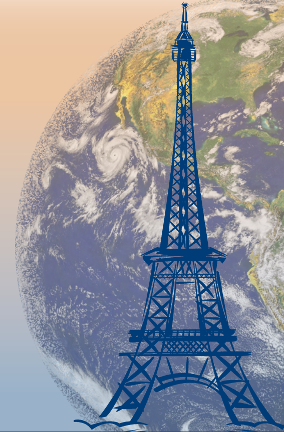

Africa:

Financing Adaptation and Mitigation in the World's Most Vulnerable Region

Amadou Sy
Senior Fellow and Director, Africa Growth Initiative, Brookings Institution

Africa is the continent that contributes the least to global warming in both absolute and per capita terms. Africa accounts for the smallest share of global greenhouse gas emissions—3.8 percent. This compares to the largest emitters like China, the United States, and the European Union, which account respectively for 23 percent, 19 percent, and 13 percent of global emissions. Africa contributes less to global warming than countries such as Russia and India (each accounts for 6 percent of global emissions). In a telling example, the Africa Progress Panel notes that it would take the average Ethiopian 240 years to register the same carbon footprint as the average American. The region's low contribution to global warming is not surprising, as about two-thirds of its greenhouse emission is from land use, particularly from forest degradation and deforestation tied to the production of charcoal.

Yet despite its low emissions, Africa is one of the regions most vulnerable to climate change. It remains highly dependent on low-productivity agriculture for food, income, and employment. Agriculture accounts for about 30-40 percent of GDP in Africa, and about 80 percent of Africans remain dependent on low-yielding, rain-fed agriculture. Global warming, even if limited to below 2 degrees Celsius, increases the risk of drought in southern and central Africa and the risk of flooding in east Africa, which would lead to higher food prices and lower yields—by 2050, warming of less than 2 C could reduce total crop production by as much as 10 percent. Reduced agricultural production will have dire consequences on human development, as poverty in Africa predominantly affects rural agriculturalists or pastoralists in countries with some of the highest poverty rates in the world. For higher levels of warming, there are indications that yields may decrease by around 15–20 percent across all crops and regions. Progress in many areas will be reversed: Health will suffer through increased mortality and morbidity due to events like extreme heat and flooding. A reversal of progress in health attainment will have a negative impact on childhood educational performance. Recent research has even found strong causal evidence linking climatic events to human conflict across all major regions of the world.

Africa's adaptation and mitigation agenda

Africa needs to not only implement climate adaptation strategies to reduce its vulnerability to climate change but also adopt mitigating measures in order to achieve sustainable growth. While climate mitigation focuses on uprooting the causes of climate change, adaptation focuses on adjusting to the effects of climate change in order to reduce vulnerability and risk. In contrast to developed economies where the focus is on climate mitigation, both climate mitigation and adaptation are pressing issues in Africa.

Climate mitigation will help the continent avoid a high-carbon lock-in that other countries such as China have experienced in their economic trajectory. Rapid economic growth and demographic and urbanization trends will increase Africa's emissions of greenhouse gases unless mitigating actions—such as the adoption of renewable energy in power generation technologies—are taken. For instance, under the International Energy Agency baseline scenario to 2040, power generation in sub-Saharan Africa would quadruple, and the region's share of global CO_2 emissions would increase from 2 percent to 3 percent. The likelihood of this scenario can be reduced when renewable technologies, including hydropower, solar, wind, and geothermal energy are included the continent's energy mix. Furthermore, adopting such technologies can help broaden access to energy through both on- and off-grid solutions.

In Africa many national governments are initiating governance systems for adaptation such as disaster risk management, adjustments in technologies, and infrastructure and ecosystem-based approaches. Basic public health measures and livelihood diversification are also reducing vulnerability. The Africa Progress Panel notes examples from Ethiopia, Niger, and Rwanda where small-scale landowners and communities are adapting to climate risk and leading the way for sustainable land use at a large scale.

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A key challenge for African countries is that even with an increase in domestic revenue mobilization, their own resources will remain insufficient to tackle both climate mitigation and adaptation. As a result, international cooperation is needed to help fill Africa's climate funding gap. A 2013 study by UNEP estimates that in a 2 degree Celsius temperature increase scenario, meeting adaptation costs in Africa by the 2020s will require a steep increase in annual funding for adaptation in Africa by about 10-20 percent annually. It concludes that present trends in funding will not meet these needs, and there is at present no clear and agreed-upon pathway or identified sources of funding through which such a rapid scaling up can be achieved. The international community could help fill the climate financing gap that Africa currently faces, but this would require that the current governance of the "global commons" be addressed. Indeed, Africa will bear the brunt of global warming, which will be mainly caused by developed economies and some emerging ones; but Africa often has limited bargaining power in international negotiations. Given that the Paris meeting can result in a binding agreement for all countries, it is therefore of the utmost importance for the continent to take a leadership role in the governance of the "global commons."

