

Chapter 28: Maritime Security

Jan Stockbruegger, Institute for the Protection of Maritime Infrastructures, German Aerospace Center

Human security is a core dimension of maritime security, and human security threats have shaped maritime security debates and policies in profound ways. This chapter develops a human-centered framework to investigate the diverse ways in which maritime insecurities such as piracy and illegal fishing affect vulnerable individuals and populations around the world, including seafarers, migrants, and coastal populations. It also investigates human security issues in the evolution of counterpiracy strategy off Somalia, and draws lessons for how to integrate and coordinate human security policies into maritime security strategies in complex political environments.

Word Count: 5700 without references

Keywords: navies; seafarers; piracy; blue crimes; marine environment; safety and security

<A>Introduction

The well-being of communities and vulnerable populations around the world is deeply connected to the ocean. Coastal communities depend on fishing and tourism for their income, offshore windfarms and oil and gas platform provide energy for millions of households, and seaborne trade guarantees access to food and consumer goods, while subsea data cables ensure global communication and internet connectivity. Maritime threats including “blue crimes” such as piracy, drug trafficking and fishery crimes or international maritime conflict and naval warfare thus affect communities and their security and livelihoods in profound ways. Violence and insecurity at sea undermine local livelihoods and incomes, disrupt humanitarian aid deliveries and weaken global food markets, leading to poverty and humanitarian emergencies around the world. The influx of illicit weapons and drugs, meanwhile, fuels conflict and instability on land, increasing risks to local communities and undermining efforts to ensure peace and development worldwide. In the future, new Artificial

Intelligence technologies as well as climate change and rising sea levels will have unforeseen security implications for coastal communities and populations.¹

Scholars have long recognized that “human security” is a core dimension of “maritime security”.² Maritime security is a concept that aims at providing a comprehensive framework to analyze and address security challenges at sea.³ According to Bueger and Edmunds, the concept “addresses the diverse threats, risks, challenges, and opportunities of the maritime space. It represents a way of understanding and responding to issues of insecurity and crime at sea as well as enhancing the governance of the sea and the welfare of people dependent on it”.⁴ Addressing human security concerns is thus vital to ensure maritime security, as well as the other way around.

Yet human security concerns are sometimes neglected in policy and scholarly debates on maritime security. Instead of treating human security as a vital component of maritime security in its own right, maritime security concerns related to communities and individuals are often subsumed under issues such as environmental, economic, and military security at sea. Security at sea is often primarily seen as an environmental problem concerning marine safety and pollution,⁵ as an economic problem concerning international trade and global energy markets,⁶ and as a problem concerning great naval powers and international peace and stability.⁷ Even though debates on these issues highlight important dimensions of human security, they do not allow us to address the major security challenge that affect individuals and communities in and related to the maritime domain.

This chapter introduces maritime security scholarship and policy from the perspective of human security – that is an approach that focuses primarily on people rather than states, the economy, or even the environment, and that aims at developing policies to “protect people against a broad range of threats to individuals and communities”.⁸

I show the benefits of this approach in terms of developing policies that increase human wellbeing and ensuring human rights and dignity on the world's oceans. Yet I also point out that human security policies can contradict other efforts and conceptions of security at sea, such as efforts to prevent and deter irregular migrant crossings⁹ or to ensure oceanic biodiversity – which can have a negative impact on the incomes of local fishing communities. I argue that constant coordination and adjustments are required to align human security goals with other policy objectives and to enshrine policies centered on human lives and welfare into comprehensive maritime security frameworks. Civil society organizations sometimes need to actively promote and advocate for addressing human security concerns – especially if these concerns contradict economic or national security objectives. Yet they also need to work with security and other actors such as navies and private shipping companies to develop and implement programs aimed at ensuring human security needs. Coordination mechanisms that bring these different actors together are thus vital to integrate humanitarian concerns in maritime security strategies.

In the next section, I provide a history of maritime security and develop a framework to analyze how maritime insecurities affect communities and individuals in terms of their socio-economic relation to the oceans. I then use this framework to map human security risks and challenges and to analyze efforts to address human security challenges in the context of Somali piracy. I then draw implications for policymakers and practitioners before summarizing my findings in the conclusion.

<A>Conceptual Framework

Here I develop a framework to understand human security in the context of maritime security debates. After describing the evolution of maritime security policies and debates, I analyze how maritime insecurities affect human security, and how human security threats at sea are related to other maritime security threats.

The rise of maritime security

Maritime security thinking has evolved over hundreds of years centered around issues such as piracy and seaborne trade and trafficking as well as maritime conflicts and naval warfare. Yet the concept of maritime security is a child of the post-Cold War era and the rise of interconnected global maritime security challenges in the 1990s. Initially maritime security referred primarily to terrorism especially following the terrorist attacks of 9/11 and the attack on the U.S.S. Cole off Yemen in 2000. Piracy was added to the maritime security agenda in the 2010s due the explosion of piracy attacks off Somalia between 2008 and 2012. This phase also led to the development of distinct governance institutions and capacities to address insecurities at sea, including the first UN Security Council Resolution on piracy in 2008.¹⁰

