

Benin navy Maitre Major Hermann Hungije addresses Benin navy and police force personnel and U.S. Coast Guard personnel from Law Enforcement Detachment 403 as they conduct close-quarters combat training during Obangame Express 2023, in Lagos, Nigeria, January 25, 2023 (U.S. Navy/Cameron C. Edy)

# **Guardian of the Seams**

## U.S. Africa Command at the Intersection of Diplomacy, Development, and Defense

By Melissa A. Stafford, Benjamin A. Okonofua, William J. Campbell, and Garth H. Anderson

y its constitution, programs, and ethos, U.S. Africa Command (USAFRICOM) is committed to the idea that knowledge should unify rather than fragment actions, concepts, and relationships. The commander

of USAFRICOM, General Michael E. Langley, USMC, charged us in this article and the two that follow to explore the concept of seams and challenged us to identify and address the disparities that potentially undermine the effectiveness of U.S. engagements with African partner forces—whether these differences are interagency relationships, resources, rules and authorities, priorities, objectives, data, or something yet unidentified.

The central dynamic of the seams concept is the fragmentation of knowledge among the collection of ongoing efforts that hampers the capacity of USAFRICOM to respond to current and future challenges. Although this

Melissa A. Stafford is the Deputy Division Chief of the Assessment and Integration Division at U.S. Africa Command (USAFRICOM). Benjamin A. Okonofua is the Assessment, Monitoring, and Evaluation Project Manager in the Assessment and Integration Division, J4, at USAFRICOM. William J. Campbell is the Senior Operational Contract Support Planner for USAFRICOM. Garth H. Anderson is Chief of Environmental Security at USAFRICOM.

collection of articles discusses the active engagement of stakeholders who contribute in many ways to increase the effects of the command's engagements on the continent despite the seams, USAFRICOM looks toward a new agenda to promote consensus, collaboration, and unity of effort in reducing seams. We cannot overemphasize the need for a deliberate and coordinated effort to bridge the existing divides that could undermine the command's mission.

For the joint force, a seam is an operational or capability junction requiring synchronization or planned mitigation. Seams are generally inevitable in any institution large enough to require an administrative hierarchy, and their effects can have tragic consequences. In the early 1980s, for instance, poorly managed seams among the military Services led to a series of failures, highlighted primarily by the failure of Operation Eagle Claw in 1980, linked to the lack of interoperability of equipment, communications, doctrine, planning, and unity of command. The limited distribution of intelligence and differential measurement methods among engineering teams led not only to the failure of NASA's Mars Climate Orbiter but also to the September 11 terrorist attacks.

The net outcome of this confluence of seams is that crises increase and intensify, creating a complex operational environment that can further limit the joint force's ability to navigate the seams among military Services, other U.S. agencies, allies, partner nations, and multilateral organizations. Because of this fragmentation, USAFRICOM may be engaged in activities to build African partners' defense capabilities but, unfortunately, to the detriment of genuinely deepening or maturing the relationships.

Today, as the joint force implements its defense strategy in support of the National Security Strategy, seams have the potential to reproduce in each generation of the workforce, the institutions, and knowledge creation methods, becoming intransigent and degrading the effectiveness of the 3D approach of diplomacy, development, and defense. Most would readily identify seams and criticize their

facilitation and persistence, but who is completely immune from them? Who has not, in some sense, been on a different track when consensus or collaboration was needed? The counterweight to seams is creating open discussions.

The United States invests billions of dollars each year to close seams internationally through the United Nations (UN), World Bank, International Monetary Fund, G7 Summit, and Embassies, to name just a few. The U.S. contribution to the UN alone exceeded \$12.5 billion in 2021. Defense coordination between and among allies requires similar investment, with the American investment in the North Atlantic Treaty Organization nearly \$600 million in 2023.

This begs the questions: If seams are inevitable in a complex environment, why bother investing in closing them? Could efforts to close one seam create another? With the challenges the joint force faces, is it counterproductive to attempt the Sisyphean task of closing seams among diplomacy, development, and defense?

Failure to address seams will incur even higher costs for the joint force, including limiting U.S. regional access and the ability to collaborate with partner forces, anticipate changes in the operating environment, and effectively counter adversaries exploiting partner vulnerabilities to assert or expand their influence. It may also degrade American influence with regional partners by making U.S. doctrine development, training, detection, standoff, and precision firepower—from which African partners have historically desired and benefitedredundant. It could also increase areas of the environment that lie outside the visibility or reach of the joint force but are dominated by U.S. rivals, which limits the joint force's awareness and readiness to operate, exercise, and train.

