



The Education, Training and Equipment for Tomorrow's Security







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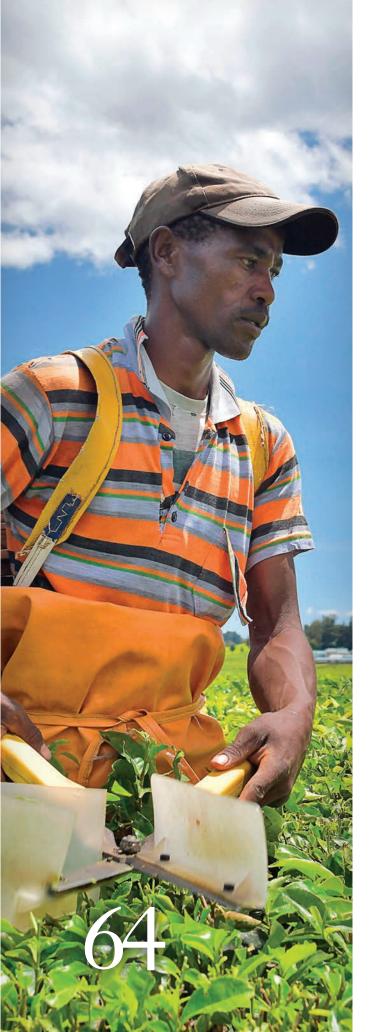
Forged in Fire: Nations Fight COVID-19 With Experience

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### ON THE COVER:

Soldiers engage in a range of capacity-building activities including anti-poaching, equipment upgrades, class work and field training.



f 2020 has taught Africa — and the world — anything, it's that it is crucial to be prepared for everything.

That means scanning the threat horizon and getting ready for what is

That means scanning the threat horizon and getting ready for what is coming next. It also means thinking about unseen possibilities and preparing for them. The year has shown that threats come in all shapes and sizes, seen and unseen. If those threats have one thing in common, it's that they require a coordinated response to ensure safety and security.

This year's threats also have taught something else: African nations have learned from their experiences to build effective institutions, capacity and knowledge to meet a range of security challenges. Nowhere is that more evident than in the continent's response to the coronavirus disease known as COVID-19.

With the lessons of the 2014-2016 West Africa Ebola crisis fresh in their minds, African health, political and security leaders are stepping up to meet the challenge of COVID-19.

Infrastructure left over from Ebola outbreaks and the fight against diseases such as tuberculosis and HIV/AIDS provided a framework for responses and testing in the Democratic Republic of the Congo, Liberia, Nigeria and South Africa. The African Union and regional economic communities also were early to sound the alarm about COVID-19's deadly potential.

In the midst of the worldwide pandemic, Africa has not been exempted from other ongoing threats. Wildlife poaching, which fuels a lucrative global trade, continues apace. But nations such as Kenya, South Africa, Tanzania and Zimbabwe have found success in using trained dogs to deter, track and apprehend poachers who stalk and butcher the continent's wildlife treasures.

In Africa's territorial waters, international fishing vessels from China, Russia and elsewhere have stolen untold quantities of fish on which artisanal fishermen depend. One tool, the international Port State Measures Agreement, is gaining support among African coastal nations and would limit or refuse port access to those vessels that fish against the rules. Port and other maritime authorities in Liberia and Sierra Leone trained separately on the provisions of the agreement in February 2020.

Perhaps most important, African security professionals continue to meet and exchange ideas and experiences in forums such as the African Land Forces Summit, held this year in Addis Ababa, Ethiopia, and in professional military education institutions. These arenas will help forge Africa's approach to the challenges of the future.

Hardships can't be prevented, but they can be faced. African nations are showing the willingness and capacity to confront challenges — together.

U.S. Africa Command Staff

A Nigerian Soldier checks a visitor's temperature at 68 Nigerian Army Reference Hospital at Yaba in Lagos.

AFP/GETTY IMAGES





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U.S. ARMY AFRICA



Africa today is a region of strategic importance. The global military

superpowers are expanding their presence on the continent. Terrorism, extremist groups, illicit traffickers, pirates, organized criminals and other nontraditional security actors are seeking to establish a foothold and are challenging our security environment.

The complex threats are diverse and have no boundaries. They cross borders and undermine regional and international security. Complicating these dynamics are climate change and the cries of all people for social and economic justice.

These challenges require bilateral and multilateral military cooperation, an understanding of the security environment,

and trust between military leaders.

Senior leader engagement is important in developing and maintaining trust among countries. As Ethiopian Prime Minister Dr. Abiy Ahmed said while accepting his 2019 Nobel Peace Prize, it is a saying shared in many African languages, "For you to have a peaceful night, your neighbor shall have a peaceful night as well."

The theme of this summit is "Tomorrow's security demands leadership today." The African Land Forces Summit will bring senior military leaders from all across the continent to discuss issues of common interest and use a collaborative approach to confront regional and continental security issues. This summit is an opportunity for the military leaders to explore the importance of developing the defense institutions of tomorrow to

train professional and accountable military leaders.

I hope our discussion will highlight the importance of collective efforts to realize our common goals of a safe, stable and prosperous African continent. It takes a few to make war, but it takes a village and a community of nations to build peace. As such it is important for African countries to work together in maintaining continental peace. Security threats don't have borders, and no country should stand alone against nontraditional security threats.

Security challenges of the African continent cannot be addressed only through using hard or military power. Governments must create synergy, convergence and teamwork across the economic development and security domain to benefit the African people.



### **Tunisian 'Robocop'** Enforces COVID-19 Lockdown AGENCE FRANCE-PRESSE

Tunisia's Interior Ministry deployed a police robot to patrol the streets of the capital and enforce a lockdown imposed in March 2020 to help the country battle the spread of COVID-19.

Known as PGuard, the "robocop" is remotely operated and equipped with infrared and thermal imaging cameras, in addition to a sound and light alarm system.

The robot's Tunisian creator, Anis Sahbani, said the machine first was produced in 2015 to carry out security patrols. It also operates autonomously through artificial intelligence.

The robot, built by Sahbani's Enova Robotics company, costs from \$100,000 to \$140,000 and has been selling mostly overseas to companies for security uses.

Several of the robots have been donated to the Interior Ministry.

The robocop deployed in Tunis has been a hit on social media with users posting footage of the machine in action in several parts of the capital.

It can be heard voicing recorded messages calling on citizens to "respect the law ... and stay at home to limit the spread [of the virus] and safeguard human lives."



### Again, Horses Trot Through Central African Republic

AGENCE FRANCE-PRESSE

A chestnut horse appears on a dusty Bangui street, trotting among the bashed-up cars, motorbike taxis and crumbling buildings. The rider is a well-known figure in the capital of the Central African Republic (CAR): Soumaila Zacharia Maidjida, nicknamed "Dida," is a former sprinter who set a national record for the 800 meters at the 1992 Barcelona Olympics.

He is one of a handful of horse riders in the CAR, a country whose poverty, climate and war make it one of the world's least equine-friendly environments.

"Everyone knows Dida," the rider said. "When ministers and bosses want to go out on a horse, it's me they come to."

Dida dreams of setting up a horse center but admits the vision is far away. He works as a guard to help feed

Horses have a troubled history in the CAR, a landlocked country that gained independence from France in 1960. Many people here associate horses with marauders who cross the border on horseback from Chad or Sudan. Older citizens, though, remember Jean-Bedel Bokassa, a horseloving despot who in 1977 had himself crowned emperor.

Bokassa had a bronze and gold carriage shipped from France to parade around Bangui. On one tragic occasion, two of the horses died of heatstroke under the pitiless tropical sun. Bokassa imported hundreds of horses during his time and even set up a cavalry.

As a child, Dida watched the displays and became excited by the idea of riding a horse.

Bangui had two well-regarded equestrian centers — one was for "high society," essentially French emigres, and the other was for the public.



Soumaila Zacharia Maidjida, who goes by the nickname "Dida," rides through Bangui, Central African Republic. AFP/GETTY IMAGES

In 1996, the halcyon days of the horse in the CAR came to a terrible end. The army mutinied, triggering a cycle of violence and instability from which the country has never recovered. Bangui's two equestrian centers were abandoned, and the horses were stolen, sold abroad or ended up in market stalls.

Dida managed to save a few of the animals, and today, despite the militia groups who control two-thirds of the country, he still makes the drive to the Chadian border to bring back horses to Bangui.

"Horses are what I live for - I can't do without them," he said.

# Drones to be Tested in Battle Against Locust Swarms

THOMSON REUTERS FOUNDATION

he United Nations is testing drones equipped with mapping sensors and atomizers to spray pesticides in parts of East Africa battling an invasion of desert locusts. Hundreds of millions of the voracious insects have swept across Ethiopia, Kenya and Somalia in what the U.N. has called the worst outbreak in a quarter century. Djibouti, Eritrea and Uganda also have been affected.

The insects, which can travel up to 150 kilometers a day, threaten to increase food shortages in a region where up to 25 million people are reeling from three consecutive years of droughts and floods, aid agencies say.

In February 2020, Keith Cressman, senior locust forecasting officer at the U.N. Food and Agriculture Organization, said prototypes would be tested that can detect swarms via special sensors and adapt their speed and height accordingly.

"Nobody's ever done this with desert locusts before," Cressman said. "So we have no proven methodology for using drones for spraying on locusts. There are already small atomizer sprayers made for drones. But with locusts, we just don't know how high and how fast to fly."

Kenyan officials say drones could play an important role in providing early warning when locust swarms arrive in an area.

"Every county wants an aircraft, but we only have five at the moment, and they can only be in one location at one time," said David Mwangi, head of plant protection at Kenya's Ministry of Agriculture. "We have not used drones before, but I think it's worth testing them as they could help."



Samburu men attempt to fend off a swarm of desert locusts in Kenya.  $\mbox{\scriptsize REUTERS}$ 



### Sierra Leonean Gangster Leaves Streets for Poetry

REUTERS

In his poem *Rough Path*, Yousef Kamara reflects on his years selling drugs and stealing as the leader of a street gang in Sierra Leone's capital, Freetown.

"Like a traveller in a rough jungle/Self propelling all alone/Edging through danger sharper than blades/My rough path is a cracked zone," he writes. Yousef Kamara holds his daughter, Stylvia, in front of their house in Freetown, Sierra Leone. REUTERS

After quitting the gang three years ago, Kamara now hopes his journey to acclaim as a poet can offer an example to other young people in Freetown, where increasing numbers are joining gangs.

Kamara has been published in several international poetry magazines and was invited in 2019 to attend the African Writers Conference in Kenya.

It is a dramatic turnaround for someone who spent the majority of his life leading Giverdam Gaza, a gang of several dozen members he founded as a teenager on Freetown's Exodus Lane.

"If you were looking for some thugs ... to beat somebody up, you'd just rush down Exodus Lane and get the Giverdam boys to do the job," Kamara said.

As he grew tired of life on the streets, he found an exit through Way Out, a media studio founded by an English filmmaker in 2008 that encourages underprivileged young people to enter the arts. Kamara decided to try his hand writing poems after seeing some of his friends enroll in a poetry course. He quickly took to it, tapping out verses on his beat-up cellphone.

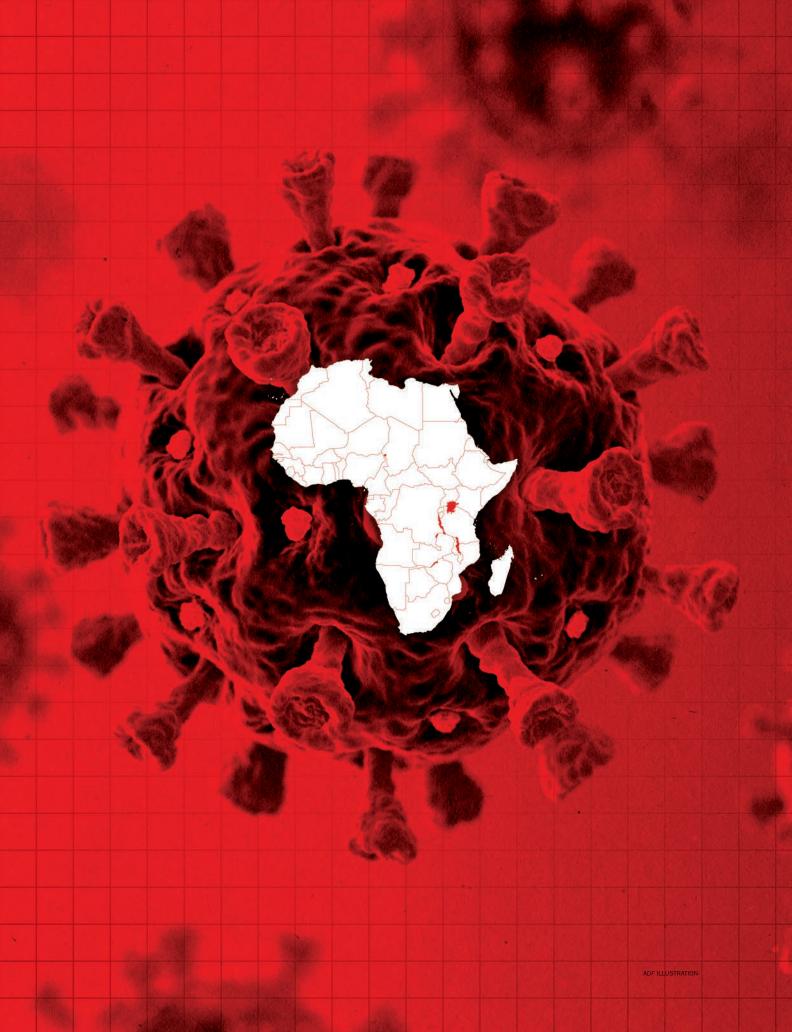
"You need to give people ... something they can take back to their communities and say, 'I'm not the bad guy you used to know,'" said Way Out's office manager Gibrilla Kamara, who is not related to Yousef.

Kamara said he would like to establish his own organization to help vulnerable young people build self-esteem and shift "from crime to career."

The challenge is pressing. Across Sierra Leone, dire economic conditions, including runaway unemployment, have led many born after the country's 1991-2002 civil war to join gangs, researchers say.

Kamara thinks poetry can be a powerful tool in combating that trend by forcing young people to be honest with themselves.

"When writing a poem, if you can be sincere with what you've seen, what you feel, what you've heard, you'll never need to fabricate any story," he said.



### African Nations' Experiences in Past Pandemics Help Them Face the COVID-19 Threat

ADF STAFF

s a frightening new respiratory illness flared in western China and eventually made its way into Europe, Africa was dealing with several other infectious disease outbreaks.

In the Democratic Republic of the Congo (DRC), workers were trying to quell a stubborn Ebola epidemic in the east of the nation that began in August 2018. In January 2019, a measles outbreak hit the DRC, infecting more than 300,000 people by mid-March 2020. In Nigeria, health officials were facing their largest-ever outbreak of Lassa fever, a seasonal illness carried by rats and spread through their waste.

All of this happened as the continent dealt with seasonal cholera outbreaks and the ever-present malaria, yellow fever and tuberculosis threats. Southern Africa continued to deal with the profound HIV/AIDS problem, which has been a health concern there for decades. The shadow of the West African Ebola outbreak of 2014-2016, which killed more than 11,000 in Guinea, Liberia and Sierra Leone, still haunted the continent.

It was into this context that SARS-CoV-2, the coronavirus that causes COVID-19, slipped into Egypt and then Algeria. Sub-Saharan Africa's first case emerged in Nigeria after an Italian man arrived in Lagos from Milan on February 24, 2020, without symptoms, France 24 reported. Four days later he was in quarantine in a Yaba hospital.

COVID-19's high infection rate, combined with the lack of a vaccine or effective medicinal treatment and low health care capacity, raised the specter of catastrophe on the continent of 1.2 billion people. By early May 2020, Africa had logged 54,027 cases of COVID-19 in 53 countries, and 2,074 had died.

Once more, a deadly disease was on Africa's doorstep. But as nations braced for the worst, health workers, government officials and security personnel displayed significant knowledge, ingenuity and foresight. Experience and resilience would be their greatest weapons.

### NIGERIA SPRINGS INTO ACTION

When the West African Ebola outbreak of 2014 began, some — including the World Health Organization (WHO) — were criticized for their sluggish responses. Nigeria, however, was not one of them.

Although not at the epicenter of the outbreak, Ebola did seep into the densely populated nation on July 20, 2014, according to *Scientific American*. Within a few weeks, 19 people contracted the disease. The ingredients for disaster were there, but Nigerian health officials responded with three key tactics:

- Fast and thorough tracing of all potential contacts.
- Sustained monitoring of those contacts.
- Rapid isolation for those potentially infected.

The actions stopped the deadly virus in its tracks, limiting cases nationwide to just 20.

Ebola is many times deadlier than COVID-19;



Algerian paramedics wear protective outfits at El-Kettar Hospital's special unit to treat COVID-19 patients. Algeria was the second African nation to record a case of the virus. AFP/GETTY IMAGES

its death rate approached 50% in the West African pandemic, but it is harder to transmit from person to person. It requires direct contact with body fluids such as blood, feces, and other secretions and tissues. Certain traditional funeral practices were found to be a common mode of transmission.

COVID-19 spreads much more easily. People need only shake hands with an infected person or come in contact with a surface the person touched and then touch their face to introduce the pathogen into the body. The virus also can be breathed in via water droplets released during coughs and sneezes. Because it is less deadly, and because so many people never show symptoms, COVID-19 travels much faster and wider than does Ebola. This also makes it far more likely to overwhelm health systems, even in highly developed nations.



Dr. Chikwe Ihekweazu, director general of the Nigeria Centre for Disease Control REUTERS

In 2018, Nigeria fully activated the Nigeria Centre for Disease Control (NCDC) and set up a network of laboratories across the country that could rapidly identify disease cases, according to *The Scientist*. Since the COVID-19 outbreak, the NCDC has undertaken aggressive public engagement campaigns to encourage safe and sanitary practices.

Nigeria's increased capacity was validated after its first COVID-19 case. Health workers took, tested and analyzed samples from the Italian traveler who brought the virus to the nation. Technicians sequenced the genome for those samples at the African Center of Excellence for Genomics of Infectious Diseases at Redeemer's University. It was the first analysis of SARS-CoV-2 in Africa.

The achievement marks Nigeria's ability to contribute to important disease genomics research and infection progression in real time, said Chikwe Ihekweazu, director general of the NCDC. It also shows that nations have invested in diagnostic capacity.