These counter-piracy governance approaches were later expanded to address other threats at sea such as smuggling, fishery crimes and grey zone attacks, leading to the evolution of a holistic approaches to address insecurities at sea that combine various policy tools including naval missions, capacity building, economic and humanitarian development programs and institution building. This process continues today with efforts to enhance maritime security governance across the world and to build an interconnected global framework to address a wide range of maritime insecurities. This includes efforts such as securing maritime food and energy transportation networks in the Black Sea and the Red Sea, the creation of marine

protected areas to secure oceanic biodiversity, and international programs to address piracy and narcotic smuggling at sea.¹¹

Maritime security has thus arrived on the global security agenda. The International Security Council, for example, has already held two open debates on maritime security in 2021¹² and 2025,¹³ demonstrating the urgency that maritime security is receiving at the highest political level.¹⁴ A range of regional and international organizations, moreover, address maritime security issues in one way or the other. This includes, among others, the “Big Five” UN Agencies: the International Organization for Migration, which deals with maritime border management; the International Maritime Organization (IMO), which regulates marine safety and the global shipping industry; the United Nations Food and Agriculture Organization (FAO), which addresses illicit fishing; the United Nations Environment Program (UNEP), which with governs marine pollution and the protection of the marine environment, and the United Nations Office for Drugs and Crimes (UNODC), which deals with transnational organized crime at sea. The International Convention of the Law of the Sea provides an overall framework for maritime security operations.¹⁵

Yet the growing number of maritime security threats and organizations that address them also increases complexity and the need to coordinate policy objectives and activities. This holds especially true when it comes to addressing human security threats at sea.

maritime security and human security

Human security concerns have been central in the evolution of the global maritime security agenda. Up to 80 percent of world trade is transported by the sea, and millions of people live in close proximity to the sea and depend on it for their livelihoods. Maritime insecurities such

as piracy threaten the lives and wellbeing of seafarers, undermine coastal livelihoods and incomes, and lead to high food and energy prices that affect millions of people around the world. Efforts to protect vulnerable populations such as seafarers and coastal communities have thus shaped debates on maritime security in deep and profound ways.

However, such debates have often been part of other debates including on economic and national security goals. According to Bueger,¹⁶ for example, maritime security has three other dimensions besides human security. One is related to environmental security, which is about ensuring safety at sea and preventing pollution and accidents such as oil spills; another is associated with economic security, which is about protecting economic activities such as trade and fishing; and finally, national security, which is about naval power and efforts to protect vital maritime interests including sovereignty over coastal waters and resources. We thus need frameworks to identify and address human insecurities at sea and how they relate to other dimensions of maritime security.

Table 1 organizes the human security risks of maritime insecurities and violence at sea by showing how maritime threats affect different communities in terms of their economic, social, and geographic relations to the sea. This includes:

- Communities and individuals that work or travel on ships and other platforms **on the sea** (e.g., fishermen, seafarers, migrants, workers on offshore windfarms and oil and gas platforms);
- Coastal communities that live **at the sea** or in close proximity to it and whose lives and livelihoods depend on maritime activities (e.g. fishing communities); and

- Communities and societies **around the world** that do not work or live on or at the sea but that depend on the oceans for trade and communication and to access global food and energy markets.

Table 1: Overview of human security threats

Communities on the sea	Communities by the sea	Populations around the world
Threats to the lives, health, and overall wellbeing of seafarers on merchant vessels, fishing boats and offshore oil and gas platforms	Threat so costal livelihoods, especially in communities that depend on fishing, coastal tourism and other maritime sectors and economic activities	Disruption of humanitarian food aid deliveries, especially to vulnerable populations in conflict affected countries and emergencies
Threats to the lives and wellbeing of migrants crossing the sea	Threats to political stability in coastal communities due to “blue crimes” and the influx of weapons and other illicit goods Threats to underwater cables and internet connectivity, especially of Small Island Developing States	Disruptions of maritime food and energy transports leading to high prices for basic goods, especially affecting communities in poor and developing countries

Yet it is important to locate and address human security concerns as part of complex threat constellation in the maritime domain.¹⁷ Human security threats are interconnected part of other dimension of maritime insecurity. Threats such as piracy for example, are not only human security challenges because they affect the lives of seafarers, but they are also challenges to economic, national, and even environmental security, as attacks against ships can lead to environmental disasters. Maritime insecurities, in other words, are usually multidimensional. Moreover, maritime insecurities are often related to developments on land, including human insecurities. Issues such as conflict and political instability on land, which

imply great risks for coastal populations, can lead to blue crimes such as piracy and other maritime threats.

Human security policies need to be integrated into broader maritime security strategies and aligned with policies that address other threat dimensions, including national, economic, and environmental threats. However, this requires coordination and collaboration across different stakeholders including navies, coastguards, seafarers, coastal communities, and the maritime transportation industry. Mitigating tensions between these actors and their economic and political interests is a core challenge in designing and implementing effective human maritime security policies.

<A>Challenges

This section maps the major human security threats at sea. This includes threats to individuals and communities on the sea, threats to coastal communities at the sea, and to vulnerable population around the world who depend on seaborne trade and communication.

On the sea

Human security threats on the sea include threats to the lives, health, and overall wellbeing of seafarers on merchant vessels, fishing boats and other platforms, as well as threats to migrants crossing the sea.