Fortunately, through implementing a modest and sustainable approach, the joint force can reduce seams for global campaigning and global problem sets. USAFRICOM is pioneering a model that leverages a time-tested, reduced-risk model from Wall Street: the retirement savings model. This model focuses on

modest and consistent investments applied over time that take advantage of compounding interest and, most important, learn and adjust based on interim results. Rather than saving up and hoping for a single "big win," the USAFRICOM looks to modest, sustained investments over time and across a diversified portfolio of 3D engagement and effort. Watching the operating environment and understanding trends still play a role, but the focus on long-term objectives and consistency in actions over time allows the investor to achieve outsized, risk-managed results for future security.

The USAFRICOM articles in this issue buttress this model and show the key to implementing this approach within the 3Ds and partner nations: U.S. Africa Command must maintain consistent and modest investments, understand the objectives of all stakeholders, learn from trending outcomes, and adjust moderately. By first addressing the seams, the articles show the incremental steps toward achieving positive outcomes.

This article addresses the concern that despite heavy investments in partner-force capacity-building, the U.S. ability to measure impact is limited mainly by the noncomplementary assessment, monitoring, and evaluation efforts by partners. The diagnosis is a problem of seams: there is a great divide between the U.S. interagency community and the United States and African partners in the ability to assess gaps and solutions, monitor progress toward the achievement of outcomes and objectives, and evaluate impacts. One implication is the risk of (mis)identifying problems and their solutions, leading to flawed capacity-building and institutions. Even more, many stakeholders, often for opportunistic reasons, do not understand whether or how the capabilities they built worked or monitor how they unfolded. If it is not good when USAFRICOM security cooperation planners and programmers misdiagnose problems and misapply solutions, it is even worse when African partners do not know the solutions were misdiagnosed and misapplied or how to manage the investments to achieve the desired outcomes.

The second article discusses the threats to national and international security brought by climate change and how the joint force must face and address these threats. Climate change affects countries differently, but quite often in Africa the results are similar: flooding, drought, and food insecurity drive migration and create vulnerabilities in a population for violent extremist organizations (VEOs) to exploit, in turn creating more instability. The joint force must build staffs that understand the challenges and effects and processes that integrate climate intelligence into planning so that we can help partners address these challenges in the most effective ways.

The third article explores the seams within contracting space. The United States has historically relied on commercial support to meet its national security and national defense objectives. However, divergent perspectives about how to pursue engagements and the attendant risks to national security, when the United States has relied on partner nation contractors, have challenged how these solutions are applied and their impact. Like the other two articles, the diagnosis is also a problem of seams: the United States and its partner nations are often on each end of the spectrum on contracting requirements, objectives, outcomes, and effects. At times, this creates elevated levels of apprehension, suspicion, and antagonism, even challenging the boundaries of the relationship.

The articles are, in large measure, a faithful reflection of how the authors view the 3D enterprise and U.S.-partner nation interaction over time and important contributions that bring out the factors that minimize the seams that encumber U.S. missions and objectives.

### Measuring Investments in Africa: A New Approach

Each year the Department of Defense (DOD) invests nearly a billion dollars in security cooperation (SC) programs to develop partnerships that encourage and enable other nations to act in support of U.S. priorities and strategic objectives. As established foreign policy instruments for building defense part-

nerships and limiting opportunities for adversarial action in the operational environment, SC programs and activities vary from highly visible and often expensive training, equipping, and exercising, to low-key, relatively inexpensive but highly valuable bilateral talks, key leader engagements, and activities to achieve interoperability with partners, among others.<sup>3</sup>

Security cooperation requirements increase every year and combatant commands rely on effective activities to fulfill and maintain their security missions. During U.S. Africa Command's latest Requirements Synchronization and Humanitarian Assistance Working Group, the command validated \$550 million in programming for fiscal year 2025, compared to \$455 million in fiscal year 2024. Although not all these programs will be funded, the increase of \$95 million in validated requirements indicates increasing awareness of partner-nation capacity shortfalls and the importance of U.S. investments to strengthen U.S.-Africa defense partnerships to mitigate these gaps.4 Despite these massive investments, there is limited insight into how effective the United States is in building partner capacity and whether these efforts are contributing to U.S. strategic objectives. For programs costing hundreds of millions of dollars per year, DOD must seek opportunities to better understand program effectiveness to improve future iterations of security cooperation planning.

