VANCOUVER - The world's fishing industry is fast running out of new ocean fishing grounds to exploit as it depletes existing areas through unsustainable harvesting practices, according to a study published on Thursday.

Expansion into unexploited fishing grounds allowed global catches to increase for decades, and disguised the fact that older areas were being depleted, according researchers at the University of British Columbia and National Geographic.

"We knew the expansion was going on, but this is the first time we have quantified it," said Daniel Pauly, a scientist at the Vancouver-based university who co-authored the report published in the online journal PLoS ONE.

About 19 million tonnes of fish were landed in 1950, and that increased to a peak of 90 million tonnes a year in the late 1980s, according to the researchers, who looked at data from 1950 to 2005.

The researchers tracked the expansion of fishing activity using computer models that examine both the total number of fish caught and the impact that catching different types of fish has had on the ocean's productivity.

By the late 1990s, the world's fishing fleets had largely run out of new fishing grounds to exploit, the researchers said.

Consumers have a romantic view of fishers being local business people, but most fishing is done by large companies, according to Pauly, who said these companies can ignore the decline of older stocks by simply moving to new areas.

The data shows more must done to ensure existing fish stocks are protected, said the researchers, who have done other studies outlining problems with the world's fish supplies.

"The sooner we come to grips with it ... the sooner we can stop the downward spiral by creating stricter fishing regulations and more marine reserves," co-author Enric Sala said in a statement.

The researchers said that in 1950 most heavy fishing was done in the North Atlantic and the Western Pacific, but by the mid 1990s, a third of the world's oceans and two-thirds of the continental shelves were exploited.

That expansion has left only unproductive fishing areas on the high seas and the ice-covered waters of the Arctic and Antarctic for boats to move into.

Some other researchers have complained that recent studies warning the oceans are being depleted of larger fish are making the situation appear worse than it really is.

Pauly said those critics have ignored the role that the move of the fleet into new fishing grounds has on fish-catch data, which is documented in the current study.