



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation
la science et la culture

Organización
de las Naciones Unidas
para la Educación
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования
науки и культуры

- Intergovernmental
Oceanographic
Commission
- Commission
océanographique
intergouvernementale
- Comisión
Oceanográfica
Intergubernamental
- Межправительственная
океанографическая
комиссия

Relevance of the Ocean for Human Societies (and vice versa?)

Dr. Wendy Watson-Wright

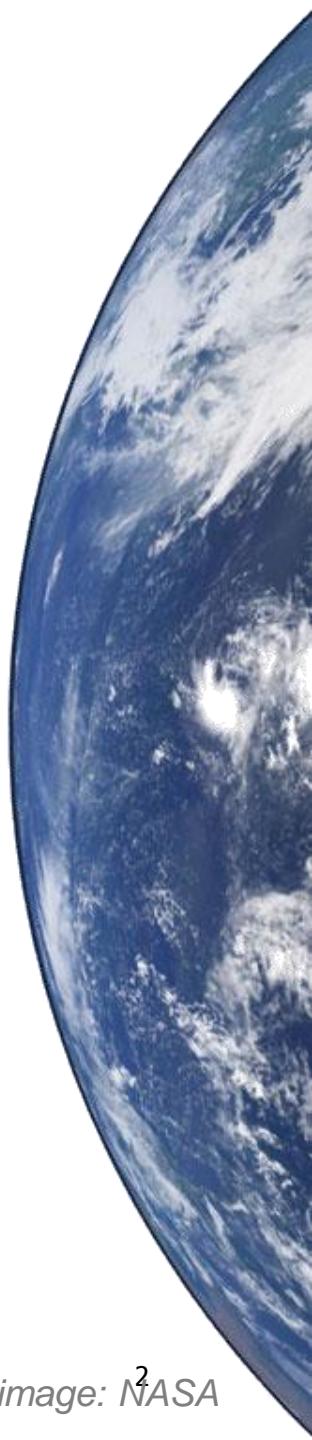
Executive Secretary

*Intergovernmental Oceanographic Commission of
UNESCO*



Outline

- Setting the stage
- Economic and non-economic relevance of the Ocean for human societies
- Human impacts on the world's Ocean
- Final remarks: sustainable management of our global commons





Even if you never have a chance to see or touch the ocean, the ocean touches you with every breath you take, every drop of water you drink, every bite you consume. Everyone, everywhere is inextricably connected to and utterly dependent upon the existence of the sea.

