

Alternative animal feed part of global fisheries crisis fix: study

November 17th, 2009 in Biology / Ecology

Finding alternative feed sources for chickens, pigs and other farm animals will significantly reduce pressure on the world's dwindling fisheries while contributing positively to climate change, according to University of British Columbia researchers.

"Thirty million tons - or 36 per cent - of the world's total [fisheries](#) catch each year is currently ground up into fishmeal and oil to feed farmed fish, chickens and pigs," says UBC fisheries researcher Daniel Pauly, co-author of the *Oryx: The International Journal of [Conservation](#)* article, published online this week.

"Meanwhile, 25 per cent of infants in Peru - which produces half of the world's fishmeal using anchovies - are malnourished," says Pauly.

In the *Oryx* article, nine of the world's leading fisheries and conservation researchers - including four from UBC - reviewed the effectiveness of past conservation campaigns and propose new strategies to effect swifter and larger-scale changes.

"Globally, pigs and chickens alone consume six times the amount of [seafood](#) as US consumers and twice that of Japan," says lead author Jennifer Jacquet, a post-doctoral fellow at UBC's Fisheries Centre. "Ultimately these farm animals have a greater impact on our seafood supplies than the most successful seafood certification program."

"We should work to eliminate the use of tasty fish for [livestock production](#). It's a waste," says Pauly. "Plus, it is not what pigs or chickens naturally eat. When is the last time you saw a chicken fishing?"

Many sustainable seafood campaigns focus on consumers but ignore large-scale market impacts - such as farming demand for fishmeal - and have failed to reach their goals, say the study's authors, which include Enric Sala of the National Geographic Society and Rashid Sumaila and Tony Pitcher of UBC.

After pioneering and distributing more than one million seafood wallet cards - pocket-sized guides that advise consumers of ocean-friendly seafood, the Monterey Bay Aquarium conducted a study that revealed no overall change in the market and that fishing pressures had not decreased for targeted species, the study points out.

"Sustainable seafood certification programs such as wallet cards have raised consumer awareness but are far less effective than targeting mega supermarket chains such as Walmart, Whole Foods and Loblaw through a combination of positive and negative publicity campaigns," says Jacquet, adding that more than 60 per cent of seafood in Canada and half the seafood in the U.S. is sold through supermarkets.

The authors also suggest establishing international standards for labeling sustainable seafood, eliminating harmful fisheries subsidies and leveraging momentum for fisheries conservation through existing global concerns for climate change.

"Global fisheries consume 13 billion gallons of fuel each year just to catch and land fish," says Jacquet. "That's more gas than 22 million cars would use. Energy use would be much higher if we include the fuel used to ship fish further for processing and to market. No discussion of the overall impact of fisheries would be complete without clarifying its contribution to greenhouse gas emissions and climate change."

"Overall, we'd like to encourage people to engage more as citizens - as they have with the global [climate change](#) movement - and less as mere consumers," said Pauly. "Big problems like overfishing require efforts to be directed at big change."

More information: The study is available online at <http://journals.cambridge.org/action/displayIssue?iid=292961>

Source: University of British Columbia ([news](#) : [web](#))