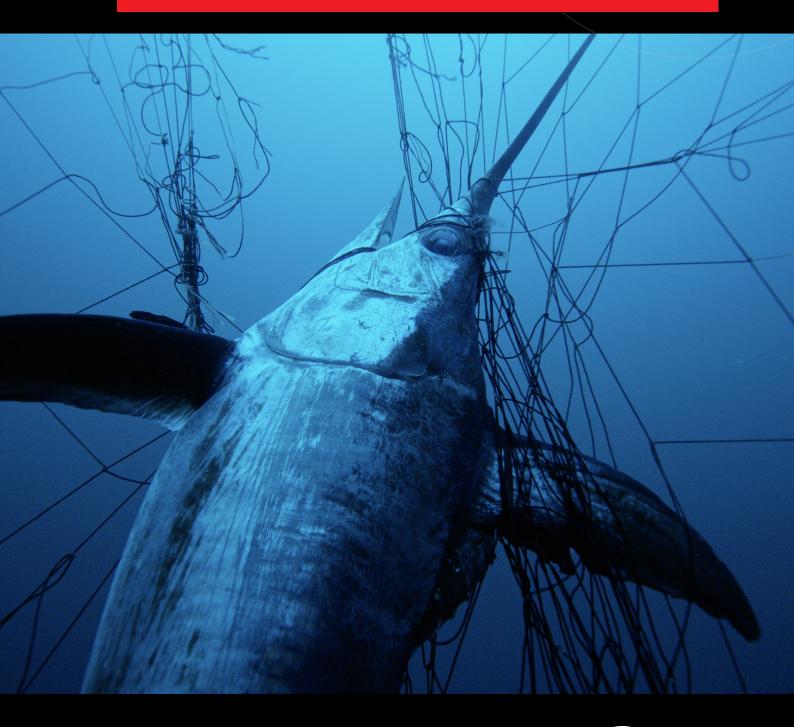
WALLS OF DEATH

ILLEGAL DRIFTNETTING IN THE MEDITERRANEAN







Protecting People and Planet

The Environmental Justice Foundation (EJF) exists to protect the natural world and defend our basic human right to a secure environment.

EJF works internationally to inform policy and drive systemic, durable reforms to protect our environment and defend human rights.

We investigate and expose abuses and support environmental defenders, Indigenous peoples, communities and independent journalists on the frontlines of environmental injustice.

Our campaigns aim to secure peaceful, equitable and sustainable futures.

EJF is committed to combating illegal, unreported, and unregulated (IUU) fishing as well as associated human rights abuses in the fishing sector.

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Our work to secure environmental justice aims to protect our global climate, ocean, forests, wetlands, wildlife and defend the fundamental human right to a secure natural environment, recognising that all other rights are contingent on this.

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Special thanks to all interviewees for their contribution to this report. All views expressed are those of EJF alone, and interviewees do not necessarily share the expressed views and interpretations.

Cover image: a swordfish entangled in and killed by a driftnet. These nets have been linked to substantial declines in swordfish populations, as well as widespread and indiscriminate bycatch of other species. Image courtesy of Paul Nicklen/ SeaLegacy.

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Contents

Executive summary	4
1. Introduction	5
2. Methodology	7
3. Driftnets: the walls of death	7
Environmental impacts	8
Legal status of the use of driftnets in the Alboran Sea (Mediterranean)	13
4. Illegal driftnet fishing remains commonplace in the Alboran Sea	13
The size of the driftnet fleet in the Alboran Sea	
is likely higher than existing estimates	16
5. Port authorities are failing to deter the use of driftnets	17
6. Economic insecurity and foreign demand drive driftnet use	20
7. Looking forward: the need for a sustainable transition	23
8. Conclusions and recommendations	24

Abbreviations

 $ACCOBAMS: \quad Agreement \ on \ the \ Conservation \ of \ Cetaceans \ of \ the \ Black \ Sea,$

Mediterranean Sea and Contiguous Atlantic Area

EEZ: Exclusive Economic Zone

EFCA: European Fisheries Control Agency EJF: Environmental Justice Foundation

GFCM: General Fisheries Commission for the Mediterranean

 $ICCAT: \\ International\ Commission\ for\ the\ Conservation\ of\ Atlantic\ Tuna$

IUU: Illegal, unreported and unregulated (fishing)



- **Driftnets** are an indiscriminate fishing method consisting of nets suspended vertically in the water column, drifting with ocean currents. These nets can measure tens of kilometres and catch fish as they swim into them.
- This investigation examined the use of driftnets by Moroccan vessels in the **Alboran Sea**, a Mediterranean biodiversity hotspot that is also critical for highly migratory species (HMS) that travel between the Mediterranean and the Atlantic Ocean.
- These nets primarily target **large pelagic species** such as swordfish, whose population is critically endangered in the Mediterranean Sea. However, driftnets also result in **high levels of bycatch**, ensnaring and depleting populations of marine megafauna, including endangered species like cetaceans, sea turtles, and sharks. Often made of nylon, driftnets can become **'ghost nets'** when lost or discarded, continuing to kill marine organisms for years while contributing to plastic pollution.
- Due to their negative environmental impact, the use of driftnets has been regulated and progressively banned at international, regional, and national levels, including in Morocco. Despite the driftnet ban under Moroccan law, EJF has confirmed with this investigation that driftnet fishing persists, with nets stored at ports in plain sight and vessels operating in both the Spanish and Moroccan exclusive economic zones (EEZs) in the **Alboran Sea** in April 2024.
- The profile of vessels using driftnets has evolved over time: while large industrial boats dominated the early 2000s, today's driftnet vessels are typically small wooden boats of approximately 3 gross tonnage (GT), measuring 5 to 10 m in length overall (LOA).
- **Fishing communities** in northern Morocco, a region facing significant chronic economic difficulties, have also been severely impacted by the COVID-19 pandemic and the energy crisis following Russia's full-scale invasion of Ukraine in 2022. Fishers interviewed by EJF indicated that harsh economic conditions, coupled with a lack of enforcement of the driftnet ban, drive individuals towards illegal practices for survival or force them to consider migration.
- **Foreign demand** is a key driver of the driftnet fishery, with the European Union (EU) as the main destination for swordfish from Morocco. This investigation's findings suggest that EU Member States may be importing swordfish caught illegally by driftnet vessels, potentially violating EU regulations aimed at ending illegal, unreported, and unregulated (IUU) fishing. As the primary market, the EU has a responsibility to ensure that harvests are legal and sustainable.
- **Recommendations** are directed at the Moroccan government, the EU, the International Commission for the Conservation of Atlantic Tunas (ICCAT), and the General Fisheries Commission for the Mediterranean (GFCM) to end illegal driftnet use, protect the abundant marine wildlife in the Alboran Sea, and support a just transition to safeguard the livelihoods of fishing communities in northern Morocco.



1. Introduction

The use of driftnets is an indiscriminate¹ fishing method that has severe impacts on marine megafauna. This technique involves suspending a net vertically in the water column, with regularly spaced foam floats along the top and weights lining the bottom, enabling the net to move passively with the ocean currents. It is used to target large pelagic species like tuna or swordfish (*Xiphias gladius*) by entangling them in the mesh. These nets can cover vast areas, with some reaching lengths² of tens of km and depths of 40 m.³ ⁴

The main target species of driftnets in the Alboran Sea is swordfish, a species that is currently in a critical state in the Mediterranean. Overfished for more than 30 years, its biomass has decreased by two thirds since the 1980s⁵ and, according to the latest available assessment, it is now 30% lower than the level required to achieve maximum sustainable yield⁶ (i.e., the maximum catch in numbers or mass that can be removed from a population over a period of time without causing the long-term decline of the

population). The EU is responsible for more than 65% of swordfish catches in the Mediterranean, with Italy (40%), Spain (15%), and Greece (9%) holding the largest shares. Other countries with significant swordfish catches include Morocco (11%), Tunisia (11%), and Algeria (5%).7 These catches are reported to ICCAT as predominantly caught by legal longline fishing8 (accounting for more than 95% of total reported catches).9 However, as this report will show, illegal driftnets targeting swordfish continue to be used, with catches presumably misreported as legal longline catches to disguise their true origin. Driftnet fishing causes other negative environmental impacts beyond its effects on the target species. Bycatch rates for marine megafauna have been recorded as high as 37% (the number of individuals of non-target species divided by the total number of individuals caught)10 and include several threatened species, such as cetaceans like common and striped dolphins, as well as pelagic sharks, including blue, shortfin mako, and thresher sharks.





Marine bycatch entangled in a driftnet. Whether during intentional operations or after they are lost and become 'ghost nets', driftnets catch indiscriminately. Credit: Alnitak.

Driftnets can also become a source of plastic pollution if discarded or lost, due to adverse weather conditions, strong currents, maritime traffic, or operational fishing factors, they may turn into 'ghost nets', continuing to entangle marine species indiscriminately for years.

The environmental consequences of this fishing technique have led to restrictions on driftnets use at international, regional, and national levels. Since bans were implemented at the regional and national levels, official reporting on the use of driftnets has all but stopped, and research into driftnet use in the Mediterranean has significantly diminished.

Information gathered by EJF shows that driftnets continue to be used extensively by Moroccan fishers in the Alboran Sea. The failure to ensure a transition for communities that rely on this technique for a living, towards more sustainable fishing techniques and the lack of enforcement by competent authorities, has allowed for the use of illegal driftnets in the region to continue.

Situated at the westernmost point of the Mediterranean, the Alboran Sea is of significant biological and economic importance. The exchange of waters with the Atlantic through the Strait of Gibraltar, 12 in combination with the seabed's diverse morphology in the Alboran Sea basin, 13 has shaped a unique ecosystem abundant in biodiversity. 14 Although the Alboran Sea covers only 2% of the surface area of the whole Mediterranean Sea, 15 it harbours one third of all known species in the Mediterranean. 16

The Alboran Sea is also a crucial transitional zone for highly migratory species (HMS).¹⁷ The Strait of Gibraltar acts as an entry point for many of these species undertaking extensive migrations

from the Atlantic to their spawning grounds in the Mediterranean and from the Mediterranean to their feeding grounds in the Atlantic.¹⁸ These species include large pelagic fish such as tuna¹⁹ and swordfish,²⁰ as well as migrating sharks,²¹ cetaceans,²² and sea turtles.²³ The periodic and systematic migration eastward or westward through the narrow bottleneck of the Strait of Gibraltar (only 13 km wide) makes the concentration of fish populations predictable, which has allowed humans to exploit them since ancient times.²⁴

The use of driftnets in the Alboran Sea began in the 1980s, with around 100 Spanish vessels employing them by 1990.²⁵ However, as driftnet fishing became prohibited in the European Union (EU), the practice saw significant growth in Morocco, particularly from the ports of Tangiers, Al Hoceima, and Nador.²⁶ Since then, Morocco has been repeatedly identified by non-governmental organisations as one of the countries where driftnet fisheries are active in the Mediterranean.²⁷

This investigation sheds light on the ongoing use of driftnets, a case of illegal, unreported and unregulated (IUU) fishing in the Alboran Sea, a key hotspot for swordfish fisheries. It recalls the ecological impacts associated with driftnet use while exploring the socioeconomic drivers behind the continued use of this fishing practice. Finally, it identifies ways to effectively address this issue.

Data presented in this report were gathered through a desk-based review as well as from land and at-sea fieldwork expeditions in 2024. Its recommendations are directed toward the Moroccan government, the EU, the Spanish Government the General Fisheries Commission for the Mediterranean (GFCM), and the International Commission for the Conservation of Atlantic Tunas (ICCAT) to end the use of illegal driftnets in the Mediterranean Sea once and for all while ensuring a sustainable transition for the coastal communities currently using this technique.

2. Methodology

The investigation involved a desk-based review of relevant literature and fisheries data, combined with fieldwork to assess the size of the local illegal driftnet fleet and how it operates in the Alboran Sea during the open season for swordfish, which takes place from 15 March to 1 October and from 1 November to 15 February.

Field research, conducted in 2023 and 2024 by EJF staff, included an at-sea expedition in partnership with the Spanish non-governmental organisation Alnitak Research Institute to document these fishing operations and their behaviour. This expedition focused on the vicinity of the Island of Alboran and westward toward the Strait of Gibraltar, a hotspot for driftnet use and a crucial fishing ground for coastal communities in Spain and Morocco. In addition, investigators from a partner organisation inspected the Moroccan ports of Tangiers, M'Diq, Al Hoceima, Sidi Hsaïn, and Nador to estimate the size of the driftnet fleet.

EJF also conducted a total of 21 semi-structured interviews²⁸ with 13 fishers (four Moroccan and nine Spanish), one Moroccan fishing vessel captain, three marine biologists, two marine veterinarians, and two representatives from separate civil society organisations.

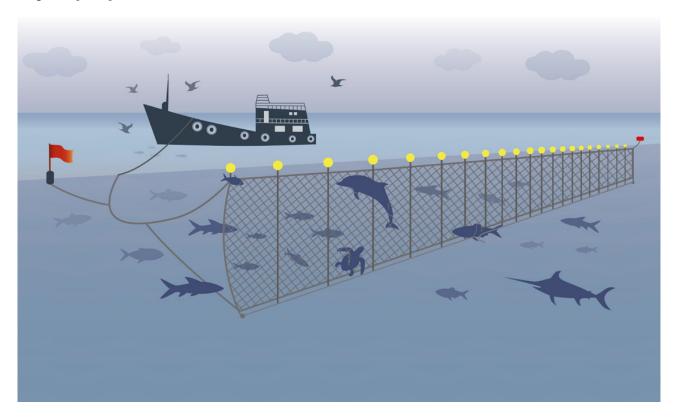
3. Driftnets: the walls of death

A driftnet is a type of gillnet designed to drift with the current rather than being anchored to the seabed. This fishing gear consists of a series of gillnets (often referred to as pieces) held vertically by floats on the upper line and weights on the lower line, typically positioned near the surface or in mid-water. One end of the driftnet is attached to a vessel or marked by a buoy or a highflyer (Image 1).²⁹



Driftnet vessel in operation in the Alboran Sea, 2024. These nets are driving declines in marine biodiversity across the sea with no intervention to stop them, despite being banned. © EJF

Image 1: Graphic representation of a driftnet.





Driftnets can stretch for tens of kilometres, spanning vast stretches of the open sea.30 According to studies prior to the driftnet ban in Morocco in 2010, the Moroccan driftnet fleet operating in the Alboran Sea and the Strait of Gibraltar area employed nets measuring between 6.5 km and 14 km long and 25 m to 30 m in height.31 However, information obtained by EJF suggests that driftnets measuring as much as 42 km may have been employed in the area in the past. The immense scale of such nets becomes more evident when considering that the Strait of Gibraltar is only 13 km wide at its narrowest point, and the widest point of the Alboran Sea is only 180 km.32 According to testimonies from Moroccan artisanal fishers and the results of the port study undertaken in August and September 2024 as part of our investigation, driftnets measuring between 3 km and 10 km long and between 40 m and 50 m in height are being used today by the Moroccan artisanal fleet, depending on the capacity of the vessels. The change over time in driftnets' size is further discussed below (see Section 4).

Environmental impacts

The negative impacts of driftnets on marine life have been extensively documented since the 1980s. earning driftnets the infamous appellation 'walls of death'.33 The use of dyed or transparent nylon filaments, combined with a large mesh size, makes driftnets virtually invisible underwater³⁴ and particularly deadly, not only for the target species but for any large-bodied marine organism unable to detect the presence of the net. This is especially the case at night when most driftnetting takes place. According to the latest International Union for Conservation of Nature (IUCN) regional assessments, driftnets remain one of the most pressing threats to the local populations of striped dolphins,35 sperm whales, 36 shortfin mako, 37 thresher sharks 38, loggerhead sea turtles³⁹ and spinetail devil rays.⁴⁰

Independent studies based on direct observations, carried out before a ban on driftnets was introduced in Morocco in 2010, recorded the proportion of individuals from non-target species caught as high as 37% among Moroccan driftnet fisheries.41 This figure was approximately 20% in the case of Spanish swordfish driftnet fisheries.⁴² During this investigation, EJF witnessed a vessel pulling up a driftnet with an entangled sunfish, which was later released in an unknown condition (Image 2). Moroccan fishers using driftnets, interviewed by EJF, confirmed that these nets entangle not only swordfish but also juvenile swordfish and many other species, including dolphins, turtles, sunfish, blue sharks, mako sharks, common stingrays, tuna, and even whales.



Fishers testimony also indicates that nets with a reduced mesh size, designed to catch tuna and bonito, are being used for swordfish fishing (see Section 4), resulting in the frequent bycatch of juveniles and undersized individuals, as well as non-target species, including vulnerable megafauna.

Quote from a Moroccan fishing captain:

"We've been forced to use nets with 100-mm mesh, but it should be the opposite—200-mm should be allowed. Right now, we catch more juvenile swordfish than adults. Larger mesh sizes let the immature ones escape. It's contradictory; now we kill more juveniles."

Image 2: Sunfish (Mola mola) entangled in a driftnet documented by EJF in the course of this investigation. Driftnets targeting large pelagic species are banned in the Mediterranean due to their negative impact on marine wildlife, killing non-target species which are then discarded as worthless. © EJF





Quote from Ramon (Spanish fisher):

"They are looking for swordfish, but of course the dolphin also gets caught, the turtle, the whale, everything that passes by gets caught."

Quote from Moroccan fisher 2:

"In these nets, more make sharks and blue sharks get caught than swordfish. Sunfish, turtles, and others also get caught. Once they are freed from the net, whether alive or dead, we throw them back into the sea."

Quote from Moroccan fisher 4:

"Sometimes even sperm whales get caught. If they get caught in the net and we can free them, we do. The net also catches sharks and tuna. Once, I managed to free a baby dolphin that was still alive and crying like a small child. I untangled it, grabbed it, dragged it out of the net, and released it. Its mother was nearby, and she was crying too. It was something sad to see and experience. If there were an alternative, we would stop fishing with these nets."

Veterinarians, marine biologists, and Spanish civil society representatives involved in animal rescues from driftnets have also described to EJF the effects of driftnets on marine megafauna caught in a driftnet: entangled large animals typically die as a result of asphyxia, exhaustion, or injuries and mutilations caused by net filaments. They also reported observing severe injuries to animals attempting to release themselves. They suggest that amputations of tails and fins are also commonly observed and are often caused by fishers as they attempt to free the trapped animal without causing damage to the driftnets.



Image 3: Dead pilot whale entangled in a driftnet, found ashore in Ras Trf, province of Driouche (Morocco). Credit: Mohammed Andalosi, AZIR, 2015.



Image 4: Dead dolphin entangled in a driftnet, found ashore in Al Hoceima (Morocco). Credit: Mohammed Andalosi, AZIR, 2017.

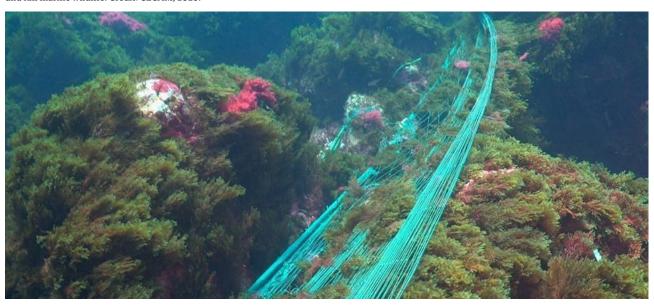
Quote from Alvaro (marine veterinarian CECAM):

"Our autopsies reveal that many animals were amputated while still alive. We have had cases of stranded animals down at the port swimming without a tail fin, ready to die. The animal is doomed."

By killing apex predators such as sharks and cetaceans, driftnets may also have wider impacts on marine ecosystems, with potential repercussions for fisheries. So-called 'trophic cascades' have been noted when apex predators are removed from an ecosystem, allowing for the increase of prey populations with unforeseen consequences further down the food chain, ultimately causing long-lasting changes in the structure of ecological communities, 43 which, in turn, could negatively impact fish populations of interest for commercial fisheries. 44

Image 5: After driftnets are accidentally lost or intentionally discarded, they remain in the marine ecosystem as 'ghost nets' continuing to catch and kill marine wildlife. Credit: CECAM, 2020.

Finally, driftnets are regularly lost at sea, contributing to the 11 million tonnes of plastic entering the ocean every year. 45 Annually, it is estimated that nearly 2% of all fishing gear is lost to the ocean, including 2,963 km² of gillnets, 75,049 km² of purse seine nets, 218 km² of trawl nets, 739,583 km of longline mainlines, and over 25 million pots and traps.⁴⁶ Based on available studies on driftnet use, a meta-analysis concluded that 3.1% of driftnets in use were lost annually around the world.⁴⁷ Once lost, driftnets continue to drift through the ocean, ensnaring marine life indiscriminately⁴⁸ for years and contributing further to the decline in marine biodiversity. These nets, commonly referred to as 'ghost' driftnets, also contain plastics that can last up to 600 years in marine environments, potentially releasing toxic chemicals into the environment.49 Moroccan fishers using driftnets interviewed by EJF explained how nets are often lost due to the strong currents in the area, the heavy maritime traffic that can damage them, and the entanglement of marine megafauna, which forces fishers to cut part or the entirety of the net, causing it to sink.



'Ghost' driftnets have washed up on beaches on the Spanish coastline of the Alboran Sea, according to fishers and locals interviewed by EJF. Spanish fishers reported finding entangled cetaceans and turtles, often in advanced levels of decomposition, while the nets remain intact, indicating ghost nets have continued to indiscriminately catch various species long after they were lost. Ghost nets can also sink over time, damaging benthic ecosystems and continuing to catch non-pelagic species.⁵⁰

Quote from Luis (Spanish fisher):

"Last year, as a result of the weather, the waves, and the wind, a net was uncovered. The net was immense, and we removed the leads, because it was a very large net. There were bones from dolphins, turtles, and garfish. Any remains were already rotten. The net was intact, brand new. Made of nylon."

Quote from a Moroccan fishing captain:

"The nets, of course, get lost at sea; they break and everything. During the season when stingrays appear, many get caught and cause the total loss of the nets, which sink to the bottom. We also suffer a lot of damage from pilot whales or orcas, etc., which tear the gear apart. Depending on luck, some lose part of the net, while others lose it completely."

Image 6: Driftnet found ashore in January 2023 in Cabo de Gata National Park (Almeria, Spain). Driftnets can become ghost nets due to adverse weather conditions, continuing to harm marine wildlife for years and damaging benthic ecosystems when they sink. Credit: PESCARTES



Legal status of the use of driftnets in the Alboran Sea (Mediterranean)

The first global calls to eliminate the use of largescale pelagic driftnets date back to the 1990s when the United Nations General Assembly (UNGA) adopted several resolutions calling on United Nations (UN) member states to take cooperative measures to eliminate the use of large-scale pelagic driftnets.⁵¹

At the regional level, the International Convention for the Conservation of Atlantic Tunas (ICCAT) banned the use of driftnets altogether for fisheries targeting large pelagic species, such as swordfish, in the Mediterranean. The General Fisheries Commission for the Mediterranean (GFCM) has also banned the use of driftnets for fisheries of large pelagic species (including swordfish) and the possession and use of driftnets longer than 2.5 km for general use. The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS) similarly prohibits vessels from storing onboard and using driftnets longer than 2.5 km.

The possession and use of driftnets longer than 2.5 km are also banned under EU law, as is the use of driftnets for swordfish fishing, irrespective of net size. ⁵⁶ EU legislation applies both to fishing vessels of nationals of EU Member States and those of third countries when fishing in EU waters. ⁵⁷

Since 2010, the possession and use of driftnets of any size and for any target species have been prohibited under Moroccan law.⁵⁸

4. Illegal driftnet fishing remains commonplace in the Alboran Sea

During EJF's at-sea expedition in April 2024, EJF investigators aboard Alnitak's vessel documented and captured geotagged images of six vessels, presumably registered under the Moroccan flag, using driftnets over the course of two days. Two of those vessels were documented as fishing illegally within the Spanish Exclusive Economic Zone (EEZ), approximately 19 nautical miles east of the Alboran Island. Meanwhile, four vessels were recorded fishing illegally in the Moroccan EEZ, approximately 35 nautical miles north of the coast of Al Hoceima, a port city in the north of Morocco (Image 7). In addition to driftnets being prohibited under Moroccan law, Moroccan vessels are not permitted to fish in the Spanish EEZ without a specific agreement.⁵⁹ Even if such an agreement were in place, the use of driftnets for the capture of large pelagics would still be illegal in accordance with EU law.60 An additional two vessels using driftnets were observed by EJF investigators in Moroccan waters, but could not be approached close enough to ascertain their identity and collect photographic evidence.

The driftnet fishery appears to operate routinely and in plain sight. The average fishing trip is less than 24 hours, and the fishing grounds are reachable within hours from the departure points. ⁶¹ According to fishers' testimony and observations made by EJF, nets are deployed in the evening, between 18:00 and 20:00, and start to be retrieved approximately 12 hours later, around 06:00 to 10:00. By 11:00 the next day, boats head back to port.

Additionally, Moroccan fishers employing driftnets and representatives from Moroccan civil society interviewed by EJF reported that illegal swordfish fishing with driftnets takes place throughout the year, even during the annual biological rest periods established by ICCAT (between 15 February and 15 March, and 1 October and 1 November). 62

Quote from Moroccan fisher 4:

"We stop fishing for a couple of months, during the annual biological rest periods. However, some go out fishing during that period but the sale of fish does not take place at the fish auction but in the black market."

Vessels using driftnets are aware of the illegality of their operations, as corroborated by Moroccan fishers themselves to EJF during the interviews. Image 7 (top left corner) depicts a vessel obscuring its

identification number while fishing in the Spanish EEZ with what appears to be a piece of cloth or a tarpaulin. The concealment of markings on fishing vessels is sanctionable under Moroccan law. 63 Concealing the markings, identity, or registration of a fishing vessel is also considered a serious infringement under EU law. 64

Image 7: Location of driftnet vessels documented by EJF in April 2024, showing the widespread and open flaunting of legislation banning their use.65

Quote from Ramon (Spanish fisher):

"They set off in the evening at dusk and pick them up before dawn. If the net is durable and set in a way the nets don't touch each other, well they can have it placed all day long."

Quote from a Moroccan fishing captain:

"We leave the port in the morning and sail all day until sunset. This net is effective at night and must be set during that time; that's when it does its work. We tie the boat to one end and watch it the entire time until sunrise, when we bring it back on board."

Quote from a Moroccan fishing captain:

35.935061° N, 3.432547° W

14 April 2024

"With this boat we're using now, we can only fish when the weather is completely calm, and the sea must be very tranquil for at least 3, 4, or 5 days. Otherwise, we can't go out to sea."















The size of the driftnet fleet in the Alboran Sea is likely higher than existing estimates

In 2024, Morocco reported to ICCAT that its Mediterranean swordfish fleet consists of 3,191 vessels. Of these, 93% use handlines, while 7% operate with longlines. In terms of size, 90% of vessels are under 7 m in length, and 10% exceed 7 m.66

Reports from the Moroccan government indicate that the Moroccan fishing fleet operates in 73 locations along the Moroccan Alboran coastline,⁶⁷ including ports,⁶⁸ beaches and special facilities for artisanal fisheries in isolated areas.⁶⁹ According to the National Office of Fisheries of Morocco, the main ports in terms of landings and value of pelagic fish in 2023 (including tuna and swordfish) in the Alboran Sea and the Straits of Gibraltar area are Tangiers, Mdiq, Al Hoceima and Nador.⁷⁰

In addition to legal fishing operations, EJF estimates that hundreds of Moroccan vessels registered as handliners and longliners operate illegal driftnets in the Alboran Sea. In 2022, a land-based survey commissioned by Alnitak was conducted in the north of Morocco to assess fishing capacity in the ports of Tangiers, M'Diq, Al Hoceima and Nador with a total of 648 driftnet vessels identified (421 in Tangiers, 35 in M'Diq, 33 in Nador and 159 in Al Hoceima). In August and September 2024, as part of our investigation, investigators reinspected the ports of Tangiers, M'Diq, Al Hoceima, Nador and Sidi Hsaïn in the north of Morocco and confirmed the ongoing use of driftnets, with 843 driftnet vessels recorded (611, 57, 125, 40 and 10 respectively).

These figures denote a substantial increase in the size of the Moroccan driftnet fleet and, correlatively, in fishing pressure. According to ICCAT studies, in the years predating the 2010 driftnet ban in Morocco, around 370 Moroccan-flagged driftnet vessels were operating in the Mediterranean, most of which were small- to medium-sized vessels. While larger industrial and semi-industrial longliners, with the capacity to carry large nets spanning tens of kilometres, reportedly stopped using driftnets after the ban came into effect in 2011, our investigation suggests that the Moroccan artisanal driftnet fleet has more than doubled in size over the last two decades, despite the ban.

Smaller vessels now make up the majority of driftnet users. Small-scale illegal driftnet fleets operate not only from the region's main fishing ports but also

from a number of small artisanal ports, such as Sidi Hsaïn, where driftnet vessels were recorded for the first time in 2024. The driftnet vessels recorded in the port study in August and September 2024 consisted mainly of small boats measuring between 5 and 10 m LOA, although several vessels recorded measured between 10 and 15 m LOA.

The vessels with driftnets observed by EJF investigators in the visited ports have characteristics that are broadly consistent with what the Moroccan government would classify as 'artisanal boats'. These are mainly wooden boats of approximately 3 GT targeting tuna and tuna-like species, with an average 6 m LOA.⁷³

Given the smaller size and capacity of artisanal boats, the driftnets employed are also smaller than in the past. According to artisanal fishers testimony, driftnets used by Moroccan fishers measure 5 km on average, with variations in size commensurate with vessel capacity. The port study conducted between August and September 2024 indicates that boats measuring between 5 and 10 m LOA employ driftnets estimated to be 3–7 km in length, while vessels of 10 to 15 m LOA employ larger nets, up to 10 km long. These characteristics are consistent with observations made by EJF at sea (Image 7).

Quote from Moroccan fisher 4:

"The boats, generally speaking, can carry up to 50 pieces (5,000 m) (...) There are boats that carry up to 60 pieces (6,000 m) or more. The depth of the net I use is about 20 m, but some have larger dimensions."

The shift in vessels using driftnets from industrial to artisanal ones also has significant security implications for fishers. The length and weight of these nets, in comparison with the size of the artisanal vessels, means that vessels can capsize in the event of unexpected weather changes or of catching large marine wildlife, according to Moroccan fishers interviewed by EJF.

5. Port authorities are failing to deter the use of driftnets

The findings of our investigation, summarised above, suggest that the use of driftnets by Morrocan fishers in the Alboran Sea remains common. The issue has not been resolved and may have, in fact, worsened with the number of vessels using these illegal nets more than doubling, potentially leading to similar or even greater environmental impacts than before.

During our investigation driftnets were observed in plain sight on vessel decks in the ports of Tangiers, M'Diq, Al Hoceima, Sidi Hsaïn and Nador (See images 9 to 11), suggesting that local authorities are unlikely to be unaware of the continued use of driftnets by Moroccan fishers. Local fishers interviewed by EJF corroborated this, reporting that nets are often stored on deck and aboard fishing vessels with no or minimal effort to hide them, and that they are moved and handled freely in ports. They also suggested that regulations are not enforced due to the artisanal nature of the vessels currently using them.

Cases of Spanish authorities intercepting Moroccan driftnet vessels at sea have occasionally been reported.⁷⁴

In such instances, the coastal state is required to inform the flag state,⁷⁵ meaning that Spanish authorities likely notified their Moroccan counterparts. However, we have found no reports to date of any detention actions taken by Moroccan authorities against vessels using driftnets in Moroccan waters.

Quote from Moroccan fisher 1:

"The nets seem to be allowed at port by the authorities.

These nets are on deck and are not hidden, they put a
tarpaulin to protect them from the sun. Nothing more."

Quote from a Moroccan fishing captain:

"At the port, we lay out our nets, assemble them, sew them, and no one says anything or calls us out in any way. It's all out in the open; we have nothing to hide."



Quote from Moroccan fisher 4:

"I believe the authorities here don't enforce the ban because it's the small artisanal boats that use it, not the large vessels. That's why they turn a blind eye."

The driftnet ban implemented in Morocco in 2010 applied to all driftnets. ⁷⁶ However, the implementing regulation to the law defines driftnets as nets with a mesh size equal to or larger than 200 mm. ⁷⁷ As a result, nets with a smaller mesh size would not appear to be prohibited under Moroccan law. According to fishers' testimony, they were compelled to switch to nets with smaller mesh sizes (below 200 mm). This shift is likely to have worsened the issue of bycatch, as smaller mesh sizes are less selective and more likely to capture juvenile swordfish and non-target species of marine megafauna.

Quote from a Moroccan fishing captain:

"In the past, the nets had a 200-mm mesh. Later, we switched to 100-mm mesh to make it appear that we were fishing for frigate tuna. Then, we changed to 150 and 180-mm, and others returned to using 200-mm."

This apparent loophole could explain the lack of enforcement action taken by authorities. This undermines Morocco's compliance with recommendations from the GFCM⁷⁸ and ICCAT⁷⁹ and with the provisions of ACCOBAMS, ⁸⁰ which ban the use of driftnets regardless of mesh size (see Section 3).

Image 9: Driftnets laying on deck and in vessels in plain sight in the port of Al Hoceima in August and September 2024.









Image 10: Driftnets laying on deck and in vessels in plain sight in the ports of Nador and Sidi Hssaïn in August and September 2024. Driftnets have appeared in ports where the practice was not present before the ban in Morocco.





Image 11: Driftnets laying on deck and in vessels in plain sight in the port of M'Diq in August and September 2024. Driftnets used nowadays in the Alboran Sea usually measure up to 10 km, a remarkable length considering that the widest point of the Alboran Sea is only 180 km and that the Strait of Gibraltar is only 13 km wide at its narrowest point.









6.Economic insecurity and foreign demand drive driftnet use

The use of illegal driftnets in the Alboran Sea is driven by a complex interplay between foreign demand for swordfish and local economic challenges and is facilitated by the lack of enforcement of prohibitions by competent authorities (see Section 5) as well as the failure of government to actively support a transition away from this destructive fishing practice.

In 2022, Morocco was the fourth-largest source of fishery and aquaculture product imports to the EU by value.⁸¹ Almost all Moroccan swordfish landings are destined for exports.⁸² Spain is the primary importer, with import volumes representing 78.8% of Morocco's

reported swordfish landings. 83 Spain is also the main supplier of swordfish products within the EU. 84

While domestic swordfish production in Spain is substantial, an undetermined fraction of Spanish swordfish exports is likely to consist of re-exported swordfish products imported from Morocco. Italy is the main destination for intra-EU exported Spanish swordfish products, representing 84% of Spanish swordfish exports to the EU market by value (82% by volume) over the same period. 85 Trade flows of swordfish products between Morocco and the EU market over the last five years up to 2022 are summarised in Image 12.

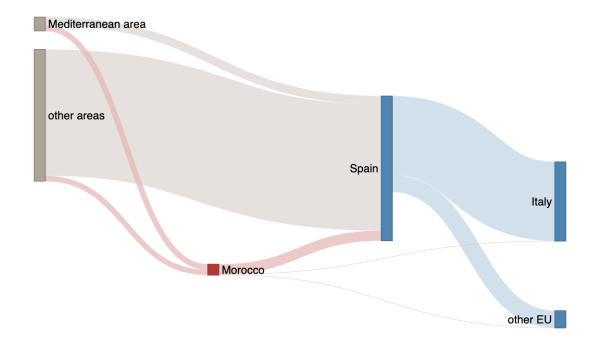


Image 12: Swordfish landings and exports to the EU market reported by Morocco, Spain and other EU member states for the period 2018–2022. Link thickness is proportional to volume in tonnes (sources: FAO FishStat; UN Comtrade; EU Comext).

Quote from Moroccan civil society representative:

[&]quot;Europe and Spain have a lot of responsibility in the matter, since they are the main destination of swordfish caught in Morocco. It is very hard to eliminate driftnets if the swordfish caught with them is being bought."

The conclusions of the swordfish trade data analysis, which identifies the EU market as a potentially important driver of driftnet fishing by Moroccan vessels, are confirmed by the testimony of local fishers and civil society representatives from Morocco and Spain collected during this investigation. They claim that most of the swordfish illegally caught in the north of Morocco is sent to the port of Tangiers (and, to a lesser extent, also the port of Nador), where it is processed and exported to Europe due to its high market price and demand. A representative of the Spanish NGO Alnitak explicitly highlighted European companies as key actors in driving swordfish supply chains. According to local fishers, swordfish caught with driftnets are recorded as having been caught with longlines. Morocco's official ICCAT reporting, such as the Mediterranean swordfish fishing plans,86 indicate that swordfish are only caught with longlines and handpoles.

Quote from Ric (marine biologist and founder of Alnitak):

"Probably a large percentage of the illegal fish trade that is coming from Morocco is controlled by European companies. We know there are some Spanish companies operating from Spain that actually buy this fish and then resell it to Europe."

Quote from a Moroccan fishing captain:

"The policy of considering what is caught with driftnets as caught with longline, something unacceptable, is done because driftnets are officially banned. They got European aid to eliminate them and they will not now recognise the existence of driftnets. Therefore, we officially fish with longlines."

The use of driftnets, enabled by deficient law enforcement on the part of local authorities, therefore appears to persist mainly to satisfy foreign demand. This is despite the fact that this fishing method is associated with a high entry cost. While driftnet fishing is generally considered cost-efficient⁸⁷ for capturing swordfish compared to other fishing methods when taking into account fuel costs, it requires significant capital expenditure for artisanal fishers. According to testimonies from local fishers, each piece that makes up a driftnet costs around €500, bringing the cost of a typicallyused net measuring 5,000 m to approximately €25,000. For many fishers, shifting to driftnet fishing meant having to sell their property and land, as reported to EJF.

Quote from a Moroccan fishing captain:

"When we switched to small-scale driftnet fishing, everyone started using them. A large number of boats began using them massively, and many people started selling land and property to acquire and use them."

The increased incentivisation of driftnet fisheries targeting swordfish as a result of foreign demand has coincided with growing economic insecurity in the north of Morocco. The overall region's economic decline (with perhaps the exception of Tangiers-Tetouan) has reduced the number of viable economic opportunities for local communities, particularly for young people. The region saw political and social unrest in 2017, 88 with demands for more economic and social investment in the Rif, a region situated in northern Morocco, made to the central authorities.

Coastal communities, like communities in other regions, have also been severely affected by the impacts of the COVID-19 pandemic⁸⁹ and the energy crisis following the full-scale Russian invasion of Ukraine in 2022.⁹⁰ The depletion of marine resources due to overfishing and habitat loss and degradation, climate change, and pollution, among other factors, are further exacerbating the already precarious situation for coastal communities in Morocco.⁹¹ Moroccan fishers interviewed by EJF reported an overall decline in catches and the inability to sustain their incomes, leaving many communities with limited alternatives to make a living. This, in turn, drives individuals towards IUU fishing practices as a means of survival.

Competition with Algerian fishers may also contribute to the continued use of driftnets by Moroccan fishers. Fishers interviewed by EJF stated that Algerian boats also employ driftnets, but EJF investigators were not able to verify this claim.

Quote from Moroccan fisher 3:

"Nowadays, working at sea doesn't provide enough to live on; it's hard to support your family. In the past, you could, because there were plenty of fish, and making money was easy. However, now, the catch is so scarce that you can't even cover your expenses for fuel, bait, fishing gear, and everything else."

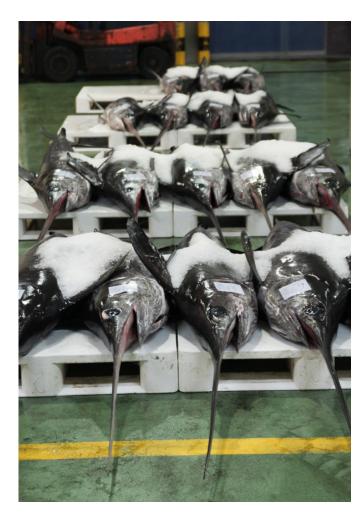
Quote from a Moroccan fishing captain:

"I myself, as the owner of a boat and a captain, still can't make ends meet. I'm forced to find ways to get by in order to survive. My children, my home, demand a lot of expenses, and I'm personally experiencing this crisis. Imagine the situation for a simple sailor?"

Quote from Moroccan fisher 1:

"People leave their country for various reasons.

There's a lack of jobs, and even when they do work, what they earn isn't enough to cover their basic needs. If there is work, it's precarious and not consistent. From my point of view, I now see that there is no future in fishing. The sailors themselves are leaving; they're all going."



Swordfish at fish market, Spain. The majority of Morocco's swordfish exports arrive in Spain, underlining the need for Spain to take action to stop the products of illegal fishing entering its supply chains. © EJF

Quote from a Moroccan civil society representative:

"I believe the reasons why driftnets are still being used are clearly economic, as it is the livelihood for many families living along the country's coasts."

The difficult economic conditions are also prompting a significant number of people to consider migration as a way to seek better opportunities abroad, despite the risks involved. ⁹² Moroccan fishers reported that the lack of opportunities and the precariousness of existing jobs drive people, especially young people, to migrate.

Quote from Moroccan fisher 3:

"In the area where I live, everyone is involved in fishing; it is our local economy. We don't do any other work besides fishing. There are no other opportunities to make a living there. The poor people who emigrate do so out of necessity, due to the economic crisis and precarious conditions."

Quote from a Moroccan fishing captain:

"Currently, we are running out of sailors to work at sea; almost all of them have emigrated, and those who haven't are expected to do so soon. It's a sad situation; the profession of a sailor has no future whatsoever. The cost of living is so high that it's impossible to convince them to stay in their country."

7.Looking forward: the need for a sustainable transition

Following the 2003 ICCAT ban on the use of driftnets for large pelagics, Morocco presented a four-year plan⁹³ to phase out the use of driftnets through public education, buyback schemes, destruction of gear, and assistance for fishing communities, including a training program on other fishing techniques.⁹⁴ To support the implementation of the plan, Morocco received limited US funds,⁹⁵ and until 2019 it was receiving €1.25 million in annual financial contributions from the EU.⁹⁶ However, how these funds were used remains unclear. The evidence gathered in this report suggests that efforts to date to phase out the driftnet fishing technique in Morocco have been unsuccessful.

Moroccan fishers and a Moroccan civil society representative spoke to EJF about the socioeconomic importance of the swordfish fishery for the region, as many families rely on it to sustain their income with few alternatives available. To address the transition away from a fishery that is both widespread and deeply embedded in the local economy, Moroccan fishers shared with EJF their ideas of what alternatives could look like.

While aware of the negative environmental impacts and the illegality of the driftnet fishery, Moroccan fishers employing driftnets stated that, in order to abandon the practice, they would require support from the authorities to transition to alternative gear, such as longlining. This would involve financial aid to purchase new gear, buy-back schemes to recover investments made in driftnets, as well as training in the use of alternative equipment. Additionally, fishers highlighted fleet overcapacity as a problem and suggested reconverting part of the fleet to other activities, such as tourism.

Beyond outlining possible alternatives to driftnet fishing, Moroccan fishers and a Moroccan civil society representative interviewed by EJF called for the establishment of direct dialogue between the affected fishers and the government so they could express their concerns and provide the authorities with the necessary information to find solutions and facilitate the transition away from driftnets.

Quote from Moroccan fisher 4:

"I believe we can transition to tourism, taking people for boat rides on the sea. I think it's the best option. There are too many of us fishing, and the resources are scarce. The Mediterranean is a small sea with few fish, and everyone has a boat; there are already too many of us."

Quote from a Moroccan civil society representative:

"To eliminate this fishing gear, I believe there should be significant support from international institutions, helping the country to reform the artisanal fishing fleet and provide other alternatives. We've also heard fishers asking for help to switch to surface longlining, and they've often expressed their desire, especially during the summer season, to engage in tourism."

Quote from Moroccan fisher 4:

"We also need training in new fishing techniques. This training is necessary so that fishers can learn to fish with hooks again, as young fishers nowadays don't know how."

Quote from a Moroccan fishing captain:

"I am in favour of its phasing out right now, on the condition that we are supported with the acquisition of new gear."

Quote from Macarena (marine biologist/fisher PESCARTES):

"There is no species that driftnet provides us with that we cannot obtain with much more selective fishing gear. It doesn't provide anything that we couldn't achieve in another more sustainable way."



The use of illegal driftnets continues to be a major threat to marine biodiversity in the Alboran Sea, decimating populations of marine megafauna. Populations of sharks,⁹⁷ turtles⁹⁸ and marine mammals,⁹⁹ many of them endangered, are disappearing at alarming rates in this critical region for migratory species.

This practice takes place in full view of the authorities, with driftnets laid out in ports in plain sight. Immediate action from authorities is required to enforce regional rules and Morocco's own legislation, which prohibits the use of driftnets. However, this practice is widespread and rooted in local economies; therefore developing and ensuring a buy-in and support for a plan for a transition away from destructive fisheries is a must. For the long-term and complete eradication of driftnets, actions must be taken in partnership with fishing communities and fishers that use driftnets to find a lasting solution that protects marine ecosystems while also protecting the livelihoods of coastal communities in the region.

The Moroccan government must fulfil its commitment to eradicating driftnets and enforce relevant national laws and regulations. It should provide comprehensive resources to the competent authorities for this purpose and introduce effective and proportionate sanctions to deter the use of illegal gear while supporting impacted fishers to sustainably transition away from the practice.

While the responsibility for ending driftnet fishing lies primarily with the Moroccan government, the international community must play a supportive role in ending the practice. Being the most important market for swordfish from Morocco, the EU has a clear interest and responsibility to ensure harvests are legal and sustainable.

The findings of this investigation indicate that EU Member States are at risk of importing seafood caught illegally by vessels using driftnets, in possible contravention of the EU legislation on illegal, unreported and unregulated (IUU) fishing (Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, also known as EU IUU Fishing Regulation), which prohibits the import of illegally caught seafood into the EU.

The Moroccan government's failure to enforce its own laws and ensure compliance with GFCM, ICCAT, and ACCOBAMS provisions also raises a risk of future action by the European Commission. Other countries associated with similar systemic IUU fishing practices have been subjected to action by the European Commission under the EU IUU Regulation. ¹⁰⁰ If this occurs, it could have significant negative consequences for the Moroccan economy.

This report has highlighted the need for urgent action to end driftnet use, as it breaches national laws, contravenes regionally agreed management measures aimed at conserving fish populations, and undermines international conventions to conserve marine biodiversity, such as the Convention on Biological Diversity. ¹⁰¹ The implications of failing to act are serious and far-reaching. At stake are ecosystems of critical significance for local livelihoods and regional biodiversity.

The following recommendations are directed at the Moroccan government, the Spanish government, the GFCM, ICCAT, and the EU. These specific actions aim to end the use of illegal driftnets, protect the biologically and economically important coastal habitats of the Alboran Sea, and safeguard the livelihoods and viability of coastal communities.

To the government of Morocco, which should:

- 1. Ensure compliance with its own national legislation¹⁰² and commit to eradicating the use of illegal driftnets by 2025 by developing a strategy to this end in coordination with regional and local authorities, fishing communities, civil society, and the seafood industry. This should include the allocation of adequate financial and human resources for the effective monitoring, control, surveillance, and enforcement of fisheries laws and regulations.
- Comply with Morocco's regional and international obligations, including GFCM and ICCAT's conservation and management measures, as well as ACCOBAMS' provisions.
- 3. Support fishing communities to sustainably transition away from the use of driftnets by the end of 2025, if necessary with the assistance and support of external partners and funding sources, such as the EU's Neighbourhood, Development and International Cooperation Instrument (NDICI).

- 4. Promote the exchange of experiences and best practices between different countries and regions that have successfully implemented bans and have transitioned away from driftnets.
- Engage with the seafood industry operating in Morocco on the implementation of traceability measures to ensure illegally harvested seafood, including swordfish, does not reach the EU and other markets.
- 6. Adopt the Global Charter for Transparency to facilitate more effective and cost-effective action against illegal and unsustainable fishing.¹⁰³



Driftnet vessel operating in the Alboran Sea, 2024. The Government of Morocco must now finally enforce the ban on their use, but will need support to do so. © EJF

To the EU:

- The European Commission should engage in cooperation and dialogue with the Moroccan government to help end the use of illegal driftnets. The EU should establish a structured anti-IUU fishing cooperation with Morocco to fight against IUU fishing, with an emphasis on the use of illegal driftnets.
- 2. In this context, the EU should propose to Morocco the establishment of an EU-Morocco IUU Fishing Working Group, complementary to cooperation under the future Protocol of the EU-Morocco Sustainable Fisheries Partnership Agreement (SFPA), with the aim, among others, of supporting Morocco in addressing the definitive phase-out of driftnets.
- 3. To support EU Member States in enforcing the EU IUU Regulation, the European Commission should highlight the IUU fishing risks identified in this briefing through appropriate channels, especially the Mutual Assistance system set out in Chapter XI of the EU IUU Regulation.
- 4. EU Member States, particularly Spain, which receives the majority of swordfish exports from Morocco, should increase scrutiny for fisheries imports from Morocco into the EU market to ensure their legal origin, in accordance with Articles 16 and 17 of the EU IUU Regulation, effectively barring market access to illegally harvested seafood products.

- 5. The European Commission and the European Fisheries Control Agency (EFCA) should ensure that the support given to the Moroccan authorities on fisheries control and inspection through the EU project "Mediterranean virtual regional training academy on fisheries control and inspection (e-FishMed)" addresses gaps in the implementation of national and regional (i.e., GFCM) regulations related to driftnets.
- 6. The EFCA and Spain should assess the risks posed by driftnet fisheries, as evidenced by this report, with a view to reinforcing Joint Deployment Plans covering the Alboran Sea in accordance with Articles 5 and 9 of Commission Implementing Decision (EU) 2018/1986.¹⁰⁴
- 7. For the purpose of ensuring a high, uniform and effective level of control in the EU and to match the need for increased assistance to the EU Member States in the Mediterranean, ¹⁰⁵ EFCA should be provided with strengthened resources and capabilities.
- 8. The European Commission, EFCA, and the EU Member States should, when exploring the extension of the EFCA Joint Deployment Plan involving third countries, consider Morocco a priority partner country.



Driftnet vessel operating in the Alboran Sea, 2024. Sustained action from the EU, RFMOs, and Moroccan government is needed to safeguard marine wildlife and justly end the use of driftnets. © EJF

To the GFCM and ICCAT:

- The GFCM should discuss potential non-compliance of Morocco with GFCM
 Recommendations GFCM/29/2005/3 prohibiting the use of driftnets for fisheries of large pelagic species and GFCM/22/1997/1 on the limitation of the use of driftnets in the Mediterranean.
 To address this issue, the GFCM should urge Morocco to strengthen control measures in the affected areas to stop the illegal use of driftnets.
- The GFCM and ICCAT should ensure that the joint workshop for the evaluation of the impact of driftnets in the Mediterranean, to be organised in accordance with Resolution GFCM/45/2023/10, results in clear follow-up actions to ensure compliance with driftnets bans.
- 3. As part of Morocco's implementation and compliance with ICCAT requirements, ICCAT should also discuss the potential non-compliance of Morocco with Recommendation 03-04 related to Mediterranean swordfish.



Swordfish at fish market, Spain, 2023. © EJF

References

- 1 While driftnets are size-selective, they are not species-selective within the taraet size class.
- 2 He, P., Chopin, F., Suuronen, P., Ferro, R.S.T & Lansley, J.(2021) Classification and illustrated definition of fishing gears. FAO Fisheries and Aquaculture Technical Paper No. 672. Rome: FAO, https://doi.org/10.4060/cb4966en.
- In the past, there are records of driftnets measuring up to 60 km, see AO Fishery (n.d.) 'Gear type GT220 description', https://www.fao.org/fishery/docs/CDrom/ARTFIMED/ArtFiWeb/descript/Gear/geartype/gt220.htm (accessed 3 June 2024).
- 3 Silvani, L., Gazo, M. & Aguilar, A. (1999) 'Spanish driftnet fishing and incidental catches in the western Mediterranean', *Biological Conservation*, 90, pp. 79–85, https://doi.org/10.1016/S0006-3207(98)00079-2.
- 4 Testimonies gathered for this report indicate that driftnets can reach up to 60 meters in height.
- 5 ICCAT (n.d) 'Fisheries and Resources Monitoring System', https://firms.fao.org/firms/resource/10025/en (accessed 3 October 2024).
- 6 ICCAT (2020) Report of the 2020 Mediterranean Swordfish Stock Assessment Meeting, 25 May 2020, https://www.iccat.int/Documents/Meetings/Docs/2020/REPORTS/2020 SWO MED ENG.pdf
- 7 ICCAT (2022) ICCAT Report 2022/2023 (II), https://www.iccat.int/ Documents/SCRS/ExecSum/SWO_MED_ENG.pdf
- 8 Longline is a fishing gear made up of a main line, with secondary lines attached, each having hooks at the end. Drifting pelagic longlines are used globally to catch widely distributed pelagic and semi-pelagic fish. This method is particularly effective for catching tunas and tuna-like species, billfish, sharks, and other marine species.
- 9 ICCAT (2020) Report of the 2020 Mediterranean Swordfish Stock Assessment Meeting, 25 May 2020, https://www.iccat.int/Documents/Meetings/Docs/2020/REPORTS/2020 SWO MED ENG.pdf
- 10 Calculated from data reported in Tudela, S., Guglielmi, P., El Andalossi, M., Kai Kai, A. & Maynou, F (2003) 'Biodiversity impact of the Moroccan driftnet fleet operating in the Alboran Sea (SW Mediterranean). A case study of the harmful effects inflicted by current IUU large-scale driftnet fleets in the Mediterranean on protected and vulnerable species', Biological Conservation, 121, pp. 65–78, https://doi.org/10.1016/j.biocon.2004.04.010.
- 11 Macfadyen, G., Huntington, T., & Cappell, R. (2009) Abandoned, lost or otherwise discarded fishing gear. UNEP Regional Seas Reports and Studies, No.185; FAO Fisheries and Aquaculture Technical Paper No. 523. Rome: United Nations Environment Programme (UNEP) / Food and Agriculture Organization of the United Nations (FAO), https://openknowledge.fao.org/handle/20.500.14283/i0620e
- 12 Millot, C., & Tapier-Letage, I. (2005) 'Circulation in the
 Mediterranean Sea'. Handbook of Environmental Chemistry, 5, pp. 29–66.
 13 Suárez-de Vivero, J. L. (2011). Atlas para la planificación espacial marítima. Sevilla: Universidad de Sevilla.
- 14 UNEP Mediterranean Action Plan (2015) Alboran Sea: Ecology and human activities (draft report), https://rac-spa.org/nfp12/documents/information/wg.408 inf18 eng.pdf
- 15 The Spanish Ministry for the Ecological Transition estimated in 2017 that 5,409 species of marine fauna and flora are found in the 'Strait of Gibraltar and Alboran' demarcation. Spanish Ministry of Ecological Transition (2017) 'Lista patrón de las especies marinas presentes en España' https://www.miteco.gob.es/es/biodiversidad/servicios/banco-datos-naturaleza/lpemverresolucion2017verboe-tcm30-200183.xls, (accessed 10 June 2024).
- 16 Coll, M., Piroddi, C., Steenbeek, J. et al. (2010) 'The biodiversity of the Mediterranean Sea: estimates, patterns, and threats'. *PLoS One*, 5(8), https://doi.org/10.1371/journal.pone.0011842
- 17 The full list of Highly Migratory Species (HMS) can be found in Annex I of the United Nations Convention on the Law of the Sea (UNCLOS).
- 18 UNEP (2009), Status of knowledge on the Mediterranean Pelagic ecosystem: an overview of the oceanographic and biological processes, 12 May 2009, UNEP(DEPI)/MED WG.331/Inf.19, https://www.rac-spa.org/sites/default/files/meetings/nfp9/wg331 inf19 eng.pdf
- 19 Carruthers, T., Di Natale, A., Lauretta, M., Pagá García, A., Tensek, S. (2018) Migratory behaviour of Atlantic bluefin tuna entering the Mediterranean. Collect. Vol. Sci. Pap. ICCAT, 74(6): 3082-3099, https://www.iccat.int/Documents/CVSP/CV074_2017/n_6/CV074063082.pdf
- 20 De la Serna, J. M & Alot, E. (1990) Considerationes relativos a los

- desplazamientos efectuados por el pez espada (Xiphias gladius) en el area del estrecho de Gibraltar y otras observaciones relacionados con biología de la reproducción. Col. Vol. Sci. Pap. ICCAT, 32(2): 353-359, https://www.iccat.int/Documents/CVSP/CV032 1990/n 2/CV032020353.pdf.
- 21 See Megalofonou, P., Yannopoulos, C., Damalas, D. et al. (2005). 'Incidental catch and estimated discards of pelagic sharks from the swordfish and tuna fisheries in the Mediterranean Sea'. Fishery Bulletin, 103, pp. 620–634; Meléndez, M. J., Macías, D., & Ceballos, E. (2015) 'La demarcación Estrecho-Alborán como un área prioritaria para la conservación de los Condrictios en un contexto Atlántico-Mediterráneo.' Actas del VIII Simposio Margen Ibérico Atlántico (MIA15), Málaga, 21–23 Sep 2015, pp. 449–452.
- 22 See de Stephanis, R., Cornulier, T., Verborgh, P., Perez Gimeno, N. et al. (2008) 'Summer spatial distribution of cetaceans in the Strait of Gibraltar in relation to the oceanographic context', Marine Ecology Progress Series, 353, pp. 275–288; Stephanis, R., Cañadas, A., Villalba, N., Perez-Gimeno, N., Sagarminaga, R., Segura, A., Fernández-Casado, M., & Guinet, C. (2000) Fin whale (Balaenoptera Physalus) migration through the Straits of Gibraltar?, https://alnitak.org/wp-content/uploads/2022/03/FIN-WHALE-MIGRATION.pdf;
- 23 See Camiñas, J. A., & de La Serna, J. M. (1992). 'Loggerhead (Caretta caretta) frequency observed in the Spanish surface long-line fishery in the Western Mediterranean Sea during 1989'. Rapp Comm int Mer Medit, 33, pp. 286; Camiñas, J. A. (1997). 'Relación entre las poblaciones de la tortuga boba (Caretta Linnaeus 1758) procedentes del Atlántico y del Mediterráneo en la región del Estrecho de Gibraltar y áreas adyacentes'. Revista Espanola de Herpetologia, 11, pp. 91–98.
- 24 Cort, J., & Abaunza, P. (2019) 'The Bluefin Tuna Catch in the Strait of Gibraltar. A Review of Its History' in Cort, J., Abaunza, P. (eds) The Bluefin Tuna Fishery in the Bay of Biscay. SpringerBriefs in Biology. Springer, Cham, pp. 22–36, https://doi.org/10.1007/978-3-030-11545-6 4
 25 Silvani, L., Gazo, M. & Aguilar, A. (1999) 'Spanish driftnet fishing and incidental catches in the western Mediterranean', Biological Conservation, 90, pp. 79–85, https://doi.org/10.1016/S0006-3207(98)00079-2
- 26 NOAA Fisheries (2012), 2012 Report of the Secretary of Commerce to the Congress of the United States concerning U.S actions taken on foreign large-scale high-seas driftnet fishing, https://media.fisheries.noaa.gov/dam-migration/2012 driftnet report.pdf
- 27 See Environmental Justice Foundation (2007) Illegal Driftnetting in the Mediterranean, https://ejfoundation.org/resources/downloads/EJF-Illegal-Driftnetting-in-the-Mediterranean.pdf; Oceana (2009) Adrift! Swordfish and Driftnets in the Mediterranean Sea, https://oceana.org/wp-content/uploads/sites/18/swordfish and driftnets.pdf; Oceana (2010) The Use of Driftnets by the Moroccan Fleet, https://europe.oceana.org/wp-content/uploads/sites/26/The-use-of-driftnets-by-the-Moroccan-fleet-ndf
- 28 Semi-structured interviews are a qualitative research method that combines elements of both structured and unstructured interviews. In this format, the interviewer follows a set of predefined questions or topics but has the flexibility to explore other themes or ask follow-up questions based on the responses of the interviewee.
- 29 He, P., Chopin, F., Suuronen, P., Ferro, R.S.T and Lansley, J. (2021) Classification and illustrated definition of fishing gears, FAO Fisheries and Aquaculture Technical Paper No. 672. Rome: FAO, https://doi.org/10.4060/cb4966en
- 30 Ibid.
- 31 Tudela, S., Guglielmi, P., El Andalossi, M., Kai Kai, A. & Maynou, F (2003) 'Biodiversity impact of the Moroccan driftnet fleet operating in the Alboran Sea (SW Mediterranean). A case study of the harmful effects inflicted by current IUU large-scale driftnet fleets in the Mediterranean on protected and vulnerable species', Biological Conservation, Issue 1, 121, pp. 65–78, https://doi.org/10.1016/j.biocon.2004.04.010
- 32 Instituto Geográfico Nacional (n.d.) Sismotectónica del Mar de Alborán, https://www.ign.es/web/resources/sismologia/tproximos/sismotectonica/pag_sismotectonicas/alboran.html#:~:text=El%20_mar%20de%20Albor%C3%A1n%20que,en%20sus%20zonas%20_m%C3%A1s%20profundas (accessed 4 July 2024).
- 33 The Economist, (1989) 'Wall of Death Fishing in the Pacific', 313, no. 7625, 21 October, p. 36.
- 34 Gabriel, O., Lange, K., Dahm, E. & Wendt, T. (eds.) (2005) Fish Catching Methods of the World. 4th edn. Oxford: Wiley-Blackwell, pp. 275–290