Maritime jobs on vessels or offshore energy platforms are notoriously hard and dangerous and imply a high risk to workers' health or even lives. For example, 11 people died in 2010 Deepwater Horizon oil platform explosion in the Gulf of Mexico.¹⁸ Health and safety risks are particularly high on vessels that sail under so-called flags of convenience and are registered in

countries such as Panama or Gabon that are unwilling or unable to ensure compliance with international labor standards set by the International Maritime Organization and the the International Labour Organization. As a consequence, these vessels often provide poor working and living conditions sometimes leading to serious human rights abuses.¹⁹ For example, vessel owners and operators in the fishing industry sometimes hire unskilled migrant workers due to their willingness to accept risky jobs, low wages, and long working hours,²⁰ and there have even been cases of forced labour in the maritime food industry.²¹ Since 2004, moreover, the IMO recorded over 849 ship abandonment incidents concerning 11,968 seafarers with unpaid wages.²²

Attacks on vessels are another threat to the health and safety of seafarers. This includes attacks against merchant shipping in the Red Sea led by the Houthi armed group in Yemen in response to Israel's war against Gaza.²³ Over one hundred ships were targeted in these attacks, which involved missiles, drones, unmanned surface vehicles, and small arms. With two vessels sunk and three seafarers killed between November 2023 and July 2025, the International Maritime Organization lamented that "innocent seafarers and local populations are the main victims of these attacks and the pollution they cause."²⁴

Another set of human security risks concerns irregular migration across at sea. Each year, hundreds of thousands of people flee their countries to escape war and poverty, and, in the absence of legal pathways, cross into other countries illegally. Such irregular border crossings often take place at sea on maritime routes across the Mediterranean or the Caribbean. Yet these maritime border crossings are extremely dangerous. Migrants often rely on human smugglers who prioritize profit over safety, using unseaworthy vessels that are overcrowded and ill-equipped to handle rough seas. Moreover, many migrants lack swimming skills and are not provided with essential safety equipment like life jackets. Some smugglers abandon

migrants at sea. In 2024, more than 2,200 people either died or went missing in the Mediterranean while trying to reach Europe.²⁵ European states, moreover, have been accused of amplifying this humanitarian tragedy because they prioritize border control and deterring migration over Search and Rescue (SAR) efforts to save migrants lives. Many NGOs have effectively been barred from conducting SAR operations that could attract migrants to use these dangerous maritime routes to try and reach the European Union.²⁶

By the sea

Maritime insecurities also affect coastal communities who live and work in close proximity to the sea and who often rely on maritime related economic activities. For example, piracy attacks off Somalia have had a negative impact on the fishing and tourism industries in countries across the Western Indian Ocean. Thus, the East African tourism sector grew 25 percent slower than in other African countries.²⁷ This is a major problem for communities and individuals who depend on these sectors for their income and to feed their families.

Blue crimes such as piracy and smuggling also undermine political stability and increase the risk of crime and conflict with negative consequences of affected local populations.²⁸ For example, the prevalence of piracy and fishery crimes can fuel corruption, lead to an influx of small arms and weapons, and strengthens armed groups who also engage in other criminal activities such as arms and drug trafficking or even human smuggling. In Nigeria, for example, pirate groups also operate illegal oil refineries and bunkering programs that pollute rivers and coastal areas in the Niger Delta region. These pirate groups also often pay off officials, and they are protected by political leaders who use them for violent attacks against their rivals.²⁹ Thus, maritime piracy contributes to political instability in Nigeria's Niger Delta region, putting

local communities and their livelihoods at risk due to conflict, insecurity, pollution, and a lack of economic development.³⁰

Fishery crimes, including Illegal, Unreported, and Unregulated (IUU) fishing activities, are another maritime human security threat that affects local livelihoods. Estimates suggest that IUU fishing accounts for up to 20% of global catch, potentially costing economies between \$10 billion and \$23 billion annually.³¹ Furthermore, IUU fishing contributes to overfishing, hinders the recovery of fish stocks, and damages marine ecosystems. This threatens the livelihoods of local fishing communities and thus the incomes of families who rely on these industries to sustain their livelihoods.³² Illicit fishery activities and high levels of unemployment and poverty caused by it also associated with other maritime crimes including piracy.³³

Another set of maritime security threats to the income of coastal communities includes shipping accidents and pollution such as oil spills. Such pollution events devastate the local maritime economy and have a major impact on the health and living standards of affected communities. For example, the 2020 Wakashio oil spill in a natural reserve off Mauritius had negative impacts on the local fishing and tourism industry, and there continue to be concerns over the long-term health and environmental effects of these oil spills for local communities.³⁴

Threats to underwater communication cables are another human security concern. Digital communication relies on subsea data cables, and many communities around the world – especially in coastal nations and small island developing states – rely on only a few cables to access the internet. Yet these cables are increasingly under threat, with significant risks to the ability of communities and individuals to communicate with one another. Threats include attacks by hostile actors, but most cables breaks are the result of accidents and when vessels drop their anchors and fishing nets on these installations. Cable breaks can also be caused by natural events.³⁵ In 2022, for example, the Hunga Tonga-Hunga Ha'apai volcanic eruption

severed the main cable connecting Tonga to the rest of the world, leaving the island nation with limited and slow internet access during the relief operations.³⁶

Around the world

Maritime insecurities affect not only those who live by and from the sea. People across the world rely on seaborne trade and communication, and maritime threats thus also have global ramifications for human security that affect vulnerable populations far beyond the oceans and coastal areas.

