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CAUGHT RED-HANDED BRIEF | JUNE 2019

MARITIME SECURITY IN THE INDIAN OCEAN:
PERCEIVED THREATS, IMPACTS, AND SOLUTIONS
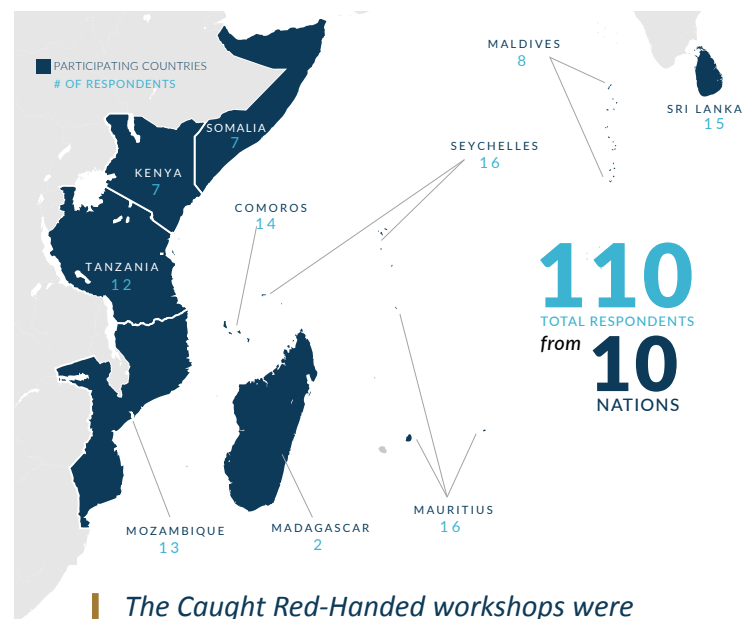
by Laura Burroughs and Robert Mazurek

OVERVIEW: This brief is based on surveys of more than 100 representatives from maritime agencies in ten Indian Ocean countries. It highlights perspectives about the most significant maritime security threats, the impacts of illegal, unreported, and unregulated (IUU) fishing on human security and conflict, and the most effective approaches and needed resources for combating IUU fishing in each country.

Indian Ocean countries face several ongoing maritime security threats, including piracy, armed robbery, human smuggling, drug smuggling, and illegal fishing. Each maritime threat has a significant impact on coastal welfare and economic growth. But with limited resources to combat these criminal activities, coastal states are faced with the dual challenge of prioritizing funding to reduce security threats while simultaneously mobilizing local, regional, and international efforts to overcome maritime security challenges. During the Caught Red-Handed workshops in 2018, which were conducted in ten Indian Ocean countries, Secure Fisheries had a unique opportunity to better understand how each country prioritizes maritime security threats while examining how participants perceive the types and severity of maritime challenges in their own country.

The Caught Red-Handed workshops were part of a novel collaboration with the United Nations Office on Drugs and Crime and the US Navy in an effort to combat illegal fishing. The Caught Red-Handed workshops maximized participation and information dissemination by hosting separate workshops in each country rather than hosting one workshop with participants from each country, which would have limited the attendance of key stakeholders and technical experts. The workshops were attended by nearly 300 participants from different maritime agencies, including fisheries and wildlife agencies, maritime police, navies, and coast guards. Secure Fisheries disseminated surveys to workshop participants, gathering information on perceived national maritime security threats and capacity needs.

Of the Caught Red-Handed workshop participants, 110 responded to this five-question survey. This brief highlights and synthesizes their responses in order to share their perspectives and inform future maritime security efforts.

NUMBER OF RESPONDENTS BY COUNTRY:

PARTICIPATING COUNTRIES
OF RESPONDENTS

MALDIVES
8

SRI LANKA
15

SOMALIA
7

SEYCHELLES
16

KENYA
7

COMOROS
14

TANZANIA
12

110
TOTAL RESPONDENTS
from
10
NATIONS

MOZAMBIQUE
13

MADAGASCAR
2

MAURITIUS
16

The Caught Red-Handed workshops were attended by participants from different maritime agencies, granting insight into how maritime security threats are perceived across nations and organizations.

