Chinese distant water fishing fleet

In recent decades, China has evolved into the world’s leading fishing country with the largest industrial distant-water fishing fleet (DWF). This infographic gives a brief overview of this development and makes a comparison with the EU. It complements a study commissioned by the European Parliament’s Committee on Fisheries (PECH). The PECH committee is currently preparing an own-initiative report on the implications of Chinese fishing operations for EU fisheries.

Evolution of Chinese and global marine fisheries catches, 1980-2019

China’s marine fisheries catches increased tremendously at the end of the 20th century. According to reported catch data, as collected by the research initiative Sea Around Us, China’s catches rose from about 3 million tonnes in the early 1980s to over 12 million tonnes in the late 1990s, before stabilising at a level of about 12 to 14 million tonnes per year (peaking above 14 million in 2014 and 2015, this trend is visualised in the line chart in Figure 1).

The global catch did not increase at the same rate. Instead, global production has stagnated since the late 1980s at a level of about 75 to 83 million tonnes (with a peak in 1996 of 84 million tonnes). The UN Food and Agriculture Organization (FAO) points to the increasing number of stocks fished at unsustainable levels.

This also means that – during the same period – China’s share of the global catch increased: from an average of 5% for the 1980-1989 period to 17% for 2010 to 2019 (see the bar chart in Figure 1).

Figure 1 – Chinese marine catch compared with rest of world (1980 to 2019, million tonnes)

Data source: D. Pauly, D. Zeller and M. Palomares (editors), 2023 (Sea Around Us Data).
Presence of Chinese fishing vessels in distant waters (2022)

The strong increase in China’s catch coincided with the expansion of its distant-water fishing fleet (DWF), which started in 1985 (when China sent its first distant-water fishing vessels to West Africa).

The map in Figure 2 illustrates the presence of the Chinese DWF, which occurs both on the high seas (i.e. in waters outside national jurisdictions) and in the waters of third countries, particularly in the waters off west Africa and South America.

The data are based on the tracking of automatic identification system (AIS) data by the organisation Global Fishing Watch. However, it should be noted that ‘going dark’ – disabling automatic identification systems (AIS) – is a known illegal, unreported and unregulated (IUU) fishing practice that prevents a complete picture from being drawn.

Figure 2 – Presence of Chinese fishing vessels (2022, size of circle indicates the number of boats detected at a particular GNSS location)

Size of EU and Chinese distant water fleets

According to the Chinese Ministry of Agriculture and Rural Affairs, there were 2 701 fishing vessels operating in distant waters by the end of 2019. However, as noted in a study conducted for the PECH committee, this figure includes vessels operating in waters close to China (e.g. in Korean waters), usually not considered part of the DWF. Excluding those vessels, the study for the PECH committee estimated that China’s DWF consists of approximately 900 Chinese vessels. The figure is a rough estimate of the ‘visible’ DWF. As many of China’s distant-water fishing companies engage in joint ventures or private agreements in foreign countries, there is a lack of transparency over the ownership of vessels. A share of the Chinese DWF is considered to be flagged to third countries with beneficial ownership by Chinese operators.

The annual economic report on the EU fishing fleet, published by the European Commission’s Joint Research Centre, provides a wealth of information on the EU fisheries sector. The 2021 report defined the EU’s DWF as ‘fishing vessels over 24 metres of length’ that ‘fish predominately in non-
EU waters’. Under this definition, the DWF in 2019 consisted of 279 vessels, the vast majority of which were Spanish (205 vessels), French (22) and Portuguese (17).²

Figure 3 illustrates the size of the DWFs of China and the EU, based on the two sources mentioned. It should be noted that the figures for the EU and China are not directly comparable, owing to differences in sources and definitions, and the high uncertainty about the Chinese DWF.

Relative shares of EU and Chinese distant-water fleet catches

There is also a lot of uncertainty in the data when it comes to calculating the share of catches coming from China’s DWF to the total Chinese catch. Various sources point to the over-reporting of domestic catches and a substantial under-reporting of distant catches in China’s official statistics.³ However, according to the study carried out for the PECH committee,⁴ the share of the distant-water catches has remained quite steady since 2000 and is estimated at between 30% and 35% of the total catch over the past two decades.