Maritime insecurities can have a direct impact on individuals and communities live far away from the oceans and who do not work in maritime or related industries. On the one hand, maritime insecurities such as pirate attacks or grey zone attacks on shipping traffic can disrupt vital energy and commodity flows and cause shortages leading to high prices that have a very negative impact on prices causing hunger and even famine. For example, one study finds that “because of Russia’s full-scale invasion of Ukraine, the prices of essential agricultural commodities have risen to even higher than \$500 in Lebanon and Egypt.”³⁷ Thus, the United Nations collaborated with Russia, Ukraine, and Turkey to ensure Ukrainian grain flows through the Initiative on the Safe Transportation of Grain and Foodstuffs from Ukrainian ports. Naval forces have also escorted vessels delivering food aid to Somalia to conflict affected countries to protect them against pirate attacks.

Another human security impact of maritime insecurities is narcotic and drug trafficking. Narcotics are a major health crisis, and each year tens of thousands of people overdose and are killed due to drug abuse. Drugs also contribute to crime and have many negative social consequences in affected communities. Many drugs are transported by sea, either in

containers or in small vessels and submersibles. For example, cocaine and other drugs that reach Europe from South America are smuggled via the sea, and criminal networks involved in drug trafficking have become a major problem not only in South America and Africa but also in many European port cities.³⁸

Summary

This section has mapped the broad range of human security threats at sea and how threats such as piracy, maritime conflict, shipping accidents and others affect the safety and health of communities who work or travel on the sea or who live by the sea and whose livelihoods depend on seaborne trade and communication. Table 2 summarises these insights by providing an overview of the human security implications of major maritime security threats discussed in this section and the broader literature and debate on maritime security.

Table 2: The human security impact of major maritime security threats

Maritime security threat	Human security impact
Marine accidents and pollution such as oil spills	Health and safety threats affecting seafarers and fishermen; threats to coastal livelihoods and incomes; health risks affecting coastal communities
Lack oversight and rule enforcement in the maritime transportation and fishing industries	Health and safety threats affecting seafarers and fishermen including forced labor, crew abandonment, and unpaid wages
Piracy, maritime terrorism, and grey zone warfare and attacks against merchant vessels	Health and safety threats affecting seafarers and fishermen; threats to coastal livelihoods and humanitarian aid deliveries; high food and energy prices affecting vulnerable populations
Fishery and other environmental crimes at sea	Threats to coastal livelihoods and incomes

Illicit smuggling of narcotics, weapons, and other products	Worldwide health risks due to drug abuse; threats of crime and conflict due to drug trafficking
Trafficking of migrants and vulnerable populations	Health and safety threats affecting migrants crossing the sea; threats of crime and conflict affecting coastal communities
Threats to subsea communication infrastructures due to attacks, accidents, and natural disasters	Threats to communication affecting especially coastal and Small Island Developing States

<A>Context of Challenge

Human security threats at sea are interconnected, and they are only one dimension of global maritime insecurities and challenges. Thus, this section focuses on Somali piracy to locate specific human security threats related to piracy in a broader context and to explain how these issues have shaped the development of maritime security policies and strategies.

Somali piracy was deeply interwoven with human security issues and concerns. When the piracy pandemic erupted in 2008, pirate attacks were primarily seen as a national security or economic problem. States deployed warships to fight pirates at sea and to escort and defend vessels in high-risk areas in the Western Indian Ocean. Yet it soon became apparent that addressing piracy and developing a long-term and sustainable solution to the problem required a broader toolset beyond military effort. This included policies and strategies aimed at tackling human security threats related to the causes and consequences of pirate attacks.³⁹

One human security issue that has become essential in counter-piracy operations concerns the treatment of captured pirates. Countries deploying naval forces to the Western Indian Ocean were reluctant to deal with suspected pirates in their own legal systems. Instead, they preferred to transfer suspected pirates to regional states. Yet doing so was complicated because European states who had signed on to the European Convention on Human Rights

needed to guarantee that these countries treated pirates under basic international human rights standards.

Consequently, the European Union and other actors invested heavily in the legal and prison system of countries such as Kenya, Somalia and the Seychelles, and helped build their legal capacities to prosecute suspected pirates according to international human rights standards. These programs became a cornerstone of counter-piracy operations and ensured that hundreds of suspected pirates could be detained, prosecuted, and imprisoned in regional states. The programs also provided broader benefits in that they lifted the legal and judicial capacities of regional states and increased their ability to deal with other criminal problems – including in providing modern prison and court systems.⁴⁰

The health and safety of seafarers was another human security concern that affected counter-piracy operations off Somalia. Between 2008 and 2012, as many as 3,741 crewmembers of 125 different nationalities were kidnapped by Somali pirates, “with detention periods as long as 1,178 days.”⁴¹ Most seafarer hostages as well as the ships and cargoes were released after the shipowner paid a multi-million-dollar ransom. States and the maritime industry thus frequently justified counter-piracy measures to protect seafarers, leading to major efforts to better train crewmembers and secure merchant shipping in the waters off Somalia.

