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GUARDING THE GULF

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Combat Maritime Crime

Illegal Fishing
Threatens
Livelihoods

Ending
Oil Theft
on Land
and at Sea

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PETTY OFFICER 3RD CLASS
LUIS R. CHAVEZ JR./U.S. NAVY

ON THE COVER:

Members of a Ghanaian boarding team participate in Obangame Express 2015, a multinational exercise designed to bolster maritime safety and security in the Gulf of Guinea.

As Africa enjoys unprecedented economic growth, coastal countries hope to reap the rewards of what is being called the “blue economy.” Gulf of Guinea countries are benefiting from increased port traffic, tourism and underwater oil drilling. Several Gulf ports have expansion projects underway to accommodate larger ships from around the world.

But this growth is not guaranteed. It must be protected from threats that seek to blow it off course. The Gulf is now the world’s leader in piracy with nearly an attack per week recorded in 2014, according to the International Maritime Bureau. Oil theft is draining the region’s wealth and costing Nigeria alone \$6 million per day.

Faced with these threats, West African militaries appear ready to respond. Nigeria is among the countries now investing heavily in its Navy. In early 2015, Nigeria commissioned four warships and plans to add two more before the end of the year. Likewise, Ghana has launched an electronic surveillance system that allows improved maritime domain awareness and is home to the Maritime Trade Information Sharing Centre, a voluntary reporting system tracking ship traffic across the Gulf.

Efforts at regional cooperation also are beginning to take shape. In 2013, more than 20 nations joined to sign the historic Yaoundé Code of Conduct. The agreement provides the framework for information sharing, joint patrols and the updating of maritime law across the Gulf region. Joint naval exercises reinforce this cooperation by helping to bridge differences in policy, communications and training that are inherent in all multinational coalitions.

The threats are real, but so is the capacity to overcome them. Whether on land or at sea, we all recognize that shared prosperity begins with shared security.

U.S. Africa Command Staff



Sailors from Côte d'Ivoire stand at a port in Abidjan to welcome a newly purchased RPB 33 patrol boat — the first of three acquired by the Navy. Militaries across the Gulf of Guinea are beefing up their maritime security capacity to protect the “blue economy” from threats, including piracy, trafficking and oil bunkering. AFP/GETTY IMAGES



Security in the Gulf of Guinea

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U.S. AFRICA COMMAND

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Collaboration is Essential in the Gulf of Guinea



Mark Owen Woyongo,

Ghana's minister for the interior, spoke at the second annual Coastal and Marine Surveillance Africa conference in Accra, Ghana, on March 17, 2015. His speech has been edited to fit this format.

Maritime security has taken the center stage in recent times in the Gulf of Guinea region. Crimes at sea have assumed alarming proportions and are posing a huge threat to global commerce.



About 90 percent of the world's trade is undertaken via sea. With resources such as oil and gas, we serve the energy needs of many

nations. The economies of many nations depend heavily on the maritime domain and the growing concerns of the security of the domain.

International collaboration is, therefore, the best way forward. However, international collaboration is not the only measure required to deal with the problem. Coordination among agencies within states is also critical to ensure effective maritime security.

Based on this awareness, national, regional, and international initiatives and strategies are being explored to find solutions to the growing threat. The traditional security approach of physically protecting and securing the maritime domain has devolved due to technology. Physical presence is no longer a prerequisite to detect crimes at sea. We in Ghana have installed the Vessel Traffic Management Information System — VTMIS — along our coasts and are now reaping the benefits of this system. Maritime domain awareness for security agencies is significantly improved, and they are now able to detect crime at sea through monitoring from shore.

Currently, stakeholders in the maritime industries are making huge investments in infrastructure, driving the need for security and protection solutions. Governmental organizations now have a growing preference for an all-in-one solution, which offers flexible integration of individual security systems such as surveillance, weapons and command-and-control systems. It is also important that systems are interoperable among the friend agencies and countries.

Ghana discovered oil in 2007 and commenced production in December 2010 from the Jubilee Oil Field 60 kilometers offshore. Two other fields are also in the process of development. These discoveries and subsequent developments have led to the influx of several offshore installations, including mobile offshore drilling units and the FPSO [floating production storage and offloading vessel] Kwame Nkrumah.

Traffic in Ghana's maritime domain has already shot up. With the huge investments in the maritime domain, it is imperative that pragmatic steps are taken to provide adequate security and protection in the domain. The government of Ghana recognizes the strategic importance of the maritime domain and is committed to equipping the Ghana Navy and other relevant security agencies to adequately secure this environment.

Additionally, the augmented fleets of the Ghana Navy and the establishment of the maritime police are part of the many initiatives to achieve the objective of securing the maritime environment. In fact, the



Military and security personnel listen to a vendor at the Coastal and Maritime Surveillance Africa conference in Accra, Ghana, on March 17, 2015. ADF STAFF

Ghana Navy was recently in the news for arresting eight pirates who had hijacked a tanker in Ghanaian waters, thanks to an effective monitoring system and capable platforms provided by the government in recent years. Plans are far advanced to acquire offshore patrol vessels with helicopter landing decks for the Navy in order to improve their monitoring and response capabilities.



STARGAZING TOURISTS FLOCK TO AFRICA'S DARKEST PLACE

AGENCE FRANCE-PRESSE

A sliver of the central Namib Desert was named Africa's first "International Dark Sky Reserve."

MASSIMO RELSIG

The Namib Desert on Africa's southwest coast is one of a number of remote "International Dark Sky Reserves" drawing stargazers in search of a celestial safari. Many lodges have bought research-grade telescopes and hired live-in astronomers to try to lure tourists.

"Most people come here for the other activities, visiting the dunes or the nature reserve where you see all the wildlife. This is kind of a bonus," said Misha Vickas, formerly a guide at a public observatory in Sydney, Australia, but now a resident at the &Beyond Sossusvlei Desert Lodge.

During the day, the Namib's copper, red and yellow dunes and mountains glow blindingly, befitting the world's oldest desert. But in the night sky, Mars' red glow, Magellanic Clouds — dwarf galaxies outside our own — and assorted gaseous nebulae all are visible.

"The sky is particularly good to look at here, because the Milky Way, which is the main part of our galaxy, is usually very high overhead," meaning light refraction is at a minimum, Vickas said. "There is a lot to look at."

In 2012, the NamibRand Nature Preserve, a sliver of the central Namib the size of Mauritius was named Africa's first Dark Sky Reserve by the U.S.-based International Dark-Sky Association. Similar sites include Aoraki Mackenzie on New Zealand's South Island and the Iveragh Peninsula on Ireland's southwest coast. Hawaii and Chile also are renowned astrotourism hot spots.

In the sky over the Namib, Venus and Jupiter shine bright. The Namib's good weather and ultradry atmosphere make for clear nights and transparent air all the way to the horizon. Across almost half of the Earth, stars are obscured by man-made light pollution.

"NamibRand is located in one of the darkest accessible places that remain on Earth," said John Barentine of the International Dark-Sky Association. "It is as close as you get to the way the world was long ago, before the invention and proliferation of artificial lights."

EGYPT, ETHIOPIA, SUDAN DEAL

Ends Nile Dispute

AGENCE FRANCE-PRESSE



Three African leaders have signed an initial deal to end a long-running dispute over the sharing of Nile waters and the building of Africa's biggest hydroelectric dam in Ethiopia.

The leaders of Egypt, Ethiopia and Sudan signed the agreement in Sudan's capital, Khartoum.

Egypt has opposed the Grand Ethiopian Renaissance Dam, saying it would worsen its water shortages. Ethiopia says the dam will give it a fairer share of Nile waters.

In 2013, Ethiopia's Parliament ratified a controversial treaty to replace colonial-era agreements that gave Egypt and Sudan the biggest share of the Nile's water. Egypt's then-President Mohamed Morsi said he would not allow the dam to endanger Egypt's water supply.

Morsi's successor, Abdel-Fattah el-Sissi, signed the deal with Ethiopia's Prime Minister Hailemariam Desalegn and Sudan's President Omar al-Bashir.

The three leaders welcomed the "declaration of principles" agreement in speeches in Khartoum's Republican Palace.

Hailemariam said he wanted to give an assurance that the dam would "not cause any harm to downstream countries," Reuters reported.

Sisi said the project remained a source of concern to Egypt. "This is because the Nile is their only source of water, in fact their source of life."

Ethiopia wants to replace a 1929 treaty written by Britain that awarded Egypt veto power over any project involving the Nile by upstream countries. Ethiopia says the \$4.7 billion dam will eventually provide 6,000 megawatts of power. Egypt was apparently caught by surprise when Ethiopia started diverting the Blue Nile, a tributary of the Nile, in 2013. Ethiopia says the river will be slightly diverted but will then be able to follow its natural course. The Blue Nile flows north, connecting to the White Nile in Sudan before making its way through Egypt and emptying into the Mediterranean.

Ethiopia has received strong backing from five other Nile-basin countries: Burundi, Kenya, Rwanda, Tanzania and Uganda.

ABOVE: Egyptian President Abdel-Fattah el-Sissi, left, Sudanese President Omar al-Bashir, center, and Ethiopian Prime Minister Hailemariam Desalegn celebrate their agreement on the Grand Ethiopian Renaissance Dam project in March 2015. AFP/GETTY IMAGES

BELOW: Workers build the Grand Ethiopian Renaissance Dam near the border with Sudan on March 31, 2015. AFP/GETTY IMAGES



A medical worker checks the temperature of a girl suspected of having Ebola in Kenema, Sierra Leone. AFP/GETTY IMAGES



Sierra Leone Gives Malaria Pills to Millions in Ebola Fight

AGENCE FRANCE-PRESSE

Sierra Leone began a campaign in December 2014 to protect almost half the population from malaria, reducing the burden on clinics from people who wrongly fear they have Ebola.

The early symptoms of the diseases — fever, headaches and aching joints — are so similar that malaria can easily be misdiagnosed, causing unnecessary referrals to Ebola treatment units.

More than 9,300 trained community health workers went door to door in districts where the risk of Ebola is highest to administer anti-malarial tablets to 2.5 million people over three days.

"Malaria is the number one killer in Sierra Leone, but patients who may be infected do not seek care for fear of being shunned from health centers as suspected Ebola cases," said Roeland Monasch of UNICEF, which supported the drive.

Samuel Juana Smith of the National Malaria Control Programme said the mosquito-borne parasite is thought to be behind a high proportion of the

60 percent of Ebola tests that prove to be negative. He added that most people going to Ebola treatment units turn out to have malaria.

Ebola had killed more than 10,000 people in Liberia, Sierra Leone and Guinea as of March 31, 2015, during the recent outbreak, but it also has damaged already-weak health care systems.

Doctors Without Borders said in October 2014 that Ebola had made obtaining treatment for malaria almost impossible in Monrovia, Liberia, because of the "collapse of the health care system." The agency said it had begun distributing anti-malarials to about 300,000 people in the city's poorest, most densely inhabited neighborhoods.

Before the Ebola epidemic, malaria was the leading cause of death in West Africa, with 1.7 million cases in Liberia in 2012, according to the Health Ministry. Of those, 1,800 were fatal.

The 2013 World Malaria Report ranked Sierra Leone as the country with the fifth-highest prevalence of the disease and said there were more than 2 million suspected cases in the country.



GULF *of* GUINEA


COMMERCE COLLIDES

with

CRIME

A BOOMING WEST AFRICAN ECONOMY
FACES SEABORNE THREATS

ADF STAFF



THE GULF OF GUINEA finds itself at a critical moment in its history. The promise of economic growth and the danger of maritime crime are pushing the region in opposite directions. And like a ship beset by a storm, only the hands of skilled sailors can help the region navigate the rough waters.

First, the good news: West Africa's economies are booming, and the Gulf is an important part of that growth. It's a major route for shipping oil all over the world. Container shipping traffic is up. The Gulf's mild, predictable climate is ideal for commerce, fishing and docking. It offers a relatively short shipping lane between Africa and South America. And one of the Gulf countries, Nigeria, has the largest economy on the continent.

But there is trouble as well. The Gulf has the dubious distinction of having more reported pirate attacks than any other region in the world, eclipsing the attacks by Somali pirates in the Gulf of Aden. According to various estimates, piracy in the Gulf costs the region between \$565 million and \$2 billion each year.

The reported attacks may be only the tip of the iceberg. The International Maritime Bureau and Oceans Beyond Piracy say that about two-thirds of pirate attacks off the coast of West Africa go unreported. Kidnappings and paid ransoms are sometimes kept secret as well. Overall, OBP estimates that governments and the shipping industry are spending as much as \$983 million to combat maritime piracy in the region each year.

PORT TRAFFIC

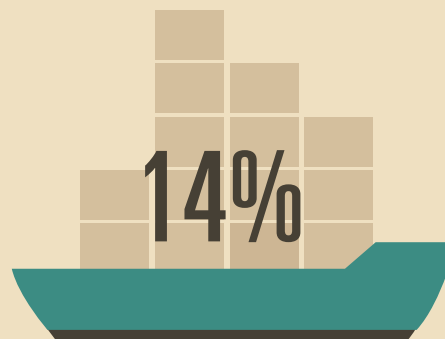


African economies are growing, and the Gulf of Guinea is positioned to be the continent's entry point. Gross domestic product in Gulf nations grew by an average annual rate of 7 percent between 2012 and 2015. Business at ports is booming at an even higher rate. Container traffic in West African ports has increased by 14 percent per year since 1995. That is the largest growth of any region in Sub-Saharan Africa, according to a paper published by the Africa Center for Strategic Studies.

Maritime commerce promises to keep expanding in coming years. The French shipping giant Bolloré is enlarging its terminal in Lomé, Togo, and the Ghanaian port of Tema is beginning a \$1.5 billion expansion. Both projects are expected to be complete by 2017. Other expansions are planned in Côte d'Ivoire, Republic of the Congo, Nigeria and Senegal. By 2020, a total of nine planned projects will give West African ports the ability to handle about 11.5 million additional shipping containers, the Drewry Shipping Consultants reported.



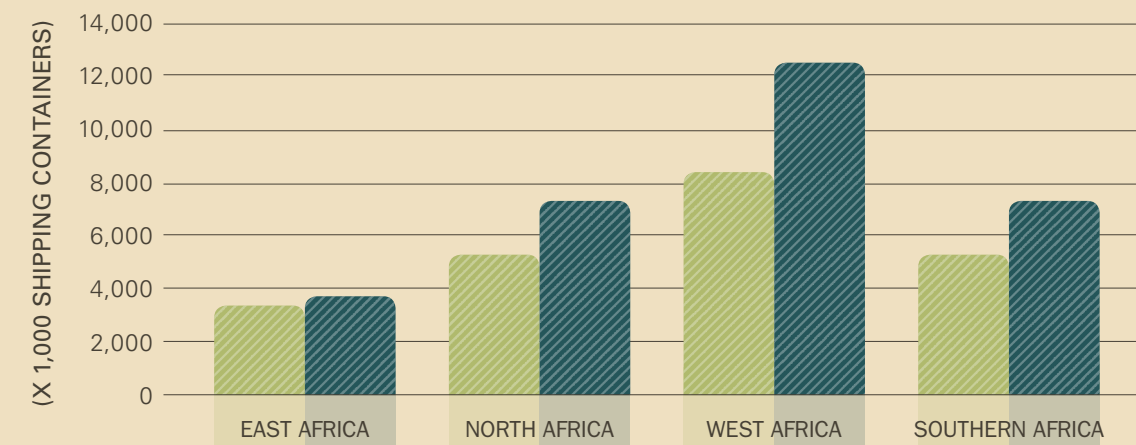
Gross domestic product in Gulf nations grew by an average annual rate of **7 percent** between 2012 and 2015.



Container traffic in West African ports has increased by **14 percent** per year since 1995.

VOLUME PROJECTIONS 2013 - 2018

■ 2013 ■ 2018



Source: Drewry

OIL

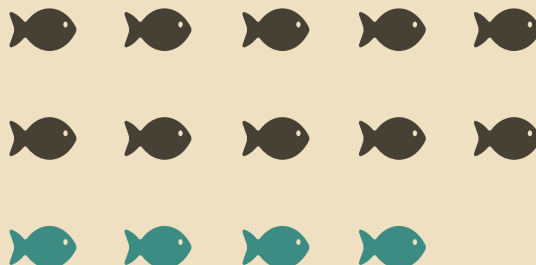


West Africa is in the midst of an oil boom. The region accounts for about one-third of the new oil discoveries worldwide, with the latest oil field discoveries off the coast of Ghana, Liberia and Sierra Leone. In all, the West African coast boasts an estimated 3.2 billion barrels of oil, according to the U.S. Geological Survey. But there is trouble in these waters. Illegal oil bunkering has reached epidemic proportions in Nigeria and elsewhere. The dangerous practice, which often involves criminals puncturing a pipeline and collecting oil in a bucket, causes the loss of about 100,000 barrels of oil per day in Nigeria, a cost of nearly \$6 million, according to the Nigerian Navy. Some estimates place the total much higher. Bunkering also causes spills that spoil the environment and explosions that can kill large numbers of people.



Source: Nigerian Navy

ILLEGAL FISHING



FOR EVERY 14 FISH CAUGHT
4 ARE STOLEN

TOTAL COST of IUU FISHING: **\$350 MILLION** PER YEAR

Fishing is vital to the economies of many West African nations. In Senegal, 25 percent to 30 percent of the nation's exports come from fisheries. In Ghana, about 7 percent of the working population is employed directly by the fishing sector, according to a European Union (EU) report. For many, it is a way of life that has gone virtually unchanged for centuries. Dugout canoes, hand-sewn nets and sails are still widely in use. But this way of life is under attack. Large foreign trawlers without proper permitting are scooping up vast amounts of fish from West African waters. According to the EU, illegal, unreported and unregulated fishing in the Gulf of Guinea costs coastal states \$350 million per year. The total number of catches in this region is believed to be 40 percent higher than what is legally reported. The practice not only decimates a precious natural resource, it also costs jobs and fosters resentment among fishermen in coastal communities. In other parts of the world, unemployed fishermen have turned to piracy as a way to make ends meet.

