

May 24, 2007

Director-General Pascal Lamy
World Trade Organization
Centre William Rappard
Rue de Lausanne 154
CH-1211 Geneva 21
Switzerland

Dear Director-General Lamy:

As members of the international science community, we write to you with our grave concern about the state of the world's oceans. The World Trade Organization (WTO) has an unprecedented and unequalled opportunity to contribute to stopping global overfishing by significantly reducing worldwide subsidies to the fishing sector. An ambitious outcome in the ongoing WTO fisheries subsidies negotiations is vital to the future of the world's fisheries. It is our great hope that you will use your leadership to guide the WTO to meet this global challenge.

We have spent lifetimes dedicated to studying the oceans ecosystems and marine fisheries. Many of us remember a time only decades ago when the oceans were viewed as vast storehouses of protein, able to provide food to an increasingly hungry world, food that could be provided by fishermen relying on technology and scientific management. At that time, many of us also started to observe the decline of some fish populations.

But we had little idea how massive the problem would become. Modern fishing technology is capable of catching fish at amounts and in places we never would have envisioned. The majority of the world's fish populations are in jeopardy from overfishing and if current trends continue, will be beyond recovery within decades.

Fish populations, as well as many other ocean species, have been depleted to a fraction of their historical level. Many of these fish are at the top of the marine food chain, and their disappearance can trigger cascading adverse effects throughout the marine ecosystem.

- Ninety percent of all the "big fish" – large-bodied sharks, tuna, marlin and swordfish – have disappeared as the result of industrialized fishing;¹
- The decline of many ocean species is increasingly impairing the ocean's capacity to provide food, maintain water quality, and recover from perturbations.²
- Despite massive technological advances and increased effort, global catches of food fish have been declining for more than a decade.³

There is no longer any question – we have reached a critical state. The world's ocean ecosystems are at a tipping point, and overfishing represents one of the greatest threats to their productivity.

Yet despite the precarious state of the oceans, many governments continue to provide significant subsidies to their fishing sector. Fisheries subsidies produce such strong economic incentives to overfish that reducing them is one of the most significant actions that can be taken to combat

¹ R. Myers & B. Worm, *Rapid Worldwide Depletion of Predatory Fish Communities*. Nature, May 15, 2003, Vol., 423, p. 280-283

² B. Worm et al., *Impacts of Biodiversity Loss on Ocean Ecosystems Services*. Science, November 3, 2006, Vol. 314, p. 787-790

³ R. Watson & D. Pauly, *Systematic distortions in world fisheries catch trends*. Nature November 29, 2001, 414, p. 534-536

global overfishing. The WTO negotiations represent the best opportunity to control worldwide subsidies to the fishing sector.

According to a new study, fisheries subsidies amount to \$30 to \$34 billion annually, and at least \$20 billion go directly towards supporting fishing capacity, such as boats, fuel, equipment, and other operating costs.⁴ These subsidies equal approximately 25 percent of worldwide fishing revenue.

Fisheries subsidies are not only a major driver of overfishing, but promote other destructive fishing practices. For example, high seas bottom trawling, a practice so environmentally-destructive that the United Nations has called on nations to severely restrict it, would not be profitable without its large subsidies for fuel. Subsidies have also been documented to support illegal, unregulated, and unreported (IUU) fishing – a serious impediment to achieving sustainable fisheries.

There are only decades left before the damage we have inflicted on the oceans becomes permanent. We are at a crossroads. One road leads to a world with tremendously diminished marine life. The other leads to one with oceans again teeming with abundance, where the world can rely on the oceans for protein, and enjoy its wildlife. The choices we make today will determine our path for the future.

Global overfishing is one of the greatest threats to the oceans. Massive government subsidies continue to perpetuate and exacerbate this problem. The WTO fisheries subsidies negotiations are historic in their intent to address a major environmental issue in the context of trade. But the results of this negotiation go far beyond trade – they will directly impact our ability to ensure the long-term sustainability of the world's fisheries.

The WTO has in its hands the opportunity to effect one of the greatest changes towards protecting the world's oceans. We urge you to use your skill and leadership to significantly achieve a successful outcome in the fisheries subsidies negotiations and demonstrate to the world that the WTO can play a constructive role in solving problems of global consequence.