The 2017 National Defense Authorization Act (NDAA) prescribed a program of assessment, monitoring, and evaluation to better understand the impact of U.S. security cooperation investments.<sup>5</sup> While this change holds enormous promise, the nonimplementation of comparable programs by African partners limits the likely success of this endeavor. The noncomplementarity of efforts is driven largely by the asymmetry in processes, priorities, and objectives, and drives a wedge between the United States and even willing and motivated partners.

#### The SC-AM&E Nexus

Security cooperation programs are a proven foreign policy instrument of

the United States for building defense partnerships and limiting opportunities for adversarial action in the operating environment. However, resourcesfinancial, time, and capacity—will always be limited, making it difficult to gain a more complete understanding of the real value of U.S. investments.6 DOD must prioritize programs that will provide the greatest cost-benefit toward U.S. strategic objectives, but understanding the benefits of SC efforts at the operational and strategic levels is not a simple calculation. When the objective is access to key terrain in a time of conflict, for example, it cannot be left to chance whether U.S. partners will say "yes" when it is needed most. DOD must therefore establish a deliberate measurement for these objectives that can be quantified outside of real-world crises to guide prioritization and planning.

To do this, the Secretary of Defense has integrated assessment, monitoring, and evaluation (AM&E) teams into combatant command security cooperation programming through Section 383 of the 2017 NDAA. The section states that the program shall:

- provide initial assessments of partner capability requirements
- monitor implementation to measure progress and outcomes
- evaluate the efficiency and effectiveness in achieving desired outcomes
- recognize lessons learned to improve future security cooperation programs.<sup>7</sup>

Since 2020, AM&E teams across combatant and component commands have supported the prioritization of SC investments, informing program design, monitoring progress toward the achievement of outcomes, and working to isolate the strategic impact. Within a relatively short period, teams have accumulated a substantial amount of data and information to support decisionmaking throughout the enterprise. Conversations about effective investments and the associated theories of change that never could have taken place in the past are now driving decisionmakers toward more effective programs.

The challenge is that the above remains limited to one side of the partnership. African partner forces rarely implement AM&E practices to understand the impact of new capabilities on their objectives, and in many cases lack the institutional expertise to do so. This constrains insights into, for example, the effectiveness of program implementation rather than the level of adoption by the partner nation; the absorptive capacity rather than the integration into partner capabilities; the delivery of equipment rather than the intent to sustain it; and so on. In short, AM&E teams can observe and report on measures of performance but are limited when it comes to the often partner-nation-centric measures of effectiveness. Observations, interviews,

and surveys provide insight into the partner's intent and willingness, but DOD will continue to rely on moments of crisis to truly test the building of a partnership, and by then it is too late to be wrong.

#### The Solution

To close this gap, USAFRICOM and DOD should integrate and implement AM&E programs into its institutional capacity-building offering to partner nations. Capacity-building focuses on building partner institutions through training and advising forces and defense leaders on developing effective policies, programs, and infrastructure. Although often overlooked, when fully adopted by partner nations, it is these institutions that enable long-term, sustainable

outcomes. AM&E, as a skill set and process, is a natural fit within the existing capacity-building approach.

This could also set preconditions for designing and implementing effective programs and capturing and sharing usable data between the United States and partners to facilitate the accurate measurement of the engagements. This would increase the partner's willingness and ability to maintain and sustain U.S. investments, improve the partner's ability to interoperate and burdenshare with the United States, and reduce costs and risks to U.S. security priorities.