Sylvia Earle

IOC-UNESCO



**United Nations Educational,
Scientific and Cultural Organization**

*only body in UN system having "E" for Education and
"S" for Science*

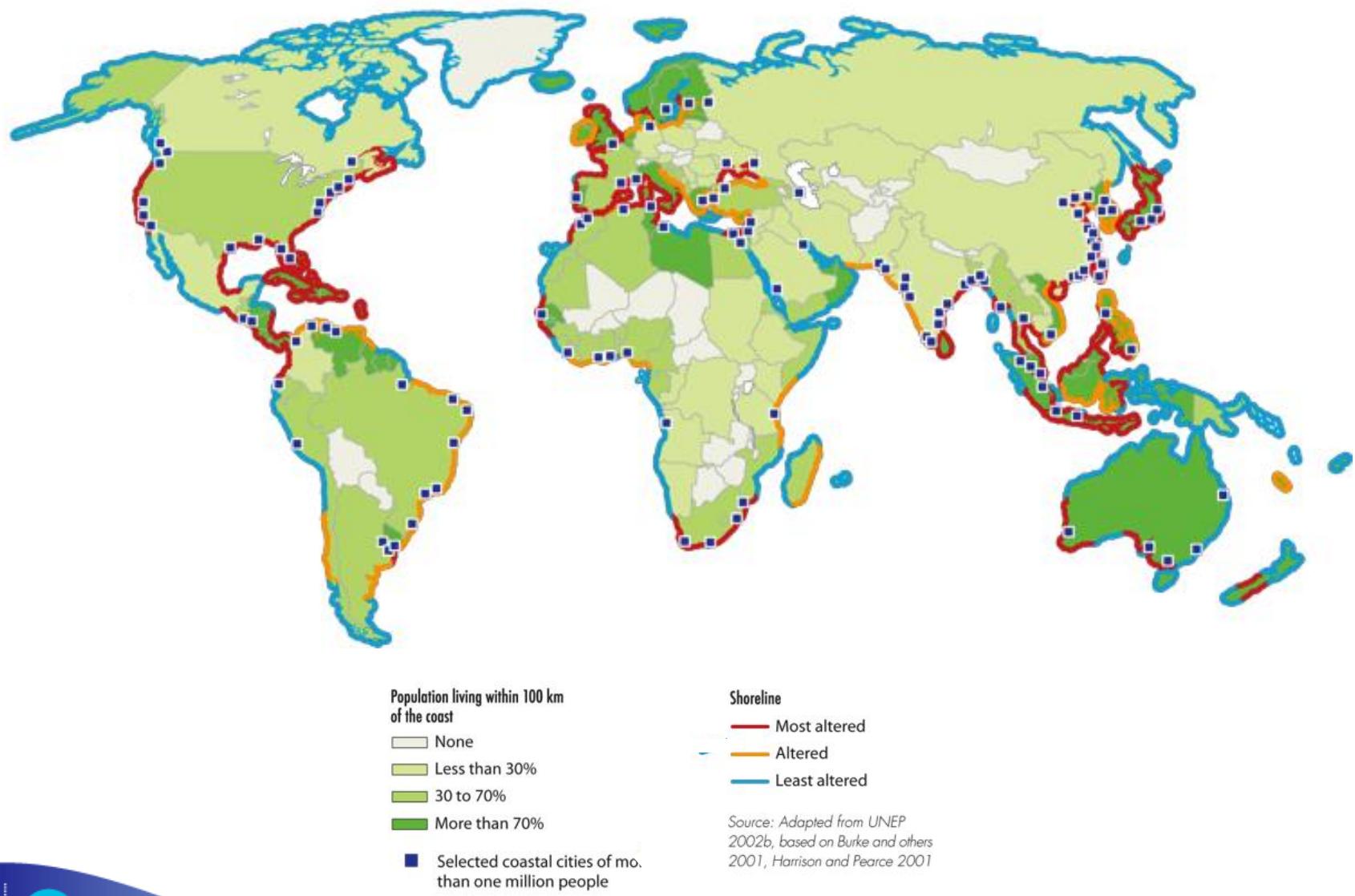
Intergovernmental Oceanographic Commission