"Whether the tool is used for disease outbreaks or routine surveillance, we now have the capacity to perform in-country sequencing, which has traditionally been done through collaborations with laboratories outside the countries," Ihekweazu told *The Scientist*.

Nigeria also has been aggressive in screening incoming passengers at airports and through door-to-door home visits to halt the advance of COVID-19. The WHO has provided coordination and technical help for personnel at the arrival terminals of Murtala Muhammed International Airport in Lagos.

In mid-March, passenger monitoring included self-reporting forms and temperature checks. A nurse also watched passengers for any visible signs of illness. People with such signs or reports of illness or exposure were directed to undergo additional screening.

On April 10, Nigeria dispatched health workers to homes and health care facilities in Lagos, a city of 21 million, to conduct electronic surveys about COVID-19 symptoms. "This is in a bid to intensify our search for possible cases of COVID-19 in different communities across the state," Lagos State Commissioner for Health Akin Abayomi told Radio France Internationale.

In the midst of these disease surveillance efforts, Nigeria and other countries also were employing one of the most important weapons used in the Ebola outbreak: contact tracing. This technique is essential to any major communicable disease outbreak. The initial sick person is isolated and treated, and any people who may have been around him or her are tracked down and tested for symptoms. Contacts without symptoms are monitored until the incubation period has passed. If they have symptoms, they are isolated and treated, then their contacts are traced, and so on.

It is important to keep COVID-19 patients isolated from others receiving medical treatment when possible. Nigeria set up separate isolation clinics early on to keep from swamping its health system as cases increased, according to a paper by the Africa Center for Strategic Studies (ACSS). The same model is in place in about 20 countries.

Nations are showing that they have learned from Ebola and other disease outbreaks, the ACSS paper said. Nations that set up isolation centers during the 2014 and DRC Ebola outbreaks are reopening them to separate COVID-19 patients from regular health care centers. The previous experiences also have reinforced the need to focus on preventive measures over therapeutic treatments.

### SOUTH AFRICA LEADS IN TESTING

In South Africa, years of treating and tracking tuberculosis and HIV have left health officials with the knowledge and infrastructure to test on a large scale.



A Somali woman sells fruit to a customer standing in a circle to help guide social distancing at a Mogadishu market. REUTERS

Experts see extensive testing as a way to track the spread of the virus while making sure infected people are isolated and treated, and their contacts are checked. South Africa responded to this need by deploying mobile testing units and screening centers in its most densely populated townships, where up to 25% of the nation's 57 million people live, The Associated Press (AP) reported.

"We have testing infrastructure, testing history and expertise that is unprecedented in the world. It is an opportunity that we cannot afford to squander."

~ FRANCOIS VENTER, Wits Reproductive Health and HIV Institute at the University of the Witwatersrand

Dense populations, a common condition in many of Africa's urban townships, present a challenge. Social distancing, a crucial tactic in the fight against COVID-19, is virtually impossible in these areas. Large families often share a single room, and homes are close together. Hand-washing also is a problem when

sometimes hundreds of people are forced to share a single tap. All these conditions make testing crucial.

"These are areas where there are high concentrations of people with HIV and TB who are at risk for severe symptoms," Durban virologist Denis Chopera, executive manager of the Sub-Saharan African Network for TB/HIV Research Excellence, told the AP. "These are areas that can quickly become hot spots."

South Africa was expecting to conduct 30,000 COVID-19 tests per day by the end of April 2020. That would rank it among the best in Africa.

"We have testing infrastructure, testing history and expertise that is unprecedented in the world," Francois Venter of the Wits Reproductive Health and HIV Institute at the University of the Witwatersrand told the AP. "It is an opportunity that we cannot afford to squander."

South Africa has long used a TB test that produces results in a couple of hours. That system, which extracts genetic material to get results, led to the development of a COVID-19 test, the AP reported. The nation was expected to begin using them in the spring. It is much faster than conventional swab tests.

"This will dramatically shorten our testing time, and the smaller machines can be placed in mobile vehicles, which are ideal for community testing," Dr. Kamy Chetty, CEO of the National Health Laboratory Service, told the AP.



A Kenyan Red Cross worker delivers hand disinfectant in one of Nairobi's poor neighborhoods to curb the spread of COVID-19. Social distancing is difficult in such areas, and clean water for washing can be scarce. APP/GETTY IMAGES

### WEST AFRICA'S NEW CHALLENGE

Ebola left a lasting impression on Guinea, Liberia and Sierra Leone. All three countries were unprepared for the deadly virus, and their ability to respond relied heavily on help from other nations in Africa and elsewhere. However, when news of COVID-19 spread, the region's strong connections to China prompted it to respond early and with a wealth of foresight and experience.

Dr. Mosoka Fallah, a veteran of the 2014 pandemic and head of its National Public Health Institute, which was established in Ebola's wake, led Liberia's preparation strategy for COVID-19. He saw the potential danger almost immediately, learning that more than 300 Chinese citizens had arrived in Liberia from China, as had 80 Liberians. He began to communicate with counterparts in Sierra Leone and Guinea on a WhatsApp group, *Time* magazine reported. They talked about airport screenings, potential flight bans and quarantines. That was in January 2020, when many countries still had not realized the potential threat of the new virus.

By the end of January, Fallah was working with Dr. Jerry Brown, who ran one of Liberia's largest Ebola treatment centers. They worked to set up training to help hospital personnel recognize COVID-19 symptoms, *Time* reported. The WHO helped them buy test

kits, and they had a staffer trained on how to test for the virus. That allowed Liberia to do all COVID-19 testing in country, a capacity not possible during the Ebola crisis. Fallah also brought back hand-washing stations that were everywhere during the Ebola outbreak.

Liberia confirmed its first case on March 16, 2020. A week later, officials declared a public health emergency and asked the United Nations Population Fund (UNFPA) for help. Officials urgently recruited contact tracers and trained and deployed them.

"It is not easy to work as a contract tracer, especially when there is still a high level of denial and stigmatization at the level of the community," said tracer Octavius Koon.

Given the low capacity in the health care sector at the time of the Ebola outbreak, affected nations learned that robust communication was necessary to avoid the spread of misinformation. Rumors could quickly get out of control and turn populations against those fighting the disease.

To combat mistrust during the COVID-19 pandemic, UNFPA recruits contact tracers from the most affected areas and deploys them within their communities.

The country learned a hard lesson in the Ebola outbreak about the importance of building trust among citizens. "The precipitous drop in infections

came through behavioral change by the general public," Gyude Moore, a former advisor to then-President Ellen Johnson-Sirleaf, told the ACSS. "And that only happened once community engagement and trust were made a central part of the response."

### THE ROLE OF SECURITY FORCES

Part of building and maintaining trust among civilians is by making sure that government representatives — particularly security forces — behave in ways that respect peoples' rights and follow the rule of law. West African nations learned during the Ebola crisis that great care must be taken in deploying police and military forces in support of a pandemic response. In the past, government officials have deployed security forces in the service of their own regimes without concern for civil rights. That history can make the optics of armed Soldiers enforcing quarantines troublesome for civilians.

Navigating the delicate balance of safety and civil obedience can be difficult for forces typically trained only for battlefield duties. John Siko, director of Dubai-based security consultancy Burnham Global, told Voice of America (VOA) that most African militaries are not trained to maintain "public order."

"With the necessary support, we will be able to build on what we have. We will be able to bolster health infrastructure and health systems on the continent.
... We will be able to turn the tide against this pandemic, country by country."

 $\sim$  CYRIL RAMAPHOSA, president of South Africa

Some forces on the continent, such as those with extensive peacekeeping experience, build mock villages and use paid actors to test the response of Soldiers before deployment. "There's a great deal of desire and necessity for public order training to make sure that guys can respond in a human rights-respective manner when this does happen," Siko told VOA.

In South Africa, the nation with the most COVID-19 cases on the continent, a lockdown was largely successful, but some Soldiers and police have been accused of using excessive force. In March, 2,820 Soldiers were deployed for the lockdown. By the third week of April, President Cyril Ramaphosa had announced he would deploy an additional 73,180

troops to enforce the order until June 26, according to The Defense Post.

In early May, gun-toting Soldiers were patrolling South Africa's streets and stores, stopping citizens who were out and about without face masks.



A health worker checks a traveler's temperature at Kotoka International Airport in Accra, Ghana, in January 2020. REUTERS

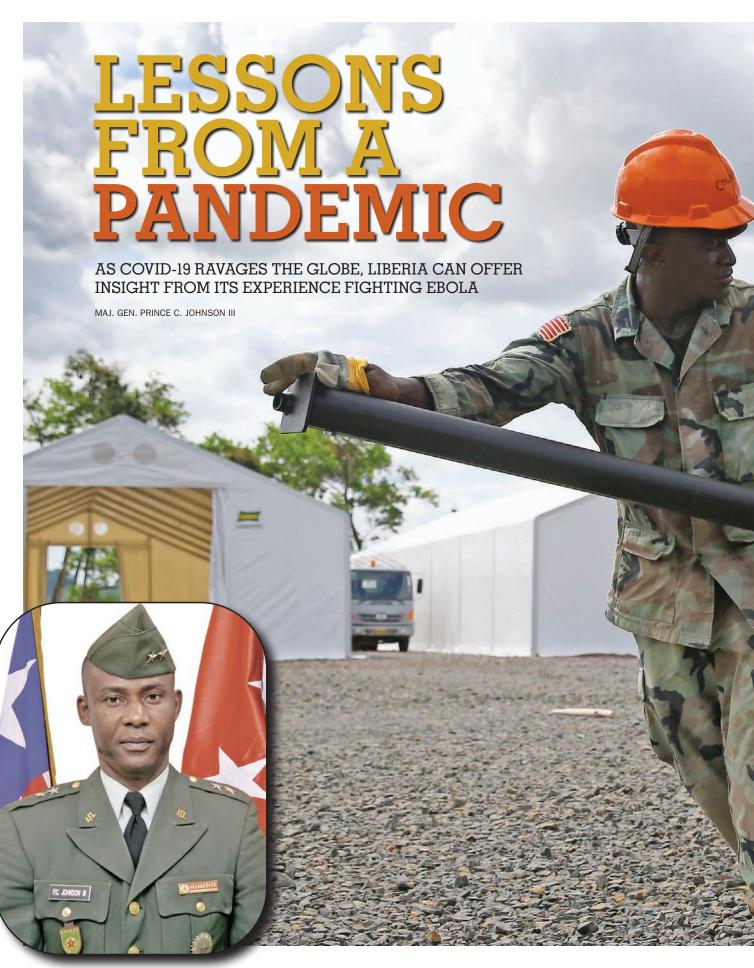
With that kind of military presence, it is essential that Soldiers show restraint and respect for human rights. Their failure to do so actually can reduce the chances that sick people will seek help, wrote Dr. Shannon Smith, professor of practice and director of engagement at the ACSS. Security forces should be deployed with care, ideally under the guidance of health workers.

Social pressure is more likely to encourage civilians to adhere to social distancing and other pandemic requirements, wrote Dr. Mark Duerksen, research associate at the ACSS.

"Military and police forces would be better used to secure places like testing centers, hospitals, and health care workers if needed," Duerksen wrote in an April 9, 2020, ACSS paper. "Additionally, police may be deployed to protect women and children who are facing increased domestic violence while confined at home."

South Africa's Ramaphosa has asked South African troops working the pandemic to be "a force of kindness." In an article he wrote for *Time* in April 2020, Ramaphosa said Africa is united, proven under the fire of disease outbreaks, and full of world-class scientists and researchers.

"With the necessary support, we will be able to build on what we have," Ramaphosa wrote. "We will be able to bolster health infrastructure and health systems on the continent. We will be able to cushion our populations from the inevitable economic fallout, and we will be able to turn the tide against this pandemic, country by country."





s the world faces an invisible enemy, the coronavirus that causes COVID-19, it might be helpful to revisit Liberia's experience during the 2014-2016 outbreak of the Ebola virus. Although we made mistakes and suffered setbacks, we also learned quite a bit about the military's proper role in fighting an epidemic. Ultimately, I believe, the efforts by the Armed Forces of Liberia (AFL) and its international partners helped slow the spread of the virus and saved lives. I am confident that the lessons we learned will leave us better positioned to face future outbreaks. As such, I would like to share some of these lessons with allies across the continent and the globe.

Ebola emerged in a densely forested area of Guinea in late 2013. By the following August, it had spread to at least three nearby countries, and the death toll had surpassed 900 with 232 having died in Liberia. The crisis surpassed the capabilities of the Liberian police and other regional security forces. On August 7, 2014, then-President Ellen Johnson Sirleaf declared a 90-day state of emergency. Under section 2.3 of Liberia's National Defence Act, this meant the AFL was tasked with providing "command, control, logistical, medical, transportation and humanitarian support to the civil authority" to combat the disaster.

But questions remained. What exactly did this mean, and were we prepared? For context, the AFL had been rebuilt from the ground up after a 15-year civil war. Under the supervision of the United States and two security companies, about 2,000 AFL Soldiers were recruited, vetted, trained and equipped. The Economic Community of West African States provided mentorship, and the new AFL was born in 2006. By 2014, we were still finding our footing. We shared security responsibilities with the United Nations, and the AFL's only missions had been to deploy to the Ivoirian border in 2012 and contribute troops to the U.N. mission in Mali beginning in 2013.

Furthermore, the entire medical corps consisted of one platoon-size unit. The fight against Ebola was unlike anything we had ever seen. We were tasked with providing security for the nation's health practitioners and institutions so they could carry out their life-saving work. We also were asked to restrict the movement of people in five northwest Liberian counties (Lofa, Gbarpolu, Montserrado, Bomi and Grand Cape Mount), a combined population of about 2 million.

### **OPERATION WHITE SHIELD**

The mission that took shape was known as Operation White Shield with duties including:

- Enforcing the quarantine and curfew.
- Staffing checkpoints near the border and on major roads and taking temperatures of civilians.
- Providing security escorts for burial teams in hostile areas.

• Transporting key logistical items to places in difficult terrain.

Of all these tasks, perhaps the most difficult was providing a security escort for burial teams. That was a challenge because some people did not want to accept the fact that to stop the disease from spreading, their loved ones needed to be buried in areas far from their homes.

This issue of culture had come to the forefront. Humanitarian organizations and international nongovernmental organizations could not convince community members that this was the best way to control the



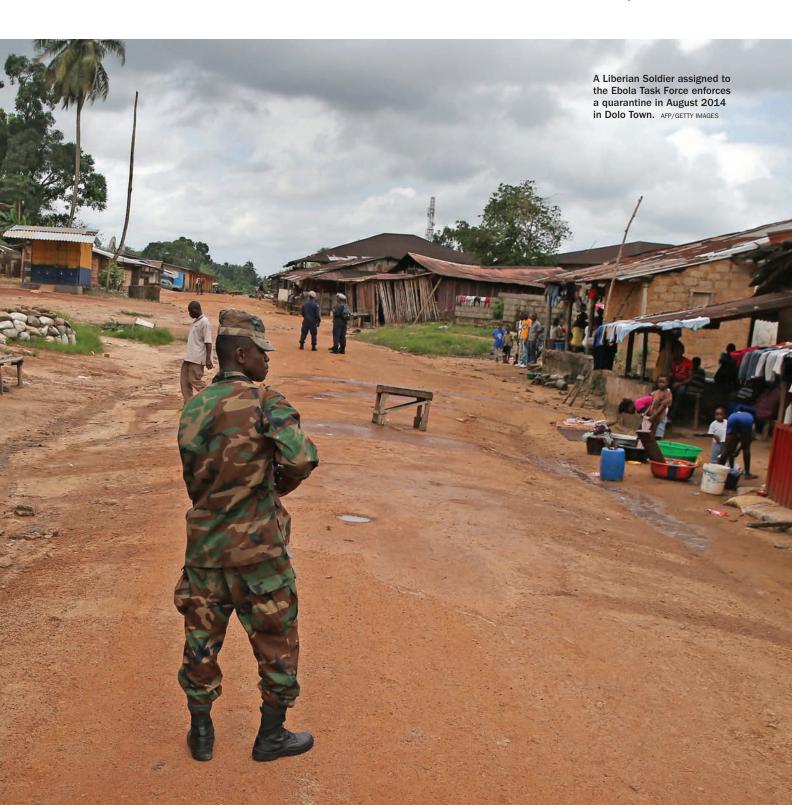
spread. In Liberia, we were unfamiliar with the practice of burning bodies and we, AFL Soldiers, had to explain it to people and tell them that they had to change their cultural practices to control the virus. People were frustrated that their loved ones who died were taken from them forcibly. In some religions, people perform ritual cleansing on the dead, but they were denied these opportunities. We encountered serious resistance.

We learned that when trying to control an outbreak, culture is as important as tactics since diseases spread as a result of human behavior.

### OPERATION UNITED ASSISTANCE/UNITED SHIELD

In September 2014, our president appealed for help from the international community. The first military to join the AFL was the U.S. Army through the 101st Airborne Division. It deployed Operation United Assistance. Now we had two military operations operating in one country. We quickly saw the importance of good leadership.

When the 101st came, the advance team was headed by U.S. Army Maj. Gen. Darryl Williams. He came with aircraft, and he came with supplies to build the Ebola treatment units (ETUs) that we so badly needed. But



when he got into the country, his first stop was to go to the AFL commander's office and ask, "What do you have, and what do you need?" He didn't say: "We will use our tools" or "We'll make the plan." He looked to us for input. This is the model for leadership. The host nation rightly plays an important role in addressing a humanitarian crisis and determining how to stop the spread of a deadly disease. Gen. Williams recognized this from the beginning.

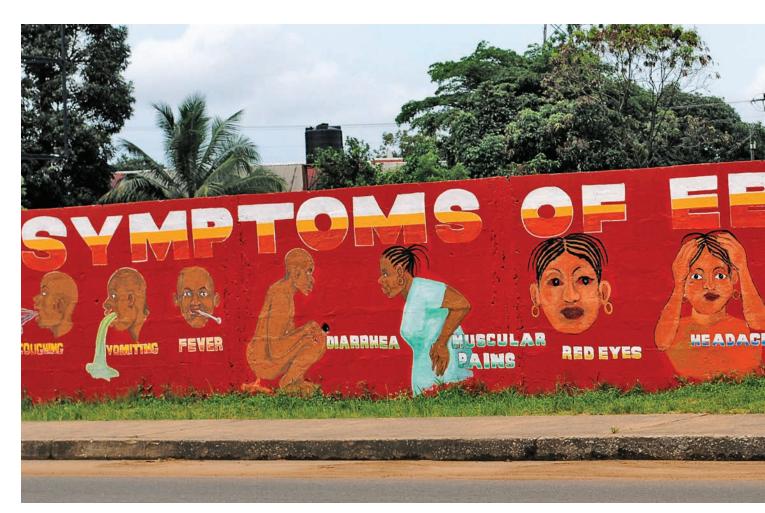
We combined our resources, and we came up with our own model. And that was reflected in the new name of the joint effort. We took the term "United" from the U.S. mission and "Shield" from the Liberian mission to create "Operation United Shield."

