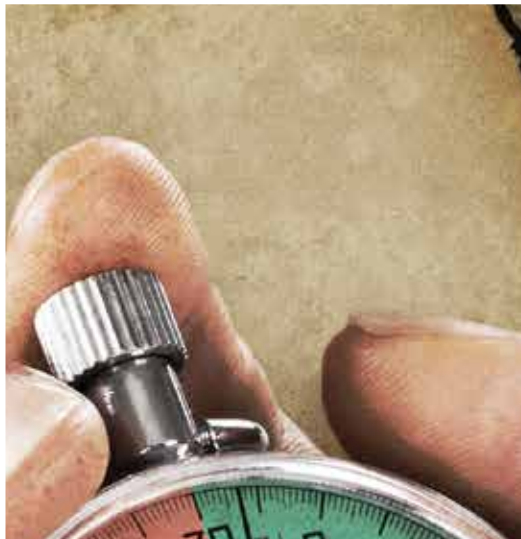


# adf

AFRICA DEFENSE FORUM



## RAPID RESPONSE

**Time Is Short  
When Disaster  
Strikes**

## PLUS

**A Conversation with  
Dr. John Nkengasong  
of the Africa CDC**



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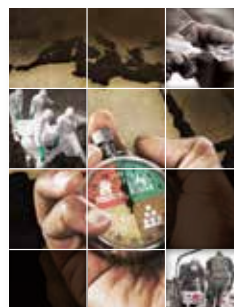
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## ON THE COVER:

This *ADF* photo illustration uses a stopwatch to illustrate the importance of a speedy response to disasters. The watch face has designs representing flood, fire, displaced people and disease. It is set against a background of photos showing various aspects of emergency response.

PHOTOS BY MONUSCO, REUTERS



In a crisis, speed is essential. Whether it is a natural disaster, a disease outbreak or a conflict, security professionals know that if they can reach a problem in its early stages, they have a better chance of controlling it. Unfortunately, disasters don't always happen in places that allow for an easy response. Some of Africa's deadliest crises, including the Ebola outbreak of 2014-2016, have begun in countries with limited resources and in remote regions that are difficult to access.

Being prepared for these types of crises requires planning on a national, regional and continental level. It also requires a commitment that lasts longer than the flurry of attention that surrounds an individual event. African security leaders and public health institutions are showing that they're up to the challenge.

In early 2017, the African Union launched the Africa Centres for Disease Control and Prevention with headquarters in Addis Ababa, Ethiopia. This continental public health agency, the first of its kind, aims to improve Africa's laboratory networks, its disease surveillance systems, and its planning for epidemics. The Africa CDC is applying the lessons from the Ebola outbreak to make sure the continent is better prepared to face the next health challenge.

Africa's security sector also is playing a lead role. The AU's African Standby Force has guidelines for Humanitarian Action and Natural Disaster Support operations that will marshal a wide range of civil and military resources to respond to crises. Additionally, the AU is putting in place mechanisms to solve logistics challenges. Programs to share airlift capacity among countries and pre-position stocks for rapid military deployment will help make sure that forces can respond to crises anywhere and anytime.

Individual countries are leading by example as they find creative ways to use their military resources to respond to natural disasters. In Zambia, for instance, the Air Force is helping to fight an invasion of armyworms that is damaging the country's crops.

In a rapidly changing world, the only thing that is guaranteed is that man-made and natural crises will continue to threaten the planet. Through training, preparation and partnership, Africa's military and civilian leaders can lessen the impact of these crises and save lives.

U.S. Africa Command Staff



Internally displaced people fleeing drought-stricken regions receive water at a distribution center in Baidoa, west of Mogadishu, Somalia. REUTERS



## Rapid Response

### Volume 10, Quarter 3

## U.S. AFRICA COMMAND

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# Africa Makes Progress in Disease Prevention



**Ambassador  
Olawale  
Maiyegun,**  
*director of social  
affairs for the  
African Union,  
spoke August 16,  
2016, in Addis  
Ababa, Ethiopia.  
His remarks have  
been edited to fit  
this format.*

Although outbreaks of emerging and re-emerging infectious diseases have surfaced all over the globe, no continent has been harder hit than Africa.



The Ebola epidemic was West Africa's first real experience with the virus. What began as an epidemic outbreak quickly escalated into a humanitarian, social, economic and security crisis. Schools, markets, businesses, airlines, shipping routes and borders closed. The epidemic claimed the lives of more than 11,300 people and infected more than 28,500, bringing devastation to families, communities, and the health and economic systems of the three most affected countries [Guinea, Liberia and Sierra Leone].

As of August 4, 2016, 3,867 suspected cases of yellow fever had been reported in Angola, of which 879 were laboratory confirmed. The total number of reported deaths is 369, of which 119 were reported among confirmed cases.

As of August 8, 2016, the Democratic Republic of the Congo (DRC) had reported 2,269 suspected yellow fever cases. Out of 1,943 samples analyzed in the DRC, 74 cases were confirmed, including 16 deaths.

Many countries have made remarkable progress in preventing infectious diseases. As a result, disease burden is increasingly defined by disability instead of premature mortality. The leading causes of death and disability have changed from communicable diseases in children to noncommunicable diseases in adults.

Since the mid-1970s, the world has seen the emergence of 30 new infectious diseases and the return of such killers as malaria and cholera — many of them originating in Africa.

A major lesson learned from the Ebola outbreak is the need for the AU to put in place a program to build Africa's capacity to deal with public health emergencies and threats in the future. Disease surveillance, detection, and emergency preparedness for health and natural disasters and response are vital. Therefore, capacities and systems most needed to prevent, detect and respond to public health threats must be reinforced to ensure that in the medium to long term, African countries



Officials celebrate the opening of the Africa Centres for Disease Control and Prevention on January 31, 2017.  
AFRICAN UNION COMMISSION

attain and possess all International Health Regulations (IHR) capacities and systems. It is in this context that the AU fast-tracked the establishment of the Africa Centres for Disease Control and Prevention (Africa CDC) and seeks to ensure that the Africa CDC is operational in its full capacity in the next couple of months. The Africa CDC will partner with the World Health Organization and other relevant stakeholders to assist our member states to address gaps in IHR compliance, complementing one another and ensuring effectiveness.



# MODERN LIFE

## *Intrudes on Ancient Salt Trade*

AGENCE FRANCE-PRESSE

Every morning, hundreds of men converge on a dry lakebed in Ethiopia, where they cleave at the ground with axes to extract salt. They toil under the gaze of camels that will carry the salt bricks to market, in a trek historians estimate has gone on since the sixth century.

But with the government opening the isolated northern region to investors and tourists by cutting new roads through surrounding mountains, the laborers, traders and caravan drivers say their traditional way of life could soon be lost.

"If it continues like this, it will stop our work," miner Musa Idris said as he stood at Lake Asale, where temperatures can reach 50 degrees C.

Restaurants and hotels have sprung up in the area, also known as the Danakil Depression, to cater to tourists who visit the uniquely desolate landscape formed by the intersection of three tectonic plates.

The presence of salt in the area has not escaped the attention of mining companies.

Nearby, an Ethiopian company has built a plant that sucks water from the lake into evaporation ponds, creating salt

the miners say is costlier but better than the blocks they mine from the lakebed. One of its managers predicts the plant one day will be the main salt supplier in the area.

Perhaps no development has affected the traditional salt industry like the new roads. Getting the salt-laden camels from Lake Asale to the nearest city, Mekele, used to be a four-day trek down rock-strewn gullies. Now, the caravans terminate in Berhale, the region's main salt trading outpost, which road builders connected to Mekele by tarmac about five years ago. The journey takes only three days.

About 5,000 blocks of salt arrive each day at a trading post on a dry riverbed at the edge of Berhale, from which they are loaded onto trucks that take them as far away as neighboring Kenya.

The Lake Asale miners like Idris have also grown tired of the industry's backbreaking labor and low wages, despite its long history in the area. "If technology comes and changes it, it would be better."

Others embrace the traditional way. "We see this as our farmland, so we don't have anything else but this," miner Indris Ibrahim said. "My children and grandchildren will hopefully mine in this area."



AFP/GETTY IMAGES



## NIGERIAN MAKES HISTORY WITH SOLO FLIGHT

# — Around the — World

AGENCE FRANCE-PRESSE

Nigerian airline pilot Ademola Odujinrin, known as “Lola,” has become the first African to fly solo around the world.

The 38-year-old left Washington, D.C., in September 2016 aboard a Cirrus SR22, a small, single-engine airplane, and stopped in more than 15 countries on five continents during the journey, according to a statement by his foundation, Transcend.

Odujinrin landed at his starting point at Dulles Airport, just outside the United States capital on March 29, 2017.

“I want African children to think: ‘I can do this, too!’ ” Odujinrin said.

The website Earthrounders lists Odujinrin as the first African among the 120 pilots who have flown around the world solo since American Wiley Post became the first in 1933.

A commercial airline pilot since 2011, Odujinrin works for Air Djibouti, which partially financed the project.

# KENYA <sup>to</sup> REOPEN BORDER <sup>with</sup> SOMALIA

VOICE OF AMERICA

The Kenyan government says it will open the border with Somalia to boost trade and allow the flow of people between the two countries. Kenyan President Uhuru Kenyatta also pledged to help Somalia fight al-Shabaab militants and support and train government workers. His remarks came after a March 2017 meeting in Nairobi with Somali President Mohamed Abdullahi Mohamed.

The borders have remained closed for the past 25 years since Somalia descended into conflict. However, people living along the borders and refugees have found a way to get into Kenya. The countries will begin by opening two border posts at Doble-Liboi and Mandera-Bula Hawa, Kenyatta said.

“Close economic cooperation between Kenya and Somalia will not only help to improve the lives of our millions of people but will also enhance the security situation in East Africa,” Mohamed said. “Therefore, my government is ready to work very closely with your government in the realization of full economic cooperation between our two nations.”

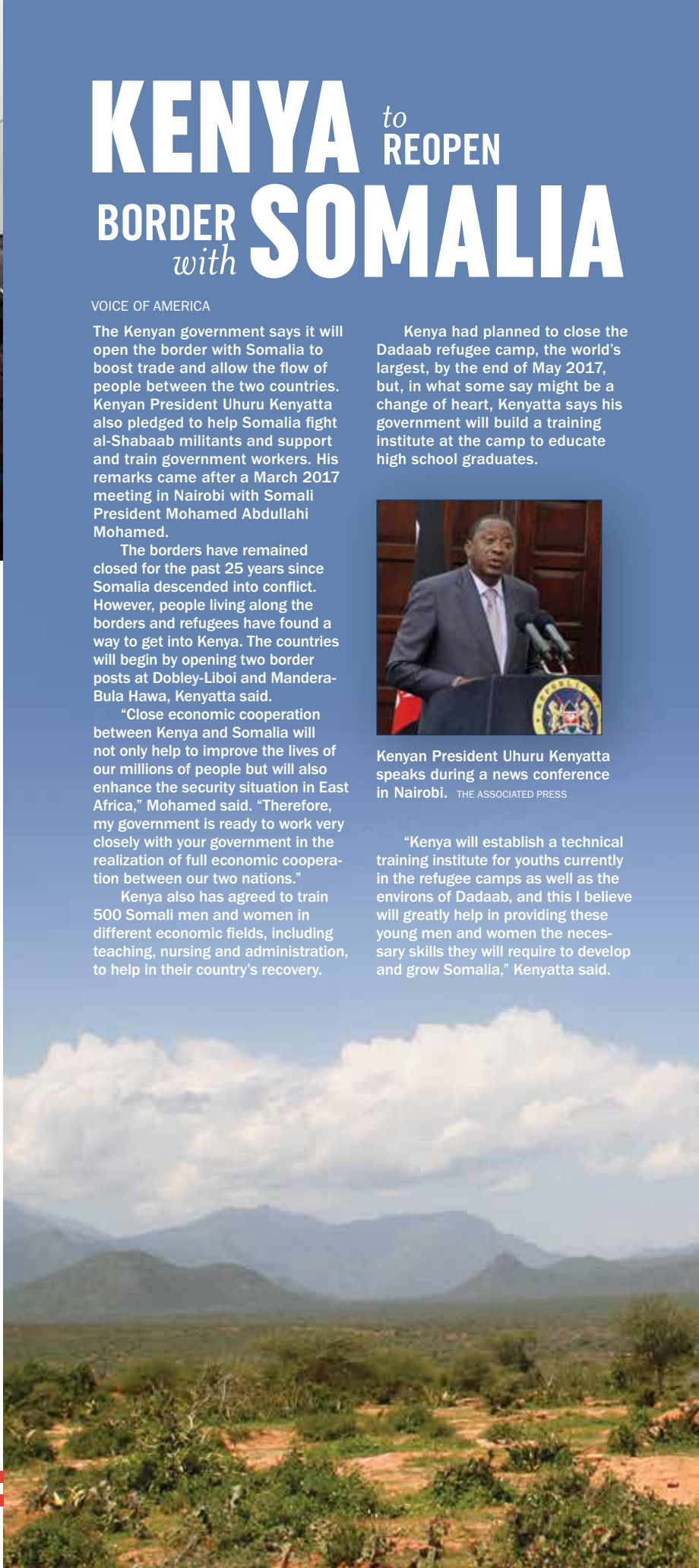
Kenya also has agreed to train 500 Somali men and women in different economic fields, including teaching, nursing and administration, to help in their country’s recovery.

Kenya had planned to close the Dadaab refugee camp, the world’s largest, by the end of May 2017, but, in what some say might be a change of heart, Kenyatta says his government will build a training institute at the camp to educate high school graduates.



Kenyan President Uhuru Kenyatta speaks during a news conference in Nairobi. THE ASSOCIATED PRESS

“Kenya will establish a technical training institute for youths currently in the refugee camps as well as the environs of Dadaab, and this I believe will greatly help in providing these young men and women the necessary skills they will require to develop and grow Somalia,” Kenyatta said.





# LESSONS LEARNED





## THE EBOLA OUTBREAK EXPOSED WEAK SPOTS IN THE CONTINENT'S HEALTH SYSTEMS.

### OFFICIALS ARE DETERMINED TO FIX THEM.

ADF STAFF

A meningitis outbreak in Nigeria's northwest showed the progress that has been made since the Ebola crisis and the work that still remains.

Beginning in December 2016, a highly contagious form of cerebral spinal meningitis emerged in Zamfara State. Meningitis is a deadly bacterial infection that swells the spine and the brain. It is spread through sneezing, coughing and by sharing utensils. It is common in northern Nigeria, which sits in a region known as the "meningitis belt."

Many residents of this region were vaccinated against certain strains of meningitis. Unfortunately, this outbreak was an uncommon strain, Type C, and the government did not have enough vaccines. By April 2017, 9,646 cases had been reported across 43 local government areas, and 839 people had died.

"The challenges are not completely dissimilar from the Ebola outbreak," Dr. Chikwe Ihekweazu, CEO of the Nigeria Centre for Disease Control (CDC), told ADF. "We didn't detect the outbreak as quickly as we could have; we didn't confirm the cases as quickly as we could have. So, especially for meningitis, which is a disease that occurs fairly frequently in our context, we could have been a lot better prepared."

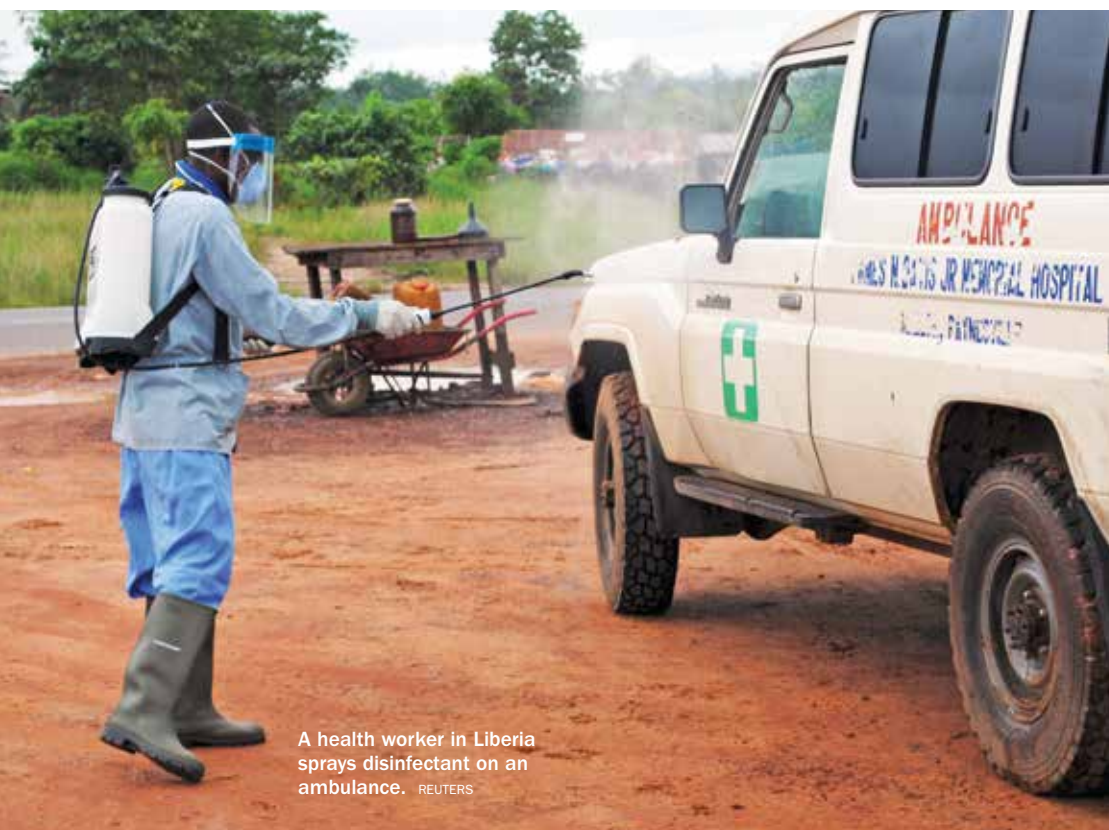
After the slow start, Nigeria made progress. With leadership from the Nigeria CDC, the Nigerian Red Cross Society, the World Health Organization (WHO) and others, the country launched its "outbreak control team." Public health officials dispensed 500,000 vaccines

donated by the International Coordinating Group on Vaccine Provision and requested assistance from the British government which donated 800,000 doses. Sixty-two medical teams, each including a doctor, nurse and laboratory scientist, traveled to the worst-hit areas. Samples of suspected cases were tested in the field or flown back to laboratories.

By late April, the number of cases was diminishing, and health workers began a door-to-door effort to identify anyone who still needed help. Radio jingles with health information played over the airwaves. At-risk populations such as prisoners received vaccines.



A boy in the Kisenso district of Kinshasa, Democratic Republic of the Congo, is vaccinated during an emergency campaign against yellow fever. REUTERS



A health worker in Liberia sprays disinfectant on an ambulance. REUTERS



“We’re learning a lot, and at least now there is really an understanding and acceptance that we have to invest in these systems,” Ihekweazu said. “This is not something you can do in the middle of an outbreak. You have to proactively do it.”

Being proactive is what the continent is aiming for in the wake of Ebola. It has set up the continentwide health institute, the Africa CDC, and countries are investing heavily in disease control and response.

“A lot of public health in Nigeria and across the continent has been driven by disease-specific programs like those for HIV, malaria, TB,” Ihekweazu said. “I think a bit late, but better late than never, we’re coming to the realization that we need to build an all-hazards approach to preventing, detecting and responding to infectious disease.”

