MEASURING MARITIME SECURITY IN THE WESTERN INDIAN OCEAN REGION

In January 2009 nine countries signed a new Djibouti Code of Conduct (DCoC) to coordinate efforts to combat piracy and armed robbery at sea in the Western Indian Ocean and the Gulf of Aden. Soon after, 11 more countries joined the agreement, which now includes every country along the Arabian Peninsula coast from Jordan to the United Arab Emirates; every country on Africa’s littoral from Egypt to South Africa; Ethiopia; and the island states of Comoros, Madagascar, Maldives, Mauritius, and Seychelles. France observes the DCoC and contributes to its implementation, as do several other states, the International Maritime Organization, and a civil society group called Friends of the DCoC.

The DCoC initially limited its scope to the suppression of piracy and armed robbery of ships.1 Signatories agreed to investigate and arrest persons suspected of piracy, interdict and seize suspicious vessels, rescue ships and persons subject to piracy, and conduct shared operations with other signatory countries. The Code of Conduct was designed to operate across four pillars which provide structures for communication, cooperation, and coordination. The four pillars include national and regional training, legislation enhancements, information-sharing (particularly around maritime domain awareness), and counter-piracy capacity improvements.

With piracy and armed robbery in sharp decline across the region, the DCoC signatories met again in January 2017 to expand the agreement via the Jeddah Amendment. Under the new agreement, the scope was broadened to address a wider range of maritime security issues, including human trafficking, maritime terrorism, and illegal, unreported, and unregulated (IUU) fishing. In addition, the Jeddah Amendment requires participants to foster growth of the blue economy through the development of official national strategies pertaining to shipping, seafaring, fisheries, tourism, stability, and sustainable food security.

Counter-piracy efforts were propelled by regular reporting of incidents and analyses of new and emerging trends. Reports from industry, member states, and global civil society helped to identify and validate several preventative measures that contributed to the reduction of piracy and armed robbery in the region, including increased shipping speeds, the use of armed security on vessels, and the creation of a transit corridor across the Gulf of Aden that is regularly patrolled by foreign navies.

Reporting on the expanded scope of maritime security threats can support the broader Jeddah Amendment in a similar way. To this end, Stable Seas created the...
Stable Seas Maritime Security Index to measure and map threats to maritime governance and the efforts of nations to counter these threats. This tool, which is now expanded to cover 70 countries across Africa and Asia, was designed to assist in the evaluation and implementation of regional maritime security strategies like the Jeddah-amended Djibouti Code of Conduct.

The Maritime Security Index uses many kinds of data, including surveys of military and civilian experts from around the world, to generate scores for nine maritime issue areas. These include the following.

- Three threats to Security at Sea: Piracy and Armed Robbery at Sea, Maritime Mixed Migration, and Illicit Trade
- Three measures of Economic Resilience: Coastal Welfare, Fisheries, and Blue Economy
- Three contributors to Good Governance: Rule of Law, International Cooperation, and Maritime Enforcement Capacity

Dozens of indicators are combined to create these scores, with each ranging from 0 (critical maritime security challenge) to 100 (exceptional area of strength). Stable Seas intends to work with its international networks to update these scores annually so that it may better track the progress that the DCoC and other multilateral institutions are making in the maritime domain.

The analysis that follows shows the importance of using inclusive and holistic approaches to improving maritime security through agreements like the DCoC. These themes are interrelated. Progress in some areas will generate progress in others, while weaknesses in an area like fisheries enforcement can strengthen the criminal networks that perpetuate other kinds of crimes. In this way, all of these issues are important and none can be addressed in isolation.

What follows is a detailed analysis of these nine issues in the regions covered by the Djibouti Code of Conduct. The next section, titled The Issues, provides briefs on all nine issues included in the index. The final section, titled Country Briefs, offers one-page assessments for each coastal member of the Djibouti Code of Conduct. Additional information is located at www.stableseas.org.

Overall, the members of the DCoC face diverse maritime security challenges. This group includes states with advanced economies and strong militaries, as well as states struggling with weak law enforcement capacity and myriad onshore threats to political and economic welfare. Together, however, DCoC countries outperform the broader membership of the African Union on eight of nine issue areas. These higher scores include the regional average for Piracy and Armed Robbery, which demonstrates the DCoC region’s capacity for successfully addressing critical maritime threats. With better data and tracking the DCoC can replicate this success against other challenges at sea.
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WHY THE BLUE ECONOMY MATTERS FOR MARITIME SECURITY

The Blue Economy is vital to the sustainable development of coastal economies, global food and energy security, and international commerce. The maritime transportation sector carries some 90 percent of the world’s international trade, and one billion people in developing countries depend on seafood as their primary source of animal protein.

However, the overexploitation of marine fisheries resources, the impacts of climate change, and maritime crimes such as IUU fishing and piracy and armed robbery at sea can threaten these industries and undermine coastal economies. These threats reduce coastal welfare and limit opportunities in legal maritime industries, which can push underemployed communities toward black markets and transnational maritime crime.

The list of countries performing well on this score includes Malaysia, which has world-class port facilities, abundant offshore oil wealth, a large fishing industry, and a booming tourism sector fueled by ecotourism, coral reef diving, and coastal resorts. The lowest scores went to countries that have not yet realized this kind of potential, in many cases due to some combination of poor natural-resource endowment and problematic political or economic conditions. Not all countries have deep-water harbors, offshore oil fields, and enticing beaches and dive sites. Even in places without these endowments, improved maritime transportation infrastructure and environmental protection can be critical to the creation of a diverse, resilient, and sustainable national economy.
The countries along the long coastline of East Africa have very diverse economies. Egypt stands out with a high Blue Economy score due to offshore natural resource wealth and its management of the Suez Canal, one of the world’s busiest and most geostrategic shipping chokepoints. Unsurprisingly, other strategically located countries like Djibouti (at the southern end the Red Sea) and South Africa (the Cape of Good Hope) also have some of the highest maritime transportation scores on the continent.

Many of the island nations in the Western Indian Ocean have strong tourism and fisheries sectors. The Seychelles and Mauritius, for example, host impressive and growing tourism industries that attract foreign visitors and sustainably promote the region’s clean beaches, unique flora and fauna, and world-class resorts.

Though offshore oil and gas production is limited in East Africa, several promising deposits line the coast. Somalia, Kenya, Madagascar, and South Africa are among the many East African countries working toward developing new offshore extractives infrastructure. But until these are developed, offshore oil and gas will not be a significant contributor to the region’s economy.

Elsewhere, development of the Blue Economy is a significant challenge. Somalia is not secure enough for major investments in coastal infrastructure. Though piracy in the region peaked almost a decade ago, the persistent reputation has deterred major coastal investments. Africa’s Red Sea coasts lack major hubs, as Sudan and Eritrea are both located far from the sea. Other countries struggle with balancing investment against growing foreign debt burdens.

Diverse economies along East Africa’s coastline feature strong tourism and fisheries sectors.

THE DEBT BURDEN OF RAPID BLUE ECONOMY DEVELOPMENT

Several African nations have taken on significant foreign debt to finance infrastructure projects, including major projects in the maritime sector. The projects promise to contribute to economic growth by facilitating trade and providing jobs. However, when it comes time to service those debts, governments that have depended upon foreign loans and whose budgets are tied up in recurrent expenditures, like paying military personnel or ensuring trash collection, may find themselves unable to pay back the loans. In this way, unsustainable investment in the Blue Economy could threaten to bring on future debt crises.

Economists note that China-funded projects around the Indian Ocean are not proving to be economically beneficial, as ports are being built far larger than current traffic demands. Consequently, these projects may not benefit recipient nations, but may instead saddle them with debt that will have to be paid through increased taxes, reduced services, or the transfer of assets to foreign lenders.
The Blue Economy of the Middle East and North Africa

The Blue Economy scores of North African countries are slightly above the continental average, though Morocco and Egypt stand out as being among Africa’s strongest Blue Economies. Morocco, in particular, excels due to having the highest tourism score on continental Africa, great maritime transportation infrastructure, and relatively low vulnerability to climate change. In fact, the Mediterranean coast is among Africa’s least climate-vulnerable regions.

The nature of the Blue Economy changes dramatically as one moves from west to east along the Mediterranean coast. While Morocco, Algeria, and Tunisia benefit from tourism and relatively sustainable industries like shipping, the eastern Mediterranean is much more reliant upon offshore oil and gas extraction. Libya, for example, has a Blue Economy that is nearly entirely dependent upon offshore oil and gas.

Oil and gas are also the most important contributors to the Blue Economy in much of the Middle East. Saudi Arabia, Qatar, the United Arab Emirates, and Iran are among the countries receiving the maximum score for offshore oil and gas. Many of these same countries also have excellent maritime transportation infrastructure, driven by the need to export these extractives and import foreign agriculture and consumer goods.

One area for potential improvement is coastal tourism. The Middle East is rich in historical attractions, beaches, and coral reefs, but political violence, corruption, and insular political systems that restrict foreign visitors obstruct the development of a foreign tourism sector. Countries scoring low on tourism include Yemen, Israel, the State of Palestine, Iraq, Iran, and Pakistan.

Oil and gas are the primary contributors to the Blue Economy in much of the Middle East and Eastern Mediterranean.

CLIMATE CHANGE AND THE BLUE ECONOMY OF THE MIDDLE EAST AND NORTH AFRICA

The MENA region, which is already among the world’s hottest areas, could suffer greatly from further climate-change–related increases in surface and sea temperatures. Investment in the Blue Economy could provide a solution. In coordination with the Food and Agriculture Organization, some countries in the region have invested in hydroponics, which is the practice of growing plants soil-free in water. This is critical for regional food security and climate adaptation because so much of this area suffers from nutrient-poor soil and food import dependence. Further investment in these technologies could create a new economic sector that could potentially address food insecurity and promote sustainable growth while also allowing countries to diversify their oil-based economies. Many countries face declining oil production, making this kind of experimentation all the more important.
Poor physical and economic security onshore can create the conditions illicit networks need to flourish. Alternatively, improved maritime security can reduce the risk of coastal insecurity.
COASTAL WELFARE
EAST AFRICA

The long coastline of East Africa includes vibrant port cities, remote stretches with rural populations, and concentrated political conflicts. As a result, conditions are highly variable along the coast and range from very high levels of physical and economic security in places like Réunion and Mauritius to exceedingly dangerous hotspots along the coasts of Somalia and Mozambique. Poverty, threats of physical violence, and the presence of radical non-state actors like al Shabaab give Somalia the lowest Coastal Welfare score out of the 70 countries in the region of study.

Because Somalia is relatively central to the East African coastline, sitting at the juncture of the Red Sea region and the Western Indian Ocean, poor coastal welfare in Somalia threatens maritime security in a number of proximate states. Illicit activities in southern Somalia affect neighboring Kenya, while transnational criminal networks operating in the north play a critical role in the conflict in Yemen across the Gulf of Aden. Poor maritime domain awareness in this area contributes to broader regional problems like smuggling and drug trafficking between South Asia and several East Africa ports.

Another hotspot that has seen an increase in coastal violence is northern Mozambique. Here, new violent non-state actors are emerging to challenge the government’s hold on this region, with one group going as far as to claim allegiance to the Islamic State. These groups’ activities are likely related to the growing shadow economy that has developed as a result of the transshipment of drugs, with opiates from South Asia being the most important of these illicit goods. This anecdote highlights the cyclical relationship between coastal welfare and maritime crimes; healthy and secure coasts are less likely to harbor transnational criminal networks, though the activities of these networks also undermine coastal economies and perpetuate poor maritime security.

HOMICIDE AND COASTAL VIOLENCE IN SOUTH AFRICA

South Africa has a well-developed economy relative to much of Africa and it does not face major political conflicts. However, not all violence is political in nature. South Africa’s 2018 homicide rate of 34 per 100,000 is among the highest in Africa. Much of this violence is concentrated in port cities. Cape Town is one of the most violent cities in the entire world, with a homicide rate of greater than 65 per 100,000; this represents a 20 percent increase in just five years. Durban also faces a homicide rate that exceeds the national average. Local experts attribute some of this violence to the use of these port cities as transshipment hubs in the global drug trade. This activity has enriched criminal enterprises in South Africa while also creating greater rates of drug use in port cities.
Coastal welfare in southwest Asia clusters around two extremes. In countries like Yemen, Syria, and Pakistan, major political conflicts have contributed to significant humanitarian crises that have undermined economic security and generated some of the world’s lowest scores on welfare measures like infant mortality rate and the Human Development Index. War is especially concentrated along the coast in Yemen, where major port cities like Aden and Hodeidah have become primary strategic objectives of that war’s many active combatants.