Gen. Williams had a specific mandate to construct 17 ETUs, since at the time there was only one ETU in the country, in Montserrado County. The other 14 counties of Liberia did not have ETUs, so people, unable to travel, fell victim to the disease and died without receiving specialized treatment.

When we discussed this with Gen. Williams, we decided to reduce the number and build 10 ETUs and lower the capacity of each from the planned 100 beds to 50 beds. This was the best plan to put Liberians in

As commanders, we always need to be monitoring and preparing because we don't know where a pandemic is going to come next. Our ability to handle future challenges depends on leadership today."

- Maj. Gen. Prince C. Johnson III

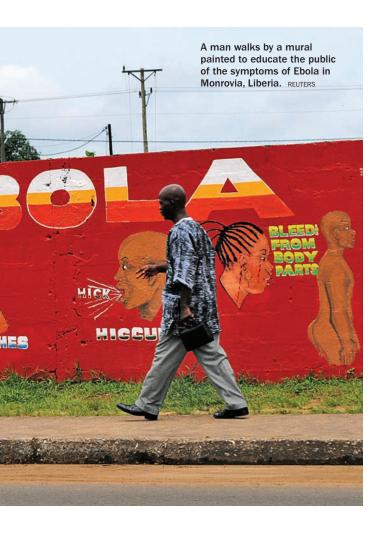


the position to support and manage the ETUs once they were complete. We managed to construct three ETUs in a short time, which started to reduce the issue of victims having nowhere to go. By October 2014, we had a higher number of available beds than new cases.

We also collaborated with the U.S. to offer simulation training to our medics and some infantry men to know the best approach when encountering a victim. The training included how to identify symptoms of Ebola and how to properly use personal protective equipment (PPE). The U.S. partnered with Liberians to develop a train-the-trainer program so students who took the course could teach others.

We established a structure for sustaining forward deployed troops and health-care workers, ensuring a continuous flow of personnel and equipment to the hardest-hit areas. This logistics support plan relied on U.S. rotary-wing airlift capacity and Liberian ground transport.

In a matter of weeks, testing centers were added, which decreased the time required to confirm a case from two or three days to several hours. Patients were being tested at mobile centers and moved to ETUs immediately to decrease the time they could spread the disease. By the first week of 2015 there was a 60% reduction in new cases compared to the worst periods the previous August.



### LESSONS LEARNED

**Regional Partnerships:** In 2014, we were reminded very quickly that we live in a global village. You must watch what happens to your neighbor to protect yourself. We did, and we are here today because of it. Partnerships can mitigate a lot of challenges in our region. Bilateral relationships between political, military and civilian leaders of neighboring countries make sharing information and coordinating a response easier. The nations of Liberia, Guinea and Sierra Leone learned that, and I believe regional partnerships are stronger today than ever.

**Networking:** The issue of trust within a country is difficult, but you can't wait to build trust during a conflict or crisis. You must start building trust among yourselves in advance. The civilian leaders in the public and private sector concerned with emergency response, medicine, humanitarian aid, testing and production of PPE must have a trust-based relationship before an outbreak occurs.

**Education:** Public education proved vital to the security situation in Liberia. As the public learned more about how the virus spread and why certain things, including quarantines, were necessary, it became easier to protect them.

**Training:** Due to the crisis, the AFL was responsible for maintaining public order in some locations, something that is typically a police responsibility. It is important that Soldiers are trained and prepared to handle issues such as crowd control in which patience, restraint and avoiding the use of force are key components.

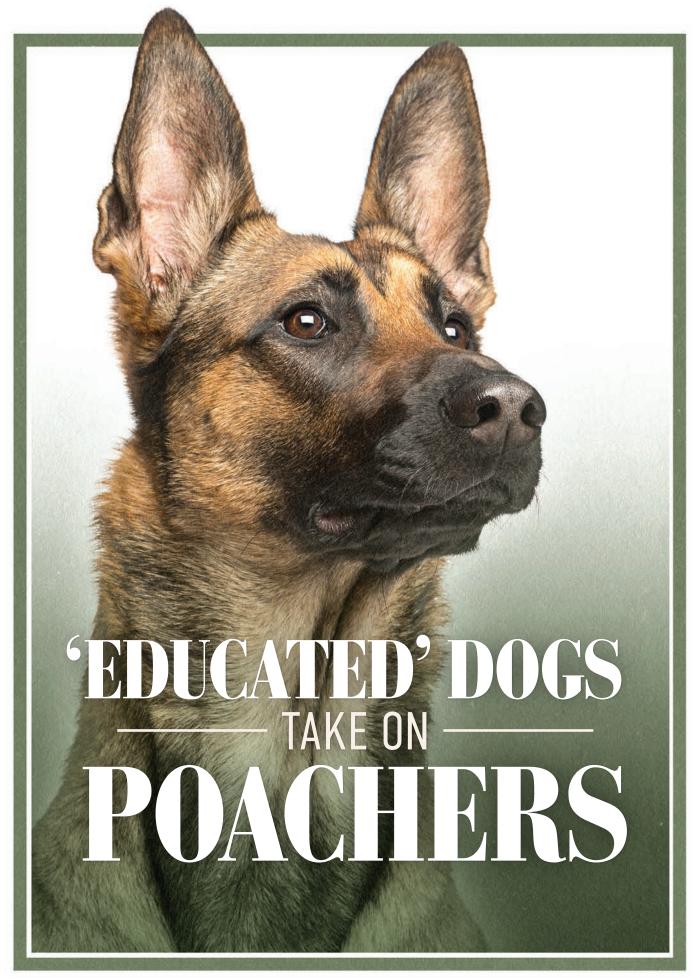
**Local Ownership:** When the U.S. came, Gen. Williams had a clear message: "I'm not going to take charge. You are the face of this." That was significant for us to hear. To have Liberians take ownership of the problem and take the lead in stopping the spread made success attainable.

### **FUTURE CHALLENGES**

This virus affected more than 28,000 people in our region. Of those, more than 11,000 died. In Liberia we had close to 5,000 deaths. Having lived through this, I know what it takes to respond. During my command, I had to make difficult decisions such as telling a junior officer he was not allowed to visit his mother as she was dying from the disease. I ordered him to remain in quarantine. These decisions are heartbreaking, but discipline is essential to stop the spread of the virus. Any leniency in quarantine can lead to a new wave of cases. Looking forward, I'm not scared, but I am concerned about COVID-19 and the threat of future pandemics. I've started planning already. As commanders, we always need to be monitoring and preparing because we don't know where a pandemic is going to come next. Our ability to handle future challenges depends on leadership today. 

□

Maj. Gen. Johnson has served in the Armed Forces of Liberia for more than 11 years and, since 2018, has been chief of staff. He has studied at several military schools including the U.S. Army Command and General Staff College in Fort Leavenworth, Kansas. He holds a master's degree in peace studies from the Kofi Annan Institute for Conflict Transformation, University of Liberia.



### Highly Trained Dogs Are Tracking Down Contraband, Protecting Wildlife and Saving Lives

ADF STAFF

As poachers go high-tech with helicopters, animal sedatives and high-powered rifles, the men and women protecting endangered wildlife are going old school with dogs.

Conservation authorities in Zimbabwe and South Africa say that poachers now fly in helicopters over game parks to identify rhinos and, while airborne, shoot drugs at the animals to sedate them.

Once targeted animals become weakened, the rustlers land and brutally cut off their horns with chainsaws. There are no mercy killings here; the animals are left to bleed to death. To put them out of their misery would be to attract vultures, which would, in turn, alert authorities.

The scope of the problem is devastating. For instance, Kruger National Park in South Africa spends \$13.5 million annually on anti-poaching efforts. It has the most highly trained and dedicated anti-poaching

force in Africa. The conservation news service MongaBay reports that the park has been divided into 22 sections, each with its own section ranger and a team of field rangers. The rangers have helicopter support and the South African National Defence Force to help. Yet with all this money spent and all the effort, hundreds of rhinos are still poached each year in Kruger. Although the number has decreased in recent years, it is partly because there are fewer and fewer rhinos left to poach, with their numbers having declined in Kruger since 2011.

As wildlife officials look for new ways to protect rhinos, elephants and other animals from poachers, they are increasingly relying on highly trained dogs — "dogs with master's degrees," as some have called them.

Continued on pg. 23

One dog is able to secure the same area as seven rangers, according to Animals Saving Animals. AFP/GETTY IMAGES



# THESE ARE TOUGH DOGS'



There have been almost 400 seizures of illegal wildlife products since the Canines for Conversation program, funded by the African Wildlife Foundation, started in 2011. Canines for Conservation Director Will Powell, who lives in Tanzania, spoke with ADF about his organization's dogs.

### ADF: What kinds of dogs do you use to detect poachers and smuggled goods?

**Powell:** We have 50 detection dogs. There are three types. There are detection dogs, which are used at airport checkpoints and borders. Tracking dogs are used in the bush. And there are assault dogs, which we don't use.

Our approach to tracking poachers isn't to get the dogs all fired up, then catch the bad guy and bite him. These dogs quite often overheat. Our trainers are taught to be much more relaxed. They can keep the dogs tracking all day. During the tracking, give the dogs some rest and some water. If you see some shade, and it's not time to rest, rest them anyway.

If you have a rhino poacher in north Kenya or South Africa, it's a race — it's a mad-dash race for the poacher to get the hell out of there. Sometimes it's a bit too late to catch the poacher, but you get the message out that the risk of getting caught is much higher because of the dogs. In the Serengeti (National Park), we've had dogs for eight years. In the last six years, no elephants have been killed. If you poach anything, you'll be followed home and caught.

### ADF: What breeds of dogs do you use?

**Powell:** We use several types of dogs — Malinois and some GSDs (German shepherd dogs), German shorthaired pointers, Hanoverian hounds.

We have a dog that tracked a poacher's trail that was 6 1/2 days old. It's almost impossible when a trail is that old. When the team found the poacher, he thought it was witchcraft. He'd killed an elephant and hidden the tusk in a neighbor's yard, under some manure. The dog still picked

up the scent and recovered the ivory. It was a German shepherd — they have a thought process. You can have a conversation with a German shepherd.

ADF: A news report said that even though these dogs are not trained to sniff out poached turtles, a dog found some anyway.

**Powell:** When they smell large biological odors, they will have a change of behavior. A dog smelled something, so his handler checked out the bag [a traveler was carrying]. They sniff out things they weren't trained to find — tortoises, coral, timber.

We've got a problem with bush meat trade in Serengeti National Park. Wildebeests and Zebra are killed there every day.

### ADF: Where do you get your dogs?

**Powell:** We select our dogs in Europe. The dogs have come from Holland, the Czech Republic, France, Belgium, Hungary, Poland. When we select them, I joke that they already have a bachelor's degree before we train them.

Proper selection of the right dogs is part of the trick. We start them off with a Kong, which is a standard dog toy. It's a great tool for teaching dogs how to track. They have to love the Kong. I'll hide the toy in different places. We do environment tests, seeing how they do in different places.

After we get them, we train them for two or three months before they get handlers. After that, they get eight to 10 weeks of training. Our dogs are social but independent. They live in kennels.

It's not set in stone that a particular handler will handle

that particular dog. We have dogs here who can be handled by any handlers. We're choosing dogs which are handlerproof. And we teach the handlers to love the dogs.

We teach the handlers love, care and affection. We try to get dogs who are not too needy, but also dogs who are not too aggressive.

The tracking dogs in the Serengeti are kept in kennels that are tsetse fly-proof. We put out tsetse fly targets; the

Opposite: Canines for Conservation Director Will Powell works with a dog.

AFRICAN WILDLIFE FOUNDATION

flies are attracted to dark blue. Our targets are impregnated with insecticide.

Tsetse fly bites can cause sleeping sickness. The biggest threats to our dogs

are tsetse flies and the heat. Dogs are more easily affected by tsetse flies than are humans. As far as tsetse flies go, dogs are the canaries in the mines. These are tough dogs; they've been in the field their whole lives.

Our handlers take the dogs for walks and will groom the dogs and make health checks. We've had two dogs retired after seven years in the field, and they were never bitten by tsetse flies.

The Masaai handlers in Tanzania will stop and rest their dogs whenever they find shade, even before a rest is needed. It's best to refresh the batteries before they run flat.

One day we had a dog track a poacher for eight hours alongside a river. Then we brought in a second dog. The second dog had a two-minute track before we caught up with the poacher.

One of our dogs, Jerry, is 14 years old. He worked as a tracker for eight years. He's retired to a nice house and a nice family in Arusha. Life for these dogs can be pretty good in retirement. Hanging out on a white beach in Tanzania isn't bad.

There are some risks for the handlers. We don't want them to be identified. Their faces are hidden, and they ride in blacked-out vehicles. If they are too successful, they are at risk.

People question the efficacy of teams that don't make finds on a regular basis. That's not the case. Since our dogs have been at the Mozambique airport [in Maputo], the word on the street has been that you can't transport anything illegal through the airport because the dogs will catch you. Don't go there! It's a prophylactic effect — we don't seize anything because the dogs have convinced everyone that they will get caught.

ADF: Talk a little about what it's like in the field.

Powell: When you're a poacher in the field, you can get tracked all the way back to your home by our dogs. We scoop up the dirt of the footprint. If we lose the track, we use common sense and go to the next bus stop or village, up to 20 kilometers away. There, we present the dirt to the dog again. In the second or third village, the dogs picks up the trail. We go to the poacher and say, "Mate, you're

We'll do lineups where we will line up suspects. The dogs will pick them right out. The poachers start telling you their whole story.

coming with us." They think it's witchcraft.

### Continued from pg. 21

The dogs come from other parts of the world to join the mission. Ireland dispatched a 14-month-old Dutch shepherd named Scout to a South African reserve. *The Independent* of the United Kingdom reported that such dogs, properly trained, are valued at more than \$30,000 and can be used to "help protect the rhinos, park rangers and even reserve personnel." Although the dog from Ireland was already highly trained, he began a new intensive training course in South Africa to prepare him for his new environment.

Then there's Drum, who was 10 months old in 2019 when he arrived at the Ol Pejeta Conservancy in Kenya. The charity Animals Saving Animals trained the spaniel from the United Kingdom. The dog, said the conservancy, has proven to have an "exceptional ability" to detect ammunition and weapons. His job mainly involves vehicle searches.

"I hand-picked him from a litter when he was 8 weeks old," dog trainer Daryll Pleasants told the conservancy. "As a puppy, he was always bouncing around, and that's perfect for the job; it's a very active role."



A member of the Kruger National Park Anti-Poaching K9 Unit and his dog patrol the park. AFP/GETTY IMAGES

Animals Saving Animals was founded in 2016 and now trains dogs for use all over the world. Pleasants said he believes his dogs have helped reduce poaching in some areas by up to 72%.

### DOGS FROM AROUND THE WORLD

Dogs of varying breeds, including Belgian Malinois, Weimaraners, English springer spaniels, German shepherds and German shorthaired pointers, have been dispatched to Africa to stalk poachers, sniff out contraband at airports and assist in vehicle stops.

Under good conditions, a dog can detect the presence of a poacher up to a kilometer away. This makes anti-poaching officers much better equipped to track at night and cover more ground.

The African Wildlife Foundation established its dog program, Canines for Conservation, in 2014. The dogs have taken part in 400 seizures of illegal wildlife material such as elephant tusks, rhino horns and pangolin scales since then. Most of the products were headed for China and other parts of Southeast Asia to be used in bogus traditional Chinese medicine products.

Wildlife workers who have never worked with dogs, except perhaps guard dogs, have come to respect the animals.

"Dog handling has become a sought-after job among employees of wildlife authorities in Tanzania, Kenya, Uganda, Mozambique, Botswana and most recently Cameroon," tweeted Albert Schenk of the Wildlife Conservation Society. The handlers typically learn to work with the dogs over the course of eight to 10 weeks.

Canines for Conservation Director Will Powell told the BBC that the program is a public-private partnership with governments that helps them develop dog units within their wildlife organizations. "That includes strategy, standard operating procedures and veterinary protocol," he said. "With their help, we select rangers and train them as detection dog handlers."

Powell chooses his dogs in Europe, in countries that already have a culture of working dogs. His career as a dog trainer began with teaching them to detect land mines.

The first class of Canines for Conservation graduated in July 2015, along with handlers from the Kenya Wildlife Service and the Tanzania Wildlife Division. The dogs were deployed to the primary airports and seaports of the two countries. From January through August 2016, the dog teams based at Kenya's Jomo Kenyatta International Airport discovered more than 26 caches of ivory, rhino horn and pangolin scales.

### AGGRESSIVE PURSUIT DOGS

Powell's dogs are trackers, not attackers. But trainers in other organizations sometimes take a different approach. In Zimbabwe, dogs trained by Pleasants are equipped with armor for self-defense.

In 2018, two armored dogs, Polaris and Rogue, tracked poachers and covered enough ground in an hour in low light to find the men.

"The poachers panic, drop their equipment, including heavy-caliber ammunition, and surrender,"





The Independent of the U.K. reported. "Before night falls, the poaching team has intercepted and arrested a gang and recovered dangerous arms."

"At night when our eyes become useless, that's when the dog nose really helps us," one dog trainer told the news website Insider. "The idea is to get the team close enough to the poacher that the team will then be able to make an arrest."

### VERSATILE MALINOIS

The Belgian Malinois breed, which is similar to German shepherds, has proven useful in tracking poachers because of its intelligence, power, agility and, in some cases, bite strength. The breed has been used in military operations around the world and as guard dogs. Some trainers say that one dog and its handler can cover an area 60 times larger than the area covered by a ranger without a dog.

Conraad de Rosner, founder and director of K9 Conservation, is known for his work with Weimaraners and Malinois. He told *Africa Geographic* he uses Weimaraners to track animals, detect animal remains, and trap and locate wounded animals. His Malinois are used to track human suspects, detect firearms and ammunition, and use force if necessary.