I. THREATS TO MARITIME SECURITY

Indian Ocean countries face a variety of maritime security threats. Participants were asked to rank the risk level for each of the following threats to maritime security as either a "significant threat," "somewhat a threat," or "not a threat," referring to their respective countries. Figure 1 shows the percent of respondents who ranked each threat at which risk level.

Respondents listed illegal fishing as the most significant maritime security threat across all ten countries. While this number may be heightened due to the topic of the workshops, survey respondents hailed from a variety of maritime sectors, including navies and national customs and border protection agencies. In Somalia and the Maldives, 100 percent of survey respondents listed illegal fishing as a significant maritime security threat. Workshop participants emphasized the harmful impacts of illegal fishing, but illegal fishing garners relatively little attention or resources, allowing illegal fishing vessels to proliferate throughout the region and even enable other maritime crimes. In Somalia, workshop participants felt illegal fishing threatened both food and economic security in coastal communities. Sri Lankan participants perceived illegal fishing as a direct threat to the sovereignty of their Exclusive Economic Zone (EEZ). And in the Maldives, participants observed a link between illegal fishing and criminal networks.

Respondents considered drug trafficking to be the second most significant maritime security threat. The Stable Seas Maritime Security Index finds that East Africa is the largest intermediary for Afghanistan's heroin supply.[1] And, in some cases, drug trafficking and illegal fishing are related.[2] For example, fishing vessels may be used to transport drugs or help drug trafficking vessels refuel. Traffickers find fishing vessels to be optimal transportation because they draw less attention than other types of vessels and illegal fishing generates low penalties compared to other maritime crimes. Some drug traffickers shifted to illegal fishing in response to the lure of lucrative returns and low penalties; they also take advantage of fishing vessels and even the fish cargo itself to conceal illicit drugs. Drugs and illegally caught fish may also be traded, especially because this exchange is less traceable than one involving cash payment.[3]

ILLEGAL FISHING
was listed by respondents as the
MOST SIGNIFICANT
MARITIME SECURITY THREAT

The Stable Seas Maritime Security Index finds that Mozambique has one of the highest rates of illicit trade in the Western Indian Ocean,[4] especially the trafficking of heroin and cocaine.[5] A majority of Mozambique's Caught Red-Handed survey respondents perceived significant threats from illegal fishing, drug trafficking, human smuggling, and arms and weapons trafficking, highlighting the interconnectedness of transnational crimes. Caught Red-Handed participants in Mozambique also emphasized the need for interagency coordination between the Ministry of Fisheries and the Drug Enforcement Agency to combat illegal fishing and drug trafficking.

While terrorism ranked the lowest across the survey of maritime security threats, most respondents rated it as significant in Somalia, Kenya, and Mozambique, where threats from terrorist groups like Al Shabaab are prevalent. Although these terrorist groups conduct attacks on land, they may receive funding from maritime crime, including illegal fishing.[6]

FIGURE 1: THREATS TO MARITIME SECURITY

| | Significant threat | Somewhat a threat | Not a threat |
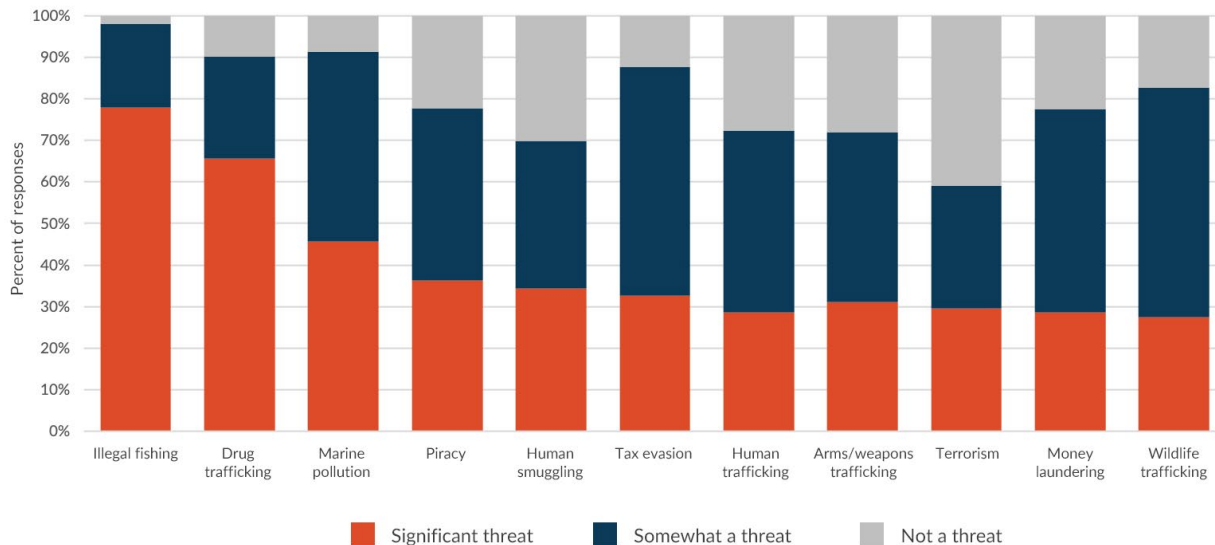
II. HUMAN IMPACTS OF IUU FISHING