only UN body with mandate in ocean science in global ocean

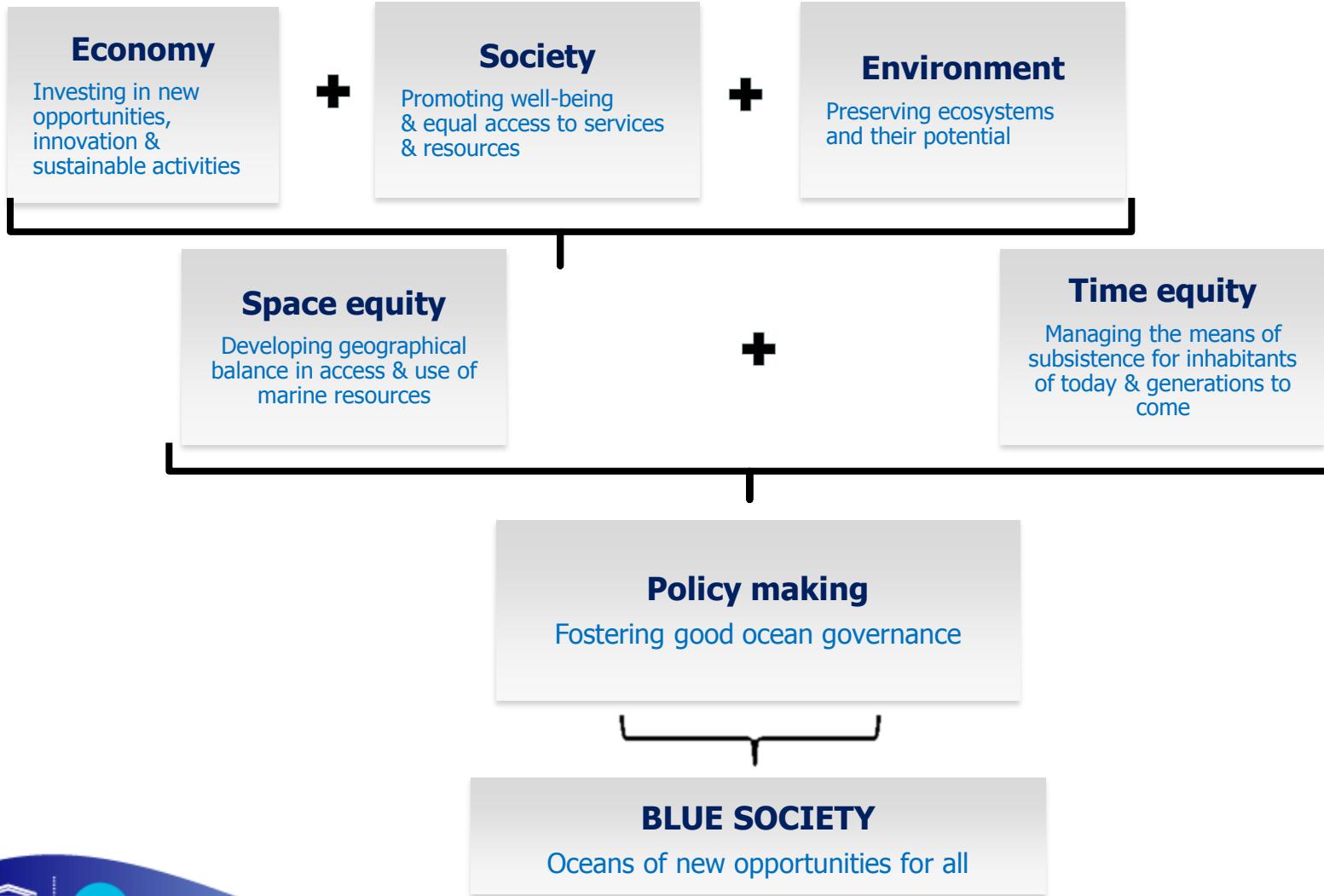
One planet, one ocean



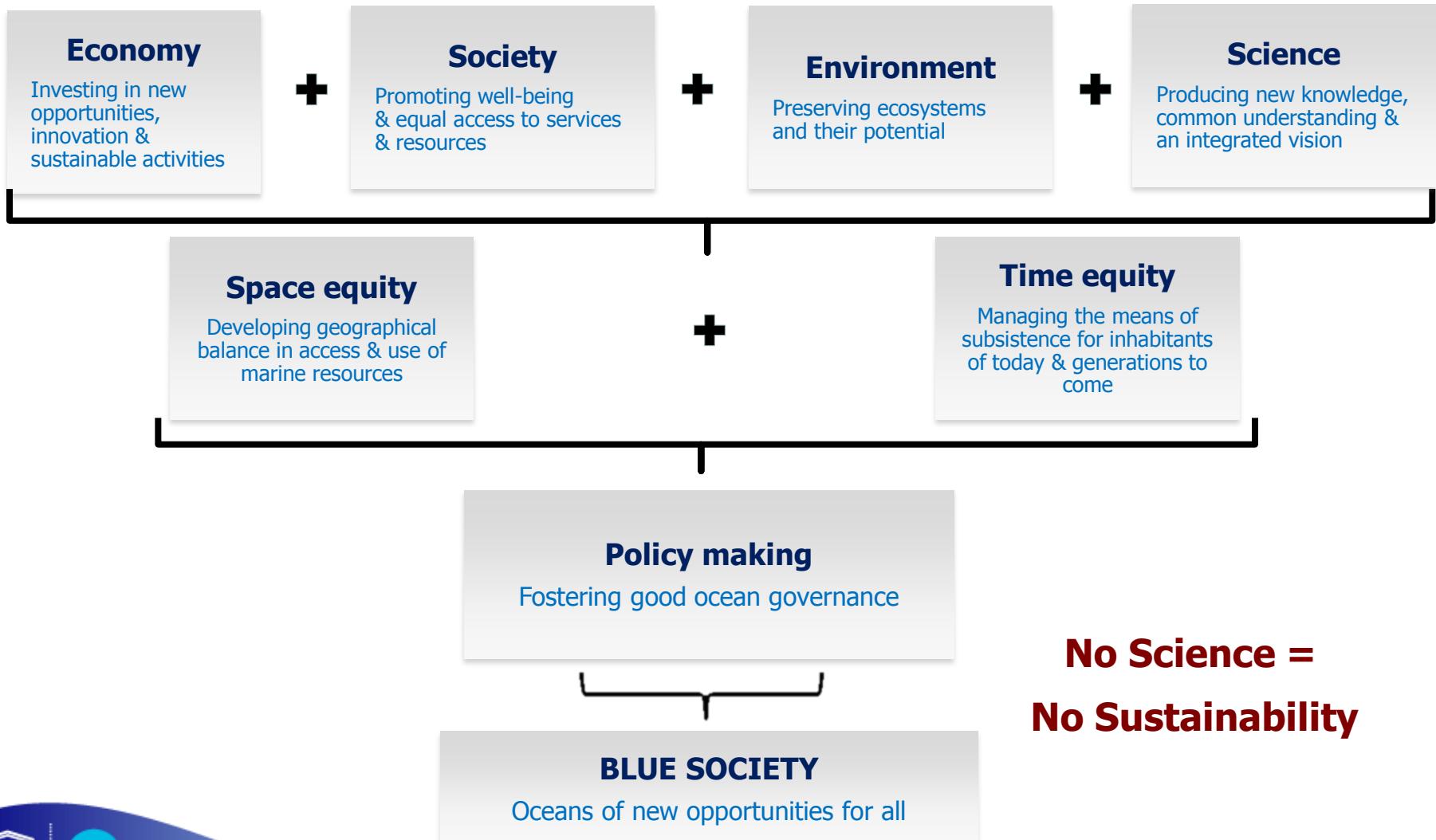
Coastal population and shoreline degradation