## SURVEILLANCE

Speed is the enemy of an outbreak. Diseases are transmitted at different rates but tend to follow set patterns. For example, the WHO uses a model that shows some disease outbreaks begin to gain momentum by day 10 and peak at day 21. The quicker public health officials can mount a response, the better their chances. This is where surveillance comes in. Systems to report outbreaks must reach every corner of a country and allow people working at remote clinics to transmit information to the central government.

Nigeria has an Integrated Disease Surveillance System in place, which is intended to relay disease information from the local government level to the state level and then to the federal government. However, it is largely paper-based and requires modernization. Ihekweazu said the country is setting up an electronic system that will allow for real-time reporting, and the project is about 40 percent complete. In addition to its formal network, the Nigeria CDC has a call center where people can report dangerous health incidents.

“We’re not quite there yet, but we’re sorting out the bottom of the pyramid from the health facilities to the local government,” he said. “That will really enable us to mount a response a lot quicker than we are able to do at the moment.”

Other countries are doing similar work. Sierra Leone is putting in place a system of real-time data gathering through its Emergency Operations Centers. It also has a network of community event-based surveillance where volunteers are trained to report signs of disease.

“The focus is no longer solely on Ebola, but on other diseases — Sierra Leoneans are putting in place systems to track diseases in every corner of the country,” said Dr. Fodae Dafay, director of Disease Prevention and Control in Sierra Leone. “Ebola created a sense of urgency in having coordinated efforts and more established information flow.”





A Congolese health worker prepares a yellow fever vaccine.  
REUTERS



Health workers in Sierra Leone transport the body of a suspected Ebola victim.  
REUTERS

The World Bank is funding a Regional Disease Surveillance Systems Enhancement Project to improve disease surveillance, testing and response in all 15 countries of the Economic Community of West African States.

## LABORATORIES

Properly identifying diseases through laboratory testing is essential. As the meningitis outbreak in Nigeria demonstrated, even when dealing with well-known diseases, unusual strains or variants can cause problems. But too often labs are far away from an outbreak and are under-resourced.

This fact is particularly pronounced in Sub-Saharan Africa, where there are only 34 accredited laboratories outside of South Africa. Most countries in the region — 37 of 49 — have no accredited labs, according to a 2014 paper published in the *American Journal of Clinical Pathology*.

This laboratory shortage means diseases often are misdiagnosed. Less than 30 percent of medical decisions in Africa are based on accurate diagnostics. By contrast, that number is 70 percent in the United States.

“I’ve said publicly that this is our weakest link at the moment,” Ihekweazu said. “Surveillance is completely dependent on having a solid laboratory infrastructure to verify diseases. You can make a clinical diagnosis, but you really can’t confirm what a disease is without a laboratory diagnosis.”

**“We’re learning a lot, and at least now there is really an understanding and acceptance that we have to invest in these systems. This is not something you can do in the middle of an outbreak. You have to proactively do it.”**



~ Dr. Chikwe Ihekweazu,  
CEO of the Nigeria Centre for Disease Control

# FIGHTING FEAR WITH FACTS

Disease outbreaks are aided by fear and misinformation. Effective communication is the best way to ensure that civilians can protect themselves and help health officials and security professionals respond. The World Health Organization offers field-tested guidance for communicating with the public during a health crisis:

- 1. EARN TRUST:** The key principle during outbreaks is to communicate in ways that build, maintain or restore trust between the public and authorities. Without this trust, the public will not believe, or act on, health information that is shared.
- 2. BE PROACTIVE:** Communication about a current or potential health risk is crucial. Announcing early — even with incomplete information — prevents rumors and misinformation from spreading. The longer officials withhold information, the more frightening the information will seem when it is revealed, especially if it is disclosed by an outside source. A delayed announcement will erode trust in the ability of public health authorities to manage an outbreak.
- 3. BE TRANSPARENT:** Maintaining the public's trust throughout an outbreak requires transparency, including timely and complete information of a disease risk and its management. New developments should be publicized promptly. Outbreak managers should be transparent with the public and partner organizations. This helps information gathering, risk assessment and decision-making.
- 4. LISTEN:** Understanding the public's perception of risk and its views and concerns is critical. Without knowing people's beliefs and practices, or how they understand a risk, necessary decisions and behavior changes may not occur.
- 5. PLAN:** Public communication during an outbreak is an enormous challenge and demands sound planning. Planning itself is an important principle, but it must translate into action.



ISTOCK





The Africa CDC is working to strengthen these laboratory networks and has named a Regional Coordinating Center in each of the continent's five regions. When a cluster of suspicious disease cases erupts and the diagnosis is uncertain, the coordinating center will step in to find the best laboratory to do a test, taking into account expertise and distance. The center will ensure that samples are collected and sent to the lab and that results get back promptly to a relevant public health official.

### COMMUNITY

One of the bright spots of the Ebola response was the volunteers in affected communities who organized to do important medical work. This included identifying cases, tracing contacts, spreading important health information and enforcing quarantines. Now that the outbreak is over, public health officials want to capitalize on these community efforts and encourage them to continue for the future.

"There's a saying that what happens in the community happens in the nation," said Dr. John Nkengasong, director of the Africa CDC. "We plan to lay a lot of emphasis on developing and strengthening community health care programs."

To advance this, the Africa CDC is helping create the Africa Public Health Corps to train and empower average citizens. Aspects of the health corps include

a "voluntary rapid response force," a program on field epidemiology, training on information systems and other important skills. Officials hope citizens will be their first line of defense against the spread of diseases but also against harmful rumors and cultural norms that undermine public health work.

"We know that if the community gets it wrong, our efforts become extremely challenging," Nkengasong said.

### PLANS

The Ebola outbreak showed that, in several countries, pandemic response plans had not been established or had existed on paper only. For instance, Liberian military officers reported that the chain of command during the outbreak was unclear, and Soldiers had not been properly trained to perform tasks such as enforcing a quarantine.

The Africa CDC wants to change that. The organization is beginning to work with governments across the continent to update their response plans so they can practice them regularly on a national and regional level. All involved foresee militaries playing a key role in these exercises.

"We want to make sure that the ministries of defense are fully engaged," Nkengasong said. "So in those times of crisis they can step in and help with logistics and build treatment centers rapidly." □



# PREPARING for the UNKNOWN

## A conversation with Dr. John Nkengasong of the Africa CDC on how to anticipate the next pandemic

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| ADF STAFF |

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*Dr. John Nkengasong is a virologist who has spent his life searching for cures to the world's deadliest diseases. During a 22-year-career at the U.S. Centers for Disease Control and Prevention in Atlanta, he held numerous posts including chief of the International Laboratory Branch and co-chair of the President's Emergency Plan for AIDS Relief Laboratory Technical Working Group. A native of Cameroon, he is the founding chairman of the board of directors for the African Society for Laboratory Medicine and previously served as the chief of virology in Côte d'Ivoire. On January 1, 2017, he became the first director of the Africa Centres for Disease Control and Prevention (CDC), a continentwide public health agency that is part of the African Union. He spoke to ADF from his office in Addis Ababa, Ethiopia. His remarks have been edited to fit this format.*

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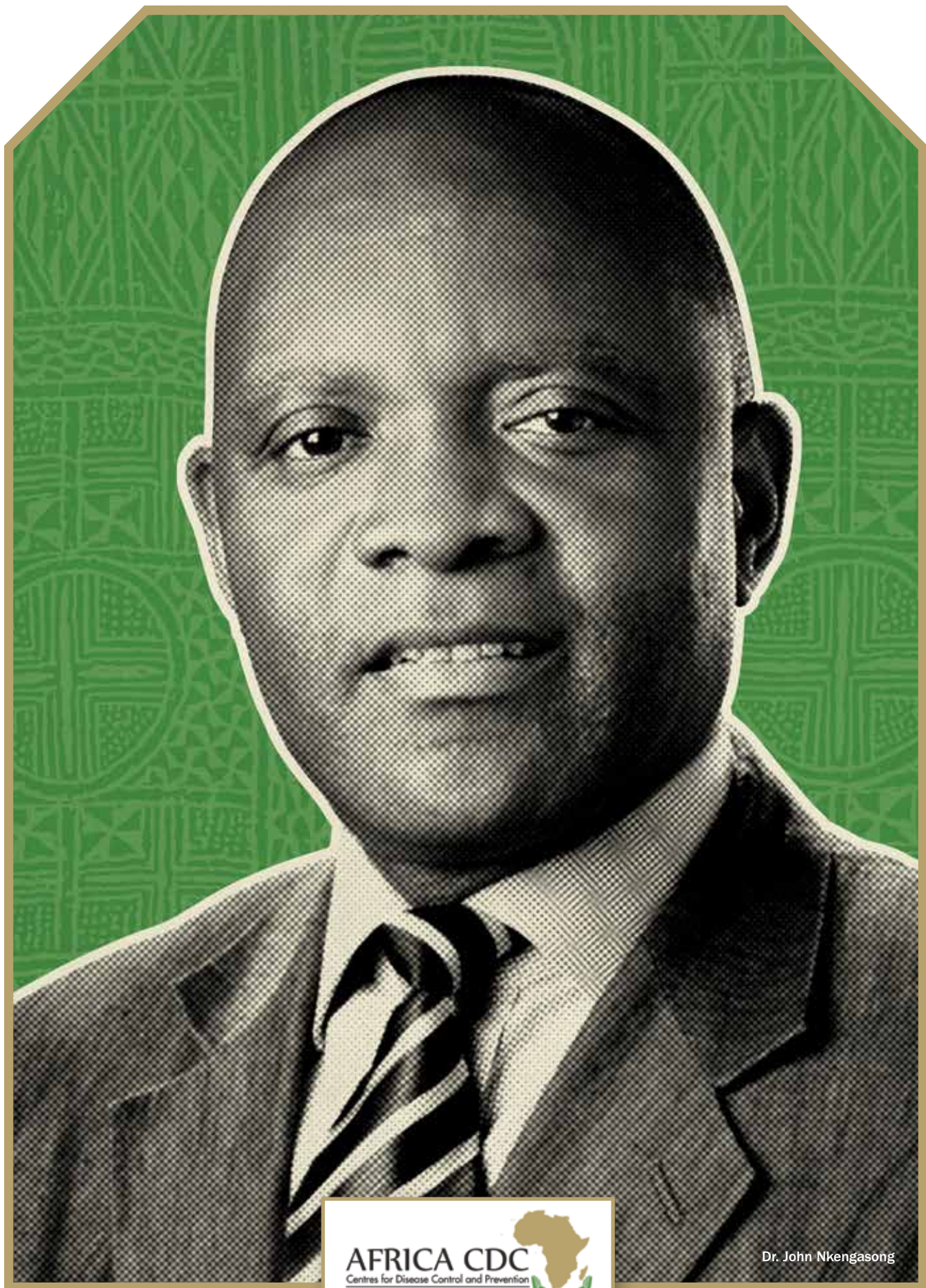
**ADF:** How did you become interested in this field of medicine, and where does this passion come from?

**NKENGASONG:** I am a virologist. I've been practicing virology for close to 28 years now. So, to be quite honest with you, my passion for this started with hepatitis B. At that time, before HIV/AIDS, it was perhaps the most devastating viral infection, due to the liver cancer effect that it caused. Subsequently, I studied hepatitis C and then HIV/AIDS for the past 20 or 25 years. I think my interest in virology stems from the devastating effect viruses have had in history and also how they continue to constitute a threat to human beings.

**ADF:** How did the Africa CDC come into existence? Was the project planned before the Ebola outbreak of 2014-2015?

**NKENGASONG:** In 2013, the heads of states of the African continent met in Abuja, Nigeria. They considered several factors, including the population of the continent, which really has increased tremendously from the time when countries gained independence. In 1947, when the World Health Organization (WHO) was created, the entire population of Africa from Cairo to Cape Town and Liberia to Somalia was about 230 million. Fast forward to today, and the continent is over 1.2 billion. And we are still using





Dr. John Nkengasong





the same public health architecture that was established in 1947. Because of the increased population, there is a massive movement of individuals, and there are a number of diseases that we are facing now that were not there at that time. HIV/AIDS was just characterized 30 years ago and has had a devastating influence on the continent. The issues of antimicrobial resistance are very serious. It is projected that about 4 million Africans will die annually because of antimicrobial resistance by the year 2050 if nothing is done. Lastly, there is the growing impact of noncommunicable diseases [heart disease, diabetes, cancer].

Because of all these factors, they thought it was important to establish a public health agency that will

complement and enhance the work the WHO is currently doing. Ebola came in 2014, and that accelerated the idea that this agency is critical. The heads of state moved ahead quickly to establish it, and it was formally launched on the 31st of January 2017.

**ADF:** One of the goals for the Africa CDC over the next five years is to improve health-related surveillance and information systems. What does this mean, and how might it help identify outbreaks in their early stages?

**NKENGASONG:** Actually, if we had systems in place to monitor these outcomes and act on them, then we would have picked up on the Ebola outbreak very early





Students work in a laboratory at the Catholic University of Gaben in Butembo, Democratic Republic of the Congo.

AFP/GETTY IMAGES

**mechanism in place for people to report that to a local health official who can run it up the chain of command to the national level and get a response?**

**NKENGASONG:** Exactly.

Assuming that the event occurs in a remote area of Guinea and is picked up by a community health worker, and they immediately use the appropriate information system. This could be a simple cellphone that people in the community are trained to use to transmit public health data to the next layer, and then the next layer dispatches a group of experts to go to the community and investigate it. It's not just the laboratory, but epidemiologists and those who know how to do these investigations. They go there and find out and take action. That would have minimized the impact of Ebola.

**ADF:** Another goal is to help strengthen clinical and public health laboratory networks in the five African subregions. Could you explain the role of these laboratories?

**NKENGASONG:** The operating model of the Africa CDC is that member states should have their national public health institutes, which are their mini-CDCs. They will have the ability to run a lab network in the country, have a response team of disease investigators and laboratory experts, and have an emergency operations room that can be used to coordinate the intervention during an event. Lastly, they should have a good information center. So these public health institutes will now work around the regional collaborating centers. We are hoping to equip these regional centers with more advanced diagnostic capabilities. For example, the regional center in Nigeria, if there is an event in The Gambia or Guinea where they cannot characterize it, they can collect the sample, ship it quickly to the regional collaborating center, and use advanced diagnostic technology there to figure out what it is and provide the response in a timely fashion. Then the headquarters in Addis Ababa, Ethiopia, will of course be coordinating all of this effort and provide additional capabilities if the need arises.

on. That's what we mean by surveillance systems that are strengthened. It's the ability to monitor and track the occurrence of diseases and take action. The reason that we need good innovative information systems is that it is not enough to detect an event in a remote area in a country; you ought to be able to report that event in a timely fashion to the next layer of the health system so they can take the action that is required. There has to be a feedback mechanism that provides a response. You're dealing with detection and response.

**ADF:** So in the future if something occurred in a remote area of Guinea, for example, then there would be a

**ADF:** Will any of these networks include facilities where you can create and store vaccines?

**NKENGASONG:** Yes, that's part of the plan. They should be able to have more specialized techniques in what we are calling reference centers. Let me give you an example: In West Africa there are powerhouses of public health resources that we have. There is the Medical Research Council Unit in The Gambia; the Institut Pasteur in Dakar, Senegal; the Institut Pasteur in Côte d'Ivoire; the Noguchi Memorial Institute in Ghana; and the regional center in Nigeria. So we don't expect everyone to do the same thing, but we expect each of them to be able to do very specific tasks.

A medical staffer  
receives a patient  
at a laboratory in  
Abidjan, Côte d'Ivoire.

REUTERS







**ADF:** The Africa CDC also plans to help African Union member states create or improve preparedness and response plans for public health emergencies. What do countries need to be doing to improve these plans?

**NKENGASONG:** As we speak, many countries have not developed pandemic preparedness and response plans. We are working together with the WHO and other organizations like the World Bank to develop a framework on how member states can develop and implement their plans. We really want to see them not only develop them but simulate them every so often. So I think that we can assist them to seek out the gaps that exist and to know exactly where the gaps are that we need to strengthen. Because it's one thing to develop these plans; it's another thing to actually put these plans in place. We have just started; we have not yet engaged member states, but we hope to convene our first meeting in August or September in Kenya. The unique asset that the Africa CDC has is that it can convene the ministries of different countries — ministries of finance, agriculture, communications and interior — and bring them all to the table so they can actually be on the same page in terms of understanding what preparedness means and what response means in a coordinated fashion. Because when you hit that pandemic situation like we saw in the Ebola crisis, it ceases to be a Ministry of Health activity. It becomes a multisector activity.

**ADF:** As you look across the continent in your new role, what are you most concerned about?

**NKENGASONG:** The continent of Africa should use Ebola as a wake-up call and join efforts in supporting what the leadership has put in place with the Africa CDC to help strengthen overall systems. The best way to prepare for the unknown is to prepare for the known. That way the national health system can respond to the frequently occurring diseases that we deal with every day. This is what we call in the jargon "endemic." They include malaria, HIV, tuberculosis, cholera. So if we have systems that can respond to these everyday occurrences, then we are preparing ourselves for the worst case.

The second concern that I had is that everyone thinks of Ebola, but we should be thinking, "What if it wasn't Ebola? What if it was a pandemic flu?" It would probably be several orders harder to control that kind of infection. So we should really be putting our energy into thinking that even though we were successful at bringing Ebola under control, it could be something else.

Finally, I would say there are three different ecological threats that we are looking at. One is diseases that occur with contact to contact. Second, diseases that are respiratory — airborne like the pandemic flu. Lastly, vector-associated diseases like Zika and yellow fever. So in our overall strategy of preparedness, we should be thinking of these three ecological threats in order to make us better prepared for the future. □







# THE CAPACITY TO **RESPOND**

TO INTERVENE IN CRISES AND SUSTAIN MISSIONS,  
AFRICAN MILITARIES MUST MAKE LOGISTICS A PRIORITY

**COL. UDUAK UDOAKA**  
U.S. AIR FORCE

**A** significant development in the post-Cold War period has been African states' active involvement in peacekeeping operations. Of the 105,078 personnel deployed in support of nine United Nations peacekeeping missions in Africa, more than half are uniformed Africans. Ethiopia, Nigeria and South Africa have the largest contingents of the 38 African countries contributing peacekeepers. Even states that were once devastated by war, such as Sierra Leone, are now deploying peacekeepers.

Despite their provision of troops to U.N. and African-led operations, most African countries remain overwhelmingly dependent on external partners for mobilization and logistics sustainment. Bilateral requests for support are part of an annual cycle of planning and programming or part of a country's pledged participation in a mission. Requests include airlift movement for troops and vehicles, engineering work, and medical capacity. This chronic dependency continues despite more than two decades of external assistance by international partners. It also persists despite many indicators that African leaders truly want to develop their own logistics capacity.

A few factors have impeded the development of logistics capacity on the continent. One is political will. For too long, governments have not prioritized investment in military logistics. Part of this is due to the difficulty in creating a clear and convincing narrative to justify spending money to sustain and maximize the use of existing equipment. It is easier to persuade politicians to spend money on buying new equipment. Another factor is corruption and a lack of military professionalism. In cultures where cronyism and nepotism are rampant, single-source contracts awarded through personal contacts are common. These result in overpayments and, often, substandard outcomes. Corruption affects the supply of equipment, weapons and the pay of front-line units. It

siphons money away from logistical improvements and makes donors and taxpayers less willing to fund military efforts.

