Central African Forest Initiative (Cafi) for halting deforestation. Following an assessment of forest loss emissions by experts over 2016 and 2017 compared to 2006–2015 parameters, Gabon received US \$17 million from Norway through the Cafi and the sum of US \$150 million has been set aside for a 10-year period. This is seen as a prelude to Gabon's entry into the carbon trading market. Gabon has also been multiplying initiatives involving different stakeholders. For instance, the African Conservation Development Group has been granted rights to the sustainable development of savannah land in the Mayumba province, a project that plans to contribute to reducing carbon emissions by 200 million tonnes over 25 years, although the project has seen its share of hiccups.

What's next?

Having regard to their diverse development needs and poverty levels, African nations face different issues when addressing climate change/energy-transition-related matters and, in particular, carbon neutrality targets. Notwithstanding these factors, the challenges and the perception of the efforts that the continent is being called upon to implement—which are considered to be disproportionate taking into account the African nations' contribution to the overall amount of GHG emissions worldwide—are, all in all, similar.

On the east side of the continent, Mozambique finds itself in a very difficult position and faces a crucial dilemma: (i) on the one hand, the commitments under the Paris Agreement and carbon-neutrality trends/impacts thereof on investment portfolios; while (ii) on the other hand, the desperate need to attract investment (national and foreign) on several economic fronts. At present, the biggest "energy treasure" of Mozambique is the extensive natural gas reserves in the north of the country. However, companies and investors—especially those operating in developed countries where expectations of leading the energy transition are high—are increasingly being called upon to reduce their investment portfolio in fossil fuels and move towards energy-transition systems. Balancing these two sides of the spectrum will be key for Mozambique. An option may be implementing state of the art/ground-breaking carbon capture and storage systems and/or innovative carbon offsetting mechanisms.

Gabon, on the other hand, has to balance the growth of its economy, which is currently highly dependent on the extractive sector, with future opportunities in carbon-trading and sustainability-related projects. Gabon's extractive industry has been dominated by petroleum and its gas potential has not yet been exploited. As a relatively stable country in what is widely regarded as an unstable region, Gabon effectively positions itself as a more attractive proposition for investment. However, very strict foreign exchange regulations applicable to all countries in the Economic and Monetary Community of Central Africa (CEMAC), including Gabon, has recently been a source of cause for concern, albeit some adjustments have recently been made for extractive sectors.

The inclusion of the principle of "just energy transition" in the Glasgow Pact is proof of the dilemma developing nations face, and their need to reach a delicate equilibrium between energy needs and sustainability. The reality is that the concept of "balance" should be kept in mind in the international agenda. As economic development—particularly of "fragile" nations—cannot, and should not, be hindered, effective systems should be put in place to properly accommodate economic development alongside with climate-action measures.

Mozambique and Gabon—as well as other African nations—should have full right and opportunity to exploit their natural resources and develop their economies for the benefit of their people. Gabon demonstrated, over the course of the weeks leading up to COP26, that these two principles are not necessarily mutually exclusive. It organized the Oil, Gas and Energy Summit, focusing on its gas potential during the last week of October 2021, and the President, His Excellency Ali Bongo Ondimba, attended the Future Investment Initiative summit in Riyadh a few days later, which had sustainability as one of its underlying themes, and then the COP26 at Glasgow during the first week of November. While COP26 was ongoing, Gabon's 12th oil licensing round was too, and has now reached the stage where discussions are ongoing with the Ministry of Petroleum for the requested blocks.

This does not mean, however, that these countries should be able to "walk away" from their respective roles and responsibilities in connection with climate change. The energy-transition and low-carbon initiatives should continue to progress in both countries, and investment in renewables is of key importance to achieve that goal.

Developed countries must also play a critical role in helping the developing world—notably those nations facing a dilemma similar to that of Mozambique and Gabon—to be successful in their endeavours in enhancing economic development and contributing to meeting their emissions-reduction targets, together with implementing climate mitigation, adaptation and resilience measures. Article 9 of the Paris Agreement provides for financial mechanisms whereby developed countries should provide financial resources to assist developing countries with respect to both mitigation and adaptation in continuation of their existing obligations under the UNFCCC. Mozambique is clearly one of the developing countries

that needs financial support for this purpose. The financial indicators for Gabon, as an upper-middle income and highly urbanised country, may be different from Mozambique's profile but its challenges are similar. As mentioned publicly by the Gabonese Minister for Environment following the "crunch" negotiations leading up to the Glasgow Climate Pact, African countries accepted a moral commitment by developed nations to

contribute to adaptation finance instead of a firm funding obligation. Without this, they "weren't going to get an agreement until Egypt".

All in all, climate change is not a matter pertaining to a single country or group of countries, and does not (and cannot) depend on their level of development. It is a matter of concern for all our planet that cannot be curtailed by the political and economic barriers between states or people. All future actions must be taken together in a balanced, equitable and fair manner.