Sincerely,

Dr. Daniel Pauly
Professor and Director
Fisheries Centre
University of British Columbia
Vancouver, BC, Canada

Dr. Boris Worm
Assistant Professor
of Marine Conservation Biology
Biology Department
Dalhousie University
Halifax, NS, Canada

Dr. Ussif Rashid Sumaila
Associate Professor and Director
Fisheries Economics Research Unit
Fisheries Centre
University of British Columbia
Vancouver, BC, Canada

cc: **Ambassador Guillermo Valles Galmes of Uruguay**
Chairman, WTO Negotiating Group on Rules

⁴ Sumaila, U. R. and D. Pauly (Editors) 2006. Catching More Bait: A Bottom-up Re-estimation of Global Fisheries Subsidies. Fisheries Centre Research Reports Vol. 14(6) 114 pp.

Dr. Alex Aguilar

Dept Biologia Animal
Facultat de Biologia
Universitat de Barcelona
Barcelona, Spain

Dr. Cameron Ainsworth

Post Doctoral Fellow
Fisheries Centre
University of British Columbia
Vancouver, Canada

Dr. Vera Alexander

Professor Emeritus
University of Alaska Fairbanks,
Fairbanks, AK, USA

Dick Allen

Fishery Researcher
Fisheries Dept. Graduate School
University of Rhode Island
Rhode Island, USA

Omar A. Amir, M.Sc.

Marine Mammal Research and Education Group
Institute of Marine Sciences
Zanzibar, Tanzania

Dr. Tim Andrew

Managing Director
Enviro-Fish Africa (Pty) Ltd
Grahamstown, South Africa

Lemnuel V Aragonés, Ph.D.

Associate Professor
Institute of Environmental Science and Meteorology
University of the Philippines
Diliman, Quezon City, Philippines

Randall Arauz

President, Programa Restauración Tortugas Marinas,
PRETOMA
Central American Director, Turtle Island Restoration
Network, TIRN
Co-Chair, Central American Shark Specialist Group,
IUCN
Tibás, San José, Costa Rica

Lara Atkinson

Marine Research Institute
University of Cape Town
Rondebosch, South Africa

Dr. Johann Augustyn

Chief Director: Research, Antarctica & Islands Department
of Environmental Affairs and Tourism Marine and Coastal
Management
Rogge Bay, South Africa

Dr. John C. Avise

Distinguished Professor, Ecology & Evolutionary Biology
School of Biological Sciences
University of California, Irvine

Megan Bailey

Masters Student, Fisheries Centre
The University of British Columbia
Vancouver, BC

Dr. Andrew Bakun

Professor of Marine Biology and Fisheries
Pew Institute for Ocean Science
Rosenstiel School of Marine and Atmospheric Science
University of Miami, Miami, Florida, USA

Jaco Barendse (MSc)

Co-ordinator: Southern African Sustainable Seafood
Initiative, WWF South Africa
Cape Town, South Africa

Nina Baumgartner

PhD student, Zoology Department
School of Biological Sciences
University of Aberdeen
Aberdeen, Scotland, UK

Giovanni Bearzi, Ph.D.

President, Tethys Research Institute
Milano, Italy

Bas Beekmans

PhD-student
British Antarctic Survey
Cambridge, United Kingdom

Dr. Kirsten Benkendorff

Senior Lecturer, Marine Biology
School of Biological Sciences
Flinders University
Adelaide, S.A., Australia

Dr. Matt Berman

Visiting Professor
Fisheries Centre
University of British Columbia
Aquatic Ecosystems Research Laboratory
The University of British Columbia
Vancouver, BC, Canada and,
Professor of Economics
Institute of Social and Economic Research
University of Alaska Anchorage
Anchorage, AK, USA

Dr. Charles Birkeland

Adjunct Associate Professor
Department of Zoology
University of Hawaii at Manoa
Hawaii, USA

P. Dee Boersma, Ph.D.

Wadsworth Endowed Chair in Conservation Science
Department of Biology
University of Washington
Seattle, WA, USA

Justin Brashares, Ph.D.

Assistant Professor of Ecology and Conservation
Environmental Science, Policy and Management
University of California, Berkeley
Berkeley, CA USA

Gill Braulik

Research Fellow
Pakistan Wetlands Programme
Islamabad, Pakistan

Dr. Peter Britz

Associate Professor and Head of Department,
Department of Ichthyology and Fisheries Science
Rhodes University
Grahamstown, South Africa

Dr. JoAnn Burkholder

Director
Center for Applied Aquatic Ecology
North Carolina State University
Raleigh, NC USA

Dr. José J. Castro

Lecturer
University of Las Palmas de Gran Canaria
Canary Islands, Spain

Dre Cattrijsse

Vlaams Instituut voor de Zee
Flanders Marine Institute
Oostende, Belgium

Rene Cerda-D'Amico

Professor
Fisheries and Aquaculture Economist
Pontificia Universidad Catolica de Valparaiso
Valparaíso, Chile

Dr. Jeff Chanton

Department of Oceanography
Florida State University
Tallahassee, Florida, USA

Villy Christensen, Ph.D.