"While both breeds are classed as 'patrol dogs,' their functions differ somewhat, and often their skills and abilities complement and assist each other in the field," he said. "For this reason, and depending upon the situation, two field rangers, each with a different

A ranger jumps out of a helicopter with a dog during an antipoaching drill in Kenya. AFP/GETTY IMAGES

dog breed, are sometimes deployed together. All our dogs are trained in protection work, and they are capable of suspect apprehension should the need arise. These dogs are specially trained to bite or apprehend a suspect only upon command and to detain that suspect with minimal force."

All of the trainers say that keeping the dogs from overheating is essential. The dogs, mostly from Europe, have to be protected from heat they have never known before. Some wear Kevlar bulletproof vests that start at about \$500. De Rosner said there are companies now testing lightweight bulletproof dog vests that have a special gel that can help regulate the dogs' temperature in hot and cold weather.

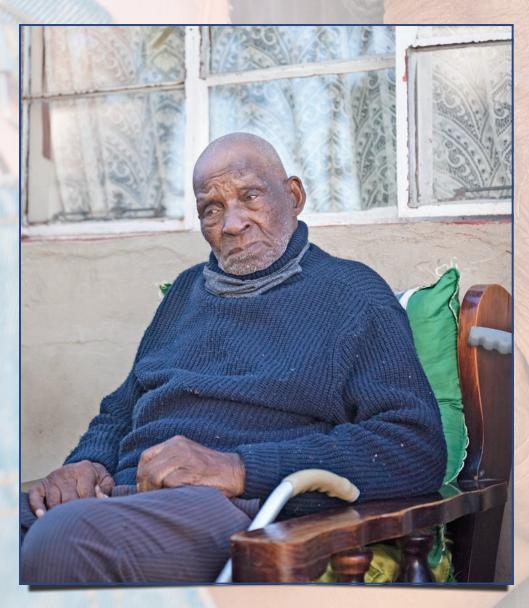
The other major threat to the dogs is sleeping sickness, transmitted by tsetse fly bites. It can kill dogs if not detected early. The handlers go to extraordinary lengths to protect the dogs from the flies, especially at night.

The dogs are hardly maintenance-free. They must have special housing to protect them, and they are fed top-quality food. Still, they are cost-effective.

"Although dogs are not a silver bullet in the fight against poaching, they are a huge security force multiplier," Animals Saving Animals' Pleasants told BBC Earth. "One dog is able to secure the same area as seven rangers."



# HIS LIFE SPANNED GENERATIONS





AGENCE FRANCE-PRESSE PHOTOS BY AFP/GETTY IMAGES

hen Fredie Blom was born, the automobile was in its infancy, the first airplane was less than a year old and World War I was in the future.

More than 116 years later, Blom still got around with the help of his cane. On warm days he would sit outside his home in the Delft neighborhood of Cape Town, South Africa, and smoke his beloved cigarettes.

"I have lived this long because of God's grace," Blom told Agence France-Presse on his birthday in May 2020. About three months later, however, Blom's long life came to an end by natural causes.

Blom was born in 1904 in Adelaide, a rural hamlet in South Africa's Eastern Cape province. At the time of Blom's most recent birthday, a 112-year-old British man had been officially certified as the world's oldest man by Guinness World Records. Blom's age had not been verified by Guinness.

He has the distinction of being alive for two notorious global pandemics, the first being the so-called Spanish flu of 1918. That flu wiped out his entire family.

Even so, COVID-19 didn't give Blom reason for panic. He took the latest pandemic in stride. He did confess consternation at one of South Africa's pandemic lockdown provisions: a ban on cigarette sales. The government later eased up on tobacco sales, which helped him realize his birthday wish.

As his family celebrated his birthday, Blom — known affectionately as "Oupa," which means grandfather — walked outside his home to sit in a wooden easy chair. His stepdaughter squirted his hands with sanitizer. His wife, Jeanette, soon joined him there. The two were married 46 years.

Local children and his wife's grandchildren serenaded him with a birthday song and enjoyed a hot plate of food provided by Blom's family.

Blom hadn't seen a doctor in more than two years before his death. He said he was tired of being pricked and prodded.

Blom never had children, but he adopted Jeanette's from a previous marriage. "He has done everything for us," his stepdaughter, Jasmien Toerien, said in May. "He would wake up at three or four in the morning to cycle to work. He loves animals and gardening."

His long life came to an end suddenly. On August 22, 2020, Blom died of natural causes at Tygerberg Hospital in Cape Town. Two weeks before his death, he "was still chopping wood," family spokesman Andre Naidoo told Agence France-Press. "He was a strong man, full of pride."

# Preparing for Tomorrow's Security

## The African Land Forces Summit Challenges Military Leaders to Look Ahead

ADF STAFF

wenty years ago, few had heard of cyber warfare. Religious extremism was not considered a threat to most countries. And piracy was thought to have been eradicated a century earlier.

Things can change quickly.

As land forces chiefs from across Africa gathered in Addis Ababa, Ethiopia, in February 2020, they were looking to the future. The four-day African Land Forces Summit (ALFS) sponsored by U.S. Army Africa (USARAF) and co-hosted by the Ethiopian National Defence Force (ENDF) was an opportunity to look over the horizon and begin to prepare for the threats that will be most prevalent years from now.

"It is always easier to anticipate than to fix," Gen. Birame Diop, Senegal's chief of defense staff, told the assembled leaders.

Anticipation was on the agenda. The theme of ALFS 2020 was "Tomorrow's security demands leadership today."

Topics included preparing for natural disasters, case studies in multinational peacekeeping missions and modernizing military education to meet 21st century demands. Each day included breakout sessions in private rooms moderated by subject matter experts. There, defense leaders had the opportunity to speak freely and build relationships with their counterparts from across the continent.



"It creates a conducive environment for African security chiefs to meet each other," said Lt. Gen. Molla Hailemariam, the ENDF ground force commander and co-host of the event. "It gives us the chance to build and continue relationships."

The 8th ALFS set attendance records with 42 African land forces chiefs attending, eight allies and global partners from Europe and other parts of the world, and 12 U.S. state partners.

Molla said he has confidence that the alliances built during the event will endure. "It has been a good chance for us to see how we can complement what other countries are doing," he said. "We are interacting at a one-to-one level but also regionally. It is very crucial."

One highlight of the week was the Command Senior Enlisted Leader forum, which took place concurrently. USARAF Command Sgt. Maj. Charles W. Gregory Jr. said building an empowered noncommissioned officer (NCO) corps in Africa will be vital to improving training and the use of technology in national militaries. He told the audience that "every commander has a sergeant," and an empowered sergeant can help the commander identify the "blind spots" in the force structure to prepare for future challenges.

"If you are always prepared for what you hope and pray will never happen, when that bad day comes you will be ready," Gregory said.

The U.S. has invested in helping African militaries train the next generation of NCOs through its Africa Enlisted Development Strategy, which works to standardize NCO training in countries including Kenya, Morocco, Mozambique and Senegal. Gen. Stephen Townsend, commander of U.S. Africa Command, calls a professional NCO corps "the backbone" of an effective armed force.

The event included the first female NCO participant, Jr. Warrant Officer Menbere Akele Kibret of Ethiopia. She told the audience that women are making progress in the Ethiopian military, particularly in the cyber domain, but she would like to see more.

"In the Ethiopian Air Force we have a lot of women technicians, engineers and so many experts. But it's not enough; it's too small in number," she said. "So how to enhance it and include more women participation and empower them in every aspect of the military? Especially in professional or leadership roles."

### "We are interacting at a one-to-one level but also regionally. It is very crucial."

~Lt. Gen. Molla Hailemariam of Ethiopia

In closing remarks, Townsend highlighted the importance of the timing of the event. He pointed to the impending transfer of security responsibilities in Somalia from the African Union Mission in Somalia to the Somali National Army in 2021. He discussed the intractable civil war in Libya. And he referenced the terror threat plaguing the Sahel. The leaders who will address these and other security threats, Townsend said, "are sitting right here in this room."

"We are at a collective decision point with respect to Africa's future security," he said. "The future we all wish to see, a more secure, stable and prosperous Africa, centers on African leadership and African militaries providing regional security."



Attendees shake hands during the African Land Forces Summit in Addis Ababa, Ethiopia, in February 2020. USARAF



U.S. Army Maj. Gen. Lapthe Chau Flora, deputy commander of U.S. Army Africa, greets delegates at ALFS 2020. USARAF

### **Views from the Summit**

During ALFS 2020, commanders spoke to *ADF* to share their thoughts on the most pressing security issues in their home countries and outlined the lessons they took away from the conference. Below are the views of four security leaders from across the continent.

STORIES AND PHOTOS BY ADF STAFF



### An Army on the Rise

he Central African Republic (CAR) is rebuilding its Armed Forces from the ground up. After a national crisis in 2013 and 2014, many units of the Central African Armed Forces were dissolved, and the country began a national campaign to recruit, train and professionalize the Armed Forces.

As recently as 2018, the majority of the country was still lawless, controlled by rebels and other nonstate actors. A National Defence Plan signed by the CAR president outlines steps to build a 9,900-person garrison army stationed across four zones by 2022. About half the Soldiers will be stationed outside the capital, Bangui, including many in areas controlled by rebels.

Brig. Gen. Alfred Service, head of CAR's Special Group for Protecting the Republic, said there is much work to be done, but he is optimistic. "We have a lot of challenges to overcome: development, a challenging security situation in much of the country, armed groups who occupy mineral zones and don't respect the law, bandits who must be brought to justice."

Service said he used his time at ALFS to share experiences with fellow officers about the specifics of working alongside a multinational mission. CAR is home to a 13,000-person United Nations mission.

"We spoke about the multidimensional aspect of these things: political affairs, civil affairs, protection of civilians. There is also the decision-making process in multinational missions," Service said. "A certain number of things to know in order to move together in one direction."



Brig. Gen. Alfred Service, head of the Central African Republic's Special Group for Protecting the Republic

As he spoke in early 2020, Service eyed CAR's national elections set for December as a benchmark for the country. "The reconstruction of the country needs democracy," he said. "We had the elections of 2015 under the U.N. And now we must continue with elections because to have legitimate authorities, we must avoid the change of power by the use of force. It's the elections that must be valued for the people to give a mandate to leaders."

The path has been winding, but Service said he is hopeful for the future of the country. "There are challenges that remain, but we are going in the right direction because we are in it together."



### Hard-Won Peacekeeping Experience

rig. Gen. Gilbert Mulenga, chief of operations for the Zambia Army, has seen the highs and lows of peacekeeping. He served in missions in Angola, the Democratic Republic of the Congo and Sierra Leone and commanded the Zambian battalion (ZAMBATT) in the Central African Republic (CAR).

He recalls the despair he felt in 2000 when more than 200 Zambian peacekeepers were held hostage in Sierra Leone. But he also shared in the triumph in 2018 when the United Nations ranked the Zambians as the highest-performing contingent in the CAR mission.

He said his country brings its rich history to peacekeeping training. "Our training is scenario-based; whatever is happening in the CAR, we give this scenario to the troops and we see how they react," he said. "Those of us who have been on the ground, you guide them. Wherever you see there is a gap, you bridge it through the guidance, which is coming from experience."

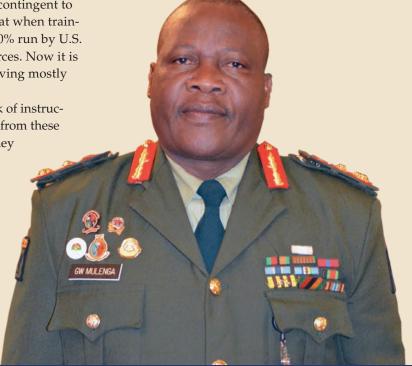
The latest deployment of troops, known as ZAMBATT 5, is the fifth Zambian contingent to serve in the CAR. Mulenga said that when training began five years ago, it was 100% run by U.S. trainers and some other foreign forces. Now it is Zambian-led with U.S. trainers serving mostly as observers.

"Now we are providing the bulk of instructors; most of them have experience from these missions, particularly in CAR, so they also share experiences with the Soldiers," Mulenga said.

The mission in CAR is not a quiet one. Mulenga said his men have faced rebels firing 107 mm mortar rockets mounted on land cruisers. Preparing for that reality required a change in training.

"The new rookies who are going to the mission, you have to prepare them psychologically, mentally and physically," he said. "It's not actually an environment where there is a peace to keep, but a peace to enforce."

During his time at ALFS, Mulenga spoke with fellow commanders about the need to adapt to asymmetric warfare, the need to have situational awareness when entering the operational environment and, above all, the importance of understanding the mission mandate. "If you don't understand the mandate, you could be operating outside of it," he said. "The U.N. mandate must be protected at all costs."



Brig. Gen. Gilbert Mulenga, chief of operations for the Zambia Army



## **Health on the Front Lines**

andemic preparedness was top of mind during the early months of 2020 as COVID-19 spread across the globe. For Brig. Gen. Tensay Yilma Mequantie, the acting commandant of health for the Ethiopian National Defence Force (ENDF), this is an ongoing concern.

"The Army is very exposed compared to other sectors," he said. "They are on the front lines, they are moving here and there. They have communication with a lot of society. They are directly exposed to pandemics."

Before the first COVID-19 case was reported in Ethiopia, the ENDF established a committee to develop a prevention plan and coordinated with the Ministry of Health. The ENDF also relied on the knowledge brought back from the 26 Ethiopian Soldiers who deployed to Liberia during the 2014 Ebola outbreak to provide medical aid.

"As an Army we are working with a common knowledge, knowing the source of the disease, transmission of the disease, and how we are controlling it," Tensay said. "This knowledge should be transferred to the Army by teaching, by demonstrations."

The ENDF, like many security forces in Africa, is vulnerable to diseases such as HIV/AIDS, malaria and cholera. Tensay said the ENDF has registered particular success against the spread of malaria. He pointed to a disease early warning system and "steady surveillance groups" in the military that monitor for outbreaks and offer Soldiers training on best practices.

"Malaria is endemic in our country," he told *ADF*. "In the past a lot of people died because of malaria, but not today. We have a lot of protection equipment, including

jelly used for protection, insect nets, properly treating our uniforms [to repel mosquitoes]."

Tensay said ALFS is an opportunity for Ethiopian military medical personnel to build on partnerships forged during Justified Accord in 2019, a U.S. Army Africa exercise in Ethiopia. During that exercise, doctors from the U.S. Army's 212th Combat Support Hospital, 30th Medical Brigade, trained with the staff of the Armed Forces Hospital in Addis Ababa. Tensay said the partnership between the two countries has strengthened since that time and now includes training on combat casualty care.

"This is a chance to come together, so in the future during any war time or hard time we have a common knowledge," Tensay said. "We have prepared together."



Brig. Gen. Tensay Yilma Mequantie, acting commandant of health for the Ethiopian National Defence Force

### Preparing for the Worst

or Mauritius, security begins with disaster preparedness. The small island nation in the Indian Ocean is exposed to cyclones, tsunamis and flooding.

But if the country has geographic disadvantages, Khemraj Servansing, Mauritius' deputy commissioner of police, believes its preparedness gives it an advantage. "We are exposed to natural disasters. This is nature, and you can't change it," he said. "Our government has invested massively in disaster risk-reduction issues."

Servansing heads Mauritius' Disaster Risk Reduction and Management Centre, which was created in 2015.

When a threat like a cyclone is detected, the country activates a multiagency National Emergency Operations Center. The country's National Crisis Committee coordinates with local emergency management centers in each of the country's 12 municipalities. The process must be seamless. In the event of a tsunami they will have less than six hours to move citizens to safety.

"The focus now is not only on response," Servansing said. "We don't wait for the disaster to happen. We have to be proactive."

Mauritius also has created a flood risk map and invests 2% of its gross domestic product annually in resilience measures. The preparation has been expensive and is time-consuming, but Servansing believes it is worth it.

Four years ago the country's response infrastructure made it the world's 13th most vulnerable nation to disasters, according to the World Risk Report. By 2019, that number had dropped to 47th.

"You reduce the risk, because if you get a major event, the economic losses that the country will incur will be much, much more than what you are going to invest in disaster risk reduction," Servansing said.

At ALFS, Servansing was most interested in hearing from countries and experts with experience in mass-scale natural disasters. All countries, he said, must have a plan to coordinate the aid they will receive, to oversee the actions of nongovernmental organizations and allow relief goods to clear customs to enter the country.

"To organize the reception for getting all these organizations into your country, it's not a simple task. It's very complicated," he said. "It's the host country that has to take ownership. You have to direct the operation, not them. So we have to have a plan."



Khemraj Servansing, Mauritius' deputy commissioner of police and officer in charge of the nation's Disaster Risk Reduction and Management Centre

# PEACEKEEPING TRADITION

Ethiopia Brings Seven Decades of Experience to a Peace Support Training Center

ADF STAFF

hen South Korea faced a communist incursion from the North in 1950, it asked the world for help. One country in Africa answered the call: Ethiopia.

Emperor Haile Selassie formed a battalion from his Imperial Bodyguard and deployed it to fight under the United Nations flag.

By the time the conflict was over, Ethiopia's Kagnew Battalion had won the respect of allies and enemies. The Soldiers' heroism during an outnumbered battle on "Pork Chop Hill" has become the stuff of legends. In fact, Ethiopia was said to be the only contingent that never lost a prisoner or left a dead comrade on the battlefield.

"We were the best fighters. The three Ethiopian battalions fought 253 battles, and no Ethiopian Soldier was taken prisoner in the Korean War," combat veteran Mamo Habtewold told the BBC. "That was our Ethiopian motto:

'Never be captured on the war field.'"

It was the beginning of a long tradition. Since that time Ethiopia has participated in 13 United Nations missions in countries ranging from Haiti to Yemen. Today, with more than 6,600 troops serving in four U.N. peacekeeping missions, Ethiopia is the largest contributor of uniformed personnel to U.N. missions in the world.

Nearly all of its U.N. peacekeepers are spread across three missions in Sudan and South Sudan, and 4,000 more troops serve in the African Union Mission in Somalia.

Ethiopia's focus on neighboring nations is by design. Col. Elias Seyoum Abrha, commandant of Ethiopia's Peace Support Training Center, said it comes from a longstanding national belief in "security interdependence."

"Their security is intertwined with our security," Elias said. "If there is something wrong with our neighbors, it affects us."



An Ethiopian peacekeeper serving in Darfur, Sudan, greets a young boy. U.N.-AFRICAN UNION HYBRID OPERATION IN DARFUR



A sign welcomes visitors to Ethiopia's Peace Support Training Center.





### TRAINING CENTER PROMISES NEW ERA

Despite this deep commitment to peacekeeping, until recently Ethiopian peacekeepers had limited access to predeployment and mission-specific training.