But elsewhere on the Middle East, coastal welfare is exceptional. Safe, prosperous, and modern cities can be found in Dubai, Abu Dhabi, and Doha. Oman, Kuwait, and Bahrain also score very high in coastal welfare, thanks to very high levels of economic development and economic security. To the west, Israel, Jordan, and Lebanon remain significantly safer and more prosperous than many of their neighbors.
Healthy fish stocks are critical to maritime security as the fisheries sector is vital to improving national economies, local livelihoods, and local food security.

In many developing countries, marine fisheries are essential for coastal livelihoods, especially for artisanal and small-scale fishers. Some countries, particularly in Southeast Asia, also have large industrial fleets that make fisheries a critical contributor to their national economies. However, fisheries resources are rapidly declining across the globe, and in many regions fisheries resources are poorly managed. Declining catches create incentives for illegal and/or unsustainable practices, which can range from fishing in closed areas to using illegal gear or even using forced labor at sea to offset declining revenue. Thus, healthy fish stocks are critical to maritime security as the fisheries sector is vital to improving national economies, local livelihoods, and local food security.

This year, countries with large and productive fisheries sectors earned high Fisheries scores, including South Africa and the Philippines. Notably, both countries also work to conserve fragile marine ecosystems by creating marine protected areas. Countries receiving weak scores included countries with immature fisheries sectors, lax regulations, and pollution. The Democratic Republic of the Congo received the lowest score in Africa, and Cambodia received the lowest score in Asia. As fish, pollution, and vessels operating illegally can all cross national maritime boundaries, it is vital for the future health and productivity of marine fisheries that large regions of countries receive high Fisheries scores.
The Western Indian Ocean produces nearly 20 percent of the global tuna catch and its waters are home to other important highly migratory fish stocks like swordfish, marlin, and sailfish. The oceanographic connections between national waters result in economic and security connections between nations. The Western Indian Ocean Marine Science Association (WIOMSA) is a member-driven organization that brings together 9 WIO nations to support scientific collaboration and regional approaches to understanding overfishing, the Blue Economy, maritime insecurity, climate change, and other global issues. WIOMSA supports the development of students and young professionals in order to grow scientific capacity in the region. Such apolitical networks strengthen relations between nations and are critical for a comprehensive and informed approach to fisheries management.
North African countries generally received moderate Fisheries scores, though each country along Africa’s northern coast faces a unique set of fisheries challenges. Our measure for overall fisheries health is highest in Morocco and drops as one moves from west to east along the southern Mediterranean. However, Morocco has the lowest score for participation in regional fisheries management organizations and has weaker domestic fisheries legislation than its neighbors.

There is also substantial variation in Fisheries scores in the Middle East, which tend to be lower than those in North Africa. Syria, Oman, Iran, and the United Arab Emirates obtained the highest scores in this area, whereas Iraq, Jordan, Lebanon, and Saudi Arabia were among the countries scoring much lower.

Closer scrutiny of these scores reveals that domestic fisheries legislation is weak across the Arabian Peninsula and especially weak in Jordan and Lebanon. Only Syria, Iran, Pakistan, and Oman participate in all of the region’s relevant RFMOs. The United Arab Emirates is the only country in this area with significant marine protected areas, while in the eastern Mediterranean, Syria, Lebanon, Israel, and Gaza have high levels of marine pollution.

Taken together, one can understand the Middle East and North Africa as a region endowed with rich fish stocks and insufficient efforts to protect these stocks. Generally speaking, strong indicators for fisheries productivity combined with weak indicators for fisheries regulation and protection suggest that this valuable natural resource is under threat.

**The Middle East and North Africa, as a region, are endowed with rich fish stocks and insufficient efforts to protect these stocks.**

Yemeni fishers in the port city of Hodeidah are caught in the deadly crossfire of a conflict that has lasted for years and made millions of Yemenis vulnerable to starvation and violence. The warring parties have been engaged in a long fight for Hodeidah, a crucial port for humanitarian assistance and other goods entering northern Yemen. These dire circumstances force hundreds of thousands of fishers to brave the warzone in the water in an attempt to feed their families. While on the sea, they have to remain vigilant for both the Saudi-backed coalition, who may mistake them for smugglers, and for the Houthis, who may rob and kill them. In several instances, pro-government gunships have targeted fishing vessels suspected of carrying arms into the country.
Countries can take part in the illicit economy in several ways: as a source country, a transit country, and as a destination country. Illicit trades can be defined as any commerce taking place outside of the confines of the formal economy, including the sale of illegal products, or licit items traded illegally. On a global scale, frequently traded illicit items include drugs, wildlife products, and arms, as well as various other kinds of contraband, though certain regions are hotspots for specific products. Illicit products move across national borders by land, air, and sea to reach destination markets across the globe. Shipping containers are seldom inspected at port, presenting a convenient and cost-effective mode of transport and making maritime routes a favorite for traffickers.

WHY ILLICIT TRADES MATTER FOR MARITIME SECURITY

Countries can take part in the illicit economy in several ways: as an illicit product’s source-country or place of origin, such as rhino horn from South Africa; as transit countries that products pass through as part of their journey, such as heroin originating in Pakistan traveling through Mozambique before going onward to target markets in Europe or North America; and finally, as destination countries, where a market exists for a specific product, such as the illegal resale of arms to insurgent groups in conflict zones.

The illicit economy presents myriad challenges to the global community. The most obvious challenge is that the illicit sale of legitimate products circumvents the formal economy, thus bypassing import and export regulations and undermining authorized dealers of such commodities. More alarming and nefarious impacts of the illicit economy are also evident, however. Rates of drug use in source, transit, and destination markets increase with accessibility. An escalation in illegal poaching of vulnerable species including pangolins, elephants, rhinos, and tigers occurs in order to meet global demand for wildlife products. And finally, the global flow of weapons to non-state actors with violent objectives fuels conflicts in unstable regions.

Countries can take part in the illicit economy in several ways: as a source country, a transit country, and as a destination country.
The total amount of illicit goods traded through the Western Indian Ocean is difficult to accurately measure; however, the World Drug Report 2019 published by the United Nations assumes transit points in eastern and southern Africa are critical for heroin coming from Afghanistan along the Southern Route. Originating in Pakistan, heroin lands in coastal Kenya, Tanzania, Mozambique, and South Africa before traveling by land or air routes to key markets in Europe.

Tramadol, a new synthetic opioid manufactured almost exclusively in India, is shipped through the Mozambique Channel en route to Nigeria. Another synthetic drug, Captagon, is manufactured in Syria and Iraq before traveling by sea to Sudan. Cocaine transited through Brazil lands in South Africa before traversing the African continent on its way to Europe and the Middle East. And despite noticeable efforts to curb cannabis production and distribution in the Western Indian Ocean region, it remains pervasive and is grown and traded in every country.

Wildlife, too, is trafficked throughout the Western Indian Ocean region. Illegal fauna from the African savanna, including Serengeti National Park in Tanzania, is trafficked by air, by land, or by sea to buyers in the Middle East and Asia. Certain products, such as rhino horn and pangolin scales, are purchased for their purported health benefits in traditional Chinese medicine, while others, like trinkets made of elephant ivory, serve as exotic symbols of wealth and status.

American firearms being used for poaching in Mozambique suggests there is a broad arms-trade network. Government officials have been implicated in some of these networks, notably in Tanzania. Weapons supplied to warring factions in Yemen also make their way across the Red Sea into the Horn of Africa, often through Djibouti.

Transit points in eastern and southern Africa are critical for the trafficking of illicit products including heroin, Tramadol, cocaine, wildlife, and arms.
The maritime routes used by traffickers to transport drugs, arms, and wildlife products are extensive across the Middle East and North Africa region. Maritime routes through the Persian Gulf and the Mediterranean and Red seas provide ample opportunities for moving illicit goods at sea.

Illegal arms trading is prevalent here because the region currently hosts major arms suppliers, such as Iran, as well as active conflict zones in Yemen, Libya, Syria, and elsewhere. Waterways through this region, including the Red Sea and Gulf of Oman, link Middle Eastern weapons suppliers with more distant illicit arms markets in Somalia, Djibouti, and Yemen.

Some Middle Eastern countries are increasingly important hubs in the illicit trade in wildlife products; however, much of this traffic moves by air. For example, a very well-known trade in exotic animals exists in several wealthy countries on the Arabian Peninsula. There is limited reporting of these species moving by sea and most evidence instead suggests entry through the region’s major international airports.

Much of the synthetic drug trade in the MENA region revolves around the highly addictive amphetamine Fenethylline (better known by the brand name Captagon). According to the United Nations Office on Drugs and Crime, Jordan, Lebanon, and Syria are critical transit and distribution points for Captagon, and Saudi Arabia represents a major market for the drug. Elsewhere, northwestern African countries like Morocco, Algeria, and Tunisia are transshipment points for cocaine in transit between South America and European consumer markets. Cannabis and hashish are also widely trafficked at sea. Despite many countries in the region imposing severe penalties for drug-related crimes, the MENA region serves as a major origin, transit, and destination market for illicit drugs.

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In the Middle East, the extensive network of air and sea routes within the United Arab Emirates has facilitated its growth into a regional transit point for illicit drug trafficking. Dubai, the country’s largest city, sees substantial drug smuggling activity, much of which occurs inside Dubai’s extensive port system. Reflecting broader trends in the region, the most frequently trafficked drugs in the UAE are Captagon, hashish, cocaine, and other kinds of methamphetamines. In 2018, for example, Dubai law enforcement authorities seized a cocaine shipment totaling 13 kilograms at port, and in 2019, authorities intercepted a ship carrying approximately 800,000 Captagon pills. Dubai Customs announced that it had stopped 421 drug trafficking attempts in the first three months of 2019 alone.
WHY INTERNATIONAL COOPERATION MATTERS FOR MARITIME SECURITY

Coastal waters are critical boundary zones that separate sovereign territory from other countries and the high seas. To govern these frontiers effectively, states must cooperate through the international maritime laws that outline how to settle maritime claims and disputes and provide mechanisms for managing offshore economic resources. Failure to comply and cooperate with neighbors can exacerbate problems like illegal fishing while also weakening maritime law enforcement and enabling those looking to operate illegally.

Fortunately, nearly all of the countries included in the region of study participate in legal frameworks like UNCLOS, the United Nations Conventions on Transnational Organized Crime (Palermo Convention), and the UN Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (Vienna Convention). Each has been signed, ratified, or acceded to by more than 95 percent of the 70 included countries. However, participation in fisheries agreements like the Port State Measures Agreement (PSMA), remains weak. As of July 2019, less than half of these countries are party to the PSMA.

Ghana, Mozambique, Namibia, Oman, Senegal, Seychelles, and Sri Lanka, earned perfect International Cooperation scores this year. Several others received low scores, in part because 33 of the 70 countries have ongoing maritime boundary disputes or make territorial claims that exceed UNCLOS guidelines.

Cooperation between neighboring coastal nations is key to enforcing maritime laws.
In January 2017, the member states of the Djibouti Code of Conduct met to expand the scope of the agreement beyond counter-piracy operations through what is now called the Jeddah Amendment. This agreement, which also includes many countries on the Red Sea and around the Arabian Peninsula, is providing an institutional architecture for sharing maritime domain awareness information, which should help members counter maritime trafficking, IUU fishing, and maritime terrorism. As the threat of piracy has waned, these other threats have started to attract much-needed attention from maritime enforcement authorities. One issue that is quickly replacing piracy as a primary threat in the Western Indian Ocean region is the increased smuggling of drugs from South Asia to unsecured ports in South Africa, Mozambique, Tanzania, and Kenya.

Piracy off the coast of Somalia, which declined precipitously after 2012, provided the impetus for the creation of several productive international institutions related to maritime security issues, including the Contact Group for Piracy off the Coast of Somalia and the Djibouti Code of Conduct.

There have been positive signs for international cooperation in this region, where many longstanding maritime disputes are progressing toward resolution. For example, the recent political and economic opening of Eritrea has brought new opportunities for cooperation to the Red Sea region. Elsewhere, Kenya and Somalia are resolving their maritime dispute at the International Court of Justice. To the south, the International Court of Justice issued its opinion on the longstanding dispute between Mauritius and the United Kingdom over the Chagos Archipelago. The court stated that the United Kingdom did not remove the indigenous population of the archipelago in accordance with international law and that the United Kingdom should therefore return the islands to Mauritius. However, this legal opinion has yet to change possession of the archipelago.

In the coming years, international cooperation in East Africa will continue to be driven by established regional information-sharing hubs, including the Regional Maritime Information Fusion Center in Madagascar and the Regional Centre for Operational Coordination in the Seychelles. These centers help countries keep abreast of events in the region and coordinate responses to regional maritime issues. As the Djibouti Code of Conduct progresses toward full implementation, additional regional centers may be constructed to better facilitate coordinated responses among the members of that institution.