Associate Professor
Fisheries Centre, University of British Columbia
Vancouver BC, Canada

Dr. Patrick Christie

Assistant Professor
School of Marine Affairs and Jackson School of
International Studies
University of Washington
Seattle, WA, USA

Dr. Larry Crowder

Stephen Toth Professor of Marine Biology
Nicholas School of the Environment and Earth Sciences
Duke University Marine Laboratory
Beaufort, NC, USA

Helen Davies, MSc

Director,
Sustainable Fishing Solutions Ltd.
Pennington, Hampshire, UK

Dr. Ralf Döring

Department of Land Economics
University of Greifswald
Greifswald, Germany

Dr. J. Emmett Duffy

Professor of Marine Science
Virginia Institute of Marine Science
The College of William and Mary
Gloucester Point, VA, USA

Karen L. Eckert, Ph.D.

WIDECAST
Nicholas School Marine Laboratory
Duke University
Beaufort, NC, USA

Scott A. Eckert, Ph.D.

WIDECAST
Nicholas School Marine Laboratory
Duke University
Beaufort, NC, USA

Dr Alasdair Edwards

Division of Biology
Ridley Building
Newcastle University
Newcastle upon Tyne
United Kingdom

Dr. Marta Estrada

Research Professor
Institut de Ciències del Mar (CSIC)
Barcelona, Spain

Dr. Lorenzo von Fersen

YAQU PACHA e.V.
Am Tiergarten 30
NUERNBERG, Germany

Dr. P.J. Fielding

FieldWork
Berea, East London, South Africa

Sarah Foster, M.Sc.

Ph.D. Candidate
Project Seahorse, Fisheries Centre
The University of British Columbia
Vancouver, B.C., Canada

Helen E. Fox, Ph.D.

Marine Conservation Biologist, Conservation Science
Program
World Wildlife Fund - US
Washington, DC, USA

Silvia Frey

Environmental Scientist
OceanCare
Wädenswil, Switzerland

Dr. Rainer Froese

Leibniz-Institut für Meereswissenschaften IfM-GEOMAR
Kiel, Germany

Edgardo D. Gomez, Ph.D.

Emeritus Professor, Univ. of the Philippines Marine
Science Institute and
Chair, Southeast Asia Center of Excellence, GEF/WB
Coral Reef Targeted Research Program

Ami K Groce, M.S.

Marine Biologist II - Data Management & Reporting
Environmental Monitoring & Technical Services
Laboratory EMTS Division - Metropolitan Wastewater
Department
San Diego, California, USA

Nigel Haggan

Research Associate
UBC Fisheries Centre
Vancouver, VC, Canada

Dr. Paul Hart

Professor
Department of Biology
University of Leicester
Leicester, UK

Dr. Emma Harrison

Scientific Director
Caribbean Conservation Corporation
San José, Costa Rica

Dr. David D. Hart

Director, Senator George J. Mitchell Center for
Environmental and Watershed Research and
Professor, Department of Biological Sciences
University of Maine
Orono, Maine, USA

Stanley Hartmann

Environment Agency - Abu Dhabi
Fisheries Statistician
Marine Environment Research Centre
Abu Dhabi

Dr. Mark Hay

Teasley Professor of Environmental Biology
School of Biology
Georgia Inst. of Technology
Atlanta, GA, USA

Dr. Simon Hemphill

Chairman of the Kenya Association of Sea Anglers
Member of the Board of Kenya Marine and Fisheries
Research Institute
Committee and member of the African Billfish Foundation
Ukunda, Kenya

Sheila JJ Heymans

Lecturer: Dunstaffnage Marine Laboratory
Scottish Association for Marine Science
Dunbeg, Oban, Scotland

Michael Hirshfield, Ph.D.

Vice-President for North American Oceans and
Chief Scientist, Oceana
Washington, D.C., USA

Dr. Mark Hixon

Professor, Department of Zoology
Oregon State University
Corvallis, OR, USA

Carolina García Imhof

Ms. Marine Science
Bogotá, Colombia

Dr. Jeremy B. C. Jackson

William E. and Mary B. Ritter Professor of Oceanography
Center for Marine Biodiversity and Conservation
Scripps Institution of Oceanography
La Jolla, California USA

Dr. Stephen T. Jackson

Professor of Botany
Director, Program in Ecology
Aven Nelson Building
University of Wyoming
Laramie, WY, USA

Jennifer Jacquet

Ph.D. student,
University of British Columbia Fisheries Centre
Vancouver, B.C., Canada

T. Todd Jones

Department of Zoology
University of British Columbia
Vancouver, B.C., Canada

Les Kaufman

Professor of Biology
Boston University Marine Program
And Senior PI, Marine Management Area Science
Conservation International
Woods Hole, MA, USA

Amelie Knapp

Senior research Officer
TRAFFIC Europe
Brussels, Belgium

Arthur H. Kopelman, Ph.D.