Source: EU

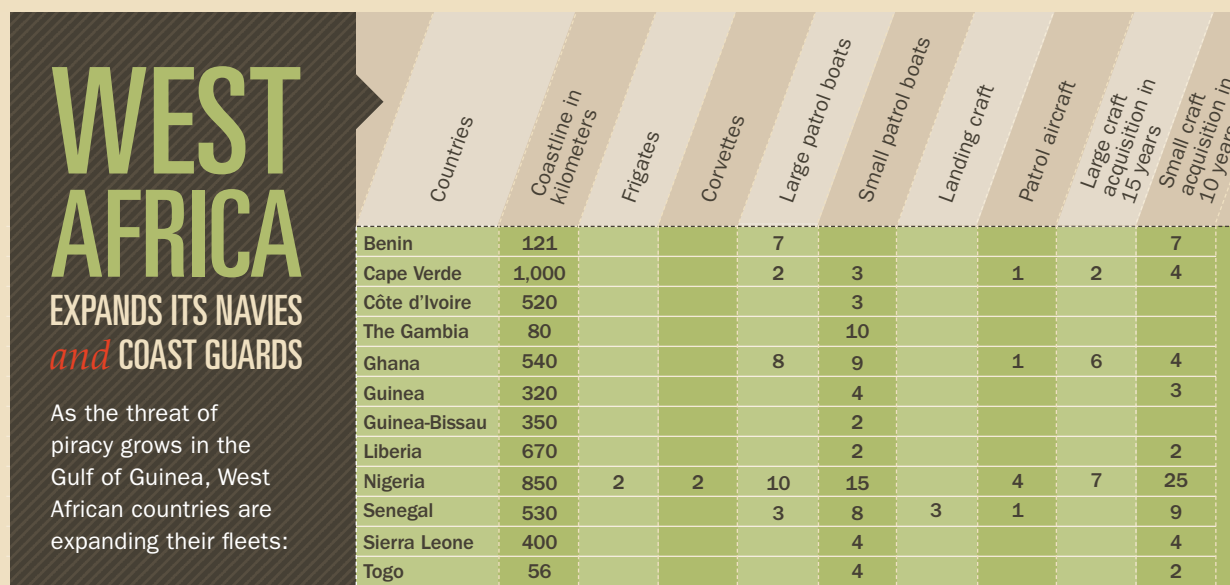
NAVY/COAST GUARD FLEETS



In response to emerging threats and recognizing the importance of commerce in the Gulf, many coastal countries are beefing up their navies and coast guards. Historically, maritime security has been secondary in funding and perceived importance to other security needs in Africa. That is no longer the case. The newfound status was on display in February 2015 when the Nigerian Navy put four new warships into service, the

most ever commissioned at one time. Angola is undergoing a rapid expansion of its navy to protect its offshore oil wealth.

Still, many Gulf navies and coast guards are under-equipped for extensive patrolling and pursuits, leaving their ports vulnerable. Although nine Gulf nations plan to acquire additional large patrol ships, those plans are often years in the future.

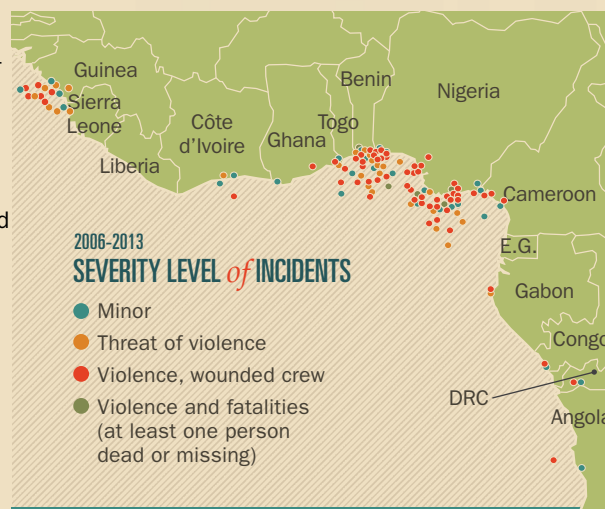


Source: IHS Jane's, 2013

KIDNAPPING/HIJACKING

In 2012, the Gulf of Guinea surpassed the coast of Somalia to become the region of the world with the greatest number of pirate attacks. In 2014, 1,035 seafarers were subject to attacks, and 170 were detained or held hostage. Most pirate attacks in 2014 were farther offshore in international waters, indicating the work of more sophisticated pirate networks. More than half of the attacks involved weapons. Among those believed to be involved in piracy are Nigerian gangs, "insiders" in the oil industry, crooked security workers, and organized criminal networks from Eastern Europe and Asia. Piracy attacks in the Gulf now make up 19 percent of all recorded maritime crimes worldwide.

The world's commercial shipping companies are taking notice. Insurance underwriters have designated the waters off Benin, Nigeria and Togo as a "war risk area," which drives up insurance costs.



Source: ACSS



ZONES of COOPERATION

The Economic Community of West African States and the Economic Community of Central African States have set up multinational zones for sharing information about the Gulf of Guinea.

- ZONE E** - Currently operational ECOWAS zone
- ZONE D** - Currently operational ECCAS zone
- ZONE A** - ECOWAS zone (currently operational)
- ZONE B** - ECOWAS zone (currently operational)
- ZONE F & G** - ECOWAS zone (currently operational)

SOURCE: ECOWAS, ECCAS, AND THE AFRICAN UNION

ADF ILLUSTRATION

COOPERATING FROM COAST TO COAST

Ghanaian Sailors board the German Navy's FGS Brandenburg during a human trafficking scenario at Obangame Express on March 22, 2015.

PETTY OFFICER 3RD CLASS LUIS R. CHAVEZ JR./U.S. NAVY

GULF OF GUINEA NATIONS GATHER IN GHANA TO FORGE PARTNERSHIPS AGAINST MARITIME CRIME

ADF STAFF

An oil tanker carrying nine crew members sailed through the Gulf of Guinea off the coast of Nigeria in January 2015. Soon, the vessel fell victim to a common regional threat.

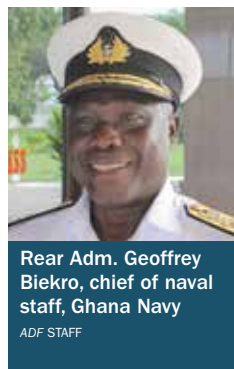
Near Warri, Nigeria, eight heavily armed pirates boarded the ship, bound for a port in Togo, and took command. From there, the MT Mariam continued its course up the West African coast. Much of this journey is shrouded in mystery.

At some point, pirates must have sidled the Mariam up next to another vessel operated by accomplices. The two crews worked together to drain the Mariam of the 1,500 metric tons of crude oil it was carrying. Forces from Benin, Ghana, Nigeria and Togo searched for the ship with the stolen cargo, Reuters reported.

As the ship passed through Togo's territorial waters into Ghana's maritime domain, something very simple — but vitally important — happened: Togo's chief of naval staff picked up the phone and rang his counterpart in Ghana, Rear Adm. Geoffrey Biekro.

Biekro assured his colleague that he would take care of the matter. The GNS Blika, led by Lt. Cmdr. Michael Duvor, was dispatched to the hijacked ship 26 nautical miles southeast of the Ghanaian port city of Tema, Ghana's *Daily Graphic* reported. There, Ghana's Navy captured the ship without injury to crew members, criminals or Sailors. The Navy recovered four AK-47 assault rifles, 300 rounds of ammunition, one pump-action gun, 18 mobile phones, nearly \$1,500 and three hand-held VHF radios.

Just two months earlier, Biekro had sailed two Ghana Navy ships to Togo and Benin as a Navy band played on board. At each stop, Biekro and his naval counterparts discussed joint training, exchange visits, and information



Rear Adm. Geoffrey Biekro, chief of naval staff, Ghana Navy
ADF STAFF

and intelligence sharing. The commanders signed communiqués with each other solidifying their commitments.

"Very soon we shall start joint exercises at sea, and we also discussed hot pursuit into others' territorial or others' exclusive economic zone, which will be approved by our respective governments," Biekro told ADF. "But in all this, the commitment, the enthusiasm of my counterparts made it clear that we are on the way to big success."

THE POWER OF PARTNERSHIPS

West Africa's maritime area is vast, with shoreline stretching from Angola to Senegal. It includes the Gulf of Guinea, where a wide range of commerce and crime intersect, sometimes with violent consequences. Many West African navies are limited in their capacity to effectively patrol their territorial waters and exclusive economic zones, which stretch 200 nautical miles from shore.

The area, and the number of ships passing through it, is too much for any one country to handle. The number of nations — 17 in all — means that countries must respect their neighbors' sovereignty at sea. Bilateral and multilateral partnerships are the only way to combat pirates, oil thieves and illegal fishing operations.

The Ghana Navy's overtures to Togo and Benin in November 2014 and Biekro's visit to his counterpart in Côte d'Ivoire in February 2015 to foster cooperation and information sharing are examples of the possibilities.

"The criminals take advantage of our ill-defined international maritime borders to commit crimes in one country and immediately move into other countries' territorial waters to escape arrest," Biekro said.

Accra, Ghana, became a hub of maritime cooperation in March 2015 with two major events. First, the Coastal and Maritime Surveillance Africa (CAMSA) conference brought together senior naval officers and international maritime security experts and vendors to discuss best practices and available technology for protecting the maritime domain.

A few days later, Exercise Obangame Express 2015, a multinational naval exercise, began in the Gulf of Guinea.

AN EXERCISE BUILT ON TOGETHERNESS

"Obangame" comes from the Fang language of southern Cameroon and other parts of Central Africa. It means "togetherness," an apt name for the event in the Gulf of Guinea. U.S. Africa Command sponsors the annual exercise, which brought together 23 countries: Angola, Belgium, Benin, Brazil, Cameroon, Côte d'Ivoire, the Democratic Republic of the Congo, Denmark, Equatorial Guinea, France, Gabon, Germany, Ghana, Nigeria, Norway, Portugal, the Republic of the Congo, São Tomé and Príncipe, Spain, Togo, Turkey, the United Kingdom and the United States.

The exercise had multiple purposes and multiple layers. Its intent was to help African nations put into operation the Yaoundé Code of Conduct, signed in Cameroon in June 2013 by more than 20 West and Central African nations. Through it, nations agree to cooperate on



PETTY OFFICER 3RD CLASS LUIS R. CHAVEZ JR./U.S. NAVY



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A Beninese boarding team member climbs through the German Navy's FGS Brandenburg during a simulated drug smuggling scenario as part of Obangame Express on March 25, 2015.

An Ivorian boarding team approaches the FGS Brandenburg during an illegal fishing scenario on March 21 as part of Obangame Express 2015.

maritime security by sharing and reporting information, interdicting vessels suspected of illegal activities, apprehending and prosecuting criminals, and caring for and repatriating seafarers subjected to illegal activity.

Obangame Express tested and bolstered these capabilities in several ways. Four major scenarios played out at sea using large ships from the United States, Brazil and European nations. Two involved oil tanker hijacking. One mimicked weapons smuggling, and the other simulated illegal, unreported and unregulated fishing.

These scenarios played out across the water from Angola to Ghana and included eight large ships. Personnel working in national marine operations centers (MOCs) tracked the ships as they moved along coastlines. The scenarios tested individual nations' abilities to do this while responding to injects from a multinational exercise control group stationed at the Kofi Annan International Peacekeeping Training Centre (KAIPTC) in Accra.

As ships left one nation's waters and entered another's, the first nation's MOC would hand off the ship to the next country. This tested a nation's ability to communicate effectively with neighboring countries about maritime threats.

Participating nations used the large ships for boarding and search-and-seizure drills to improve their ability to apprehend hijacked ships or vessels carrying out illegal activities in their waters.

CONFIRMING STRENGTHS, HIGHLIGHTING WEAKNESSES

The point of an exercise like Obangame Express is to

help nations see what improvements are necessary to ensure effective multinational collaboration. Lt. Michael Asiamah, officer in charge of the MOC at Ghana Navy Headquarters, said he and his staff took lessons from their participation.

Asiamah said his staff was able to effectively communicate with other nations, especially Togo and Côte d'Ivoire. However, the exercise underscored the language barrier. "It has brought to the fore the fact that French as a second language would be better and beneficial to us because for our neighboring countries, they speak French," he said. "I think the language barrier — at least for those of us in the MOC, various MOCs — some basic knowledge in French I think would be prudent."



Lt. Michael Asiamah,
Ghana Navy
ADF STAFF

Challenges such as these and others will have to be addressed moving forward, but already some effective collaboration is underway in the Gulf of Guinea.

'OPERATION PROSPERITY'

In 2011, the waters off East Africa — most notably the Gulf of Aden — still were the global focal point for piracy. But by September that year, incidents in the Gulf of Guinea had reached such a level that Benin President Thomas Boni Yayi contacted his Nigerian counterpart for assistance in patrolling the waters off their adjacent coasts.

The resulting agreement produced "Operation Prosperity." Joana Ama Osei-Tutu, research associate at

MERCHANT SHIPS ADD EYES IN GULF OF GUINEA

STORY AND PHOTO BY ADF STAFF

From a small, white building on the campus of Regional Maritime University near Tema, Ghana, a handful of people keep watch on a maritime area that stretches from the northern border of Mauritania to the southern border of Angola.

The Maritime Trade and Information Sharing Centre (MTISC) for the Gulf of Guinea is a free service funded by private and public interests, including the International Maritime Organization (IMO), Interpol, Oil Companies International Marine Forum and nations from the G7 Friends of the Gulf of Guinea Group. Watch keepers, who work two or three at a time, typically are drawn from regional navies and industries.

The system is simple. Vessels email an initial report when entering the voluntary reporting area (VRA). After that, vessels are expected to send daily position reports as long as they sail within the VRA. They send a final report as they leave. Ships can report suspicious activity at any time.

MTISC workers reply to all reports, which contain basic identifiers such as the vessel's name, flag, call sign, IMO number, position, course, speed, cargo and crew contacts.

"We are not just receiving reports and just replying and processing — no. We get the message; we go through them thoroughly," said Dehcorti Karmo, a watch keeper from Liberia. "When we receive this information, we get baseline information from vessels. What they see they report to us."

Then, watch keepers share crucial information in the VRA with nearby vessels so they can avoid areas that might be dangerous. Center workers also relay information about suspected threats to regional and national authorities.

Say a merchant ship in the VRA off the coast of Nigeria sees what appears to be a suspicious ship-to-ship transfer. This could mean that criminals are offloading oil from a hijacked vessel. The merchant ship could report it to the center, which is staffed around the clock. The MTISC, in turn, would notify nearby merchant vessels and report the incident to Nigerian authorities and regional marine operations centers for further investigation. The center also participated in scenarios as part of Obangame Express 2015.

Any merchant vessel in the VRA can report to



Dehcorti Karmo, left, a watch keeper from Liberia, and Lt. Ankrah Ahmed of the Ghana Navy keep track of data coming into the Maritime Trade and Information Sharing Centre for the Gulf of Guinea.

the MTISC: commercial fishing vessels, oil industry ships, barges, even yachts. Ships are not compelled to report when they enter the VRA. But if they don't, the center will not be able to notify them of potential threats. So the advantages are clear.

The payoff for regional navies and maritime security authorities also is high. MTISC watch keepers estimate they receive 250 to 300 messages each day. That's hundreds of opportunities for merchant ships to help keep an eye on the Gulf of Guinea.

It's difficult to quantify how many of those emails may include reports of suspicious activity. Sometimes crews may opt to call or email the center directly, rather than fill out another form. Sometimes, national maritime centers will inform the MTISC of issues.

"The other centers are willing to communicate with us because ships are willing to communicate with us. We have a direct link with the ships," said Lt. Ankrah Ahmed of the Ghana Navy. "They don't have direct access to the ships. So whatever information probably they would want to send out there, it's best to come through us because we send it directly to the ships."



Nigerian forces conduct visit, board, search and seizure training aboard the joint high-speed vessel USNS Spearhead during Obangame Express 2015 on March 20. PETTY OFFICER 2ND CLASS KENAN O'CONNOR/U.S. NAVY

the KAIPTC, wrote that in Operation Prosperity, “the Nigerian navy provides the vessels and most of the logistics and human resources for the operation, while the Benin navy opens its waters for Nigerian naval vessels to patrol. Benin also hosts the Operation Prosperity headquarters in Cotonou.”

Prosperity ensures safe passage for ships, protects against resource exploitation, and helps keep attacks in Benin’s waters from spilling over into Nigeria’s maritime domain, Osei-Tutu wrote.

When criminals “feast in one nation’s waters,” as they have so often done near the coast of Nigeria, they need to flee to another nation’s maritime territory to avoid capture, Osei-Tutu told *ADF*. At first, oil thieves would bunker and offload oil in Nigeria’s waters. “But when Nigeria started to close up these creeks and plug these holes, they needed a place to go and do business. So they’d take it from Nigeria and go to the next safest place ... which is Benin.”

Operation Prosperity, originally intended to last six months, was extended. Osei-Tutu said it stands as a model of effective cooperation.

ZONES MAKE PARTNERSHIPS POSSIBLE

As naval and maritime security experts were preparing for CAMSA and Obangame Express in Ghana, the Economic Community of West African States (ECOWAS) inaugurated the multinational maritime coordination center in Cotonou, Benin, for what is known as Pilot Zone E. The zone comprises Benin, Niger, Nigeria and Togo. The center will coordinate joint activities, including patrols, information sharing, training and drills, according to an analysis by the Institute for Security Studies.

Pilot Zone E is part of the ECOWAS Integrated Maritime Strategy (see page 13) and stems from the Yaoundé summit of June 2013, which produced the code of conduct. Two other zones have been established among ECOWAS nations: Zone F has Burkina Faso, Côte d’Ivoire, Ghana, Guinea, Liberia and Sierra Leone. Zone G has Cape Verde, The Gambia, Guinea-Bissau, Mali and Senegal. Neither F nor G is operational, but Ghana and others will be observing operations in Zone E.

The Economic Community of Central African States established Zones A and D. Zone A consists of Angola,



A Ghanaian naval officer monitors the maritime domain from the marine operations center at Ghana Navy headquarters in Accra during Obangame Express 2015. ADF STAFF

Burundi, the Democratic Republic of the Congo and the Republic of the Congo. Zone D, which was the first zone to become operational, includes Cameroon, Gabon, Equatorial Guinea and São Tomé and Príncipe. Its regional center is in Douala, Cameroon. Vice Adm. Hervé Nambo Ndouany, special chief of defense staff to the president of Gabon, told *ADF* cooperation in Zone D has been “very successful” and that nations there have shared their experiences with ECOWAS.

SHARING INFORMATION, EXTERNALLY AND INTERNALLY

Sharing information and resources among neighboring countries can increase the capacity to combat piracy and other maritime crime. One way to make that easier, Osei-Tutu said, is for leaders in various countries to build personal relationships with each other. Doing so allows officials to share information and take action when they otherwise might wait for information to work its way up and down the chain of command on both sides. This can be time-consuming and inefficient.

When the MT Mariam made its way into Ghanaian waters, Togo’s chief of naval staff called Rear Adm. Biekro. Biekro saw to it that a ship was dispatched to intercept the Mariam and arrest the bandits aboard. “And then I called my counterpart [to say] that the ship had been arrested; he should send his staff to come and carry out the various investigations,” Biekro said. “And that was done.”

But that is only one part of a complex puzzle. Each nation has a variety of agencies in addition to national navies: immigration services, customs, maritime police, ports authorities, drug enforcement authorities and coast guards. These multiple agencies will have to be willing to share information with each other as well.

“This is not the Olympics,” Osei-Tutu said. “There is no gold medal if the navy gets them and the maritime police doesn’t get it. Or there’s no medal if the coast guard is who arrested them and not the police service. There’s no award for who did it first.” □

Members of a Ghanaian boarding team prepare to board a vessel during Obangame Express 2015, a multinational exercise designed to bolster safety and security in the Gulf of Guinea.