Another major limiting factor is the lack of reliable infrastructure in many parts of Africa. Roads, railways, airports, seaports, telecommunications, electricity, water and sanitation facilities all are in short supply. Road transportation is Africa's intracontinental distribution mode of choice and constitutes about 90 percent of transport between urban areas. Unfortunately, poor surface conditions and delays at border crossings impede responsive logistics support to private and public entities, as well as security forces. When demand for logistics support by military forces depends on unreliable ground support, the materiel required by force commanders is in jeopardy and so is mission success.

To begin to address these and other challenges, I will outline recommendations that can be used in the short term, medium term and long term by Africa's militaries.

**Prioritize professionalism:** To sustain logistics capacity and improve capability, militaries must ensure a framework is in place to recruit logisticians and provide regular opportunities to hone the logistics craft through education, training and exercises. Logisticians also must be rewarded for their training and hard work. No amount of capacity will address



Senegalese troops in support of an Economic Community of West African States mission guard the statehouse in Banjul, The Gambia.

AFP/GETTY IMAGES





Kenya Defence Forces Soldiers arrive in Nairobi after serving in a U.N. peacekeeping mission in South Sudan. REUTERS

the logistics challenge in Africa if military salaries are not paid regularly. Logistics is a marketable skill, and a trained Soldier who is not being paid will vote with his or her feet. Many militaries suffer in this regard. An unpaid vehicle mechanic in an African army will not go hungry when there is a commercial demand for mechanics.

African militaries also must ensure that professional development opportunities exist to advance logisticians to higher ranks. This means adjusting the value system to define success outside of infantry or artillery functions. The United States, for example, has four-star commands centered on logistics and sustainment. This highlights the importance of logistics and offers a track for officer growth and development. With respect to training provided by international partners, many African states lack the institutional capacity to complement and sustain training after it is delivered. The result is an erosion of acquired knowledge and stagnation in capacity. African states such as Egypt, Ghana, Kenya, Nigeria and South Africa recognize the importance of retaining skills and have established centers to institutionalize training capability. However, the vast majority do not, which contributes to the lack of indigenous logistics capacity.

**Share airlift resources:** In 2014, when senior military logisticians from across Africa, Europe and

North America convened as part of the African Land Forces Summit, participants agreed that there was a need to create collective arrangements to coordinate and share airlift resources. These types of arrangements have succeeded in other contexts. Examples are the U.N.'s Regional Service Center in Entebbe, Uganda, and the Movement Coordination Centre Europe in the Netherlands. Sharing capacity lets participating countries leverage reliable transportation options (air, land and sea) and optimize costs while meeting force commander routine, operational, and exercise requirements to deliver troops and equipment to an area of operation.

The AU understands the value of such coordinating constructs and is working on a Continental Movement Coordination Center (CMCC) as part of a larger project, the African Standby Force. The CMCC would provide the AU's strategic headquarters the ability to project its forces in a coordinated manner while leveraging available continental airlift, both military and commercial. The EU's External Action Service is already supporting the CMCC with funding and training. Although some commentators have doubted African states' willingness to share airlift resources, the Amani Africa II exercise in November 2015, for which the air forces of Algeria and Angola flew troops to South Africa, demonstrated that political willingness does exist.

**Hold multilateral logistics exercises:** Exercise and training programs are excellent tools for maintaining readiness and combat effectiveness at the unit level. Within a military branch, they assure senior leaders that units are capable of meeting their designed operational capability and help identify gaps and shortfalls that can be addressed before deployment. U.S. Africa Command's service components conduct a number of exercises with partner militaries to "encourage the development of partner security capabilities and the instilling of professional ethos among African military elements." These exercises vary in form, focus and function, but African militaries have not yet staged a logistics-centric exercise. A multinational logistics exercise in the African context would be particularly valuable because it would encourage standards and interoperable tactics, techniques and procedures among participating nations. It also would allow for critical logistics skill development at the tactical and operational levels and bring senior leaders together to assess the outcomes, lessons learned and develop common strategies to address common challenges. Interoperability remains a challenge. The sheer number of partners helping to build military logistics capacity across Africa has resulted in a variety of parts and equipment being donated and varying doctrines being taught. A logistics exercise

would satisfy African leaders' desire for a standard when it comes to logistics training from multiple partners. This is where capacity and capability can be enhanced for African militaries.

**Preposition stocks for just-in-time logistics support:** The African Standby Force (ASF) Roadmap calls for depots to "facilitate storage of material, equipment and end-user stocks to ensure availability when required without being constrained by delays due to long procurement lead-time." The ASF's rapid deployment posture — a force that can be deployed within 14 days anywhere on the continent in response to crises — makes "just-in-time" logistics imperative. The depot concept would be a critical enhancer of force readiness by holding essential equipment and supplies in reserve to provide initial operational capability to deploying forces. Moreover, the Continental Logistics Base (CLB) in Douala, Cameroon, would have pre-established contractual arrangements that would let force support planners tap into a supply chain. Resupply of a deployed force, after the initial self-sustainment requirement, could occur using the same contractual arrangements.

Although CLB skeptics may argue that it is a waste of money, the concept, with some retooling for efficiencies and self-help from the government of Cameroon and the AU, can result in a logistics center

South African National Defence Force Soldiers take part in an exercise in Limpopo province.

AFP/GETTY IMAGES







Soldiers guard a government helicopter in Bouake, Côte d'Ivoire. REUTERS

of excellence, posturing personnel and equipment to support force commanders. It also has the potential to grow into a logistics institution from which African states can model their own concepts of support.

**Maintain mission readiness metrics and reward performance:** African militaries not engaged in peace operations should constantly prepare for assigned missions. This includes sustaining equipment at a level of readiness the military determines to be necessary to accomplish its goals. An example would be to adhere to the AU standard to have the capability to deploy anywhere on the continent in 14 days. As troop-contributing countries receive assistance from the U.S., the AU, U.N. or other foreign partners, this standard could be applied to incentivize partner militaries to meet that capability logistically. Specifically, if the partner meets and sustains this goal, then they would receive extra assistance to bolster capacity at a higher echelon of command. For example, if an Army logistics company demonstrates the ability to rapidly deploy in 14 days, then they could receive more investment in capacity for a brigade-equivalent force. In addition, other metrics could be jointly developed with a goal that training and equipment support would be contingent on attaining and sustaining an agreed-upon readiness level. Such reporting should be required of countries

already committed to contributing forces to a regional standby brigade.

**Now is the time:** The ideas presented here are not new. Military and civilian leaders, scholars and AU officials have called for similar approaches to enhancing rapid response to crises for years. But recently, momentum has increased and exciting opportunities have arisen. The African Union's establishment of the African Capacity for Immediate Response to Crises and the increasingly regular collaborations between African countries to address security challenges are positive signs. The time is finally ripe for these recommendations, and they deserve new attention and focus from policymakers who may have written them off earlier as unworkable, too expensive or unrealistic. Although these recommendations will help generate additional momentum and will yield short-term wins, truly improving African logistics capacity requires much deeper reforms, which must be driven and sustained by Africans themselves. □

About the Author:

U.S. Air Force Col. Uduak Udoaka is a senior logistician who has served in logistics roles at the Wing, Numbered Air Force, Major Command, Headquarters Air Force, and Geographic Combatant Command levels, in addition to serving as a contingency planner for Operation Iraqi Freedom. His career includes assignments in research and development, acquisition logistics, a Four-Star Commander's Action Group, deployments in support of Operation Enduring Freedom, peacekeeping operations in West Africa, and political-military security cooperation activities. This article is adapted from a paper he wrote as an Air Force senior fellow at the George C. Marshall European Center for Security Studies, Garmisch-Partenkirchen, Germany.





# DEALING *with* DISASTERS

ADF ILLUSTRATION



# *The African Standby Force Can Deploy in Times of Natural Disasters, Humanitarian Crises*

ADF STAFF

AFRICA HAS FOR YEARS been working toward creating a force that could respond quickly to security crises anywhere on the continent. Known as the African Standby Force (ASF), it brings to bear 25,000 personnel — 5,000 from each of five Regional Economic Communities (RECs) — to intervene and secure peace during a crisis.

Military, police and civilian personnel comprise the ASF. Thousands from all over the continent gathered in Lohatla, South Africa, in October 2015 for Amani Africa II, an exercise to test the readiness of the force. Soldiers

in trucks, armored personnel carriers and helicopters conducted a mock war drill

as red and green smoke, marking enemy and allied positions, respectively, filled the air.

Bombs, bullets and flares made for an impressive display of coordinated military strength. But military hardware won't be the only tools at the ASF's disposal. Under certain circumstances, the tools might be shovels, hammers, bandages and syringes.

The ASF also has a mandate for responding to a wide range of humanitarian and natural disasters, regardless of whether they are caused by conflict. African Union (AU) officials have approved guidelines for just these types of missions, called Humanitarian Action and Natural Disaster Support (HANDS) operations. AU officials and others met in Addis Ababa,

Women wait to visit a mobile health clinic in South Sudan in February 2017. REUTERS





A woman washes her baby in a pond in Unity State, South Sudan, an area hit by famine and conflict. Providing clean water to displaced people is one of the duties of an African Standby Force mission. REUTERS





Ethiopia, in September 2015 to finish writing guidelines for HANDS and again in December 2016 to begin talking about how to plan for and operate such missions under the guidelines.

In the latest meeting, participants discussed the AU's humanitarian policy, requirements for HANDS operations, and ASF assets and logistics. In addition, they talked about training, civil-military cooperation and lessons the AU's Somalia mission has yielded in that regard. Finally, nongovernmental organizations — the Norwegian Refugee Council, African Humanitarian Action and the West Africa Disaster Preparedness Initiative — offered their perspectives.

## AU DISASTER RESPONSE GUIDELINES

The purpose of the guidelines for ASF HANDS missions is to “develop appropriate measures to facilitate humanitarian action in complex humanitarian crises or emergencies, such as those created by armed conflicts, natural and human induced disasters, and to determine to what extent the ASF can be employed in supporting efforts to address those situations and their effects.”

The HANDS program was initiated in 2012, two years after the Heads of State and Government asked the chairman of the AU Commission to look at establishing a way to respond rapidly, “in a coordinated, harmonized and efficient way,” to humanitarian crises. The 2010 Haitian earthquake was noted as inspiring the AU to act. The guidelines include the following objectives:

- Securing populations, government buildings and infrastructure, especially when a state's security is disrupted.
- Creating a secure environment so other humanitarian agencies can respond.
- Helping RECs and member states respond to disasters.
- Providing logistical support such as airlift, equipment, communications and transportation.
- Coordinating civil and military efforts.
- Offering technical and personnel assistance to support recovery and post-conflict reconstruction.

The ASF originally was designed to deploy under six scenarios, all of which carry some degree of strategic military or security focus. Those same scenarios won't necessarily provide the basis for a HANDS mission. However, an ASF force could be called upon to support a HANDS mission even if it already was deployed for security purposes, the guidelines state.

Any time military personnel and assets are involved for civilian purposes, it can be fraught with political concerns. The AU pledges that if military assets must

be used for humanitarian purposes, it will be done under civilian leadership, be limited

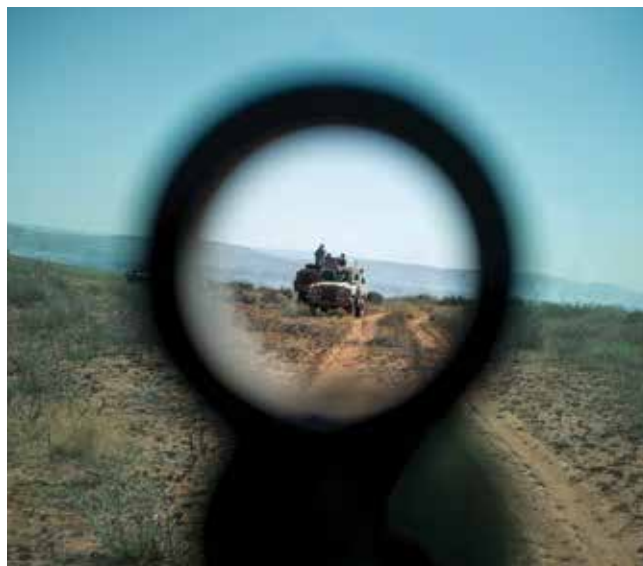
Women carry food in South Sudan in February 2017. An African Standby Force mission can support other aid agencies. REUTERS

in time and scope, and conducted in accordance with long-standing humanitarian principles.

## THE AU'S EBOLA RESPONSE

The AU has had experience responding to humanitarian disasters, although not specifically through the ASF mechanism. After the West African Ebola outbreak of 2014-2016, the AU mobilized the AU Support to Ebola Outbreak in West Africa (ASEOWA) mission in the fall of 2014. By the time the mission officially ended on December 31, 2015, ASEOWA had deployed 855 people to Guinea, Liberia and Sierra Leone. Of those, 740 were medical personnel. ASEOWA personnel worked alongside other responders, including a United Nations team, the World Health Organization, Doctors Without Borders, the United States military and others.

ASEOWA leaders attended the workshop in Addis Ababa in September 2015 to share their insights and lessons learned with officials who had gathered to finalize HANDS guidelines.



Soldiers take part in Amani Africa II, a 2015 exercise to test the readiness of the African Standby Force. AFP/GETTY IMAGES

## DISASTERS AND DUTIES

HANDS guidelines state that a humanitarian intervention could arise as a result of several natural or human-induced disasters, such as drought and desertification, floods, landslides, earthquakes and volcanoes, industrial hazards and pollution, and diseases and epidemics.

Once deployed to one of these disasters, ASF HANDS personnel could be called upon to perform a number of duties. Among the most common are providing and treating water, conducting evacuations, providing temporary shelters, and working to open or restore communications. During disease outbreaks, such as the West Africa Ebola epidemic, ASF workers could be called upon to immunize people, enforce quarantines and provide logistical support to health workers. □

# NIGERIA MARKS DEMOCRACY DAY



**G**overnment officials and citizens packed into the stands of Freedom Square in Owerri, Nigeria, on May 29, 2017, to mark an important date in the country's recent history.

ADF STAFF

Police officers, Nigerian Army personnel and civilians marched through the public square about 80 kilometers north of Port Harcourt in Imo State. But they weren't there to celebrate a person or a battle; they were celebrating a form of government.

The assembled crowds were commemorating Democracy Day, a yearly celebration of the restoration of democracy after years of military rule in the federal republic. The holiday marks May 29, 1999, when Olusegun Obasanjo took office as president. His inauguration ended years of military rule that began in 1966 and was interrupted only briefly by a democratic period from 1979 to 1983.

Bola Tinubu, a former Lagos State governor, urged Nigerians to nurture democracy so that it would contribute to the growth and progress of Nigeria. "Democracy Day and our commemoration of it must be more than an empty ritual," Tinubu told Nigeria's *Premium Times*. "It must add up to more than another reason to have another holiday. We, as a people, choose democracy as our preferred form of governance, not because it would be easy to achieve or to hold even once we have it.

"We choose democracy because history has taught us that the welfare of the people is best and perhaps only secured by government responsive and accountable to the people. This can only be democracy.

"Many Nigerians have fought and sacrificed to enshrine democracy as our way of governance," Tinubu said. "We mark this day in honor of these people, many of whom labored in obscurity and without proper thanks, to achieve this precious thing for the nation."





A Nigerian police officer shouts an order as she marches during a Democracy Day parade on May 29, 2017, in Freedom Square in Owerri.

AFP/GETTY IMAGES





# FIGHTING *Famine*



# TRACKING AND RELIEVING HUNGER CAN BE A CHALLENGE. THE KEY FOR SOLDIERS?

## KNOWING THEIR ROLE

ADF STAFF

By the time the world hears about a famine, it's probably too late.

International aid organizations say early alerts and rapid responses to food shortages are the only ways to save lives. Before the United Nations declared famine in Somalia in 2011, it had issued 16 warnings that danger was imminent. Those warnings mostly were ignored and, by the time famine officially was declared, 120,000 people had died.

"Once famine takes root, it's that much harder to recover," wrote Aryn Baker in *Time* magazine. "Yet the call to *prevent* famine is never as widely shouted, or eagerly responded to, as the urgent demands to *stop* it."

Famine is no stranger to Africa. In the 20th century alone, widespread hunger hit the continent no fewer than 18 times, killing anywhere from 5,000 to 1 million people at a time. In 2017, it struck again, this time in South Sudan — and to a lesser extent in northern Nigeria and Somalia — and the effects have been devastating.

In South Sudan, 100,000 people were on the verge of starvation as of February 2017, and 5 million people — 40 percent of the young nation's population —

needed immediate assistance.

"Our worst fears have been realized," Serge Tissot, of the Food and Agriculture Organization of the United Nations, told CNN. "Many families have exhausted every means they have to survive." Another humanitarian aid official said people resorted to scavenging in swamps to find food.

The problem will continue in coming years as changing weather patterns, population growth and conflict threaten the continent's fragile food security. So how can food crises be noticed early, and what role should security forces play in addressing them?

### STAGES AND CAUSES

Famine is a particular term with a particular meaning. Its definition goes beyond just drought conditions and a large number of hungry people. Famine actually is the last stage in a five-step progression of food insecurity, according to the Famine Early Warning Systems Network (FEWS NET). The five stages grow over time — minimal, stressed, crisis and emergency, culminating with famine. A famine exists

when at least one out of five households in an affected area faces an extreme lack of food, more than 30 percent of the population suffers acute malnutrition, and at least two out of 10,000 people die each day.

Famine was declared in part of South Sudan early in 2017, and three other countries — Nigeria, Somalia and Yemen — were at level four, meaning they were at high risk of developing famines.



People unload relief aid from a military helicopter in southern Malawi after rain washed away crops.

AFP/GETTY IMAGES

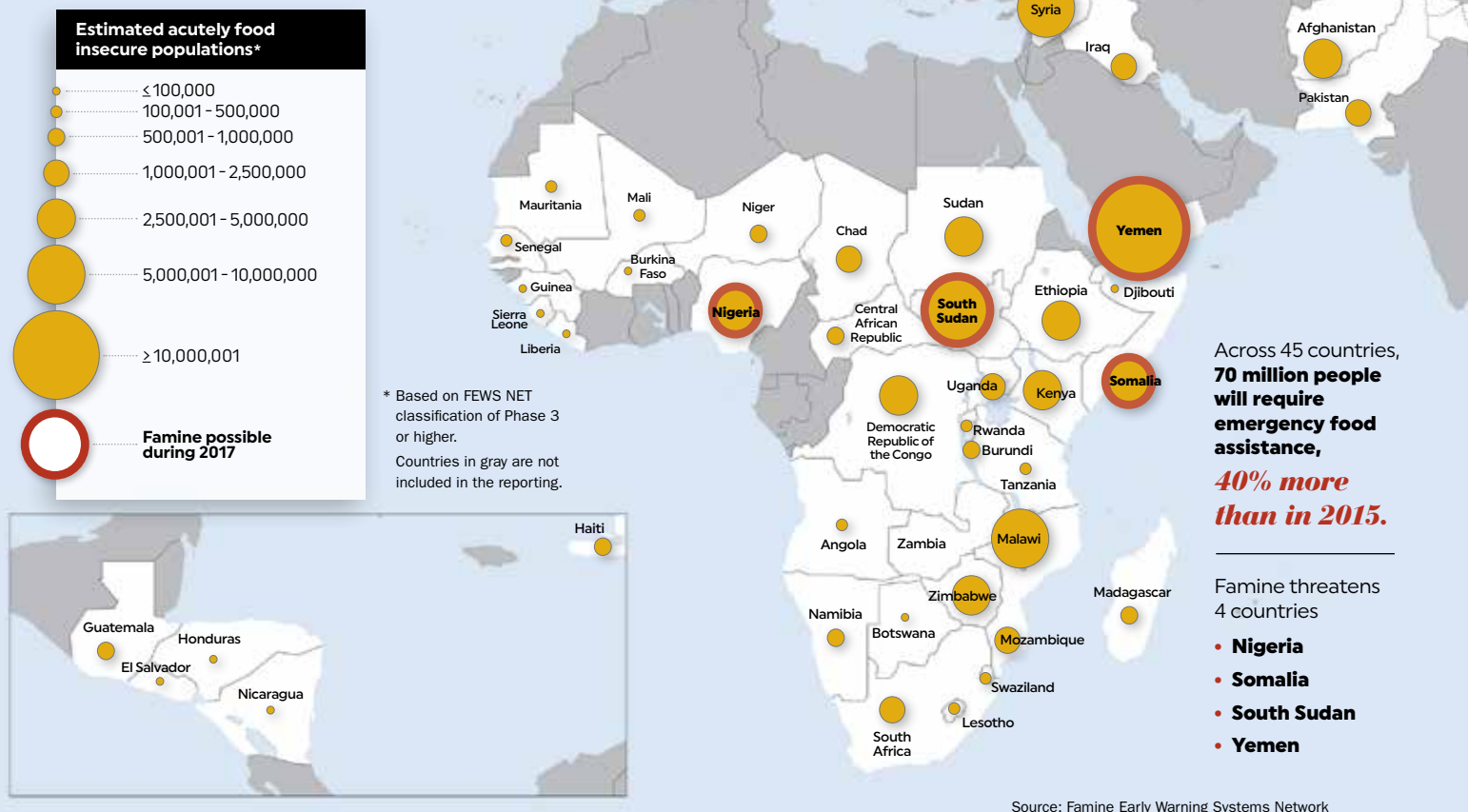
The causes of famine can be just as complex as its stages. When drought, conflict or both strike a region, populations may be forced to migrate to other areas or into neighboring countries. A drought in an area already beset by conflict can disrupt harvests, planting or the care of livestock. Warring factions often block access to areas, which may keep humanitarian aid workers and residents from moving about freely. This can exacerbate existing problems.