President
Coastal Research and Education Society of Long Island
Division of Natural Sciences and Mathematics
Dowling College
Oakdale, NY, USA

Dr. Glenn-Marie Lange

Senior Research Scholar
The Earth Institute at Columbia University Center for
Economy, Environment and Society
New York, NY, USA

Dr. Henri Laurie

Department of Mathematics and Applied Mathematics
University of Cape Town
Cape Town, South Africa

Professor John L. Largier

Coastal Oceanography
Bodega Marine Laboratory & Dept Environmental Science
and Policy
University of California, Davis
Bodega Bay, CA, USA

Derek E. Lee

Farallones Biologist
PRBO Conservation Science
Petaluma, California USA

Dr. Alain Le Breton, DVM

Ichthyopathologist
Post Graduate in HACCP & Hygiene
Specialized in Marine Fish Production
Grenade, France

Dr. Marek R. Lipinski

Senior Specialist Scientist (Cephalopods), Marine and
Coastal Management, DEAT, Cape Town, South Africa

Holly S. Lohuis

Education Associate
Jean-Michel Cousteau Ocean Futures Society
Santa Barbara, CA, USA

Ms. Vimoksalehi Lukoschek

Doctor of Philosophy Candidate
School of Marine and Tropical Biology
School of Environment and Earth Sciences
James Cook University, Townsville, Australia

Hiroyuki Matsuda, DSc.

Professor
Faculty of Environment & Information Sciences
Yokohama National University
Yokohama, Kanagawa, Japan

Carlos Martinez del Rio

Professor
Department of Zoology and Physiology
University of Wyoming
Laramie, WY

Tim McClanahan, Ph.D.

Senior Conservation Zoologist
Wildlife Conservation Society
Coral Reef Conservation
Bamburi, Kenyatta Beach
Mombasa, Kenya

Catherine M. McClellan

PhD Candidate
Nicholas School of the Environment and Earth Sciences
Duke University Marine Laboratory
Beaufort, NC, USA

Dr. Stephanie McWhinnie

School of Economics
University of Adelaide, Australia

Dr. Laurence D. Mee

Director, Marine Institute
Professor of Marine and Coastal Policy
University of Plymouth,
Plymouth, Devon, UK

Fiorenza Micheli

Assistant Professor
Hopkins Marine Station
Stanford University
Pacific Grove, CA, USA

Leopoldo E. Moro Abad

Servicio de Biodiversidad
Dirección General del Medio Natural
Centro de Planificación Ambiental
S/C de Tenerife, Islas Canarias, ESPAÑA

Sally R. Murphy

Marine Turtle Biologist, Retired
South Carolina Department of Natural Resources
Sheldon, SC, USA

Gerrit Nanninga

MSc Marine Biology
Center for Tropical Marine Ecology Bremen, Germany

Wallace "J." Nichols, Ph.D.

Senior Research Scientist
The Ocean Conservancy &
Research Associate
Department of Herpetology
California Academy of Sciences
Davenport, California USA

Giuseppe Notarbartolo di Sciara, Ph.D.

Honorary President,
Tethys Research Institute
Milano, Italy

Thomas A Okey

Science Director,
Conservation Science Institute,
Santa Cruz, CA USA

Katherine O'Neill, Ph.D.

Associate Professor
Environmental Science, Policy and Management
University of California, Berkeley
Berkeley, CA USA

Hoyt Peckham

Director of Field Research
propeninsula / grupo tortuguero
and phd candidate, department of ecology and
evolutionary biology
University of California at Santa Cruz
Santa Cruz, CA, USA

Dr. Charles H. Peterson

Alumni Distinguished Professor
University of North Carolina at Chapel Hill
Institute of Marine Sciences
Morehead City, NC, USA

John Pilgrim

Conservation Advisor
BirdLife International in Indochina
Hanoi, Vietnam

James A. Powell, Ph.D.

