Fish stocks greatly exaggerated by false reporting from China, study finds

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The sole tally of the world's fish stocks is being wildly overstated as a result of fishy statistics from China, a study by researchers at the University of British Columbia suggests.

For more than a decade, China has been exaggerating catch reports, leading scientists to believe there's a healthy number of fish in the sea, says an article to be published Thursday in the science journal Nature.

Despite local evidence that fish stocks are overexploited, figures from the United Nations have long suggested worldwide catches rose 330,000 tonnes a year throughout the 1990s.

Those numbers have helped to foster a false sense of security about the health of international fish stocks, says the article by researchers Reg Watson and Daniel Pauly.

In fact, China's doctored numbers have been artificially driving up the tally, which has actually declined by some 360,000 tonnes a year since 1988, Watson said in an interview.

“The catches are much higher than you'd expect, inexplicably higher,” Watson said of China's annual catch reports, which account for roughly 18 per cent of the world's total.

“There really is no oceanographic feature that we've looked at that explains the high catch.” There is a socio-political feature unique to China that may explain it: mid-level government officials who tended to get promotions on the basis of meeting production targets.

“This is a system where more is better,” Watson said. “They actually get promotions and in fact, it's virtually required to reach production targets and these are increased every year.”

As a result, global figures - relied on by banks, investment firms and conservation experts to determine economic and environmental policy - are seriously out of whack.

Decisions based on the false belief that fish stocks are healthy could be disastrous, Watson warned.

“When companies in the North Sea decide that they're going to have another supertrawler despite all objections, they can point to this kind of message and say, ‘But everything's OK, we've been told there's fish out there on the world's seas and we can go out there and get it.’”

Watson described the experience of one fishing company whose supertrawler - capable of scooping up in days what entire fleets would take months to haul in - went from one barren sea to another in a futile search for fish.
“The information we've been relying on has been faulty,” he said. “Instead of the world global catch staying constant or perhaps even rising, it actually has been dropping. It has been dropping since about 1988.”

The Food and Agriculture Organization of the United Nations has long suspected something was amiss, but China has repeatedly refused to discuss there was a problem.

Watson devised a statistical model to predict catch rates in various parts of the world. Most regions reported catch rates that corresponded to the model's predictions. China did not.

The model predicted the region, where major fish populations had long been classified as overexploited, would produce 5.5 million tonnes in 1999. But that same year, China reported catching 10.1 million tonnes.

A spokesman for the Chinese Agricultural Ministry's Fisheries Department said the government stopped two years ago offering county and provincial officials job promotions based on growth.

“Local government officials have no incentive to inflate their fishing output,” said Wan Cheng. “We believe there is no intentional overreporting of statistics, but only some possible statistical defects.”

The government put into effect a “zero growth” policy that catch reports from oceans should not exceed 1998 levels of about 35 billion pounds of fish and shellfish per year, he said.

As a result, Watson said, China's catch reports have suddenly levelled off, after years of being on the rise.

The study's findings came as little surprise to Lee Alverson, a global fisheries consultant in Seattle who headed research for the National Marine Fisheries Service in the Northwest and Alaska from 1970 to 1980.

“It takes a lot of nerve to make the sort of accusation they did about China, but there were a lot of scientists who felt nervous about those numbers,” Alverson said. “If any of the nations are putting bogus numbers into the accounting process, then our ability to assess if overfishing is going on is in jeopardy.”

Misreporting is a problem worldwide, noted Mike Hagler, a fisheries expert with Greenpeace, but offending countries typically under-report their haul by omitting illegal catches.

Keeping such figures as accurate as possible is crucial to maintaining healthy stocks, he said.

“We know so little about the oceans generally and the dynamics of biodiversity,” Hagler said from his office in Washington, D.C. “Getting poor information compounds this.”