PETTY OFFICER 3RD CLASS LUIS R. CHAVEZ JR./U.S. NAVY



PROTECTING

GHANA'S OFFSHORE RESOURCES AGAINST PIRACY

THE DISCOVERY OF OIL BRINGS WITH IT
A NEED TO ENSURE MARITIME SECURITY

MUTARU MUMUNI MUQTHAR



Mutaru Mumuni Muqthar is executive director of the West Africa Centre for Counter-Extremism, an independent civil society organization focused on counterterrorism research. He has a master's degree in international terrorism, global crime and international security from Coventry University, United Kingdom, and a bachelor's degree in business administration from Ashesi University, Ghana.

As piracy off the Horn of Africa has decreased, the focus has shifted to the Gulf of Guinea, a coast stretching 2,500 kilometers from Cape Lopez in Gabon north to Cape Three Points in western Ghana. Ghana discovered about 5 billion barrels of oil reserves in 2007, bringing with it security concerns about piracy, terrorism, smuggling and continental shelf disputes with neighboring countries. In no area has the threat been more pronounced than in maritime piracy. During 2012-2013, reported piracy incidents in the Gulf of Guinea exceeded those recorded in

the Horn of Africa, according to the United Nations Office on Drugs and Crime (UNODC).

A booming black market for fuel in West Africa makes these waters attractive to pirates. Oil is the single most important product of economic trade transported mainly via sea in the West Africa region. More than 90 percent of all cargo trade is conducted by sea, and the trade is organized in such a way that it leaves room for a black market to thrive.

Ghana's vulnerability is not in doubt. "The whole of Ghana is prone to piracy," said David Asante-Apeatu,

Ghana's commissioner for Marine Police. "This is more true following the country's discovery of oil." Maritime piracy is an imminent threat, but not unique to Ghana, according to James Agalga, the country's deputy minister for the interior. In fact, there were two piracy incidents associated with Ghana in 2014. These pirates originate principally from Nigeria, with a small number from Benin and Togo. According to UNODC, pirate victims off the coast of Benin have confirmed English- and French-speaking pirates working together, indicating a criminal network that crosses borders. Nigeria recorded 57 of the reported 73 incidents during 2013, according to UNODC. It is easy to assume that the next target might be Ghana.

Agalga is well aware of this, but he asserts that Ghana's waters have become extremely dangerous for pirates, given the country's preparedness. "Once you retool the Navy and Army, the next important tool is to prioritize agency collaboration and strengthen focus on information sharing," Agalga said. "The important thing at present is to ensure increased capacity to monitor both territorial and international waters with joint patrol teams from neighboring countries when and where possible."

There is innate pressure on Ghana to prevent the conditions experienced by other West African countries. But, according to authorities, Ghana is a ways off from experiencing the same problems that Nigeria has faced. A common argument is that there are significant differences between the two domains. Although oil thieves gross about \$1 billion from onshore bunkering annually in Nigeria, there is less chance of cutting through pipelines to siphon oil in Ghana because most of the country's oil is offshore. Joana Ama Osei-Tutu of the Kofi Annan International Peacekeeping Training Centre in Ghana relates the fundamental differences: "Ghana has a clearer coast, no creeks, and is quite clear and secure," she said, referring to the fact that Nigeria's coastline is punctuated by multiple waterway entry points that can be used by pirates and traffickers.

PREPAREDNESS AND CAPACITY

Agalga said Ghana is not just counting on the benevolence of partner nations. The Ghana Maritime Authority (GMA) has launched a modern vessel traffic management information system (VTMIS). The integrated system is meant for continuous electronic surveillance of Ghana's maritime space and has remote sensors with the capacity to detect and identify ships and boats on the high seas. It has communication towers equipped with marine radar, automatic identification systems, and closed-circuit television systems to monitor vessels and onboard activities far afield.

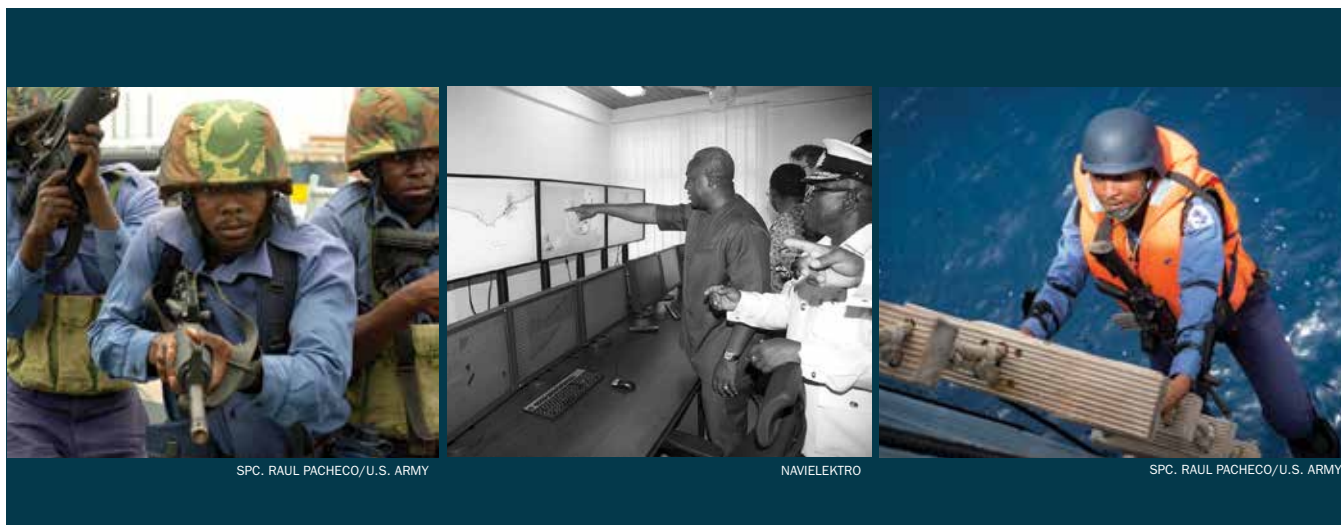
The project consists of eight remote sensor sites at Tema, Winneba, Keta, Axim, Big Ada, Half Assini, Takoradi and Cape Coast, as well as three remote base stations at Keta Krachi, Yeji and Anum. The National Control Centre is at the headquarters of the GMA in Accra. An automatic identification system for vessels and crafts operating on the Volta Lake and a long-range identification and tracking of ships' functionality and weather sensors are included on ships. VTMIS deployed by the Finnish company ELTEL Networks Corp. can track vessels within a range of 1,000 nautical miles.

A booming black market for fuel in West Africa makes these waters attractive to pirates. Oil is the single most important product of economic trade transported mainly via sea in the West Africa region.

The GNS Blika, front, participates in a boarding exercise during Obangame Express. Ghana's small naval vessels are not able to patrol areas far from shore.

U.S. EMBASSY GHANA





SPC. RAUL PACHECO/U.S. ARMY

NAVIELEKTRO

SPC. RAUL PACHECO/U.S. ARMY

FROM LEFT: A Ghana Navy team participates in a boarding exercise as part of Obangame Express 2015 in March. • Ghanaian President John Dramani Mahama and security officials attend the commissioning of Ghana's vessel traffic management information system in 2014. • A Ghana Navy boarding team member climbs onto the German Navy's FGS Brandenburg during a weapons trafficking training scenario at Obangame Express.

However, many challenges remain. The VTMISS alone is inadequate to eliminate the threat of piracy. The ability to thwart attacks is as important as spotting the attack, if not more so. Although the floating production storage and offloading vessels are about 200 nautical miles away, Ghana's small boats are unable to go more than 100 nautical miles from shore. Bigger vessels are required to provide adequate cover to successfully overcome or fight off pirates. "We need logistics to be able to cover our territorial waters; we need offshore vessels to be able to patrol our waters," Asante-Apeatu said.

There is suspicion of possible friction among agencies involved in the sector. Osei-Tutu noted that the security setup is characterized by fragmented agencies, such as the Maritime Police, GMA, Navy, and Ports and Harbours Authority. All these working under separate ministries and agencies lead to duplication of duties and risk marring the good will required to counter piracy. In Asante-Apeatu's assessment, however, "We are able to do joint patrols adequately supporting each other; the Marine Police, the Navy, the Maritime Authority. There is a relatively high cordial relationship amongst security agencies."

IMPLICATIONS FOR MARITIME TRADE FOR GHANA

Piracy has significant economic implications. It raises the risk level and causes insurance companies to increase their rates. An increase in piracy off Ghana's coast could have a significant effect on international insurance rates for importers and exporters, and increase the cost of doing business at the country's ports. In Benin, the UNODC observes that an upsurge in attacks in 2011 resulted in the

international maritime insurance adjusters placing Benin's waters under the same risk profile as Nigeria's. This significantly increased the cost of shipping to Benin. The increase in the cost of imports reduces revenues, increases the cost of living, and results in a decrease in competitiveness of imports.

CONCLUSION

Ghana can avoid the same fate. Stable and secure waters will require a deliberate and comprehensive security architecture that involves the Navy, Marine Police, GMA, Army, Interior Ministry and other allied institutions. Strengthening the capability of the security forces to increase patrols and surveillance will serve as a strong deterrent.

Companies operating vessels should be required to have a master security plan containing onboard defensive measures, a compulsory presence of armed security teams aboard vessels, modern technology tracking, and monitoring devices such as the VTMISS. Discipline within the forces and a resolve to stamp out corruption are critical to bringing safety and order to the sector.

Finally, there is a correlation between economic and social problems on shore and the incidence of crime off shore. The country needs to tackle underlying economic and social problems that can produce security threats. A group of peasant fishermen, farmers and youths along the coast could be enticed by foreign pirates and by the allure of money to join the illegal trade. Recruiters could harness local discontent against authorities by enticing young people to engage in piracy, maritime robbery or both. A longer-term vision will require that Ghana set up a Coastal Development Authority to oversee the security and development of coastal life and resources. □



A member of the Benin Navy's anti-piracy team rides in a patrol vessel along the coast.

CORBIS

PIRATES

Seek Out Weak Spots

WHEN CRIMINALS ARE STOPPED IN THE WATERS OF ONE COUNTRY, THEY SHIFT THEIR ACTIVITIES TO ANOTHER

ADF STAFF

The pirates of the Gulf of Guinea can be an unimpressive-looking group. Although they are hard and muscular, captured pirates often dress like beggars — shoeless and wearing cast-off clothes that seem intended for smaller men. They appear to be the sort of thieves who would steal cellphones and money but little more.

Appearances can be deceiving.

In January 2014, pirates stole a tugboat to use as a mother ship and began a days-long journey to steal the Kerala, a Greek-owned, Liberian-registered oil tanker, off the coast of Angola. Although there were 30 ships in the vicinity, they went straight to the Kerala, which they boarded before disabling its communications and identifications systems. They also painted over its markings, according to a report by the U.S. Naval Institute.

The hijackers sailed the ship north 1,300 nautical miles over the course of more than a week. Their

first stop was off the coast of the Democratic Republic of the Congo, where they loaded some fuel oil onto another ship. They sailed to Nigeria for two more ship-to-ship transfers. After selling nearly 15 million liters of diesel fuel, they abandoned the ship off the coast of Nigeria.

Such a crime could not have been random. It involved planning, insider information and organization. The pirates who targeted the ship knew about its cargo, its location and its route — all provided by someone within the oil industry or a government. The buyers also had to be in on the planning. As the Naval Institute noted, if the pirates sold the fuel for only half its market value, they still made about \$5 million.

Among those believed to be involved in piracy are Nigerian gangs, “insiders” within the oil industry, crooked security workers, and organized criminal networks originating in Eastern Europe and Asia.

THE STATE OF MARITIME PIRACY *in the Gulf of Guinea*

ECONOMIC COST

**\$983
MILLION**

HUMAN COST

**1,035
SEAFARERS**
subject to attack

**170
SEAFARERS**
detained or
held hostage

PIRATE ACTIVITY

58%
of attacks occurred in
**INTERNATIONAL
WATERS**

Source: Oceans Beyond Piracy, 2014 figures

KIDNAPPINGS AND RANSOMS

Gulf pirates do not restrict their crimes to oil bunkering. Some are involved in kidnappings and ransoms. In particular, the kidnapers, usually from Nigeria, typically target petroleum industry vessels. After pirates board and ransack a ship, they kidnap the most valuable crew members, often identifying them with information provided by insiders. The pirates then return to their camps to negotiate ransoms.

The Naval Institute reports that ransom negotiations typically take less than a month. Companies usually pay between \$50,000 and \$100,000 per person, with the largest known ransom being \$2 million, supposedly paid in late 2013 for the release of two Americans.

Kidnapping is one of the most profitable forms of piracy, but it is also the most difficult. It requires intelligence gathering, such as locating a specific ship far out at sea. Kidnappers must have heavy weaponry to subdue the ship and overcome rescue attempts. Kidnapping also requires a long-term commitment and shore support to endure often-lengthy negotiations. And it requires money laundering to allow the ransom to be used.

A United Nations report, "Maritime Piracy in the Gulf of Guinea," concluded that kidnappings in the Gulf of Guinea have been less common than oil theft, with all reported abductions occurring in Nigerian waters. In 2014, the number of pirate attacks in the Gulf of Guinea dropped by 18 percent, according to a report by the shipping information group Dryad Maritime. The vast majority of attacks occurred on the high seas as opposed to close to shore. This is evidence of more sophisticated operators. Also of concern to experts was that pirates were developing networks across borders, with Francophone and Anglophone pirates working together in some instances. Piracy networks appeared to be cultivating certain specialties like ship-to-ship oil bunkering, said Cmdr. Kamal-Deen Ali of the Ghana Navy.


"Despite the fact that we may have had fewer incidents in 2014, there were dynamics that point to the pirates actually entrenching and getting deeper rather than waning away," Kamal-Deen said. "Significantly, in 2014 for example, we had a major attack in Angolan waters. Prior to that we've never had a vessel hijacked in Angolan waters."

THE WORLD'S PROBLEM

Piracy isn't just West Africa's problem. Bunkering and other crimes have ripple effects all over the world. At least 28 organizations have acted to prevent pirate attacks in the Gulf. They include NATO, the United Nations, the World Bank, Interpol, the European Commission and the International Maritime Bureau.

Piracy attacks in the Gulf make up 20 percent of all recorded maritime crimes in the world. The shipping losses have wide-ranging effects, especially on insurance rates. Underwriters have designated the waters off Nigeria, Togo and Benin as a "war risk area," which drives up insurance costs.

Benin depends on its 121 kilometers of coastline for its



The Benin
Navy's anti-
piracy team
patrols the
Bight of
Benin.

CORBIS

livelihood, with taxes on trade amounting to half of its government revenues. Of that, 80 percent comes from the port of Cotonou. The United Nations says piracy attacks in 2011 forced international insurance adjusters to put Benin in the same category as Nigeria. That raised insurance rates and hurt Cotonou's business. Beninese officials say the port lost 70 percent of its business in the third quarter of 2011. Piracy attacks in Benin have since dropped, but insurance rates remain high.

When waters become too dangerous, private industry tends to steer clear. For example, the Norwegian Shipowners' Association says the number of times its vessels visited Nigerian ports decreased by 37 percent between 2011 and 2013 because of the threat of attacks, even though port calls to the rest of Africa increased by 20 percent.

The navies and the coast guards of Gulf of Guinea nations are underequipped for extensive

patrolling and pursuits, leaving their ports vulnerable. Although nine of the Gulf nations have plans to acquire more, and larger, patrol ships, those plans often are years in the future.

Anchorage and approaches to the ports of Bonny and Lagos in Nigeria, Cotonou in Benin, Lomé in Togo, Tema in Ghana, and Abidjan in Côte d'Ivoire are especially vulnerable to pirate attacks, with large numbers of merchant ships anchored or traveling there.

In Lagos, hundreds of boats and ships linger in the calm water near the ports for days, waiting their turn to anchor in the crowded harbors. A two-hour storm on the Lagos coast in 2010 showed just how vulnerable some of the ports are. In that storm, 25 ships were beached, revealing how many ships were unmanned or unmonitored. Authorities now believe that some of those vessels may have served as pirate hideouts.





Suspected pirates are paraded aboard a ship in Lagos, Nigeria.

REUTERS

THE HISTORY OF PIRACY

The International Maritime Organization keeps records of unlawful acts against ships and boats. The organization compiled these figures for the Gulf of Guinea between August 1995 and March 2014:

LOCATION OF INCIDENT

International waters	158
Territorial waters	296
Port area	389

STATUS OF SHIP WHEN ATTACKED

Steaming	236
At anchor	457
Not stated	64

NUMBER OF AGGRESSORS INVOLVED

1 to 4	241
5 to 10	208
More than 10	85
Not stated	290

CONSEQUENCES TO THE CREW

Actual violence against crew	277
Threat of violence against crew	110
Ship missing	1
Ship hijacked	36
None/not stated	223

WEAPONS USED BY ATTACKERS

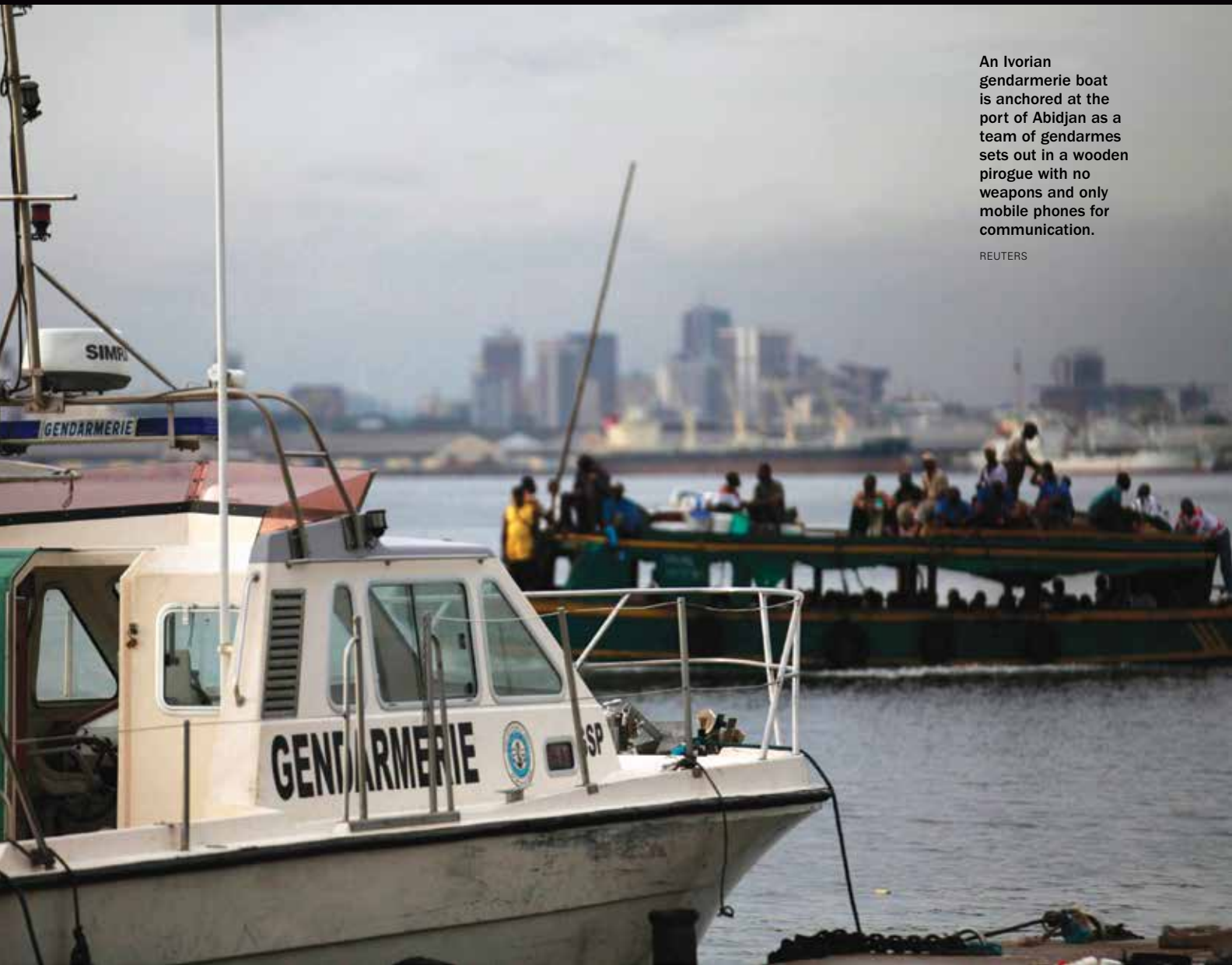
Guns	236
Knives	210
Rocket-propelled grenades	2
Other	30
None/not stated	336

PARTS OF SHIP RAIDED

Master and crew cabins	18
Cargo area	152
Storerooms	261
Engine room	5
Main deck	9
Not boarded	166
Not stated	66

OTHER

Lives lost	46
Wounded crew	181
Missing crew	7
Crew hostage	519
Assaulted	173



An Ivorian gendarmerie boat is anchored at the port of Abidjan as a team of gendarmes sets out in a wooden pirogue with no weapons and only mobile phones for communication.

