

China's Foreign Fishing Is Largely Unreported

New Study Estimates Catch Is Worth US\$11.5 Billion a Year

Chinese fishing vessels catch about **US\$11.5 billion (8.93 billion euros)** worth of fish a year outside the waters of China, most of which is unreported, according to a new study by the *Sea Around Us* project at the University of British Columbia. The study estimates that the Chinese foreign catch averaged 4.6 million metric tons a year from 2000 to 2011—much greater than the average of 368,000 tons China reported to the UN Food and Agriculture Organization.

China's foreign fishing data are incomplete

In the late 20th century, facing a decline in domestic fisheries, several nations began fishing beyond their own waters. Europe and the United States were the first to develop distant-water fishing fleets, and China had a globally significant fleet by century's end.

Distant-water fishing is often conducted under access agreements between the fishing nation and host nation. China, unlike some other nations, does not make such agreements public, and the data it reports may not reflect total catch.

In the absence of reliable official data, the best information about China's distant-water fishing comes from scholarly articles, news reports, and other non-official sources. For the new study, researchers compiled more than 500 such sources documenting the location of Chinese vessels. For each country where fishing occurred, at least 10 experts used these sources to estimate the number and type of vessels. The researchers then calculated total catch using published data on catch by vessel type. Finally, they used a statistical technique called the Monte Carlo method to derive

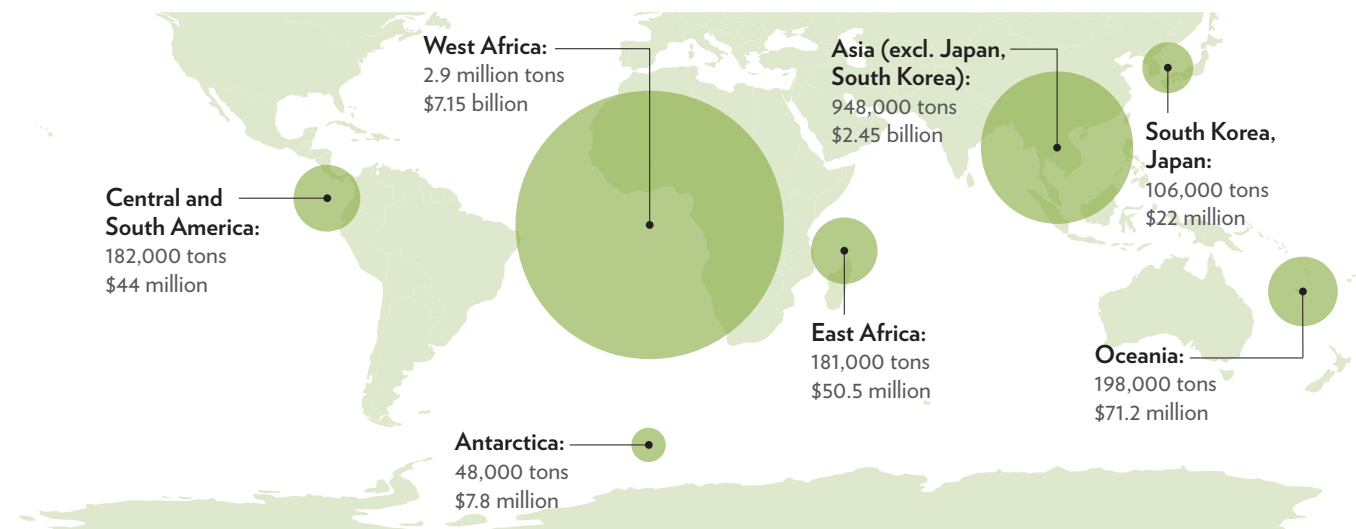
regional and world estimates and to quantify uncertainty. The map below shows the results.

Better data are crucial for management

Without reliable catch data, it is difficult to set appropriate limits on large-scale fishing. And without such limits, fish populations are far more likely to collapse or produce less-than-optimal yield. This study presents a significant piece of missing catch data, which may be particularly useful in West Africa, where most of China's foreign fishing occurs. It also provides a way to estimate the catch of other large distant-water fleets, such as Spain's.

Where Chinese Vessels Fish

Estimated average annual catch by region, in metric tons, 2000-2011



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