International cooperation is trending positively in East Africa. Several productive international institutions exist, and many longstanding maritime disputes are progressing towards resolution.

**EMERGING REGIONAL MARITIME SECURITY INSTITUTIONS IN EAST AFRICA**

In January 2017, the member states of the Djibouti Code of Conduct met to expand the scope of the agreement beyond counter-piracy operations through what is now called the Jeddah Amendment. This agreement, which also includes many countries on the Red Sea and around the Arabian Peninsula, is providing an institutional architecture for sharing maritime domain awareness information, which should help members counter maritime trafficking, IUU fishing, and maritime terrorism. As the threat of piracy has waned, these other threats have started to attract much-needed attention from maritime enforcement authorities. One issue that is quickly replacing piracy as a primary threat in the Western Indian Ocean region is the increased smuggling of drugs from South Asia to unsecured ports in South Africa, Mozambique, Tanzania, and Kenya.
Countries in North Africa receive above-average scores for International Cooperation, due in part to strong norms of maritime cooperation in the Mediterranean region. Algeria, Tunisia, and Libya have no maritime boundary disputes and work closely with European partners on the opposite side of the Mediterranean. Morocco and Egypt do have minor maritime disputes with their respective neighbors, though these countries are also parties to a greater share of the international maritime legal frameworks assessed as part of the International Cooperation score.

There is much more variation in scores in the Middle East. Oman stands out as the only country in this region to obtain a perfect International Cooperation score, which it achieved by being a party to all eight international maritime legal frameworks and by resolving maritime boundaries with neighbors. Notably, Oman has earned this score while occupying very strategic and contentious waterways and also participating in regional frameworks like the Djibouti Code of Conduct. At the other extreme, Israel has the lowest score of any country covered by this version of the Maritime Security Index due to its multiple maritime disputes with neighbors and its absence from agreements including UNCLOS and the FAO Port State Measures Agreement.

Further maritime security cooperation in the Middle East is threatened by increasing geopolitical tensions in a few hotspots. These include the Gulf of Oman, where Saudi–Irani tensions have led to the targeting of commercial vessels; the Gulf of Aden, where Yemen’s civil war is spilling over into critical shipping lanes; and the Eastern Mediterranean, where an effective sea blockade of Gaza has challenged international maritime law and imposed poor economic conditions on the Gazan population.
Maritime domain awareness (MDA) is vital for maritime security, but must be coupled with enforcement capacity to deter illegal activities. Good maritime governance is not possible without navies and coast guards that have the capacity to monitor territorial waters and exclusive economic zones. Where states are up to this task, smugglers and traffickers cannot operate freely and fisheries laws are enforceable. However, inadequate capacity to govern the maritime space can hamper a country’s efforts to regulate maritime activity and render any maritime legislation effectively irrelevant. Poor capacity in this area provides tempting opportunities for those who seek to profit from the absence of real enforcement of maritime law.

### Why Maritime Enforcement Capacity Matters for Maritime Security

Effective maritime enforcement capacity begins with strong maritime domain awareness (MDA), defined as the ability to gather, process, analyze, and share real-time information about what is occurring at sea. This capacity is vital for promoting marine safety, responding to vessels in distress, stopping illegal activity, tracking at-sea transshipments, and protecting waters from illegal incursions by foreign vessels. Few countries have the full array of satellites, coastal radar stations, high-speed patrol vessels, sophisticated ship registries, and aircraft that comprise a well-developed MDA system. Instead, most countries must rely on multilateral information-sharing and strategic geographic areas of focus to generate an understanding of activities in their waters.

MDA is complex and expensive, yet insufficient on its own. Knowledge of illegal activity at sea is less valuable if states do not have the vessels, trained crews, and funds to quickly respond to concerning or suspicious incidents in real-time. Navies and coast guards, and in some countries distinct agencies focused on fishing and customs, share the responsibility to intervene and apprehend. Deterrence of illegal activities cannot occur without adequate investment in both MDA and enforcement capacity. Countries with both of these capacities are in a better position to attract investment in offshore and coastal Blue Economy industries, including shipping and tourism.

Maritime domain awareness (MDA) is vital for maritime security, but must be coupled with enforcement capacity to deter illegal activities.
The EEZs off the coast of East Africa are vast, and maritime enforcement is complicated by several unresolved maritime disputes among neighbors in the region.

SOMALIA’S CONTRIBUTION TO COUNTER-PIRACY EFFORTS

Since the height of Somalia’s piracy crisis a decade ago, international navies have patrolled Somali waters and shipping companies have implemented self-protection measures like hiring private armed guards, increasing shipping speeds, and wrapping their decks in razor wire. Stable Seas’ annual State of Maritime Piracy report finds that these kinds of measures have been very effective; reported incidents of piracy and armed robbery in Somalia have fallen sharply since 2012.

Somalia’s role in reducing the local threat of piracy and armed robbery at sea is sometimes overlooked. Concurrent to international patrols and private measures, Somalia has worked with international partners to expand regional maritime enforcement capabilities and formalize judicial procedures for prosecuting alleged pirates. These efforts are important because although piracy attacks have declined, many of the root drivers of piracy and armed robbery remain in place along the Somali coast.

MARITIME ENFORCEMENT CAPACITY | EAST AFRICA

With few exceptions, the exclusive economic zones off the coast of East Africa are vast, and maritime enforcement is complicated by several unresolved maritime disputes among neighbors in the region. Few countries have adequate resources, and this weakens their ability to deter illegal fishing, trafficking, and piracy, all of which are or have recently been pressing maritime security threats in the Western Indian Ocean. Due to this area’s geostrategic location, maritime enforcement authorities are also challenged by the illegal activities of criminals from distant regions, including Asian fishing fleets and Middle Eastern traffickers.

In response to difficulties like these, several Western Indian Ocean nations have developed regional information-sharing platforms. For example, the Seychelles is home to the Regional Centre for Operational Coordination and Madagascar hosts the Regional Maritime Information Fusion Centre. These platforms help Indian Ocean nations identify real-time threats and coordinate responses to transnational maritime issues. Importantly, some efforts are also including non-African actors. These include the Indian Ocean Rim Association, the Indian Ocean Commission, and the Djibouti Code of Conduct.

Over the last several years, many international partners have worked with East African countries to fill the void in maritime enforcement capacity. Much of this assistance was motivated by the piracy crisis occurring off the coast of Somalia in the beginning of the 2010s. Japan, India, the United States, China, and the European Union are among the many global partners who have worked in East Africa to strengthen counter-piracy efforts and escort vulnerable commercial vessels through the region. These measures have proven successful, as incidents of piracy and armed robbery have fallen sharply over the last few years.
With the exception of Libya, North African countries score well in Maritime Enforcement Capacity. Egypt received the highest score in the region, with Morocco, Algeria, and Tunisia close behind. Egypt has a strong and well-equipped navy and, according to the most recent Military Balance report, the most coastal patrol vessels in North Africa. Tunisia stands out in North Africa as having the maritime space that is the least difficult to govern due to a clear delineation of maritime boundaries and a relatively small EEZ.

In the Middle East, Maritime Enforcement Capacity scores are relatively high, with the exception of Yemen. Standouts include Saudi Arabia, Israel, the United Arab Emirates, and Iran, all of which have modern navies with the ability to project force at sea. Due to the number of small seas and gulfs in this area, even the smaller countries have sufficient resources to provide maritime law enforcement within their relatively small EEZs.

However, common problems also undermine maritime enforcement capacity in this region. Several Middle Eastern countries are involved in maritime boundary disputes with neighboring countries, and this complicates maritime enforcement efforts. A number of countries dispute their maritime borders with more than one of their neighbors, including Israel, Iran, and Saudi Arabia. Additionally, while naval capacity remains generally high throughout the Middle East, geopolitical rivalry has meant that some states make greater investments in force-projecting vessels rather than the small high-speed coastal patrol craft that are better suited for inspections and maritime law enforcement.

In 2017 the Combined Maritime Forces, a Bahrain-based naval coalition involving the United States Fifth Fleet and 32 other nations, established a Maritime Security Transit Corridor (MSTC) through the Gulf of Aden consisting of two one-way shipping lanes separated by a 0.5-nautical-mile buffer. This corridor allows international navies to concentrate their counter-piracy efforts on a very narrow slice of the region, thus enabling safer passage through one of the world’s busiest shipping chokepoints. Similar transit corridors exist in other dangerous waters, including near the Philippines’ Sulu Archipelago.

The Maritime Security Transit Corridor stretches approximately 800 miles from the Hanish Islands in the southern Red Sea through the Bab el-Mandab Strait and east across the Gulf of Aden toward the Socotra Islands. In doing so, it passes through nearly all of Yemen’s busy exclusive economic zone. Yemen does not have the maritime enforcement capacity to monitor and patrol this large space and international resources are limited, making the MSTC an important tool for protecting global trade and the safety of seafarers.
Experts in human security have long realized the complex nature of activities like human smuggling, human trafficking, slavery, economic migration, asylum-seeking, and the global illicit sex trade. Individual migrants who leave their home countries for economic opportunities elsewhere may find themselves both voluntarily paying smugglers and involuntarily paying bribes and ransoms before they reach their destinations. Others will never arrive, and will instead endure long periods of forced labor or subjugation to sex traffickers. Some will see their families divided among transnational criminal networks that exploit vulnerable migrants.

Migrants traversing the sea often have unsafe vessels and untrained crews, ambiguous legal protections, and heightened vulnerability to being forced into slavery or sex trafficking. Beyond the immediate threat of possibly capsizing and drowning, migrants far from shore can be trafficked because they are at the mercy of their smugglers. In some regions, the primary trafficking threats include sale into sex trades in coastal cities and ports. In others, men and boys are sold to corrupt fishing crews who then force them into years of slavery at sea. Near conflict zones, economic migrants who voluntarily pay smugglers may find themselves targeted by warring parties, finding out that their vessels are also carrying drugs and arms to be used to support one of the fighting factions.

Following the lead of the International Organization for Migration, we describe these activities as mixed migration, and further describe the presence of these activities at sea and in ports as maritime mixed migration.
Comoros struggles with maritime mixed migration due to its proximity to Mayotte, which is a major regional destination for economic migrants. Comoros is also situated at the northern entrance to the Mozambique Channel, which migrants from East and Central Africa use to reach work opportunities in South Africa.

Geography makes this island country an appealing transit point, yet to date government efforts to counter trafficking have not adequately addressed the problem. The United States Trafficking in Persons Report (2019) rates Comoros at “Tier 3,” which is the lowest rating of any country in the southwest Indian Ocean. Recent research on this problem indicates that trafficking and exploitation of children is especially common in Comoros.
Maritime mixed migration across the Middle East and North Africa has attracted global attention over the last decade due to unprecedented waves of migrants and refugees crossing waterways to escape conflicts in several major conflict zones. No other region is experiencing the number of severe maritime humanitarian crises seen across the MENA region over the last several years.

North Africa continues to be a major departure point for African migrants bound for Europe, but the escalation of violent political conflict and anarchy in Libya and the Sahel has made this route increasingly dangerous over the last decade. Now, embedded transnational human trafficking and smuggling networks take migrants and refugees across the Sahara toward the Libyan coast, where they then wait to be smuggled into Europe. Many never reach Europe, and are instead trafficked into forced labor or sexual exploitation while in Libya.

Migrant and refugee deaths have been more widely reported—including the broadly circulated photographs published in late 2015—which has drawn increasing international attention to maritime migration in the Eastern Mediterranean. Many of these migrants and refugees left Syria bound for Greece and other European destinations. This route is seeing fewer migrants now following greater cooperation between Turkey and the European Union.

The Bab al-Mandab Strait separating eastern Africa from the Arabian Peninsula continues to see high rates of maritime mixed migration in both directions. People from countries like Ethiopia, Djibouti, and Eritrea cross the strait into Yemen in order to reach Gulf countries like Saudi Arabia and the United Arab Emirates. However, Yemenis fleeing violence in their home country also cross the strait into Africa.

The MENA region has seen unprecedented waves of migrants and refugees crossing waterways to escape conflict over the last decade.

**THE LIBYAN COAST GUARD**

The Libyan Coast Guard, which receives training and funding from the European Union, has been intercepting migrant boats at sea and returning migrants to detention centers in the Tripoli area. Conditions in Libya’s migrant detention centers are abysmal, raising questions about whether these centers qualify under international law as places of safety for disembarkation. Detainees are at constant risk of violence, and bombings have become a regular occurrence. In July 2019, for example, an airstrike at the Tajoura detention center killed over 50 people. Torture, sexual assault, and human trafficking are also rampant in the centers and the UN has called for their closure. Despite these dangers, disembarkation in Libya has been popular with European policymakers eager to curb their migrant and refugee populations.
Piracy and armed robbery at sea incur substantial financial costs, but also severe physical, mental, and emotional tolls of the victims and their family members. While the average hostage situation lasts a few weeks, captors can be extremely violent to captive crew. Many hostages have endured years in captivity before their release, and some hostages are never released—they are killed during the initial attack or rescue attempt, succumb to illness during captivity, or, in the worst case scenario, are killed at the hands of their captors. There are financial implications, as well. Often seafarers are the primary breadwinners for their families; during captivity, many do not even receive payment. Worse yet, trauma keeps some seafarers from returning to life at sea.