This changed in June 2015 with the opening of the Ethiopian Peace Support Training Center in Addis Ababa. The \$6.2 million facility was partially financed by the United Kingdom and Japan. It is designed to offer training that elevates peacekeeping to a true military specialty and prepares personnel for the complexities and dangers of modern missions.

The center offers 28 functional and thematic courses on a range of topics including protection of civilians, conflict management, civil-military coordination and mediation. Since its inception, it has trained more than 6,300 people, including about 32% who travel from other African countries.

"We are open for all Africans, to share our experience," Elias said.

The trainers from the center also operate the Hurso Contingent Training Center in a rural region of Ethiopia about 400 kilometers east of the capital. In this rugged camp, peacekeepers undergo predeployment classroom and field training that generally lasts about three months.

Hurso offers three modules: a generic course that

fulfills the requirements of African Union or U.N. missions; special courses for skills such as logistics or combat medicine; and mission-specific courses designed to replicate the unique challenges of environments such as Somalia, South Sudan or Darfur. About 11,500 troops train in Hurso each year.

"In all missions we have a different package that they train on," Elias said. "When we are discussing dynamic training, this is what it means: always adding and improving based on lessons learned."

### HAVING AN IMPACT

Ethiopia's domestic capacity for peacekeeping training is rare in Africa. In recent years, troop-contributing countries have had to compete for limited spaces in classrooms around the continent. Increasing training capacity in Africa has been a point of emphasis by the U.N., which wants to ramp up evaluation of troop performance during missions and offer troops continuing education.

"As we know, improved performance reduces fatalities," U.N. Secretary-General Antonio Guterres said. "As such, training is a necessary and strategic investment in peacekeeping — and is a shared responsibility between member states and the secretariat."

Ethiopia believes its investment in training is making



# Ethiopian Peacekeeping Through the Years

Years Counted	Mission Area	Participation
1951-1953	KOREA	6,037
1959-1962	CONGO	10,425
1993-1995	RWANDA	1,696
2003-2010	LIBERIA	17,714
2007-2019	DARFUR, SUDAN	22,500
2011-2019	ABYEI	31,326
2014-2019	SOMALIA	26,538
2014-2019	SOUTH SUDAN	8,750
TOTAL:		124,986

Source: Ethiopian Peace Support Training Center

a difference. In Darfur, the Ethiopian contingent was singled out by the force commander who lauded it for "going beyond mission tasks" and aiding the local population by drilling wells and mediating disputes. In Abyei, a disputed area claimed by Sudan and South Sudan, 1,900 Ethiopian peace-keepers received U.N. medals for gains made in the troubled region during an eight-month deployment.

Ethiopia also has increased the number of female peacekeepers to more than 600, a point of emphasis at the training center. The Ethiopian government has pledged to raise those numbers further. In 2016, Brig. Gen. Zewdu Kiros Gebrekidan was appointed deputy force commander of the United Nations Interim Security Force for Abyei, making her one of the few women ever to hold that command position.

Ethiopia's military and civilian leaders say they intend to continue this dedication to peacekeeping for decades to come.

"Whatever problems we are faced with, we will realize peace and security, even if we have to sacrifice our own lives," said Capt. Gabrhiwot Gebru, deputy commander of the Ethiopian Battalion in the U.N. Mission in South Sudan. 

□



# A Global Agreement Fights Illegal Fishing by Keeping Scofflaws From Landing Their Loot

ADF STAFF

hen Sierra Leonean fishermen board their small wooden boats and head out into the open sea to make a living, sometimes they can see their enemy.

Along the ocean horizon float larger fishing vessels and trawlers — virtually all of them foreign and most Chinese — waiting to scoop up their catch using an array of illegal and destructive methods. Up to 70 trawlers work in Sierra Leonean waters around the clock, according to a BBC report.

Sometimes the rust-stained trawlers drop heavy, metal doors that sink and help drag nets across the ocean floor, scraping away priceless life and habitat. The huge, gaping nets trap sea life indiscriminately, laying waste to the fragile ecosystem as they go.

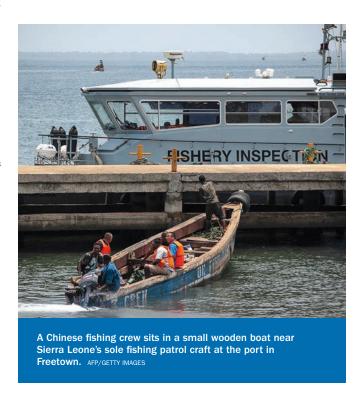
Sometimes the boats will string nets between them and steam away as "pair trawlers," again scooping up fish on an industrial scale. The practice is illegal in Sierra Leonean waters. Some crews will lie about the size of their catch (or not report it at all), fly false flags or fish in prohibited areas. Sometimes they will bring their catch ashore to sell, undercutting the thousands of artisanal fishermen who depend on selling fish for their livelihoods.

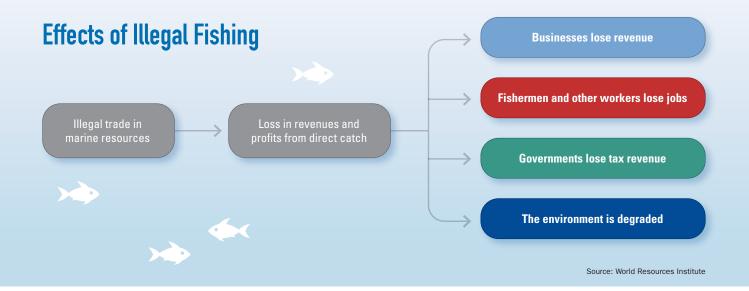
Other times they will transship their catches to larger reefers, which steam off to foreign ports in China, Russia and elsewhere, leaving Africa's waters depleted and its local fishermen deprived.

But what if after all their deception and trickery, these illegal fishing vessels couldn't pull into a port and offload their catch? What if after all their work and scheming there was nowhere to take the fish — and no way to sell it?

#### PORT STATE MEASURES AGREEMENT

In June 2016 a new global tool in the fight against illegal, unreported and unregulated (IUU) fishing took effect. The United Nations Food and Agriculture Organization (FAO) Agreement on Port State Measures to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing





introduced a simple way to fight IUU fishing — by limiting access to ports.

The Port State Measures Agreement (PSMA), as it is commonly called, is the first binding international pact that targets IUU fishing. Its potential to end the global scourge is promising. It seeks to prevent those who fish illegally from landing their catches at ports, thus keeping ill-gotten seafood from reaching national and international markets.

"The Port State Measures Agreement is probably the most effective way to try to counter illegal, unreported and unregulated fishing, by putting the onus on vessels to essentially verify that any fishing that they are looking to land in a country has been caught legally," said Dr.

Ian Ralby, chief executive officer of I.R. Consilium and an expert on maritime affairs.

The agreement is a major advancement in countering IUU fishing. It deemphasizes the need to pursue, intercept and prosecute those who flout regional, national and international fishing regulations. That model is a tall order even for the richest of nations because of the vastness of the maritime domain. Without a global maritime force, Ralby told *ADF*, it's impossible to effectively patrol the world's seas.

With a port-centered approach, even a country "that doesn't have a single naval asset" or lacks effective maritime domain awareness can have a potent law enforcement tool for addressing unlawful fishing, Ralby said.



"The Port State Measures Agreement is probably the most effective way to try to counter illegal, unreported and unregulated fishing, by putting the onus on vessels to essentially verify that any fishing that they are looking to land in a country has been caught legally."

~ Dr. Ian Ralby, chief executive officer of I.R. Consilium

#### **HOW THE AGREEMENT WORKS**

The PSMA offers mechanisms for vetting fishing vessels before they can dock at ports and unload their catches. It also gives boats with a history of compliance and adherence to rules a way to be "fast-tracked" into foreign ports.

In short, those who follow the rules are rewarded. Those who don't are not.

The Fisheries Committee for the West Central Gulf of Guinea (FCWC) explains that authorities lead implementation and operation of the agreement in cooperation with other national agencies to analyze risk, identify high-risk vessels and decide whether to grant port entry to foreign-flagged fishing vessels.

Generally, according to the FCWC, a vessel seeking access to a nation's port would make an advance request. Information then could be checked, cross-referenced and analyzed by fisheries, port, navy and police authorities. If the port state suspects the vessel has engaged in IUU fishing, it could deny entry or condition entry on an inspection.

If no IUU fishing is suspected, port authorities can grant the vessel access to all facilities, but still may require an inspection. Vessels with a history of compliance can be rewarded with more efficient port controls each time they seek entry. This is the fast-tracking provision of the agreement.

Ralby said he has helped parties think about the interagency cooperation necessary to identify suspect vessels and make the agreement work. The goal is to benchmark indications of illicit behavior through the agreement, which is different from looking for a vessel engaged in IUU fishing on the open water.

"The reality of the matter is fish have to land in order to enter the supply chain, which means in order for the illicit activity of IUU fishing to be profitable, they have to get the fish on land and to market," Ralby said. "And so if you put a massive roadblock to bar that process from occurring, you take out the reward portion of the equation, and you increase the risk that they're actually going to get caught."

Continued on pg. 43



# The Port State Measures Agreement

Increased control over foreign-flagged vessels that must:

- Use designated ports.
- Submit a request before entering port, allowing time for due-diligence checks
- Allow inspections in port and provide required information.

#### **DENY PORT ENTRY:**

Unless this poses a safety risk or if the vessel is to be scrapped.

Known or suspected illegal fishing vessels can be denied access to the port.

Alerts are sent to relevant states.

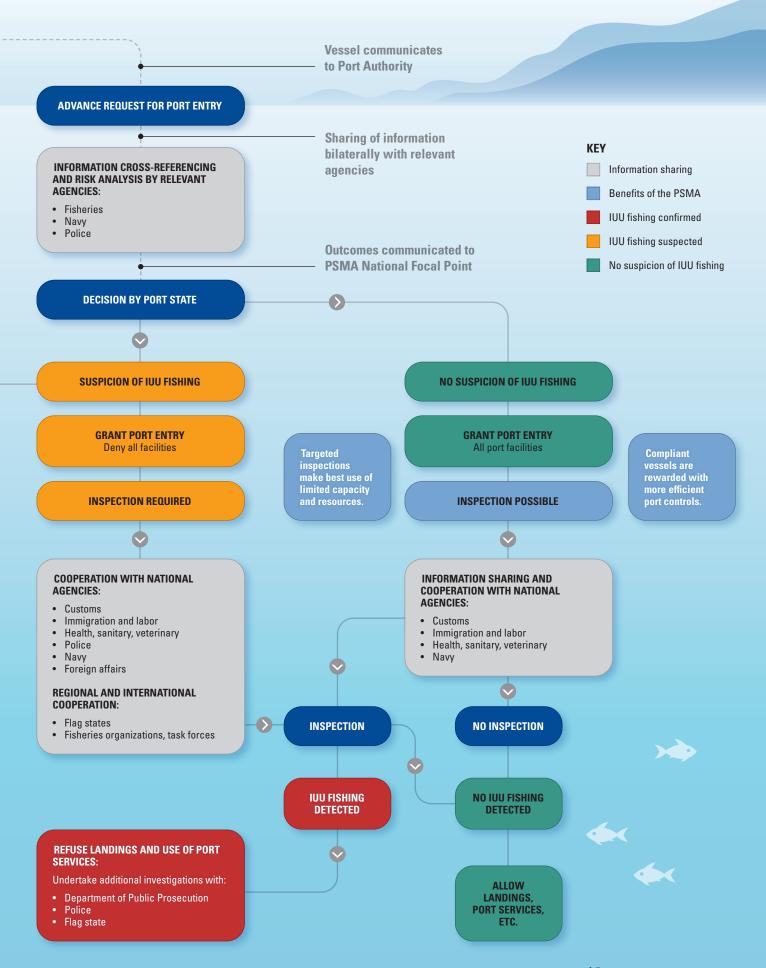
#### INFORMATION SHARING WITH NATIONAL AGENCIES:

- Police
- · Coast Guard
- Navy
- Foreign affairs

## REGIONAL AND INTERNATIONAL COOPERATION:

- Flag states
- Port states in the region
- Fisheries organizations and task forces





## **Inspections a Major Part of PSMA**

ADF STAFF

Under the Port State Measures Agreement, foreign-flagged fishing vessels might be subject to inspections before they can access ports to offload their catch. Trained inspectors will have to examine vessels and their records to ensure compliance with regulations and laws.

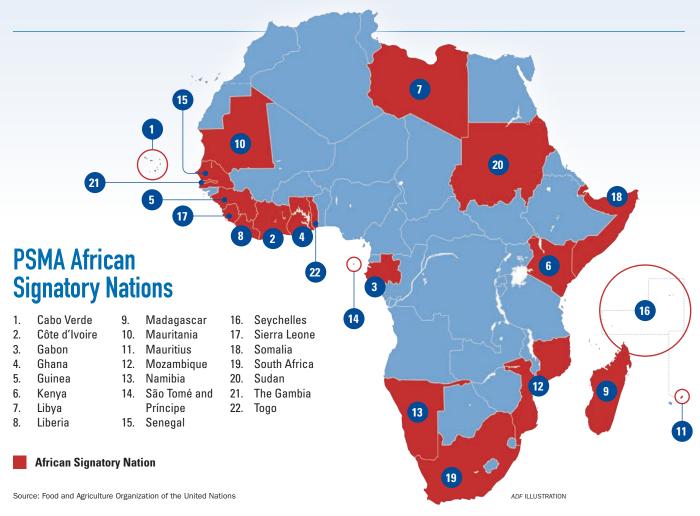
According to the Food and Agriculture Organization of the United Nations, vessels seeking port entry will have to provide 23 pieces of information, including vessel name, flag state, owner, certificate of registry, fishing and transshipment authorizations, total catch onboard, and the total catch to be offloaded.

After inspections, inspectors will fill out a 42-point form. Among the things that they must do are:

- Verify that onboard vessel identification documentation and ownership information are true, complete and correct.
- Verify that the vessel's flag and markings match the documentation.
- Verify that fishing and fishing-related authorizations are true, complete and correct.
- Review other documentation and records such as logbooks, catch, transshipment and trade documents, crew lists, stowage plans and drawings, and descriptions of fish holds.
- Examine fishing gear to verify that its size, attachments,

- dimensions and configuration conform to regulations.
- Determine whether fish was caught according to applicable rules.
- Examine the quantity and composition of fish, including by opening packed containers and moving the catch or containers to examine fish holds.
- Evaluate whether there is clear evidence that a vessel has engaged in illegal, unreported and unregulated fishing.
- Provide the vessel master a copy of the inspection report.
   The master will sign and can add comments, objections and contact flag state authorities if he has trouble understanding the report.
- Arrange for translation of relevant documentation if possible and necessary.

Inspectors must be properly trained to do this work. Training, as set out by the agreement, will address at least 12 areas. They include ethics; health, safety and security; pertinent national and international laws and other regulations; how to collect, evaluate and preserve evidence; how to conduct inspections, write reports and conduct interviews; analyzing vessel documentation; identifying and measuring fish; identifying and measuring vessels and their gear; vessel equipment operations; and post-inspection actions.



### **ADOPTION IS NOT ENOUGH**

All but 16 of Africa's 54 nations have coastlines, as do more than 200 other nations and territories. But so far, only 66 nations are parties to the agreement worldwide, and 23 of those nations are in Africa. The various nations are at different stages of acceptance, approval, ratification and accession, according to the FAO.

That is a significant and laudable response, but it's not enough to make the agreement as effective as it can be. Gaps in the coastlines covered by the agreement give criminals safe havens for landing catches. For example, most of West Africa is a party to the agreement. But Guinea-Bissau is not. So a vessel could avoid one nation, steam up the coast and dock at another to avoid scrutiny and controls.

Gaps in the coastline left by nations that have not yet joined the agreement will produce significant vulnerabilities. But Ralby explained that nations that are parties to the agreement still have tremendous advantages and opportunities through inspections and port controls. Some African nations have some of the highest reliance on fish protein in the world, so having every tool at their disposal to counter IUU fishing will be vital. There is tremendous benefit, he says, whether it's one, 23 or all 38 African coastal nations operating under the agreement.

Also, even if every coastal African nation adopts the PSMA, it will not be effective without being implemented "efficiently, effectively, consistently and transparently," Ralby said. African nations will have to harmonize efforts so that all countries are working from the same set of standards and sharing information. "Any difference in that approach will be exploited," he said.

The potential for corruption also will have to be addressed. The PSMA only will be as good as the people charged with enforcing it. The international fisheries market has significant value; it exceeded \$240 billion in 2017 and is expected to surpass \$438 billion by 2026, according to Research and Markets. Ralby said that value can entice some people into corruption such as through bribes to ignore regulations or to sign off on catches when they shouldn't.

Port states also will have to ensure that compliant vessels that receive fast-track access to ports don't exploit that privilege by trying to sneak in IUU catches. Ralby suggested constant and random reviews to ensure that fast-tracked vessels stay compliant.

Ralby said as COVID-19 spreads in Africa and elsewhere, combating IUU fishing is likely to present a bigger challenge. The disease has complicated the global supply chain, so opportunities to skirt rules are likely to be explored. Likewise, law enforcement will be more difficult



Three Chinese ships sit in the harbor in Conakry, Guinea, during an inspection. Guinean authorities found shark carcasses and fins. APP/GETTY IMAGES

because there's likely to be less interest in boarding vessels. This could change the face of the problem in the near term.

Even so, African nations are taking steps to familiarize themselves with the elements of the agreement. Just before COVID-19 started spreading in Africa, Sierra Leone held an exercise on the PSMA in Freetown in February 2020.

