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# Before the House Committee on Foreign Affairs, Subcommittee on Africa, Global Health, and Global Human Rights

# On 27 April 2021 at 2 PM Hearing on the Effects of Climate Change in Africa

Chairwoman Bass, Ranking Member Smith, and Members of the Subcommittee, thank you for the opportunity to share my testimony today. My name is Dante Disparte, and I am the founder and Chairman of Risk Cooperative, a firm specialized in risk, insurance, and resilience.

I also serve on FEMA's National Advisory Council and as the Chief Strategy Officer and Head of Global Policy for Circle, a leading provider of digital financial services. I have dedicated my career to making the world more resilient at the nexus of global security, emerging risks, and technology, including my ongoing work with leading non-partisan think tanks and institutions, such as the American Security Project, New America Foundation, and the Brookings Institution. I am also the co-author of a 2016 book on resilience and anthropogenic risks and wrote the foreword for a new book on the business imperative of responding to climate change published by Harvard Business School Press.

I am speaking today in my personal capacity to address the important questions raised by this Subcommittee on the effects of climate change in Africa.

To begin, I want to acknowledge that, like the global response to the <u>COVID-19 pandemic</u>, where in effect we are as strong as our weakest links, climate change poses a similarly urgent challenge requiring coordinated global action and solidarity. For the world to rise to the occasion of arresting the spread of COVID-19 and responding to climate threats, U.S. leadership is a necessity. Indeed, we could draw close parallels between pandemic preparedness and mounting a concerted response to climate change, particularly as it affects vulnerable populations and developing and emerging countries disproportionately.

I am no stranger to Africa, having run business operations in 32 African countries earlier in my career while working in the humanitarian supply chain. I have also worked over the years to catalyze inward investment flows and entrepreneurialism across the continent, including as an advisor to Tony Elumelu's Entrepreneurship Program and to various programs led by the State Department and the World Bank Group. I am also no stranger to the long term effects of disaster displacement having grown up poor in Puerto Rico's paradise, where my house was destroyed by Hurricane Hugo as a kid and my <u>island was destroyed</u> by Hurricane Maria as an adult. If the fate of Caribbean islands and small island states are the veritable canaries in the <u>climate change coal mine</u>, then the future of building climate-smart adaptation and resilience may very well be told on

the African continent - home to one of the first countries to recognize U.S. independence in 1777, the Kingdom of Morocco.

In 2015, I was invited to be a part of President Obama's delegation to the Global Entrepreneurship Summit in Kenya, where youth and talent are Africa's most abundant resource, followed closely by the sun. These need to be harnessed to ensure climate-smart economic development and broadbased economic participation. While part of my testimony today will outline some of the threats and concerns that should shape U.S. foreign policy and national security objectives, the best instrument we have to combat the deleterious effects of climate change in Africa (and here at home) is to innovate our way through the crisis, build deep commercial ties, destignatize investments south of the Mediterranean and leverage widely under-utilized risk-transfer instruments that can put a fixed price on risk and uncertainty. I will come back to some of these proposed policy solutions and instruments but, for now, let me outline some of the specific risk factors we must consider - many of which have already manifested themselves, suggesting that we must contend with climate change and its consequences in the present tense.

## **Economic and insurance impacts**

Home to more than 1.34 billion people and 54 sovereign countries, the effects of climate change in Africa and on its disparate economies and regions will be varied and are already being felt. In some instances, arid regions like the Sahel, from whence the increasingly turbulent Atlantic hurricane season is born, will become drier and hotter. This will have continued direct impacts on the U.S. mainland and territories as the confluence of warming ocean temperatures and a hotter Sahel region are fueling record-breaking storms. Hurricanes Harvey, Irma and Maria, as three devastating examples, each have a birthplace in Africa and directly threaten U.S. lives, livelihood, property, infrastructure and our economy overall. Subtropical zones may face record flooding or water scarcity, which notably affected South Africa in 2017. In 2019 (adjusting for the global economic slowdown caused by COVID-19, which has exacted the heaviest toll from the people and economies who can least afford it), the economic output on the African continent was \$2.6 trillion USD in nominal GDP.

