

Fish Wars: Climate and Fisheries Conflict in the South China Sea

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Climate change is no longer exclusively an environmental crisis; it has evolved into a profound security challenge that is reshaping global geopolitical affairs (Mendenhall et al., 2020; World Meteorological Organization [WMO], 2026). Rising temperatures, changing precipitation patterns, and more frequent extreme weather events are increasingly recognized as factors that exacerbate existing vulnerabilities and intensify competition over natural resources (WMO, 2026). Nowhere is this “threat multiplier” effect more evident than in the South China Sea, where warming oceans and declining fish stocks are fueling tensions over maritime space and resource access.

The South China Sea supports the food security and livelihoods of millions across Southeast Asia and is among the world’s most productive fishing grounds (Pomeroy et al., 2016, as cited in Mendenhall et al., 2020). Yet these resources are increasingly under pressure. The convergence of climate-driven shifts in fish populations and decades of overfishing has created a volatile environment where competition over marine resources

is becoming increasingly intense and the risk of fisheries conflict is rising (Mendenhall et al., 2020). The South China Sea therefore illustrates how environmental change can place increasing strain on existing governance structures and reshape regional security dynamics.

Climate Change and the Race for Fish

The physical impacts of climate change, including ocean warming, acidification, and sea-level rise, are fundamentally altering marine ecosystems worldwide (Mendenhall et al., 2020). Ocean warming is driving a global redistribution of biodiversity, forcing many fish species to migrate toward cooler poleward waters or into deeper, colder environments (Pecl et al., 2017). As marine ecosystems shift, fisheries are forced to adapt, often moving into new and contested waters.

In the South China Sea, these ecological changes intersect with long-standing territorial disputes. Overlapping maritime claims involving China, the Philippines, Vietnam, Malaysia, Brunei, and Taiwan create a politically sensitive environment in which shifts in fish distributions can quickly become a source of tension (Mendenhall et al., 2020). Climate change does not create these disputes, but it intensifies the conditions under which they unfold. Environmental pressures are compounded by Illegal, Unreported, and Unregulated (IUU) fishing. According to the Stimson Center's IUU Fishing Risk Analysis in Southeast Asia, the South China Sea remains one of the region's most vulnerable to illegal fishing due to weak governance, economic incentives, and increasing pressure on marine resources (Stimson Center, 2025). The result is an environment of increasing scarcity, where artisanal and industrial fishers alike are forced to travel farther from shore, often crossing sensitive maritime boundaries to find commercially viable stocks (Mendenhall et al., 2020; Spijkers et al., 2019).

This "race-for-fish" dynamic has important security implications. Spijkers et al. (2019) argue that fisheries conflict is rarely caused by a single factor. Rather, it emerges from the interaction of environmental change, political tensions, and competition over scarce resources. In regions where food security and economic livelihoods depend heavily on fisheries, ecological disruption can therefore contribute to broader crises in international relations.

In this warming world, fishing grounds are increasingly viewed as strategic spaces rather than merely economic assets (Mendenhall et al., 2020). Fisheries disputes have become securitized, with states deploying coast guards and naval forces to protect fishing rights, enforce maritime claims, and deter foreign incursions. China increasingly relies on a combination of coast guard vessels, maritime militia, and fishing fleets to assert its maritime claims in the South China Sea (Permanent Court of Arbitration [PCA], 2016). This blurring of the line between civilian and state activity increases the risk of miscalculation, as local fisheries disputes can

escalate into diplomatic or security crises (Spijkers et al., 2019). Fishing vessels have become symbols of sovereignty and instruments of state presence.

Scarborough Shoal: A Fisheries Flashpoint

Scarborough Shoal remains one of the most significant flashpoints in the South China Sea due to its abundant fishing grounds and strategic location (PCA, 2016; Dang & Trang, 2025). Claimed by both China and the Philippines, the shoal has been the site of repeated confrontations between fishermen, coast guards, and maritime authorities. Since 2012, China has maintained a near-permanent presence around the shoal through coast guard and maritime militia vessels (PCA, 2016). The legal status of these actions was addressed in the landmark 2016 South China Sea Arbitration.

The Arbitral Tribunal ruled that China's claims to historic rights within the so-called "nine-dash line" had no legal basis under the United Nations Convention on the Law of the Sea (UNCLOS) (PCA, 2016). The Tribunal further found that China had unlawfully interfered with the traditional fishing rights of Filipino fishers and had failed to protect the marine environment (PCA, 2016). Despite the ruling, tensions have continued to rise. In April 2026, China conducted combat readiness patrols near Scarborough Shoal, highlighting the continued strategic importance of the area (Reuters, 2026a). More recently, diplomatic protests were lodged over the presence of a floating platform deployed by Chinese vessels near the shoal, which Beijing described as part of "comprehensive research" (Reuters, 2026b). These developments illustrate how fisheries, sovereignty, and security have become increasingly intertwined in the South China Sea.

The environmental consequences of maritime disputes in the South China Sea are substantial and, in some cases, irreversible. The 2016 Arbitral Tribunal found that China's island-building activities in the Spratly Islands caused severe harm to fragile coral reef ecosystems (PCA, 2016). Using large-scale dredging equipment, these activities buried coral reefs under millions of tons of sand and rubble, causing permanent damage to marine habitats (PCA, 2016). The Tribunal also found that Chinese fishing vessels had engaged in the harvesting of endangered species, including giant clams and sea turtles, often under the protection of government vessels (PCA, 2016). These findings demonstrate that environmental degradation has become intertwined with broader struggles over sovereignty and resource control.

From Competition to Cooperation

Despite mounting risks, current international governance frameworks remain ill-equipped to address the combined challenges of climate change, fisheries depletion, and maritime insecurity (Mendenhall et al., 2020; Spijkers et al., 2019). Many Regional Fisheries Management Organizations struggle to adapt to shifting fish stocks and lack the enforcement capacity

necessary to respond effectively to changing environmental conditions (Mendenhall et al., 2020).

Several pathways toward cooperation have nevertheless been proposed. Scientific collaboration and shared monitoring systems can provide a non-threatening basis for negotiation and help states develop a common understanding of ecological change (Spijkers et al., 2019). Provisional fisheries agreements that recognize territorial disputes while creating shared fishing zones may also reduce tensions (Mendenhall et al., 2020). An innovative proposal is the establishment of a Scarborough Peace Park. Dang and Trang (2025) argue that a jointly managed marine protected area could conserve biodiversity while fostering trust through collaborative research and coordinated enforcement. Although politically ambitious, such initiatives demonstrate that cooperation remains possible even in contested waters.

The South China Sea illustrates how climate change can reshape geopolitical relationships without directly causing conflict. By altering marine ecosystems and intensifying competition over fisheries, climate change places increasing pressure on existing governance structures and raises the stakes of maritime disputes (Mendenhall et al., 2020; Pecl et al., 2017). For policymakers, the challenge is clear: the current territorial model of maritime governance is being strained by a warming world. Addressing fisheries through a climate-security lens is therefore essential for environmental sustainability and regional stability. Ultimately, the future of the South China Sea will depend on whether states choose cooperation over confrontation and develop institutions capable of managing the ecological and geopolitical challenges of the twenty-first century.

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