While there may be many approaches to bringing assessment to the partner, any solution would likely be some combination of demonstration, training, and



U.S. Marine Corps Sergeant Mercedes Klein trains with Ghanaian army soldier Sergeant Joseph Akataaba on marksmanship fundamentals during exercise African Lion, near Daboya, Ghana, June 7, 2023 (U.S. Army/Nathan Baker)



U.S. Air Force B-1B Lancer from 9th Expeditionary Bomb Squadron, Dyess Air Force Base, Texas, flies Bomber Task Force mission alongside two UK and two U.S. F-35 Lightning IIs from UK Carrier Strike Group's HMS *Queen Elizabeth*, over Camp Lemmonier, Djibouti, November 11, 2021 (U.S. Air Force/Michael Cossaboom)

advising. This begins by first demonstrating the value and potential effect of applying these efforts, then evolving to planning and teaching basic skills such as identifying and documenting objectives. This is then expanded to build more complex skills, such as building a theory of change or a roadmap to the desired future state, identifying key indicators, and routinely monitoring progress. Lastly, the partner is trained on how to bring that information back into the planning process to adjust plans as needed to achieve objectives. As appropriate, partners could also receive

software and training on data storage, analytics, and communication tools as their information repository grows.

Undoubtedly, one of the key benefits of this solution is that U.S. stakeholders will benefit from implementation, even at the earliest stages. Understanding a partner's objectives and priorities allows the United States to steer the future of the partnership more effectively: Where is there natural alignment? Where are likely friction points? Where might the partner nation more easily align with a competitor? While USAFRICOM conducts regular engagements—including

engaging with key leaders from several partner nations and understanding their objectives at the highest levels—it is not uncommon for the presumed objectives to vary across national leaders and even more when it comes to midlevel leadership where many security cooperation initiatives take place. Building a consistent understanding of objectives and priorities will enable the United States to build partner trust, capability, and capacity more effectively and efficiently.

Conversely, on the partner's side, assessment processes will likely strengthen the U.S. relationship by reinforcing



the SC investments through logical monitoring. U.S. SC efforts are in high demand because of the quality and comprehensiveness of the solutions provided. However, they do not implement quickly, with typical lead times of 3 to 5 years. For partners that have immediate needs and short memories, this sours the U.S. reputation and, worse, can make an opening for an adversary to drive a wedge into the relationship. Building processes that document objectives, timelines, and effects counteracts this unease by managing expectations and reinforcing the positive effects of previously implemented efforts.

USAFRICOM's partner nations have already glimpsed DOD assessment processes and potential impacts through the execution of SC programs. A natural curiosity has arisen among the interviews, surveys, and evaluations. Some African partners, including Morocco, Tunisia, and Kenya, have expressed that they want this type of institutional capacity-building to better manage U.S. investments and generate usable and sharable data.

Supporting their efforts with AM&E tool kits can mitigate the knowledge divide and increase interoperability between USAFRICOM and its partners, with the advantage of being economical while facilitating genuine collaboration to ensure the greatest return on investment. When fully implemented, this effort will bring the measurement of outputs, outcomes, and effects across the United States and partner-nation landscapes under one banner to be beneficial to individual nations and to the relationship itself. Used in this way, the program can serve USAFRICOM and African partners as a significant capacity-builder for the future and a broker of empirical knowledge.

#### **Climate Change Investments**

Climate change is a threat multiplier, presenting risk to both national and international security. The 2022 National Security Strategy states, "The climate crisis is the existential challenge of our time." The Intergovernmental Panel on Climate Change states, "Multiple African countries are projected to face compounding risks from reduced production across crops, livestock and fisheries, increased heat-related mortality . . . and flooding from sea level rise."8 Climate effects exacerbate existing threats including political unrest and VEO activity, and they also contribute to increased access by our global competitors, all of which jeopardize U.S. national interests and security.

The joint force faces challenges in addressing these climate security risks. How do organizations build climate-literate staffs and integrate climate intelligence into planning and processes? Where is the strategic key terrain where the demands of climate-induced crises create game-changing conditions? For example, climate effects in Somalia have negatively impacted agriculture, which provides

around 70 percent of Somalia's employment, allowing al-Shabaab to build its strength by recruiting among displaced populations. How could our competitors seek advantages?

Over the past decade, for instance, China has increased access and influence by leveraging Africa's growing energy demands and financing renewable energy projects. In 2020, Chinese enterprises completed or planned 4.8 gigawatts of wind and solar projects on the continent.10 What resources and solutions addressing infrastructure adaptation, security cooperation, and technology will be committed to addressing climate security implications, ensuring continued U.S. strategic access and the ability to respond to crises? For example, in the Port of Djibouti, U.S. Navy engineers are evaluating and upgrading the primary pier that supports the largest U.S. base in Africa to ensure its ability to withstand climate effects such as sea level rise.