IUU fishing also undermines human security by adversely affecting the economy and food security. Participants were asked to rank, for their home countries, the impacts of IUU fishing as "significant," "somewhat significant," or "not significant." Figure 2 shows how respondents ranked these impacts by category.

FIGURE 2: IMPACTS OF IUU FISHING
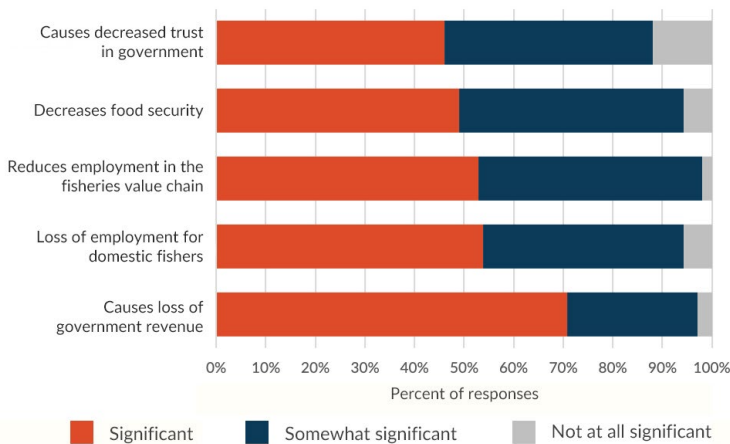
Caught Red-Handed workshop participants believed IUU fishing resulted in loss of government revenue, loss of employment for fishers, and a reduction of employment for other fishing sector jobs, and, to a lesser extent, decreases in food security and trust in government. In most Indian Ocean countries, illegally caught fish is not landed, let alone processed, in the country in whose waters it was caught; therefore, the most direct and immediate revenue comes from the licensing of fishing vessels.

Indirectly, the loss of government revenue prevents reinvestment into the sector that could develop domestic processing and expand both domestic markets and foreign trade. The vast majority of survey respondents believed that IUU fishing either "somewhat" or "significantly" reduced employment in the fisheries value chain. This can have spillover effects, as the fishing sector employs many people beyond the fishers themselves. This includes gear owners, processors, and marketers of fish, with a majority of post-harvest workers being women.[7]

Mozambique estimates an annual loss of US$60 million due to illegal fishing in its waters, combining the economic impact of losses in employment, the value chain, and licensing.[8] In Seychelles, a country with a strong Blue Economy, the fisheries sector provides 90 percent of the country's export revenue and 11 percent of employment.[9]

III. IUU FISHING AND CONFLICT

IUU fishing is related to conflict at a larger scale. Participants were asked whether IUU fishing was related to conflict in their country, and to what degree ("significantly related," "somewhat related," or "not related.") Figure 3 shows the perception of participants about the links between IUU fishing and conflict.

Illegal fishing is also related to other forms of maritime and land-based conflict. More than half of the respondents noted the relationships between IUU fishing and fisheries conflict—especially conflict between foreign and local fishers, conflict over fish shortages, and conflict around overlapping fishing grounds.