REUTERS

“THE REAL SOLUTION TO PREVENT PIRACY IS GOOD GOVERNANCE ON SHORE, THE RULE OF LAW, AND A COMPETENT AND CAPABLE COAST GUARD.”

Matthew Fiorelli

ECHOES OF SOMALIA

Comparisons to the infamous Somali pirates are inevitable. The Gulf pirates have adapted some of the Somalis' tactics, such as the use of mother ships as a kind of headquarters, and methods for boarding ships. Both groups have kidnapped people for ransom.

Merchants and businesses operating in the Gulf of Guinea have adapted some of the protective techniques and practices used by their counterparts in the Gulf of Aden, including adding barriers such as fencing to ships to stop boarders. Ships also have added citadels, or safe rooms. In the event of attacks, crews move to the heavily armored citadels, where pirates cannot reach them. The crews then use radios to summon help. But none of the preventive measures has been foolproof.

Somali pirates have been stymied, in part, by the use of private armed guards aboard ships. But in the territorial waters of the Gulf of Guinea, it is illegal for private security companies to carry firearms. It is also illegal to transport firearms through those countries' territorial waters.

Some of the Gulf countries, particularly Nigeria, have had some success with reducing tanker hijackings by setting up patrolled "safe zones" around vulnerable anchorages. But such measures are not effective in stopping kidnappings. The kidnapping high-risk region, at more than 78,000 square kilometers, is too big to patrol. And the shoreline offers too many jungles, rivers and creeks for authorities to effectively search. As of mid-2015, the area off the coast of Nigeria was the most dangerous for pirate activity. But the pirates had extended their territory to the borders of Cameroon and Equatorial Guinea. Deep water attacks became the norm in 2014 with 58 percent of West African attacks occurring in international waters.

Stopping the pirates in the Gulf of Aden has involved setting up an elaborate shipping lane, patrols, and encouraging ships to gather and travel in fleets. Protecting anchored ships in the Gulf of Guinea will be much more difficult.

But the region has some advantages in fighting piracy. A 2013 Chatham House study described the region as being "one of Sub-Saharan Africa's more politically coherent blocs, encompassing regional communities that do acknowledge the economic impact that maritime insecurity has." The region's economic groups, particularly the Economic Community of West African States and the Economic Community of Central African States, have been active in maritime security issues. They have called for increased military patrolling and the implementation of an integrated maritime strategy.

HOW TO STOP THE PIRATES

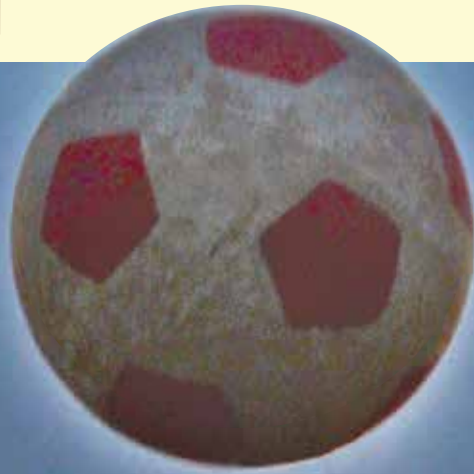
In a report released in early 2013, the International Crisis Group recommended steps to address Gulf of Guinea piracy. The report was directed to Angola, Benin, Cameroon, Côte d'Ivoire, the Democratic Republic of the Congo, Equatorial Guinea, Gabon, Ghana, Nigeria, the Republic of the Congo, São Tomé and Príncipe, and Togo. It included these points:

- Research the illegal fuel trade to identify oil and shipping companies involved in illegal activities.
- Boost job creation along the coast by protecting artisanal fishing, stimulating local fish processing and reinvesting assets seized from fuel smugglers.
- Strengthen maritime law enforcement by training navies, maritime law enforcement bodies and port authorities.
- Maintain constant navy patrols in mooring zones and territorial waters, and carry out regular surveillance flights.
- Draw up best management practices on anti-piracy for ship owners, captains and crews.
- Set up a national interagency anti-piracy task force to investigate, arrest and prosecute pirate gangs.
- Have countries sign agreements to allow extraditions, and enable cooperation among navies, maritime administration agencies and police.
- Organize joint surveillance operations in dangerous zones.
- Coordinate international support and ensure that foreign interventions are aligned with national strategies.
- Stress the need to treat piracy as a transnational organized crime that demands a coordinated response.

The Kofi Annan International Peacekeeping Training Centre says that "without the development of stable institutions, good governance, and economic opportunities, piracy will continue because tactical successes will prove unsustainable." To stop piracy, Gulf security forces will have to be organized and trained together.

"The effectiveness of anti-piracy efforts will also depend on the ability of regional governments to prosecute perpetrators," said the center in "Piracy in Africa: The Case of the Gulf of Guinea," a 2014 paper written by Matthew Fiorelli. "Local nations must partner with the international community to ensure that institutions are in place to prosecute captured pirates while simultaneously encouraging good governance that will stem corruption and promote socioeconomic stability."

The study concluded that "the real solution to prevent piracy is good governance on shore, the rule of law, and a competent and capable coast guard." □



EQUATORIAL GUINEA STEPS INTO FOOTBALL SPOTLIGHT





ADF STAFF

A young boy in the mainland city of Mbini, Equatorial Guinea, bounces a football off his head, no doubt imitating his favorite footballers.

In many ways, he's no different than millions of other boys and girls on the continent with an affinity for the sport. But this young fan was having his fun on January 30, 2015, in the middle of the Africa Cup of Nations tournament. And this year, the biennial event took place in his home country, from January 17 to February 8.

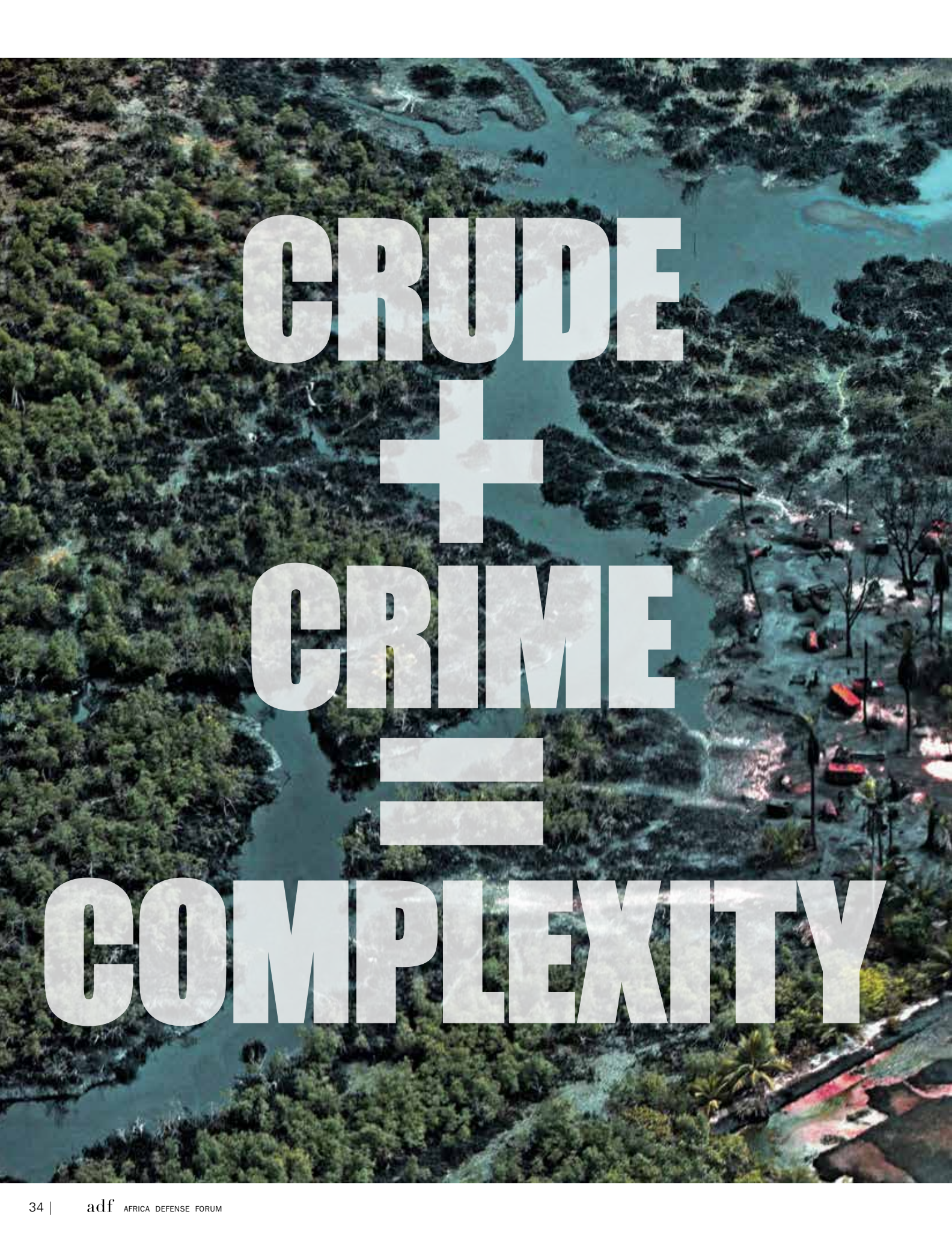
The tournament came to the small Gulf of Guinea nation of 720,000 people when Morocco, the original host, backed out in 2014 due to the raging Ebola crisis.

Equatorial Guinea, which was not affected by the Ebola outbreak, stepped in as host, even though it has only two major football stadiums — Nuevo Estadio de Malabo, which holds 15,250 spectators, and Estadio de Bata, which holds 37,500, the International Business Times reported.

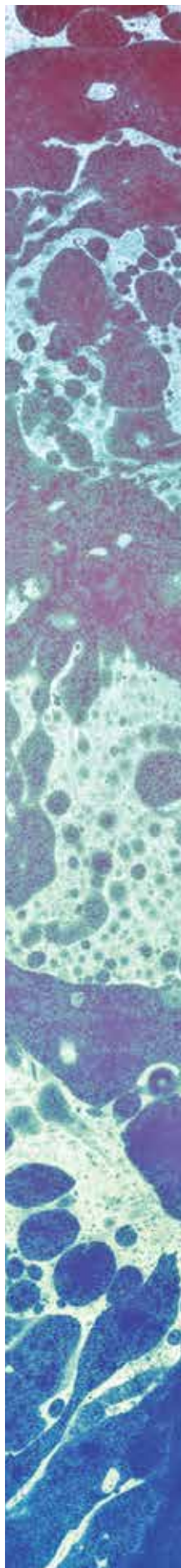
Sixteen teams competed for the title, and Equatorial Guinea made it to the semi-final, where it lost to Ghana, 3-0. Ghana went on to face Côte d'Ivoire, which won 9-8 on a thrilling penalty shootout after scoreless regulation play.

Not long after the final, there was cheering in a neighboring country. Gabon was selected to host the 2017 Africa Cup of Nations.

AP/GETTY IMAGES



**CRUDE
+
CRIME
=
COMPLEXITY**



GULF OF GUINEA NATIONS WILL HAVE TO NAVIGATE ACTIVITIES ON LAND AND SEA TO COMBAT OIL THEFT

ADF STAFF

When an automobile runs low on petrol, Benin offers two options. The driver can tool into the nearest service station and fill up at regular prices, or he can stop at one of many roadside tables featuring an array of bottles, jugs and cans.

The various bottles may once have held water, rum or vodka. Even empty Fanta soda bottles find new life in this enterprise. Now they all contain the same liquid: an amber elixir called “kpayo.”

Kpayo, a term applied to many counterfeit goods in Benin, loosely means “fake oil.” It can be engine oil or petrol of questionable or poor quality. Because of its low cost, kpayo is hugely popular with the thousands of motorcycle taxis in Benin, known as *zémidjans*. It’s also vital to many families struggling to make ends meet.

One Beninese man with a wife and four children said he has sold the fuel for four years.

“I trained as an electrician,” he said. “But there are no jobs. That is why I started this trade. So I talked to my friends who told me they make a living out of this business.”

This view of Nembe Creek in Nigeria’s Niger Delta region shows what happens after thieves tap into corporate oil lines. The result is loss of company revenue and devastation to the surrounding environment. In 2012, Shell Petroleum Development Co. of Nigeria removed 157 bunkering points, and 116 were leaking. AFP/GETTY IMAGES

The fuel comes across the border via back roads and backwaters. Motorcyclists will hang several big containers on themselves as they ride in. Smugglers stuff multiple drums on large canoes known as Cotonou boats. Sometimes these black marketeers buy petrol at Nigerian service stations at low, subsidized prices and bring it to Benin, where it sells on roadsides for substantially less than local station prices.

The practice is only one end of a broad spectrum of oil-related crime that bedevils the entire Gulf of Guinea region and beyond, from Angola to as far north as Senegal. As oil companies continue to procure concessions to explore and drill in the exclusive economic zones of multiple countries, the region and the world are seeing the potential — and problems — that accompany the discovery of oil.

Oil-related crime is so widespread and so devastating that the Coastal and Maritime Surveillance Africa (CAMSA) conference devoted a full day of its three-day March 2015 event in Accra, Ghana, to protecting the sector's infrastructure. Several days later, Exercise Obangame Express, a huge annual multinational naval exercise, included oil-related crime in two of its four major sea-based training scenarios. African nations and

their partners are aware of the threats and are educating themselves on how best to confront them.

THE COMPLEXITY OF WEST AFRICAN OIL CRIME

Oil can be an economic boon if its wealth is shared and reinvested. It can be a nightmare if land- and sea-based infrastructure goes unprotected. And the two arenas are not isolated from each other. Corruption and greed can give rise to social unrest that causes crime and destruction of infrastructure, and, by extension, the environment.

In many places, oil work and village life exist uneasily side by side. Eric Kwame Tettey, research and investigations advisor for oil company Tullow Ghana Ltd., thinks that human activity close to oil and energy infrastructure is the biggest threat in Ghana for now. Drilling rigs at sea offer an example. They cost millions to build and millions to operate daily.

"So you can imagine if one fisherman's net — just a net — gets entangled into that, and we don't work for one day, two days, three days trying to correct that," Tettey said. "You can imagine the chain effect it can cause to business."

Land-based infrastructure is especially vulnerable



A man near Porto Novo, Benin, is loaded down with fuel smuggled in from Nigeria. The fuel often is sold in jars, jugs and bottles on roadsides. AFP/GETTY IMAGES

to civil unrest, such as that fueled by a combination of poverty, unemployment and anger over corruption, Tetey said.

Nigeria, where oil was discovered in 1956, is an object lesson for how civil unrest can cripple the industry. Within two years, production had begun in the Oloibiri district of the Niger Delta. The area holds the distinction of having Nigeria's first commercial oil well and producing the nation's first crude oil export. But for years since, citizens have decried the lack of local financial benefit from oil riches. That dissatisfaction has grown into sustained unrest in the Niger Delta, where the Niger River stretches more than 300 fingers into the Gulf of Guinea.

Militants and common thieves for years have tapped corporate oil lines to siphon off crude for themselves. Sometimes they set up makeshift refineries that resemble illegal liquor distilleries. Jerry cans full of petrol and crude make their way into Benin and elsewhere along back roads. On the other end of the crime spectrum, oil tankers carrying many metric tons of crude suddenly will vanish from their berths. They turn up days later miles away at sea and sucked dry of their product through ship-to-ship transfers.

Where did the oil go? Who took it? How were they paid? Is it part of a larger criminal enterprise that involves drugs and other forms of smuggling? If so, how? These questions only begin to scratch the surface of the complexity that confronts Gulf of Guinea nations. This is the challenge of oil-related crime.

THE SEA AND THE LAND ARE CONNECTED

As West African military, security and corporate officials gathered at CAMSA, a common theme emerged and was echoed at Obangame Express: Crime at sea begins on land.

Retired Vice Adm. Dele Joseph Ezeoba, Nigeria's former chief of naval staff, hammered home that seemingly simple axiom at CAMSA with the fervor of an evangelist. "There is no criminality at sea that does not originate from the land. True or false? True or false?" he said to his audience. "So the issue of our backwaters or inland waters, which we consider an exclusive reserve, in terms of rights to protect, must be seen as the starting point for the fight against criminals at sea. Because even when they are finished with the criminal illegalities at sea, they go back to what? To the land."

Nigeria's Niger Delta region is rife with oil lines. Thieves commonly pound taps into the lines and siphon or divert oil for resale or small-scale refining. The practice has resulted in multiple spills that have turned the once-pristine delta into an environmental disaster

area. So, on one level, you have a cyclical condition in which a disaffected population turns to the pipelines and causes spills. This damages the entire ecosystem and is Nigeria's single greatest maritime threat, Ezeoba told ADF. The result denies "people access to their primary means of livelihood, which is fishing or subsistence agriculture."

So they see the pipelines as their only means of survival. They tap them, and the cycle repeats itself and worsens. Economic inequality and other social conditions create the conditions for crime on land. Opportunity is what draws the criminals to the sea, Ezeoba said.