However, shipowners were also criticised for prioritizing profit over protecting seafarers. For example, shipowners continued to sail their vessels through high-risk areas and they sometimes failed to invest in appropriate yet costly security measures, including the deployment of armed guards.⁴² Moreover, some shipowners abandoned hijacked vessels and did not pay ransoms to ensure the release of crewmembers, thus prolonging the detention of kidnapped seafarers and increasing their suffering at the hands of pirates. However, ransom payment to free hostages also incentivized and helped finance further attacks against vessels,

thus putting even more seafarers at risk of being captured by pirates.⁴³ The industry also worried that ransom payments to free hostages might be illegal because they could fund Somali-based terrorist organizations listed by the United Nations or the U.S. Treasury. Yet ransom payments continued, at least in part due to humanitarian concerns for hostage lives.

The broader question in this debate was whether states or the industry is responsible for protecting merchant shipping and human lives at sea. The industry claimed that maritime security is a public good to be provided by governments and naval forces. Yet states refused to build-up a large enough naval force and instead to urged shipping companies to protect their own vessels and to reduce their reliance on naval support. The International Maritime Organization, for example, developed guidelines for shipowners to deploy armed guards on board of their vessels. Eventually, most vulnerable vessels carried armed guards, which helped reduce the number of pirate attacks significantly. Private armed guards, in other words, became vital to protect seafarers against pirate attacks off the coast of Somalia.⁴⁴

Finally, human security came to the fore in the grievances of Somali populations. Many Somalis, especially those in coastal communities, viewed piracy as a legitimate response to illicit foreign fishing activities off their coast. Such activities had increased after the collapse of the Somali state in 1991, leading to overfishing and competition over scarce marine resources between Somali and foreign fishing fleets.⁴⁵ Pirates presented themselves as coastguards who defend Somali waters – even though they primarily hijacked commercial vessels unrelated to fishing activities including vessels transporting humanitarian food aid to displaced Somali people – and there was a strong sense among Somalis that foreign navies prioritized fighting pirates to protect global trade and their own interests but did little to help impoverished Somali communities and to protect their marine resources.⁴⁶

Addressing these issues became part of counter-piracy strategy. States and international organizations continued to view pirates as criminal threat that had to be contained with military force. However, they also began to pay attention to human security issues and the needs of local Somali populations as part of a long-term strategy aimed at legitimizing counter-piracy efforts and addressing the root causes of piracy on land. This included investments in local development programs, including in the fishery sector, to provide alternative employment and livelihood opportunities for young people. Moreover, some international naval forces included monitoring fishing activities in their mandate.⁴⁷ European Union Naval Forces also escorted vessels transporting UN humanitarian food aid deliveries to Somalia, thus ensuring that Somali population benefited from the international naval presence of their coast.⁴⁸

In short, the case of Somali piracy demonstrates that human security threats were both a cause and a consequence of Somali piracy, and that these issues became vital in the design and evolution of counter-piracy governance. Efforts to address human security concerns were thus embedded in broader maritime security debates and strategies.

The Somali piracy case was foundational for the evolution of maritime security strategies around the world. Its lessons of integrating humanitarian concerns in maritime security strategies thus continue to inform responses to other maritime crimes. For example, legal reforms and capacity building to ensure that suspected criminals can be prosecuted and imprisoned based on international human rights standards has become a common practice in maritime security programs. Moreover, efforts to fight illegal fishing have proliferated in recent years, and a large number of NGOs today helps coastal states in emerging and developing countries to monitor their coastal waters and to detect and detain illegal fishing vessels.

<A>Implications for Practice

The human security perspective forces us to reconsider the different ways in which insecurities at sea affect vulnerable individuals, communities, and populations, and to design policies and strategies that prioritize their safety and well-being over other national or economic security goals. Policies and programs aimed at protecting seafarers and fishermen, increasing the resilience of coastal populations, and protecting vital aid and food and energy flows thus need to be seen as part of sustainable maritime security strategies.

A key problem, however, is that many vulnerable or marginalized communities, individuals, and populations affected by maritime insecurities lack the capacities to bring their issues and concerns to the attention of policymakers and to shape and participate in policymaking processes. Seafarers, for example, often remain “invisible” in public debates, and also many coastal communities are located in remote and inaccessible regions, thus making it difficult to monitor and document their security concerns.⁴⁹ Thus, finding and identifying these communities is one of the most important challenges for promoting human security issues in the maritime domain. It requires analysts to engage with often isolated and difficult to reach communities and to develop strategies to bring their concerns to the international security agenda.

Yet designing effective human security policies and integrating them into broader strategies aimed at securing maritime spaces remains challenging. Policymakers usually prioritize national and economic security objectives over human security ones, and human security policies often compete against other policies for funding and resources. For example, the humanitarian goal of saving migrant lives at sea might undermine national security efforts to

deter people from crossing the seas, and ensuring access to fishing grounds for local communities can lead marine disputes with other countries and undermine efforts to protect the marine environment. Moreover, policymakers are often reluctant to fund coastal development programs and instead prefer military interventions to fight maritime insecurities such as piracy at sea.

One way to promote human security goals in such contexts is to align them with other maritime security objectives. For example, human insecurities including poverty and deprivation are often a root-cause of blue crimes or illicit migrant flows.⁵⁰ Consequently, tackling such problems has become part of long-term maritime security strategies aimed at reducing the incentives of coastal populations to engage in piracy and other criminal and irregular activities including using dangerous maritime migration routes. The case of Somali piracy has also demonstrated that addressing local security and developmental needs is vital to ensure the legitimacy of military and other efforts to contain crimes at sea.