Science for sustainability



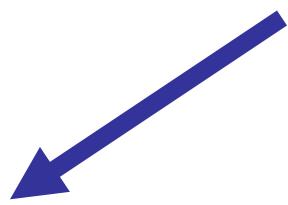
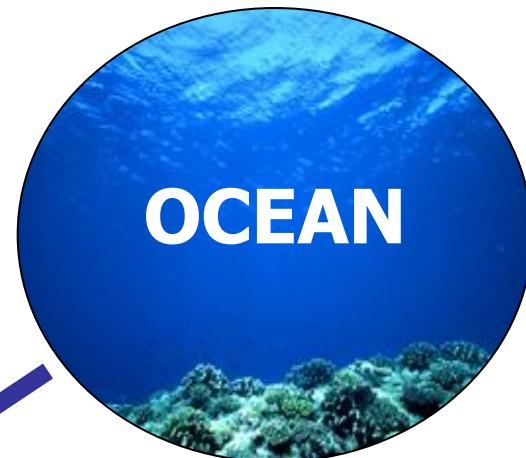
Science for sustainability

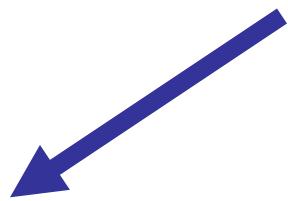
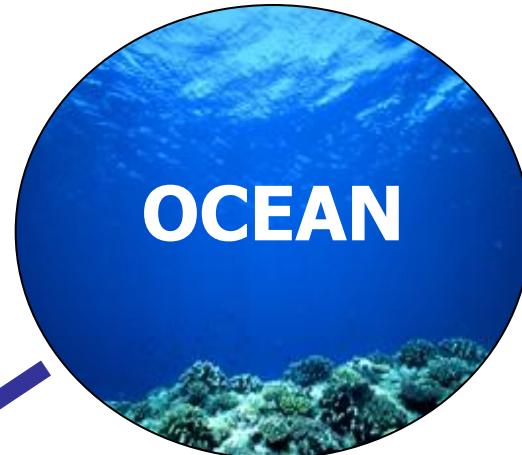


Outline

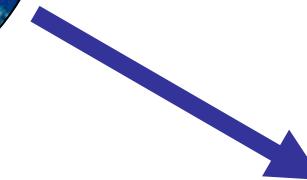
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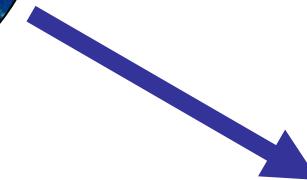