"They're out there at sea, largely ungoverned, because of the vast expanse. They can have a free rein to perpetrate criminality," Ezeoba said.

"And when they're finished committing their atrocities at sea, they still go back to land, to share their loot and spend whatever they have gotten on land. So it becomes very pertinent that we must institute a structure that will cut out their ability to leave the land and go out to the sea. That is where the inland or backwaters become very, very important."

In Nigeria, for instance, lakes and rivers are the responsibility of customs, immigration and marine police officials. When capacity is lacking in such agencies, naval forces, which use the waterways to get to the sea, may have to step in.

"What becomes very pertinent is to create a platform that will allow for interface and overlapping of their activities with respect to intelligence gathering," Ezeoba said. "That is what is key."

Addressing the connection between land- and sea-based crime will not be easy. The problem can be multifaceted, with one distinct type of crime connected to another.

Serge Rinkel, program manager for Borderpol, a nonprofit border security organization, told a CAMSA audience that much of the lawlessness in the Gulf of Guinea region began with oil crime and expanded to exploit weak borders and long-standing smuggling routes. Organized crime is targeting Africa because of its natural resources, Rinkel said, and often a wide range of crimes are connected: drug, weapons and human trafficking; oil theft; and money laundering. When thieves steal something, such as oil, it means they have a market for selling or trading it.

"When there is criminal activity, there is another activity connected every time," Rinkel said.

THREATS EXPECTED TO SPREAD

What once was seen solely as a Nigerian problem is now attracting attention up and down the coast of West



Retired Vice Adm. Dele Joseph Ezeoba of Nigeria ADF STAFF



OPERATION PULO SHIELD CRACKS DOWN ON OIL CRIME

THE ASSOCIATED PRESS

A suspected oil thief pilots a wooden boat filled with crude oil in Bayelsa, Nigeria.

ADF STAFF

Nigeria has wrestled with numerous problems since the discovery of crude oil in 1956, namely theft and the destruction of oil-related infrastructure. Since 2012, the military's Joint Task Force (JTF) has been taking action to address these problems.

At that time, the government authorized the JTF to go after oil thieves in the creeks and waterways in nine states of the Niger Delta, according to the newspaper *Vanguard*. The effort is called Operation Pulo Shield. Pulo is an Ijaw word that means oil.

A June 2014 Reuters report showed that Nigeria was losing about \$35 million a day from oil theft — a quarter of the nation's revenue. Estimates have placed the daily loss at between 100,000 and 600,000 barrels. Nigeria has a maximum crude oil production capacity of 2.5 million barrels per day, according to the Nigerian National Petroleum Corp.

Rear Adm. Usman Jibrin, Nigeria's

chief of naval staff, reported in March 2015 that his forces apprehended 84 vessels, arrested 155 suspected oil thieves, and destroyed 120 illegal oil refineries, 29 barges, 93 boats and more than 1,200 pieces of equipment and tools used by oil thieves in 2014, according to *The Punch* newspaper.

In 2013, the JTF reported that it had killed 82 pirates and robbers, killed 23 kidnappers, and conducted 1,025 anti-bunkering patrols that led to the destruction of 1,951 illegal refinery camps and the arrest of 1,857 thieves, according to Maritime Security Review. JTF operatives also destroyed more than 1,117 Cotonou boats, 82 tanker trucks, 81 barges and 1,873 surface tanks.

Despite its successes, the JTF has met with criticism. An October 2013 report by Stakeholder Democracy Network said that a few high-ranking JTF officers had ties to "tap point owners, oil theft unions and camp managers," according to Nigeria's *Premium Times*.

"During the tapping process, the

JTF ensure the surrounding waterways are clear so workers can install the tap without disturbance," the report said. The report also said low-ranking officers share in "transportation taxes" from distribution vessels.

"In term of discipline, there is no organization that is devoid of black sheep," Nigerian Maj. Gen. Johnson Ochoga told *Premium Times* in January 2013. "But we have sustained our zero tolerance to crimes."

"JTF cannot be complicit in oil theft. If there is no oil, our salaries will not be paid, so we defend it with our lives," JTF spokesman Col. Onyema Nwachukwu told *Premium Times*. "We are passionate about our mandate because it is not just the right thing to do but also because we must save our country from the ineptitude of some of our countrymen who are hell-bent on plunging our nation into an abyss of economic unsustainability. It is a serious national security challenge, when a nation's economic means of survival is threatened."

Africa. As more and more countries get into the oil and gas business, they will attract the kinds of criminals so often identified with Nigeria, said Joana Ama Osei-Tutu, a research associate with the Kofi Annan International Peacekeeping Training Centre.

Ghana is developing its oil industry, and Côte d'Ivoire, Liberia and Senegal are among countries searching for oil, Osei-Tutu said. As Nigeria has increased security along its coast, pirates and thieves "have to find a way of moving away from the secured area to the unsecured areas, and so it started to shift gradually, and it just has gone on."

In some cases, Osei-Tutu said, thieves will hijack oil tankers in Nigeria and sail all the way out to Côte d'Ivoire to siphon the oil. If naval forces secure those areas, "then they will try Liberia, and then they will try Guinea and then Sierra Leone to see where they can easily offload their cargo."

a marine operations center in his home country through which the Navy can track ships at sea with the SeaVision computer program. When two ships end up close together, it's worthy of scrutiny because it could mean a ship-to-ship transfer of oil is taking place.

Also, naval officials can track the routes of vessels. Omokhodion said cargo vessels typically move in a straight line. "Somebody who is not drunk will move straight," he said. But when a cargo vessel begins to take on a zigzag route with several stopping points, it's worthy of investigation. That could indicate a rendezvous with a co-conspiring vessel.

Monitoring equipment and naval assets will bolster the fight against oil crime — and other maritime threats — but the capacity to procure and deploy better assets varies widely in the Gulf of Guinea region. Not even some of the better-equipped forces,



Oil from illegal refineries is ferried to market on a Cotonou boat in Bayelsa State in Nigeria. Shell Petroleum Development Co. of Nigeria reported that it lost 60,000 barrels of oil a day in 2013. AFP/GETTY IMAGES

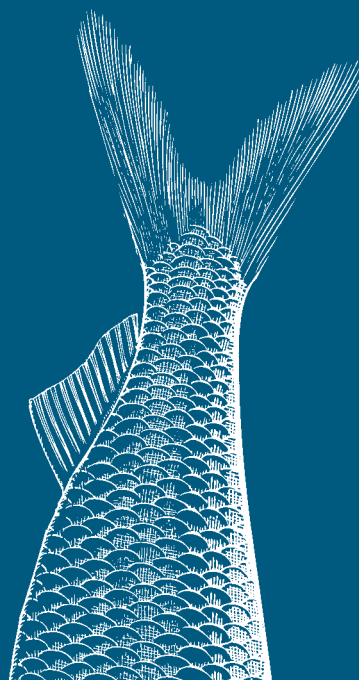
Any country that becomes lax in its security will become a haven. So it's important that nations take comprehensive measures now. Countries may not be able to patrol their exclusive economic zones around the clock, Osei-Tutu said, but they need to give the perception that they are there and have eyes on the sea.

ESTABLISHING A MARITIME PRESENCE

The CAMSA conference and Exercise Obangame Express focused on overcoming sea blindness and establishing a robust maritime presence. Lt. Cmdr. Eddy Omokhodion of the Nigerian Navy manages

such as Ghana's, have all the resources they would like. Ultimately, having a good eye on the sea and cooperating across borders will be a key to success, participants agreed.

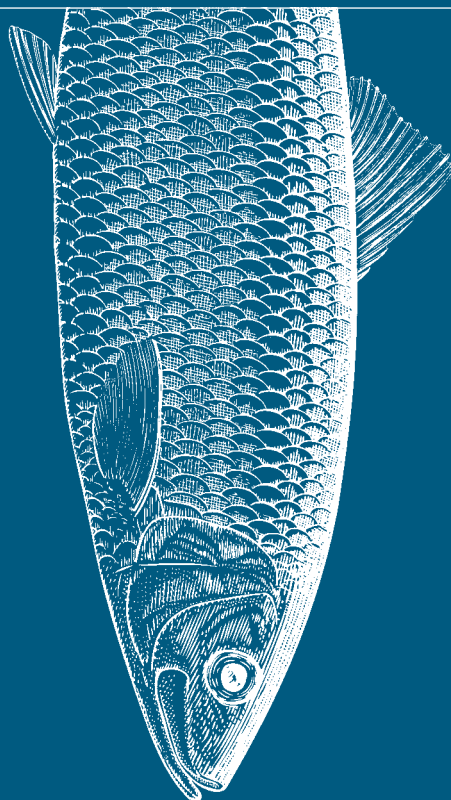
"So I do not have enough assets now, but I also know that I don't need to have enough to be able to be effective," said Rear Adm. Geoffrey Biekro, Ghana's chief of naval staff. "That is why we are collaborating in the subregion. Yes, Nigeria has some [offshore patrol vessels]; Benin also has some fast battle boats. We believe that when we pool these resources together, we will be more effective." □



A DIMINISHING CATCH

ILLEGAL FISHING IS DAMAGING LIVELIHOODS AND
ECONOMIES ALL ALONG THE GULF OF GUINEA

ADF STAFF



The women of Jamestown fishing village in Accra, Ghana, pour large baskets of small sardines onto the concrete floors at the center of the community to dry under the West African sun. Children play games, drawn with colored chalk, on the hard surface nearby. It's a Saturday, and a steady breeze comes in off the Gulf of Guinea, rippling the surface of the water as the area bakes in the March heat.

On Tuesdays, however, the men of Jamestown take over the common area, turning the multipurpose square into a makeshift football pitch. They set up goals on each end and unleash the pent-up stress of six days of fishing in the Gulf. Locals say it is a longtime tradition that Tuesdays are to be a day of rest for fishermen.

Fishing has gotten more difficult in Jamestown. Catches aren't as plentiful as they were years ago, locals say, and fishermen steer their leles — large canoes built from wawa wood — ever farther from shore. The rough, choppy seas of the Gulf of Guinea can be unforgiving. Sometimes the fishermen don't come back.

The story is one that is repeated up and down the Gulf of Guinea. Artisanal fishermen, unable to replicate past catches a few miles from shore, are venturing farther and farther away, endangering themselves and sometimes coming into conflict with larger boats and the ever-increasing number of oil platforms. As their catches dwindle, so do the economies of West African nations. And with them, the area's food security.

"These fishermen depend on a daily sustenance," Joana Ama Osei-Tutu, research associate at the Kofi Annan International Peacekeeping Training Centre, told *ADF*. "If they go to sea for two days, they need to come back with something to sell and make a profit. They can't go home empty-handed. They have to survive."

AN ECONOMY IN PERIL

The value of fish to West African nutrition cannot be overstated. It is a vital source of protein and contains other nutrients that don't occur as prominently in cereals, other crops and other meat sources, according to the report "World Ocean Review." Fish is also a source of iodine and heart-healthy omega-3 fatty acids.

Fish also are an important economic commodity. Much of the fishing by Africans in the Gulf of Guinea is undertaken on a small scale in small boats such as the ones that sail out of Jamestown. Fish pulled into these boats typically are caught within a few miles of the shoreline and sold in local markets. They range from sardines to barracuda to red snapper.

A common scourge imperils this age-old practice. Illegal, unreported and unregulated (IUU) fishing can destroy livelihoods and local economies by keeping small-scale fishermen from successfully plying their trade.

"Industrial fishing for now is dominated by foreign fishing vessels, and that is already a problem for Cameroonian consumption and for the Cameroonian economy," said Cmdr. Emmanuel Sone, operations officer at Navy headquarters in Yaoundé, Cameroon. Many



The women of Jamestown in Ghana dry, clean and prepare the catches. *ADF* STAFF

of the fish caught in Cameroonian waters are unreported, which means no taxes are paid on them. Large international fishing vessels carry the fish to other countries, often in Europe and Asia. They leave depleted waters in their wake because their hauls are huge and indiscriminate. Sometimes large vessels sail to within 3 nautical miles of the shore, which is against Cameroonian law, Sone said.

"They are not just depriving the locals from the small catches they make just outside their fishing villages, but they are also depriving the general fish market of the catches they make because they generally export it, they generally deliver it in foreign ports."

Cameroon spends more than \$162 million a year to import 200,000 metric tons of fish to satisfy local demand, according to Cameroon's CRTV. The nation's Ministry of Livestock, Fisheries and Animal Industries held a meeting in March 2015 to talk about how Cameroon can bolster production to become a fish exporter.

Worldwide numbers on IUU fishing are staggering. A 2012 report from the Environmental Justice Foundation lists profound global losses from the practice:

- Between \$10 billion and \$23.5 billion is lost worldwide to IUU fishing each year.
- Up to 37 percent of all fish caught in West African waters is thought to be due to IUU. That's the highest level of any region in the world.
- Fish represents 64 percent of all the animal protein consumed in Sierra Leone. About 230,000 people in that one country are employed in the fisheries industry.
- Ninety percent of vessels fishing in West Africa are bottom trawlers that drag heavy equipment across the ocean floor. This damages the seabed and endangers marine life such as coral, turtles and sharks.



A fisherman in Accra's Jamestown community in Ghana tends to his nets. ADF STAFF

EXERCISE ADDRESSES IUU PROBLEM

IUU is such a problem in West Africa that planners for Exercise Obangame Express agreed that it should be among the four major scenarios offered at the March 2015 event across the Gulf of Guinea.

The IUU scenario began with a large vessel suspected of having used explosives to fish off the coast of Gabon. As Gabonese authorities sent ships and helicopters to investigate, the ship fled west toward São Tomé and Príncipe and then steamed toward Equatorial Guinea.

Nations tracked and followed the vessel for several days. On the last day, Cameroonian Navy forces boarded the ship to investigate. Security forces searched the ship for illegal catches and checked whether the vessel had proper permission to fish.

Like most maritime criminals in the Gulf of Guinea, those who fish illegally are becoming more sophisticated. Osei-Tutu of the Kofi Annan center relayed a story told to her by a Nigerian official.

Authorities boarded a vessel off Nigeria's coast that was suspected of illegal fishing. Once on board, they found that it was more than a ship; it was a factory where fish could be processed and canned on-site. "So on top is fishing, but when you come a deck or two below, it's a factory," Osei-Tutu said. "So by the time they leave the coast, you have stamped fish tins — Italy, France, Germany, what have you."

"Their story is that they are transporting fish from the Philippines or Singapore or South Korea or Russia or whatever it is to European markets, and they're just traveling through your waters," she said. That leaves investigating nations unable to prove that fish came from their waters.

SENEGAL STEPS UP

Like many other West African nations, Senegal suffers from the practice of IUU fishing. But in 2012, incoming President Macky Sall made good on a campaign promise when his government revoked fishing licenses for 29 large trawlers that had been operating in Senegal's waters, according to a July 2013 *Africa in Fact* report.

"This was a decision of resource management that was made to reduce the number of fish being taken from our waters," said Cheikh Sarr, director of Senegal's Ministry of Fisheries and Maritime Affairs. "It was made in light of the concern over the rarity

of resources, and it was a decision that was made to allow the fish a chance to regenerate."

Sarr and others say that canceling the licenses helped ease the problem of overfishing, but it has not necessarily helped prevent illegal fishing. "Revoking these licenses has been helpful in the general sense," he told *Africa in Fact*. "But the reality is, whether or not a boat is authorized to enter our waters, if they decide to engage in IUU [fishing], they will come. And often, we have very little power to stop them."

Large trawlers often work many miles off a nation's coast. Regional navies, coast guards and maritime police forces often don't have ships with the capacity to venture out far enough to patrol and discourage illegal fishing in exclusive economic zones.

The Jamestown fishing village
in Accra, Ghana ADF STAFF



GHANAIAN, U.S. FORCES BUILD CAPACITY TOGETHER

U.S. forces conducted joint exercises with Ghana in 2014 and 2015 through the African Maritime Law Enforcement Partnership (AMLEP) program. Operations were conducted from the joint high-speed vessel USNS Spearhead, which also participated in Exercise Obangame Express. In April 2014, a Ghana-U.S. team boarded three vessels that were fishing illegally off the coast of Ghana. An agent with the Fisheries Commission of Ghana recorded six infractions from the three ships that could result in up to \$2 million in fines once adjudicated, according to a U.S. Navy release.

"This joint exercise has improved the professional competence of the maritime security agencies and also interagency collaboration," Commodore Godson Zowonoo, flag officer commanding Western Naval Command, said after the exercise. "Ghana's joint boarding team will be at sea very often to ensure that the knowledge acquired is utilized."

In the February 2015 exercise, the USNS Spearhead again worked with Ghanaian officials. Representatives came from Ghana's Ministry of Fisheries and Aquaculture Development, the Marine Police Unit of the Ghana Police Service, the Ghana Navy and the U.S. Coast Guard, the U.S. Navy said.

A combined boarding team conducted six boardings to look for illegal activities. Violations included lack of license, lack of registration to fish in Ghana's waters, and insufficient crew members, among other things. The three vessels with violations were turned over to the Ghana Navy for escort to port for further investigation by the Ministry of Fisheries and Aquaculture Development.

Separate AMLEP exercises also have been held recently with Cape Verde and Senegal.

Joint high-speed vessel USNS Spearhead moors at Sekondi Naval Base, Ghana, after completing Africa Maritime Law Enforcement Partnership operations in February 2015.

LT. ADAM COLE/U.S. NAVY



IUU FISHING DEFINED

The Food and Agriculture Organization of the United Nations endorsed the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing in 2001.

ILLEGAL FISHING IS:

- Conducted by vessels in a nation's waters without permission or in violation of laws.
- Conducted by vessels of states that are parties to a regional fisheries management organization but that ignore that organization's measures.
- Conducted in violation of international obligations, such as a regional fisheries management organization.

UNREPORTED FISHING IS:

- Not reported, or has been misreported, to a relevant national authority or regional fisheries management organization.

UNREGULATED FISHING IS:

- Inconsistent with conservation and management of a fisheries management organization by vessels without nationality or by those flying a flag not party to the organization.
- Related to areas or fish stocks for which there are no management measures and where fishing is inconsistent with state responsibilities for conservation under international law.

BOTTOM TRAWLING

Destroys Livelihoods, Ecosystems

When large fishing boats come into the Gulf of Guinea, they often take away more than just tons of fish. Their tactics can destroy livelihoods, local economies, even the food security of an entire region.

Their indiscriminate methods also can damage or destroy ecosystems. In an article about the plight of fishermen in Senegal, the BBC reported that one Russian ship, the Oleg Naydenov, was caught carrying 1,000 metric tons of fish. Senegal seized the ship and accused it of fishing without a license.

Such ships can scoop up many tons of fish on one expedition. Heavy trawls are the tool of the trade for nearly 90 percent of large industrial fishing vessels, according to Africa in Fact. Trawlers can pull up many tons more fish than quotas allow in a short time, making them common violators of reporting regulations.

Local artisanal fishermen are powerless against such methods. Issa Fall, coordinator of the Fisherman Committee at the bay of Soumbédioune in Dakar, told the BBC that at one time, fishermen in the entire market could count on hauling in 3,500 metric tons of fish per year. By January 2014, that

catch had dropped to less than 3,000 metric tons per year.