Piracy is formally defined as any unlawful act or threat of violence, detention, or theft for financial or material gain by the crew or passengers of a ship directed against another ship or persons or property on board a ship outside the jurisdiction of the territorial waters of a state. Such acts committed in territorial waters, usually within 12 nautical miles (nm) measured from the coast, are legally defined as acts of armed robbery. Stable Seas identified 48 incidents of piracy and 256 of armed robbery worldwide in 2018.
Although no vessels were hijacked for ransom in the Western Indian Ocean region in 2018, pirate groups maintain the capability to launch attacks. Weak economic conditions and political instability create an environment for continuing coastal violence and crime networks, particularly in Somalia.

The primary explanations for this lack of kidnappings for ransom in Somalia include the continued presence of foreign navies, arrests of accused pirates, the efforts of private security teams onboard vessels transiting the High Risk Area, and the adherence of crews to industry-developed Best Management Practices. On land, the development of local institutions and marine forces, capacity-building efforts by international stakeholders, and changing attitudes among elders and local authorities who no longer enable pirate operations in their communities all contributed to the low number of incidents of piracy.

One of the three failed incidents of piracy off Somalia and Yemen in 2018 was repelled by the onboard security team present when armed men attacked the bulk carrier KSL Sydney while it was underway off Mogadishu on 16 October 2018. One robbery and one attempted robbery were reported at Nacala Port and Anchorage in Mozambique in 2018.

Suspicious approaches in this area are often not linked to piracy, but rather associated with the conflict in Yemen, fishing vessels operating in the area, and smuggling activity. A mortar attack from land off Baraawe, Somalia, on the landing craft Alpha Kirawira on 22 July 2018 was attributed to Al Shabaab, as they maintained a presence in the Lower Shabelle region. Two attacks on fishing vessels southwest of Mogadishu on 3 and 17 April 2019 are also most likely attributed to Al Shabaab.

Somalia has worked with international partners to stop piracy and armed robbery by improving the legal and physical infrastructure needed to detain and lawfully prosecute alleged pirates who are captured. Working together with neighbors including the Seychelles and international organizations such as the UN Office on Drugs and Crime allowed for the transfer of captured persons to nearby countries while Somalia works on improving its prisons and legal procedures.

In practice, this kind of cooperation has been mostly positive, though it has not occurred without some regional discord. For example, many international partners criticized a decision by Somali authorities to release 19 convicted pirates early in 2019. The pirates had been convicted in the Seychelles and sentenced to more than 30 years in prison. This example illustrates some of the benefits of international cooperation around legal solutions to transnational maritime crime while also highlighting the challenges of transferring sovereignty and jurisdiction over these crimes.
PIRACY AND ARMED ROBBERY
MIDDLE EAST & NORTH AFRICA

Piracy and armed robberies of vessels are not common in North Africa. Two robberies on yachts were reported in North Africa in 2018: one at anchorage in Arrecife in Lanzarote, Canary Islands, and the other at berth in Spanish Puerto Noray, Melilla. In the first case, two dinghies were stolen and in the latter case, crew possessions were taken.

Piracy is a more significant concern around the Arabian Peninsula, though incidents have declined sharply since 2012. Several violent incidents occurred off Yemen in 2018, but do not meet the legal definitions of piracy and are better classified as acts of or attempts at maritime terrorism. These incidents included missile attacks against oil tankers flagged to parties in the Yemen war, such as Saudi Arabia. Vessels in Yemeni waters have also been threatened by sea mines, remote-controlled waterborne improvised explosive devices (WBIEDs), and attacks by Houthi militia members in skiffs. Vessels calling at Yemeni ports, including aid vessels sent by the World Food Programme, have also been targeted.

Three very large crude carriers (VLCCs) were attacked off Hodeidah in 2018. In April, the *Abqaiq* sustained minor damage when it was hit by a projectile southwest of the port of Hodeidah. In July, two Saudi-flagged VLCCs came under attack by Houthi militia off the same port. One of the two vessels, the VLCC *Arsan*, carrying two million barrels of oil, sustained damage after it was hit on the stern above the waterline.

*Piracy is more of a concern in the Arabian peninsula than Northern Africa, though incidents have declined sharply since 2012.*

On 27 March 2019 the Turkish-flagged tanker *Elhiblu 1* was underway to Libya when a European aircraft monitoring the Mediterranean Sea requested rescue assistance from it for more than 100 migrants onboard two rubber boats who were deemed "in mortal danger." Upon their rescue, *Elhiblu 1* continued to its destination port of Tripoli in Libya. While the migrants had no weapons, they threatened the crew and effectively forced the captain to instead chart a route north towards Europe. A patrol vessel stopped the tanker from entering Maltese territorial waters and a special operations team boarded and took control of the vessel. Italy labeled the incident an act of piracy on the high seas, while humanitarian groups continue to insist that the migrants are victims. This incident illustrates how complicated classifying and prosecuting maritime security incidents can be under current international laws.
WHY RULE OF LAW MATTERS FOR MARITIME SECURITY

The Rule of Law score measures five conditions that prevent the policies crafted by governing authorities from being executed as intended in coastal and offshore areas: 1) corruption, 2) inefficiency, 3) ineffectiveness, 4) poor judicial integrity, and 5) political exclusion. Each of these conditions can hamper a government’s ability to improve maritime security through lawmaking and law enforcement.

Corruption, for example, invites trafficking and smuggling through a nation’s ports. Even the best foreign trade and customs policies are quickly undermined if port administrators can be bribed or coerced. This is one reason that the World Bank finds trading across borders to be significantly less efficient where governments are more widely perceived to be corrupt.

Port corruption is especially threatening in Africa and Asia because a large share of regional trade passes through a small number of major seaports. The concentration of goods in these seaports makes them economic chokepoints at which port administrators are uniquely positioned to demand bribes, permit illicit economic activity, and undermine good governance.

To effectively fight corruption and curtail bribe-seeking, states can review their bureaucracies and eliminate points where these activities are most likely to occur. Seaports should be a focal point in this search.
Rule of Law scores in East Africa generally improve heading north to south, with South Africa, Réunion, Mauritius, Mayotte, and the Seychelles outperforming most other states in the region. In the northern part of East Africa, Somalia, Sudan, Eritrea, and Egypt all lag behind regional averages. Many components of the Rule of Law score follow this general pattern, including Transparency International’s assessment of corruption perceptions and the World Bank’s evaluation of the ease with which transnational businesses can trade across borders.

However, it would be an oversimplification to state that rule of law universally improves from north to south. Djibouti has a score that is approximately equal to those of Madagascar and Tanzania. Eritrea has one of the lowest scores in the region this year, but political change in that country signals that the rule of law is likely to rapidly improve. Neighboring Sudan also saw political instability that could very well generate a new government with a deeper commitment to the rule of law.

Meanwhile, the rule of law is being challenged along the southwest Indian Ocean coastline. A well-documented increase in illicit drug and wildlife trafficking in Mozambique and Tanzania could undermine local authorities while enriching transnational criminal networks and criminal organizations. These groups include a new Mozambique-based jihadist organization that claims an affiliation with the Islamic State. South Africa is the most economically developed country in the region, yet the eastern port city of Durban is an important hub in the global drug trade and suffers relatively high levels of crime.

**HOW PORT INVESTMENTS CAN REDUCE CORRUPTION**

Links between port access and political corruption have begun to unravel in East African countries like Tanzania. Dar es Salaam, Tanzania’s largest maritime port, provides critical access to transportation and economic ventures that coastal and inland communities rely on for survival. Tanzania approved extensive upgrades to Dar es Salaam to increase port efficiency and port security in September 2014. Recent improvements include implementing the Tanzania Customs Integrated System (TANCIS) to reduce import and export times and improve system efficiency. Further progress has stalled due to various anti-corruption scandals plaguing Tanzanian officials from the energy sector to the Port Authority head responsible for updating Dar es Salaam. Led by President John Magufuli, Tanzania has advanced anti-corruption initiatives that aim to eliminate corrupt practices and officials within the country, indicating initial positive strides toward advancing the rule of law in the maritime space.
Rule of Law scores vary widely in North Africa, with Tunisia and Morocco among the top performers in the region while Libya and Egypt fare much worse. These scores reflect the very different conditions that exist along different parts of the southern Mediterranean coastline.

Libya does not have a single government with the capacity to oversee the entire coastline, but it is also perceived as having the greatest problem with corruption, according to Transparency International. Its score for government efficacy is also among the worst on the continent. Egypt’s overall Rule of Law score is not much better, though conditions there are much different. The World Bank finds that Egypt and Algeria have the region’s lowest marks for ease of trading across borders, indicating inefficient port processes and unnecessary red tape that hinder the shipping sector while also creating ideal conditions for corruption and bribe-seeking.

In the Middle East, Yemen and Syria received the lowest Rule of Law scores due to the ongoing violent conflicts and lack of stable government in both countries. Several stable countries, including Saudi Arabia and Oman, perform well in some areas of Rule of Law, yet face low marks for political inclusion. Meanwhile, Israel, the United Arab Emirates, and Jordan score relatively well.

Perhaps the strongest component of the rule of law in this region is judicial integrity. Across much of the Arabian Peninsula, experts perceive the judiciary to be relatively free of corruption and bribe-seeking. Scores for judicial integrity are especially high in Saudi Arabia, Oman, the United Arab Emirates, Jordan, and Qatar. A strong judiciary is necessary for the proper trial and prosecution of maritime crimes, including piracy and trafficking.

Judicial integrity was almost uniformly the strongest component of the rule of law across the Middle East and North Africa.

Researchers sometimes conflate a strong rule of law with liberal democratic political processes, but in the maritime domain the most important aspects of the rule of law relate to governance at major seaports. Many nondemocratic countries in this region receive poor political inclusion scores, yet have strong rule of law scores due to the professionalization of port administrators and the integrity of customs and judicial systems. Data from the Stable Seas Maritime Security Index confirm that sound processes at seaports dissuade illicit maritime crime and that a strong rule of law can contribute to a secure maritime environment, regardless of political regime type. Political inclusion is important, as excluded groups are more likely to turn to black market economic activity that can undermine the legal economy. However, open and inclusive societies must also prioritize corruption-free and efficient commerce in major seaports.
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The Comoros islands sit in the strategically significant Mozambique Channel between Madagascar and Mozambique. Comoros formally declared independence from France in 1975, and continues to protest France’s claim to neighboring island Mayotte. Despite its legal independence, Comoros relies heavily on France for economic opportunities. France remains the largest buyer of Comoros’ ylang-ylang cash crop, and in 2006 France was accountable for 42 percent of Comoros’ exports and 39 percent of imports.

**GOOD GOVERNANCE:**

**VIOLATIONS AND DISPUTES ALONG WITH SEVERELY UNDERDEVELOPED MARITIME ENFORCEMENT GREATLY UNDERMINE COMOROS’ GOOD GOVERNANCE.** Since Comoros’ independence from France in 1975, it has disputed France’s continued claim to the neighboring Mayotte archipelago. Mayotte protestors have sought help from French authorities to curb and remove illegal migrants from Comoros that they perceive are degrading Mayotte’s economy, public health, and level of crime. The Comorian Coast Guard currently lacks sufficient vessels and personnel to monitor its complex maritime environment for piracy, illicit trade, and human trafficking, but in October 2019, Comoros signed an agreement with India to cooperate on maritime security.

**ECONOMIC RESILIENCE:**

Comoros’ economic resilience fares comparably with that of its neighbors Mozambique and Madagascar. The gravest threats include **SEVERELY LIMITED PORT TRANSPORTATION, INSUFFICIENTLY LEGISLATED FISHERIES, AND HIGH POLLUTION IN ITS MARITIME DOMAIN.** Comoros has only two ports, despite over 99 percent of products traveling to and from Comoros being transported by sea.