To integrate human security policies into broader maritime security strategies, however, development and civil society organizations need to collaborate with military and other security actors. They need to mitigate tensions and contradictions between their respective practices and objectives and find ways to combine them in fruitful and productive way. For example, the Contact Group on Piracy off the Coast of Somalia included all actors affected by piracy and involved in counterpiracy operations – including NGOs, the maritime transport industries, and naval representatives – to coordinate policies and to plan and develop strategies jointly. The willingness of different actors to collaborate with one another and to involve civil society and industry representatives was seen as a major reason for the success of counter-piracy policies in the region.⁵¹

Addressing human security concerns that contradict, at least in part, other national security objectives is more complicated, as the EU's policy towards irregular migrant flows in the Mediterranean demonstrates. NGOs increased their SAR operations to compensate for the lack of EU efforts in this area, until their operations were curtailed by certain European states to further reduce irregular migrant flows – even though this increased the risk of migrants drowning and dying at sea.⁵² The relationship between states and NGOs has thus become increasingly confrontational and conflictive, undermining efforts to better protect migrant lives at sea.

The case thus demonstrates challenges in promoting human security concerns in complex political environment and the need for continued civil society pressure and creative measures to ensure basic human security needs in the maritime domain. Indeed, it is largely due to the efforts of civil society organizations that the continued threats facing migrants in the Mediterranean are not forgotten and that governments continue to pay attention to these issues, albeit reluctantly it seems.

<A>Conclusion

Human security is a core dimension of maritime security, and human security concerns have shaped maritime security debates and policies in profound ways. This chapter has developed a community-centered framework to investigate how maritime insecurities affect individuals and populations regarding their socio-economic and geographic relationship to the maritime domain including seafarers, migrants, and coastal communities. Using this framework, it has demonstrated the wide range of maritime human security threats in and by sea as well as

around the world, such as the impact of blue crimes and maritime attacks on coastal communities and humanitarian aid deliveries and global food prices.

Drawing on the case of Somali piracy, moreover, the chapter has also shown how human security threats are connected to other dimensions of maritime security and how human security concerns were vital in the evolution and formulation of a comprehensive counterpiracy strategy. Finally, the chapter has highlighted implications for policymakers and practitioners, arguing that analysts need to engage with vulnerable communities and that they need to align human security with other objectives and integrate human security policies into broader maritime security strategies.

¹ Christian Bueger et al., *Securing the Sea: A Comprehensive Assessment of Global Maritime Security* (United Nations Institute for Disarmament Research, 2024); Ascensión García Ruiz et al., “Eco-Crimes and Ecocide at Sea: Toward a New Blue Criminology,” *International Journal of Offender Therapy and Comparative Criminology* 162 (2022), <https://doi.org/10.1177/0306624X20967950>; Basil Germond and Antonios D. Mazaris, “Climate Change and Maritime Security,” *Marine Policy* 99, no. October 2018 (2019): 262–66, <https://doi.org/10.1016/j.marpol.2018.10.010>.

² Christian Bueger, “What Is Maritime Security?,” *Marine Policy* 53 (March 2015): 159–64, <https://doi.org/10.1016/j.marpol.2014.12.005>.

³ Sarah Percy, “Maritime Security,” in *The Oxford Handbook of International Security*, ed. Alexandra Gheciu and William C. Wohlforth (Oxford University Press, 2018), <https://doi.org/10.1093/oxfordhb/9780198777854.013.40>.

⁴ Christian Bueger and Timothy Edmunds, *Understanding Maritime Security* (Oxford University Press, 2024), <https://academic.oup.com/book/56453>.

⁵ Jihong Chen et al., “Marine Oil Spill Pollution Causes and Governance: A Case Study of Sanchi Tanker Collision and Explosion,” *Journal of Cleaner Production* 273 (November 2020): 122978, <https://doi.org/10.1016/j.jclepro.2020.122978>.

⁶ Matthias Flueckiger and Markus Ludwig, “Economic Shocks in the Fisheries Sector and Maritime Piracy,” *Journal of Development Economics* 114 (May 2015): 107–25, <https://doi.org/10.1016/j.jdeveco.2014.12.003>.

⁷ Brian Benjamin Crisher and Mark Souva, “Power at Sea: A Naval Power Dataset, 1865–2011,” *International Interactions* 40, no. 4 (2014): 602–29, <https://doi.org/10.1080/03050629.2014.918039>.

⁸ Commission on Human Security, ed., *Human Security Now* (New York/N.Y., 2003), 2.

⁹ Paolo Cuttitta, “Repoliticization Through Search and Rescue? Humanitarian NGOs and Migration Management in the Central Mediterranean,” *Geopolitics* 23, no. 3 (2018): 632–60, <https://doi.org/10.1080/14650045.2017.1344834>; Kathleen Newland, “Maritime Migration: A Wicked Problem,” in *All at Sea: The Policy Challenges of Rescue, Interception, and Long-Term Response to Maritime Migration*, ed. Kate Hooper and Sarah Flamm Kathleen Newland, Elizabeth Collett (Migration Policy Institute, 2016).

¹⁰ Bueger and Edmunds, *Understanding Maritime Security*, 21–29.