According to Greenpeace, some pelagic freezer trawlers can freeze and store up to 6,000 metric tons of fish, allowing them to fish for weeks at a time. By contrast, 50 small traditional African fishing boats would have to fish for an entire year to match what one such trawler can catch and process in a single day.

Heavy trawlers are doing more than just depleting regional fish stocks. The gigantic nets, which sometimes are 60 meters across when fully extended, are held on the ocean floor by a pair of trawl doors, each weighing up to 5 tons. As the ship drags the trawl across the ocean floor, it scrapes off everything in its path, such as vegetation and coral, just like a bulldozer.

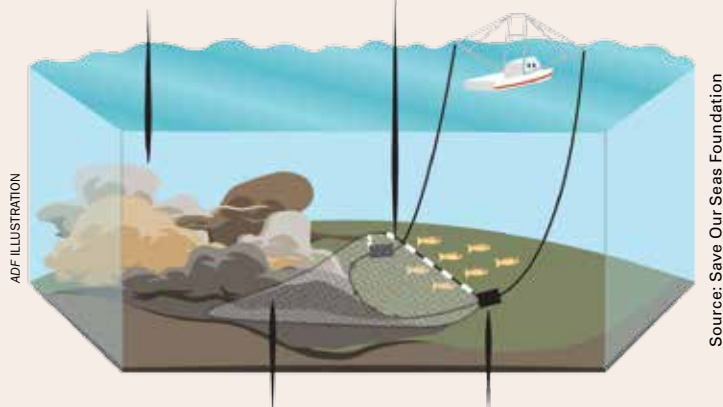
The drag also stirs up enormous plumes of sediment from the sea bottom. This becomes a pollutant. Many sediment plumes are so large they are visible from outer space.

Finally, nets drawn by trawling ships do not discriminate. Everything in their path is entangled. If a shrimp boat drags a trawl, it may pull up thousands of immature fish, as well as turtles and sharks. This so-called bycatch is unwanted and includes any living thing discarded or killed by fishing gear.

Anatomy of a BOTTOM TRAWL

Trawling raises plumes of sediment from the ocean floor, introducing pollution that has settled on the bottom back into the water (and food chain). These plumes are so big, they are **clearly visible from space**.

The nets used in bottom trawling catch enormous amounts of unwanted fish and other marine life. As bycatch, these animals are discarded back into the sea to die. In shrimp trawls, up to **90 percent** of the catch is bycatch.



The trawling apparatus effectively bulldozes the sand floor, destroying fragile coral reefs and other bottom-dwelling life.

Nets are kept open by a pair of trawl doors dragging along the sea floor, each weighing up to **5 tons**.



ISTOCK

GHANA'S FISHERIES ENFORCEMENT UNIT

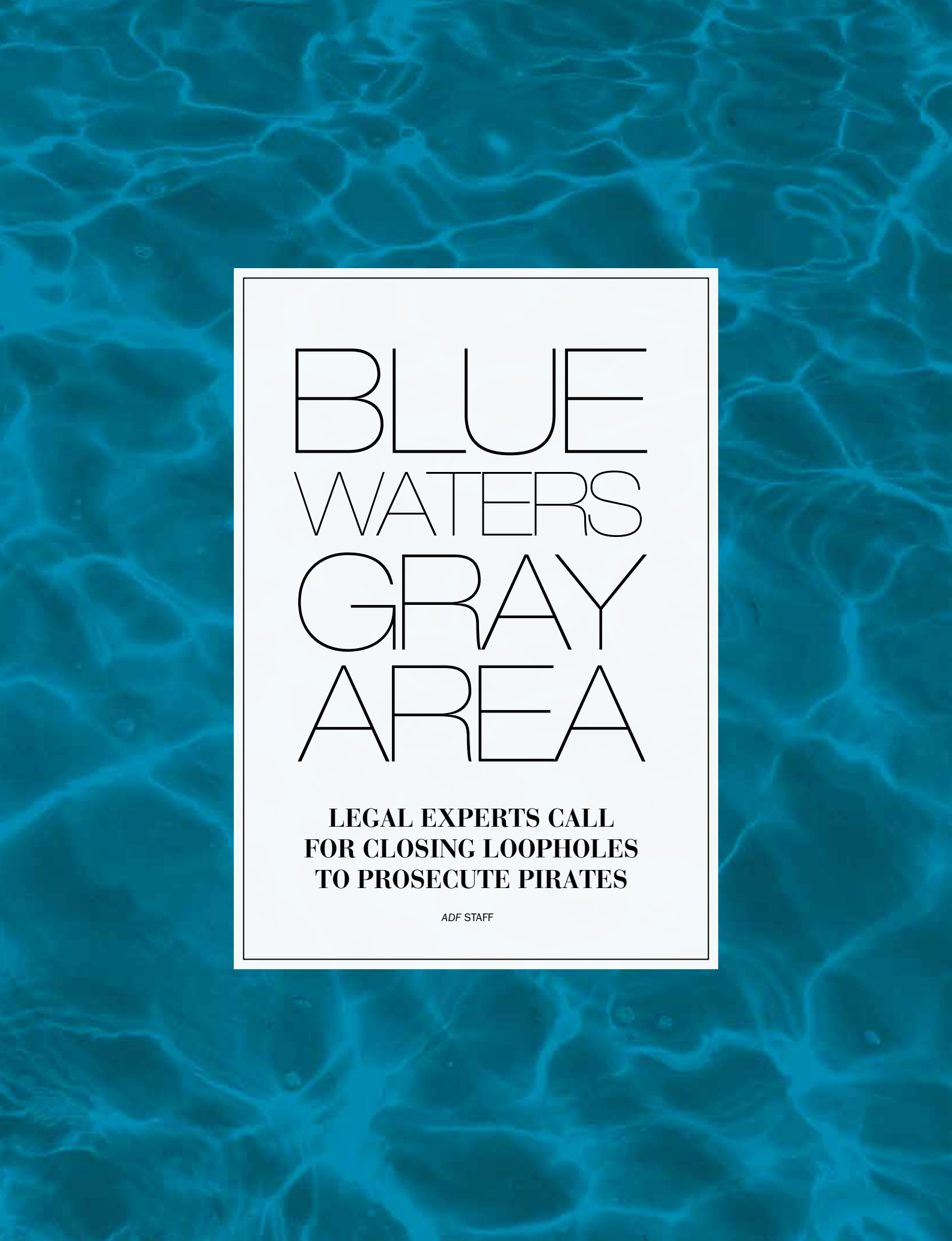
Ghana established a Fisheries Enforcement Unit (FEU) in 2013 and authorized it to combat illegal fishing activities, according to the *Daily Graphic*. The FEU includes personnel from Ghana's Navy, Air Force, Fisheries Commission, Attorney General's Department, the Marine Police of the Ghana Police Service and the Bureau of National Investigations.

The FEU monitors and controls all fishing operations within Ghana's waters. In December 2014, the FEU arrested 26 fishermen on suspicion of fishing with dynamite, an illegal and dangerous practice, the *Daily Graphic* reported. Still, officials believe there is much work to be done to protect the Gulf's fish stock for today's fishermen and for generations to come.

"Of late, seasonal bumper fish catches have become history, and this could be attributed to rampant violation of fisheries laws and regulations, such as pair trawling, light fishing, use of unauthorized nets and net meshes, transshipment and dumping at sea," said Nayon Bilijo, minister of Fisheries and Aquaculture Development.

This is a big problem for an industry that adds \$1 billion to government coffers while providing a livelihood for up to 10 percent of Ghanaians and up to 60 percent of the nation's animal protein intake, according to *The Africa Report*. Kyei Kwadwo Yamoah, programs manager for Friends of the Nation, a local nongovernmental organization, summed up the threat.

"There is steady decline in the fishing sector; if the sector declines and collapses, this is a food security issue and national security issue," he said. "Government must act to protect the sector." □



BLUE WATERS GRAY AREA

**LEGAL EXPERTS CALL
FOR CLOSING LOOPHOLES
TO PROSECUTE PIRATES**

ADF STAFF



In an interview on board a Ukrainian freight vessel, Somali pirates bragged that they had outsmarted the system. They said they could hijack a commercial ship, knowing that the ransom payments could be worth millions and if they were caught, it would pose no problem. In their words, they would just get a “free ride back to the beach” from one of the dozens of international naval ships patrolling the area.

“They can’t stop us — we know international law,” Jama Ali, a pirate, told *The New York Times* in 2008.

Ali may have been emboldened by the lack of punishment, but his assessment of international law was dead wrong. In fact, international law pertaining to piracy is among the toughest in the world. It gives those who arrest pirates great latitude to detain them and bring them to face justice on shore.

For centuries, all nations have been permitted to arrest pirates caught on the high seas, now defined as water farther than 12 nautical miles from a coastline. Pirates hold a uniquely reviled status in the eyes of the law because they

imperil international trade and travel. The legal term used to describe them is “*hostis humani generis*,” a Latin phrase that translates to “an enemy of all mankind.”

The U.N. Convention of the Law of the Seas (UNCLOS), adopted in 1982, reflects the seriousness of the crime. It says stopping piracy is not only a right, but a duty. “Any State having an opportunity [to take] measures against piracy, and neglecting to do so, would be failing in a duty laid upon it by international law,” the UNCLOS states.

So why is this duty so rarely fulfilled? The question is particularly pressing because West African piracy has emerged and presents some the same legal hurdles faced for years off the coast of East Africa.

LEGAL LIMBO

The early years of Somali piracy were characterized by what was termed a “catch-and-release” system. Pirates were captured and then simply returned to the nearest port. The toughest punishment most faced was to have their weapons confiscated or, in some cases, their boats destroyed.



Somali inmates eat breakfast at a U.N.-funded prison in Hargeisa, Somalia. The prison holds pirates convicted in Seychelles courts. AFP/GETTY IMAGES



Two Somali pirates arrested by French authorities wait inside the courtroom in Rennes, France, in 2013. They were found guilty of hijacking a yacht in 2009.

AFP/GETTY IMAGES

A 2011 report by Jack Lang, special advisor to the U.N. secretary-general, found that nine out of 10 suspected pirates captured off the coast of Somalia were released without being prosecuted. Piracy legal expert Yvonne Dutton said a “culture of impunity” reigned.

This was not due to apathy. Prosecuting pirates is a difficult task.

Since the 1930s, pirates have been considered civilians instead of combatants under international law. This places an added burden of proof on naval patrols that seek to arrest them. Once caught, many pirates insist they are simple fishermen who have been falsely accused. The burden is on arresting authorities to prove otherwise.

“Given that pirates are civilians on board civilian vessels, patrolling navies can do little until the suspects attempt to board another ship,” Eugene Kontorovich wrote in the article “A Guantanamo on the Sea: The Difficulty of Prosecuting Pirates and Terrorists,” published in *California Law Review*. “International law does not criminalize being on a Somali fishing vessel, even if the only pieces of ‘fishing equipment’ on board are AK-47s and RPGs.”

FROM SEA TO PRISON

Legal barriers make prosecuting pirates difficult



HIGH SEAS

The **United Nations Convention of the Law of the Seas**, adopted in 1982, defines a country’s territorial waters as extending **12 nautical miles from shore**. Although intended to protect national sovereignty, pirates have sought out the territorial waters of weak or failed states and have operated with impunity.



RELEVANT LAWS

Piracy was all but unheard of until its resurgence off the coast of Somalia in the past decade. Consequently, most **African nations have outdated or inadequate laws criminalizing piracy**. Cmdr. Kamal-Deen Ali, legal director of the Ghana Navy, said Togo and Liberia are the only West African nations that have up-to-date anti-piracy laws.



IN THE ACT

International law views pirates as civilians instead of combatants. This means authorities must observe them in the act of boarding or holding a ship to charge them. Some have advocated for the adoption of “articles of crime” legislation in African countries, which would criminalize the **possession of equipment associated with piracy such as AK-47s** and grappling hooks in some circumstances.

Worse still, if authorities use too much force while arresting pirates, the navies themselves could be charged with violating international humanitarian law. At the height of the Somali piracy problem, Britain went as far as to urge its ships not to capture suspected pirates for fear they would claim asylum under European Union human rights law.

Some have complained that UNCLOS actually makes capturing pirates more difficult because the 1982 treaty extended territorial waters from 3 nautical miles offshore to 12 miles. This means that when there is a weak state, such as is case with Somalia, pirates can take advantage of the lack of capacity in territorial waters. This problem was rectified during the Somali piracy crisis when foreign navies were allowed to enter Somali waters and use “all necessary means to repress piracy,” according to a U.N. Security Council authorization.

As difficult as it is to capture pirates, putting them on trial is equally onerous. Navies are not typically trained to collect and preserve evidence so it can be used in court. Once a trial begins, it can be difficult to locate arresting authorities, multinational

crews of ships and corroborating witnesses. People needed to testify are often “scattered around the world” by the time the trial starts, Kontorovich wrote. Finding adequate defense counsel and translation services for pirates also is difficult.

Given the cost and complexity, it is little wonder that East African and European nations have not been eager to arrest or try pirates. Two positive examples are Kenya and the Seychelles, which have tried dozens of Somali pirates after receiving money from the U.N. and member nations to set up special courts.

Some legal scholars, however, question the validity under UNCLOS of transferring pirates to a third-party state such as Kenya or the Seychelles. Legal scholars have argued that universal jurisdiction was intended to apply only to the arresting nation.

“If nations that make the arrest are unwilling to prosecute, then releasing the defendant may be a proper outcome — a legitimate exercise of prosecutorial discretion,” Kontorovich wrote. “Auctioning prosecution to the lowest bidder, while defensible, can also raise concerns about due process and related issues.”



PRESERVING EVIDENCE

Maritime arresting authorities such as **navies are typically not trained to preserve evidence of a crime like piracy** or to take witness statements from relevant parties once they liberate a hijacked vessel. As a result, crucial evidence needed to convict pirates in court can be lost.



MULTIPLE JURISDICTIONS

Cases of piracy on the high seas often involve pirates from one country, victims and a hijacked vessel from a second country, and authorities from a third country. Transferring evidence, sharing information, extraditing suspects and other **matters require international cooperation.**



FINDING A COURT

Nations have been understandably hesitant to try pirates due to the cost and complexity of the cases. **The U.N. has helped fund special piracy courts** in the Seychelles and Kenya, but critics have questioned their legitimacy because neither the pirates nor the arresting parties are typically from either of those countries.

NEW MARITIME LAW CENTER Seeks to Bring Nations On Board the Piracy Fight

ADF STAFF

As Africa enjoys unprecedented economic growth, it is looking for ways to protect and expand this prosperity for years to come. During its 50th anniversary celebrations, African Union leaders pointed to the continent's "blue economy," the trade and industry linked to the sea, as vital to sustaining that growth in the coming decades.



Cmdr. Kamal-Deen Ali, legal director of the Ghana Navy and director of research at the Ghana Command and Staff College.

GHANA NAVY

"Africa being a big island, there is a need to have a better understanding of all activities in its adjoining oceans and seas, and think seriously how to maximize the limitless opportunities laying therein," said Erastus Mwencha, deputy chairman of the African Union Commission.

Protecting the blue economy will require strong rule of law, which is why the Centre for Maritime Law and Security (CEMLAWS) Africa was created in 2015. CEMLAWS is headquartered in North Legon, Ghana, and

its goal is to be a regional center of excellence that helps Gulf of Guinea countries update their laws and policies relating to maritime security so crimes such as piracy and illegal fishing can be prosecuted.

"What we are looking at is trying to promote effective responses to ocean governance challenges," said Cmdr. Kamal-Deen Ali, legal director of the Ghana Navy and executive director of CEMLAWS. "We're looking at capacity building, we're looking at policy analysis and we're looking at sustained research."

CEMLAWS is focusing on helping nations seeking to implement the African Union's Africa Integrated Maritime Strategy 2050, a continentwide policy adopted in 2013, and the Yaoundé Code of Conduct, adopted the same year by more than 20 West African and Central African countries.

Ali said CEMLAWS has assembled a global network of maritime security experts, industry professionals and others, including Professor Martin Tsamenyi of the Australian National Centre for Ocean Resources and Security, who serves as chair of the center, and Professor James Kraska of the Stockton Center of U.S. Naval War College, who serves as co-chair. The center offers courses for navy officers, government officials and civilians on a wide spectrum of issues including law of the sea, maritime regulation and enforcement, maritime policing, rule of law, and sustainable fisheries.

"These courses will help fix the gaps that we have now in terms of capacity in the Gulf of Guinea space," Kamal-Deen said.



A Togolese boarding team member gives a status update to his patrol boat while aboard the German Navy target vessel FGS Brandenburg.

SPC. RAUL PACHECO/U.S. ARMY



GULF OF GUINEA LEARNS LESSONS

Cmdr. Kamal-Deen Ali, legal director of the Ghana Navy and director of research at the Ghana Command and Staff College, is worried that history might repeat itself in the Gulf of Guinea (GoG). He does not want “catch and release” to become the norm in West Africa.

Kamal-Deen told *ADF* that the greatest need is for each of the GoG countries to adopt anti-piracy legislation. Currently, he said, only Liberia and Togo have up-to-date and adequate anti-pirate legislation. “What it means is that you may be able to apprehend pirates, but at the end of the day you can only keep them for so long if you will not be able to provide adequate legislation upon which they can be prosecuted,” Kamal-Deen said. The four greatest areas of need are as follows:

LEGAL FRAMEWORK: New comprehensive legislation would include legal tools to define, investigate, prosecute and punish piracy. It also would provide for judicial cooperation between countries, allowing for the extradition of pirates to their home countries for trial if needed, and the exchange of judicial information among countries.

It cannot be a patchwork solution, Kamal-Deen said. It will be essential that GoG countries all adopt legislation because it is likely that investigations, arrests and prosecutions will span the territorial waters and land of several countries. Although legislation will be specific to the judicial systems of separate countries, the Yaoundé Code of Conduct, signed by more than 20 countries in 2013, outlines maritime piracy, robbery at sea and other transnational organized crimes. It calls for countries to strengthen national laws and harmonize them across the region.

“When you do not have that legislation, then your ability to prosecute pirates can be challenged,” Kamal-Deen said. “That’s the situation we have in the Gulf of Guinea.”

ARTICLES OF CRIME: Kamal-Deen said it is also necessary for GoG countries to have “articles of crime” legislation through which suspected pirates can be prosecuted if they are caught with the tools of piracy,

even if they are not caught in the act of boarding or after having hijacked a ship. “Where you are found, for example, with a speedboat loaded with AK-47s off the coast of Ghana or off the coast of Nigeria, the presumption is that you are going to commit piracy unless you can prove otherwise,” he said. “These kind of articles of crime legislation are very important within the context of the Gulf of Guinea.”