To confront these challenges, USAFRICOM conducted a series of workshops and tabletop exercises with interagency and African partners to frame the strategic landscape and identify solutions for climate adaptation. The command is developing a climate common operating picture that integrates existing climate forecasting tools and risk models into existing planning processes. USAFRICOM is also working to make U.S. force posture locations more resilient to climate effects and other disruptions, with adaptable infrastructure and demand reduction through improved operational energy and water technologies and policies. Most important, the command is leveraging its robust security cooperation program to address African climate resiliency, disaster response, and water and natural resource security and management. Early investments now by the United States to make partner nations more selfsufficient reduces both the risk and the scale of a future U.S. crisis response.

Botswana, an emerging U.S. partner that relies heavily on imported electricity (largely from South Africa), is striving to build a climate-resilient infrastructure. This lack of energy independence threatens the capacity of the country's defense



 $U.S.\ Reconnaissance\ Marines\ with\ 3^{rd}\ Force\ Reconnaissance\ Company,\ 4^{th}\ Marine\ Division,\ conduct\ close\ quarters\ tactics\ with\ Tunisian\ regiment\ commandos\ marine\ as\ part\ of\ African\ Lion\ 23,\ in\ Bizerte,\ Tunisia,\ May\ 25,\ 2023\ (U.S.\ Marine\ Corps/Lara\ Soto)$ 

forces to execute training activities and military airfield requirements in support of regional security missions to counter the so-called Islamic State–Mozambique and other threats. USAFRICOM and the Department of State are helping the Botswana Defence Force to master plan and integrate new resilient energy technologies and facilities. By 2025 they should be able to sustainably generate, store, and consume power for 24/7 training and operations in support of regional peace operations.

USAFRICOM is also conducting workshops with the Kenya Defence Forces (KDF) in 2023–2024 to assess facility climate risks and develop a plan

to integrate operational energy systems into shared U.S. and KDF expeditionary bases. Building logistically sustainable resilient facilities increases the ability to operate away from larger bases and deeper into areas of higher VEO activity.

In Chad, climate change is causing more frequent and severe periodic floods, such as the devastating 2022 event that threatened the ability to launch intelligence, surveillance, and reconnaissance operations at a U.S.-Chad cooperative security location. U.S. military engineers are working with their Chadian counterparts to teach and implement flood mitigation measures to protect critical base infrastructure.

In Madagascar, climate changeinduced drought has created food and resource insecurity that threatens national and regional stability in the western Indian Ocean. In 2022, USAFRICOM and the U.S. Army Corps of Engineers (USACE) held a workshop with the Madagascar Ministry of National Defence, which leads the nation's disaster response efforts, to discuss their most pressing water resource issues. With other national ministries in attendance, including water, environmental, and agricultural, this event generated a true Malagasy interagency response that identified internal capability gaps and whole-of-government response actions.

USAFRICOM and USACE established a low-cost multiyear program to integrate several water resource and climate risk tools into Madagascar's overall response program that will build their interagency capabilities to respond and adapt to climate change effects, enhancing national and regional security.

### Contracting Out for a More Secure Future

The United States has relied on commercial support since the Revolutionary War and that reliance has only grown with time. While the United States must carefully manage its supply-chain risk regarding weapons systems theft and adversarial infiltration, relying on commercial support, especially in developing countries, poses a distinct advantage for the United States and its allies.

In many cases commercial solutions are the most viable, or the only solution, available to fulfill DOD needs. Military operations are often constrained by the number of troops that may be deployed to the host nation. Often there is a local solution readily available that can more efficiently respond to rapid or fluctuating demands. Preexisting relationships with such countries, and the trust in transparent business practices, allow for such immediate applications. Building trust over years enables short-notice commercial solutions without further political guarantees. This enables opportunities for the United States and its allies that are not available to their competitors.

Every nation ultimately looks after its own self-interest first while acknowledging that some have more choices than others. When presented with rapidly expanding populations, economic and educational needs, and limited infrastructure, many will turn to quick and basically reliable solutions that have long-term deleterious effects. The goal should be to provide equally enticing sustainable opportunities, while building—not exploiting—the host nation. Transparent business practices are not only morally right but also provide benefits outside of the mutually agreeable negotiated solution. U.S. commercial engagement is nonpredatory; it helps build the host-nation economy

while respecting the host-nation's sovereign rights. Commercial contracts are based on the Uniform Commercial Code, not exploitation.