Secure Fisheries' recent report, *Fish Wars: The Causes and Consequences of Fisheries Conflict in Tanzania,*[10] finds that illegal fishing is the primary driver of fisheries conflicts in Tanzania. The second most significant cause stems from declining fish populations, with 50 percent of fisheries dispute events involving real or perceived fish shortages. Offshore, conflicts arise between foreign and domestic fishers as illegal foreign fishers attempt to exploit local resources.

The relationship between IUU fishing and conflict is complex, and more research is needed to understand the level and intensity of fisheries conflict in the Indian Ocean. However, maritime security experts' perceptions of the relationship between IUU fishing and conflicts in their waters are an important indicator.
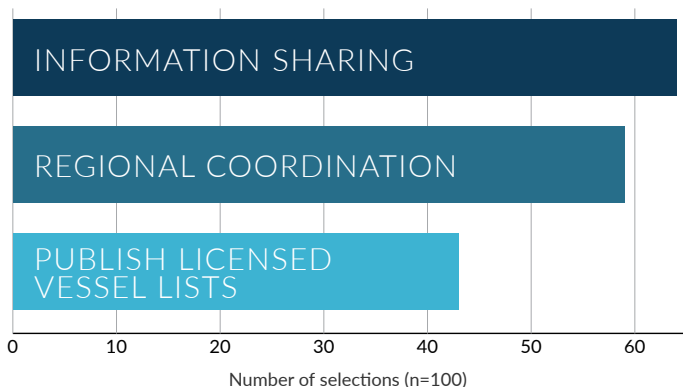
FIGURE 3: RELATIONSHIP OF IUU FISHING TO CONFLICT
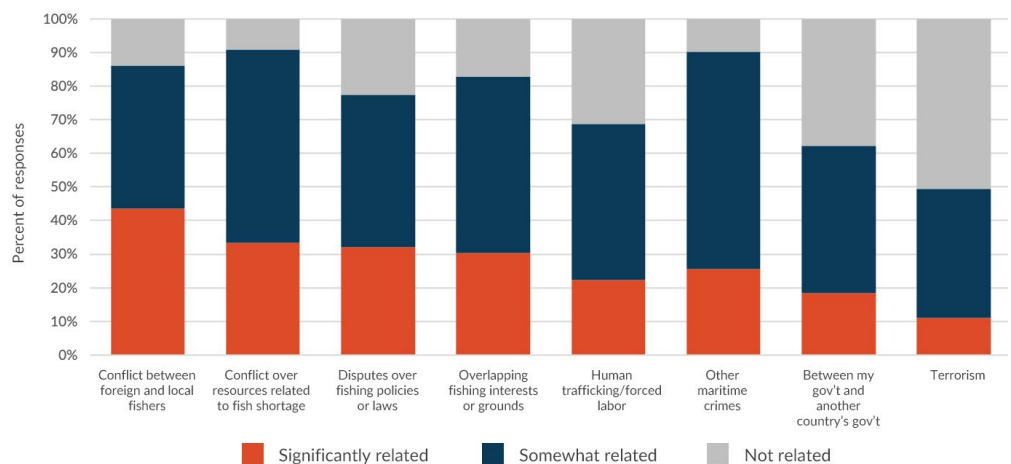
IV. MOST EFFECTIVE APPROACHES TO COMBATING IUU FISHING

Several national and international approaches have been employed to combat IUU fishing in the Indian Ocean. Participants were asked to select, for their home country, the three most effective approaches. Figure 4 displays the three most commonly selected approaches.

FIGURE 4: MOST EFFECTIVE APPROACHES TO COMBATTING IUU FISHING

INFORMATION SHARING

REGIONAL COORDINATION

PUBLISH LICENSED VESSEL LISTS

0   10   20   30   40   50   60

Number of selections (n=100)

Our survey of the Caught Red-Handed participants helped us understand which approach participants felt was the most effective in fighting illegal fishing in their respective countries. We asked participants to pick three of fifteen options; information sharing, regional coordination of illegal fishing efforts, and transparency in vessel licensing were selected in the top three by most participants.