DEFINED BORDERS: Kamal-Deen said an underlying factor inhibiting cooperation among GoG nations to defeat piracy relates to maritime boundary disputes. When nations do not agree where the boundaries are, it “tends to inhibit cooperation,” he said. He believes it is time for countries to resolve these disputes in the interest of broader public safety. “The reality is that unresolved boundary issues will always impact maritime security cooperation, including information sharing, from strategic through operational to the tactical levels,” Kamal-Deen said. For instance, he said, an ongoing maritime border dispute between Ghana and Côte d’Ivoire has the potential to limit information sharing between the two countries.

COURTS AND TRAINING: Training of seamen, police, attorneys and others will be necessary to ensure that pirates are captured and transferred humanely, evidence is preserved, and the accused receive a swift and fair trial. Nigerian Rear Adm. Adeniyi Adejimi Osinowo has called for beefing up the West African legal system to handle an influx of piracy cases. It must, he said, be a regional effort because the waters of the GoG are shared, and pirates will search out and exploit weak areas. “Efforts to fast-track extraditions and to synchronize penalties for crimes at sea across jurisdictions would prevent pirates from finding more lenient treatment across coastal boundaries,” Osinowo wrote in a security brief for the Africa Center for Strategic Studies. Osinowo also pushed for the creation of courts dedicated to handling piracy and sea robbery and additional training for special prosecutors. □

THE  WAY

FORWARD

*A NIGERIAN ADMIRAL OUTLINES
THE KEY STEPS NEEDED TO STOP PIRACY*

REAR ADM. ADENIYI ADEJIMI OSINOWO



REAR ADM. ADENIYI
ADEJIMI OSINOWO

Rear Adm. Adeniyi Adejimi Osinowo has served in the Nigerian Navy for more than 30 years. During that time he has held the positions of chief of training and operations, and director of transformation for the Navy. He was also on the directing staff of the National Defence College in Abuja. In 2011, he received the Meritorious Service Medal from the United States for his seven months spent as deputy commander of Africa Partnership Station. He also helped develop the Africa Integrated Maritime Strategy 2050, outlining the continent's strategy to secure its maritime domain. This article was adapted from a security brief written for the Africa Center for Strategic Studies.

Combating piracy and armed attacks on shipping in the Gulf of Guinea requires work across the piracy cycle. This includes addressing shore-based causes, offshore transit vulnerabilities and the markets for piracy proceeds. Stemming the tide of attacks equally demands more deliberate cross-cutting efforts that incorporate preventive, deterrent, and collaborative measures among national and regional stakeholders. Here are some areas where West African security professionals can focus their efforts to maximize results.

Maritime space management: Improving security is more about the strategic management of maritime space than it is about naval fleets and patrol craft. Central and West African states must define clearer transit corridors and anchorage sites to protect merchant vessels in their territorial waters and exclusive economic zones, which extend 200 nautical miles (nmi) from a country's coast. This would be akin to the Internationally Recommended Transit Corridor that has functioned well in

the Gulf of Aden and has been replicated as a Voluntary Reporting Area in the Gulf of Guinea. Such arrangements require a combination of regional and national collaboration that could be facilitated by the Maritime Inter-Regional Coordination Center (MICC) in Yaoundé, Cameroon.

Viewing the success of the Secured Anchorage Area in Lagos Harbor, a public-private security partnership offering around-the-clock protection to vessels wishing to anchor safely near the Lagos port channel, similar concepts should be established around approaches to all ports in the region, including enforcement and sanction processes for vessel violations. Such procedures will improve vessel safety and simplify the patrol and surveillance demands on maritime authorities.

To advance regional maritime space management, there is a need to fast track the activation of the MICC and the multinational maritime coordination centers, including Maritime Zone E, which is composed of Benin, Niger, Nigeria and Togo (see map, page 13). This will facilitate information sharing among law enforcement agencies, maritime commerce stakeholders and international partners. In particular, the establishment of national maritime operation centers could resolve some difficulties in interagency cooperation among navies and port- and flag state-control authorities.

Enforcement harmonization: The limited number of piracy-related trials underscores the need for greater harmonization of legal efforts in the region as stated in the memorandum of understanding among the Economic Community of Central African States (ECCAS), the Economic Community of West



Lagos, Nigeria, is home to one of Africa's busiest ports.

ISTOCK

African States (ECOWAS) and the Gulf of Guinea Commission. To do so, a thorough review of each country's legal framework should be undertaken to enable each to effectively prosecute pirates. Efforts to fast track extraditions and to synchronize penalties for crimes at sea across jurisdictions would prevent pirates from finding more lenient treatment across coastal boundaries.

Members of the judicial system should be trained in coordination with maritime enforcement agencies to speed up and standardize evidence collection and preservation to facilitate efficient and fair trials. Creating courts dedicated to prosecuting piracy and sea robbery may help minimize these delays.

Internavy cooperation: Authorization of a standing forum for regional heads of navies by the ECOWAS Committee of Chiefs of Defence Staff could provide much-needed synergy for coordination. This has been done in Maritime Zone E and needs to be replicated among other zones under ECOWAS. The Political Affairs, Peace and Security Department of ECOWAS has the responsibility in this regard to encourage the activation of zonal coordination for all member states, including common understandings and prosecutions of cross-border and extraterritorial crimes.

Asset Requirements: A layered deterrent mechanism characterized by maritime air

patrols, patrols by offshore patrol vessels (OPVs) and seaward defense boats (SDBs), and terrestrial- and satellite-based surveillance assets will be needed to monitor and secure the Gulf of Guinea. A theoretical 100-nmi radar coverage and patrol radius should be assumed for each patrol vessel.

For every vessel at sea, one should be on standby while another undergoes routine maintenance. Based on these assumptions and West Africa's approximately 3,000-nmi coast, the aggregated minimum OPV requirement for effective deterrence and response amounts to 90 craft. Compared to the current inventory of 32 OPVs/equivalent assets (frigates, corvettes and large patrol craft), governments should consider the 58-OPV deficit as a working guide on future capitalization efforts. In the relatively calm and open waters of the region, OPVs of under 1,000-ton displacement with minimal weaponry would suffice. SDB requirements would enable effective presence in the approaches to all regional ports with a similar provision that two additional SDBs be available for each one deployed. States with long coastlines or piracy hot spots should consider acquisition of fixed- and rotary-wing maritime patrol aircraft. These projections, though ambitious, provide a planning guide for governments, navies, foreign partners and investors.

Profiling piracy networks: Breaking the

cyclical chain of attacks on shipping in a cost-effective manner requires a robust capacity for profiling maritime crime and sharing information among stakeholders in the region. Such a capacity would involve monitoring transiting vessels, their crews, and their ownership with a view to profiling suspicious vessels and individuals, including monitoring in coastal communities. A watch list for suspect vessels and human accomplices should be developed, updated and shared.

An international campaign to close off markets and financial centers to stolen oil and its proceeds would raise the cost of stealing from the Gulf of Guinea. This would require more concerted efforts among Central and West African states and their global partners to identify and sanction criminal networks involved in the laundering of proceeds from piracy and related crimes. Sanctioning vessel owners and organizations known to be the beneficiaries of proceeds from attacks and oil theft would be extremely useful, and yet is a significant gap in the collaboration among the European Union, Asian and African states.

Partnership Engagement: More collaboration is needed among international partners and African governments in the international waters around the Gulf of Guinea. Operations Atalanta, Ocean Shield, and Combined Task Force 150/151 in the Gulf of Aden and Indian Ocean provide an adaptable template. There would also be value in U.S., European and Asian partners strengthening naval and coast guard capacity in the region through effective collaboration.

Targeted economic development on the coast: The situation in the Niger Delta and widespread poverty in the region underscore the need for more concerted infrastructural development,

youth employment and coastal environmental protections. Given that the waters off the Niger Delta account for more than half the piracy attacks recorded in recent years, there is a need to improve economic opportunities for coastal communities there. Likewise, given the socio-economic impacts of illegal fishing, pollution and environmental degradation, state and local governments across the region must focus on maritime-related policy matters that directly impact coastal residents. This includes enforcing laws governing foreign companies' intrastate shipping, proper application of environmental laws, and expanding shipbuilding, fishing, and other industries where significant production deficiencies still exist. Such advancements would reduce the incentives that drive youth into piracy and create shared interests among communities, the state and the private sector in a secure and vibrant maritime economy.

CONCLUSION

As countries in the Gulf of Guinea increasingly rely on the seas for economic prosperity, the evolving violent attacks on shipping with transnational dimensions call for multilateral remedies. Some of these, including Maritime Zone E and the MICC, already are underway. Governments also must uproot the drivers of piracy as well as expand the resources and shared interests in a secure maritime domain. None of these recommendations will gain enough traction to be self-sustaining until the discussion of maritime security in the Gulf of Guinea is raised from the operational to the ministerial level, where the purse strings are held. Until there is political will in each Central and West African country to protect the region's waters, the Gulf of Guinea will remain a challenging security environment. □



A

Uganda's 'Wakaliwood' Takes Off

AGENCE FRANCE-PRESSE

film made in Uganda for about \$200 has become an Internet sensation, with its trailer viewed more than 2 million times.

Who Killed Captain Alex was written, directed and produced by Isaac Nabwana in 2010. Nabwana has produced almost 50 films. In April 2015, he filmed *Operation Kakongoliro* ("Ugandan Expendables"), an action film. It was filmed in a scrap yard in Wakaliga, a neighborhood in Uganda's capital, Kampala, which now is known as "Wakaliwood."

"It is going to be as big as Nollywood, Bollywood or even Hollywood — there's no reason why not," Nabwana boasted of Uganda's informal film industry, insisting that studios in Nigeria, India and the United States will get a run for their money. "We think

Hollywood people will come here," he said.

It has been almost a decade since Nabwana, 42, built Ramon Film Productions, Uganda's first action-film company, fulfilling his childhood dream of making movies. Today he is still building. "We need good cameras, software," Nabwana said. "The biggest challenge is money."

Promoter-producer Alan Hofmanis said the key hurdle is that Uganda's film industry is "massively pirated."

"It's getting harder to sell the movies, with U.S.-pirated movies going for as little as 500 shillings," Hofmanis said. That's equal to less than 20 cents.

After the films are made, the production staff and actors, who usually have to supply their own wardrobe and do their own makeup, sell the movies door to door across Uganda for about \$1 per copy.

"Wakaliwood" cast and crew film a scene in one of their upcoming movies in Kampala, Uganda, on March 4, 2015.

AFP/GETTY IMAGES

Mauritanian Film Wins

INTERNATIONAL HONORS

AFP/GETTY IMAGES

A film with a powerful anti-extremist message has been internationally honored. The film *Timbuktu* was nominated for an American Academy Award and won top honors at France's César Awards.

The film tells the story of northern Mali under the control of jihadists. The ancient caravan town of the title, often a byword for otherworldly remoteness, was seized by armed insurgents who cut a swath through the West African nation for most of 2012.

The movie depicts the resistance of the townspeople and their struggle to retain their way of life under the brutal, ultraconservative regime of the insurgents. It shows how women were forced to cover their faces by their new masters from al-Qaida in the Islamic Maghreb and Ansar al-Dine, which banned music and football and dealt out floggings and amputations.

The extremists demolished the mausoleums of Muslim saints, angrily dismissing them as "idolatry," and destroyed precious manuscripts preserved in the city.

Originally to be filmed in Mali, most of the movie — the

only African nominee for the best foreign film Academy Award — ended up being shot under military protection in Mauritania, the home of director Abderrahmane Sissako, with just a few scenes captured in Timbuktu itself.

"After a month of filming in Timbuktu, which had already been liberated, there was a suicide bombing outside the garrison," Sissako said. "I thought to myself it was naive to bring a foreign team of French and Belgians there. We would have been easy targets."

Characterized by its vivid yet unfussy cinematography,



the French co-production was the first Mauritanian candidate for best foreign film at the Academy Awards. It was among five contenders in the category, which was won by the Polish film *Ida* in February 2015. The same month, *Timbuktu* won best French film at the César Awards.

Director Abderrahmane Sissako, center, kneels near the trophies received for the film *Timbuktu* at the 40th César Awards ceremony in Paris on February 20, 2015. REUTERS



SAFE KENYA

Kenyan Film TACKLES SOCIAL ISSUES

ADF STAFF

An arts charity based in Kenya has produced its third film, about the lives and relationships of people from different walks of life in Mombasa. Its goal is to shed light on what prompts young people to turn toward extremism.

Watatu is a production of Sponsored Arts for Education (SAFE) Kenya, which also produced the acclaimed movies *Ndoto Za Elibidi*, about the AIDS epidemic, and *Ni Sisi*, about ethnic violence. The latest movie was filmed entirely in Mombasa, Kenya's second largest city.

The film's name is Swahili for "three" and focuses on the lives of three men. One is a married Muslim. His young nephew, the second man, has a degree but cannot find a job and is becoming an extremist out of anger, disillusionment and boredom. The third man is a friend who had left Mombasa but has returned to be a community police officer. The nephew perceives him to be an outsider and loathes him for it.

The primary theme of the movie is the radicalization of Kenya's unemployed young adults. One unusual aspect of the film is how it ends: The last segment features scenes from an original stage performance of the script and audiences' reactions to it.

The production company had its beginnings in the 1970s with the University of Nairobi's Free Traveling Theatre. SAFE, now in its 14th year, uses the performing arts to tackle Kenyan society's problems and the need for change. *Watatu* premiered in Mombasa in June 2015.



WIKIMEDIA COMMONS

Japan to Help Tanzania Unclog Roads

THE CITIZEN, TANZANIA

There's a glimmer of hope at last for Dar es Salaam drivers: The Japanese government has donated \$13 million in a bid to reduce the city's traffic gridlocks. The money will be spent to build overpasses at key road junctions.

Minister for Works Dr. John Magufuli said the city was searching for an engineer for the project. "We expect that by mid-June we will have obtained an engineer from among the bidders," he said. "Our major aim is to end traffic jams in the city."

In the 2014-2015 budget, the Works Ministry will spend \$14 million on ending traffic jams in Dar es Salaam. The minister told Parliament in 2014 that at least 109 kilometers of the city's roads would be paved. The project, he said, would cover all feeder roads that could enable residents to reach their destinations without using main roads.

Another \$33.8 million will be spent on the interchange road project in Ubungu, a district in western Dar es Salaam.

A 2013 study by the *Journal of Management and Sustainability*, a Canadian publication, found that traffic jams in Dar es Salaam resulted in an economic loss of \$207.5 million annually. Those affected include the owners of commuter buses that must pay extra for fuel and employers who lose out on employee productivity due to long commutes.

Morocco Pledges Support to UAE in Anti-Terror Fight

ADF STAFF

Morocco has agreed to provide military, operational and intelligence support to the United Arab Emirates to help fight terrorism.

The announcement came during a visit by the crown prince of Abu Dhabi, Sheikh Mohammed bin Zayed Al Nahyan, in March 2015. It was one of the 21 bilateral deals expected to be signed during the visit, Agence France-Presse reported.

"This action, part of the tradition of successful partnership and strong solidarity between the two brotherly countries, reinforces a historic and multi-faceted military and security cooperation with Gulf States," Morocco's Ministry of Foreign Affairs said in a statement.

During his two-day visit to Morocco, the Emirati prince participated in ceremonies to open a hospital and a desalination plant. In 2011, the six-nation Gulf Cooperation Council, to which the UAE belongs, invited Morocco and Jordan to become members. Although that did not materialize, the GCC created a \$5 billion fund on behalf of the two countries, AFP reported.


The UAE, which contributed \$1.25 billion to that fund, said it had become the primary investor in the Casablanca stock market and that its investments in the country totaled \$1.3 billion, according to AFP.

Morocco stressed that there is a long history of cooperation between the two countries. "Hundreds of Moroccan Soldiers had, over several decades, been deployed on the UAE territory as part of their contributions to training and security of the Emirate of Abu Dhabi," the ministry said in a statement.



AFP/GETTY IMAGES

Moroccan King Mohammed VI, right, stands beside Sheikh Mohammed bin Zayed Al Nahyan, the crown prince of Abu Dhabi, during a welcome ceremony for the United Arab Emirates visitors at the Royal Palace in Casablanca on March 17, 2015.



Indian Prime Minister Narendra Modi unveils a plaque marking the opening of the Coastal Surveillance Radar station in the Seychelles.

INDIA MINISTRY OF EXTERNAL AFFAIRS

Seychelles, India Join Forces on Ocean Issues

SEYCHELLES NEWS AGENCY

When Indian Prime Minister Narendra Modi visited the Seychelles in March 2015, the two countries affirmed a partnership regarding maritime security and creating a “blue economy” where the ocean can be used to drive growth. Modi and Seychelles President James Michel signed four bilateral agreements, announced the donation of a surveillance aircraft to the Seychelles, and launched a new radar system.

In a ceremony in the mountainous region of Mahé, Modi officially switched on the Coastal Surveillance Radar, describing it as a symbol of the cooperation between the two countries. The Coastal Surveillance Radar project has been linked in the Indian media to an extensive regional surveillance system being installed in several Indian Ocean island states. The prime minister mentioned in his speech that he hoped the Seychelles soon would become a “full partner” in the maritime security cooperation among India, Maldives and Sri Lanka.

Modi also announced the upcoming donation of a second Dornier surveillance aircraft to the

Seychelles Coast Guard to increase maritime security. India gave the Seychelles a Dornier Do 228 in 2013.

“Our security partnership is strong. It has enabled us to fulfill our shared responsibility to advance maritime security in the region,” Modi said. “It is a privilege to be a partner of Seychelles in the development of its security capabilities.”

The two leaders also discussed blue economy cooperation, using the resources of the Indian Ocean, and announced the establishment of a joint working group to look for ways to cooperate in using marine resources sustainably. They announced that Seychelles citizens will be able to obtain three-month visas on arrival in India, and the two countries signed memorandums of understanding on issues including renewable energy and hydrography.

“This is an area that holds great promise for our nations,” Michel said. “The blue economy is all about ownership by regional states of the resources in our oceans around our islands and our coasts.”

ECOWAS Launches Maritime Center

ADF STAFF

The Economic Community of West African States (ECOWAS) inaugurated a new multinational maritime coordination center designed to monitor and prevent illicit activity at sea.

The program known as Pilot Zone E will coordinate joint activities among Benin, Niger, Nigeria and Togo, the Institute for Security Studies (ISS) reported. It will be headquartered in Cotonou, Benin, and the collaboration will include patrols, information sharing, training and drills. The center is part of the ECOWAS Integrated Maritime Strategy and will report to the Regional Maritime Security Coordination Centre of West Africa.

Other subregional zones have already been established, including Zone F, which is composed of Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Liberia and Sierra Leone; and Zone G, which is composed of Cape Verde, The Gambia, Guinea-Bissau, Mali and Senegal, ISS said. Although the zones have been established, host countries have not yet been selected for coordination centers.

"While piracy, armed robbery, illegal fishing, oil theft and other threats at sea are still far from being eradicated, these actions suggest that ECOWAS and its member states are serious about securing their maritime domains in a cooperative manner," wrote Barthelemy Blede, senior researcher at the ISS office in Dakar, Senegal. "Having said this, more work lies ahead for the ECOWAS Commission. It must now focus on finalizing its maritime security architecture."

Nigerian Navy boarding team members maintain security during a simulated hijacking scenario aboard the German Navy target vessel FGS Brandenburg.

