

Edited by Jennifer Sills

WTO must ban harmful fisheries subsidies

Sustainably managed wild fisheries support food and nutritional security, livelihoods, and cultures (I). Harmful fisheries subsidies—government payments that incentivize overcapacity and lead to overfishing—undermine these benefits yet are increasing globally (2). World Trade Organization (WTO) members have a unique opportunity at their ministerial meeting in November to reach an agreement that eliminates harmful subsidies (3). We—a group of scientists spanning 46 countries and 6 continents—urge the WTO to make this commitment.

To curb overfishing, biodiversity degradation and loss, and CO₂ emissions, and to safeguard food and livelihoods, WTO members must prohibit fisheries subsidies that cause harm, such as those that lower the cost of fuel and vessel construction and those that provide price support to keep market prices artificially high (2). Subsidies to distant-water fishing fleets must be eliminated to prevent overfishing on the high seas and in waters under national jurisdiction. Such subsidies threaten low-income countries that rely on fish for food sovereignty (4, 5). Exceptions to the rules—known as special and differential treatment-should be considered for small-scale fishers that use

low-impact gears or that fish for subsistence, but only if decoupled from incentivizing overfishing (6).

An effective agreement must eliminate subsidies for fuel (7), distant-water and destructive fishing fleets (4, 5), and illegal and unregulated vessels in line with the aims of Sustainable Development Goal 14.6 (8). To ensure accountability, it should also support low-income countries' efforts to meet their commitments and transition to sustainable management. Finally, the agreement should require transparent data documentation and enforcement measures (9).

We call on the heads of state of the High Level Panel for a Sustainable Ocean Economy, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, and the United States-Mexico-Canada Agreement—who have already committed to eliminating harmful subsidies (10-12)—as well as other trade blocs and individual countries, to declare their support now for an agreement that enshrines these recommendations. WTO members must harness their political mandate to protect the health of the ocean and the well-being of society. U. Rashid Sumaila^{1,2*}. Daniel Skerritt¹. Anna Schuhbauer¹, Sebastian Villasante³, Andres. M. Cisneros-Montemayor⁴, Hussain Sinan⁵, Duncan Burnside¹, and 289 additional authors† ¹Institute for the Oceans and Fisheries, University of British Columbia, Vancouver, BC V6T 1Z4, Canada. 2School of Public Policy and Global Affairs,

University of British Columbia, Vancouver, BC V6T

1Z4, Canada. 3Cross-Research in Environmental

Technologies, Department of Applied Economics, University of Santiago de Compostela, 15782 Santiago de Compostela, Spain. *School of Resource and Environmental Management, Simon Fraser University, Burnaby, BC V5A 1S6, Canada. *Marine Affairs Program, Dalhousie University, Halifax, NS B3H 4R2, Canada. *Corresponding author. Email: r.sumaila@oceans.ubc.ca †Full list of authors and affiliations can be found at www.science.org/doi/10.1126/science.abm1680.

REFERENCES AND NOTES

- 1. D. Pauly et al., Nature 418, 689 (2002).
- 2. U. R. Sumaila et al., Mar. Pol. 109, 103695 (2019).
- WTO, Negotiations on fisheries subsidies (2021); www.wto.org/english/tratop_e/rulesneg_e/fish_e/ fish_e.htm.
- 4. D. Tickler et al., Sci. Adv. 4, eaar3279 (2018).
- 5. E. Sala et al., Sci. Adv. 4, eaat2504 (2018).
- A. M. Cisneros-Montemayor et al., Mar. Pol. 69, 229 (2016).
- 7. U. R. Sumaila et al., ICES J. Mar. Sci. 65, 832 (2008).
- United Nations General Assembly, "Transforming Our World: The 2030 Agenda for Sustainable Development" (2015).
- 9. M. D. Smith, Science 364, 34 (2019).
- High Level Panel for a Sustainable Ocean Economy, "Transformations for a sustainable ocean economy: A vision for production, protection and prosperity" (2020); www.oceanpanel.org/ocean-action/files/ transformations-sustainable-ocean-economy-eng.pdf.
- 11. M. A. Khan et al., J. Econ. Struct. 7,1 (2018).
- A. M. Villarreal, I. F. Fergusson, "NAFTA and the United States-Mexico-Canada Agreement (USMCA)" (Congressional Research Service Report, 2020).

COMPETING INTERESTS

U.R.S. is an unpaid member of the board of directors of Oceana and science advisory board member of the Pew Charitable Trusts' Global Ocean Legacy project and has received funding from the High Level Panel for a Sustainable Ocean Economy and Oceana. S.V. has received funding from the "EQUALSEA—Transformative adaptation towards Ocean Equity" Project, under the European Horizon 2020 Program.

10.1126/science.abm1680

Alzheimer's drugs: Does reducing amyloid work?

In his Perspective "Treatments for Alzheimer's disease emerge" (6 August, p. 624), D. J. Selkoe asserts that some trials testing potential treatments for Alzheimer's disease have shown "evidence of disease modification." He cites reductions in amyloid plaques (hypothesized to cause cognitive decline) and some modest reductions in cognitive decline shown in four potential drugs that target amyloid. However, hardly any trials have shown an effect, and even the trials with statistically significant results show effects that are too small to be clinically significant or to justify moving forward with the treatments. β-amyloid antibodies can lower amyloid plaques (extracellular aggregated insoluble β -amyloid), but available data show that decreasing amyloid plaques does not in itself lead to reduction in cognitive decline.

544 29 OCTOBER 2021 • VOL 374 ISSUE 6567