Final Statement of the Conference on

“Health of the seas and oceans and their role in the present and future of humanity”

Pontifical Academy of Sciences, Casina Pio IV,
Vatican City, June 8, 2022 – World Oceans Day

The ocean and its seas make the planet habitable for all life forms, including ours, and have always been an opportunity of unity, cultural exchange and fraternity among people(s), supporting human civilizations around the world. The ocean covers more than 70% of the earth’s surface, includes over 95% of the biosphere and 98% of the planet’s waters, generates 50% of the oxygen for living organisms, and absorbs around 40% of the world’s total carbon emissions, mitigating the climate. Most of the ocean lies outside national jurisdictions, and coastal regions are connected to one other by ocean currents, fish migration and floating pollutants, making global, equitable and shared responsibility essential for effective ocean governance regimes.

Inspired by Pope Francis’ Encyclical Laudato Si’, and in alignment with the United Nations’ Sustainable Development Goals and the Decade of Ocean Science for Sustainable Development (2021-2030), the undersigned scientists participating in the Conference on “Health of the seas and oceans and their role in the present and future of humanity” at the Pontifical Academy of Sciences, Vatican City, on June 8th, 2022 – World Oceans Day – declare:

1. Well before the end of this century, more than 10 billion people may live on Earth. They will be consuming resources, emitting greenhouse gases, polluting seas and the ocean, increasing the impact of climate change and loss of biodiversity, and transforming raw materials at an even more unsustainable scale than today, unless actions are taken now.

2. The scientific evidence of the progressive degradation of natural ecosystems and the “business as usual” climate change scenarios of the UN Intergovernmental Panel on Climate Change, call on all of us to treat climate change and its impact on ecosystems and their functions as the emergency it is, and to do more in the coming years. We urgently need solutions to rapidly reduce and compensate human impacts on the ocean.
3. Over 3 billion people depend on the sea as a principal source of nutrition; 1.3 billion people, especially in the poorest countries, rely on marine resources for their livelihood. Industrialized countries that exploit resources in the waters of developing countries – and in areas outside national jurisdictions – impair their access or possibility to use these unique resources sustainably. Aquatic foods also called “blue foods” derived from the ocean can play a vital role in building the food systems of the future, providing healthier and sustainable diets, and addressing nutrient deficiencies that afflict many populations. In order to produce the blue food we eat, we need small-scale fishers and fish farmers, both men and women, who are at the heart of the blue food systems.

4. If wisely and sustainably used, the ocean’s biodiversity can also be a long-term source of medical extracts and other resources. However, our rapacious overexploitation has jeopardized the ocean’s ability to regenerate resources and ecosystems, endangering the possibility of passing on a healthy ocean teeming with life to our children and grandchildren, so that they too may have the same option.

5. The scientific community is aware of how little we know about marine biodiversity and ecosystem functioning. We cannot protect or use wisely what we do not know. Constant destructive exploitation threatens undiscovered or unrecognized resources that may one day become critical for the survival of future generations.

6. We need to recognize that the ocean is a common heritage of humankind, that it supports local cultures, and that all human beings have the right to a healthy and biodiverse ocean.

7. The ocean can also become a cornerstone of the global clean energy transition by harnessing renewable and sustainable energy from wind, waves and the sun, thus ensuring energy equity and human wellbeing, which are particularly necessary in developing countries.

8. Along with ocean protection, restoration and the sustainable use of ocean resources are the solution to these harms and should be based on science alongside traditional knowledge, through enhanced worldwide ocean partnerships that co-create solutions. Oceans and coastal systems of small island nations need science and education partnerships to strengthen training and innovative capacity.

9. The ocean confronts us with enormous opportunities and responsibilities, from which citizens, policy makers, societies and scientific communities can no longer escape. All countries with capacity, resources and technologies are asked to make them available to promote an authentically sustainable and regenerative use of marine resources, and to commit themselves, and ourselves, even more resolutely in the implementation of concerted measures to combat climate change, pollution and biodiversity loss.
There is a clear urgency to adopt novel approaches which combine sustainable use of ocean resources with effective ocean protection. By addressing these issues together, we can reverse the trend of progressive habitat degradation, allowing ecosystems to recover and improve the health of the planet and of humanity as a whole. To achieve these challenging goals, we must:

(i) Recognize that human, animal, and environmental health are interconnected, and support a “One Health” approach to improve the wellbeing of ocean ecosystems, species, and the communities which depend on them.

(ii) Develop, prioritize and advance an inclusive culture of the seas, protecting the ocean as the common heritage of humankind, including agreements that foreground humanity’s inalienable right to a healthy, biodiverse and productive ocean, as well as the right of all living beings to good health.

(iii) Harmonize governance, economic, and societal needs for this common good by sharing best practices and promoting multilateral, binding agreements, starting from the preservation of all blue resources, with a moratorium on mining, as well as oil and gas extraction, in the areas beyond national jurisdictions, which will exacerbate, not solve, the planet’s problems.

(iv) Promote cooperation in support of a higher universal cause that will benefit the lives of both current and future generations worldwide and govern the ocean as a global, shared commons – the “common heritage of humankind”;

(v) Develop policies and take actions that lead to positive feedback from people to the ocean and vice versa, both locally and globally, rather than the current situation where policies and actions tend to strengthen negative feedback (e.g., the provision of harmful subsidies by governments);

(vi) Promote knowledge exchange and capacity-building globally to “live in harmony with the ocean” so that no ocean community is left behind, including the meaningful recognition and inclusion of the knowledge and perspectives of indigenous peoples and vulnerable groups;

(vii) Create an international instrument focused on ocean health to guide, advocate for and support ocean use that enables the flourishing of marine biodiversity.

We, the undersigned, participating in the PAS Conference on “Health of the seas and oceans and their role in the present and future of humanity”, call for a new, more respectful culture of the seas and ocean, to enforce international agreements more holistically, and rethink our way of consuming, living, planning, working, fishing, producing energy and managing our common global goods and heritage. We need a culture of the sea (“blue culture”) to enable humanity to share this common global good sustainably and allow the ocean and seas to support the prosperity, health and wellbeing of a growing human population, while improving the lives of present and future generations.
Signatories:

Joachim von Braun, President, Pontifical Academy of Sciences
H.E.M. Cardinal Peter K. A. Turkson, Chancellor, Pontifical Academy of Sciences
H.E. Msgr. Marcelo Sánchez Sorondo, Immediate past PAS Chancellor
Roberto Danovaro, President, Stazione Zoologica Anton Dohrn
Ferdinando Boero, European Marine Board, President Dohrn Foundation
Rose Boswell, Ocean Cultures and Heritage at Nelson Mandela University, South Africa
Timothy Bouley, Exeter Univ. Center for Environment and Human Health
Adrianna Ianora, Stazione Zoologica Anton Dohrn, Italy
Jim Leape, Stanford, co-director of the Center for Ocean Solutions
Kenneth Mei Yee Leung, City University of Hong Kong
Lisa Levin, Scripps Institution, USA
Jeffrey Sachs, President of the UN Sustainable Development Solutions Network, USA
Rashid Sumaila, Fisheries Economics Research Unit, University of British Columbia
Martin Visbeck, GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany