

# **Role and impact of China on world fisheries and aquaculture**

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# Background

- Committee on Fisheries (PECH) request – **November 2021**
  - The implications of Chinese fishing operations on EU fisheries and the way forward [2022/2148\(INI\)](#)
  
- Policy Department B – unit dedicated to providing expert input to the PECH Committee
  - 2012 - [The role of China in world fisheries](#)
  - 2022 - [Role and impact of China on world fisheries and aquaculture](#), Lead author – **Daniel Pauly** (University of British Columbia)

# Structure of the study

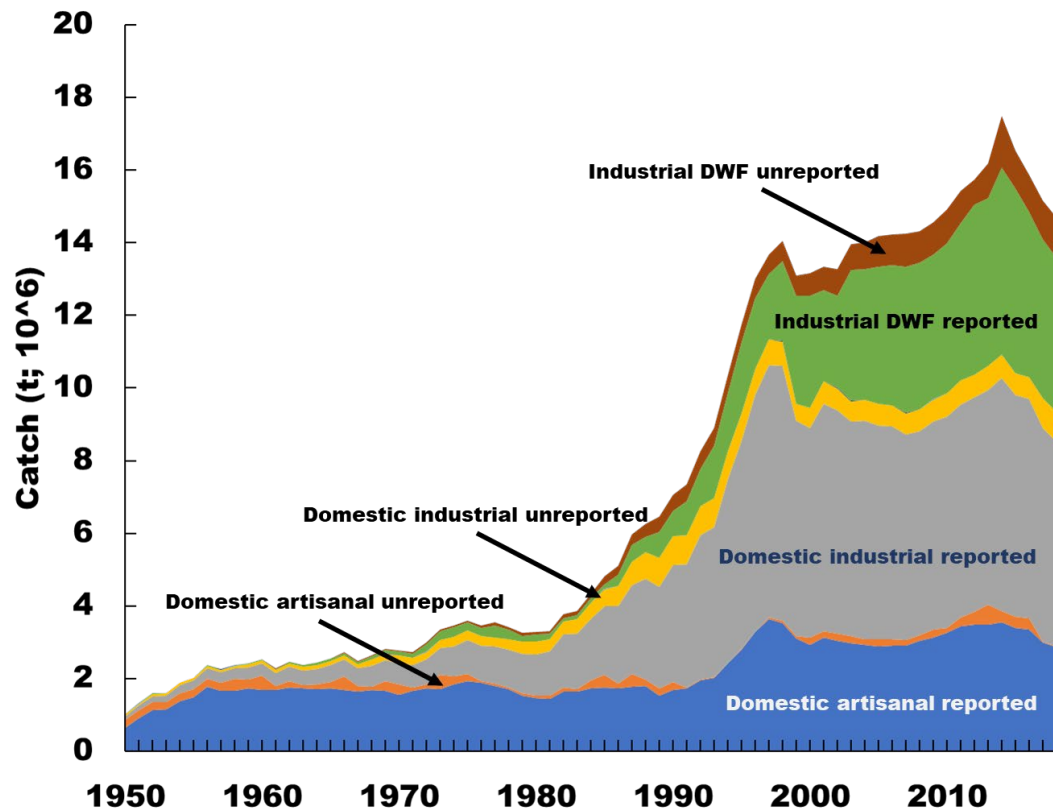
1. Overview of the Chinese fleets, aquaculture, and trade
2. Fishing access agreements
3. China's subsidies to its fishing sector
4. IUU fishing practices
5. EU-China cooperation
6. Consequences of China's fishing activities for the EU
7. Protection of the EU against unfair competition
8. Conclusions and recommendations

# 1. Overview of the Chinese fishing fleet, aquaculture, and trade

## Chinese distant water fishing fleet:

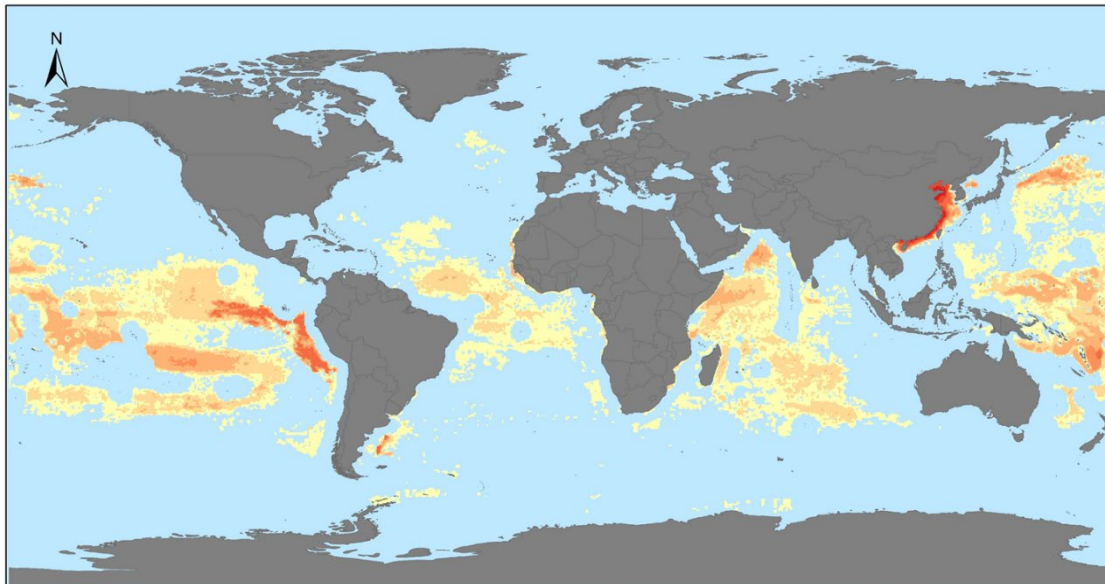
- The **total marine catches** of Mainland China currently amount to **14-16 million tonnes**, of which **3-4 million tonnes** originate from **distant-water** fishing, notably from the waters off **West Africa** and western **South America**.
- Since **2014**, China is the **top fishing country in the high seas**, and is **one of five countries** driving high seas fisheries and transshipment of **large tuna** and **sharks** and, more recently, of **squid**.