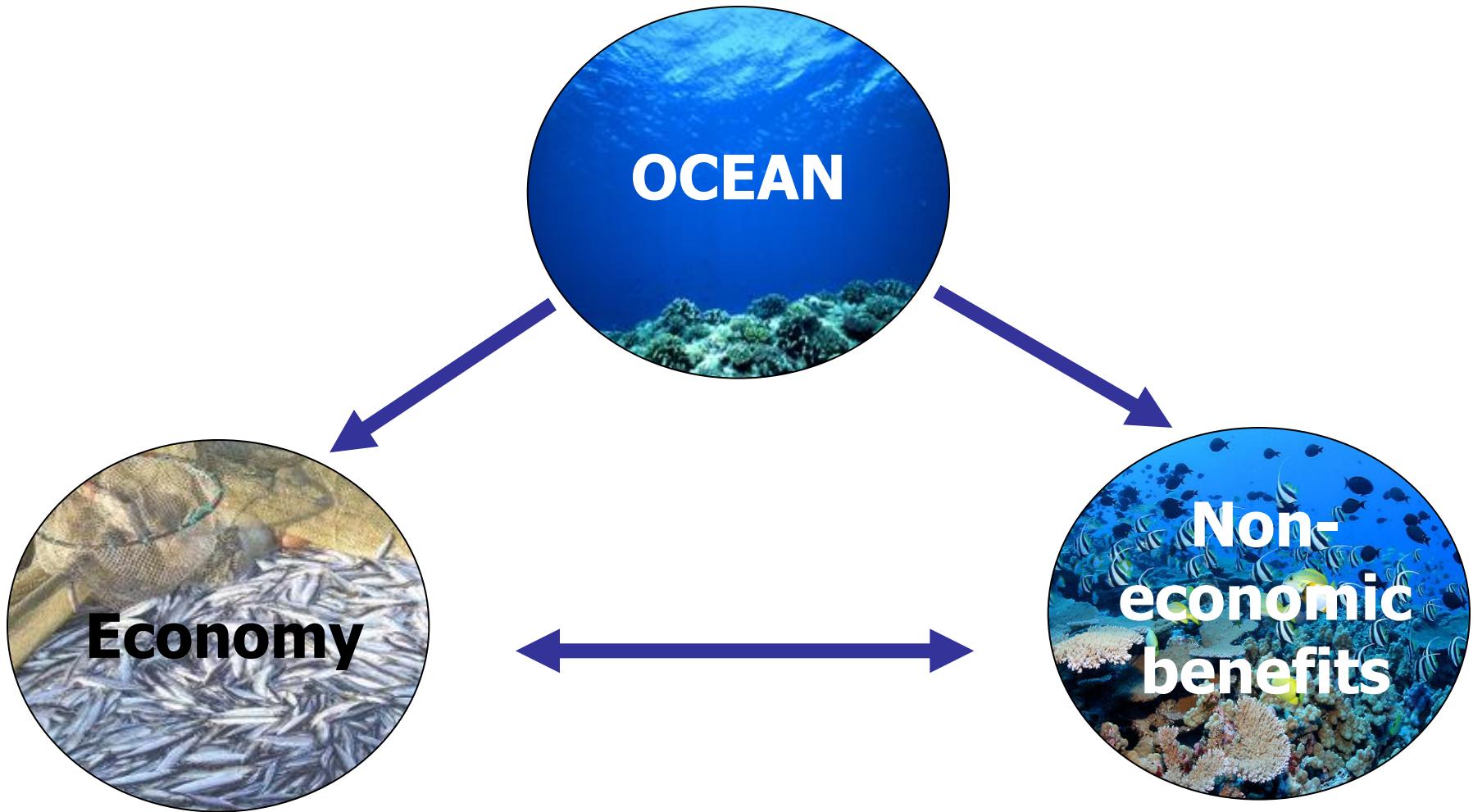
- Shipping and transport
- Fisheries and aquaculture
- Travel and tourism
- Ports, infrastructure, maritime transport
- Energy...