**SECURITY AT SEA:**

**HIGH POVERTY RATES, SPARSE HEALTHCARE FACILITIES, AND INADEQUATE EDUCATIONAL OPPORTUNITIES LEAD MANY COMORIANS TO ATTEMPT TO MIGRATE** from Comoros to the nearby French territory island, Mayotte. Comorian child migrants become particularly vulnerable to various types of trafficking along the journey and upon reaching Mayotte. The Comorian government has not yet signed the Protocol to Prevent, Suppress and Punish Trafficking in Persons. Additionally, Comoros is located on the infamous “Southern Route” for opiate trafficking, and as such, ranks 69th out of 70 countries for its illicit opiates trade and 68th for overall illicit trade, greatly damaging its safety.
The small but strategically located country of Djibouti sits at the meeting point of the Red Sea and Gulf of Aden, where fewer than 32 kilometers of open water separate Africa from the Arabian Peninsula. Djibouti has one of the best natural harbors in East Africa, making it an ideal base for foreign military installations. China, Japan, the United States, and France are among the many global powers with a presence here. Djibouti’s ports serve as primary points of commerce for Ethiopia and the greater Horn of Africa region.

**GOOD GOVERNANCE:**

Djibouti has a small coastal patrol fleet and its waters are overwhelmed by foreign vessels transiting the Red Sea and the Gulf of Aden. However, **DJIBOUTI LEADS MULTILATERAL MARITIME SECURITY EFFORTS** by hosting regional meetings and trainings, and is the namesake of the Djibouti Code of Conduct, the primary maritime security strategy for Western Indian Ocean states.

**ECONOMIC RESILIENCE:**

**DJIBOUTI IS A MAJOR SHIPPING HUB FOR EAST AFRICA, AND MUCH OF ITS BLUE ECONOMY DEPENDS ON ITS CLOSE RELATIONSHIP WITH ETHIOPIA,** whose massive regional economy has been landlocked since Eritrea's secession in the early 1990s. Large foreign investments in Djibouti’s ports have given it the fourth-highest score for maritime transportation infrastructure in Africa, following only Egypt, Morocco, and South Africa.

**SECURITY AT SEA:**

Before 2012, Djibouti was at the center of the piracy crisis in the Western Indian Ocean. Thanks in part to Djibouti’s leadership of regional counter-piracy efforts, this threat subsided, but has been replaced by new maritime security threats. **THE NEARBY WAR IN YEMEN HAS RAISED FEARS OF MARITIME TERRORISM IN THE BAB-EL-MANDEB STRAIT.** Djibouti has also become a major hub for mixed maritime migration for those in transit between East Africa and the Arabian Peninsula.
Egypt occupies the northeastern corner of Africa and has long coastlines along both the Mediterranean and Red Seas. Center of this stretch is defined by Egypt’s most important geographic feature: the Suez Canal which provides the most efficient shipping route between Europe and Asia. Egypt is a critical global shipping hub, but is also a key transcontinental transit point for trafficking goods, migrants from Eastern Africa, and victims of international human trafficking.

GOOD GOVERNANCE:
EGYPT’S WELL-DEVELOPED NAVY IS THE STRONGEST IN NORTH AFRICA and increasing naval capacity has been a high priority of the al-Sisi administration. Egypt recently acquired modern naval weaponry from foreign partners including France, the United States, and Russia. The Egyptian fleet is widely considered to be fully capable of projecting force on both of its strategic fronts simultaneously.

ECONOMIC RESILIENCE:
Egypt has a STRONG AND DIVERSE BLUE ECONOMY, WITH STRENGTHS IN GLOBAL SHIPPING CONNECTIVITY AND OFFSHORE OIL AND GAS. However, its coastal tourism sector has been especially hard-hit following mass-casualty bombings targeting Sinai tourists in the mid-2000s and the downing of a commercial flight over the Sinai Peninsula in October 2015.

SECURITY AT SEA:
EGYPTIAN WATERS ARE FREE FROM PIRACY AND ARMED ROBBERY. Though some terrorist plots have targeted the Suez Canal, including an alleged Muslim Brotherhood plot in the summer of 2015, Egypt has prevented a major attack in this strategic waterway.
Like much of the Red Sea coast, the shores of Eritrea are primarily rural and remote. Economic investment has been impeded by the two decades of isolationism that have resulted from its secession from Ethiopia and the application of United Nations sanctions. However, recent diplomatic efforts are promising new opportunities for economic and political integration. If these efforts continue, Eritrea could quickly develop to be an active participant in Red Sea regional maritime security strategy and a regional hub for maritime commerce.

GOOD GOVERNANCE:
Until recently, Eritrea had earned a reputation for being among the most isolated and repressive countries in Africa. Of the 70 countries covered in this year’s Maritime Security Index, ERITREA RANKS 68TH IN INTERNATIONAL COOPERATION, 66TH IN RULE OF LAW, AND 64TH FOR POLITICAL INCLUSION. However, these numbers overlook major reforms in Eritrean foreign policy. In 2018 the United Nations lifted an arms embargo, and Eritrea has since normalized relations with Djibouti, signed a peace agreement with Ethiopia, and secured major investments from foreign economic powers such as Russia and China.

ECONOMIC RESILIENCE:
Eritrea has one of the poorest populations in Africa. POVERTY, MANDATORY MILITARY SERVICE, AND REPRESSION DRIVE ONE OF THE WORLD’S HIGHEST EMIGRATION RATES. Decades of political isolationism mean Eritrea’s port infrastructure is underdeveloped and its fisheries are not well-managed.

SECURITY AT SEA:
Due to Eritrea’s isolation, there is little evidence of major illicit trading networks running through it. However, Eritrea’s very high emigration rate—the UN estimates more than 10 percent of the country’s population has sought refuge elsewhere—and close proximity to the war in Yemen make it ONE OF THE WORLD’S HOTSPOTS FOR MARITIME MIXED MIGRATION. Weak domestic legislation makes migrants transiting near Eritrea exceptionally vulnerable to forced labor or sex trafficking.

GOOD GOVERNANCE SCORES
Higher Scores Indicate Stronger Governance

ECONOMIC RESILIENCE SCORES
Higher Scores Indicate More Resilient Economies

SECURITY AT SEA SCORES
Higher Scores Indicate More Secure Waters
GOOD GOVERNANCE:
The Royal Jordanian Naval Force (RJNF) maintains limited capabilities to operate in the Gulf of Aqaba and the Red Sea. Recent acquisitions from the United States of two Response Boat—Mediums (RB-Ms) should help Jordanian forces perform security, search and rescue, and drug interdiction operations. In August 2019, the RJNF assumed command of the CTF 152 task force coordinating maritime security operations in the Arabian Gulf.

ECONOMIC RESILIENCE:
Jordan has one of the smallest economies in the Middle East and relies heavily on energy imports. Ranked well below the regional average in Blue Economy and Fisheries, Jordan lacks industrial fishing capability and has lackluster fisheries legislation. Artisanal operations must sell catches immediately upon reaching land because there are no cold storage facilities; however, King Abdullah II has recently expressed interest in expanding the Port of Aqaba’s commercial capacity with the creation of the Aqaba Special Economic Zone (ASEZ).

SECURITY AT SEA:
Jordan’s location and small coastline have insulated it from piracy. Despite the UN’s 1967 West Bank resolution, large numbers of Palestinians reside in the country. Refugees fleeing the Syrian civil war have migrated to Jordan and remained there, or traveled dangerous maritime routes in hopes of reaching Africa or Europe. The United Nations has documented cases of Syrian women and children fleeing violence being forced into marriage or trafficked for labor or sex.
GOOD GOVERNANCE:

The International Court of Justice is set to review the Kenya–Somalia maritime boundary dispute in November 2019. On September 27, 2019, Somali officials committed to comply with any ICJ ruling. **KENYA’S PROXIMITY TO SOMALIA HAD PUSHED THE KENYAN NAVY TO INCREASE ITS ROLE IN PATROLLING MARITIME TERRITORY and protect commercial vessels and foreign tourist cruise ships at the height of piracy activity in the Western Indian Ocean in order to directly engage the threat.**

ECONOMIC RESILIENCE:

**KENYA’S COASTAL AND MARINE ECOSYSTEMS ARE VULNERABLE TO THE EFFECTS OF CLIMATE CHANGE,** particularly its mangroves, coral reefs, and fisheries. Fisheries are also susceptible to illegal, unreported, and unregulated (IUU) fishing, but recent legislation, including the Fisheries Management and Development Act of 2016, points to official commitment to target illegal and unsustainable fishing.

SECURITY AT SEA:

**KENYA HOSTS HIGH NUMBERS OF REFUGEES FROM SOMALIA, SOUTH SUDAN, ETHIOPIA, BURUNDI, AND OTHERS.** These vulnerable populations are frequently victims of human trafficking as they remain in the country or attempt to traverse dangerous maritime routes to reach distant destinations. The illicit trade in arms continues to plague Kenya’s maritime and internal safety. Authorities seized and burned a cache estimated to be 5,250 illegal firearms during enforcement raids in 2016, but Kenyan forces face a constant battle to disable the arms trade.
GOOD GOVERNANCE:

MADAGASCAR IS A REGIONAL LEADER IN SOME ASPECTS OF GOOD GOVERNANCE. It is a party to most relevant international maritime legal frameworks and also receives very high marks for its inclusive political system. However, Madagascar scores poorly in Maritime Enforcement. The country’s maritime enforcement authorities are challenged by a vast maritime domain and multiple maritime boundary disputes. Madagascar also has more coastline than any other African nation.

ECONOMIC RESILIENCE:

Madagascar ranks poorly in Coastal Welfare and Blue Economy, in part because of the economic vulnerability of the country’s coastal populations. MADAGASCAR IS ESPECIALLY SUSCEPTIBLE TO CLIMATE-CHANGE–INDUCED VULNERABILITY. Its fisheries are among the most threatened in the Indian Ocean; Madagascar ranks 67th of 70 countries in fisheries health. Improving fisheries health would likely improve the Blue Economy and, in turn, coastal economic welfare.

SECURITY AT SEA:

Piracy is suppressed in the Mozambique Channel, but ILLICIT TRADES REMAIN PREVALENT IN MALAGASY WATERS. Survey respondents indicate severe levels of illicit trade in arms, cannabis, cocaine, and wildlife. Madagascar remains a hotspot for lemur, reptile, and bird trafficking. President Rajoelina has expressed the political will to work to preserve Madagascar’s biodiversity and wildlife, though this will be a challenge without stronger maritime domain awareness.
The Maldives is a nation comprised of over 1,000 islands in the Indian Ocean. Known for its pristine beaches, Maldives has developed a robust coastal tourism sector, which accounts for much of the nation’s gross domestic product. The most populous island in Maldives, called Malé, supports approximately a quarter of the national population and is the governmental and commercial anchor of the country. The nation’s largest port is located in Malé and is administered by the government-owned entity Maldives Ports Limited.

GOOD GOVERNANCE:
MALDIVES WOULD BENEFIT FROM INCREASING ITS RULE OF LAW RANKING. By focusing on inclusion, judicial integrity, and corruption in government procedures, Maldives could more effectively address pressing economic and environmental issues threatening the country’s stability, like rising sea levels. Maldives has long advocated for international collaboration on issues like the environment and has signed all international maritime agreements except for the United Nations Food and Agricultural Organization Port State Measures Agreement.

ECONOMIC RESILIENCE:
Maldives ranks well in Blue Economy, especially in the tourism sector. The sandy beaches and tropical climate create the ideal environment for attracting foreign tourists. EROSION AND FLOODING, HOWEVER, THREATEN BOTH THE TOURISM INDUSTRY AND THE LIVELIHOODS OF LOCALS dependent on coastal resources. Maldives has implemented several measures to reduce flooding, emphasizing wetland and mangrove conservation efforts, but the threat remains.

SECURITY AT SEA:
Although Maldives ranks above average for Illicit Trade, the country’s deep-sea port is used by illicit actors as a transit point for smuggling drugs, including opium and cocaine, between the Middle East and Asia. BY INCREASING PORT SECURITY AND LAW ENFORCEMENT, MALDIVES CAN DISRUPT REGIONAL DRUG-TRAFFICKING ROUTES and contribute to safety at sea in its surrounding waters.
A former British island colony, Mauritius gained independence in 1968 and has displayed steady economic dependence on sugar, tourism, and an expanding fish-processing industry. Mauritius’ 1.9-square-kilometer EEZ is rich in aquaculture and marine ecosystems, but proves difficult to patrol and protect against unregulated migration, illicit trafficking patterns, and illegal fishing practices.

**GOOD GOVERNANCE:**

**MAURITIUS POSSESSES NO REGULAR MILITARY FORCES.** Instead, the nation relies on the National Coast Guard, a branch of the Mauritius Police Force, for maritime security. Coast guard capabilities are growing, including with the recent purchase of the CGS Valiant patrol vessel in 2017. The patrol vessel will serve as a force multiplier in conjunction with ten interceptors, Dornier maritime surveillance aircraft, and two Chetak helicopters. Mauritius has ongoing disputes with Seychelles over the Chagos Islands and the French-administered Tromelin Island.