A mass influx of people can strain resources and increase the spread of certain diseases, such as cholera. In southern Somalia, some villages still under al-Shabaab control have seen an increase in cholera cases, according to Voice of America (VOA). In May 2017, Somalia was reporting 200 to 300 cholera cases every day. More than 40,000 Somalis had fallen ill since December 2016, and half were in South West State.

A community volunteer carries seeds distributed by the International Committee of the Red Cross in South Sudan in April 2017.

THE ASSOCIATED PRESS

## FOOD ASSISTANCE NEEDS in 2017 are Unprecedented



In May 2017, medics visited more than 150,000 displaced people living in camps near Baidoa, Somalia. Many in the camps slept in the open without tarps. Stagnant water and mud were everywhere, and there was not enough clean water to go around. UNICEF and World Health Organization (WHO) personnel provided oral cholera vaccines to children. However, the ability to fight cholera and other diseases is connected to the ability to combat hunger and other humanitarian problems, Dr. Abdinasir Abubakar, cholera expert with the WHO, told VOA.

"We cannot only solve cholera," Abubakar said. "We cannot only deal with cholera unless we deal with food insecurity, unless we deal with water issues, malnutrition. ... We are working closely and we are coordinating, but again in Somalia one of the challenges we are facing [is] a shortage of resources to support all these interventions."

### EARLY WARNING SYSTEMS

There are many ways to predict the likelihood of a famine. Weather data shows when annual rainfalls have been inadequate to water crops. Market data show when staple food items become scarce and more expensive.

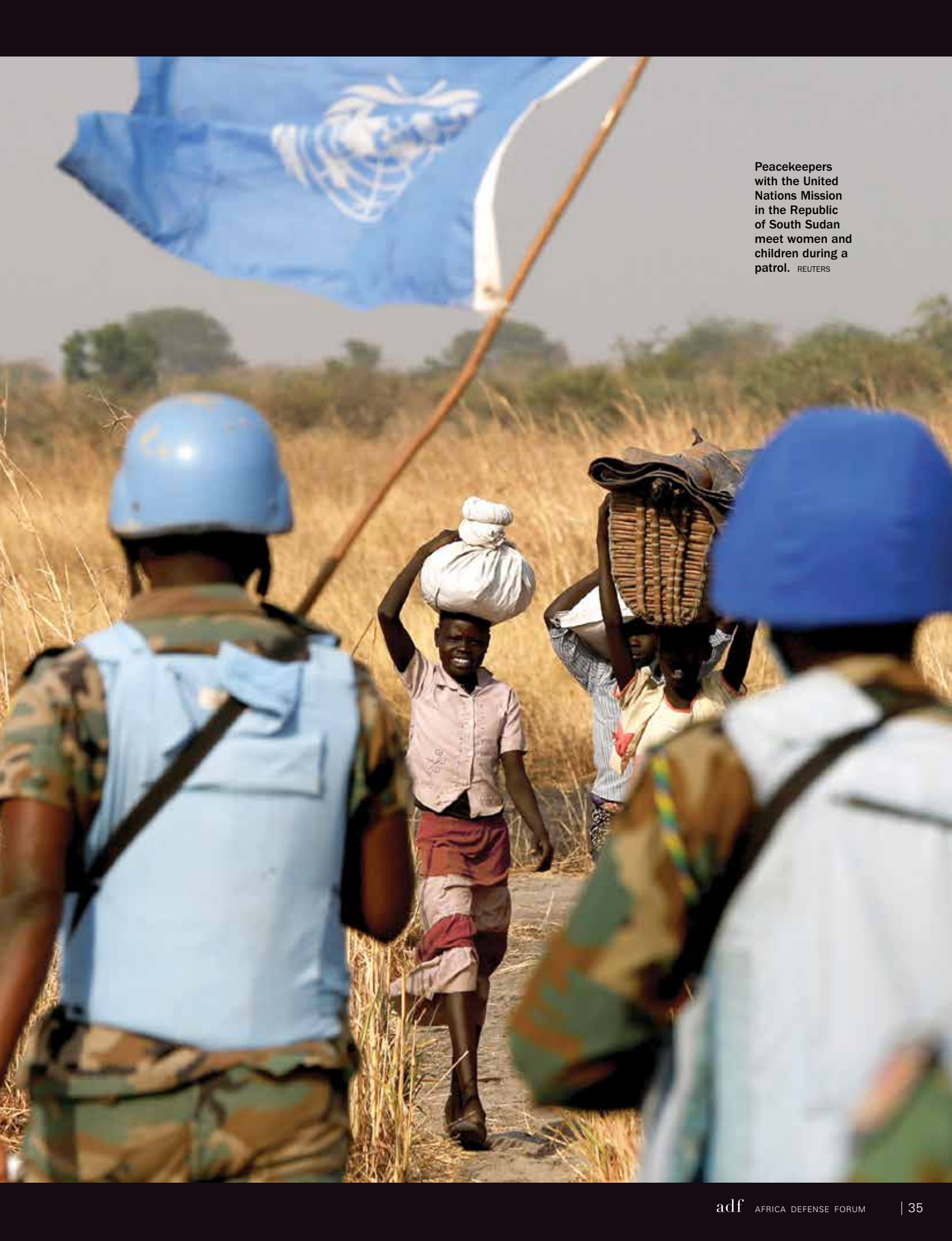
Mass migration tells when people have been forced to flee their homes due to conflict, disease or ecological stressors.

FEWS NET has 22 field offices around the world monitoring these factors. They produce regular reports and issue warnings. When conflict or distance makes it difficult to access certain regions, the organization relies on local partners, satellite imagery and mobile phone technology to gather data. For example, FEWS NET launched a pilot project using cellphones to collect wage and market data in Madagascar to determine when laborers are in low demand, which signals a bad year for harvests. In other countries, FEWS NET has built farmer networks that relay information by phone.

"We're piloting a variety of tools and I think technology can help us, but I would also say that there are limitations," Chris Hillbruner of FEWS NET told VOA. "At the end of the day we still get the best information when people are able to go into these areas and get on the ground to collect information about what is happening."

Other organizations are looking for ways to gather information about food insecurity in places that are too remote or too dangerous for observers to enter. The platform Tomnod, run by the satellite





Peacekeepers with the United Nations Mission in the Republic of South Sudan meet women and children during a patrol. REUTERS



*“Attacks against aid workers and aid assets are utterly reprehensible. They not only put the lives of aid workers at risk, they also threaten the lives of thousands of South Sudanese who rely on our assistance for their survival.”*

~ EUGENE OWUSU

the United Nations' humanitarian chief in South Sudan





A United Nations World Food Programme helicopter flies over people waiting to register for food distribution in South Sudan. REUTERS

company DigitalGlobe, uses crowd-sourced analysis of satellite imagery to map data. The group has mapped satellite imagery across 18,000 square kilometers in South Sudan to identify permanent dwellings, temporary dwellings and livestock herds. The satellites produce high-quality images in which each pixel represents 30 centimeters on the ground. This mapping will help DigitalGlobe track the impact of the ongoing conflict and give an idea of where food insecurity is likely to occur.

"For humanitarians to cover that kind of ground, especially when it's insecure, is just not a safe approach," said Rhiannan Price, senior manager of DigitalGlobe's Seeing a Better World Program. "Satellite imagery offers a really helpful tool when it comes to assessing and evaluating what's happening on the ground, trying to find those folks so we can get resources and actually quantify the situation there."

The Nutrition Early Warning System launched by the International Center for Tropical Agriculture tracks health and nutrition information to look for trends such as stunted growth in children, which may be a precursor to widespread food insecurity. The system is expected to be up and running in Ethiopia, Nigeria, Somalia and South Sudan by the end of 2017.

## HOW SOLDIERS CAN HELP

Peacekeepers and military personnel often will be asked to help provide food assistance, but typically will not play the lead role. There are two main ways Soldiers can help ensure rapid response to famines: protection and coordination.

### Protection

Lack of security prevents food from reaching those who need it. When aid workers are attacked or threatened, organizations typically remove their personnel. In April 2017, the U.N. Food and Agriculture Organization pulled workers from some of South Sudan's hardest-hit areas after three aid workers were killed.

"Attacks against aid workers and aid assets are utterly reprehensible," said Eugene Owusu, the U.N.'s humanitarian chief in South Sudan. "They not only put the lives of aid workers at risk, they also threaten the lives of thousands of South Sudanese who rely on our assistance for their survival."

Armed forces can provide security for humanitarian groups by protecting convoys as they move along roads, offering security at feeding stations or guarding boats coming into ports. One of the most visible examples of this is the European Union Naval Force's Operation Atalanta, which

has protected World Food Programme (WFP) vessels coming into and out of the Horn of Africa since 2008. Another example is the liberation of the port city of Kismayo, Somalia, in 2012 by African Union and Somali forces, which allowed the WFP to resume delivering aid for the first time in four years.

It's not only aid workers who need protection; recipients of food aid can become targets as well. In Nigeria, Boko Haram has attacked villages to steal food aid and medicine. "Any delivery of aid had a high potential for a town to be attacked and supplies raided," Karen Attiah, global opinions editor for *The Washington Post*, said during a forum at the Brookings Institution. "That's a perennial problem of providing support to these areas. How do you do it without strengthening the terrorists you're trying to fight and without making the recipients a target?"

### Coordination

Armed forces and nongovernmental organizations (NGOs) are structured differently. Militaries operate as strict hierarchies and tend to seek quick impact and short-term engagement. NGOs' structure empowers lower-level workers, and those workers prefer to retain independence to avoid arousing the suspicion of those they are trying to help, according to the *Guide to Nongovernmental Organizations for the Military*, edited and co-written by health and human rights expert Lynn Lawry.

The goal of both groups is protecting the public, and it is helpful if they can work together.

Shantal Persaud, deputy spokesperson for the U.N. Mission in South Sudan, said peacekeepers are not mandated to help provide famine relief. But in any such mission, peacekeepers will encounter humanitarian actors.

The key is to integrate the efforts of everyone serving the mission, Persaud said. This is achieved through training, and then practicing the integration in the field. "Peacekeepers and humanitarians do not operate in silos and are integrated at the outset by conduct of integrated induction training, which is mandatory for all and carried out by the in-house Integrated Mission Training Centre," she said.

Security professionals should not be surprised when humanitarian organizations choose to stay at a distance. In Somalia, 13 aid workers were kidnapped in April 2017 by al-Shabaab, which suspected them of being government informants. Working for international aid groups makes locals a target. Working alongside security forces could make them even bigger targets.

"If they caught me, they would kill me," a Somali employee of Save the Children told *The Washington Post*. "It's that simple." □

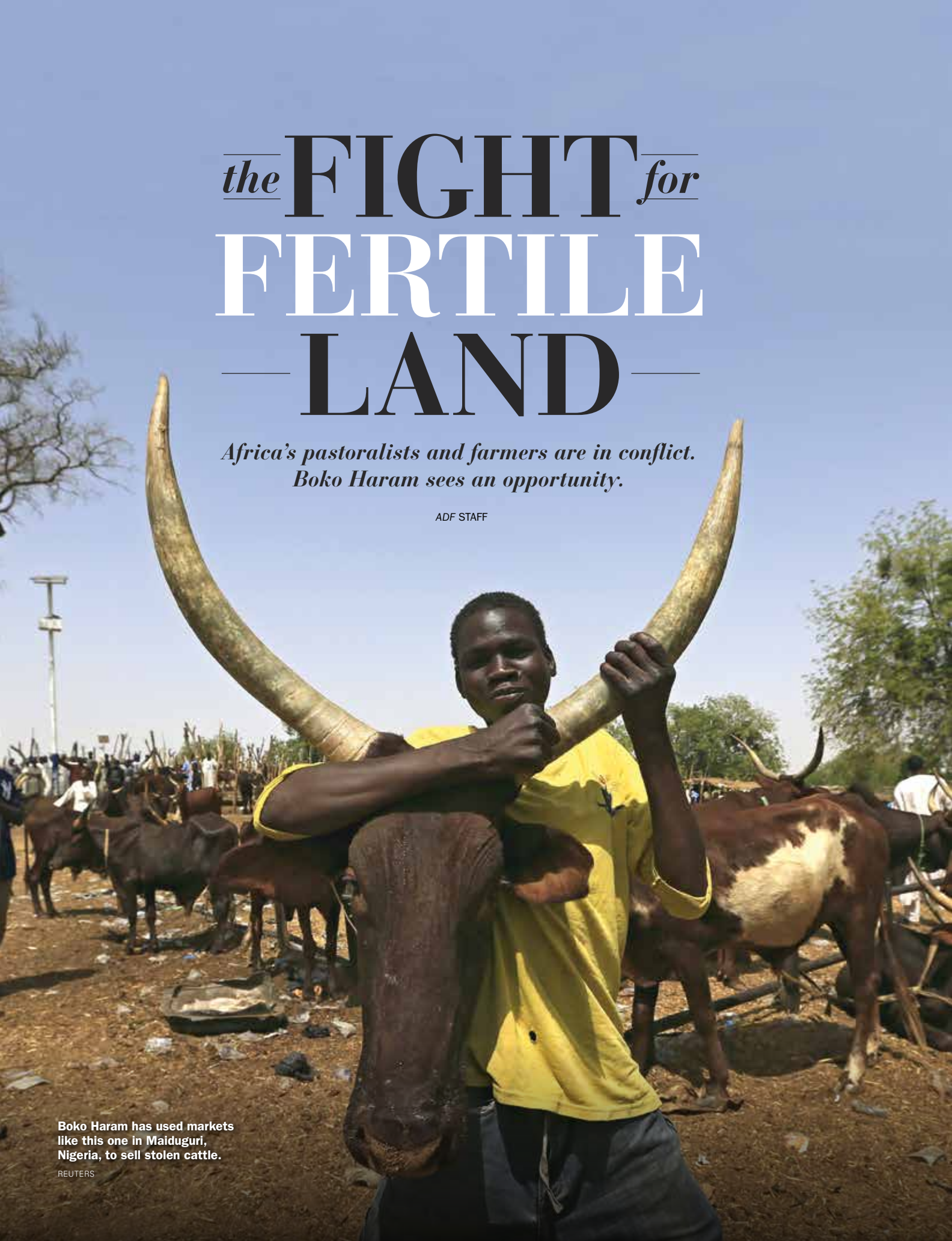
# *the* FIGHT *for* FERTILE LAND

*Africa's pastoralists and farmers are in conflict.  
Boko Haram sees an opportunity.*

ADF STAFF

Boko Haram has used markets like this one in Maiduguri, Nigeria, to sell stolen cattle.

REUTERS





**F**or generations, Fulani herdsmen have roamed North Africa, grazing their animals. In the 60 years of post-colonial Africa, life for the herdsmen, also known as pastoralists, has become harder, as they compete with farmers for fertile land, often resorting to violence. Since 2000, tens of thousands of people have died in pastoralist-related violence in Nigeria alone.

Now, extremists, including the terror group Boko Haram, are attacking the pastoralists and their cattle, all while encouraging them to rebel against the farmers and join the extremists' causes.

The mostly Muslim Fulani are not the only herdsmen the extremists have targeted. The reach of various extremist groups extends to the Sahel, the Lake Chad Basin and the Horn of Africa.

Experts say that most farmers and herdsmen coexist peacefully. When relations sour and turn violent, it's usually due to local disputes that go unresolved, along with competition for increasingly scarce land and resources.

"Much of the conflict ... between Christians and Muslims is about land and access to water," said Vanda Felbab-Brown of the Brookings Institution. "But Boko Haram is tapping to those sentiments and inflaming those sentiments."

The Fulani number between 20 million and 25 million, with significant populations in Burkina Faso, Cameroon, Guinea, Mali, Mauritania, Niger, Nigeria and Senegal. About a third of them are pastoralists, making them the largest such herding culture in the world. Their way of life requires mobility, with the herdsmen roaming to meet the food, water and climate protection needs of their livestock.

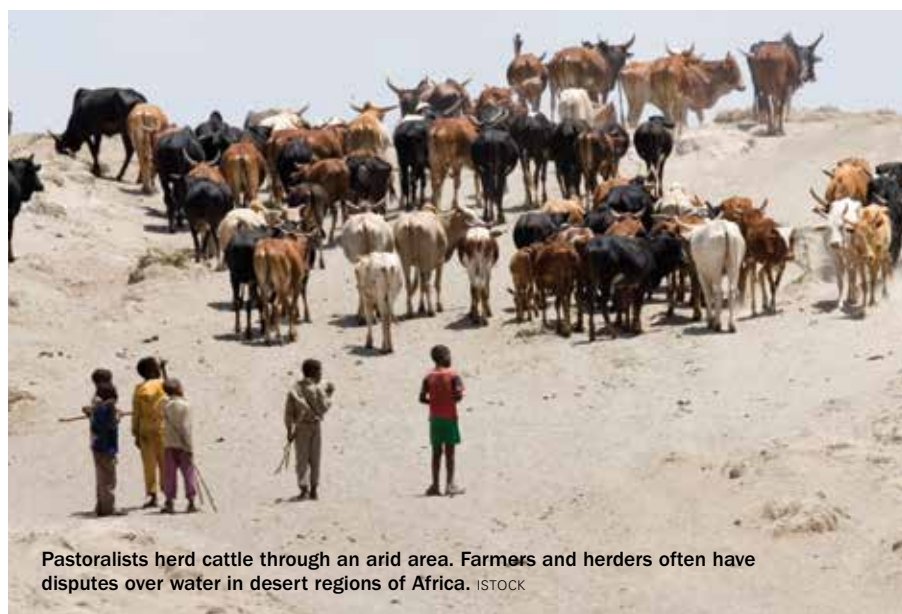
Because of population growth, global warming and droughts, they are now forced to compete with farmers for fertile land. The desert is expanding, and Lake Chad is shrinking. Some governors in northern Nigeria have called for the intervention of the Economic Community of West African States to stop the incessant clashes between herdsmen and local farming communities in several states across Nigeria. *The Premium Times* of Nigeria reported in April 2017 that the country is trying to establish a 6,000-kilometer cattle

route to keep herdsmen from crossing farmland.