Africa in Paris

Africa is speaking with one voice, and the continent has committed to achieve an inclusive, ambitious, and equitable COP21 agreement that would lead to lower carbon emissions. The Paris meeting aims to keep global warming to less than 2 C above pre-industrial levels (as agreed to in Cancun in 2010). It also seeks to keep global warming to below 1.5 C by 2100. The basis for the position that African countries will take to Paris in December 2015 is the African Common Position developed by the African Group of Negotiators and endorsed by the African Ministerial Conference on the Environment. African negotiators will seek to ensure that global climate governance will include the concerns of all 195 countries, and in particular those of poor countries and small islands. They will set a high bar in terms of the targets for the reduction of carbon emissions and seek firm commitments from developed economies to a mechanism that will adequately finance climate adaptation, and not just climate mitigation.

Among the issues to be agreed upon in Paris, climate finance and in particular the need for financing both climate adaptation and mitigation will probably the most important concern for African negotiators. At the third Financing for Development Meeting in Addis Ababa in July 2015, the international community recognized the need to increase financing for low-carbon and climate-resilient development. In particular, developed countries committed to a goal of mobilizing jointly $100 billion a year by 2020 from a wide variety of sources, including public and private sources, to finance mitigation actions and transparency on implementation (a goal previously set in 2009 in Copenhagen but not reached). In addition, the international community welcomed the initial resource mobilization process of the Green Climate Fund—the largest dedicated climate fund—which aims for a 50:50 balance between mitigation and adaptation over time and a floor of 50 percent of the adaptation allocation for particularly vulnerable countries (such as least-developed countries, small island developing states, and African countries). In Addis Ababa, the international community also noted the importance of continued support to address remaining gaps in the capacity to gain access to and manage climate finance.

The October 2015 Bonn Meeting on Climate Change, the last meeting before Paris, offers a preview of the African position on climate finance. Judging from their concerns in Bonn, African policymakers will, without a doubt, negotiate strongly for the main contributors of greenhouse gas emissions to commit to—and act upon their commitments—the level of financing, the use of financing for adaptation, and the sources of financing. In Bonn, African negotiators put climate finance at the center of the negotiations and strengthened their bargaining power by joining the G-77 and China group of countries, which together included 130 nations, accounting for 80 percent of the world's population. African negotiators are seeking more finance, including a binding commitment from developed economies greater than $100 billion by 2020. They are also warning that new public finance should be used to fill the climate financing gap and that existing official development assistance should not be diverted to climate finance. In addition, the current fragmentation of the climate finance architecture, with many separate multilateral agencies, does not serve the continent well and may not be conducive to leveraging private investment.

In addition to climate finance for adaptation, a likely stumbling block in Paris will be the discussions about loss and damage (L&D) associated with climate change impacts in developing countries. Loss and damage associated with impacts of climate change, including extreme events (such as hurricanes and heat waves) and slow onset events (such as desertification, sea level rise, and ocean acidification) can be relatively high in developing countries, given their vulnerability to the adverse effects of climate change. According to the World Bank, losses to insurers due to weather events have reached about $200 billion a year, from about $50 billion a year in the 1980s. In spite of the establishment of the Warsaw International Mechanism at COP19, which represents a first step in addressing loss and damage associated with climate change in developing countries, L&D will remain a contentious issue given concerns from developed economies about an "unending string of liability" and the binding nature of the Paris agreement.

A successful agreement in Paris would strengthen global governance, but whatever the outcome African countries should take the lead in developing and implementing sustainable strategies that can lead to a "triple-win" scenario. As noted by the Africa Progress Panel, Africa can lead the world on climate-resilient, low-carbon development and achieve the "triple-win" of boosting agricultural productivity, reducing poverty, and strengthening national efforts to combat climate change. The Intended Nationally Determined Contributions for the Paris meeting offer an opportunity for African governments to develop ambitious but realistic strategies leading to the triple-win scenario. Regional cooperation and the support of regional development banks such as the African Development Bank and multilateral institutions such as the World Bank and the Green Fund can help kick-start the process while the continent works to attract more international support, including through innovative financial solutions such as carbon finance.