# Marine fisheries catch by Mainland Chinese domestic and distant water fleets



# 1. Overview of the Chinese fishing fleet, aquaculture, and trade

- Distant water fleets of Mainland China, in 2018-2020, operated in **hot spots** around the focus areas emphasized in the study.



- off **Ecuador**
- off northwestern Africa (**Mauritania** and **Senegal**)
- off the east coast of **Madagascar**,
- around **Mauritius**
- off the eastern and southern coasts of the **Solomon Islands**.

# 1. Overview of the Chinese fishing fleet, aquaculture, and trade

## Chinese distant water fishing fleet:

- There is a large discrepancy and uncertainty about the **number of vessels** of the Chinese distant water fleets. The low **estimate** of ‘**visible**’ vessels is around **900**; a higher estimate assumes that about **2 000** ‘**invisible**’ vessels ought to be added.
- This discrepancy may be due to the inclusion of a large number of **vessels operating in waters close to China**, e.g., in **North Korea** and **Japan**, usually on the basis of access agreements.

# 1. Overview of the Chinese fishing fleet, aquaculture, and trade

## Chinese marine aquaculture sector

- China's mariculture produced **16 million tonnes (mt)** in 2020, of which **14 mt** are **bivalves**. Overall, the industry generates about **52 billion Euros** per year.
- Fish and crustacean farming generate a **huge demand for fishmeal**, which has turned China into the **largest fishmeal importer** in the world, and which impacts the fish consumption of some of the countries from which the fishmeal is imported.



# 1. Overview of the Chinese fishing fleet, aquaculture, and trade

## Chinese import and export of fisheries and aquaculture products

- China's role as a primary **seafood processor** (filleting) to the world is changing in favour of secondary **value-added processing**.
- Rising Chinese wealth is - unsurprisingly - leading to increased **imports of expensive prime seafood** (fresh salmon, fillet products, shellfish) for domestic consumption.

# 1. Overview of the Chinese fishing fleet, aquaculture, and trade

## Chinese import and export of fisheries and aquaculture products

- However, there is one thing that has **not changed**, i.e., China's dominance of the **trade in fishmeal**. In 2012, China was importing **30%** of the traded total, and provisional data for 2021 suggests this is now approaching **50%**.
- When its domestic production is included, China appears to be consuming **60%** of global **fishmeal production**.

## 2. Fishing access agreements

- **Distant water fleets** operating in the study areas usually gain **legal access** in these countries' Exclusive Economic Zones through joint ventures, bilateral agreements, private agreements and licensing.
- The **terms of these agreements** or licenses are usually **not publicly available**, as they are seen as commercially sensitive. EU **SFPA** are more **transparent**.
- Of the **six focus countries**, Mauritania, Senegal and Mauritius have **active SFPAs**, Madagascar and the Solomon Islands have **dormant SFPAs** and Ecuador has **no SFPA**.

## 2. Fishing access agreements

- In the past decade, China has been actively expanding its **Belt and Road Initiative**. All focus countries but Mauritius have joined the initiative, with fisheries as an important component of China's involvement. However, **concrete details** on these agreements **are not publicly available**.
- Many of China's distant water fishing companies also engage in **joint ventures** or **private agreements** in foreign countries. This makes it **hard to trace who the actual beneficial ownership** is and adds another layer of opaqueness on the operation of China's distant water fleet.

### 3. China's subsidies to its fishing sector

- China provides **US\$ 2.4 billion** annually to its distant water fleets operating in the Exclusive Economic Zones of **other countries**, and **\$68 million** to its distant fleets operating in the **high seas**.
- **Harmful subsidies** provided by China to its distant fleets are concentrated on those operating along the **coast of African countries** (22 EEZs; amounting to an annual average of **\$240 million**).
- Results suggest that **transparency** is an issue not only regarding the **deployment of fleets** and their catches, but also regarding **subsidies**.