Because they seldom put down roots, Fulani herdsmen have little political power. This makes them vulnerable to extremist recruitment. In May 2013, officials attending a conference in Chad concluded that if the herdsmen had more government support, they might have formed an organized defense against extremists. The herdsmen, they said, could have been encouraged to control and supervise regions of pasture that are not easily reached by national security forces.

"Increasingly, angry nomadic Fulanis feature prominently in the terrorist violence waged in West Africa," wrote researcher Anouar Boukhars for *World Politics Review*. "This trend of disaffected nomadic herding communities joining violent extremist groups became evident as early as 2012." That year, young nomadic herdsmen in central Mali began asking extremists for military training and protection from roaming gangs that were stealing their herds.

The Fulanis' complaints have merit. Laws throughout Africa give preferential treatment and land rights to settled residents, especially those who are native to a particular region.



Pastoralists herd cattle through an arid area. Farmers and herdsmen often have disputes over water in desert regions of Africa. ISTOCK

**"TERRORIST GROUPS ARE INCREASINGLY USING NATURAL RESOURCES, SUCH AS WATER, AS A WEAPON OF WAR, CONTROLLING ACCESS TO IT, AND FURTHER COMPOUNDING AND EXACERBATING RESOURCE SCARCITIES."**

— Lukas Rüttinger, writing for the think tank Adelphi



Cattle graze at a Kenyan wildlife conservancy during a drought in early 2017.

AFP/GETTY IMAGES







Even when governments establish groups and mechanisms to resolve land disputes fairly, they generally favor farmers, who already have well-defined territorial jurisdictions.

Herders have taken up arms against farmers, who have branded them as roving thieves. Farmers have also described them as extremists masquerading as pastoralists. But there remains uncertainty as to the extent that pastoralists are working with extremist groups.

“Violence has certainly claimed hundreds of pastoralist and settler lives this year alone, but precise information is scarce,” the interna-

nomadic herdsmen to its cause. A 2017 study by the Africa Center for Strategic Studies noted, “The FLM strategy is potentially extremely destabilizing because it risks fusing Islamist terrorism in the Sahel with pastoralist grievances and communitarian violence.” If the FLM is able to attract larger numbers of Fulani, it “would give terrorists traction among deep-seated societies that cover wide expanses of territory.”

“It would thus confer a new ferocity, persistence and reach upon terrorism in Africa,” the study reported.

The FLM is not the only extremist group operating in Mali.

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**“AQIM HAS PUBLICLY CLAIMED THAT THEY WILL CONTINUE TO FLEX ITS FULANI NETWORK FOR THE PURPOSES OF RECRUITMENT AND EXPANSION.”**

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— U.S. State Department

tional think tank Chatham House reported in May 2016. “It is still not clear whether this is a product of long-standing inter-community tensions, exacerbated by climate change and land-grabbing by politicians, simple banditry or overspill from the Boko Haram crisis — or a complex mix of all of these factors.”

#### **RECRUITING IN MALI**

In 2015, Malian extremists formed the Macina Liberation Front (Front de libération du Macina, or FLM), which has attacked civilians, United Nations peacekeepers, French troops, and Malian security forces in the central and southern parts of the country. The FLM is specifically trying to recruit Fulani

A March 2017 study by the U.S. State Department lists Mali as an example of the influence Muslim extremists can exert on pastoralists. The study noted that al-Qaida in the Islamic Maghreb (AQIM) “has successfully integrated itself into the Mopti and Segou-based Fulani community in Mali through the co-option of local grievances and astute network building.”

“AQIM has publicly claimed that they will continue to flex its Fulani network for the purposes of recruitment and expansion,” the study noted. It added that Mali’s extremists were putting the “downstream communities” of Burkina Faso and Côte d’Ivoire at risk as well.



Ethiopian men herd cattle across a country road.

ISTOCK

Boukhars noted that AQIM is successful in part because it preys upon people who already feel disenfranchised.

"The expansion and execution of successful terrorist attacks helps AQIM-led groups rebuild their resources and broaden their recruitment base, reaching areas riven by long-simmering communal distrust, festering local conflicts and distrust of state institutions, particularly in marginalized peripheries and rural communities," Boukhars wrote. "The group ingrained itself into local settings riven by ethno-racial tensions as well as fierce competition over scarce resources, patiently building and expanding a network of family ties, social support, political relations and economic exchange."

In many cases, extremist groups are robbing and slaughtering the Fulani and other herders, rather than trying to recruit them. In Nigeria, Boko Haram has been robbing, murdering and kidnapping villagers for many years. Since 2013, it also has targeted herders, killing them and taking their animals. A 2016 study by researchers at Ohio State University said: "It is likely that cattle are a major source of income for the group and not ivory, as has been suggested." The study noted that attacks on pastoralists are largely unreported crimes, unlike attacks on villages.

Attacks on pastoralists are often on a large scale. In September 2016, the Nigerian Army arrested three suspected Boko Haram members at the Maiduguri cattle market. The three men were trying to sell 200 stolen cows. Nigerian officials had been forced earlier in the year to ban cattle sales in the market because so many Boko Haram fighters had become major cattle dealers. Officials ended the sales ban when legitimate cattle sellers pledged to identify bogus cattle dealers. One of the three men arrested told officials that he was "part of logistics elements of the Boko Haram terrorists group that assist in selling cows for the insurgents."

To avoid extremist groups, particularly Boko Haram, pastoralists have moved to new countries or drastically changed their annual migration patterns, disrupting farmers' lives in the process. In northeast Nigeria, herders have fled the country, seeking refuge in Cameroon. These refugees have suffered untold hardships in the process, and the massive influx of their animals has wreaked havoc on markets and the value of local livestock.

Some herders in the Sahel, fearful of Boko Haram, have abandoned their traditional dry-season grazing areas in Nigeria and moved to Ghana instead, where they are not welcome. Farmers there say the herders and their animals overwhelm the region's resources.





**Bags of feed are piled at a cattle market in Maiduguri, Nigeria.**

REUTERS

“My country is carrying more burden,” Emmanuel T. Obeng, director of the Environmental Protection Agency of Ghana, told the Thomson Reuters Foundation. “As they come with their livestock, they burn the vegetation in Ghana to get fresh grass for their cattle. There have been many conflicts with our people over natural resources, including water and land.”

Some studies have concluded that the worst is still to come for pastoralists. A commissioned study conducted by the think tank Adelphi and released in April 2017 concluded that climate change is going to be a factor in recruitment by extremist groups.

“As climate change affects food security and the availability of water and land, affected people will become more vulnerable not only to negative climate impacts but also to recruitment by terrorist groups offering alternative livelihoods and economic incentives,” researcher Lukas Rüttinger wrote. “Terrorist groups are increasingly using natural resources, such as water, as a weapon of war, controlling access to it, and further compounding and exacerbating resource scarcities.”

## NOT THE ENEMY

Pastoralists deserve protection from extremist groups, both for their survival as well as to prevent them from being recruited. To help the herders and to stabilize the regions they inhabit, the affected countries must make changes from within.

Researchers say that the lessons learned in the aftermath of Côte d’Ivoire’s decade of civil war can be applied to countries dealing with angry pastoralists. To improve life in these countries, these priorities have been recommended:

- Create jobs for disenfranchised young people.
- Encourage governments to design and implement disarmament, demobilization and reintegration processes among pastoralists and farmers in rural areas.
- Develop reconciliation plans for ethnic and religious groups.
- Better regulate land ownership and territorial administration. That includes honest and fair sharing of land and natural resources. Pastoralist leaders have called for grazing reserves to be set aside for their exclusive use.
- Improve the delivery of government-provided services to rural areas.
- Offer equitable political and geographic representation for all, including nomadic herders.

“Better water and land management strategies, increased economic opportunities and a more sensible approach to counterinsurgency could do much to prevent the alienation of already-vulnerable populations,” the think tank RUSI concluded in an April 2017 report.

The nongovernmental organization Conciliation Resources says that rural development, including education and employment opportunities, is a major component of any reconciliation plan. Countries must ensure that the diversification of livelihoods away from pastoralism is a viable option.

“This has important security implications as well, given the rise in young men turning to organized banditry and crime within pastoralist communities,” the organization reported in a 2017 study. “Rebuilding the system of nomadic education, and education generally in rural areas, is key.” □

# *AT* **WAR** *with* **MALARIA**

*The Mosquito-Borne Disease Is a Continental Problem, but a Program is Equipping African Militaries to Fight It*

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ADF STAFF



ISTOCK



**A**n insidious, debilitating force has attacked tiny Burundi, in Africa's Great Lakes region. Since the beginning of 2015, there have been 16.8 million cases of malaria reported in the country, according to the United Nations. More than 7,800 people have died in that period, and many more may face a lifetime of relapses and illness, depending on the strain of the disease and the level of treatment they received.

The crisis, which officials labeled an epidemic, is a crushing blow to a nation already reeling from political turmoil stemming from President Pierre Nkurunziza's pursuit of a third term in office in 2015. Hundreds of thousands of Burundians have fled the nation to escape violence and human rights abuses.

Dr. Josiane Nijimbere, Burundi's minister of public health, told *The East African* the outbreak of the mosquito-borne disease can be attributed to an increase in marshland for growing rice and the improper use of protective mosquito netting.

Climate change also has exacerbated the problem. "There is a strong association between malaria and warm temperatures, which have led to significant increase in malaria cases because of the spread of mosquitoes," Nijimbere told reporters in March, according to the Voice of America.

### ***A CONTINENTAL PROBLEM***

Burundi is not alone. Malaria is prominent in nations across the continent, from Ghana to Ethiopia, and virtually everywhere in between.

Four primary parasite species cause malaria and are spread from person to person by female Anopheles mosquitoes. Two parasites — *P. falciparum* and *P. vivax* — pose the most significant human health threat in Africa. *P. falciparum* is the most prevalent and kills the most people.

Malaria prevention consists mainly of using insecticide-treated nets (ITNs) and indoor spraying to keep mosquitoes away from people, the World Health Organization (WHO) reports. Treatments include drugs to prevent infection and prompt diagnosis and treatment for those who become infected. Often, if detected early and treated quickly with the proper drugs, malaria can be cured.

Despite these preventive techniques and treatments, the outbreak in Burundi is indicative of a persistent threat in Africa. Most of the continent is prone to malaria, and the disease still strikes millions there annually. WHO

estimated that in 2000 there were 214 million cases of malaria in Africa alone, resulting in 764,000 deaths.

The good news is that by 2015, the number of cases and deaths had fallen to 191 million and 394,000, respectively, according to a 2016 WHO report. That's a 48 percent decrease in deaths, due in large part to the growing use of ITNs. Despite improvements, malaria remains the pre-eminent health concern on the continent, far surpassing even the deadly, but comparatively rare, Ebola.

Cape Verde, Mauritius and Tunisia, have made significant strides toward ridding themselves of malaria over the years, but much work still needs to be done all over the continent.



A Ugandan People's Defence Force medic takes care of a malnourished child with malaria. REUTERS

Maj. Joseph Tamba Gayflor, commander of the Armed Forces of Liberia's (AFL) Medical Command, told ADF via email that malaria is a major cause of outpatient visits to AFL health centers. "Many Soldiers are withdrawn from their duties due to illness associated with malaria," he said. "The main burden of the disease is associated with family, especially children under 5 and pregnant women. This also impacts the psychological preparedness of Soldiers, which prevents them from being mission focused. Additionally, in peacekeeping missions, malaria is the major cause of morbidity."



# Kenya, Ghana, Malawi chosen for **MALARIA** VACCINE TRIAL

THE ASSOCIATED PRESS

**T**hree African countries have been selected to test the world's first malaria vaccine, the World Health Organization (WHO) announced on April 24, 2017. Ghana, Kenya and Malawi will pilot the injectable vaccine in 2018 with hundreds of thousands of young children, who have been at the highest risk of death.

The vaccine, which has partial effectiveness, has the potential to save tens of thousands of lives if used with existing measures, according to Dr. Matshidiso Moeti, WHO regional director for Africa. The challenge is whether impoverished countries can deliver the required four doses of the vaccine for each child.

Malaria remains one of the world's most stubborn health challenges, infecting more than 200 million people every year and killing about half a million, most of them African children. Bed netting and insecticides offer the best protection.

worst outbreaks — that it couldn't tell whether cases have been rising or falling in the past 15 years.

The vaccine will be tested on children 5 months to 17 months old to see whether the protective effects shown so far in clinical trials can hold up under real-life conditions. At least 120,000 children in each of the three countries will receive the vaccine, which has taken decades of work and hundreds of millions of dollars to develop.

Ghana, Kenya and Malawi were chosen for the vaccine pilot because all have strong prevention and vaccination programs but continue to have high numbers of malaria cases, WHO said. The countries will deliver the vaccine through their existing vaccination programs.

WHO is hoping to wipe out malaria by 2040, despite increasing resistance problems to drugs and insecticides used to kill mosquitoes.

"The slow progress in this field is astonishing, given that malaria has been around for millennia and has been a major force for human evolutionary selection, shaping the genetic profiles of African populations," Kathryn Maitland, professor of tropical pediatric infectious diseases at Imperial College London, wrote in *The New England Journal of Medicine* in December 2016. "Contrast this pace of change with our progress in the treatment of HIV, a disease a little more than three decades old."

Pharmaceutical company GlaxoSmithKline developed the malaria vaccine. The \$49 million for the first phase of the pilot is being funded by the global vaccine alliance GAVI, UNITAID and Global Fund to Fight AIDS, Tuberculosis and Malaria.

The AFL educates its Soldiers and their dependents on how to prevent malaria by using ITNs and anti-malarial drugs, Gayflor said.

One program is helping experts in African nations develop their ability to quickly and accurately diagnose malaria and better identify the vectors that transmit it and other diseases.

## **THE AFRICA MALARIA TASK FORCE**

In 2011, senior leaders from five East African nations gathered in Stuttgart, Germany, for a command surgeon malaria symposium sponsored by U.S. Africa Command. These leaders from Burundi, Kenya, Rwanda, Tanzania and Uganda discussed strategies for addressing malaria and called for tactical level information sharing. Events focused on diagnostics and entomological issues such as vector surveillance and mosquito identification. Two other countries — Djibouti and South Sudan — have since joined in East Africa.

Two years later, identical efforts kicked off in West Africa with Benin, Burkina Faso, Ghana, Liberia, Niger, Nigeria, Senegal and Togo. Côte d'Ivoire, Guinea and Sierra Leone have since joined in that region.

The Africa Malaria Task Force (AMTF) sponsored 17 events between 2011 and March 2017, which include diagnostic and entomological symposia. A diagnostic symposium in Ghana involved 18 African nations, with two participants per nation. Two-week diagnostic events include makeshift field laboratories with testing kits, microscopes, computers and projectors. After a pretest to gauge knowledge, participants take part in basic microscopy and basic and advanced diagnostic techniques. They learn the steps of diagnosing malaria and see its similarities and differences compared to other vector-borne illnesses.

Participants receive booklets and CD-ROM slide libraries so they can refer to images after they return home. Often, they form their own social media circles and share information long after sessions have ended.

In the two-week entomological information-sharing sessions,

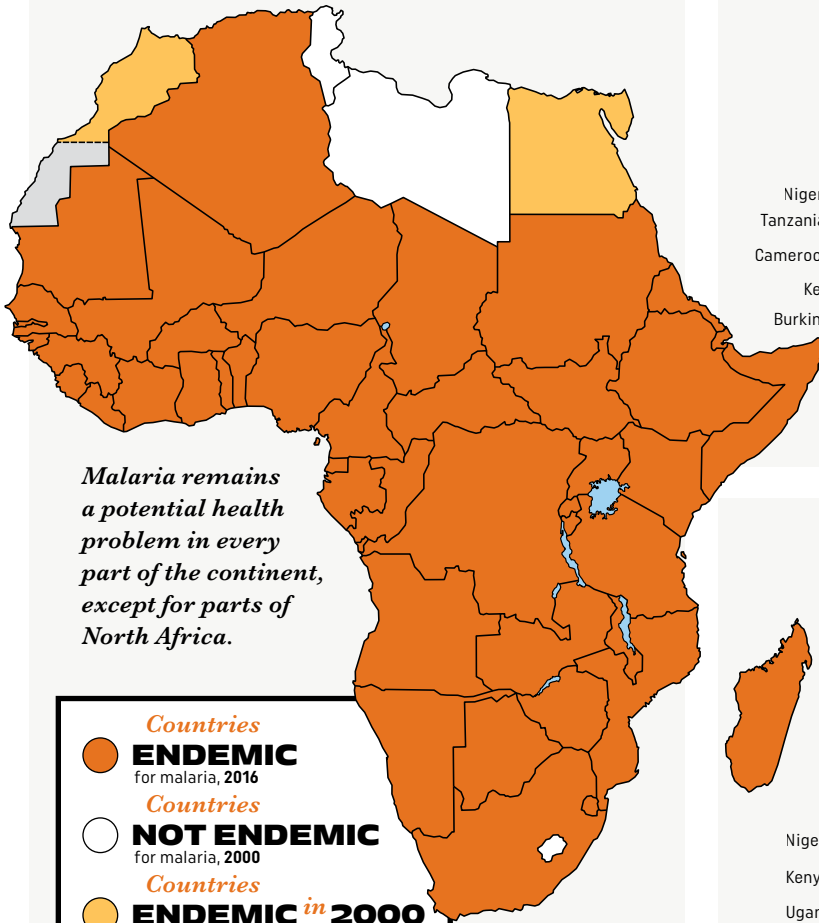


A baby receives a trial version of a malaria vaccine in Kenya. THE ASSOCIATED PRESS

A global effort to counter malaria led to a 62 percent cut in deaths between 2000 and 2015, WHO said. But the United Nations agency has said in the past that such estimates are based mostly on modeling and that data is so unreliable for 31 countries in Africa — including those believed to have the



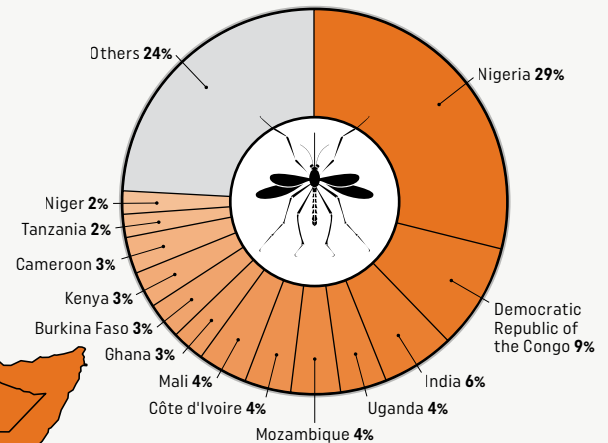
*African countries*  
**ENDEMIC FOR MALARIA**  
*in 2000 and 2016*