- 35 Aguilar, A. & Gaspari, S. (2012) 'Stenella coeruleoalba (Mediterranean assessment)', The IUCN Red List of Threatened Species, https://www.iucnredlist.org/species/20731/2773889#assessment-information (accessed 22 August 2023).
- 36 Notarbartolo di Sciara, G., Frantzis, A., Bearzi, G. & Reeves, R. (2012) 'Physeter macrocephalus (Mediterranean assessment)', The IUCN Red List of Threatened Species, https://www.iucnredlist.org/species/41755/2955634#assessment-information (accessed 22 August 2023).
- 37 Walls, R. H. L. & Soldo, A. (2016) 'Isurus oxyrinchus (Mediterranean assessment)', The IUCN Red List of Threatened Species, https://www.iucnredlist.org/species/39341/16527941#assessment-information (accessed 22 August 2023).
- 38 Ellis, J. R., Ferretti, F., Soldo, A. & Walls, R. H. L. (2016) 'Alopias vulpinus (Mediterranean assessment)', The IUCN Red List of Threatened Species, https://www.iucnredlist.org/species/39339/212641186#assessment-information (accessed 22 August 2023).
- 39 Tudela, S. (2004) Ecosystem effects of fishing in the Mediterranean: an analysis of the major threats of fishing gear and practises to biodiversity and marine habitats, Studies and reviews no. 74, Rome: GFCM, https://www.fao.org/publications/card/fr/c/8356f07a-74b3-5a7f-b524-9a0f210c410c/
- 40 Notarbartolo di Sciara, G., Serena, F. & Mancusi, C. (2016) 'Mobula mobular (Mediterranean assessment)', The IUCN Red List of Threatened Species, https://www.iucnredlist.org/species/110847130/214367431#ass essment-information (accessed 22 August 2023).
- 41 Calculated from data reported in Tudela, S., Guglielmi, P., El Andalossi, M., Kai Kai, A. & Maynou, F (2003) 'Biodiversity impact of the Moroccan driftnet fleet operating in the Alboran Sea (SW Mediterranean). A case study of the harmful effects inflicted by current IUU large-scale driftnet fleets in the Mediterranean on protected and vulnerable species', Biological Conservation, Issue 1, 121, pp. 65–78, https://doi.org/10.1016/j.biocon.2004.04.010.
- 42 Calculated from data reported in Silvani, L., Gazo, M., & Aguilar, A. (1999). 'Spanish driftnet fishing and incidental catches in the western Mediterranean'. Biological Conservation, 90, pp. 79–85,
- https://doi.org/10.1016/S0006-3207(98)00079-2. Sunfish constituted a disproportionate portion of the bycatch, representing an average of 85% of the catch. Therefore, it was considered an outlier and excluded from the calculation. When sunfish is included, the bycatch rate rises to as much as 94%.
- 43 See Estes, J. A., Terborgh, J., Brashares, J. S., Power, M. E. et al. (2011) 'Trophic downgrading of planet Earth', Science, 333, pp. 301–306, https://doi.org/10.1126/science.1205106; Myers, R. A., Baum, J. K., Shepherd, T. D., Powers, S. P. et al. (2007) 'Cascading effects of the loss of apex predatory sharks from a coastal ocean', Science, 315, pp. 1846–1850. 44 See e.g. the case of great shark decline affecting scallops fisheries in the Northwest Atlantic: Myers, R. A., Baum, J. K., Shepherd, T. D., Powers, S. P. et al. (2007) 'Cascading effects of the loss of apex predatory sharks from a coastal ocean', Science, 315, pp. 1846–1850, https://doi.org/10.1126/science.1138657.
- 45 Pew Charitable Trusts (2020) Breaking the Plastic Wave: A Comprehensive Assessment of Pathways Towards Stopping Ocean Plastic Pollution, https://www.pewtrusts.org/-/media/assets/2020/07/breakingtheplasticwave_report.pdf.
- 46 Kelsey Richardson et al. (2022), Global estimates of fishing gear lost to the ocean each year, *Science Advances*, 8, Issue 41, https://doi.org/10.1126/sciadv.abq0135.
- 47 Richardson, K., Hardesty, B.D., Wilcox, C. (2019) Estimates of fishing gear loss rates at a global scale: A literature review and meta-analysis, Fish and Fisheries, Vol 20, Issue 6, pp 1218–1231, https://doi.org/10.1111/faf.12407
- 48 Fernandes Perroca, J., Giarrizzo, T., Azzurro, E., Rodrigues-Filho, J., et al. (2022). Negative effects of ghost nets *on Mediterran*ean biodiversity, Aquatic Ecology, 58, pp. 131–137, https://doi.org/10.1007/s10452-022-09985-3
- 49 Macfadyen, G., Huntington, T., & Cappell, R. (2009) Abandoned, lost or otherwise discarded fishing gear, UNEP Regional Seas Reports and Studies, No.185 / FAO Fisheries and Aquaculture Technical Paper No. 523, Rome: United Nations Environment Programme (UNEP) / Food and Agriculture Organization of the United Nations (FAO), https://openknowledge.fao.org/server/api/core/bitstreams/4bf2eeed-b47b-463c-a461-85861e726ce5/content.
- 50 Ibid.
- 51 Resolution 44/225, 22 December 1989, UN Doc. A/RES/44/225;

- Resolution 45/197, 21 December 1990, UN Doc. A/RES/45/197; Resolution 46/215, 20 December 1991, UN Doc. A/RES/46/215; Resolution 51/36, 9 December 1996, UN Doc. A/RES/51/36; Resolution 76/71, 9 December 2021, UN Doc. A/RES/76/71, paras. 132–134.
- 52 ICCAT Recommendation 03-04 relating to Mediterranean swordfish.
- 53~ Recommendation GFCM/29/2005/3 prohibiting the use of driftnets for fisheries of large pelagic species.
- 54 Recommendation GFCM/22/1997/1 on the limitation of the use of driftnets in the Mediterranean.
- 55 Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area, 24 November 1996, entered into force 1 June 2001, 2183 UNTS 321, Art. II(3) in conjunction with Annex 2, 1(a).
- 56 Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, OJ L 198/105 (25 July 2019), Art. 9(1) and (2), Annex III.
- 57 Ibid., Art. 2(1).
- 58 Dahir portant loi n° 1-73-255 du 27 chaoual 1393 (23 novembre 1973) formant règlement sur la pêche maritime (as amended), Art. 13-1 and 33(2). 59 United Nations Convention on the Law of the Sea (UNCLOS). Art. 56 and 62.
- 60 Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, OJ L 198/105 (25 July 2019), Art. 9(1) and (2), Annex III.
- 61 Institute National de Recherche Halieutique (2023), 'Pêcherie Artisanale', https://observatoire-halieutique.ma/pecheries/pecherieartisanale/ (accessed 5 June 2024)
- 62 Arrêté du ministre de l'agriculture et de la pêche maritime n° 1176-13 du 27 Journada 1 1434 (8 avril 2013) réglementant la pêche de l'espadon, Art. 4(1) (as amended by Arrêté du ministre de l'agriculture, de la pêche maritime, du développement rural et des eaux et forêts n°4154-19 du 4 journada I 1441 (31 décembre 2019)).
- 63 Dahir portant loi n° 1-73-255 du 27 chaoual 1393 (23 novembre 1973) formant règlement sur la pêche maritime (as amended), Art. 33(5).
 64 Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, OJ L 286 (29 October 2008), Art. 3 and 42. From 10 January 2026 falsifying or concealing markings, identity or registration of a fishing vessel will be considered a serious infringement under Regulation (EU) 2023/2842 of the European Parliament and of the Council of 22 November 2023 as regards fisheries control, OJ L 1/105 (20 December 2023), Art. 90(2)
- 65 The maritime zones and maritime delimitations depicted in the image are purely illustrative, extracted from Starboard and GFW maps.
 66 ICCAT (2024 'Mediterranean swordfish fishing plans submitted in 2024', PA4_802/2024, https://iccat.int/com2024/ENG/PA4_802
 ENG. pdf
- 67 Ministère de la Pêche Maritime (n.d.) Flotte de Pêche Maritime, http://www.mpm.gov.ma/wps/portal/PortaII-MPM/P%C3%AAche%20%20maritime/Flotte/!ut/p/b1/04_SjgCPykssyoxPLMnMzovMAf-GjzOIN3Nx9_IoMzAwswsIsDDzNTQM8PT2dDS1cjPULshoVAXa_PfU!/(accessed 4 July 2024).
- 68 Agence Nationale des Ports (n.d.) The ports of Morocco, https://www.anp.org.ma/en/portmaroc (accessed 4 July 2024).
- 69 Ministère de l'Agriculture et de la Pêche Maritime (n.d.) Stratégie de développement et de compétitivité du secteur halieutique,
- https://www.europarl.europa.eu/meetdocs/2009 2014/documents/dmag/dv/dmag20100505 15 /dmag20100505 15 fr.pdf
- 70 See Office National des Pêches (2024) Rapport Statistique 2023, http://www.onp.ma/wp-content/uploads/2024/01/RAPPORT-STATISTIQUE-2023.pdf (accessed 6 June 2024); ICCAT (2005), Report for the biennial period 2004-05 Part I. Vol. 3, https://www.iccat.int/Documents/BienRep/REP_ES_04-05_I_3.pdf.
- 71 Saraminaga. R. et al (2022) 'Backtrack modelling for the management of the risk of sea turtle entanglement in ghost gear' ICCAT Subcommittee on Ecosystems Workshop on sea turtles, Malaga (Spain) of October 2022 [on file with EIF].
- 72 ICCAT (2004), Situation de la pecherie de l'espadon (Xiphias Gladius) des cotes Marocaines, Col. Vol. Sci. Pap. ICCAT, 56 (3): 898-903, https://www.iccat.int/Documents/CVSP/CV056 2004/n 3/CV056030898.pdf; ICCAT (2005), Report for the biennial period 2004-05 Part I. Vol. 3, https://www.iccat.int/Documents/BienRep/REP_ES_04-05_I_3.pdf.