A useful framework for thinking about climate-related economic consequences is the notion of economic output at risk, or GDP@Risk. This is a <a href="mailto:methodology">methodology</a> I helped launch with Lloyd's, the Cambridge Centre for Risk Studies, and the American Security Project in 2015. By this measure, GDP in all five African subregions will suffer a significant deceleration due to global temperature increases. For scenarios ranging between 1-4°C temperature increases relative to pre-industrial levels, the African continent's overall GDP is expected to decrease between 2.25%-12.12% according to the <a href="mailto:African Climate Policy Centre">African Climate Policy Centre</a>. The real figures and economic consequences, however, are likely to be much larger, because climate change can be seen as the *risk of risks*, as it exacerbates all other risk factors and would reveal pre-crisis structural, political, and economic vulnerabilities, much like a global pandemic.

Not unlike some of the challenges we see in the U.S. and in other countries with an <u>insurance</u> <u>protection gap</u> (wherein as the waters rise and the fires rage, insurance balance sheets are in retreat), Africa labors under one of largest insurance protection gaps in the world at 85% according to <u>Swiss Re</u>, a global reinsurance provider. The net result, whether in the face of acute or attritional risks and climate hazards, is the costs of resilience, reconstruction and disaster response do not have sufficient financial hedging.

Insurance and risk-sharing mechanisms are key instruments that can not only create investor confidence in deploying more capital across Africa (particularly when the worst misdeeds of political risk are entirely insurable), but also be key in supporting post-disaster recovery and resilience. There are some promising opportunities and projects with micro-insurance and parametric insurance programs that pay claims automatically and can radically reduce the fractional cost of reaching the people who need it the most, while doing so with transparency and high accounting fidelity. Exploring these very instruments for domestic disaster relief and accelerating not just financial protection but critically needed liquidity would meaningfully improve resilience. Leveraging technologies like blockchain-based payment systems can microtarget intended financial beneficiaries in a corruption and bribery-resistant way that ensures aid, relief and legitimate payment flows reach their intended beneficiaries.

#### **Infectious and vector-borne diseases**

In the risk management profession, there is a concept known as tracking near misses. By this measure, the drum beat that a global pandemic was on the horizon was growing <u>louder over the years</u>. The 2014 Ebola outbreak in West Africa, along with a number of epidemics and outbreaks that have been tracked on the continent and reviewed by this Subcommittee, were clear warning signs. In the face of global public health threats that do not respect borders or check in with Homeland Security or the TSA, a whole-of-society approach to prevention, detection, containment, and cure is required. Climate change requires the same whole-of-society approach and how it is addressed on the African continent will be one of the defining steps for long range global stability.

At the time of the 2014 Ebola outbreak, I was leading a global insurance company that handled medical evacuations from affected countries. What was notable then, as in the current response to COVID-19, was that the outbreak quickly overwhelmed first lines of defense, negating a defense-in-depth approach or early alert system that a novel zoonotic or vector-borne disease has broken nature's boundary. Local healthcare systems, NGOs, and regional responses faltered, and the veritable "militarization" of the response required U.S. leadership to gain the upper hand on the Ebola outbreak. Prior testimony before this Subcommittee by former CDC Director, Dr. Robert Redfield, evidenced as much.

With the specter of unchecked climate change along with the blurred lines between our species and nature's defenses, including perilous animal farming and wild game consumption, we are likely to see the emergence of future infectious diseases with pandemic potential develop in Africa. The threat to Africa's <u>unparalleled biodiversity</u> and natural beauty due to climate change, illegal poaching and markets is also dire. Climate change will exacerbate these risks and just as COVID-19 does not respect national boundaries, neither do Zika carrying mosquitoes that will continue their inexorable march north as the world warms. *E pluribus unum*, out of many, one, is a useful starting point for the level of solidarity we must have in the face of global challenges. A climate change policy failure in Africa will affect U.S. interests at home and around the world because we are all in this together. Although there are deep altruistic reasons for the U.S. to care and constructively intervene, it is also in our national security and economic interests to ensure the effects of climate change in Africa are abated.

## Human displacement and mass migration

The insidious human toll of climate change is that it exacts the heaviest price on the people who can least afford it and who make the lowest direct contribution to its onset. Just as low-income families who live in low-lying areas in poorly constructed housing in the U.S. carry the disproportionate brunt of climate change and weather-related disasters, the same paradigm holds true in Africa. The prospect of accelerated human displacement, climate change refugees and internally displaced people (IDPs) will continue to put pressure on political stability in many fragile African states.