¹¹ Bueger et al., *Securing the Sea: A Comprehensive Assessment of Global Maritime Security*.

¹² United Nations Security Council. S/PRST/2021/15 (9 August 2021).

-
- ¹³ United Nations Security Council. S/PV.9919 (20 May 2025).
- ¹⁴ Brian Wilson, "The Turtle Bay Pivot: How the United Nations Security Council Is Reshaping Naval Pursuit of Nuclear Proliferators, Rogue States, and Pirates," *Emory International Law Review* 33, no. 1 (2019), <https://doi.org/10.2139/ssrn.3329212>.
- ¹⁵ Bueger et al., *Securing the Sea: A Comprehensive Assessment of Global Maritime Security*.
- ¹⁶ Bueger, "What Is Maritime Security?"
- ¹⁷ see also Bueger and Edmunds, *Understanding Maritime Security*, 6.
- ¹⁸ Jonny Beyer et al., "Environmental Effects of the Deepwater Horizon Oil Spill: A Review," *Marine Pollution Bulletin* 110, no. 1 (2016): 28–51, <https://doi.org/10.1016/j.marpolbul.2016.06.027>.
- ¹⁹ International Transport Workers' Federation, *Flags of Convenience*, n.d., <https://www.itfseafarers.org/en/issues/flags-of-convenience>.
- ²⁰ Elizabeth R. Selig et al., "Revealing Global Risks of Labor Abuse and Illegal, Unreported, and Unregulated Fishing," *Nature Communications* 13, no. 1 (2022), <https://doi.org/10.1038/s41467-022-28916-2>.
- ²¹ Miriam Wilhelm et al., "Private Governance of Human and Labor Rights in Seafood Supply Chains – The Case of the Modern Slavery Crisis in Thailand," *Marine Policy* 115 (May 2020): 103833, <https://doi.org/10.1016/j.marpol.2020.103833>.
- ²² International Maritime Organization, "Seafarer Abandonment," n.d., Michael Bloor and Helen Sampson, "Regulatory Enforcement of Labour Standards in an Outsourcing Globalized Industry: The Case of the Shipping Industry," *Work, Employment and Society* 23, no. 4 (2009): 711–26, <https://doi.org/10.1177/0950017009344915>. <https://www.imo.org/en/ourwork/legal/pages/seafarer-abandonment.aspx>.
- ²³ E. Rodriguez-Diaz et al., "Challenges and Security Risks in the Red Sea: Impact of Houthi Attacks on Maritime Traffic," preprint, Engineering, October 1, 2024, <https://doi.org/10.20944/preprints202410.0053.v1>.
- ²⁴ David Gritten, "Two Crew Killed in Attack on Cargo Ship in Red Sea," *BBC*, July 9, 2025, <https://www.bbc.com/news/articles/c70r9p6e8yxo>.
- ²⁵ Angela Giuffrida, "More than 2,200 People Died in Mediterranean in 2024, UN Finds," *The Guardian*, January 3, 2025, <https://www.theguardian.com/world/2025/jan/03/more-than-2200-people-died-trying-to-reach-europe-2024>.
- ²⁶ Cuttitta, "Repoliticization Through Search and Rescue? Humanitarian NGOs and Migration Management in the Central Mediterranean."
- ²⁷ The World Bank, *The Pirates of Somalia: Ending the Threat, Rebuilding the Nation* (Washington, D. C., 2012), xiv.
- ²⁸ Christian Bueger and Timothy Edmunds, "Blue Crime: Conceptualising Transnational Organised Crime at Sea," *Marine Policy* 119, no. May (2020): 104067, <https://doi.org/10.1016/j.marpol.2020.104067>.
- ²⁹ Sarah Percy and Anja Shortland, "The Business of Piracy in Somalia," *Journal of Strategic Studies* 36, no. 4 (2013): 541–78.
- ³⁰ Otto Lisa, *Maritime Security in the Gulf of Guinea: Establishinh Law, Generating Order.*, in *Policy Briefing* 151, no. July (South African Institute of International Affairs, 2016); Carina Bruwer, "Transnational Organised Crime at Sea as a Threat to the Sustainable Development Goals: Taking Direction from Piracy and Counter-Piracy in the Western Indian Ocean," *African Security Review* 28, nos. 3–4 (2019): 172–88, <https://doi.org/10.1080/10246029.2020.1728352>.
- ³¹ Monterey Bay Aquarium, "Stop Illegal Fishing," *Seafood Watch*, n.d., <https://www.seafoodwatch.org/seafood-basics/sustainable-solutions/stop-illegal-fishing>.
- ³² Andrew J. Temple et al., "Illegal, Unregulated and Unreported Fishing Impacts: A Systematic Review of Evidence and Proposed Future Agenda," *Marine Policy* 139 (May 2022): 105033, <https://doi.org/10.1016/j.marpol.2022.105033>.
- ³³ Anup Phayal et al., "All Maritime Crimes Are Local: Understanding the Causal Link between Illegal Fishing and Maritime Piracy," *Political Geography* 109 (March 2024): 103069, <https://doi.org/10.1016/j.polgeo.2024.103069>.
- ³⁴ Sankaran Rajendran et al., "History of a Disaster: A Baseline Assessment of the Wakashio Oil Spill on the Coast of Mauritius, Indian Ocean," *Marine Pollution Bulletin* 175, no. January (2022): 113330, <https://doi.org/10.1016/j.marpolbul.2022.113330>.
- ³⁵ Jonas Franken et al., "Hidden Structures of a Global Infrastructure: Expansion Factors of the Subsea Data Cable Network," *Technological Forecasting and Social Change* 215 (June 2025): 124068, <https://doi.org/10.1016/j.techfore.2025.124068>; Christian Bueger and Tobias Liebetrau, "Protecting

Hidden Infrastructure: The Security Politics of the Global Submarine Data Cable Network,” *Contemporary Security Policy* 42, no. 3 (2021): 391–413, <https://doi.org/10.1080/13523260.2021.1907129>.