- 73 Institute National de Recherche Halieutique (2023), 'Barques artisanales', https://observatoire-halieutique.ma/flottes/barques-artisanales/ (accessed 7 June 2024)
- 74 See Carlos Garfella Palmer (2022) 'Conservacionistas demuestran el uso de redes de pesca ilegales por parte de embarcaciones marroquíes en el Mediterráneo', El País, 29 June 2022, <a href="https://elpais.com/clima-y-medio-ambiente/2022-06-29/conservacionistas-demuestran-el-uso-de-redes-de-pesca-ilegales-por-parte-de-embarcaciones-marroquies-en-el-mediterraneo.html; Carmen Echarri (2023) 'Así Interviene Guardia Civil en Redes Ilegales de Pescadores Marroquíes', El Faro de Ceuta, 24 August 2024, https://elfarodeceuta.es/asi-interviene-guardia-civil-redes-ilegales-pescadores-marroquies/; Sonia Moreno (2023) 'Guardia Civil Intercepta Pesqueros Marroquíes en Aguas Españolas', El Español, 14 May 2023, https://www.elespanol.com/espana/20230514/guardia-civil-pesqueros-marroquies-espanolas-denuncias-pp/762923717 o.html.
- 75 UNCLOS, Art. 73(4) and 94(6).
- 76 Dahir portant loi n° 1-73-255 du 27 chaoual 1393 (23 novembre 1973) formant règlement sur la pêche maritime (as amended), Art. 13-1 and 33(2).
- 77 Decret n° 2-10-341 du 7 journada I 1432 (II avril 20II) pris pour l'application de la loi no. 19-07 modifiant et completant Ie dahir portant loi nO 1-73-255 du 27 chaoual 1393 (23 novembre 1973) formant reglement sur la poche maritime.
- 78 $\,$ Recommendation GFCM/29/2005/3 prohibiting the use of driftnets for fisheries of large pelagic species.
- 79 ICCAT Recommendation 03-04 relating to Mediterranean swordfish. 80 Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area, 24 November 1996, entered into force 1 June 2001, 2183 UNTS 321, Art. II(3) in conjunction with Annex 2, 1(a).
- 81 EUMOFA (2023) The EU fish market 2023 Edition, https://eumofa.eu/documents/20124/35668/EFM2023 EN.pdf/95612366-79d2-a4d1-218b-8089c8e7508c?t=1699541180521
- 82 Mean value calculated for the period 2019–2023 from trade data reported by Morocco in UN Comtrade under HS codes 030247, 030357, 030445, 030454, 030484, and 030491, and data reported by EU member states in EU Comext under CN codes 03024700, 03035700, 03044500, 03045400, 03048400 and 03049100.
- 83 Calculated from landings data reported by Morocco in FAO FishStat, and trade data reported by Morocco in UN Comtrade and by Spain in EU Comext for the period 2018–2022 (the latest year for which landings data were available at the time of writing).
- 84 Calculated from trade data reported by Spain and other EU countries in EU Comext under CN codes 03024700, 03035700, 03044500, 03045400, 03048400 and 03049100.
- 85 Calculated from trade data reported by Spain and Italy in EU Comext under CN codes 03024700, 03035700, 03044500, 03045400, 03048400 and 03049100.
- 86 ICCAT (2024 'Mediterranean swordfish fishing plans submitted in 2024', PA4_802/2024, https://iccat.int/com2024/ENG/PA4_802_ENG.pdf 87 Northridge, S. P. (1991) 'Driftnet Fisheries and their Impacts on Non-Target Species: A Worldwide Review', FAO Fisheries Technical Paper No. 320, Rome: FAO, https://www.fao.org/4/T0502E/T0502E00.htm 88 Sirine Al Hachimi, S., Belkheiri, O. & Benarrosh, Y. (2022) 'Distorsions économiques et spatiales dans le Nord du Maroc. Quels mondes en présence et quelle intégration possible ? Le cas de Fahs Anjra', Les Cahiers d'EMAM, 34, https://doi.org/10.4000/emam.4788. 89 Ait Ali, A., El Avnaoui, K., El Hossaini, F., Mandri, B. (2020) 'Impacts de la COVID-19 sur l'économie marocaine: un premier bilan', Rabat: Policy Center for the New South, https://www.policycenter. ma/publications/impacts-de-la-covid-19-sur-economie-marocaineun-premier-bilan#:~:text=Nos%20analyses%20s%27accordent%20 sur,drastique%20de%20la%20demande%20%C3%A9trang%C3%A8re 90 World Bank (2023) Rapport de Suivi de la situation economique: Le Maroc face aux choques d'offre, https://documents1.worldbank.org/ curated/en/099337102132324304/pdf/IDUob65b92ce0ee6e04aacoaf-020c702ce303424.pdf
- 91 Ndiongue, M. (2023) 'La pêche côtière et artisanale en crise en 2023', Maroc Diplomatique, 15 January 2024, https://maroc-diplomatique.net/la-peche-cotiere-et-artisanale-en-crise-en-2023/. See also generally FAO (2024) 'Gestion de la pêche à petite échelle: défis et opportunités' 15–18 January 2024, COFI:FM/I/2024/INF/6, https://openknowledge.fao.org/server/api/core/bitstreams/cbffeb26-7884-4636-b372-029c461f372a/content (accessed 4 July 2024).

- 92 See Christoph H. Schwarz (2019) 'Transmediterranean Political Socialisation: The Hirak Movement, the Moroccan Diaspora and Europe as a Political Imaginary,' European Institute of the Mediterranean, https://www.iemed.org/publication/transmediterranean-political-socialisation-the-hirak-movement-the-moroccan-diaspora-and-europeas-a-political-imaginary/; Ghalia Kadiri (2021) « Nous n'avons plus aucun revenu » : l'arrêt de la contrebande plombe l'économie du nord du Maroc, Le Monde, 18 February 2021, https://www.lemonde.fr/afrique/article/2021/02/18/nous-n-avons-plus-aucun-revenu-l-arret-de-lacontrebande-plombe-l-economie-du-nord-du-maroc 6070448 3212.html 93 ICCAT (2004) 'Report for the biennial period 2004–05' Part I Vol. I, annex 8, appendix 9, https://www.iccat.int/Documents/BienRep/REP ES 04-05 I 1.pdf.
- 94 Kawtar Tali (2010), 'Le Maroc interdit les filets maillants dérivants', Ajhourdhui Le Maroc, 27 June 2010, https://aujourdhui.ma/focus/le-maroc-interdit-les-filets-maillants-derivants-71487.
- 95 See NOAA Fisheries (2012), 2012 Report of the Secretary of Commerce to the Congress of the United States concerning U.S actions taken on foreign large-scale high-seas driftnet fishing, https://media.fisheries.noaa.gov/dam-migration/2012 driftnet report. https://media.fisheries.noaa.gov/dam-migration/2012 driftnet report. https://media.fisheries.noaa.gov/dam-migration/2012 driftnet report. <a href="https://media.fisheries.noaa.gov/dam-migration/2012 driftnet report. <a href="https://media.fisheries.noaa.gov/dam-migration/2012 driftnet report. <a href="https://media.fisheries.noaa.gov/dam-migration/2012 driftnet report. https://media.fisheries.noaa.gov/dam-migration/2012 driftnet
- 97 See Walls, R. H. L. & Soldo, A. (2016) 'Isurus oxyrinchus (Mediterranean assessment)', The IUCN Red List of Threatened Species, https://www.iucnredlist.org/species/39341/16527941#assessment-information (accessed 22 August 2023); Ellis, J. R., Ferretti, F., Soldo, A. & Walls, R. H. L. (2016) 'Alopias vulpinus (Mediterranean assessment)', The IUCN Red List of Threatened Species, https://www.iucnredlist.org/species/39339/212641186#assessment-information (accessed 22 August 2023) 98 Tudela, S. (2004) Ecosystem effects of fishing in the Mediterranean: an analysis of the major threats of fishing gear and practises to biodiversity and marine habitats, Studies and reviews no. 74, Rome: GFCM, https://www.fao.org/publications/card/fr/c/8356f07a-74b3-5a7f-b524-9a0f210c410c/
- 99 See Aguilar, A. & Gaspari, S. (2012) 'Stenella coeruleoalba (Mediterranean assessment)', The IUCN Red List of Threatened Species, https://www.iucnredlist.org/species/20731/2773889#assessment-information (accessed 22 August 2023); Notarbartolo di Sciara, G., Frantzis, A., Bearzi, G. & Reeves, R. (2012) 'Physeter macrocephalus (Mediterranean assessment)', The IUCN Red List of Threatened Species, https://www.iucnredlist.org/species/41755/2955634#assessment-information (accessed 22 August 2023).
- Governance Globally: Impact of the EU IUU Carding Scheme on Belize, Guinea, Solomon Islands and Thailand, https://www.iuuwatch.eu/wp-content/uploads/2022/03/2022-EU-IUU-Coalition-Carding-Study.pdf

 101 Convention on Biological Diversity, 22 May 1992, entered into force 29 December 1993, https://treaties.un.org/doc/
 Treaties/1992/06/19920605%2008-44%20PM/Ch XXVII 08p.pdf

 102 Dahir portant loi n° 1-73-255 du 27 chaoual 1393 (23 novembre 1973) formant règlement sur la pêche maritime (as amended), Art. 13-1.

 103 Coalition for Global Fisheries Transparency (2024), 'Global Charter for Fisheries Transparency', https://fisheriestransparency.net/wp-content/uploads/2024/10/Coalition-for-Fisheries-Transparency-Global-
- Charter-2024-EN.pdf (accessed 16 October 2024).

 104 Commission Implementing Decision (EU) 2018/1986 of 13 December 2018 establishing specific control and inspection programmes for certain fisheries, OJ L 317 (12 December 2018), Art. 5, 9 and Annex I.

 105 EFCA (2024) Minutes of the 42nd meeting of the Administrative Board, Ref. Ares(2024) 5702327, 24 April 2024, https://www.efca.europa.eu/sites/default/files/2024-08/Signed%20Minutes%20AB%2024.04.24.pdf



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