Each country that participated in the Caught Red-Handed workshops invests in efforts to combat illegal fishing. Some of these efforts are managed by a single agency, like routine port inspections conducted by maritime police. In other cases, multiple national agencies work in partnership on collaborative approaches to combat IUU fishing, such as joint patrols conducted by fisheries officers and the coast guard. There are also several regional efforts to fight illegal fishing that go beyond national borders. For example, the FISH-i Africa Task Force joins eight Indian Ocean states to share information on illegal fishing vessels, and they have made notable progress in identifying and intercepting such vessels.

Interestingly, every island nation in the survey (Seychelles, Comoros, Mauritius, and Madagascar) picked information sharing more than any of the other options. This may reflect the isolation inherent in managing ocean resources far away from the continent. It may also be related to the large size of the EEZs for most island nations. The lack of information sharing

on fishing vessel activities and close coordination between national maritime agencies makes it is easy for transnational fishing vessels to operate unnoticed, far offshore, and to transship illegal catch to distant ports.

Information sharing between agencies increases arrests for illegal fishing. For instance, during a recent patrol in the EEZ of Seychelles, a Sri Lankan-flagged vessel was spotted by the Seychelles Coast Guard patrol ship *Andromache* near Mahe. A coast guard boarding team conducted an inspection and found evidence related to illegal fishing. This information was then shared with the Seychelles Fishing Authority, who then assisted the Coast Guard and police in gathering evidence needed for a successful prosecution.

Information sharing goes hand in hand with another approach that was selected by most participants: regional coordination. FISH-i Africa provides an interactive communications platform which enables members to communicate and exchange information related to illegal fishing incidents and operators in real-time. The task force also provides an opportunity for discussion, analysis, strategy building, and planning, while also building relationships and establishing trust between national fisheries enforcement officers from different countries.

Regional coordination was one of the approaches identified by Caught Red-Handed participants as most effective at fighting IUU fishing. Above: a marine participates in a joint exercise among East African navies. US Air Force photo: Tech. Sergeant Donald R. Allen.

Publishing vessel licensing information was also highlighted in our survey results. Several Caught Red-Handed participants mentioned that without a transparent way to distinguish legal vessels from illegal vessels, it is impossible to combat illegal fishing. Consequently, more Indian Ocean countries are beginning to publish their vessel lists online. The Seychelles has built the model for this and has been publishing fishing vessel licensing information for over a decade, while Somalia has just started publishing their list with the licensing of Chinese fishing vessels in 2018.

V. RESOURCES NECESSARY TO COMBAT IUU FISHING

Caught Red-Handed participants articulated several resource gaps in the fight to deter illegal fishing. They were asked to select, for their home country, the three most needed resources. Figure 5 displays the three most commonly selected resources.

FIGURE 5: TOP 3 RESOURCES NEEDED TO COMBAT IUU FISHING
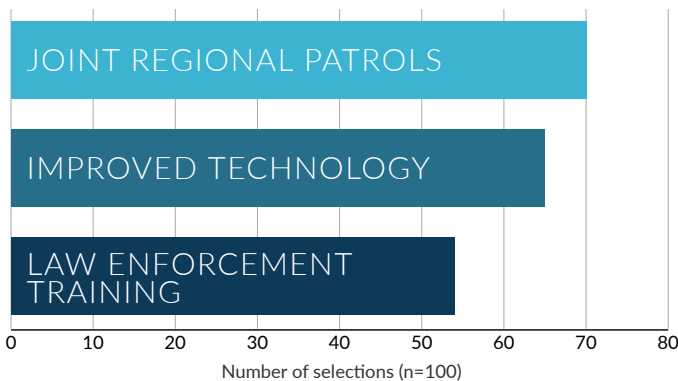
None of the Caught Red-Handed participants felt that they had adequate resources to combat illegal fishing. And several countries believed that, at least in the short term, the best way of addressing this lack of resources was collaborating and coordinating with neighboring states to conduct joint patrols. Joint regional patrols were ranked highest by participants when asked what resources they needed to combat IUU fishing. If regional states pooled their resources and targeted areas with high rates of crime, participants contended that there could be a significant reduction in fisheries crime.

