

2008 Pew Fellowship in Marine Conservation Awarded to Dr. Ussif Rashid Sumaila to Document the Economics of Unsustainable Fishing Globally

Dr. Sumaila is an Associate Professor at the University of British Columbia Fisheries Centre, one of sixteen research units in UBC's College for Interdisciplinary Studies in Vancouver, Canada

NEW YORK CITY, Feb. 5 – Dr. Ussif Rashid Sumaila, an Associate Professor at the University of British Columbia Fisheries Centre in Vancouver, Canada, is among five ocean experts to be awarded the prestigious 2008 Pew Fellowship in Marine Conservation, which supports critical marine conservation projects around the world. Dr. Sumaila will use his fellowship to document the financial factors contributing to unsustainable commercial fishing and depletion of ocean resources around the world.

The Pew Institute for Ocean Science administers the three-year, \$150,000 awards and today announced the 2008 Fellows, whose innovative projects are urgently needed to improve coral reef health, sustain fisheries, and enhance the effectiveness of marine protected areas. The winners are based in Canada, the United States, China, France and Australia and join more than 100 Pew Fellows in Marine Conservation from 29 countries around the globe (Learn more about the other recipients and their projects at www.pewoceanscience.org).

Dr. Sumaila's prior work has shown that taxpayers worldwide are paying massive subsidies to support overfishing, and has drawn international attention from the media and policymakers. Through his fellowship project on "Global Data on the Economics of Fishing," Dr. Sumaila will create comprehensive databases that detail the cost and ecological impact of commercial fishing around the world. This information will form the basis for sophisticated studies and models that he will develop to document the massive fiscal and environmental waste being caused by poor management of global ocean resources.

"Dr. Sumaila's Pew Fellowship project will provide concrete arguments for smarter policymaking concerning fisheries management worldwide," said Pew Institute for Ocean Science Executive Director Dr. Ellen Pikitch. "Valuable marine ecosystems are being plundered because of overfishing, ineffective management, and fisheries subsidies, and Dr. Sumaila will help to provide the evidence necessary to educate the public and policymakers alike."

Effective marine conservation policy cannot be designed without a better understanding of the underlying social and economic drivers of overfishing, as well as deeper knowledge about overfishing's impact on marine conservation and society. Through his Pew Fellowship, Dr. Sumaila will gather extensive information from around the world on each of these factors.

First, Dr. Sumaila will develop global databases of national and private discount rates applied in key fisheries over the past ten years. Private actors in an economy, as well as governments, use these discount rates as a way to weigh future benefits against current ones. "This project will provide policymakers and stakeholders with a deeper understanding of how people's desire to 'frontload' benefits and 'backload' costs can result in the depletion of our life support systems," Dr. Sumaila said.

Dr. Sumaila will then create Conservation Indices – including different fish’s growth rates, discount rates of fishers who target those species, and other factors – and will use that information to identify the species and locations most vulnerable to commercial fishing. He will produce global maps showing Conservation Indices for each of the world’s 64 large marine ecosystems and for all countries’ Exclusive Economic Zones (EEZs), the area extending 200 nautical miles beyond the boundaries of a nation/state into the ocean. Within the EEZ, living and non-living resources can be rightfully explored and exploited by that nation/state..

“We will be able to show that in most cases, countries actually do not gain economically from the fishing going on in their Exclusive Economic Zones,” said Dr. Sumaila. “By combining our economic analyses with conservation indices maps, we will be able to demonstrate that fishing in certain conservation-sensitive areas of the ocean may not be economically viable if not for subsidies.”

As another important component of this project, Dr. Sumaila will develop a global database of the cost of fishing in different countries, and when using different types of fishing gear. He will collect data for vessels operating in major fisheries in Africa, Asia, Europe, North America, Oceania, and South/Central America, including the Caribbean. The database will include fixed costs incurred whether the vessel is used for fishing or not (eg the cost of the boat purchase, office expenses, and variable costs that are incurred only when boats are being used, such as fuel). The “cost of fishing” database will be combined with the databases on discount rates, conservation indices, and his prior highly publicized findings on the massive subsidies given to support the fishing industry worldwide. It will provide “the final piece of the puzzle that will allow a complete analysis of the misuse of our ocean resource wealth,” Dr. Sumaila said.

Dr. Sumaila, who was born in Nigeria, raised partly in Ghana, and earned his PhD in Economics from the University of Bergen in Norway, made international headlines in 2006 and was invited to speak at the United Nations and the White House after co-authoring research that found massive subsidies are given to the fishing industry worldwide. He and colleagues at the University of British Columbia Fisheries Centre found that \$30-34 billion in subsidies were given by 144 maritime countries in 2000, and at least \$152 million of that went specifically to support bottom trawl fleets operating in the high seas. Bottom-trawling is widely viewed as the most damaging commercial fishing technique, since trawlers scrape the seafloor and destroy marine communities in the process.

The dollars given to subsidize bottom trawl fleets constituted 25 percent of the total landed value of fish, and amounted to significantly more than fleets’ estimated profit -- only 10 percent of landed value, he and his colleagues found. “Substantial amounts of subsidies are being paid by taxpayers around the world to support overfishing,” Dr. Sumaila said. For more on UBC’s Fisheries Centre, please see www.fisheries.ubc.ca.

Since the early 1990s, the Pew Fellowship in Marine Conservation has been awarded to more than 100 leading marine scientists, economists, attorneys, and other ocean conservationists from 29 countries. The fellowship program supports innovative projects led by mid-career, emerging leaders in ocean conservation and designed to develop and implement solutions to critical challenges in the marine realm.

The four other 2008 Fellows will pursue projects that aim to: safeguard Antarctic krill fisheries that serve as critical food sources for whales; protect China's threatened marine environment by creating an unprecedented network of Marine Protected Areas; develop novel and groundbreaking techniques to enhance the thermal tolerance of corals and help them survive dangerously warming oceans around the world; and, determine whether "selective" commercial fishing, in which only certain fish are captured, harms the ecosystem more than "even fishing," in which fish are broadly captured and there is extensive bycatch and discards. Photographs and more information about each of the 2008 Pew Fellows in Marine Conservation are available upon request and at www.pewoceanscience.org/fellows/2008.

The mission of the Pew Institute for Ocean Science is to advance ocean conservation through science. Established by a generous multi-year grant from the Pew Charitable Trusts, the Pew Institute is a major program of the University of Miami's Rosenstiel School of Marine and Atmospheric Science and has offices in Florida and New York. Visit us online at www.pewoceanscience.org.