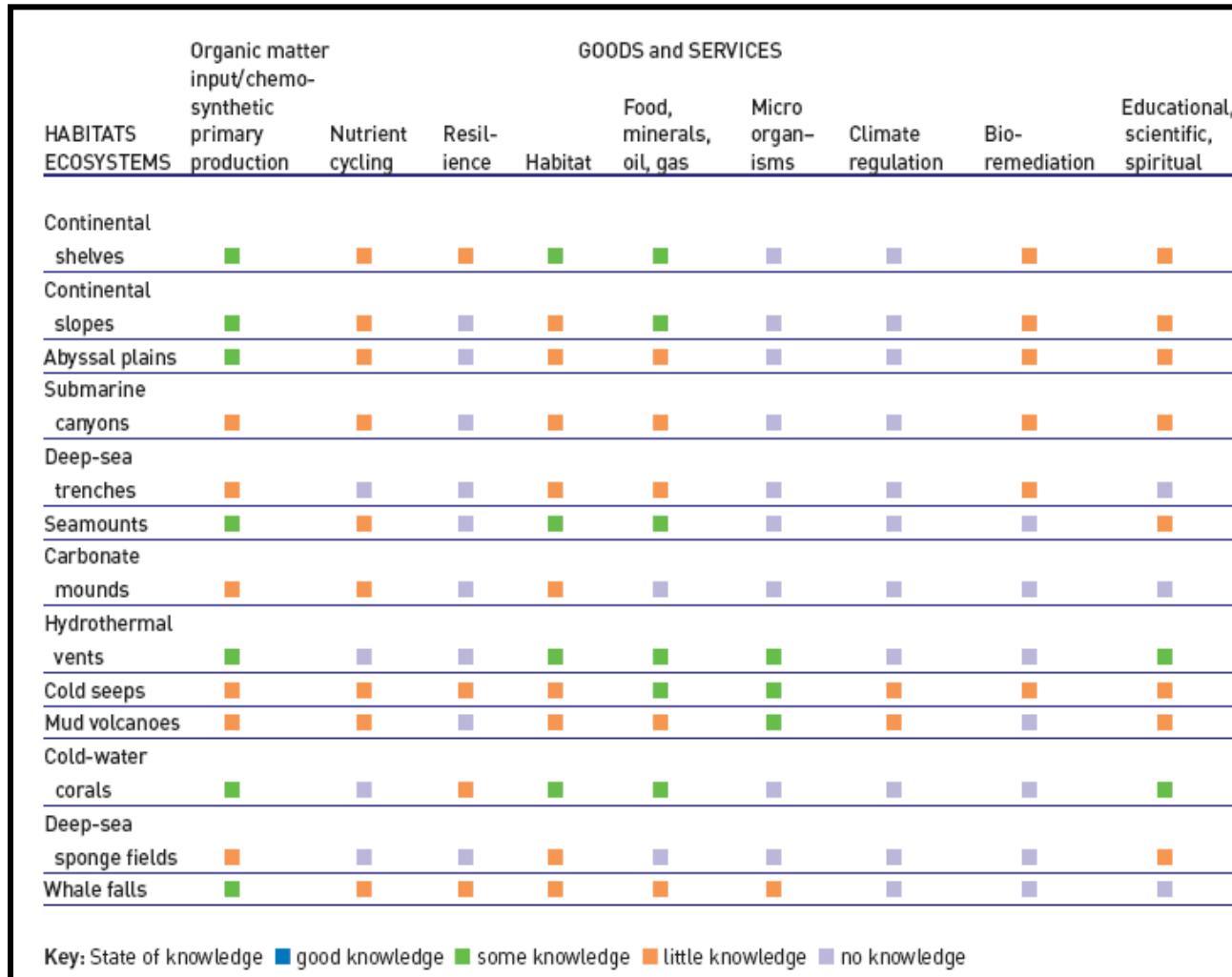


- Biological services
- Regulating services
- Sink for waste and nutrient disposal
- Cultural and aesthetic services...