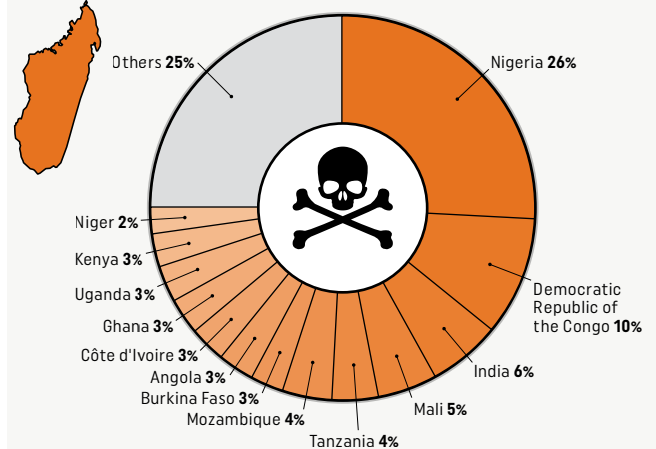
*Malaria remains a potential health problem in every part of the continent, except for parts of North Africa.*

Source: World Health Organization's World Malaria Report 2016

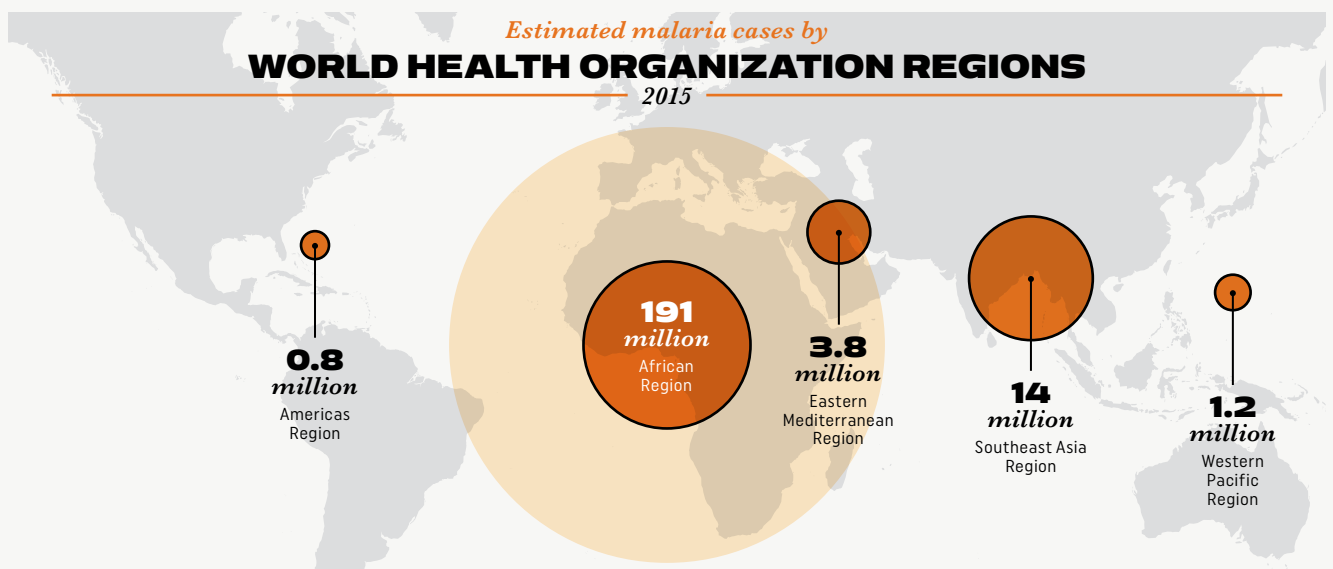
*Percentage of Global*  
**MALARIA CASES**  
**BY COUNTRY**  
*2015*



*Percentage of Global*  
**MALARIA DEATHS**  
**BY COUNTRY**  
*2015*



*Estimated malaria cases by*  
**WORLD HEALTH ORGANIZATION REGIONS**  
*2015*



Source: World Health Organization's World Malaria Report 2016

ADF ILLUSTRATION

# DISEASES

## *SPREAD BY*

# MOSQUITOES IN AFRICA

ADF STAFF

Vector-borne diseases are transmitted by the bite of an insect or arachnid such as mosquitoes, ticks and certain species of flies.

Mosquitoes spread a number of diseases in Africa, including the following, according to the World Health Organization:



## DENGUE FEVER:

Dengue is prevalent in the tropics and is endemic in more than 100 countries in Africa, the Americas, the Eastern Mediterranean, Southeast Asia and the Western Pacific. Data is not available for the number of cases in Africa, but the Americas, Southeast Asia and Western Pacific regions are the most seriously affected.

### *SYMPTOMS:*

The mosquito-borne virus exists in four strains, causes severe flu-like symptoms and can be lethal. People can recover and acquire immunity for the strain that infected them.

### *VECTOR:*

Aedes aegypti mosquito



## YELLOW FEVER:

This virus is endemic in 33 African countries and 11 South American countries. An outbreak began in Angola in December 2015 and spread to the Democratic Republic of the Congo.

### *SYMPTOMS:*

Symptoms can include sudden fever, chills, severe headache, muscle pain, nausea, vomiting and fatigue. After a brief remission, a small percentage will develop severe symptoms, such as high fever, jaundice, bleeding, and eventually organ failure.

### *VECTOR:*

Aedes or Haemagogus species mosquitoes



## ZIKA VIRUS:

Outbreaks of this mosquito-borne virus have been recorded in Africa, the Americas, Asia and the Pacific. Seventy countries and territories have reported evidence of Zika transmission since 2007.

### *SYMPTOMS:*

Symptoms can include mild fever, a skin rash, conjunctivitis, muscle and joint pain, malaise or headache. Zika can cause microcephaly and Guillain-Barré syndrome.

### *VECTOR:*

Transmitted primarily by Aedes mosquitoes



## CHIKUNGUNYA:

Chikungunya has been identified in more than 60 countries and occurs mostly in Africa, Asia and on the Indian subcontinent. However, a 2015 outbreak affected several countries in the Americas.

### *SYMPTOMS:*

Chikungunya causes an abrupt onset of fever, which often includes joint pain, muscle pain, headache, nausea, fatigue and a rash. Joint pain can be severe and last for weeks. It shares clinical characteristics with dengue fever and Zika. Most patients recover, but joint pain has been known to persist long term. Eye, neurological, heart and gastrointestinal issues occur occasionally.

### *VECTOR:*

Most commonly female Aedes aegypti and Aedes albopictus mosquitoes



## WEST NILE VIRUS:

About 80 percent of all people who contract West Nile virus will never show symptoms, but it can cause a fatal neurological disease. The virus can cause severe disease and death in horses. Vaccines are available for horses but not people. Birds are the natural hosts of West Nile virus.

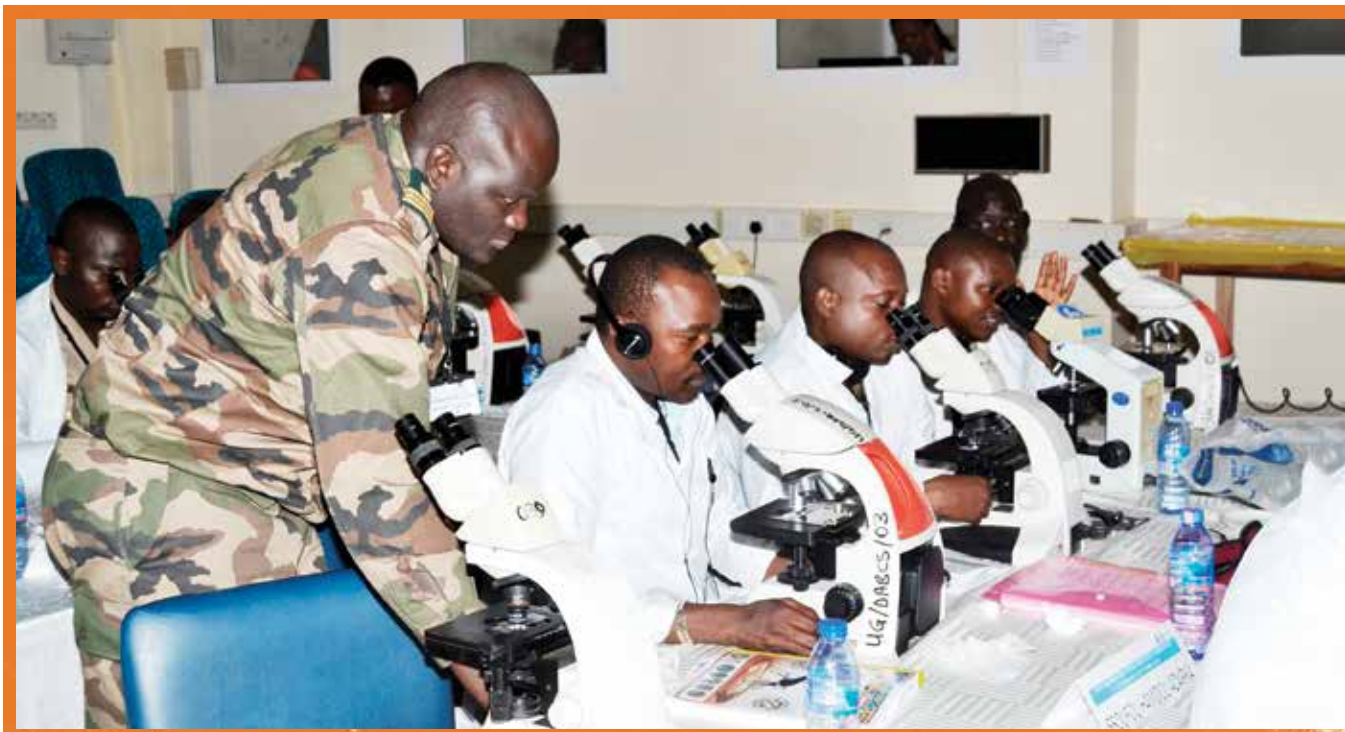
### *SYMPTOMS:*

Fever, headache, tiredness, body aches, nausea and vomiting sometimes are accompanied by a skin rash and swollen lymph glands.

### *VECTOR:*

Culex mosquitoes, particularly Culex pipiens





*Continued from Page 46*

participants go out into the field for “tick drags,” in which a white cloth is drawn through vegetation to collect insects and arachnids. Participants also trap mosquitoes and identify them to determine what disease vectors might be present. Properly identifying vectors can help with diagnostics, even if sophisticated equipment is unavailable.

For example, if a person shows symptoms that resemble malaria but mosquitoes that carry the disease have not been found in that area, that is a clue to consider other diseases with similar symptoms.

The AMTF also tries to meet with senior leaders yearly to discuss what has been going on at tactical events. They ask for suggestions on how to improve symposia and seek guidance on future events. This gives high-ranking officers from participating countries a chance to have a say in programming and tailor information to their forces’ needs.

Gayflor said the AFL has participated in AMTF events in Ghana, Kenya and Nigeria. So far, five AFL members have taken part in diagnostic, entomology, and clinical and laboratory technician sessions. Liberian forces have learned prevention strategies and exchanged ideas with personnel in other countries. “There is a need to continue support from the AMTF, in terms of training and equipping militaries to combat the disease,” he said.

### **BEYOND THE MILITARY**

In 2018, the AMTF expects to offer question-and-answer sessions between events to help participants maintain their skills. Organizers will send out midterm tests and slides and get back answers. If tests show that skills have not been maintained, participants can get help before they attend another information-sharing event.

**Capt. Mame Cheikh Seck of the Senegalese Army assists with malaria parasite species identification at the Africa Malaria Task Force diagnostics event at the Kofi Annan International Peacekeeping Training Centre in Accra, Ghana, in 2017. U.S. AFRICA COMMAND**

The information-sharing sessions engage primarily with military personnel, which helps ensure their military’s readiness to prevent, diagnose and treat malaria within its ranks. This also helps maintain a robust, healthy military that is prepared to respond when needed. But the program also has a civilian goal. In many African countries, the military supports its nation’s civilian population. Organizers knew that equipping African militaries to diagnose and treat malaria would benefit populations living near garrisons.

Techniques shared in AMTF sessions offer another valuable benefit as well: They can be applied to many vector-borne diseases. Africa is home to a number of diseases spread by mosquitoes: malaria, yellow fever, dengue fever, West Nile virus and Zika virus.

The potential dangers of these additional vector-borne risks were underscored in late 2015 and into 2016. A yellow fever outbreak was detected in Angola in December 2015, and the viral disease spread throughout the country and into the Democratic Republic of the Congo (DRC) in March 2016, WHO reported. Angola reported 4,306 suspected cases, and the DRC reported 2,987 suspected cases. In all, about 400 people died.

“Malaria — yes, it’s a significant threat — but there are other threats out there,” said U.S. Air Force Maj. Antonio Leonardi, a public health officer with U.S. Africa Command. “You’re not going to know what they are until you start looking for them, and the process is still the same.” □



# SOLDIERS TO THE RESCUE

**ARMED  
FORCES HAVE  
THE SKILLS  
AND TOOLS  
TO RESPOND  
TO CRISES**

ADF STAFF

A 2012 plane crash in Lagos, Nigeria,  
killed 153 people. THE ASSOCIATED PRESS







**F**or years, when countries needed their armed forces' help during natural disasters, the philosophy was "last in, first out" — don't use them except as a last resort, and use them as little as possible. But that thinking is at odds with the need for a timely response, which is something armed forces are trained to do.

The "last resort" thinking, particularly in Africa, has given way to the realization that armies, navies and air forces have a particular set of skills and equipment and can, in fact, be the first line of defense in dealing with disasters. For example:

In **Zambia**, armyworms began attacking corn crops in late 2016. The country has no national air service, so President Edgar Lungu called on his Air Force to airlift pesticides. The worms, so named because they eat almost any vegetation in their way, had destroyed crops in six of the nation's 10 provinces as of early 2017. Four years earlier, the worms destroyed corn, cassava, sorghum and rice fields, Reuters reported.

In **South Africa**, 120 South African Sailors joined firefighters to control wildfires spreading near Cape Town in January 2017. Two South African Air Force helicopters also deployed. The website Africanews reported that the Sailors worked "day and night" to bring the fires under control.

In November 2016, 2,000 troops from **Burundi, Kenya, Rwanda, Tanzania and Uganda** gathered in Kenya for training on how to conduct rescue missions. *The Star* of Kenya reported that in addition to the rescue training, the Soldiers were learning how to work together as members of the East African Community. The Soldiers also took on projects designed by Kenyan military engineers, including grading roads, sinking boreholes and rehabilitating schools.

In **Uganda**, Soldiers crossed over their border into South Sudan in July 2016 to rescue Ugandans and others trapped in the fighting in that country. Over the course of a few days, they used dozens of armored vehicles to rescue an estimated 3,000 Ugandans.

## DIFFERENT SET OF RULES

In many ways, armed forces are tailor-made for helping out, or even taking the lead, in rescue operations. The use of a nation's armed forces can be particularly helpful in remote areas, where civilian infrastructure for handling disasters can be lacking or nonexistent. But using armed forces for rescue operations in Africa, as in other parts of the world, can have its own problems.

During the colonial period, many African countries used their military forces to control the population, not protect them. After independence, African nations began the slow process of military reform to meet the needs of their citizens, and yet, some level of distrust remains. That has been particularly the case in countries that have had multiple government coups and extended periods of military rule.

Jibrin Ibrahim, a writer for Nigeria's *Premium Times*, noted, "Military rule ultimately impacts negatively on society by generalizing its authoritarian values, which are in essence anti-social and destructive of politics."

A South African Army officer told *ADF* that because of the lingering memories of apartheid, many South African civilians still harbor feelings of distrust and resentment toward their country's Soldiers, even during rescue missions. He noted that he and his Soldiers have been shown more courtesy and respect in neighboring countries than in their homeland, and he said that more time would have to pass before the bad old days are behind the country.

Even in countries with well-established relationships between civilians and the armed forces, the use of Soldiers and Sailors in times of crisis is under development. In a 2015 study on disaster relief, researcher Vanessa Thevathasan wrote, "It is essential that a greater push for inter-dialogue, collaboration and coordination within the military, humanitarian and state sectors takes place to better define civil-military relations for disaster response."

Thevathasan pointed out several examples of successful rescue work around the





**IF THE ARMED FORCES ARE GOING TO BE FIRST RESPONDERS,  
SPEED IS CRITICAL. IF MILITARY RESOURCES ARE  
SLOW TO ARRIVE, IT CAN PREVENT OR DELAY  
THE DEPLOYMENT OF ALTERNATIVE CIVILIAN SERVICES.**



A Kenyan Soldier tries to rescue a survivor from the rubble of a collapsed building in Nairobi. REUTERS



Nigerian Navy and military medical directors meet in Abuja with the nation's health minister during a media briefing on the 2014 Ebola outbreak.

REUTERS

world, including the establishment of isolation and treatment centers in West Africa during the 2014 Ebola outbreak.

"Coordination and communication between the civilian humanitarian sector and the military has historically been extremely challenging to overcome," she wrote in the study. "Barriers include differences in cultures, priorities and operating modes between military and civilian staff that directly impacts information coordination, which itself contributes to the success or failure of relief operations."

One notable success, she said, was Japan's military assistance after the earthquake-tsunami in 2011. "The rapid deployment of troops and engagement with the civilian population created broader public support for defense spending and greater encouragement towards the military's role in disaster assistance both at home and abroad."

#### FAST-MOVING, SELF-CONTAINED

A 2011 study after the earthquake in Japan concluded that for military contributions to be

successful in disaster relief, they need to be:

- Self-contained, with little need for additional help that might slow down the response. "This includes making greater use of reservists; reserve personnel tend to have unique specialist skills from civilian careers which are of great value in responding to crises," the study, written by security consultant David Rubens, concluded.
- Fast-moving and able to deploy in a matter of hours, taking with them all the equipment they will need initially.
- Multiskilled and able to adapt and respond to unanticipated scenarios.
- Self-directing, able to make fast decisions based on their own assessments of situations, and not relying on a distant command chain.

There are some established guidelines for militaries when responding to disasters with other organizations. In 2008, the Stockholm International Peace Research Institute listed





Soldiers and police officers are honored at a graduation ceremony at the 14th Protection of Civilians course in Vicenza, Italy, in February 2017.

SPC. PAOLO BOVO/U.S. ARMY

factors that contribute to a successful military response to a crisis:

**Timeliness:** If the armed forces are going to be first responders, speed is critical. If military resources are slow to arrive, it can prevent or delay the deployment of alternative civilian services.

**The right tools for the job:** Deployed people and assets must meet the needs of the situation and be appropriate to the local culture and political environment.

**Efficiency:** The military assets must be well-managed, and well-integrated with wider international relief efforts.

**The “absorptive capacity” of the host country:** The country receiving the assistance must be able to accommodate an influx of people and resources. It must also be able to integrate and coordinate the assistance with its own resources. A country capable of using help must also be capable of helping itself.

**Coordination of resources:** Assistance can come from the armed forces, civilian governments, international organizations and nongovernmental organizations. The groups supplying the help must

be able to easily share information. The institute said the groups must achieve a harmony of different cultures.

Officials emphasize that crisis management requires careful planning and information sharing. When an earthquake struck Haiti in 2010, the Haitian government was widely criticized for being slow to respond and poorly prepared. There were plenty of partner nations that wanted to help out, but there was no database of the specific capabilities, training and rescue goods that each country possessed. There was no way for rescue organizers to match up Haiti’s most critical needs, such as food, water and temporary shelter, with the types of help volunteer nations wanted to provide.