## 4. IUU fishing practices

- The **unreported catch** of Chinese distant water fleets subject to illicit trade is, on the average, **17%** of the total distant fleet catch (1980-2019).
- The greatest number of **IUU incidents** were reported in **Ecuador** (35%), the **Philippines** (25%) and **Mauritania** (13%). Infractions reported in **Senegal**, **Madagascar**, **Mauritius**, and the **Solomon Islands** represent only about **2%** of the incidents reported.
- The **switching off** of Automatic Identification Systems (**AIS**) directly accounts for **‘going dark’**. Lack of data on position of vessels are due to vessels **‘going dark’**.

## 5. EU-China cooperation

- **EU-China** cooperation at the **bilateral level** has **advanced considerably** in the past few years, partly due to the establishment and the political visibility of the **Blue Partnership for the Oceans**.
- The Blue Partnership for the Oceans has opened the path for **cooperation** and **dialogue**, and encourages the EU and China to cooperate with Regional Fisheries Management Organizations (**RFMOs**) to promote **better governance** of fisheries.

## 6. Consequences of China's fishing activities for the EU

- China's **massive subsidies** for their distant-water fleet have lead to **unfair competition**.
- **Overfishing** results in environmental **degradation** and **reduced resource** availability, as well as socio-economic implications for **local communities**.
- The **risk of overfishing** is exacerbated by the **lack of reliable data** and transparency about the amount of fish caught.



## 7. Protection of the EU against unfair competition

- The EU's best **protection against unfair practices** should be **transparency** and adherence to the letter and spirit of the **fishing agreements** it has with various countries, thus setting a high bar for other entities to follow.
- Ensuring adequate **enforcement** of the existing EU legislation and of international agreements on **safety at sea** and **labour conditions** on fishing vessels is also recommended.

## 8. Conclusions and recommendations

- China will not fade away, and its **major role** in international fisheries and mariculture **will continue to grow**. We should always keep this in mind.
- Thus, a **rule-based global system** that considers the interests of all parties needs to be in place to **regulate international economic activities**, including fisheries.
- Finally, when **interacting** with **Chinese negotiators**, it may help to point out that China's central government has proclaimed an '**Ecological Century**' and insists on **international cooperation** leading to mutual benefits.

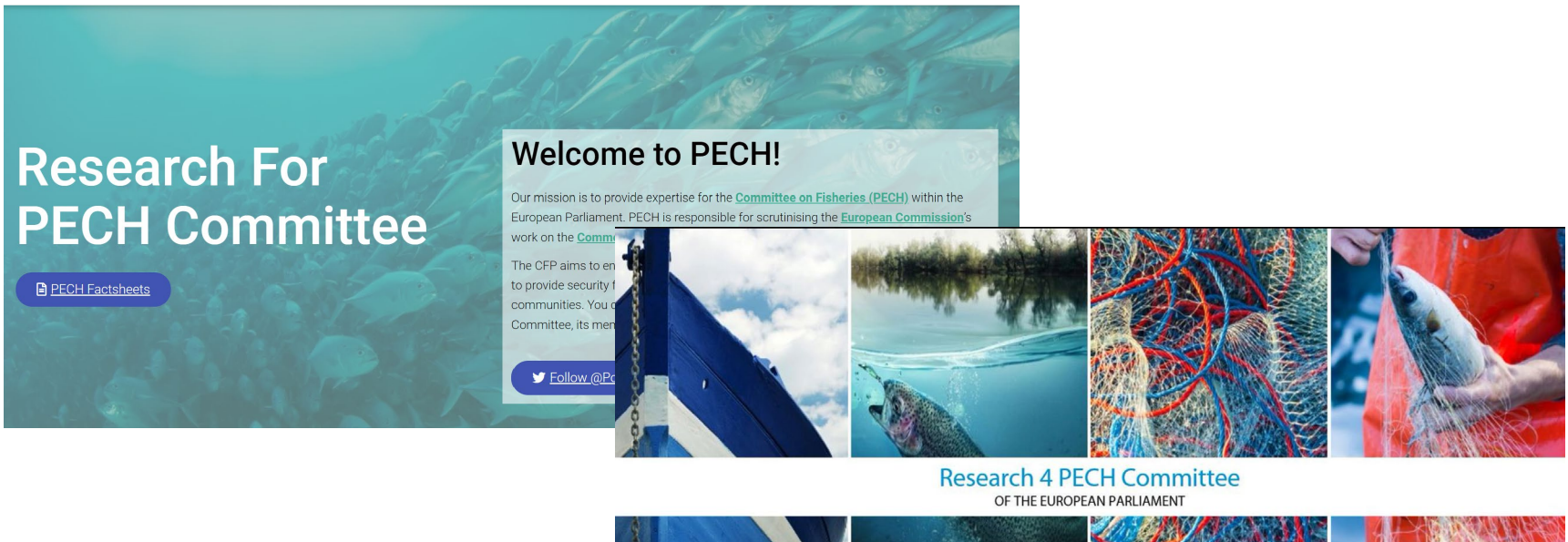
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