**ECONOMIC RESILIENCE:**

**MAURITIUS LACKS HEALTH-ADJUSTED NET SAVINGS (ANS), RANKING 130TH IN THE WORLD** and the 29th lowest of all African nations. Economic resilience is further dampened by unsustainable fishing practices by foreign fishing vessels that exploit Mauritius’ territory in the absence of meaningful legislation.

**SAFETY AT SEA:**

**MAURITIUS HAS LARGELY ELIMINATED PIRACY IN ITS MARITIME DOMAIN,** and is one of the few countries that have signed agreements with the European Union and the United Kingdom to accept piracy trials. In 2011 Mauritius passed the Piracy and Maritime Violence Act, which has served as a deterrent. Mauritius continues to suffer from forced labor and human trafficking as migrants enter the country seeking economic opportunities. Currently Mauritius occupies Tier 2 on the Watch List according to the Trafficking in Persons report, but as recently as 2019 the government has expressed will to enact change by implementing a 24-hour hotline to assist with preventing human trafficking.
Mayotte, a French-administered island located in the strategic Mozambique Channel, separated from the Comoros archipelago in 1975. Since 2009, France has recognized Mayotte as an overseas department governed by the same laws as the French mainland. Despite this relationship to France, Mayotte is a predominantly Muslim country and only about half the population speaks or reads French.

**GOOD GOVERNANCE:**

Mayotte residents voted in 1975 to remain a part of France as Comoros gained independence. As recently as April 2018, Comoros has continued to dispute France’s claim to Mayotte and seeks to reintegrate the island back into Comoros’ sovereignty. **MAYOTTE CONTINUES TO EXPRESS DESIRE TO STAY INTEGRATED WITH FRANCE AMID GROWING UNREST AMONG LOCAL POPULATIONS FRUSTRATED WITH ECONOMIC DECLINE AND INCREASED ILLEGAL IMMIGRATION BY COMORIANS.**

**ECONOMIC RESILIENCE:**

**THE BIGGEST THREATS TO ECONOMIC RESILIENCE IN MAYOTTE INCLUDE INADEQUATE TRANSPORTATION AND AN INCURSION OF FOREIGN FISHING.** For both categories, Mayotte ranks 69th out of 70 countries in the Maritime Security Index. The Longoni Port Community, the smaller of Mayotte’s ports, signed a contract in 2011 with French port developer MGI to upgrade to a “Smart Port” system. The transition is due to take place in December 2019, allowing Mayotte to employ automated port technology to improve port efficiency.

**SECURITY AT SEA:**

**RECENT UNREST WITHIN MAYOTTE HAS TARGETED FRENCH AUTHORITIES FOR INEFFECTIVE MARITIME ENFORCEMENT** aimed at combating piracy and for the illicit cannabis trade between Mayotte, Madagascar, and the African mainland. As the region faces economic challenges, more Comorians have illegally migrated to Mayotte seeking greater opportunity. The population influx from illicit maritime routes has put increased strain on Mayotte’s safety and stability.
Mozambique oversees an expansive EEZ and East Africa’s largest Indian Ocean coastline. Mozambique is a key hub for the illicit trade in cannabis and has experienced an influx of migrants from northern countries seeking refuge in South Africa. The country’s fledgling navy lacks the capabilities to patrol the vast territory, but recent vessel donations from France and India point to maritime security growth and improvement in detection and prevention of illicit activities in Mozambican waters.

**GOOD GOVERNANCE:**

**MOZAMBIQUE’S SEVERELY UNDERDEVELOPED NAVY POSES A SUBSTANTIAL CHALLENGE** to maritime enforcement in the country’s EEZ and along its coast. As recently as 2016, Mozambique’s navy purchased three new interceptors from France to improve the navy’s capabilities in anti-piracy, anti-trafficking, and anti-terrorism operations and protecting new offshore oil and natural gas repositories.

**ECONOMIC RESILIENCE:**

**MOZAMBIQUE’S FISHERIES ARE IN POOR HEALTH,** but recent legislation, low levels of foreign fishing, and presence of regional fisheries management organizations reflect a commitment to economic and sustainability improvements. Coastal communities along Mozambique’s vast coast remain vulnerable to climate change with increasing sea levels, more frequent flooding, and increasing extreme weather events like Cyclone Idai in March 2019.

**SECURITY AT SEA:**

**MOZAMBIQUE TRAILS FAR BEHIND EASTERN AFRICA IN ILLICIT TRADE MEASURES,** ranking 70th out of 70 countries in cannabis trade and 69th in illicit opiates and synthetic drugs trade. The nation’s location along the “Southern Route” from the Middle East to markets in South Africa and beyond provides a natural hub for illicit drug trades and illegally poached ivory products. Destruction resulting from environmental disasters such as the recent cyclones have heightened human trafficking as traffickers capitalize on opportunities caused by economic distress and orphaned or separated children.
GOOD GOVERNANCE:
OMAN HAS THE STRONGEST INTERNATIONAL COOPERATION SCORE IN THE MIDDLE EAST, being a party to major international legal frameworks and an active participant in regional arrangements like the Djibouti Code of Conduct. However, Oman’s EEZ is also very large and these busy waters see abundant legal and illegal shipping traffic. Omani authorities frequently seize illegal shipments of drugs transiting across the Gulf of Oman.

ECONOMIC RESILIENCE:
Oman enjoys a thriving economy and exceptional scores for Coastal Welfare (5th of 70 countries), fisheries health (11th), pollution (5th), and maritime transportation infrastructure (18th). THIS DIVERSIFIED BLUE ECONOMY IS ONE OF THE STRONGEST IN THE MIDDLE EAST. One area for improvement, however, is domestic fisheries legislation. Oman has healthy and productive fisheries, but domestic laws for protecting those fisheries are weak relative to other Indian Ocean countries.

SECURITY AT SEA:
OMAN’S MOST PRESSING MARITIME SECURITY THREAT IS THE ESCALATION OF GEOPOLITICAL TENSIONS INVOLVING IRAN and the security repercussions of those tensions on maritime commerce in the Strait of Hormuz and the Gulf of Oman. An incident in this area would quickly propel Oman to the center of any international efforts to secure the Strait of Hormuz.
Réunion is a small overseas department of France located east of Madagascar in the Western Indian Ocean. France legally governs the island, provides essential economic support, and is responsible for land and maritime defense of the island. Réunion’s strategic location provides France a constant military presence in the Indian Ocean in close proximity to East Africa’s coast.

**GOOD GOVERNANCE:**

**DESPITE RÉUNION’S SMALL SIZE AND REMOTE LOCATION, IT MAINTAINS ADEQUATE MARITIME ENFORCEMENT CAPABILITY.** The island houses France’s naval base, Pointe des Galets, which hosts three patrol vessels, a transport ship, and a single frigate. The Yellow Jacket (“Gilets Jaunes”) protest movement on mainland France reached Réunion in November 2018 as local residents expressed anger at increased fuel costs.

**ECONOMIC RESILIENCE:**

**FRANCE RECENTLY CONTRACTED TWO PRIVATE COMPANIES TO AID RÉUNION IN COMBATING ILLEGAL FISHING AND DRUG TRAFFICKING, WHICH HAS YET TO YIELD RESULTS.** Réunion’s primary economic industries include sugarcane production, fishing, and tourism. As a result of these industries and its relationship to France, Réunion’s economic resilience and coastal welfare outscore those of other nations in eastern Africa.

**SECURITY AT SEA:**

**RÉUNION SURPASSES MOST COUNTRIES IN EASTERN AFRICA ON PIRACY AND ARMED ROBBERY, ILLICIT TRADE, AND MARITIME MIXED MIGRATION.** Moderate amounts of cannabis are grown illegally on the island and then consumed by domestic populations or shipped through illicit maritime routes to the neighboring island of Mauritius.
SAUDI ARABIA | 2019 MARITIME SECURITY INDEX

Saudi Arabia occupies most of the Arabian Peninsula and borders both the Red Sea and the Persian Gulf. Mecca, near the country’s western Red Sea coast, is a significant pilgrimage destination for Muslims. On the eastern gulf coast, Dammam and Dhahran are instrumental in Saudi Arabia’s lucrative oil industry. Saudi Arabia has a large and capable navy that must divide its efforts between these two strategic bodies of water.

GOOD GOVERNANCE:

SAUDI ARABIA HAS ONE OF THE STRONGEST MILITARIES IN THE MIDDLE EAST and is also a leading party in regional maritime security strategies. For example, Saudi Arabia has hosted many meetings on the Djibouti Code of Conduct, which was amended in the Saudi port city of Jeddah in 2017 to expand counter-piracy efforts to address a broad range of illicit maritime activities in the Western Indian Ocean.

ECONOMIC RESILIENCE:

THE SAUDI ECONOMY IS STRONG, THOUGH IT IS LARGELY DEPENDENT UPON OIL WEALTH. Of the 70 countries included in this year’s release, Saudi Arabia ranks 3rd in coastal economic welfare and 7th in Blue Economy. These scores could be further improved with better fisheries management (rank: 52nd) and development of the coastal tourism sector (rank: 20th).

SECURITY AT SEA:

SAUDI TANKERS ARE THREATENED by the possibility of a reemergence of piracy in the Gulf of Aden and the continuation of the Houthi insurgency in Yemen. The Houthis, in particular, have turned to the sea to target Saudi-flagged tankers, since the Houthis currently have no capacity to infiltrate Saudi Arabia by land. Saudi Arabia is also a destination for trafficked wildlife products and migrants traveling from East Africa.
The sparsely populated islands of the Seychelles support a booming tourism industry—one of the most important sectors of the overall economy. Seychelles also relies heavily on fishing, both for subsistence and export, with artisanal and foreign vessels harvesting species of tuna, swordfish, and lobster. Its expansive EEZ and remote location leaves Seychelles vulnerable to maritime threats; at the peak of piracy in the Western Indian Ocean, both the tourism and fishing industries suffered losses. As a result, Seychelles was one of several regional countries to bolster court systems specifically for piracy and maritime crime trials.

**GOOD GOVERNANCE:**

AUTHORITIES IN SEYCHELLES FACE MULTIPLE CHALLENGES TO MARITIME ENFORCEMENT, INCLUDING GEOGRAPHIC COMPLEXITY, VESSEL AVAILABILITY, AND NAVAL CAPACITY. Countries invested in the strategic maritime resilience of Seychelles have donated patrol vessels to the Seychelles Coast Guard. As a result, the coast guard has improved efforts in combating piracy, patrolling the borders, and securing maritime interests.

**ECONOMIC RESILIENCE:**

HIGH RANKINGS IN COASTAL WELFARE AND BLUE ECONOMY INDICATE STABLE ECONOMIC RESILIENCE IN SEYCHELLES. Transportation suffers from an underdeveloped port in Victoria and foreign fishing industries targeting surface-swimming and deep-swimming tuna populations. Expansion efforts for the Port of Victoria began in 2017. The project will increase shipping technology, port safety, and security measures in order to accommodate increased maritime traffic.

**SECURITY AT SEA:**

SEYCHELLES’ 1.3-MILLION-SQUARE-KILOMETER MARITIME TERRITORY INVITES PIRACY AND SUBSTANTIAL ILlicit TRADE THAT UNDERMINES SECURITY AT SEA. In 2009, Seychelles reported ten attacks by Somali pirates within its EEZ that harmed Seychelles’ two primary industries: tourism and fishing. Illicit opiates, cannabis, and cocaine trades further damage safety in Seychelles’ maritime domain.
Somalia’s vast maritime domain, which ranks second in size among all mainland African nations, encompasses much of the Gulf of Aden and northwest Indian Ocean. In the north, Somalia’s maritime claims approach the eastern entrance of the geostrategic Bab-el-Mandeb strait—one of the world’s busiest shipping lanes. This area suffers from high rates of illicit maritime traffic and maritime mixed migration between East Africa and the Arabian Peninsula. To the south, the Somali coast harbors transnational criminal networks that facilitate illicit trading in weapons, drugs, wildlife, and contraband like charcoal and sugar.

GOOD GOVERNANCE:
Somalia has suffered from decades of war and its central government lacks the capacity to exert control over the entire Somali coast. Coastal governance occurs primarily at the regional or local level. Consequently, large stretches of the Somali Indian Ocean coast are effectively controlled by non-state actors and transnational criminal organizations.

ECONOMIC RESILIENCE:
Somalia has rich fisheries supported by coral reefs and a productive upwelling zone. However, according to the 2015 Securing Somali Fisheries report, much of this economic potential remains underdeveloped due to weak governance and ongoing violent conflict. In 2019, Somalia ranks 70th of the 70 countries studied for Coastal Welfare, 67th for Blue Economy, and 63rd for Fisheries. Building economic resilience will require dramatic improvements to Maritime Enforcement (rank: 70th) and the Rule of Law (65th).