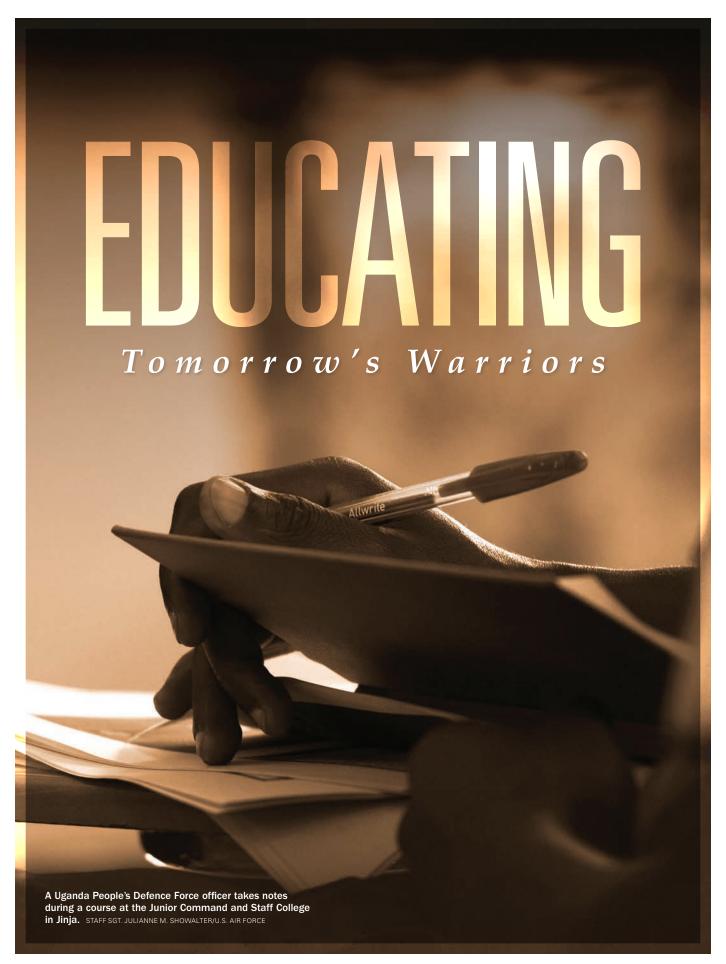
Representatives from the nation's fisheries police, health, naval, maritime, port and justice authorities took part during the weeklong capacity-building workshop. The FAO led the event. Sierra Leone ratified the agreement in September 2018.

Participants used the scheduled arrival of a foreign-flagged vessel to discharge its catches in Freetown as an opportunity to participate in a case study and learn about interagency cooperation and the exchange of information, a key element of the agreement.

Sierra Leone's neighbor Liberia held a similar event about the same time in Monrovia for representatives from the fisheries, maritime, port, health, customs, immigration, coast guard, commerce, justice and agriculture authorities.

The workshop used a foreign-flagged refrigerated cargo vessel unloading fish transshipped from vessels in Guinea-Bissau as a case study for PSMA procedures such as exchanging information and interagency cooperation.

The agreement only will get stronger as more nations sign on, slowly constricting the number of ports that criminals can use to offload and sell ill-gotten fish. According to the Pew Charitable Trusts, "Consistent international momentum over the past few years has boosted the number of parties to the agreement, making it increasingly difficult for illegitimate catch to make its way to national and international markets and reducing the incentive for dishonest fishing operators to continue their IUU activities."



## Professional Military Education Institutions Must Reform to Meet New Security Challenges

MAJ. GEN. (RET.) MUHAMMAD INUWA IDRIS

ilitary officers have all benefited from professional military education (PME) throughout their careers. PME is structured to include a mix of training, skills acquisition and traditional classroom instruction. It is designed to support a Soldier from the beginning of his or her career up to the time he or she exits active duty. It shapes attitudes toward enhanced

Uganda People's Defence Force Soldiers discuss strategy while completing a group project at the Junior Staff College in Jinja. STAFF SGT. JULIANNE M. SHOWALTER/U.S. AIR FORCE

achievements of individual and institutional missions. It is graduated into levels and compartmentalized between the enlisted and officer cadres.

Soldiers who have studied at the most prestigious PME institutions carry that pride of accomplishment with them throughout their careers.

For enlisted Soldiers, PME begins at the initial Soldier training institutions and culminates at the warrant officer academies. For officers it begins at the initial officer training academies and runs through the war colleges or equivalent institutions for policy and strategic education. It is an established fact that the progression of careers in the military is structured to be consistent with required and relevant PME at every

level. This demonstrates that the military is an adaptive organization with an emphasis on continuous learning.

### **ADAPT OR PERISH**

It is important that these institutions do not become rigid. Regular evaluation of PME must be done to determine whether it is achieving its desired functions and objectives. This is particularly urgent today, considering the complex environments in which the military finds itself operating. In evaluating PME, one must admit that the success is mixed. On the positive side, the structure and conduct of PME is impressive and successful. These are serious institutions with rigorous academic requirements. However, the outcome in terms of performance and success of missions in many parts of the continent is not as encouraging.

I speak from the Nigerian military context, which is where I spent my

career. It is the institution with which I am most familiar. In a career of 35 years, I was fortunate enough to have spent the last five years in different PME institutions as a commanding general. Through this experience I have seen the strengths and importance of PME and have observed the urgent need to reform and

African militaries have successfully promoted careerlong learning, but it is increasingly evident that the training and incentives in the military education system do not always produce the intended outcomes.

adapt to meet the demands of current threat environments.

In the Nigerian military, PME is structured, especially for the officer cadre, so that one cannot aspire to higher ranks without incremental PME exposures and experiences. This starts from the initial officer training at the Nigerian Defence Academy and culminates with strategic-level education near the peak of generalship. This structural aspect of PME is considered a success, and it is similar to how PME is structured in other African countries.

African militaries have successfully promoted careerlong learning, but it is increasingly evident that the training and incentives in the military education system do not always produce the intended outcomes. The major incentive for officers is to embark on and complete relevant courses to progress to higher ranks. PME has become a box for them to check to move up the ladder. The use of acquired education to complete tasks and solve complex problems in the field has been suspect. The result of this is a military that is increasingly reactive with short-term plans and with rapidly diminishing capabilities toward mission accomplishments. This is evident in the way assigned tasks are being confronted and conducted.

#### **NEW THREATS**

Change is urgent. The continent is facing a wide range of extremist threats in places such as the Lake Chad Basin, the Sahel, the Great Lakes region and the Horn of Africa. Many of these threats festered for years before individual countries developed coherent



strategies for response. It has taken longer for regional security partnerships to take shape. This is a challenge for PME institutions, which should look at their approaches and ask whether they are training military professionals to be proactive to volatile, uncertain, complex and ambiguous (VUCA) issues.

Evaluation of how the military conducts insurgency operations against the Boko Haram terrorist group in Nigeria has laid bare the shortcomings of PME in preparing the military. For example, in the early years of the insurgency, most missions were conducted in quick reactions to insurgents' attacks without adequate planning. The intelligence and early warning systems largely relied on open-source information and lacked relevant analysis. The logistic and procurement systems were reactive, short-term and largely unrealistic. The branches of the armed service largely conducted independent operations with little or no coordination. All these diluted the successes of the war against the insurgents and



contributed to the deepening politicization and lack of transparency in operational matters within the military. PME has a significant role to play in reversing these negative trends.

### **ASKING TOUGH QUESTIONS**

Comprehensive military transformation can be initiated through PME. However, PME must first be transformed and refocused toward problem-solving. PME must be restructured toward ensuring that the military is prepared to develop deliberate, timely and enduring responses to current and emerging VUCA threats instead of unplanned ad hoc responses. PME institutions must begin to find answers and solutions to critical questions such as:

- How can operational planning systems be more robust and realistic?
- How can early warning systems be made more responsive and adaptive?

- How can logistic systems be made more effective and efficient?
- How can procurement systems be more realistic and transparent?
- How can jointness and interagency collaborations be improved?

The answers and solutions to these and many more questions can be provided by PME if it is reoriented to do so. That reorientation can be initiated with the right political will and direction from the military hierarchy. Also, adequate and relevant investments in PME would have to be made to review and update curricula and acquire relevant technology. Advancements in information and computer technology have made learning much easier for the military through simulation and wargaming tools. PME institutions must have access to these tools.

Therefore, although the structure and delivery of PME can be said to have been perfected, the





problem-solving skills learned in PME are inadequate. As military officers we must take ownership of this problem. The military has a tendency of shifting responsibility by always blaming the political class for not providing sufficient financial support to undertake its missions. In many African countries the military was highly politicized during past involvements in political governance. The military hierarchy in the succeeding democratic dispensation has done very little toward a comprehensive transformation and realignment. Efforts at security sector transformation have been largely selective, uncoordinated and incomprehensive. The outcome has been significant effort and investment with uneven and unsatisfactory results.

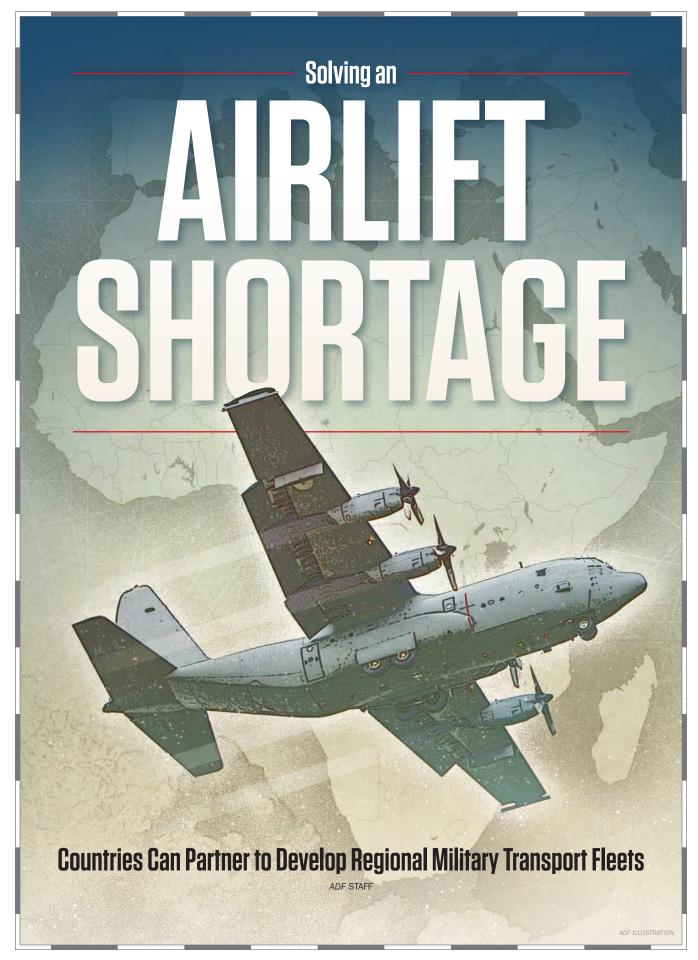
The challenges and dynamics of the current operational environment are evolving quickly. This partly explains why militaries appear to be overwhelmed in a VUCA environment. The answers and solutions should be found in PME that is oriented and focused toward problem solving, as opposed to PME that is designed largely for the purposes of career progression.

Contemporary PME for African nations must be designed to address the specific needs of the military as an institution and the nation as a whole. The current system must be reevaluated with a view to restructuring and realigning it to produce better outcomes. PME must be made deliberately contextual in terms of realistic scenario settings. Curricula must undergo continuous tests and evaluations in the field and through operational performance reviews so that relevant lessons for improvements can be derived. Critical and creative thinking must be infused at all levels so that innovations in problem-solving can be triggered and encouraged. PME must stay up to date with contemporary trends on the use of simulation and wargaming tools for modeling applied lessons learned. Simulation tools also should be introduced for projection of future events and modeling of likely responses and outcomes. These tools can easily be used to relate strategic contexts to local environments, which is necessary for contemporary military operations, thus making PME more adaptable, realistic, future-oriented and visionary.

I hope we can continue to leverage international assistance to correct the shortcomings and realign PME for better performance. Development partners have done so much and so well for us. African militaries must, therefore, rise to the occasion of improving and enhancing their military capabilities through PME, while development partners continue to sustain support and assistance.  $\Box$ 



Maj. Gen. Idris is the former commandant of the Nigerian Defence Academy in Kaduna. He served in a variety of roles over three decades, including chief of staff for the Nigerian Army Intelligence Corps, and after his retirement from active duty, he served as registrar for Baze University in Abuja. He holds two master's degrees from the National Defense University in Washington, D.C., and has studied at defense institutions in the United Kingdom and Pakistan. He received the Golden Jubilee Medal-Centenary Medal for Nigerian Servicemen and the Grand Service Star Medal in recognition of 30 years of service.





Then it comes to building military capacity in Africa, adding aircraft tends to take a back seat because of the expense involved to acquire combat craft, trainers and cargo planes.

Military applications aside, airlift capacity remains a critical need throughout the continent, as much for moving troops to troubled regions as dropping supplies to areas hit by natural disasters.

To address this need, the African Union (AU) has established a cell within its Peace Support Operation Division called the Continental Movement Coordination Center. The center oversees airlift contributed by the continent's regional economic communities, as well as short-term contract airlift, commercial sealift and land movement for peacekeeping operations. The AU has also compiled a database of continental air assets available through member nations to see where gaps and opportunities exist.

The center's mandate is to control and coordinate the use of strategic lift capabilities pledged for African Union missions. As a 2015 report by the African Center for Strategic Studies noted, the AU's highest priority is "the utilization of AU member states' organic strategic lift assets, with any shortfalls in capability supplemented by contracted commercial assets or partner assistance."

The first evidence of the center's potential came in the 2015 Amani Africa II military exercise, when a C-130 transport plane from Nigeria in the Economic Community of West African States region fulfilled an emergency airlift requirement by carrying 100 Soldiers and material from the Eastern African Standby Force.

"What this concept is saying is that, as much as we can, we should use the African resources first and mutualize resources for strategic lift, which could be complemented by partner support," retired Col. Mor Mbow of Senegal said at the time.

Despite widespread agreement on the need for such airlift capacity, actual aircraft remain in short supply. A 2013 book, *Military Engagement: Influencing Armed Forces Worldwide to Support Democratic Transitions, Volume II*, edited by Dennis Blair, emphasized Africa's need for more airlift resources: "African militaries must significantly increase capacity in air logistics to address the continent's environmental and humanitarian crises.

"The famine and drought ravaging the Horn of Africa require urgent intervention, which entails moving tons of foodstuff to remote regions where 9.6 million impoverished people are scattered. Furthermore, in Mozambique, seasonal heavy rainfalls have meant that only air transport is able to intervene and save the lives of desperate people who fail to relocate to higher ground every year. However, most African states lack the assets, resources and training."

### **Regional Resources**

As Africa weighs strategies to pool resources for airlift capacity, an existing model is worth examining.

The Strategic Airlift Capability (SAC), established in 2008, is based in western Hungary and is an independent, multinational program that provides the capability of transporting equipment and personnel over long distances to its 12 member nations. It owns and operates three Boeing C-17 Globemaster III longrange cargo aircraft.

The SAC nations are NATO members Bulgaria, Estonia, Hungary, Lithuania, the Netherlands, Norway, Poland, Romania, Slovenia and the United States, and NATO Partnership for Peace nations Finland and Sweden. Each participating nation owns a share of the available flight hours of the SAC planes that can be used for missions to serve its national defense, regional commitments and humanitarian relief efforts.

## "Every new crisis in Africa is met with the same daunting task of logistics and air mobility."

~ Maj. Ryan McCaughan, U.S. Air Force

In April 2020, SAC, at the request of the Netherlands, delivered two mobile intensive care units to the island of Sint Maarten in the Caribbean in an emergency response mission. *The Daily Herald* of the northeast Caribbean reported that the two units housed six intensive-care beds with ventilators and equipment for an additional six intensive-care unit beds in the Dutch Caribbean. This delivery was considered essential for the people of the islands to be able to treat COVID-19 patients.

The SAC concept originated at NATO headquarters in 2006. NATO officials and national representatives envisioned a partnered solution that would "satisfy a need for strategic airlift for member states without the economic resources to field a permanent capability." SAC got its first plane in July 2009, followed by two more delivered in the following months. By late 2012, the unit was considered fully capable of missions containing air refueling, single-ship airdrop, assault landings, all-weather operations day or night into low- to medium-threat environments, and limited aeromedical evacuation operations.

### Airlift on a Budget

In a 2019 study, U.S. Air Force Maj. Ryan McCaughan proposed using reconditioned planes to improve Africa's airlift capacity. He noted that the United States and other countries assisting African nations with airlift capacity would be better served by offering help on a regional basis, instead of helping individual countries. He said,

"Every new crisis in Africa is met with the same daunting task of logistics and air mobility."

He said that air mobility in Africa must be viewed as a regional resource. He proposed a comprehensive plan in association with, and led by, the African Union. He said African nations needed to take advantage of the "unprecedented availability" of a specific airplane — the C-130 cargo plane.

The Lockheed C-130 Hercules is a four-engine turboprop military transport plane that was first produced in 1955, and updated versions are still being made. It was designed to accommodate the conditions of the Korean War, with the United States needing a versatile transport plane that could airlift troops over medium distances and land on short, basic airfields.

About 70 countries have acquired C-130s over the years. More than 2,500 of the planes have been produced. There are more than 40 variations on the standard C-130. *Forbes* magazine has predicted that the C-130 likely will become the first military aircraft in history to stay in continuous service for 100 years.

The United States has worked with individual African nations to improve their airlift capacities, specifically with the C-130. In 2018, the U.S. donated a refurbished C-130 to Ethiopia. DefenceWeb reported that U.S. Embassy officials said the plane would "further enhance Ethiopia's capacity to play a vital role in regional peacekeeping missions, enabling Ethiopia to move humanitarian supplies where

A SAC C-17 parks on a runway apron in Timbuktu, Mali. STRATEGIC AIRLIFT CAPABILITY





they are needed in a timely manner and protect the lives of civilians in conflict areas."

In January 2020, the U.S. handed over a new C-130 Hercules hangar to the Nigerien Air Force at Air Base 201 near Agadez. "Niger will be receiving ex-U.S. C-130 aircraft later this year," defenceWeb reported.

The U.S. paid for the construction of the hangar, which was built within a year by international workers and about 90 Agadez residents. The hangar includes an engine maintenance room, supply storage, training area, and battery and tool rooms.

The hangar ultimately will shelter up to two C-130 transport aircraft, recently purchased by the Nigerien Air Force from the United States, defenceWeb reported.

#### The Best Choice

In his study, McCaughan concluded that the C-130 seems to be the best tool for improved airlift capacity in Africa in part because the U.S. already has chosen it for that purpose.

"Few would disagree that, in terms of capability provided, the C-130 is right for Africa," McCaughan wrote. "Primarily in terms of cargo capacity, flight time, and unimproved surface landing capability, this asset provides the answer for a region so frequently plagued by war and famine enhanced by what has been dubbed the 'tyranny of distance.' With a range of greater than 1,500 nautical miles, the capacity to carry up to 42,000 pounds of cargo, and ability to be reconfigured to adapt to a variety of mission sets, this is the

perfect aircraft for a continent with limited staging locations and a lack of surveyed landing zones which may necessitate a range of 1,000 miles before refueling can occur."