According to Eurostat data, EU vessels catch approximately 70% of the total EU catch in the north-east Atlantic area (FAO area 27, this also includes the North Sea and the Baltic Sea), and 11% in the Mediterranean and Black Seas (FAO area 37). The remaining 19% is taken from more distant areas (mainly in other Atlantic zones and the western Indian Ocean, both on the high seas and in the waters of third countries under access agreements). However, it is clear that FAO areas 27 and 37 include non-EU waters.

Figure 4 shows the estimated catches by exclusive economic zone (EEZ), for both the EU and China, based on data collected by Sea Around Us.⁵ The graph distinguishes between catches in their own waters (i.e. own EEZs, light grey), catches in nearby Korean, and UK and Norwegian waters (for China and the EU respectively, in dark orange) and catches in all other EEZs and the high seas (dark blue).⁶ About 4 million tonnes are caught by China outside its own waters and outside the nearby South Korean and North Korean (Yellow Sea) waters, representing 30% of its total catch. The EU catches some 1.1 million tonnes outside its own waters and the nearby waters of the UK (Channel Islands and mainland EEZs) and Norway (mainland EEZ), representing 28% of its total catch.
Scale of EU and Chinese fisheries subsidies

A November 2019 study classified fisheries subsidies into three groups: capacity-enhancing, beneficial and ambiguous. Beneficial subsidies can be considered investments to promote fishery resource conservation and management. Examples of capacity-enhancing subsidies are support for investments in vessels, fees to access third-country waters and fuel subsidies. Ambiguous subsidies can be either beneficial or capacity-enhancing, depending on how they are implemented (e.g. support for artisanal fisheries).

According to this study, China is, by far, the country with the most subsidies in absolute terms and, compared to the EU, has a much higher share of capacity-enhancing subsidies (Figure 5). Using the same data, the study for the PECH committee gives an insight into the subsidies provided to the Chinese DWF. It notes that Chinese fleets operating in Mauritania and Senegal receive high levels of subsidies from the Chinese government, while those operating in Madagascar, Mauritius, Ecuador and the Solomon Islands seem to have little ‘visible’ information on subsidies (suggesting a lack of transparency). In particular, there is a lack of information on the level of fuel subsidies to its DWF.
More information and an overview of EU fisheries subsidies can be found in an EPRS briefing on the WTO agreement on fisheries subsidies. This recently concluded agreement covers bans on subsidies for three types of fisheries: fisheries engaged in IUU fishing, fisheries targeting overfished stocks, and fisheries in the 'unregulated' high seas (i.e. international waters where fishing is not yet managed by an intergovernmental organisation).

**MAIN REFERENCES**
Food and Agriculture Organization of the United Nations (FAO), *The state of world fisheries and aquaculture, towards blue transformation, 2022*.

**ENDNOTES**

1 According to the study, the Chinese DWF has remained more or less stable since 2000 at an estimate of about 900 vessels.
2 The report initially mentions 259 vessels for the DWF (p. 13). However, as part of its remarks on data issues, it notes that this figure does not cover some Member States (p. 513). For the missing Member States, the number can be retrieved from the national chapters (e.g. p. 426 for Latvia); national sources were used only for Germany and Poland. These figures do not include the many EU vessels fishing in nearby waters. For example – on the basis of reciprocal agreements – some 2 600 EU vessels are currently authorised to fish in UK and Norwegian waters (mostly on jointly managed stocks).
3 See, for example, p. 74 in the study for the PECH committee in the chapter on data reporting, or the remark on p. 17 of FAO report – *The State of World Fisheries and Aquaculture 2022*.
4 The PECH committee is currently preparing an own-initiative report on the implications of Chinese fishing operations for EU fisheries.
5 In the dataset of Sea Around Us, only the data on reported landings are considered. Estimates of unreported data have not been taken into account.
6 EU catches from the Faroe Islands and Greenland EEZs (Denmark), from the Falkland Islands EEZ (UK) and the Svalbard EEZ (Norway) are counted under ‘All other EEZs and high seas’.

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