³⁶ Praveen Menon and Tom Westbrook, “Undersea Cable Fault Could Cut off Tonga from Rest of the World for Weeks,” *Reuters*, January 18, 2022, <https://www.reuters.com/markets/funds/undersea-cable-fault-could-cut-off-tonga-rest-world-weeks-2022-01-18/>.

³⁷ Dana Hassani et al., “A Multiperiod, Multicommodity, Capacitated International Agricultural Trade Network Equilibrium Model with Applications to Ukraine in Wartime,” *Transportation Science*, ahead of print, Institute for Operations Research and the Management Sciences (INFORMS), August 28, 2024, <https://doi.org/10.1287/trsc.2023.0294>.

³⁸ Bueger and Edmunds, “Blue Crime: Conceptualising Transnational Organised Crime at Sea.”

³⁹ Christian Bueger et al., “Pirates, Fishermen and Peacebuilding: Options for a Sustainable Counter-Piracy Strategy in Somalia,” *Contemporary Security Policy* 32, no. 2 (2011): 356–81, <https://doi.org/10.1080/13523260.2011.590359>.

⁴⁰ Douglas Guilfoyle, “COUNTER-PIRACY LAW ENFORCEMENT AND HUMAN RIGHTS,” *International and Comparative Law Quarterly* 59, no. 1 (2010): 141–69, <https://doi.org/10.1017/s002058930999011x>; Sofia Galani, “Assessing Maritime Security and Human Rights: The Role of the EU and Its Member States in the Protection of Human Rights in the Maritime Domain,” *The International Journal of Marine and Coastal Law* 35, no. 2 (2020): 325–47, <https://doi.org/10.1163/15718085-23441006>.

⁴¹ The World Bank, *The Pirates of Somalia: Ending the Threat, Rebuilding the Nation*, xiii.

⁴² Jan Stockbruegger, “US Strategy and the Rise of Private Maritime Security,” *Security Studies* 30, no. 4 (2021): 580–604, <https://doi.org/10.1080/09636412.2021.1976821>.

⁴³ Paul Lansing and Michael Petersen, “Ship-Owners and the Twenty-First Century Somali Pirate: The Business Ethics of Ransom Payment,” *Journal of Business Ethics* 102, no. 3 (2011): 507–16, <https://doi.org/10.1007/s10551-011-0832-y>.

⁴⁴ Stockbruegger, “US Strategy and the Rise of Private Maritime Security.”

⁴⁵ Abdi Ismail Samatar et al., “The Dialectics of Piracy in Somalia: The Rich versus the Poor,” *Third World Quarterly* 31, no. 8 (2010): 1377–94, <https://doi.org/10.1080/01436597.2010.538238>.

⁴⁶ Christian Bueger, “Practice, Pirates and Coast Guards: The Grand Narrative of Somali Piracy,” *Third World Quarterly* 34, no. 10 (2013): 1811–27, <https://doi.org/10.1080/01436597.2013.851896>; Samatar et al., “The Dialectics of Piracy in Somalia: The Rich versus the Poor.”

⁴⁷ Bueger et al., “Pirates, Fishermen and Peacebuilding: Options for a Sustainable Counter-Piracy Strategy in Somalia”; Christian Bueger, “Drops in the Bucket? A Review of Onshore Responses to Somali Piracy,” *WMU Journal of Maritime Affairs* 11, no. 1 (2012): 15–31, <https://doi.org/10.1007/s13437-012-0022-5>.

⁴⁸ Bueger et al., “Pirates, Fishermen and Peacebuilding: Options for a Sustainable Counter-Piracy Strategy in Somalia.”

⁴⁹ Adrienne Mannov, *Perspectives from the Invisible Workforce: Lessons Learned for the Contact Group*, Working Paper for the Lessons Learned Project of the Contact Group on Piracy off the Coast of Somalia (Cardiff University, 2015).

⁵⁰ Ginger L. Denton and Jonathan R. Harris, “The Impact of Illegal Fishing on Maritime Piracy: Evidence from West Africa,” *Studies in Conflict and Terrorism* 44, no. 11 (2021): 938–57.

⁵¹ Christian Bueger, “Territory, Authority, Expertise: Global Governance and the Counter-Piracy Assemblage,” *European Journal of International Relations* 24, no. 3 (2018): 614–37, <https://doi.org/10.1177/1354066117725155>.

⁵² Stefania Panebianco, “Human Security at the Mediterranean Borders: Humanitarian Discourse in the EU Periphery,” *International Politics* 59, no. 3 (2022): 428–48, <https://doi.org/10.1057/s41311-021-00316-1>.