Regional coordination bodies, such as the Indian Ocean Commission and private non-governmental organizations like Sea Shepherd, can also conduct joint patrols. Both entities have dedicated vessels and personnel for patrolling the EEZs of partner countries in close collaboration with the state agency in charge of fisheries and maritime security. In Tanzania, law enforcement officials from the Deep Sea

Fishing Authority, the Tanzanian Navy, and the Multi-Agency Task Team have been stationed on board the M/V *Ocean Warrior,* along with Sea Shepherd crew members, to inspect and arrest vessels in violation of Tanzanian law. Since the patrols began, three vessels have been impounded and ten arrests have been made.

> *None of the Caught Red-Handed participants felt that they had adequate resources to combat illegal fishing.*

Improved technology was ranked second, as many participants believe that automatic identification systems (AIS), vessel monitoring systems (VMS), and satellite imagery should be used to aid maritime patrols. For example, Seychelles has an ongoing partnership with Vulcan, which is providing the country with the technological assets needed to position patrol vessels to successfully target illegal fishers. This partnership utilizes Vulcan's integrated system called Skylight, which combines several vessel-monitoring systems and satellite technologies to create profiles, reports, and alerts on suspicious illegal fishing activities in Seychelles' EEZ.

VI. CONCLUSIONS AND RECOMMENDATIONS

Bringing together nearly 300 participants from different maritime sectors in ten Indian Ocean countries, the Caught Red-Handed workshops provided a unique opportunity to understand perceptions of maritime threats, impacts of those threats, and tangible solutions, hearing directly from those who experience them on a regular basis. Threats to maritime security require international attention and collaboration, but these priorities and solutions should be determined by those most affected. In general, efforts to combat IUU fishing and maritime crime should be collaborative and locally driven. Based on this survey and qualitative input from the Caught Red-Handed participants, we put forward the following recommendations:

EXPAND INFORMATION SHARING

Madagascar hosts a regional information fusion center to promote information sharing in the Western Indian Ocean, but participants contended that information sharing must first be improved at the national level. Participants suggested creating national maritime coordination offices with secured online platforms to improve information exchange and analysis between state agencies.

SUPPORT REGIONAL COORDINATION EFFORTS

FISH-i Africa has had notable successes in coordinating actions against illegal fishing vessels in the Western Indian Ocean, but its success relies on trust and transparency between member countries. Workshop participants recommended strengthening mandates to ensure regional information exchange and joint enforcement.

PUBLISH LICENSED VESSEL LISTS

Publishing licensed vessel lists is a low-cost way to improve transparency and help observers identify illegal vessels. In Somalia, the Ministry of Fisheries and Marine Resources provides a list published on its website.

ESTABLISH JOINT REGIONAL PATROLS

In order to supplement limited resources and funding to combat IUU fishing, states can pool resources or work with other organizations such as Sea Shepherd to catch illegal vessels.

IMPROVE ACCESS TO TECHNOLOGY

Technology such as AIS, VMS, and radar and optical satellites enable states to better identify and catch illegal fishing vessels, but many developing states do not have access to this technology. New public-private partnerships are critical to enabling all states to utilize satellite data in the fight against illegal fishing, and funding must be made available to resource-poor states to provide access to this data.

TRAIN LAW ENFORCEMENT AGENCIES IN INSPECTING AND PROSECUTING ILLEGAL FISHING CASES

Prosecution of illegal fishers is extremely rare. Local law enforcement officials requested better training in what to look for when investigating illegal vessels and what information to collect to support prosecutions.

Photo: US Navy, Timothy M Aheam.

ENDNOTES

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ONE EARTH FUTURE

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One Earth Future (OEF) is a self-funded, private operating foundation seeking to create a more peaceful world through collaborative, data-driven initiatives. OEF focuses on enhancing maritime cooperation, creating sustainable jobs in fragile economies, and research which actively contributes to thought leadership on global issues. As an operating foundation, OEF provides strategic, financial, and administrative support allowing its programs to focus deeply on complex problems and to create constructive alternatives to violent conflict.

SECURE FISHERIES

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Secure Fisheries is a program of One Earth Future. Secure Fisheries works with local, regional, and international stakeholders to strengthen fisheries governance, combat illegal fishing, and promote sustainability in fragile and post-conflict regions as a pathway towards greater peace and stability.

CONTACT US

📞 303.533.1715   ✉ info@oneearthfuture.org   📍 525 Zang St. Broomfield, CO 80021

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Advancing Sustainable Fisheries
a program of One Earth Future

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