The C-130H's annual maintenance and sustainment costs of \$5 million to \$6 million are relatively low compared to similar aircraft, McCaughan argued.

The Excess Defense Article program is designed so that a country or region takes ownership of an asset such as an airplane on an "as is" basis by assuming responsibility for all costs of moving, repairing and maintaining it.

McCaughan said the African Union should use SAC as a model for its own regional airlift support capacity. As with SAC in Hungary, the AU should pick a "framework nation" that would take responsibility for the cost of restoring and maintaining donated C-130s in a region. The AU would develop a funding model to support part of the operational and maintenance costs of the aircraft. He said one model could use a flight-hour sharing plan negotiated among the host nation, the AU and other partners in Africa.

Individual countries in Sub-Saharan Africa have struggled financially to maintain their transport planes. McCaughan concluded that a new way of managing military transport fleets is the only answer: "Until regional, governmental partners with similar interests unite contractually with one another as well as industry capable of conducting high-level maintenance, the cycle will not be broken and air mobility in Sub-Saharan Africa will remain elusive."

## The Cost of Returning a Plane to Service

Lockheed Martin has produced C-130 transport planes since 1955. ADF interviewed Dennys Plessas, vice president of Lockheed Martin International Business Development-Africa, Greece, Italy and Latin America, about the practice of returning out-of-service C-130s to the skies. The questions and answers were exchanged via email and edited for length.

**ADF:** Recognizing that no two vintage planes are alike, how much does it cost to return a well-maintained vintage C-130 to service?

*Plessas:* Just because an aircraft is well-maintained does not mean that it is either compliant to fly in worldwide airspace or is not approaching a service-life limit that requires a part as large as the wing to be replaced. In the case of 40-plus-year-old C-130s, the price of a depot overhaul just to return the aircraft to service can exceed the value of the airplane.

The most recent C-130s to be returned to service were part of the U.S. government Excess Defense Article (EDA) program. The aircraft were given the appropriate overhaul in a U.S. government depot in order to be delivered.

**ADF:** What's the value of a good used C-130?

*Plessas:* In recent years, we have seen the values of used C-130s range from hundreds of thousands of dollars for an airplane cannibalized for parts to the mid-\$10 million to \$20 million range for an approximately 35-year-old C-130H with a new glass cockpit.

**ADF:** What is the annual cost of maintaining a C-130 that is used regularly? Former Air Force Chief of Staff Gen. Norton Schwartz told Congress in 2012 it cost \$10,400 per hour to fly the C-130. Is that still an accurate figure?

*Plessas:* The cost of maintaining a C-130 is determined by several factors, to include:

- How many hours the aircraft is flown each year.
- The availability rate that is demanded by that operator.
- Fleet size.
- Whether the aircraft is maintained by a government facility or through a commercial service center.

The cost per flight hour is broken into fixed costs and variable costs. Fixed costs are dominated by maintenance and are usually spread across a fleet. Large fleets usually have lower fixed costs per aircraft because of the economy of scale as compared to a small fleet. The variable costs are consumables such as fuel and crew salary.

One of the biggest fixed-cost drivers is the effect of availability rate on maintenance. New C-130s when delivered have availability rates upwards of 90%. After 40 years of flying, we see an aircraft's availability rate drop to between 50% and 55%. As an aircraft ages, it requires

more inspections and more spare parts, while operators also have to factor in parts obsolescence. It is possible to regain some of the availability rate, but that requires a large influx of money.

**ADF:** What is involved in maintaining a C-130?

Plessas: C-130s are either maintained by government-owned depots, by government-contracted commercial entities (most commonly airlines) or Lockheed Martin-approved service centers. There are 17 Hercules Service Centers located on six continents that can support the maintenance checks along with aircraft depot level maintenance modification and overhaul support. Denel in South Africa is the only Hercules Service Center on the continent and has experience maintaining the South African Air Force's C-130BZ fleet.

**ADF:** At what point is a well-maintained vintage C-130 not worth keeping in service or putting back in service? Is the age of the plane the chief factor?

*Plessas:* The C-130 has no life limit in terms of years, but there are considerations to be made when evaluating keeping a C-130 in or out of service.

Let's look at the C-130H model as an example. C-130Hs were built from 1964 to 1996. The economic service life of a C-130H in service with a major military operator is approximately 40 years and is dependent on how the aircraft was flown and maintained by that operator.

Service limits exist for the C-130H aircraft structure/ structural components in terms of hours and number of events (i.e., number of landings). A "service limit," "service year limit" or "service life limit" should not be confused with the aircraft economic service life. Factors other than structural limits should be considered when evaluating economic service life such as the economics of operating an older aircraft and the decline in availability rate due to additional maintenance.

As C-130Hs age, their availability rates decrease. Many military operators report availability rates of 50% with 35-to 40-year-old C-130Hs. Routine and unforecasted maintenance due to age significantly impact availability rates. Unanticipated support concerns increase the time the aircraft remains in depot as well as requiring more labor, parts and engineering support. These all translate to less availability and more cost.

Operator	C-130A	C-130B	C-130E	C-130H	C-130J	Total	Average Age
Botswana		3				3	60.5
Cameroon				3		3	41.1
Chad				1		1	30.5
Ethiopia		2	1			3	57.7
Gabon				1		1	42.4
Nigeria				3		3	39.1
Safair			1	5		6	46.2
South Africa		7				7	57.4

Table 1 Source: Lockheed Martin

Operator	C-130A	C-130B	C-130E	C-130H	C-130J	Total	Average Age
Algeria				14		14	37.1
Egypt				26		26	40.3
Libya				2		2	49.4

Table 2 Source: Lockheed Martin



**ADF:** There are varying figures as to how many C-130s are still operating in Sub-Saharan Africa. Do you have any estimates?

*Plessas:* Based on the Lockheed Martin database at this time, the breakdown for C-130 Operators in Sub-Saharan Africa is: (Table 1).

Based on the Lockheed Martin database at this time, the breakdown for North Africa is: (Table 2).

The following countries replaced their C-130Hs with C-130Js at these ages:

- Italy 30 years
- Denmark 29 years
- Norway 39 years
- United Kingdom 35 years
- Australia 34 years
- Canada 35 years

**ADF:** What kind of facilities would regional groups in Africa have to build to house and maintain one or two C-130s?

*Plessas:* Operators typically need a hangar large enough to house a C-130. Most hangars, due to economy of scale, are built to house two or more aircraft because the facilities not only house the aircraft for maintenance, but also contain facilities for aircraft painting, support shops for technicians, a technical library, storage area for aircraft parts and office space.

**ADF:** A 2019 study recommended that such regional facilities in Africa have at least three C-130 planes. Is there an economy of scale in maintaining three or more such craft?

*Plessas:* There is an economy of scale. There is a minimum set of infrastructure for one C-130. Expanding to three C-130s does not triple the infrastructure. In a one-aircraft fleet the entire fixed infrastructure cost is borne in the cost per flying hour. That cost is divided in a three-aircraft fleet.

Lockheed Martin's Operational Analysis team has consistently recommended a minimum of three aircraft in a fleet to be operationally effective. In general, one aircraft is usually in a maintenance action. The reality is only two aircraft are available for tasking. Training missions will impact the tasking level of the two aircraft.  $\square$ 



## Liberian President Sings About Coronavirus

AGENCE FRANCE-PRESSE

iberian
President
George Weah
has released a
coronavirus-themed
single, using music
to raise awareness
about prevention



measures in the West African state.

In his Let's Stand Together and Fight Coronavirus, Weah explains how the virus is spread and urges hand-washing to a backing of harmonized female vocals and upbeat guitar music from the group, the Rabbis.

"From Europe to America, from America to Africa, take precautions, and be safe," the former football icon sings.

The roughly six-minute track also describes symptoms and explains how COVID-19 can spread when people touch their nose or eyes. As with other states in the region, there are fears about Liberia's capacity to respond to an outbreak.

The country was the worst affected by the 2014-16 West African Ebola outbreak, when more than 4,800 people in the country died.

Weah's spokesman, Solo Kelgbeh, said the president produced a similar song during the Ebola crisis and that he started working on the new single before COVID-19 even reached Liberia. The song serves a practical purpose, Kelgbeh said.

"Liberia is a country where a majority of the people don't have access to internet and Facebook, but everyone listens to radio," he noted. "This song will be played on various radio stations in the country ... to have the message spread sufficiently."

# **Kenyan Football Team** is a **Symbol of Hope**

VOICE OF AMERICA

Nairobi's Kariobangi neighborhood became home to a football team in 2000. Later named the Kariobangi Sharks, the team was a bright spot in an informal settlement marked by poverty, crime and crowded living conditions.

The team became an escape for talented young people with an interest in football, some who might otherwise be involved in crime. In the past two decades, the team has risen to the top of Kenya's football league, nurturing talent and giving hope to a new generation of players.

When Eric Juma was 11 years old, he saw the team training near his house. It stood out for Juma because it seemed organized. He would join the team soon after. Now he's 25 and captain of the team.

Kariobangi is plagued by unemployment and crime, and Juma said many of his childhood friends ended up in gangs. The Sharks kept Juma on the right side of the law, but being a team from a poor settlement brought its own challenges, he said.

"We never had money way back," he said. "We used to go to Mombasa, Kisumu all those times. We didn't even have enough money to buy mineral water, so we used to carry water from Nairobi to Mombasa," Juma said. "Those are some of the challenges we faced as a team and as a player individually; sometimes you don't have football shoes, you have to borrow from another player when they are not playing."

In 2019, Juma had one of his greatest days, as the Sharks defeated British football team, Everton, winning 4-3 in a post-match shootout.

It is not clear who organized the young boys who founded the Kariobangi Sharks. Residents say the players organized themselves, then received donations and began competing in tournaments. Such donations came from well-wishers, including Football Kenya Federation President Nick Mwendwa, who is credited as club founder.

The Sharks have gained a huge fan base in Kenya, competing in Kenya's Premier League with more than two dozen other teams. The football club has a youth team for boys below the age of 20 and teams for younger ages.

Juma's dream is to lead his team to play in the Africa Cup.



The Kariobangi Sharks defend against a free kick during a match in Nairobi.

## Wrestlers Fight for Peace in Ravaged South Sudan

REUTERS

South Sudanese wrestler Kur Bol Jok strode into the arena, puffed out his chest and faced his opponent, bracing for the fight.

Wrestling is popular in the world's youngest nation, which has been devastated by five years of civil war. Athletes say it is one of the few outlets in which ethnic groups who have fought each other can engage in friendly competition.

"Wrestling brings peace as different people come from different places to meet and create friendship," Jok said before the match. "Winning brings joy, and losing is normal because it is not a real fight."

Matches draw huge crowds across the country. Some were held during the conflict.

Some wrestlers smear their faces and chests with white ash. Bright animal print cloth, slashed into ribbons, dangles over their shorts.

Jok, dressed in a leopard print, strained as he grappled with

opponent Mar Jalot before flipping him over in the red dust and putting his hand on Jalot's chest to signify victory. There are no hard feelings.

"We came here for peace with all



Ladu Makur tackles Machiek Chok in a peace match during national championships in Juba, South Sudan. REUTERS

the tribes gathered to witness the game," said Jalot, whose outfit was decorated with cow-print cloth.

The carnival atmosphere, in which wrestlers dance to celebrate victories and women chant the names of winners, is a welcome respite from life's hardships.

The oil-producing East African nation won independence from neighboring Sudan in 2011 after decades of scorched-earth warfare. Then civil war broke out two years later, killing an estimated 400,000 people before the sides signed a peace deal in 2018. On February 22, 2020, the president and former rebel leader formed a long-delayed unity government.

Sports is one of the few distractions in a nation with few roads, little electricity and where most schools don't function. Most important, it unites young people divided by war, said wrestling coordinator Limor Joseph.

"It is ... the games that brings them together," he said.

# DRC FESTIVAL CELEBRATES LIFE, PEACE

BBC NEWS AT BBC.CO.UK/NEWS

In a field in central Goma, in the eastern part of the Democratic Republic of the Congo, 36,000 people got the chance to forget fears about insecurity and enjoy some top music acts at the Amani Festival.

The festival, named after the Swahili word for peace, is a rare time for such large numbers to come together in one place in this region. Goma is the biggest city in an area that has seen an upsurge of violence. Attacks by the Allied Democratic Forces rebel group and army attempts to flush them out have led to hundreds of civilian deaths.

The three-day event started with a performance of a requiem, or prayer for the dead, based on Mozart's *Requiem* but given a Congolese interpretation through local performers.

The living also were remembered. "We are coming together to show the world that life still exists," organizer Guillaume Bisimwa said, "that we are aware that a better future depends on all of us and that we must work together to build it."

As the festival was promoting peace across the region, it also featured traditional artists from Rwanda, which is



just across the border. A troupe came to show the Intore dance, which is performed at family celebrations and at big national events.

The first festival was in 2014. The 2020 event was the fifth one. It included 75 stands for businesses and nongovernmental organizations, 810 volunteers from 13 nationalities, and 35 groups of musicians and dancers.



U.N.
Secretary-General
Calls for
CEASE
FIRE
Amid COVID-19
Outbreak

ADF STAFF

nited Nations Secretary-General António Guterres urged warring parties across the world to lay down their weapons in support of the bigger battle against COVID-19, which he called the common enemy that is threatening all of humanity.

"The fury of the virus illustrates the folly of war," he said. "It is time to put armed conflict on lockdown and focus together on the true fight of our lives."

Guterres pointed out that marginalized people suffer the most during war and are most at risk from the disease. These include refugees, women, children and people with disabilities. He said health systems in war-torn countries have been decimated, and the limited capacity available must be used to fight the coronavirus. "Silence the guns, stop the artillery, end the airstrikes," he said.

Guterres also asked for the creation of corridors to allow aid workers and doctors to enter disease-afflicted areas.

Despite these hopes for warring groups to lay down arms in response to the virus, early evidence indicated the opposite may happen. In March 2020, extremist groups in Mozambique, Mali and Somalia all launched devastating attacks.

Gen. Stephen Townsend, commander of U.S. Africa Command, said there are indications that extremist groups will seek to take advantage of the need by some countries to divert security resources to fight the virus.

"While we might like to pause our operations in Somalia because of the coronavirus, the leaders of al-Qaida, al-Shabaab and ISIS have announced that they see this crisis as an opportunity to further their terrorist agenda," Townsend said, "so we will continue to stand with and support our African partners."

People bury a man suspected to have died of COVID-19 in the Madina district outside Mogadishu, Somalia. REUTERS





### Gabon Takes a Stand Against the

## PANGOLIN TRADE

AGENCE FRANCE-PRESSE

abon banned the sale and consumption of pangolins and bats, which are suspected sources of the COVID-19 outbreak in China. Dry pangolin scales are on display at a market in Nigeria.

Pangolins are critically endangered and have long been protected, but they are sold in the markets of the capital, Libreville, where their meat is popular. They have long been illegally trafficked to China, where they are highly prized in traditional medicine.

The Central African nation is 88% covered in forest, and hunting and bush meat have long been a way of life.

The Water and Forest Ministry said early studies indicate COVID-19 was a "combination of two different viruses — one close to bats and the other closer to pangolins."

Gabonese authorities said the move follows other restrictions taken during past outbreaks. "A similar decision was taken by the authorities when our country was affected by the Ebola virus — a ban on eating primates," Forestry Minister Lee White said.

The national parks agency announced in mid-March that tourists would no longer be allowed to interact with great apes to avoid any risk of contamination by COVID-19.

The pangolin, the world's most heavily trafficked mammal, also called the scaly anteater, is believed to have possibly been a vector in the leap of COVID-19 from animal to human at a market in Wuhan, China, in 2019.

Its scales fetch a high price on the black market because they are commonly used in traditional Chinese medicine, although scientists say they have no therapeutic value.

### UGANDA UNVEILS ——

## DIGITAL LAND REGISTRY SYSTEM

ADF STAFF

he Ugandan government has launched a digital land registry system to reduce fraud and land rights disputes.

The system has been in the works since 2010 and is operational in all 22 ministry zonal offices of the country. The program is a partnership between Uganda's Ministry of Lands, Housing and Urban Development and the French company IGN FI. A World Bank loan financed the program.

"We've seen a tenfold reduction in the time it takes to carry out transactions," Christophe Dekeyne, CEO of IGN FI, told Radio France Internationale. "All of the data entered into the NLIS [National Land Information System] was subject to very thorough checks and vetting processes to minimize the input of fraudulent titles."

The new land titles created by the system have bar codes that make it more difficult to forge signatures.

Other countries are interested in following Uganda's lead. In a February 2020 conference, representatives from 30 countries traveled to Uganda to discuss land rights issues. Keynote speaker and land rights expert Frank Byamugisha said that modernizing land ownership documentation across the continent will lead to more entrepreneurship and development and will help economies grow.

"Extreme poverty can be eliminated from Africa given the abundance of its land and promising labor force," Byamugisha said, according to the Ugandan news site ChimpReports.com. "Sub-Saharan Africa possesses half the world's arable land, more than 200 million hectares."

Experts believe the digital registry system already is paying dividends for Uganda. The time required to produce a land title has been reduced from 52 days to 10 days, said Dorcas Okalany, permanent secretary of Uganda's Land Ministry. She added that the project began with a \$72 million World Bank loan, and at the completion of the project, the country has seen a 269% return on the initial investment.

"Safe storage of records and space-saving ... has led to better security of records by reducing possibilities of manipulation and elimination of manual system and problems associated to it, thus leading to efficiency and effectiveness in land transactions," said Okalany, according to East African Business Week.

Traffic moves along Hoima Road in Kampala, Uganda. REUTERS





# UGANDA DEPLOYS ARMY TO BATTLE LOCUSTS

ADF STAFF

s desert locusts spread across East Africa in February 2020, Uganda deployed 2,000 Soldiers to battle the pests.

Ugandan troops used pesticide on the ground as authorities tried to secure helicopters for aerial spraying.

However, Maj. Gen. Sam Kavuma, deputy commander of land forces for the Uganda People's Defence Force, said locusts can evade such efforts.

"One challenge, which is being solved, that is aerial support to spray them," Kavuma told Voice of America. "We deal much with those which are on the ground. And when we kill them, or during the spray then they jump and go on top of the trees where our pumps cannot reach."

Uganda is one of eight East African nations dealing with reduced crop yields due to locust infestations. The other countries are Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan and Tanzania.

Ethiopia, Kenya and Somalia were the worst hit by the crop-devouring pests.