Ecosystem services

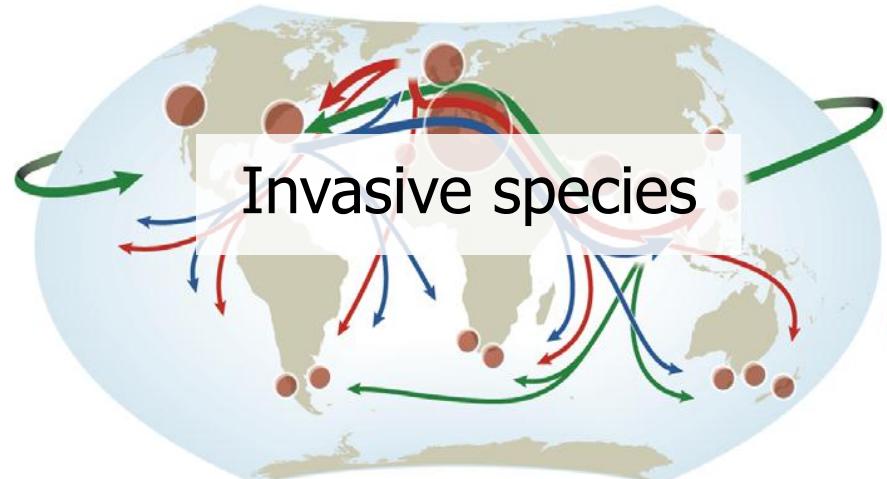
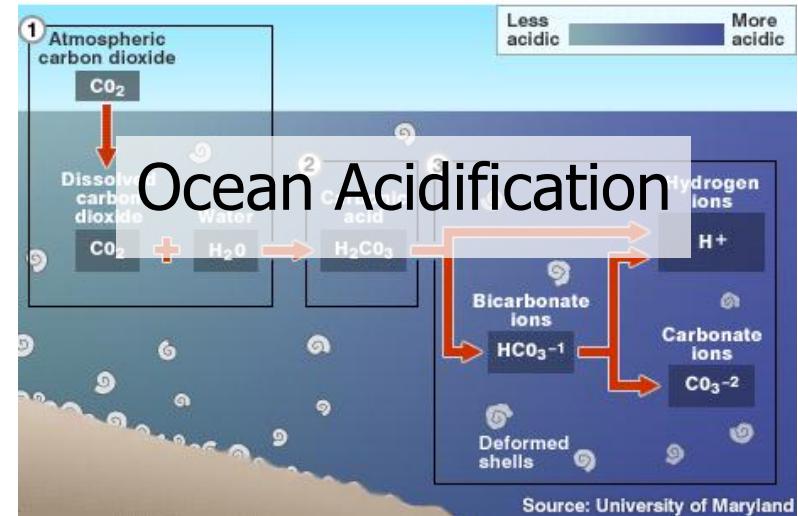
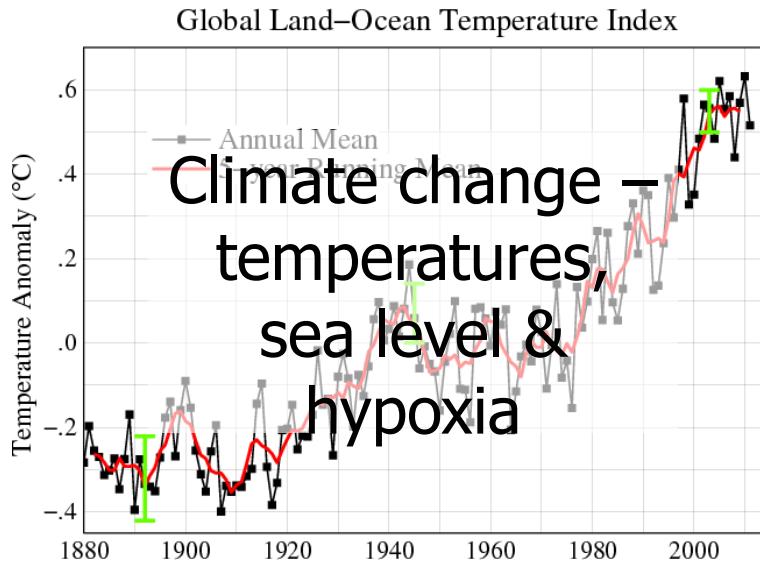