Such economic engagements build mutual trust because they are rooted in mutual respect. Most of the time, engagement with host nations is not based on military needs but on diplomacy and development goals: goals that do not exploit, but engage; do not extract, but develop. Adversaries exploit instability by providing weapons to promote further instability; they extract resources with their own workforce without providing a benefit to the country they are exploiting. The United States and its allies are uniquely positioned to use commercial contracting not only to serve the direct purpose of a contract but also to advance diplomacy and development of partner nations within a mutually respectful and beneficial enterprise. Of course, when the population is actively involved in U.S. enterprise, this also fosters local stability, trust in transparency, and respect, which relate directly back to the National Security Strategy and National Defense Strategy objectives. This is a small but deliberate action that when done routinely at the global level will impact strategic objectives.

### Modest Investments to Close Seams for a Secure Future

As the joint force moves to a more integrated, whole-of-government 3D approach to an increasingly complex and interconnected security environment, closing seams and gaps to achieve unity of effort at modest cost rises in importance. Modest, sustained investments with a long-term investment strategy provide a fiscal and, by extension, lethal advantage to the joint force, compounding in effectiveness over time. By leveraging existing routine, institutionalized intergovernmental and partner efforts, seams can be closed and differences in organizations can be leveraged as strengths at modest cost as explored in the three previous examples, which leverage investment and engagement from all partners to maximize the effect for a shared, secure future. JFQ

#### **Notes**

<sup>1</sup> "Funding the United Nations: How Much Does the U.S. Pay?" *Council on Foreign Relations*, March 13, 2023, https://www.cfr.org/article/funding-united-nations-whatimpact-do-us-contributions-have-un-agencies-and-programs.

<sup>2</sup> "Funding NATO," North Atlantic Treaty Organization, July 19, 2023, https://www.nato.int/cps/en/natohq/topics\_67655.htm.

<sup>3</sup> Select RAND Research on Security Cooperation: 2006–2019 (Santa Monica, CA: RAND, 2021), https://www.rand.org/pubs/ corporate\_pubs/CPA614-3.html.

<sup>4</sup>See, for example, Statement of General Steven J. Townsend, USA, Commander, U.S. Africa Command, *Investing in America's Security in Africa: A Continent of Growing Strategic Importance*, Testimony Before the Senate Armed Services Committee, 117<sup>th</sup> Cong., 2<sup>nd</sup> sess., March 15, 2022, https://www.armed-services.senate.gov/imo/media/doc/AFRICOM%20FY23%20Posture%20 Statement%20%20ISO%20SASC%2015%20 MAR%20Cleared.pdf.

<sup>5</sup> Department of Defense (DOD) Instruction 5132.14, Assessment, Monitoring, and Evaluation Policy for the Security Cooperation Enterprise (Washington, DC: DOD, January 13, 2017), https://open. defense.gov/portals/23/documents/ foreignasst/dodi\_513214\_on\_am&e.pdf.

<sup>6</sup> Christopher Paul et al., A Building Partner Capacity Assessment Framework: Tracking Inputs, Outputs, Outcomes, Disrupters, and Workarounds (Santa Monica, CA: RAND, 2015), xiii.

<sup>7</sup> National Defense Authorization Act for Fiscal Year 2017, Public Law 114-328, 114<sup>th</sup> Cong., 2<sup>nd</sup> sess., December 23, 2016, https://www.congress.gov/114/plaws/publ328/PLAW-114publ328.pdf.

<sup>8</sup> Hans-Otto Pörtner et al., ed., *Climate Change 2022: Impacts, Adaptation and Vulnerability*, Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge: Cambridge University Press, 2022), https://report.ipcc.ch/ar6/wg2/IPCC\_AR6\_WGII\_FullReport.pdf.

<sup>9</sup> USAFRICOM J2 Analysis, May 2021.

<sup>10</sup> Frangton Chiyemura, Wei Shen, and Yushi Chen, Scaling China's Green Energy Investment in Sub-Saharan Africa: Challenges and Prospects (Cape Town, South Africa: African Climate Foundation, November 2021), https://africanclimatefoundation.org/wpcontent/uploads/2021/11/800539-ACF-NRDC-Report.pdf.