According to the <u>Internal Displacement Monitoring Center</u> (IDMC), 60% of all internal displacement in Eastern Africa in 2019 was due to climate-induced disasters. The vicious cycle of droughts, agricultural collapse and age-old farming or pastoral lifestyles under threat, has displaced millions of people. This trend appears across the continent and climate change and related second and third order effects, including rising food insecurity, are linked to over <u>7.7</u> million IDPs and 4.6 million refugees and asylum seekers.

This chain of human migration and displacement not only destabilizes local and regional political order and boundaries, it is also spilling over into Europe, the Middle East and elsewhere. Population displacement due to climate change conspires with human trafficking and a billion-person global identity gap to push people into the shadows. Herein people fall prey to the worst of humanity, from enslavement to child labor and worse, the disaster displaced and dispossessed struggle with the legitimization of proving who they are - which is something we may take for granted as a birthright. This, combined with exclusionary global financial compliance policies that penalize entire continents for fear of one errant transaction, effectively consign more than 1.7 billion people around the world to being unbanked or under-banked, of which 350 million are in Africa, relying on costly, opaque and perilous informal financial services.

### Local, regional, and international security

Being one of the greatest amplifiers of global risk and instability, the link between climate change and an increase in political risk is clear. The specter of resource conflicts such as "water wars," where tensions are mounting over control of scarce inland waterways and potable water or hydropower along the Nile river, to the mounting threat of terrorism or militia groups wreaking havoc across the continent and exporting it trans-nationally is ever present. Similarly, the perennial threat of Boko Haram in Nigeria, to the Tuareg Rebellion in Mali, to the current brutal assault on peace in Mozambique by militants, the risk of violent extremism is on the ascendant across the African continent. Groups like the Islamic State West African Province (ISWAP) are capitalizing on climate change, unreliable rain patterns and growing food insecurity to offer "protection" to farmers in the Lake Chad Basin, consolidating control and influence. Climate change will only make these complex security threats worse and continue to draw down scarce domestic security resources and peacebuilding institutions, while drawing in international assistance including from the U.S. and allies with a void being filled by potentially hostile actors.

While other witnesses in today's hearing are foremost experts in food security, it bears mentioning that there is a direct link between climate change and the prospect of agricultural collapse. As one example, rainfall deficits have contributed to declining aggregate cereal output and crop yields of many staple foods across Africa. Here too, crop failure insurance, along with more reliable market access and supply chains, can contribute to improving the state of food security. Arguably, the spark that ignited the Arab Spring in Tunisia in 2010 and reshaped North Africa and the Middle East, was partly due to rising food prices. According to a study published in the Global Environmental Change Journal, extensive drought conditions in the Middle East and North Africa increased the flow of asylum seekers by 95-146% compared to normal climate conditions. These conditions were contemporaneous with the Arab Spring.

#### **Energy Security**

As many of the world's failed or enfeebled economies remind us, you can have electricity and not have a competitive economy, but you cannot have a competitive economy without electricity. Energy security and risk resilient critical infrastructure represent key opportunities for powering Africa and ensuring economic development does not follow the same harmful carbon-fueled roadmap of the past. Today, the twin perils of energy access and affordability in Africa produce a 48% access rate to reliable energy according to the World Bank, which is roughly half the global access rate of 90%. How this energy access gap is bridged and, critically, by what power sources may very well tell the story of Africa's economic development.

In the same way that formal financial infrastructure like brick-and-mortar banking has reached a point of diminishing returns in terms of financial inclusion, traditional carbon-hungry approaches in the energy matrix need a reset. This reset requires a shift in reliance to renewable energy, it also requires wider adoption of distributed microgrids and more diversification along the energy matrix

and its value chain. In the face of climate change, traditional critical infrastructure is proving to be very brittle and labors under many single points of failure. Examples abound of these vulnerabilities in the U.S power grid, from <a href="Puerto Rico">Puerto Rico</a> (the second longest blackout in history following Hurricane Maria), to power outages in California following record-breaking fires, to the recent grid failure in Texas following Winter Storm Uri.

With a renewable energy sector <u>thriving</u> in the U.S. (one that now hires more people than the carbon-based energy sector), trade and investment opportunities between the U.S. and Africa can simultaneously power a continent and longtime trading partner, while powering an industrial revolution in clean energy in the U.S. American economic competitiveness and security and Africa's response to climate change can advance together in lockstep.