Mark Phillips wrote a paper for the British think tank Royal United Services Institute on the role of the military in international disaster relief. He said that disasters are getting “increasingly harsh” and becoming more difficult and hazardous to deal with. Armed forces, he said, “are better suited to operating in a timely way in adverse circumstances compared to most other organizations.” □

# African Cinemas Make a Comeback

VOICE OF AMERICA

Africa's largest film festival, FESPACO, celebrated its 25th edition in 2017. The main venue, as always, was the old and respectable Cine Burkina, in the heart of Burkina Faso's capital, Ouagadougou. The city used to have at least nine dedicated cinemas — now only two remain.

It is a picture that is repeated across the continent. In Senegal, don't go looking for the Cinema de Paris, the old film temple at the Place de l'Indépendance in downtown Dakar. It's gone. It was knocked down in 2011, and the space it left behind was filled with hotels and office blocks.

And in the Cameroonian capital of Yaoundé, there are no cinemas.

"Zero," said Cameroonian culture journalist Parfait Tabapsi. "In Yaoundé, we're 3 million [people], but we don't have a single functioning cinema."

The arrival of DVDs and the failure of the big cinemas to go digital are two of the reasons for the demise in West Africa. People can watch

the latest Hollywood flicks — often pirated — for a pittance on TVs at little neighborhood viewing spots, but try to find any African films, besides perhaps a bit of Nollywood, and you will be disappointed.

Changing that is at the heart of Tabapsi's work in Cameroon with an organization called Mobile Digital Cinema.

"Our aim is to bring movies to the places where they cannot go," he said. "Because there's no communication means, there's no electricity, the roads are bad. But people need to see artists and directors that tell the story of Africa. So we buy the film rights and screen the films for free."

And now, belatedly, the old-fashioned cinema is catching up.

The award-winning Chadian Mahamat-Saleh Haroun single-handedly revived Le Normandie, in the capital N'Djamena. And in Burkina Faso, another mythical cinema, Guimbi, in the country's second-largest city of Bobo Dioulasso, is under

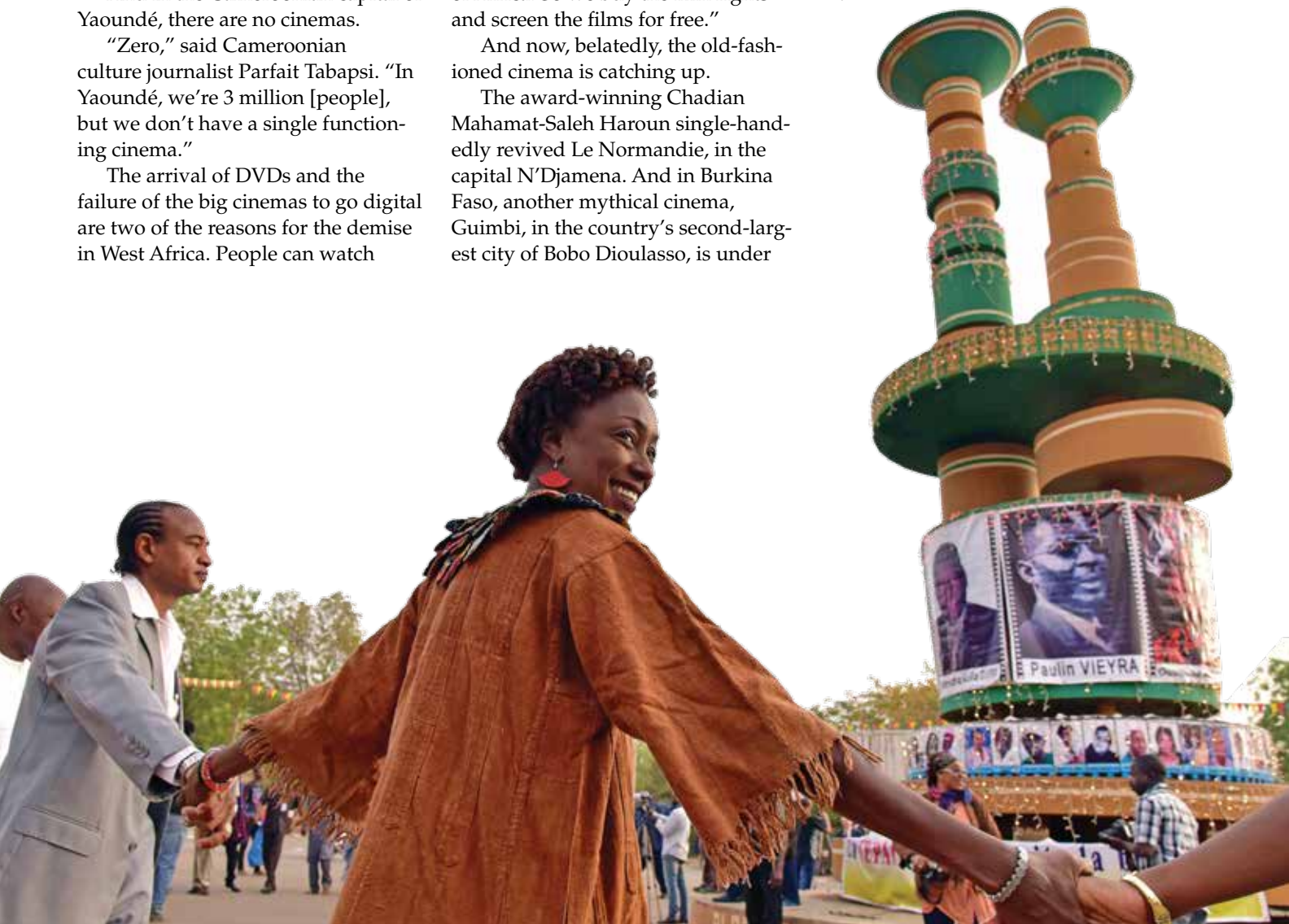
reconstruction. The work started in mid-2015 and is the initiative of local filmmakers, along with the help of friends in Belgium and France. One hall will open later this year, and the full complex will be finished in 2018.

And, in Ouagadougou, this year's FESPACO coincided with the opening of a new screening venue, the Canal Olympia Yennenga, a \$3.2 million, 300-seat theater that is powered by solar panels.

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Senegalese actor Mouna N'Diaye takes part in a memorial ceremony in tribute to the pioneers of African cinema at the FESPACO film festival in Ouagadougou, Burkina Faso.

AFP/GETTY IMAGES







## N'Dour Lends Star Power to Malaria Fight

AGENCE FRANCE-PRESSE

Youssou N'Dour, Senegal's — and perhaps Africa's — most famous musician, is throwing his weight behind malaria eradication in his homeland.

N'Dour has performed and toured since the 1970s, blending Senegalese music with soul, hip-hop and jazz. But he is also known for his work as a longtime campaigner for malaria prevention. The disease remains all too common in Senegal, with 500,000 recorded cases in 2015, including 4,400 deaths.

Worldwide, malaria killed more than 400,000 people in 2016, according to the World Health Organization (WHO). The vast majority were children living in Sub-Saharan Africa. Children are more susceptible to the disease.

A \$32 million initiative is aiming to finally stamp out malaria in the West African nation. Health officials will distribute more than 2.5 million insecticide-treated mosquito nets, 1.6 million rapid diagnosis tests and 70,000 doses of antimalarial drugs.

Senegal is in the first stage of the fight against malaria, which the WHO refers to as the “control” phase. It aims to move to the next level — pre-elimination — by 2020.

“It's first of all a serious public health problem,” N'Dour said. “But we also see the economic impact around it and the weaknesses we have at the level of development in Africa because of malaria.”

The Lives and Livelihoods Fund, which targets health projects in Muslim-majority nations and is funded by the Bill and Melinda Gates Foundation and several Gulf of Guinea states, is backing the project with the Senegalese government.

N'Dour speaks with anger about the children's lives lost needlessly to the disease over the years. He believes the Senegalese have frequently minimized malaria's deadly impact in the past. “Here there are a lot of people who will tell you, ‘Oh, I just have a touch of flu,’ while in fact they have malaria,” N'Dour said. “When children don't go to school, there are no jobs, you can't work. So poverty is always hovering in the background.”

## Africa Wants Five More Slots for World Cup

AGENCE FRANCE-PRESSE

FIFA officials say that Africa wants 10 places in the 48-nation World Cup in 2026, up five slots. The current system has 32 teams.

“All associations back an expanded World Cup, and Africa hopes for 10 places,” said South African FA President Danny Jordaan.

The expansion of the World Cup, passed by the FIFA Council, goes into effect for the 2026 tournament. The new system will feature 16 first-round groups from which winners and runners-up qualify for the knockout phase.

Africa has had five places since the 1998 World Cup in France. No African country has advanced past the quarter-finals. The 2014 World Cup was the first in which two teams from the continent reached the knockout stage.

Should FIFA grant the 54-member Confederation of African Football's wish to double its African quota, it will represent a major victory for African teams, which have long been vocal about their perceived underrepresentation at the cup. Since 1978, Europe has held more than double Africa's guaranteed slots.

Asia, with 47 members in its football confederation, also contends that it is underrepresented in the tournament. Asia and Africa have the largest voting blocs in FIFA elections and are likely to get more new slots than other continental federations.

Members of Cameroon's football team celebrate a victory. REUTERS





# Chadian Official Takes Helm of AU

AGENCE FRANCE-PRESSE

**M**oussa Faki Mahamat, former foreign minister of Chad, assumed office as head of the African Union Commission, pledging to reform the institution and tackle the continent's crises.

Faki took over leadership of the 54-country continental bloc in March, 2017 days after the United Nations announced food emergencies in four countries, including three in Africa: Somalia, South Sudan and northeast Nigeria. The U.N. said the food shortages constitute the worst humanitarian crisis since World War II.

"The famine that ravages vast areas of Africa these days is a real humiliation for us," Faki told delegates at the commission's headquarters in Addis Ababa, Ethiopia. "The immense potential of our continent and the enviable rate of economic growth of many member states of the union leave us no

justification for this hideous human tragedy."

An ally of Chadian President Idriss Deby, Faki, 56, pledged to put "development and security" at the top of his agenda. As foreign minister, he was seen as taking a strong position against Islamic extremism in Mali, Nigeria and the Sahel. Faki was elected AU chairman in January 2017 after seven rounds of voting, triumphing over Kenyan Foreign Minister Amina Mohamed and candidates from Botswana, Equatorial Guinea and Senegal.

In his speech, Faki embraced what he said was an "enlightening" report by Rwandan President Paul Kagame that recommended ways to reform the AU. The report called for the institution to better distinguish itself from other regional blocs and focus its efforts only on key areas such as political affairs and peace and security. Faki takes over from Nkosazana Dlamini-Zuma of South Africa.





## TUNISIA PREVENTS 27,000 from Joining Terror Groups

ADF STAFF

Tunisian authorities announced they have stopped more than 27,000 young people from joining terror groups since 2012. Interior Minister Hadi al-Majdoub said the young people have been prevented from traveling to foreign countries where armed conflicts are ongoing.

Tunisian police officers stand guard during a meeting of the Council of Arab Interior Ministers in Tunis. REUTERS

Al-Majdoub said that aside from those prevented from leaving the country, about 800 suspected extremists have returned from abroad, and about 190 of them were arrested. The others are being closely monitored for signs of extremist activity, he told the newspaper *Asharq Al-Awsat*.

Tunisia has contributed more foreign fighters to ISIS than any other African country. Al-Majdoub said about 3,000 Tunisians abroad are actively allied with extremist groups. The top two destinations for Tunisian-born extremists are Syria and Libya, he said. In 2016, Tunisia dismantled 245 terror cells and arrested 517 suspected terrorists, *Asharq Al-Awsat* reported.

## TANZANIA PUTS POACHING 'DEVIL' BEHIND BARS

AGENCE FRANCE-PRESSE

**T**anzania sentenced its most notorious poacher, nicknamed "The Devil," to 12 years in prison for running an ivory trafficking network across five African countries.

Boniface Matthew Maliango, 47, was arrested in Dar es Salaam in September 2015 after a yearlong manhunt.

The Elephant Action League, which fights wildlife crime, said Maliango was believed to be responsible for killing thousands of elephants as the head of 15 poaching syndicates operating throughout Burundi, southern Kenya, Mozambique, Tanzania and Zambia.

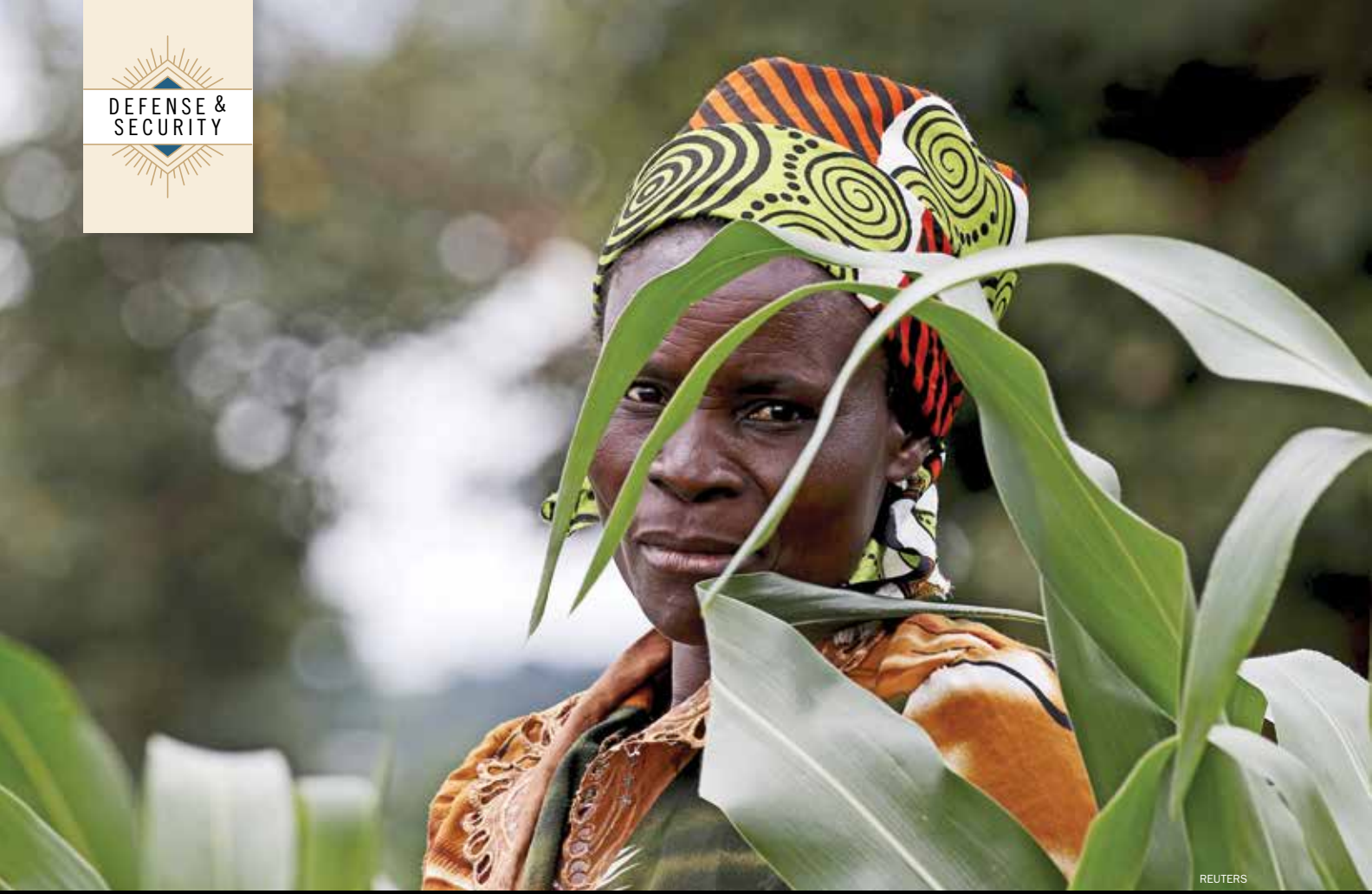
He also is accused of leading a poaching network that supplied 66-year-old Chinese citizen Yang Fenglan, known as the "Ivory Queen." She was tried in Tanzania on charges of illegally trafficking 706 elephant tusks between 2000 and 2014.

According to the International Union for Conservation of Nature, the number of African elephants has fallen by about 111,000 over the past decade, leaving only 415,000 on the continent. The killing shows no sign of abating, with about 30,000 elephants slaughtered for their ivory every year.

Tanzania, which has one of the continent's biggest elephant populations, is one of the worst-affected countries. A recent census showed a 60 percent drop in the country's elephant population between 2009 and 2014.



TERRA MATER FACTUAL STUDIOS



REUTERS

# MALAWI CALLS ON ARMY TO PROTECT FORESTS

THOMSON REUTERS FOUNDATION

**M**alawi's government is trying a new strategy to protect its fast-dwindling forests: sending in the Army.

With deforestation threatening the capital's water supply, the government has launched 24-hour military patrols of the country's major forests. Soldiers are authorized to arrest loggers and confiscate their equipment, said Sangwani Phiri, a spokesman for the Ministry of Natural Resources, Energy and Mining. The move is "a bid to avert unwarranted illegal cutting down of trees," he said.

The strategy of calling on the Malawi Defence Forces (MDF) is one that mimics strategies of other southern African countries, including Botswana and South Africa, and is common practice in parts of other countries, including India and Vietnam, he said.

Malawi's government estimates that the country's 3.4 million hectares of predominantly natural forests are being depleted at a rate of 1.8 to 2.6 percent annually, largely for charcoal production.

"We are targeting all forest areas across the country, but we are starting with the Mua, Livulezi, Dzalanyama, Vipha and Mulanje Mountain forests, whose rate of

depletion has been worrisome," Phiri said.

The deployment comes after what he described as a successful pilot program in the vast Dzalanyama Forest, which spreads across the Central Region districts of Dedza and Lilongwe. The program began in February 2015.

Lt. Wilned Kalizgamangwere Chawinga of the MDF Public Information Office said troops planned to conduct patrols 24 hours a day in the forests, as they have been doing in the pilot program.

"We detain illegal loggers and charcoal producers and snatch their vehicles and any other equipment used," he said in a written statement.

"We take everything confiscated to the nearest MDF installation, where owners come to claim them if they have appropriate papers or after paying fines to the Department of Forestry," he added.

The Soldiers also destroy charcoal kilns discovered in the forests. "Apart from patrolling the forests, confiscating equipment and detaining those involved in illegal logging, MDF Soldiers sensitize the public to the dangers of deforestation and encourage them to plant more trees," Chawinga said.



# JOINT PATROL SIGNALS NEW ERA <sup>in</sup> MALI

THE ASSOCIATED PRESS

**M**alian Soldiers and former Tuareg rebels staged their first joint patrol in northern Mali, a key step in a 2015 peace agreement meant to help calm a region under threat from extremism. As helicopters with the United Nations peacekeeping mission hovered overhead, 50 men in distinctive turbans started to patrol the city of Gao in February 2017. The city has been a frequent target of attacks by extremists, including one in January that killed 54.

The joint battalion of 600 people is the first to formally combine Malian Soldiers with the rebels from armed independent groups of the Azawad region who signed the peace deal. The patrols are aimed at “building confidence and curtailing insecurity in northern Mali pending the full restoration of state authority,” said Stephane Dujarric, spokeswoman for the U.N. secretary-general.

The new units face the challenge of securing the vast region and rooting out extremists. They also must get along in the process. The Tuaregs’ quest for autonomy has been a source of conflict with the government for decades. Former rebels participating in the patrols have been vetted to ensure they are not allied to extremist groups.

“Today, it’s not a question of the Coordination of the Movements of Azawad [former Tuareg rebellion group] or the Malian Army,” said Hassan Ag Ibrahim, a

young Tuareg fighter who was patrolling on foot alongside a Malian Soldier. “We fight together all under the same flag: the green, the yellow and the red.”