By April, another swarm of locusts — younger and more aggressive — had hit East Africa. The United



Swarms of locusts land and feed on shea trees, which are a big source of food and income for farmers in Otuke, Uganda. AFP/GETTY IMAGES

Nations estimated that the second swarm could be 20 times bigger than the first and could become 400 times bigger by the start of rainy season in June, when harvest was to begin.

Amid the infestation, aid organizations scrambled to ensure that enough food was distributed in rural areas.

"In some countries where these policies or where these measures are starting to be taken on board, there have been limitations on humanitarian access," Steven Burak of ACTED, a humanitarian aid group, told Voice of America.

"This is the perfect storm," he said. "What we're seeing as these long rains are starting over the coming months throughout the Horn of Africa, it's the ideal time to see an upsurge with desert locusts. Now, as this upsurge occurs you also have the harvests. So while the harvests are prepared, we'll see them be greatly affected by the number of locusts that will be swarming at that stage."



# NEW TASK FORCE TAKES SHAPE IN SAHEL

ADF STAFF

rance and several of its allies have announced the formation of a new task force to fight terrorist groups in West Africa's Sahel region.

Thirteen countries are task force members: Belgium, the Czech Republic, Denmark, Estonia, France, Germany, Mali, the Netherlands, Niger, Norway, Portugal, Sweden and the United Kingdom. A statement Soldiers from Burkina Faso participate in a simulated raid during the U.S.-sponsored Exercise Flintlock in Ouagadougou, Burkina Faso. REUTERS

said the task force would be operational by early 2021. It is called "Takuba," which means "saber" in the Tuareg language.

The Sahel region, extending from Senegal east to Eritrea, has been home to a steady rise in violence. In January 2020, the United Nations envoy for West Africa told the U.N. Security Council that attacks had increased fivefold in Burkina Faso, Mali and Niger since 2016. More than 4,000 deaths were reported in the region in 2019.

In Burkina Faso, extremist attacks had prompted 300,000 people to flee south, according to Al-Jazeera.

Takuba also will assist the region's national armies in countering armed terrorists and will bolster efforts made by France's Operation Barkhane and the regional G5 Sahel Joint Force, which is composed of troops from Burkina Faso, Chad, Mali, Mauritania and Niger.

Takuba will operate in the Liptako region, an area between Burkina Faso, Niger and Mali. Liptako is a stronghold for fighters linked to al-Qaida and the Islamic State.

French plans for the task force were first reported in October 2019. That month, at least 25 Malian troops were killed and dozens were missing after raids on two military camps near the Burkina Faso border carried out by heavily armed militants in vehicles. The insurgents also stole a large quantity of arms, ammunition and equipment before Malian special forces, with support from French warplanes and helicopters, fought back, The Defense Post reported.

Days later, three villages and an Army unit were attacked in northern Burkina Faso. Insurgents killed 17 people, including a Soldier.

## **NIGERIA**

# TAKES OUT **BOKO HARAM LEADERS** IN AIR RAID

ADF STAFF ---

he Nigerian Air Force (NAF) killed several top Boko Haram commanders during airstrikes on settlements near Lake Chad.

"The airstrike was executed on the heels of impeccable intelligence reports," said Brig. Gen. Bernard Onyeuko, acting director of Defence Media Operations, of the March 18, 2020, operation. Onyeuko added that the reports showed that top Boko Haram "commanders as well as some of their fighters and designated suicide bombers had assembled at the location for meetings, aimed at orchestrating coordinated attacks."

The strikes were part of Operation Decisive Edge, a mission to decimate strongholds used by the extremist group. The aerial strikes, organized through the Aerial Task Force of Nigeria's Operation Lafiya Dole, have pounded Boko Haram enclaves in the northeast of the country. On March 6, NAF fighter planes took out dozens of terrorists at Bula Korege on the edge of the Sambisa Forest in Borno State.

"The NAF fighter jets took turns in attacking the target area, neutralizing many BHTs [Boko Haram terrorists] and destroying their structures in successive passes," said Air Commodore Ibikunle Daramola, according to Nigerian newspaper *The Guardian*.

"After the first wave of strikes, the terrorists reassembled at another part of the settlement where they were tracked and mopped up," he added.

On March 9, aerial attacks took out Boko Haram logistics facilities in Bukar Meram. On March 11, fighter jets and a helicopter gunship gave close air support to ground troops in Gubio who were pursuing and, ultimately, destroyed a Boko Haram gun truck and retreating fighters, the *Vanguard* reported.

Daramola said the aerial attacks of Decisive Edge were intended to "shape the battlespace" for future ground and air operations.





THE ASSOCIATED PRESS

VOICE OF AMERICA

fficials at South African National Parks say cooperation with neighboring Mozambique has been key to reducing rhinoceros poaching in the famous Kruger National Park. Kruger is home to the world's largest wild rhino population and has proven a tempting target for poachers who for years jumped the park's borders.

South African rangers, their Mozambican counterparts and private business people leasing land from Mozambique's

government met with journalists along the border fence between the two countries during a parkorganized media trip to the Marula North region of the Kruger.

This area used to see heavy rhino poaching originating in Mozambique, but rangers now say they see a positive trend.

"Between 2018 and 2019, this area had a 53% decline in incursions of rhino poachers, and we lost 47% less rhinos," said Steven Whitfield, Marula North regional ranger. "That is a massive gain. And that wasn't coincidental."

Poachers have long targeted African rhinos for their horns, which fetch up to \$60,000 per kilogram in Asian markets.

Improved patrols, technology, and cross-border cooperation are helping to reverse rampant poaching that peaked in 2014, when nearly 830 were killed in the park.

Policing Kruger National Park, one of Africa's largest game parks at 9,500 square kilometers,

is not easy. Rangers use helicopters in addition to sophisticated surveillance equipment. Another challenge to law enforcement is that there is no extradition agreement between South Africa and Mozambique.

Kruger National Park has an estimated 8,600 wild rhinos, a key part of wildlife viewing that attracts nearly a million tourists per year. Officials on both sides of the border hope that with further cooperation, those numbers will continue to grow.

# Central African Countries Introduce 'Eco' Bill

VOICE OF AMERICA

Debate on the future of the CFA franc in the six-member Central African Economic and Monetary Community (CEMAC) has intensified after the announcement that eight African countries agreed to change the name of their common currency to "eco." They also severed the CFA franc's links to France.

The CFA franc used by West and Central African states is considered by many as a sign of French interference in its former African colonies.

Louis Nsonkeng, a researcher and economic lecturer at the University of Bamenda-Cameroon, said when the eco becomes legal tender, the eight West African states will have their financial freedom from France. He says the six Central African states that also use the CFA franc should

immediately emulate the example of the West Africans.

Cameroon, the Central African Republic, Chad, Equatorial Guinea, Gabon and the Republic of the Congo use the CFA franc. The CEMAC member states have more than 50% of their financial reserves kept in the French treasury, after agreements signed in 1948.

Thomas Babissakana, a
Cameroonian economist and financial expert, said such agreements
drain the economies of Central
African states because France now
uses the euro, yet France still controls
its currency.

The CFA franc was pegged to the French franc until 1999, when its value was fixed at about 660 CFA francs to one euro.





## Kenya Launches Campaign to Prevent HPV

VOICE OF AMERICA

he World Health Organization says
East Africa has the highest rate of
cervical cancer in the world. Kenya
has begun a mass vaccination of
girls against the human papillomavirus
(HPV), which can lead to cervical cancer.

The vaccine is being welcomed by HPV patients, who hope their children will be protected better than they were.

Jacinta Agunja, 30, tested positive in 2016 for one of the HPVs that leads to cervical cancer. After two years of intensive and expensive treatment, she was free of HPV and did not get cancer.

Agunja hopes Kenya's mass vaccination of girls, launched in late 2019, will prevent her 10-year-old daughter from also getting the virus

Kenya is offering the free HPV vaccine to 10-year-old girls as part of the country's routine immunization schedule.

At least seven women die every day in Kenya from cervical cancer, according to the Ministry of Health. The ministry says the vaccine could cut the rate of cervical cancer by up to 70%.

At least 115 countries have made the HPV vaccine routine, including some in East Africa. Rwanda first introduced the vaccine in 2006, followed by Uganda in 2015 and Tanzania in 2018.

# AFRICANS EMBRACING VEGANISM

VOICE OF AMERICA

Meat may be meeting its match, as more and more South Africans are experimenting with vegetarian and vegan lifestyles.

Veganism, which entails cutting out all meat and animalderived products, such as dairy, eggs and honey, is slowly growing globally. A Google Trends report puts South Africa at 14th globally in searches for "vegan," the only African nation to rank so high.

Other African countries, including Nigeria and Kenya, are also reporting an increased interest in veganism. One 200-member community in Nairobi is entirely vegan, reports Deutsche Welle.

Yvonne Iyoha of Nigeria founded the blog Eat Right Naija after learning about the social and environmental impacts of eating meat. The website focuses on producing healthy, vegan, Nigerian recipes and educating people about the benefits of plant-based eating.

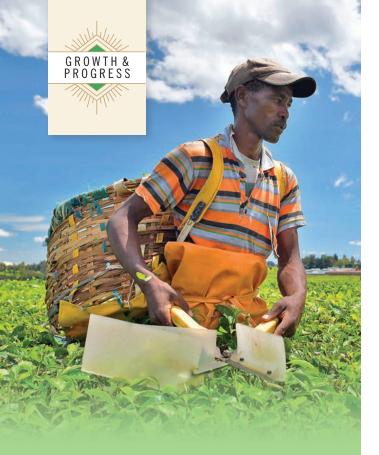
Although there is no official count of how many vegans there are in South Africa, the interest has led to vegetarian and vegan restaurants sprouting up in Johannesburg, the nation's economic hub. In 2020, Africa's first large-scale vegan and plant-based exposition will land in Cape Town.

Moral and health reasons were cited by many new vegans, like 41-year-old financial advisor Dayalan Nayagar, who made the switch in 2019 after being a lifelong omnivore.

"I got introduced to this whole new way of eating, you know healthy, eating organic-type food from plants, and I couldn't believe it," he said.



A woman serves herself at a vegan restaurant named Veggie Victory in Nigeria.  $\tt REUTERS$ 



# Kenya Experiments With Boutique Teas

AGENCE FRANCE-PRESSE

n a humming factory in Kenya's highlands, tea is hand-plucked from the fields, cured and shredded into the fine leaves that have sated drinkers from London to Lahore for generations.

A farmworker harvests tea leaves in Kenya.

AFP/GETTY IMAGES

But Kenya's prized black tea isn't fetching the prices it once did, forcing the top supplier of the world's most popular drink to try something new. In the bucolic hills around Nyeri, factory workers are experimenting with a range of boutique teas, deviating from decades of tradition in the quest for new customers and a buffer against unstable prices.

Like the bulk of Kenya's producers, they've been manufacturing one way for decades — the crush, tear and curl (CTC) method, turning out ultrafine leaves well-suited for teabags the world over. Now, in Gitugi, a factory in the Aberdare mountain range, producers are experimenting with a whole-leaf, slow-processed variety, savored for its complex tones and appearance.

The risk was necessary: Prices for stalwart CTC at auction dropped 21% in 2018-2019, underscoring the urgency to diversify and extract more from every tea bush.

The changing market may open doors to markets where whole-leaf, bespoke teas and custom infusions are rewarded with higher prices, says Grace Mogambi of the Kenya Tea Development Agency. The agency represents 650,000 small-holder farmers by selling and marketing their tea.

# Africa Delivers Largest Profits on Investment

VOICE OF AMERICA

Pritish companies have made bigger profits investing in Africa than in any other region of the world, according to an international report.

The Overseas Development Institute urges companies to seek profits on the continent rather than seeing it as a place to do charitable work. The institute said that with 1.2 billion people and eight of the world's 15 fastest-growing economies, Africa offers world-beating returns on investment.

The report looks at investment by British companies in Ghana, Kenya, Nigeria and South Africa. Its authors say the "young population, growing middle class, and planned industrial growth make the continent a great place to do business."



An oil worker on a deep-sea rig near Takoradi, Ghana REUTERS

In 2019, the rate of return on all inward foreign direct investment in developing African countries was 6.5%, higher than the rates in developing Latin America and the Caribbean at 6.2%, and also higher than the 6% return in developed economies.

Data from the International Trade Center shows France and Germany export more than double the value of goods to Africa than Britain does. British companies believe they have an edge against their rivals in the field of technology.

The secretary-general of the United Nations Conference on Trade and Development, Mukhisa Kituyi, said that African nations need to work harder to attract investment.

"We need to develop this human resource as a contribution to the world's economy; we need to create the conditions to make Africa the next factory of the world," Kituyi said.

# **Ethiopian Women**

# Find Opportunity in Green Energy

WORLD BANK

Taking use of vast energy poten-Ltial such as solar, wind and geothermal, and a grid that is nearly 100% supplied by renewable sources, Ethiopia is undertaking an ambitious project to achieve universal electricity access by 2025.

In fact, not only is Ethiopia emerging as a role model for energy development in Sub-Saharan Africa, it is doing so while spearheading innovations on gender equality.

In 2018, the Ethiopian Electric Utility decided to ensure that women are better represented in what has been an overwhelmingly maledominated sector. In 2020, women represent 20% of the utility's workforce. The utility wants that figure to reach 30% within five years and has a long-term vision of achieving gender equality across the institution.

"Women make up 50% of society," said CEO Ato Shiferaw Telila. "For our utility to be effective in its corporate objective, we need to create an enabling environment for both men and women."

The utility has allocated \$4.5 million to closing gender gaps and citizen engagement. Its approach started with developing a pipeline of future workers. It has signed a unique partnership with the Ministry of Science and Higher Education and 12 Ethiopian universities to provide courses in science, technology, engineering and mathematics to help female staffers match male employees in education so they can advance their careers in the energy sector.

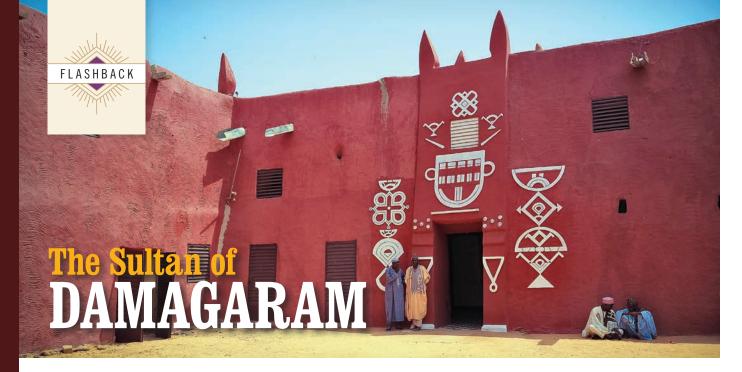
The utility is now offering full scholarships for female staffers to get a master's degree or to gain technical training. Work also is ongoing to investigate barriers — such as hostile study environments for women and limited professional networks

— to navigating the school-to-work transition.

Engineering student Dagmawit Alemayehu said opportunities are opening up despite challenging circumstances. "I have to work extra hard because, as a woman, the first thing they see when they look at me is: She's not supposed to be here," Dagmawit said. "But now there are scholarships for women, and some courses are provided for free for female students. I feel like things are getting better."

The utility also has developed leadership training for its female employees to ensure that women do not get stuck in junior roles. It also has set out to make its working environment safer for male and female workers by developing a genderbased violence policy and a code of conduct that makes it clear that

sexual harassment is not accepted. Camels walk near the Ashegoda wind farm in Ethiopia, the second largest in Sub-Saharan Africa. AFP/GETTY IMAGES



ADF STAFF

The Sultanate of Damagaram was never one of Africa's biggest empires. In what is now Niger, at its most expansive it was about 70,000 square kilometers — about the same size as modern-day Sierra Leone.

But as a commercial center, it was unrivaled in the region during its time. It was the hub of a trade route that swept from what is now coastal Libya in the north, down to what is now Nigeria in the south. Its sultans, 26 in all, ruled for 200 years until the early 20th century.

At its center was the capital, Zinder, where reminders of the empire survive to this day.

The dynasty began in the decay of the Kanem-Bornu Empire, which had been beset by famines, among other problems. By the late 18th century, Bornu rule was limited to the Hausa regions of what is now Nigeria. The Hausas, who are today Sub-Saharan Africa's largest ethnic group, adapted to the circumstances by converting to Islam and becoming traders and craftsmen.

Muslim aristocrats founded the Damagaram Empire in 1731. It began as a vassal state, similar to the feudal system in Europe at that time, with commoners owing service and military support to the aristocrats in exchange for using land for farming and cattle. The empire expanded rapidly, conquering other vassal states in the region — 18 in all by the 19th century.

Zinder began as a small Hausa tribal village, but it was ideally located to serve as a hub for trans-Saharan trade. The sultan moved the capital there in 1736. The empire was in the path of the major trade route from Tripoli, Libya, to the Kano sultanate in what is now Nigeria. As such, the empire was key to the economic health of the entire region. It also was involved in east-west trade. Almost all trade passed through Zinder.

By 1850, the sultan lived in a palace in Zinder. A European traveler of that time noted that the sultan had about 300 wives, along with countless children. By the end of the century, it was said that the sultan had 5,000



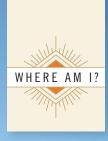
Soldiers on horseback in his cavalry, along with 30,000 foot Soldiers. He had a dozen cannons, all made in Zinder.

By 1890, the French had expanded into the sultanate from their base in Senegal. In December 1897, a 37-man French mission led by Capt. Marius-Gabriel Cazemajou went to the court of Damagaram. When it became clear that the French wanted to take over the region, Cazemajou was assassinated. The mission retreated and was replaced by armed forces.

An armed column attacked Zinder on September 13, 1899, killing Sultan Amadou Kouran Daga and putting an end to the empire. However, the French largely ignored Zinder and the surrounding area, and later sultans continued to have some power.

The chain of sultans survives to this day, largely as a ceremonial position. The sultan continues to live in the palace that was built 170 years ago.

The palace is the city's greatest tourist attraction. With its walls 10 meters high and 10 meters thick, it is an imposing structure, but it never has been attacked and its defenses never tested. The emblem of the sultan, a sword and two spears crossed behind a shield, is displayed above the palace gate.





# CLUES

- 1 This city was developed in the 15th and 16th centuries with the establishment of the Sultanate of Aïr.
- 2 Its center, which is divided into 11 irregular sections, was an important crossroads for caravan traders.
- A 27-meter mud-brick minaret, the tallest such structure on Earth, towers above the city.
- 4 This city is considered a center of culture for the Tuareg people.

# SHARE YOUR KNOWLEDGE

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