SPC. RAUL PACHECO/
U.S. ARMY



Drones Protect Rhinos in Kruger National Park

DEFENCEWEB



UDS

A technician for UAV and Drone Solutions (UDS) controls a drone from a trailer. The technology is being used to stop and deter poachers in South Africa's Kruger National Park.

Unmanned aerial vehicles (UAVs) are flying hundreds of missions over South Africa's Kruger National Park as part of a yearlong project to gauge their effectiveness in combating rhino poaching.

The results so far have been positive. "By the end of the project, we will have a lot of information about the use of available technology in anti-poaching operations and be able to make informed decisions on what is best for our environment," said Kuseni Dlamini, chairman of the South Africa National Parks (SANParks) board.

A South African company, UAV and Drone Solutions (UDS), is flying the UAVs. After the yearlong evaluation is up, SANParks will decide whether to use them permanently. UDS said it is using about 10 UAVs, including battery- and petrol-powered drones. Some have fixed wings, and some are multirotor devices. The UAVs are locally assembled with components designed and built in South Africa.

NIGERIAN NAVY ADDS FOUR SHIPS

DEFENCEWEB

Nigeria commissioned four warships into service in February 2015, with two more to be commissioned before the end of the year. The vessels were handed over to their commanding officers at a ceremony at the Naval Dockyard at Victoria Island in Lagos. They are the NNS Centenary, NNS Prosperity, NNS Okpabana and NNS Sagbama, according to the News Agency of Nigeria.

The Nigerian Navy said it was the first time in its history that four warships would be commissioned at once. "It is a demonstration of the federal government's efforts to reposition the Nigerian Navy to meet contemporary security challenges," the Navy said in a statement.

The NNS Okpabana is the former United States

Coast Guard cutter Gallatin and will be used to patrol Nigeria's exclusive economic zone (EEZ). The vessel arrived in Nigeria on January 2, 2015, joining the Navy's other Hamilton-class cutter, the NNS Thunder.

The NNS Centenary is a new P-18N offshore patrol vessel built by China Shipbuilding and Offshore International Co. It arrived in Nigeria on February 6 and will be used for maritime surveillance, EEZ patrols, and protecting offshore resources and infrastructure, according to Vice Adm. Usman Jibrin, Nigeria's chief of naval staff. "The Centenary is to also provide aid to civil authority when called upon to do so in periods such as civil unrest and natural disaster," he said.

The NNS Sagbama is a 38-meter patrol craft. The NNS Prosperity is the former Irish offshore patrol vessel LE Emer, decommissioned in September 2013 and subsequently sold to Nigeria.

"The high dependence of the nation's economy on offshore resources, as well as the enormous potential of the maritime sector to contribute to our food security and employment generation, makes provision of effective maritime security very imperative," then-President Goodluck Jonathan said at the ceremony.

The former U.S. Coast Guard cutter Gallatin was transferred to the Nigerian Navy during a ceremony in Charleston, South Carolina, in the United States. The cutter was renamed the NNS Okpabana and commissioned in a ceremony in Nigeria.



In the future, UDS also will fly scale helicopters with a range of 50 kilometers and an endurance of 2.5 to 4 hours. Unmanned helicopters are more versatile than fixed-wing aircraft because they can take off and land vertically in thick bush, but they are far noisier than fixed-wing aircraft.

UDS said the aircraft of choice is an electric fixed-wing UAV with an endurance of 2.5 hours and a range of 30 kilometers. These are mostly flown at night with infrared cameras. The goal will be to fly low and slowly to find the poachers on the ground.

The aim of using UAVs to combat poaching is twofold: to catch poachers and to deter them from poaching. UDS said it hopes to make UAV technology user-friendly and affordable so it can be deployed across Africa to conservation hot spots to protect wildlife.



AFP/GETTY IMAGES



NIGHT BASKETBALL

Returns to Mogadishu

VOICE OF AMERICA

For the first time in decades, young basketball players in the Somali capital, Mogadishu, are holding tournaments at night thanks to improved security.

For years, warlords and terrorist groups denied young Somalis the ability to play sports. At the Wiish Stadium in Mogadishu, enthusiastic fans filled the capital's basketball court in April 2015 to witness a night sporting event — the first in two decades.

Before entry, guards frisked all the supporters to assure attendees, basketball players and officials the game would be secure.

Most of these young Somalis, born after the collapse of the government more than two decades ago, had never attended a night sports event. This is something the Somali Basketball Federation said is changing now after gains by African Union and Somali forces against al-Shabaab militants.

"Many challenges are facing the country, but security is improving compared to the previous years," said Hawa Sheikh Ahmed of the Somali Basketball Association. "Things are changing, and that's why we organized the events to take place at night."

Abdinassir Nur Gedi is a photojournalist who also plays basketball for a local Mogadishu team. He said

sports are the best way to unite people, and playing games at night will let more people come to the games after work.

"I am very happy we play at night," he said. "It promotes and encourages security. Young people, me included, come here every evening to watch teams compete instead of wasting time on other irrelevant things. When I come here to watch the games, I feel relaxed and happy that I didn't waste my time on other things."

Basketball is the most popular sport among university and high school students in the capital. Although each of the 16 districts in Mogadishu has a basketball court, most are dilapidated.

Somali Basketball Federation official Mustaf Abdiaiziz Mohamed said the group is working to change this, and night games will attract more support and let young Somalis be more competitive in international tournaments.

"It's historic for us because 25 years ago was the last time we witnessed games being played at night," he said. "Twenty-five years ago basketball was played at night just like it's always played in the other parts of the world. So our players will not have a hard time playing at night when they leave for tournaments abroad."

LIBERIAN LIFE RETURNS TO NORMAL AFTER EBOLA

VOICE OF AMERICA

At the height of the Ebola crisis in late 2014, social life in Liberia was at a standstill as people tried to avoid contact to keep themselves from catching the deadly virus.

But in March 2015, with the infection rate at zero for weeks, social life began returning to normal. Liberians were seen enjoying street food and sharing meals and drinks again. They crammed into public buses and cabs without worry. Popular beaches and nightclubs were again packed, and residents expressed satisfaction that social life had returned, even though the worries have not entirely faded.

"I think it is a time where we can come back and reflect and just enjoy the cool times we used to have with our friends out here," said Derrick Tamba, a 28-year-old beachgoer.

Residents also flocked to churches, where chlorine for disinfecting hands remained in buckets at entrances. With curfews being lifted, Liberians have resumed going out at night.



Ebola survivor Musa Pabai walks in a Valentine's Day parade for Ebola survivors in Monrovia, Liberia, on February 14, 2015. REUTERS

At the end of 2014, places like the Exodus Bar in central Monrovia would have been closed at 9 p.m. on a Saturday. Fast forward to a Saturday night in March 2015, and it was filled with people who stayed until the early morning.

"After Ebola has subsided in Liberia, normal activities resumed and the excitement was too high," said Isaiah Williams.

Ebola affected every aspect of social life, including relationships. Some patrons at the club said they still avoid shaking people's hands, a habit acquired during the outbreak.



Fifteen tons of elephant tusks are burned during an anti-poaching ceremony in Kenya in March 2015.

THE ASSOCIATED PRESS

ETHIOPIA, KENYA TORCH

TONS of IVORY

AGENCE FRANCE-PRESSE

Ethiopia set fire to a 6-ton pile of seized elephant ivory, the country's entire stock, vowing a zero-tolerance policy toward poachers and traffickers.

Burning the stock, which included huge tusks, elaborate carvings, necklaces and bracelets, came in March 2015, two weeks after neighboring Kenya took similar action aimed at demonstrating renewed commitment to protect Africa's iconic but dwindling elephant population.

"The message we're sending is that we have zero tolerance for poaching and illegal trafficking," said Dawud Mume Ali, director of the Ethiopian Wildlife Conservation Authority.

"We are trying to save the elephants from extinction. This is part of that. We have to act rather than talk."

Officials said the stock had been accumulated over the past 20 years and came from elephants slaughtered in Ethiopia or cargo seized at Addis Ababa's international airport. It represented

a black market value of roughly \$12 million.

Ethiopia's own elephant population has collapsed during that period, and the most recent estimate puts the population today at just 1,800 animals, with poaching driven mainly by demand in booming Asian economies, especially China. Some of the ivory burned included carvings of Buddha.

"From the 1980s, the elephant population in Ethiopia has decreased by 90 percent," said Zeleke Tigabe of the African Wildlife Foundation. "The Ethiopian Wildlife Authority is trying to minimize illegal poaching, but much has to be done."

Ian Craig of Stop Ivory said the aim of the ceremonial burnings was to devalue ivory publicly. "More and more African countries are recognizing that sitting on ivory stockpiles is not sitting on Fort Knox," he said. "We want it to have no value. To be worthless. This is just a piece of a dead body. This is not a piece of art."

Ethiopian Capital PLANS NEW AIR HUB

REUTERS

Ethiopia will complete expansion of the capital's airport in 2018 to triple the number of passengers it handles from 7 million a year now and will soon pick a site for a new hub to deal with 10 times the number in the future, a senior official said.

Bole International Airport, on the edge of Addis Ababa, is home to Ethiopian Airlines, the state-owned national carrier that is Africa's largest by revenue and profit.



An Ethiopian Airlines Boeing Dreamliner 787 lands at Bole International Airport in Addis Ababa, Ethiopia. THE ASSOCIATED PRESS

Less than a decade ago, the airport handled 1 million passengers a year, but that rose to 7 million in 2014. Officials expect it to climb by 18 percent a year in the next few years.

"We did not expect this growth to happen in eight years," Hailu Gebremariam, Ethiopian Airports Enterprise project manager for Bole, told Reuters. "That is why we are undertaking an expansion of the airport that will serve us for the next 15 years, with a capacity of about 20 million passengers a year."

Expansion work began in September 2014 at the airport, where passengers can face long lines at peak travel and transit times.

Ethiopia, with one of the fastest-growing economies in Africa, is looking at sites for a new international airport to serve up to 70 million a year, Hailu said. By comparison, Dubai International Airport, the world's biggest for passenger traffic, handled 70.5 million passengers in 2014.

The cost of such an airport could be \$2.5 billion to \$3 billion. Ethiopian Airlines has been rapidly expanding its fleet. It now has 77 aircraft, with 44 more on order.

EAST AFRICAN BUSINESS LEADERS OPTIMISTIC

THE CITIZEN, TANZANIA

Business executives in East Africa are optimistic about the regional economy despite insecurity in Kenya and weakening currencies, a survey indicates.

A global entrepreneur indicator survey conducted by Entrepreneur Organisation (EO), a network of more than 10,000 business owners, shows that 78 percent of entrepreneurs are willing to start a business under the current economic environment. The survey was released in April 2015.

The EO's founding president, Sriram Bharatam, attributed the results to the confidence and optimism that East African entrepreneurs and companies have developed over the years.

"In terms of business momentum, the indicators

show that East Africa will continue its rise as a leading force in the global economy," he said.

The survey covered 5,868 leading entrepreneurs in agriculture, construction, energy, hospitality, insurance, logistics, media, manufacturing, port handling, real estate, technology, telecoms and utility sectors.

The respondents, from 46 countries, all lead businesses with at least \$1 million in annual revenues. The survey indicated that 90 percent of the entrepreneurs remain positive, hoping to see an increase in revenue, compared with 81 percent globally.

A Kenyan man exchanges currency in Nairobi. Business leaders say that despite the region's weak currencies, the economic future of East Africa remains strong. THE ASSOCIATED PRESS



1,000 ENTREPRENEURS WIN GRANTS



Tony Elumelu
GETTY IMAGES

ADF STAFF

One thousand entrepreneurs representing 52 African countries are in the first class of winners of the Tony Elumelu Entrepreneurship Program.

The winners were announced in March 2015. The selection committee was made up of some of Africa's most successful business leaders. In all, 20,000 African entrepreneurs applied when the online application portal opened on January 1, 2015.

"Filling the form itself was an enlightening process that helped me see a lot of loopholes to eliminate from my business, and regardless of the outcome, I know that I am on track towards the achievement of my dream," applicant Obewe N told *Forbes* magazine.

According to the selection committee, the winning business plans represented a multitude of sectors, including education,

fashion, agriculture, and information and communications technology. Most of the winners came from Ghana, Kenya, Nigeria, South Africa and Uganda.

The 1,000 selected entrepreneurs will receive online training through the remainder of 2015. They also were scheduled to participate in a two-day entrepreneurship boot camp.

The program is backed by a \$100 million grant from the Tony Elumelu Foundation, a philanthropic organization that supports entrepreneurship in Africa. The foundation is solely funded by Elumelu, who made an estimated \$1 billion from banking, energy, investments and real estate, according to *Forbes'* ranking of Africa's 50 Richest People.

One goal of the program is to create 10,000 startup companies across Africa in the next 10 years.

TANZANIAN COMPANY *Champions Local Chocolate*

REUTERS

Jaki Kweka is that rare breed of gourmet chocolatier who makes fine chocolate in Tanzania using local ingredients.

Other African companies such as Ghana's Golden Tree use local cocoa but import milk powder and sugar. Multinationals such as Nestlé mass produce chocolate in South Africa for the continent's consumers and source ingredients globally.

But few companies match Kweka's ideal. She uses Tanzanian beans and local sugar to make organic chocolate that is 100 percent African. She packages her bars in recycled maize husks for extra authenticity.

Kweka's Chocolate Mamas is one of a handful of East African companies carving out a niche in the chocolate world and trying to reverse a trend that has led to the foreign domination of Africa's growing chocolate economy. Africa produces more than 70 percent of the world's cocoa, but the \$110 billion chocolate industry is

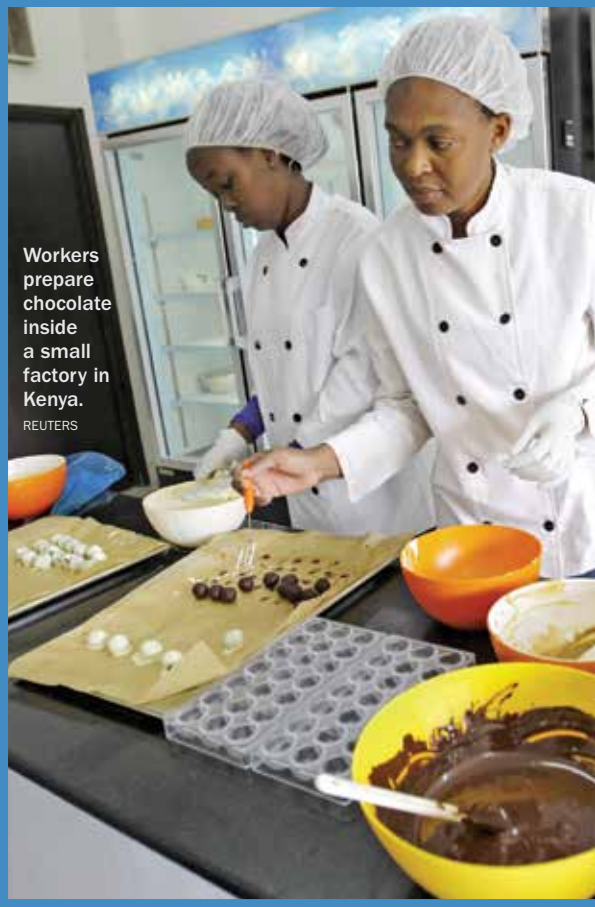
dominated by Western companies.

Top cocoa producers Côte d'Ivoire and Ghana lack dairy and sugar industries to compete with the main manufacturers. Cocoa is traded globally, so African bean growers don't have a competitive advantage when it comes to making chocolate.

Chocolate Mamas' dark and milk chocolate bars sell at premium prices in high-end shops and hotels in Dar es Salaam and Zanzibar. They have a devoted following among wealthy Tanzanians, expatriates and tourists.

The company launched in 2012. Kweka began using cocoa from small-scale farmers in southwestern Tanzania after seeing the price of importing baking chocolate from Europe. It took nine months of trial and error to perfect the recipes.

"We found out a lot of things, including that heat and humidity don't go very well with making chocolate," said Kweka, a lawyer turned pastry chef.



Workers prepare chocolate inside a small factory in Kenya.
REUTERS

Ethiopia's First Modern Ruler

TEWODROS II

ADF STAFF

When Emperor Tewodros II came to power in Ethiopia in 1855, the country had been fragmented for nearly a century. The central government had been abolished in 1769, and the country was divided into small kingdoms. In the country's history, that time is known as the "Era of Princes and Wealthy Feudal Lords," or *Zemene Mesafint*.

With an army he assembled, Tewodros conquered and reunified the splintered country. He took land from the princes and gave it to ordinary people. He paid his professional soldiers so they would not have to plunder to survive. He tried to abolish slavery and build a system of educated, salaried judges and governors. He attempted to organize his country around his government, instead of around the church. He even tried to tax the church.

But Tewodros proved to be a far better military man than a ruler, and in the end, his irrational behavior and vindictiveness were his downfall.

He was born Kasa Haylu about 1820. Although he was not of noble birth, he was the son of a chief. Some years after his father died, he became an outlaw for a time. He proved to be skillful with horses and spears, with a particular gift for military strategy, and he gradually established himself as a leader. In 1853, he gained fame by defeating a larger military force led by four regional commanders. Two years after that, he was crowned emperor.

Tewodros wanted his military to be modern and well-armed, and he began recruiting Westerners to help him with weapons.



EON IMAGES

He wrote a letter to Britain's Queen Victoria, offering his friendship and asking for her support. When he got no response, he was insulted and angry, and began to believe that Britain was collaborating with the Turks to overthrow him. In 1864, he took his revenge by arresting a British official and missionaries from Europe. He threw them in prison, where they remained for years.

He was no diplomat. He rejected all British attempts to have the prisoners released, and when British negotiators arrived, he imprisoned them as well. In 1867, the British government ordered him to release the prisoners or face the

consequences. He refused their demands, perhaps believing that a British invasion would force his rivals to unite behind him in facing down a common enemy.

The British, with 5,000 troops, faced Tewodros' forces on April 10, 1868, in a valley in the northern part of the country. It was an unfair fight. The British forces had cannons and modern rifles, and Tewodros' soldiers had swords and primitive muskets. Twenty British soldiers died, compared to the 2,200 Ethiopians slain. Two days later, when opposing forces charged his encampment, he killed himself.

Despite Tewodros' inability to sustain peace, Ethiopians today regard him as the man who restored their country and was its first modern ruler. His ideas for good governance were ultimately adopted by many of his successors. He is revered as a hero, despite his flaws.

WHERE AM I? 

CLUES

- 1. This rare major inland delta system does not flow into an ocean or sea.**
- 2. The site has about 600,000 hectares of permanent swamps and about 1.2 million hectares of seasonally flooded grassland.**
- 3. Wildlife here has adapted its growth and reproductive behavior to the arrival of floodwater during the dry winters.**
- 4. It is home to several endangered species, including the African wild dog, cheetah, lion, black rhinoceros and white rhinoceros.**

ANSWER: The Okavango Delta, Botswana

GETTY IMAGES

SHARE KNOWLEDGE

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