Northern Mali has been unstable since 2012, when extremists linked to al-Qaida took over the region, exploiting a power vacuum after mutinous soldiers overthrew the president. French and African forces pushed the extremists from strongholds in 2013, but attacks have continued and have pushed farther south. More peacekeepers have been killed as part of the U.N. mission in Mali than in any other active peacekeeping mission in the world.

More recently, extremists have issued statements threatening Tuareg and Arab families in northern Mali about participating in the joint operation, and they have followed through on those threats.

On January 18, 2017, a suicide bomber drove an explosives-laden vehicle into a military camp in Gao, killing at least 54 people and injuring more than 100 others. Al-Mourabitoun, a group linked to al-Qaida in the Islamic Maghreb, claimed responsibility and warned of more to come to punish “all who were lured by France.”

Those backing the joint patrol, and some residents of Gao, remain committed to the task.

Mohamed Maiga, a resident, said he hoped the joint patrol would bring peace. “They must continue their patrols of this type so that terrorists and armed bandits stop attacks and robberies,” he said.



THE ASSOCIATED PRESS



AFP/GETTY IMAGES

## TUNISIAN COAST GUARD SEIZES HUGE COCAINE SHIPMENT

AGENCE FRANCE-PRESSE

**T**unisia’s Coast Guard seized 31 kilograms of pure cocaine, valued at more than \$6 million, off the Mediterranean coast.

The March 2017 bust came after “suspicious movements” were sighted on a boat off Cape Bon, a peninsula on the strait of Sicily, said Lt. Col. Mohamed Walid Ben Ali, who heads the Coast Guard in La Goulette, near Tunis.

Two men fled with the boat after hurling “a large red sack” into the sea that was recovered by authorities and found to contain 30 blocks of pure cocaine.

It was the first time that Tunisian authorities have netted such a large haul of the drug, said Ben Ali, who added that Italian authorities had been alerted about the two fugitives.



AFP/GETTY IMAGES

# TRAIN BRINGS HEALTH CARE TO SOUTH AFRICA'S POOR

AGENCE FRANCE-PRESSE

South Africa's Phelophepa train draws a crowd wherever it goes. The sound of the lumbering 19-car clinic-on-rails signals the arrival of badly needed free health care for thousands of South Africans as it tours the country.

At a stop in Pienaarsrivier, a town in South Africa's Limpopo province, dozens of elderly patients and women clutching children showed up to take advantage of the service.

"We are so happy. I got two pairs of spectacles, and now I'm going to see the doctor for a checkup," said 60-year-old Janette Rakgetse from nearby Hammanskraal. "I've saved a lot of money. We arrived at 5 a.m. to beat the queue. We are a group of grannies who organized ourselves to come here."

The train clinic spent two weeks

alongside Pienaarsrivier's neat red-brick station, 55 kilometers north of the capital, Pretoria, before traveling 500 kilometers to Ladysmith in the country's east. It provided general medicine, dentistry, psychology services, a fully stocked pharmacy and an eye clinic.

Final-year medical students at universities across South Africa treat up to 400 patients a day on the train, which is run by Transnet, the state-owned rail logistics operator. Students work with a permanent team and typically spend two weeks onboard before swapping with a fresh group of interns.

"We help people to see — then they can move around freely. The train gives people hope," said fourth-year trainee optician Percy Makgwane, 22, a student at the University of Limpopo. "I'd love to work here permanently."

In 2014, Transnet supplemented the first Phelophepa train, which started as a modest three-coach setup in 1994. The name means "Good, clean health" in South Africa's Tswana and Sotho dialects. A second train has been added since.

More than 24 million patients have been treated by the services, dubbed the "trains of hope," since their launch. It is the world's largest mobile clinic. Patients typically are charged 30 rand (\$2.30) for a pair of glasses, 10 rand for dental work and 5 rand for prescription medicines.

Each train has 22 permanent employees, 16 security contractors and about 40 students onboard at any one time. The two trains spend nine months a year crisscrossing the country, reaching some of South Africa's most neglected communities.





PETTY OFFICER 2ND CLASS JEFF AHERTON/U.S. NAVY

## AFRICAN STATES *Band Together to Protect* GULF OF GUINEA

AGENCE FRANCE-PRESSE

Nineteen African countries have launched a network to tackle piracy, high-seas robbery, kidnappings and human trafficking in the strategically important Gulf of Guinea.

The Gulf of Guinea Interregional Network (GOGIN) officially began operations after a ceremony in the Cameroonian capital, Yaoundé, in June 2017.

“Coastal nations, from Angola to Senegal, have begun working together to combat criminality at sea,” said an official statement from the group.

The \$9.8 million, four-year initiative funded by the European Union is designed to clamp down on maritime crime in a region where trafficking in human beings and drugs is common. Illegal fishing and oil theft also are major problems in the zone, which stretches across 6,000 kilometers.

Retired French Vice Adm. Jean-Pierre Labonne is heading the GOGIN task force. “Our long-term aim is to support peace, stability, and economic and human development throughout West and Central Africa,” Labonne said. He added that GOGIN would provide participating states technical and logistical help to fight crime and to better exchange information.

The African states also will benefit from academic training modules and exercises at sea with the goal of eventually overseeing such activities. GOGIN emerged from the Yaoundé Process, a code of conduct adopted in 2013 after a regional summit on how to tackle illegal maritime activities in West and Central Africa.

The GOGIN initiative adds to existing operations, including an interregional coordination center in Yaoundé to monitor the Gulf of Guinea.

A Ghanaian maritime police officer looks at a suspected illicit fishing vessel during an exercise in the Gulf of Guinea.

## PARK RANGER WINS ENVIRONMENTAL PRIZE

BRAND SOUTH AFRICA

A former child soldier in the Democratic Republic of the Congo (DRC) has been awarded an international environmental prize for his work as a park ranger and conservationist in Virunga National Park, Africa’s oldest wildlife park.

Rodrigue Katembo won the Goldman Environmental Prize in April 2017 for his work to prevent potentially damaging oil exploration in the park. In addition to mobilizing DRC citizens to protest plans to drill for oil in Virunga, he also worked undercover to expose bribery and corruption of government officials by foreign oil companies.

Environmental research has shown that oil exploration in the park would threaten the habitats of the region’s critically endangered gorillas, elephants and lions.

The Goldman Prize, often referred to as the Green Nobel, is an annual award that recognizes grassroots environmental activists in six regions around the world. The prize is awarded by the Goldman Environmental Foundation, based in the United States.

Virunga National Park is home to a quarter of the world’s last remaining mountain gorillas; there are fewer than 900 globally. Additionally, the park, which covers more than 5,000 square kilometers across the DRC, Uganda and Rwanda, has several delicate ecosystems, including volcanoes, forests, river and lake systems, and mountain regions.

“The park brings a lot of different kinds of services that are benefiting the community,” Katembo told CNN in April 2017. “For instance, you have the protected fisheries where many fishermen are able to sustain their families and are able to generate income.”

Katembo and his small but dedicated team have to tackle international poaching syndicates and political instability from various militia groups. Over the past two decades, more than 160 park rangers have been killed by rebels and poachers.

The decadeslong political conflict and civil war in the DRC is something Katembo knows well. As a teenager in 1989, a militia group forced him to become a child soldier. He fought with various groups until 2003, when a brief peace gave him the opportunity to leave that life and follow a life-long dream of working with wildlife.



Rodrigue Katembo  
VIRUNGA NATIONAL PARK

# Nile River Project

## WILL LINK 10 COUNTRIES

ADF STAFF

Work is set to begin on a 4,000-kilometer shipping lane that will connect the Mediterranean Sea with Lake Victoria, improving trade for 10 countries.

The waterway, which includes using the Nile as a shipping lane, is scheduled for completion by 2024. It will pass through Burundi, the Democratic Republic of the Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania and Uganda. Ethiopia was a late arrival to the project, only deciding to join in early 2017.

The project will be for small- and medium-size commercial ships to boost trade among the 10 countries. It is one component of the Cairo-to-Cape Town road project, which stretches 10,000 kilometers from Egypt to South Africa. The project also will integrate rail lines. The shipping lane will cost an estimated \$10 billion to \$12 billion.

The shipping lane will be complicated. Canal locks will be needed to deal with waterfalls along the way.

Egypt has listed a number of potential project components, including supporting economic development in the Nile Basin by raising the level of trade and transport of goods and people, and establishing a river navigation management training center in some of the footprint states.

Phase one will comprise the section from Lake Albert in Uganda to Khartoum in Sudan; a link from Gambela, Ethiopia, to the White Nile in South Sudan; and a link from Khartoum to Aswan, Egypt.



## Countries Restrict 'DIRTY' FUEL

BBC NEWS AT [BBC.CO.UK/NEWS](http://BBC.CO.UK/NEWS)

Nigerians call the gargantuan traffic jams of cars, trucks and other vehicles in Lagos "go-slows." Trying to get anywhere is often an exercise in patience and perseverance. But apart from the frustrations of driving in Lagos, there is the serious health impact of air pollution.

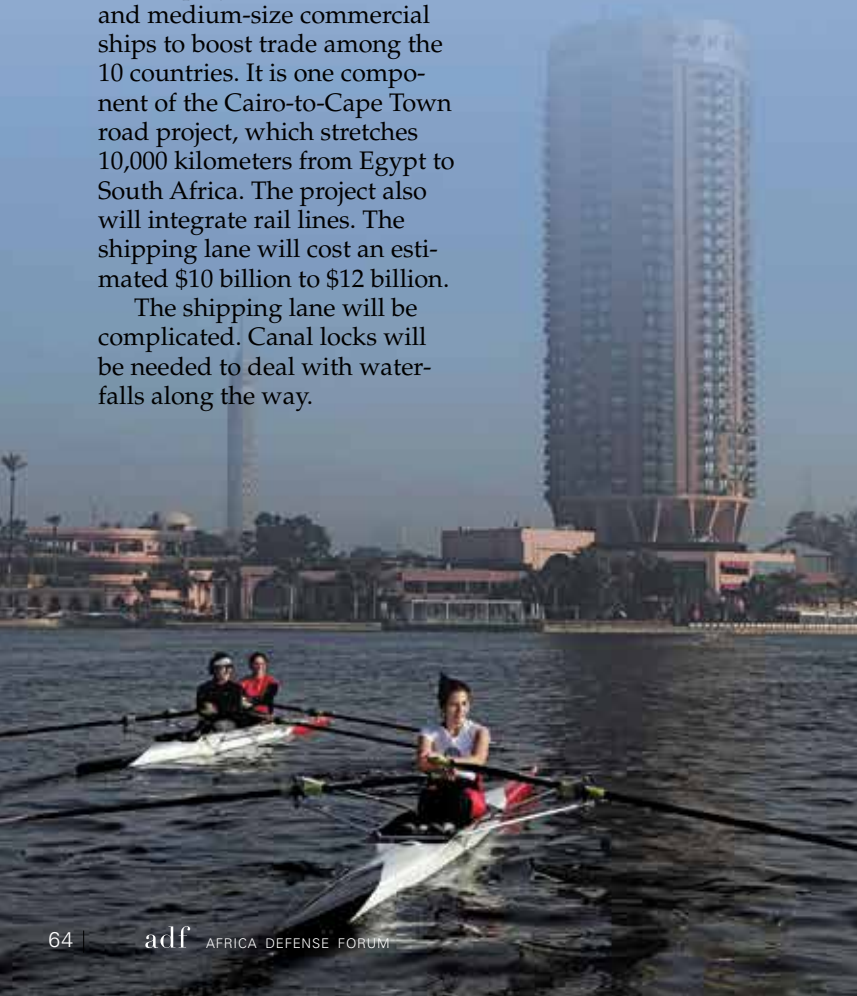
Many vehicles belch out huge, dark, sulfurous clouds — the effects of diesel fuel with high amounts of sulfur, also known as "dirty" fuel. Now, Nigeria is tackling this major cause of air pollution. In December 2016, Nigeria was among five countries in West Africa that pledged to stop importing dirty fuel used for vehicles and power generators. The other countries are Benin, Côte d'Ivoire, Ghana and Togo. Seven other African countries had already banned the fuel.

The announcement came after a hard-hitting report accusing European companies of exploiting weak regulations in West Africa to export fuels with high levels of sulfur. The amount of sulfur in some fuel used in Africa is 300 times the level considered safe in Europe.

The World Health Organization ranks sulfur particles from vehicle engines and generators as one of the top global health risks. The pollutants are linked to heart disease, lung cancer and respiratory problems.

"The ban will send a strong signal to the importers that the government means business," said David Ugolor of Africa Network for Environment and Economic Justice. "What's missing in Nigeria governance is trust. If the government wants to regain trust of the people, it will need to keep on championing this kind of regulation."

Despite being a major oil producer, Nigeria imports most of its fuel. The government says new refineries being built in Nigeria also will help alleviate the problem by producing cleaner fuel.



THE ASSOCIATED PRESS



# KENYA Rolls Out HIV Preventive Measure

VOICE OF AMERICA

Thousands of HIV-negative Kenyans will for the first time be placed on daily antiretroviral medication in a bid to prevent new infections.

The new program seeks to lower the country's HIV transmission rate for people who face a substantial risk of contracting HIV, such as rape victims and HIV-negative drug users.

Martin Sirengo, head of the National AIDS and STI Control Program, said the measure involved the use of pre-exposure prophylaxis (PrEP).

"We are introducing PrEP to a selected population, not to everyone, and this selected population includes, for instance, HIV-negative partners in a discordant relationship, where the other partner is positive," Sirengo said. "Anyone who comes

and gives a history of repeated sexually transmitted infections, anyone who comes for repeated PrEP medication, that tells us they are at risk of getting HIV," will be eligible, he said. "We are also recommending PrEP to anyone who has multiple sexual partners."

If taken daily, the drugs have a more than 96 percent success rate of preventing HIV infection. Researchers discovered that the 4 percent who got HIV had not adhered to the regimen.

Kenya becomes the second country in Africa, after South Africa, to roll out PrEP.

**A lab technician tests blood samples for HIV at a clinic in Nairobi, Kenya.**

THE ASSOCIATED PRESS



## Ghana's Elections are Model for Africa

AFRICA CENTER FOR STRATEGIC STUDIES

On January 7, 2017, Ghana held its seventh presidential inauguration since 1992. It marked the third time the party in power has changed — an unusual event in Africa, where nearly all countries hold elections, but the parties in power almost always remain the same.

Among the continent's 54 countries, only 19 African incumbent leaders from 11 countries have been voted out of office since the end of colonialism. These two feats alone — holding regular elections and changing the

party in power — have helped institutionalize Ghana's process of political transition through elections.

Yet, nearly a quarter century after embarking on the path of democratization, uncertainty prevailed before Ghana's December 2016 elections, in which the ruling National Democratic Congress' candidate, John Dramani Mahama, faced his chief opponent, the New Patriotic Party's Nana Addo Dankwa Akufo-Addo, who won. Just six months before the elections, many Ghanaians said that they greatly distrusted the judiciary and electoral commissions — two critical institutions for administering a peaceful and lawful political transition. Violence had broken out during various elec-

toral processes, and politicians and their affiliates regularly employed incendiary language.

Despite the troubling signals, Ghana's political transition went smoothly. Although political

operatives disputed certain election results and accused one another of rigging, all accepted the final result without any violence.

Surveys conducted in July 2016 and October 2016 by the Ghana Center for Democratic Development illustrate the positive change in the Electoral Commission's credibility. In July, 58 percent of Ghanaians rated the commission as prepared for elections, but by October the number had increased to 73 percent. This significant increase in positive perceptions by Ghanaian citizens can be attributed to the commission's moves to improve the voter registry's credibility, implement continuous registration processes and make it easier to vote.

As frustration began to mount due to the election commission's failure to declare a winner two days after the elections, Mahama urged calm and affirmed his faith in the commission: "I want to assure the nation we will accept the outcome of the election whether positive or negative."

Similarly, Akufo-Addo emphasized that "it is important that we remain calm. We have been through this before." These statements were similar to their joint promises in May 2013 that they would abide by the Supreme Court's decision on the winner of the 2012 election, before the court announced its ruling.



**Supporters of Ghanaian President-elect Nana Addo Dankwa Akufo-Addo celebrate his election victory in Accra, Ghana.**

THE ASSOCIATED PRESS

## ARCHBISHOP JANANI LUWUM

MARTYR *of*  
UGANDA

*When Janani Luwum, Anglican archbishop of Uganda, stood up to President Idi Amin and his atrocities in 1977, he knew Amin would not tolerate it. Turning to one of his friends, Luwum said, "They are going to kill me. I am not afraid."*

*His prediction soon came true.*

ADF STAFF

Janani Luwum was born in 1922. He was educated as a schoolteacher, and in 1948 he converted to Christianity. He became a priest in 1956 and studied for a year in Canterbury in England. In 1969, he was consecrated as bishop of Northern Uganda.

His country was going through a volatile time. Uganda became an independent country in 1962 with Milton Obote as prime minister. After a power struggle four years later, Obote suspended the Constitution. The next year, Obote's new Constitution made Uganda a republic, with Obote as its president. In 1971, Amin, who was chief of staff of the country's armed forces, overthrew Obote and immediately began a policy of repression through arrests, expulsion and murder.

Luwum became archbishop of the church region that included Uganda, Burundi and Rwanda in 1974. Amin attempted to establish a friendly relationship with Luwum, who in turn tried to get the dictator to show mercy to his perceived enemies. He described Amin and his followers as "utterly self-seeking."

From his early days as a priest, Luwum had shown exceptional energy and creativity. As the leader of the Anglican faith in his country, he demonstrated fearlessness and determination. He regularly went to the State Research Bureau — since described as "Idi Amin's personal murder factory" — to plead for the release of political prisoners.

Uganda's Anglican, Catholic and Muslim leaders began working together in their protests of Amin's violence. In 1977, after a small Army rebellion, Amin decided to stop all dissension. His army murdered



thousands of people, including Obote's entire home village. He ordered a raid on Luwum's home, supposedly in search of hidden weapons. When the archbishop called on Amin to protest, Amin had him and two cabinet members arrested.

During a sham "trial," Amin asked the crowd, "What shall we do with these traitors?" When his soldiers urged Amin to kill them, the archbishop and the two cabinet members were taken to a Land Rover. They were never seen alive again. Witnesses later said that the three men were taken to an Army barracks, where they were beaten and finally shot. Although Amin claimed that Luwum had been killed in a car crash, mourners found the bullet holes in his body.

As word spread, 4,500 mourners gathered in the capital city of Kampala to honor Luwum — a dangerous demonstration in the time of Amin. Another 10,000 gathered to honor Luwum in Nairobi, Kenya.

Two years later, Amin was overthrown and forced to flee Uganda. He died in exile in 2003.

On February 16, 2017, the government of Uganda and the Anglican Church joined to remember the 40th anniversary of the archbishop's murder. The anniversary is an official Ugandan holiday. Luwum's home village of Mucwini, site of the anniversary observation, has become a symbol of religious martyrdom throughout Africa.

Luwum was survived by his widow and nine children. Today he is remembered not just in Africa, but throughout the world. A statue of Luwum was unveiled in 1998; it is now among the 20th century martyrs commemorated on the front of Westminster Abbey in London.



# CLUES

1. At 3,415 meters above sea level, this is the highest summit in the Sahara region.
2. The summit has three volcanic craters, two of which overlap.
3. The largest crater is about 19 kilometers wide and more than 1,200 meters deep.
4. There are no historical records of an eruption at this volcano.



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