SECURITY AT SEA:
Somalia is famous for piracy and armed robbery at sea, though this threat peaked in the early 2010s before Somali authorities and the international community invested aggressively in counter-piracy measures. Instances of piracy and armed robbery remain low in 2019, though many underlying causes of piracy, including coastal poverty and low law-enforcement capacity, remain in place. At present, the more substantial concerns are trafficking in goods and maritime mixed migration. Both problems are exacerbated by violent political conflicts in the Horn of Africa and across the Gulf of Aden in Yemen.
South Africa occupies the continent’s most southern territory, and borders the Atlantic and Indian Oceans. South Africa has a large exclusive economic zone and one of Africa’s most robust navies, with 37 watercraft regularly deployed for patrol, rescue, and enforcement. Offshore oil and natural gas infrastructure in Bredasdorp Basin and the South Coast Complex supplement South Africa’s growing tourism industry and improving maritime transportation. South Africa has chaired the Indian Ocean Rim Association between 2017–2019, leading the promotion of sustained growth and balanced development within the Indian Ocean region.

**GOOD GOVERNANCE:**
Despite owning Africa’s largest navy, SOUTH AFRICAN DEFENSE CAPABILITIES MAY SHOW DECLINE AFTER THE SOUTH AFRICAN DEPARTMENT OF DEFENCE CUT THE OVERALL DEFENSE BUDGET IN 2018. Reductions may affect other key sectors in South Africa as maritime enforcement evolves against emerging threats. The South African navy plays a key role in countering piracy, illicit drugs and arms trafficking, and illegal fishing practices.

**ECONOMIC RESILIENCE:**
South Africa has a GROWING BLUE ECONOMY AND A STRONG FISHERIES INDUSTRY. Offshore oil and gas production has improved South Africa’s economic prosperity and stability. Despite South Africa’s frequent internal violence, the coast remains relatively more secure for residents and the booming tourism industry bolsters coastal economic conditions as coastal tourism provides legal employment to millions of South Africans each year.

**SECURITY AT SEA:**
South African waters remain free from piracy and armed robbery. However, ILLICIT TRADE IN OPIATES, SYNTHETIC DRUGS, AND WILDLIFE FREQUENTLY LANDS IN SOUTH AFRICA before being transported by land to Europe and the Middle East. South Africa is a major source country for wildlife products such as rhino horn and abalone.
Sudan’s coastline frames the western Red Sea directly across from the major Saudi cities of Jeddah and Mecca. This is a remote area with few major settlements, with the exception of Port Sudan, which is the country’s only significant seaport. Though the area is sparsely settled, it is critical for Sudan’s economic and political security. The country depends on the oil that is delivered by pipeline to the Red Sea coast for export. These are busy waters that see high levels of shipping traffic from vessels transiting to or from the Suez Canal.

**GOOD GOVERNANCE:**

Ongoing political instability in Sudan, including regime change in Khartoum and tension with South Sudan, make maritime security on Sudan’s eastern border a relatively low priority. **RESOLVING POLITICAL INSTABILITY IS AN IMPORTANT PREREQUISITE** for implementing a stronger integrated maritime security strategy.

**ECONOMIC RESILIENCE:**

**SUDAN IS EXCEPTIONALLY VULNERABLE TO CLIMATE CHANGE,** ranking 68th out of the 70 countries covered in this year’s Maritime Security Index. In addition to the drought vulnerability Sudan suffers in the interior, coastal populations are also threatened by very weak domestic fisheries legislation and the risk of an environmental disaster in the Red Sea.

**SECURITY AT SEA:**

**SUDAN IS A MAJOR MIGRATION AND HUMAN TRAFFICKING HUB,** as its location makes it a stopping point for persons in transit bound for both the Mediterranean and the Middle East. Some migrants do transit through Sudan’s portion of the Red Sea to reach the Arabian Peninsula. Coastal Sudan also sees migrants and trafficking victims en route to Egypt or Libya from the Horn of Africa.
Tanzania has seen recent growth in both its maritime infrastructure and governance that show promise for future resiliency and stability. Recent negotiations with Norway over oil and gas explorations boost Tanzania’s Blue Economy efforts and multiple port expansions indicate a commitment to improving maritime capabilities, but a high prevalence of several kinds of illicit trade continues to plague the country; for instance, heroin from Central Asia is trafficked along the East African coast by boat before entering land through porous maritime borders and insecure ports. Tanzania remains a favored transit country for such illicit products.

**GOOD GOVERNANCE:**

TANZANIA RANKS WELL IN THE REGION FOR GOOD GOVERNANCE, and has taken steps to improve its weak government efficiency score. Tanzania improved its trading across borders by upgrading port infrastructure in Dar es Salaam in 2015, and in 2016 implemented the Tanzania Customs Integrated System (TANCIS) to reduce import/export times. Maritime enforcement remains difficult in Tanzania’s expansive EEZ and piracy and armed robbery persist.

**ECONOMIC RESILIENCE:**

CLIMATE VULNERABILITY THREATENS TANZANIA’S COASTAL COMMUNITIES AND ITS ROBUST FISHERIES INDUSTRY. Tanzania’s freshwater and maritime fisheries are worth an estimated $4 billion annually, but remain vulnerable to pollution and deficient fisheries health.

**SECURITY AT SEA:**

Tanzanian waters fare moderately better in piracy than others in the region, BUT REMAIN A HUB FOR ILLICIT TRADES. Actors transport illicit arms, cannabis, cocaine, opiates, and wildlife through Tanzania’s mainland and the port of Zanzibar. Tanzania ranks 68th out of 70 countries for the illegal opiates trade. Mixed migration poses a considerable threat to security at sea. Tanzania occupies Tier 2 in the 2019 Trafficking in Persons report for not meeting minimum standards in efforts to eliminate human trafficking, but the current government has demonstrated political will to improve.
GOOD GOVERNANCE:
The United Arab Emirates has strong scores for Rule of Law and Maritime Enforcement. In fact, **UAE RECEIVES THE BEST SCORES IN THE REGION FOR ISSUES LIKE CORRUPTION, JUDICIAL INTEGRITY, AND THE AVAILABILITY OF COASTAL PATROL VESSELS**. However, UAE is not a party to UNCLOS or the Port State Measures Agreement and has maritime boundary disputes with Saudi Arabia and Iran. For these reasons, UAE ranks 66th out of the 70 countries studied for International Cooperation.

ECONOMIC RESILIENCE:
**UAE HAS A WEALTHY COASTAL POPULATION THAT ENJOYS EXCEPTIONALLY LOW RATES OF VIOLENCE.** Of the 70 countries studied, UAE ranks 2nd for Coastal Welfare, 4th for Blue Economy, and 9th for Fisheries. UAE’s coastal cities are modern, safe, and thriving. Further development of these diverse maritime industries could decrease the Emirates’ vulnerability to the adverse effects of climate change.

SECURITY AT SEA:
Like its neighbors, the UAE would suffer from repercussions should geopolitical tensions obstruct commercial shipping traffic around the Strait of Hormuz. But for now, **THE MOST SIGNIFICANT ILLEGAL MARITIME ACTIVITY IS TRAFFICKING OF GOODS**, most notably opiates, synthetic drugs, wildlife products, antiquities sourced from Middle Eastern and Central Asian conflict zones, and charcoal sourced from Somalia.
GOOD GOVERNANCE:

THE LONG WAR IN YEMEN HAS WEAKENED GOVERNANCE CONSIDERABLY, and Yemen now scores 70th out of 70 countries for Rule of Law and 69th for Maritime Enforcement. As of late 2019, the Houthi rebels still control sections of the coast, and the major port city of Hodeidah remains a focal point of the war effort. In several instances, this conflict has spilled offshore to target vessels in the Bab-el-Mandeb and southern Red Sea.

ECONOMIC RESILIENCE:

THE WAR IN YEMEN HAS DESTROYED THE ECONOMY AND ENDANGERED COASTAL POPULATIONS. Civilian non-combatants, including fishers working in the Gulf of Aden, have been targeted by the warring parties. Extreme poverty, food insecurity, and diseases like cholera have created one of the world’s most severe humanitarian crises. Critical maritime infrastructure has been targeted and disrupted, including the major Red Sea port of Hodeidah.

SECURITY AT SEA:

Though the Gulf of Aden was recently a global hotspot for piracy and armed robbery at sea, this threat has subsided and YEMENI WATERS ARE NOW MUCH MORE THREATENED BY SMUGGLING, MARITIME TERRORISM, AND TRAFFICKING IN PERSONS. Humanitarian crises on both sides of the Gulf of Aden have ensured a bidirectional flow of migrants crisscrossing between Somalia, Yemen, Djibouti, Saudi Arabia, Eritrea, and Sudan.
METHODOLOGY
BLUE ECONOMY

The Blue Economy score incorporates six equally-weighted components that are central to the blue economy: fisheries, marine and coastal tourism, maritime transportation and shipping, offshore oil and gas, adjusted net savings, and climate change.

Fisheries

We combine the value (in U.S. dollars) of wild caught fisheries and mariculture (aquaculture occurring in the marine environment or of marine species) for this input. Value of wild caught fish by a given country (i.e., excluding fish caught by foreign-flagged vessels) was obtained from the Sea Around Us program. Value of mariculture by a given country was obtained from the UN Food and Agriculture Organization’s Global Statistical collection. The values were summed, and standardized by dividing by the total population of a country as reported by the World Bank.

Maritime and Coastal Tourism

Sustainable coastal tourism supports jobs and livelihoods in coastal communities. We use the score from the Tourism and Recreation goal in the Ocean Health Index. The Ocean Health Index measures countries on biological, physical, economic, and social factors to assess how sustainably humans are using the ocean. The Tourism and Recreation goal measures the proportion of the total labor force engaged in the coastal tourism and travel sector, factoring in unemployment and sustainability. Countries where such employment was 9.5% or greater of the total labor force received a perfect (100) score.

Maritime Transportation and Shipping

Maritime ports and the shipping and commerce they support are pillars of the Blue Economy. Large, well-functioning ports support larger volumes of shipping, greater export and import markets, and link national economies to the global economy. We calculated this score by combining two sub-scores: port quantity and port quality. Port quantity was calculated from the Liner Shipping Connectivity Index, a national-level metric developed by the United Nations Conference on Trade and Development and accounts for number of ships, container capacity of those ships, maximum vessel size, number of services, and number of companies that operate in ports. We developed our own port quality metric that accounted for harbor size plus availability of the following services: first port of entry, tug assist, air and rail communications, medical facilities, water and fuel supplies, and dry dock repair. The overall transportation score was calculated by equally weighting the port quantity and quality sub-scores.

Offshore Oil and Gas

Offshore oil and natural gas development contributes substantially to some African nations, like Nigeria, but the distribution is highly skewed. Our score accounts for six factors: proved oil reserves, proved gas reserves, oil production, gas production, the share of oil activities located offshore and the share of gas activities located offshore. Most of our data are from the United States Energy Information Administration, which updates these figures annually.

Adjusted Net Savings

Adjusted Net Savings (ANS) is a measure of true savings in a country after taking into account the depletion of natural resources and damages, as well as investments in human capital. Many economists have adopted ANS as a metric that overcomes some shortfalls in using Gross Domestic Product to measure economic growth and development. ANS is derived from the standard national accounting measure of gross saving by making four adjustments: consumption of fixed capital is deducted to obtain net national saving; current public expenditure on education is added to account for investment in human capital; estimates of the depletion of a variety of natural resources are deducted to reflect the decline in asset values associated with extraction and depletion; and deductions are made for damages from carbon dioxide and particulate emissions.

Climate Vulnerability

Several components of the Blue Economy, such as fisheries and tourism, may be affected by global climate change. To account for this risk, we included a measure of vulnerability to climate change. We used the University of Notre Dame’s Global Adaptation Index (known as ND-GAIN). The index measures a country’s vulnerability to climate change based on: (1) exposure to climate-related or climate-exacerbated hazards, (2) sensitivity to the hazard’s impacts and (3) capacity to adapt or manage the impacts. We use the ND-GAIN Vulnerability score which is calculated at a national scale and updated annually.

COASTAL WELFARE

We conceptualize coastal welfare as a function of a population’s physical and economic security, both on the coast and in a country more generally. We calculate the Coastal Welfare score with four equally weighted components: Countrywide Physical Security

We used two indicators to measure the Countrywide Physical Security Component: countrywide armed conflict events and homicide rates. The first indicator was derived from the ACLED data project. The dataset includes geocoded information about specific lethal instances of armed conflict worldwide, such as battles between governments and rebels or uses of violence against civilians. Homicide rate data are provided by the United Nations Office on Drugs and Crime (UNODC).