Like the newly released <u>Global Trends 2040</u> superforecasting report from the National Intelligence Council reveals, there is a spectrum of possible outcomes to how climate change will affect the African continent and with it U.S. and global interests. Shifting this spectrum of outcomes away from some of the direst scenarios outlined above will not only require deep U.S. public and private engagement, but it will also require accountability, collaboration and institution building in Africa. As an optimist and deep believer in entrepreneurialism and free enterprise, I believe the arc of climate change can bend towards survival, resilience, and adaptation. The range of possible outcomes all require U.S. support.

Below are some policy considerations that can help change the tide, at once improving African climate resilience while advancing broad U.S. interests:

- Financial de-risking and insurance Broadening the base of inward investment flows, including foreign direct investment (FDI), official development aid (ODA) and remittances into Africa requires the removal of real or perceived barriers and risks. Under-utilized instruments like political risk insurance and investment guarantees can help spur investor confidence while building up critical sectors, industries, and opportunities across the continent. Critically, spurring a wave of responsible financial services innovation, particularly in critical sectors, like risk, insurance- and technology-powered platforms that can increase participation without sacrificing trust are key. Public-private risk sharing instruments or catastrophe bonds can also help bridge the insurance protection gap while building industry capacity and breadth of coverage in Africa. Similar innovations can be applied to incentivize conservation and asset ownership of natural environments.
- *Trade and investment promotion* Increasing the scope of U.S.-Africa trade and investment activities and pushing trade and investment linkages downstream to small- to mid-sized enterprises can improve economic competitiveness on both

ends of the trade as it were. Streamlining underwriting processes for investment promotion across a range of climate-smart or resilient sectors can improve capacity and build vibrant economic activity. The creation of a multi-year U.S.-Africa Trade and Investment Corridor can ensure commercial linkages become trusted and enduring.

- Energy security collaboration and grid resilience As the U.S. contemplates a generational upgrade in its own infrastructure and energy, creating trade, investment, and export linkages to bridge Africa's energy gap in sustainable ways can power a continent and power U.S. enterprise.
- *Upgrading weather instrumentation and monitoring* U.S. support in upgrading weather instrumentation, forecasting and meteorological equipment, can improve real-time safety against weather-related risks and climate change. This can also include open approaches to satellite monitoring and the creation of a pan-African Earth Watch to track the effects of climate change in collaboration with African countries. These geospatial data streams can inform claim triggers for parametric insurance programs covering climate hazards such as crop failure, floods, property damage, human displacement, among others.
- Corruption-resistant low-cost remittance corridors The world's most important and recession-resistant cashflow are peer-to-peer remittance payments. Historically, remittances are a larger figure than FDI and ODA and Africa's diaspora populations in the U.S. send billions of dollars each year to their families and loved ones across the continent. Critically, the de minimis levels of these payments are below the corruption threshold and are a critical source of financial stability reflecting the purchasing power and trust of the U.S. dollar. Yet, these remittance transfers labor from prohibitive fees, compliance costs, physical pickup locations and slow transaction times. Low-cost, corruption-resistant remittance corridors using blockchain can not only speed the transmission of U.S. aid and relief (including post-disaster assistance), but it can also ensure only intended recipients receive funds. These models, with the support of international aid and development organizations, can also support financial inclusion for the disaster displaced and climate change refugees.
- U.S.-Africa Climate Resilience Summit Once post-pandemic restrictions allow, convening of a U.S.-Africa Climate Resilience Summit held on the African continent can catalyze broad-based responses and market-driven opportunities for responding to climate change. This convening would gather heads of state, finance ministers, industry, and civil society leaders, as well as international stakeholders,

to outline multi-year plans, investments and commitments towards Africa's climate resilience.

• Strengthening Pandemic Recovery and Public Health - Overcoming the urge of "vaccine nationalism" and ensuring Africa, like other developing and emerging regions, enjoys access to trusted vaccines, cold supply chains and public health support is critical to not only containing COVID-19, but its variants that could imperil the U.S. Long term, reinforcing early alert linkages across the continent together with U.S. and international public health and infectious disease agencies can improve the detection, containment, and response to future public health emergencies.

The foregoing are but some ideas that can build on the long term and important relationship between the U.S. and the sovereign nations of Africa and its people, who like the rest of the world, are facing complex impacts from climate change.

Thank you, Chairwoman Bass, Ranking Member Smith, and Members of the Subcommittee, for the opportunity to provide my testimony.

Respectfully,

Dante Disparte