VP, Aquatic and National Programs
Pew Fellow in Marine Conservation
Wildlife Trust
St. Petersburg, Florida, USA

Chidambaran Ramachandran

Senior Scientist
Socio Economic Evaluation and Technology Transfer
Division, Central Marine Fisheries Research Institute
(CMFRI)
Kochi, India

Dr. Andrew J. Read

Rachel Carson Associate Professor of Marine
Conservation Biology
Center for Marine Conservation
Nicholas School of the Environment and Earth Sciences
Duke University Marine Laboratory
Beaufort, NC, USA

Kathleen Reaugh, Ph.D.

Ecosystem-Based Management Communications Project
Manager,
SeaWeb
Silver Spring, MD, USA

Monique Jansen van Rensburg

MSc Candidate
Ecology & Conservation Group
Institute of Natural Resources
Massey University
Auckland, New Zealand

Professor Callum M. Roberts

Environment Department
University of York
York, United Kingdom

Naomi A. Rose, Ph.D.

Marine Mammal Scientist
Humane Society International
Washington, D.C., USA

Andrew A. Rosenberg, Ph.D.

Professor of Natural Resources
Institute for the Study of Earth, Oceans and Space
University of New Hampshire
Durham, NH, USA

Carl Safina, Ph.D.

President
Blue Ocean Institute
East Norwich, NY, USA

Michiel Schotten

Ph.D. candidate
Marine Biology department
University of Groningen
The Netherlands

Anthony Scott, Ph.D.

Professor of Natural Resource Economics, emeritus
University of British Columbia
Vancouver, Canada

Joern Selling

Foundation for Information and Research on Marine
Mammals
Tarifa, Spain

Steve Shippee

PhD Candidate in Conservation Biology
University of Central Florida
Orlando, FL, USA

Dr. Sandra E. Shumway

Research Professor
University of Connecticut
Groton, CT, USA

Dr. Kerry Sink

SANBI WWF Offshore MPA Project
Marine Program
South African National Biodiversity Institute
Kirstenbosch
Claremont, South Africa

Tero Sipilä, Ph.D.

Conservation Biologist,
Metsähallitus, Natural Heritage Services
Savonlinna, Finland

Todd Steiner

Director
Turtle Island Restoration Network
Forest Knolls, CA, USA

Robert S. Steneck, Ph.D.

Professor of Oceanography, Marine Biology and Marine
Policy
School of Marine Sciences
University of Maine
Pew Fellow in Marine Conservation
Darling Marine Center
Walpole, Maine, USA

Boris Steipe MD, Ph.D.

University of Toronto
Director, Specialist Program
in Bioinformatics and Computational Biology Associate
Professor, Department of Biochemistry
Department of Molecular Genetics

Dr. Ricardo J. Haroun Tabraue

Center of Biodiversity and Environmental Management
Fac. Marine Sciences, University of Las Palmas de Gran
Canaria, Canary Islands, Spain

Shannon Teders

Aquarist
South Carolina Aquarium
Charleston, SC, USA

Steve Trott

Project Co-ordinator
Local Ocean Trust / Watamu Turtle Watch
Watamu, Kenya

Lily Venizelos

President
MEDASSET-Mediterranean Association to Save the Sea
Turtles
Athens, Greece

Amanda Vincent, Ph.D.

Canada Research Chair in Marine Conservation
Director, Project Seahorse
Fisheries Centre
The University of British Columbia
Vancouver, BC, Canada

Hans-Werner Wabnitz

Dr.jur (Freiburg/Brg) LL.M. (Tulane, N.O.)
Senior Counsel World Bank (retired)
St Jean de Vedas, France

Alan T. White, Ph.D.

Senior Scientist
Global Marine Initiative
The Nature Conservancy
Honolulu, Hawaii, USA

Sebastian Villasante

PhD Student
University of Santiago de Compostela
Spain

Dr. Lorenzo von Fersen

YAQU PACHA e.V.
Nuernberg, Germany

Colette Wabnitz, MSc

PhD candidate/FC student representative
SAUP, Fisheries Centre, AERL
University of British Columbia
Vancouver, BC, Canada

Dr. Bryan Wallace

Center for Marine Conservation
Duke University Marine Lab
Beaufort, NC USA

Lamy/Fisheries Subsidies
May 24, 2007
Page 10

Dr. Jon D. Witman

Associate Professor
Brown University
Providence, RI, USA

Dr. Mark Wunsch

Media, Education, PR
Phuket Aquarium/Cape Panwa
Muang Phuket, Thailand

Dr. Dirk Zeller

Senior Research Fellow &
Project Manager
Sea Around Us project
Fisheries Centre
University of British Columbia
Vancouver, Canada