Coastal Physical Security

To isolate armed conflict occurring near the coastline, we identified armed conflict events within 50 kilometers of a country’s coast using the same ACLED dataset.
Coastal Economic Security Component

We use two indicators to measure coastal economic security. The first is the Artisanal Fishing Opportunities goal from the Ocean Health Index (OHI), which captures whether the demand for fishing opportunities is met on the coast in a lawful and sustainable manner. The second is the Coastal Livelihoods and Economies measure from OHI. This score measures the relative economic well-being of coastal areas in comparison to the rest of the country. This score is weighted by the Human Development Index (HDI) produced by the United Nations Development Program (UNDP).

Countrywide Economic Security

We measure countrywide economic security using two indicators: the Human Development Index (HDI) from the UNDP and infant mortality rate data from the World Bank. The Human Development Index is perhaps the world’s most influential score of social well-being. The HDI seeks to capture well-being by looking at three key measures of economic and human development: life expectancy, education provision, and gross national income. Infant mortality is commonly viewed as one of the best single indicators of social welfare. To improve infant mortality rates, countries must invest in healthcare, transportation infrastructure, nutrition, and women’s education across all socioeconomic classes and social groups.

FISHERIES

The Fisheries Score incorporates six equally weighted components relevant to fisheries-related maritime insecurity and the health of fisheries: biological health of fish stocks, presence of foreign fishing vessels, strength of domestic fisheries law, membership in regional fisheries management organizations (RFMOs), the designation of Marine Protected Areas (MPAs), and ocean pollution.

Fisheries Health

The health of fish stocks is an indicator of how sustainable and reliable the resource is for future harvest. We use the score from the Wild-Caught Fisheries sub-goal of the Food Provision goal in the Ocean Health Index. The Ocean Health Index measures countries on biological, physical, economic, and social factors to assess how sustainably humans are using the ocean. The Fisheries sub-goal measures how well a nation achieves optimal sustainable production of seafood compared to a biological baseline. The target is for a given nation to maintain a fish population at the level that produces maximum sustainable yield (known as BMSY). Countries are penalized for both underfishing and overfishing. Thus, this metric is not solely one of conservation—a nation that does not fish will not earn the highest score, because they are leaving potential revenue in the water.

Foreign Fishing

The presence of foreign fishing vessels in EEZ waters can be a cause of maritime insecurity and conflict. We use data collected and maintained by Sea Around Us that assigns all fish catch in an EEZ to a given country. Data are aggregated over all species caught and the total catch (in metric tons) by all foreign fleets is divided by total catch (domestic plus foreign catch) to measure the percentage of all catch inside an EEZ done by foreign vessels.

Fisheries Legislation

Strong domestic fisheries laws include clear directives for management, provisions for enforcement, and mandates for data collection that inform fisheries management plans. When governments have strong fisheries laws, conflict is minimized through clear guidelines on access rights and approved fishing methods. We measure the strength of domestic fisheries laws by legislation archived in the FAO Document Depository.

Regional Fisheries Management Organizations

Governments that engage and collaborate with international fisheries bodies are more likely to adopt norms around fisheries management and scientific data collection. They are also more likely to adopt best practices for monitoring, control, and surveillance. Regional fisheries management organizations (RFMOs) are international bodies with voluntary membership for those countries whose fishing interests fall within RFMO jurisdiction. Some RFMOs are defined solely by geographic extent, while others are defined by the scope of the fishes they manage (e.g., tuna and other highly migratory species). Scores were calculated by counting the number of RFMO memberships a country had from the pool of RFMOs that had overlapping jurisdictions (i.e., countries did not get penalized for not joining RFMOs outside their EEZs).

Marine Protected Areas

The Sustainable Development Goals recognize the importance of Life Under Water (SDG14) and set the goal that each state should designate 10% of their waters as Marine Protected Areas by 2020. This score looks at formal protected areas in each EEZ, giving a perfect score to any country with at least 10% of an EEZ designated as an MPA.

Ocean Pollution

Marine pollution can negatively impact fisheries by disrupting breeding or feeding areas, reducing reproduction, or introducing diseases. It is also a proxy for coastal development which disrupts marine habitat like seagrass beds and coral reefs. We use the score from the Clean Waters goal in the Ocean Health Index. The Clean Waters goal measures pollution from chemicals, nutrients (agriculture), pathogens, and trash (including plastics) in EEZ waters.
ILlicit trades

For our Illicit Trades scores, we surveyed several experts in Africa and Asia with backgrounds in maritime enforcement, customs, and shipping, among others. We asked these experts to weigh in on the degree to which illicit trades present a challenge to the countries included in the index, and the degree to which those illicit trades take place employing maritime routes. We divided the survey into Africa and Asia sections and asked experts to complete only the parts of the assessment where they felt they understood the situation well.

We further divided the survey to ask separately about the illicit trades in arms, wildlife products, cannabis, coca, opiates, and synthetic substances. All told, we received nearly two-dozen responses from experts in these areas. Finally, we employed independent, open-source research to help validate the collective scores from the survey responses.

International Cooperation

International cooperation is measured with two equally weighted components: participation in relevant international agreements and maritime boundary violations or disputes.

Global Agreements

The first component reflects the signing and ratification of eight global maritime legal agreements: the United Nations Convention on the Law of the Sea (UNCLOS), UNCLOS Part XI, the UN Fish Stocks Agreement, the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA), the UN Food and Agriculture Organization Port State Measures Agreement (PSMA), the UN Convention against Transnational Organized Crime (CTOT), the UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, and the Food and Agriculture Organization’s Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement). States that have signed and ratified all of these agreements receive the maximum value for this part of the International Cooperation score. States that have signed but are not party to an agreement receive one-third of the score for that agreement.

Boundary Violations and Disputes

The second component equally weights excessive territorial claims and maritime boundary disputes. Violations are defined as territorial claims that extend beyond the twelve nautical miles granted by UNCLOS. Disputes are competing claims over exclusive economic zones that have yet to be resolved by the International Tribunal for the Law of the Sea or by formal bilateral or multilateral agreements. Countries receive the maximum score when they neither make excessive territorial claims nor have unresolved disputes with maritime neighbors.

Maritime Enforcement

We define Maritime Enforcement as each country’s capacity to effectively patrol its territorial waters and EEZ for the purposes of investigating illicit activity and enforcing maritime law. The score is not concerned with legal regimes or naval warfighting efforts, though both of these related concepts are greatly affected by Maritime Enforcement. Rather, this score focuses on the difficulty of managing a state’s specific maritime space and its capacity to perform constabulary duties in that space.

We measure the Maritime Enforcement Score with three components:

Difficulty

States face unique challenges depending on the geography of their maritime space. Our difficulty score captures this variation by considering factors like coastline length, EEZ size, and relations between each country and its immediate maritime neighbors.

Coastal Patrol Assets

We measure the number of coastal patrol vessels available to the navy, coast guard, port police, and/or another maritime enforcement division. We derive these vessel counts from The Military Balance, an annual global report from the International Institute for Strategic Studies (IISS). We supplemented these data with in-house research and inquiries to regional stakeholders.

Expert Assessment of Naval Capacity

Counts of vessels miss some important aspects of naval capability. Equipment can be outdated and navies can be underfunded or inadequately trained. To address this reality, we use a survey of regional experts to measure naval capability and gauge what activities fall within and beyond the capabilities of each state.

Maritime Mixed Migration

We measure the Maritime Mixed Migration Score with four equally weighted components:

Maritime Trafficking

Using sources like the US State Department Trafficking in Persons Report, we score the severity and breadth of forced labor and sex trafficking across men, women, boys, and girls. We also identify countries used as major international “transit hubs” for smuggled and trafficked persons, and we then weight these scores according to whether such activities occur exclusively, predominantly, or rarely at sea.
**Maritime Transit**

Whereas the Maritime Trafficking score aims to capture the extent of trafficking at sea, the Maritime Transit Component focuses on the movement of people in the maritime space, rather than their exploitation. Many persons who are not being trafficked also transit by sea as they pay smugglers to take them to their destinations. We approximate the extent of this kind of maritime transit by considering a country’s refugee rate, calculated from data from the United Nations High Commissioner for Refugees, and the relative prevalence of maritime routes vis-a-vis routes by land or air.

**Legal Protections**

The legal protections portion of the score is comprised of an international agreements indicator and a domestic legislation indicator. The international portion of the score measures participation in seven agreements that are directly relevant to protecting migrants, children, and laborers from various forms of involuntary trafficking:

- Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflict
- International Labor Organization Forced Labor Convention of 1930
- International Labor Organization Abolition of Forced Labor Convention of 1957
- International Labor Organization Worst Forms of Child Labor Convention of 1999
- International Labor Organization Domestic Workers Convention of 2011
- International Labor Organization Work in Fishing Convention of 2007

The domestic portion of the score is adapted from the 3P Anti-trafficking Policy Index by Seo-Young Cho. This index uses the Trafficking in Persons Report to annually score a state’s legal efforts in the areas of prosecuting traffickers, protecting potential victims, and preventing trafficking networks.

**Socioeconomic Vulnerability**

Finally, populations are more vulnerable to trafficking where political systems are ineffective, human capital is low, and socio-economic conditions are poor. We operationalize a population’s vulnerability with the Vulnerability to Slavery score calculated by the Walk Free Foundation as part of its Global Slavery Index.

**PIRACY AND ARMED ROBBERY AT SEA**

We created the Piracy and Armed Robbery score by measuring the proximity of each individual incident to the exclusive economic zone of each country. Incidents are classified as piracy or armed robbery using the classification system of the International Maritime Organization (IMO), which relies on the definition of piracy outlined in the United Nations Convention on the Law of the Sea (UNCLOS). The principal difference between incidents of piracy and incidents of armed robbery is geography. Piracy incidents occur in international waters, including on the high seas, as well as in countries’ exclusive economic zones and contiguous zones. Armed robbery, meanwhile, takes place in a state’s territorial and internal waters.

Because many attacks occur just outside a nation’s EEZ, this score is not calculated as a simple count of events within an EEZ. Rather, it measures a nation’s proximity to incidents of piracy and armed robbery.

**RULE OF LAW**

We measure the Rule of Law Score with five equally weighted components:

**Corruption**

Corrupt officials fail to enforce policy and thus enable transnational crime and corruption in maritime governance. Maritime trade is especially affected because nearly all of Africa’s international trade transits the maritime space. Many organizations have created corruption measures already, so we adapted the Corruption Perceptions Index by Transparency International to create the Corruption Component. This measure averages 13 other corruption variables, with more corrupt countries earning lower values.

**Efficacy**

Ineffective governments cannot enforce policy, and this hinders a state’s ability to secure its maritime space and prevent illicit maritime activities. We measure efficacy by rescaling the Functioning of Government indicator from Freedom House. The Freedom House Functioning of Government indicator ranges from 0 to 12, with the most efficacious governments receiving higher scores.

**Government Efficiency**

Governments with unnecessary administrative and bureaucratic hurdles provide more opportunities for bribery and corruption, especially as these systems relate to trade, customs, and international migration. Each year, the World Bank Doing Business report gauges government efficiency in several areas, one of which is Trading Across Borders. This indicator is computed from expert estimates of the amount of time and money required to move a standard shipping container into the country. The measure is especially relevant for efficiency in African maritime governance, as the region’s international trade transits almost exclusively through seaports.
Judicial Integrity

Judicial integrity is important to the enforcement of existing laws and ensuring that the de jure regulations are de facto conditions. Where judges are bribed and laws go unenforced, the rule of law is too weak for policies aimed at the maritime domain to be effective. We created the Judicial Integrity Component using three indicators from the Varieties of Democracy Project (V-Dem), a leading dataset on the strength of governance around the world: Judicial Attacks, Judicial Accountability, and Judicial Bribery.

Inclusion

We gauge political inclusion with five indicators from the Varieties of Democracy Project. These cover unequal treatment under the law according to social group identification, subnational region, religion, socioeconomic status, and gender. These are measures of equal treatment under the law, and not of the absolute provision of liberal and transparent governance. Non-democratic states can score well if the law is equally applied across all five of these social divisions.

More information on Maritime Security Index scoring is available in the Index Code Book.
STABLE SEAS

One Earth Future fosters sustainable peace by partnering with innovative world leaders, global development agencies and communities to see complex problems at the root of armed conflict in new ways and solve them together through orchestrated collaboration.

Stable Seas, a program of One Earth Future, engages the international security community with novel research on illicit maritime activities such as piracy and armed robbery, trafficking and smuggling in persons, IUU (illegal/unregulated/unreported) fishing, and illicit trades in weapons, drugs, and other contraband. These activities perpetuate organized political violence and reinforce each other to threaten economic development and the welfare of coastal populations.

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