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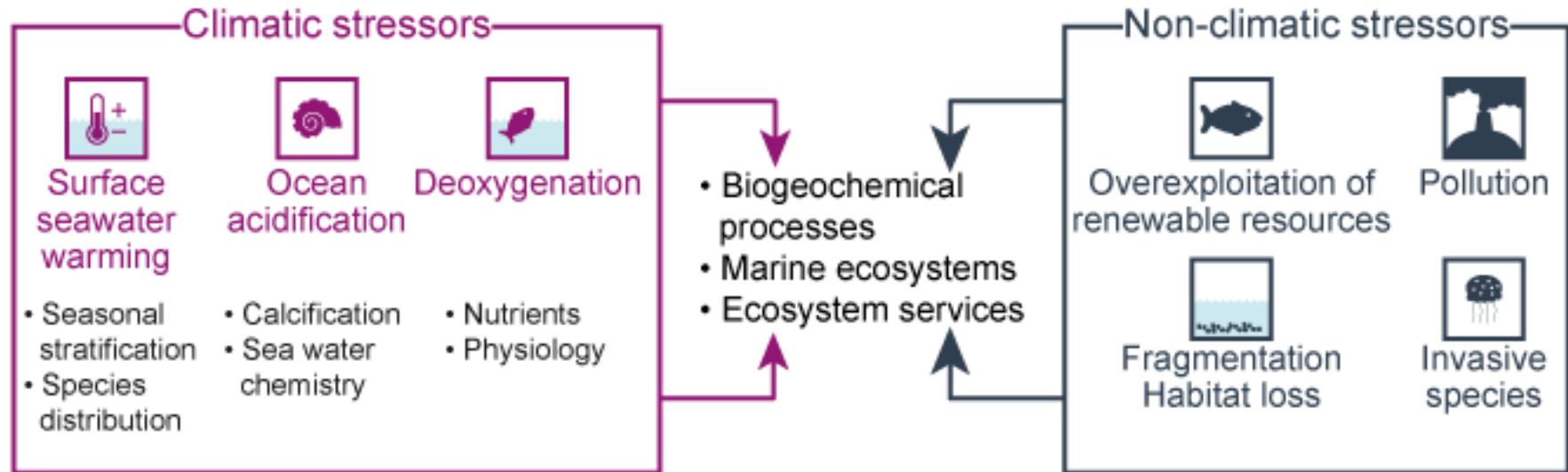
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Single stressors



Multiple stressors

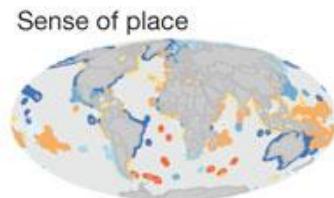
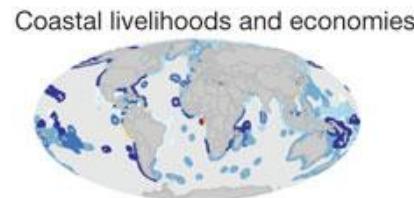
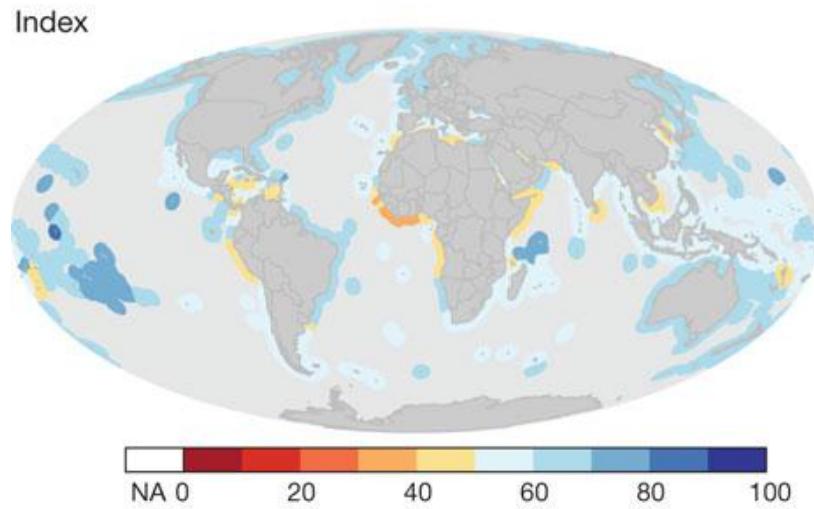


Possible effects of combining different stressors:

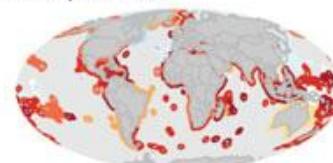
Amplification

Compensation

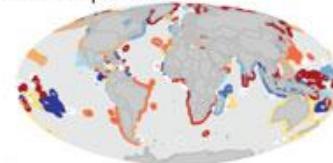
Index to assess the health and benefits of the global ocean



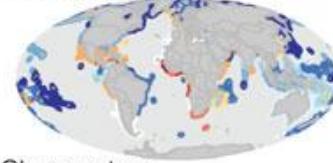
Food provision



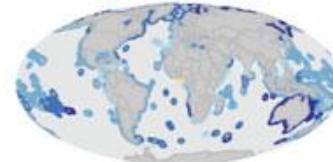
Natural products



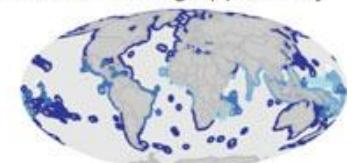
Coastal protection



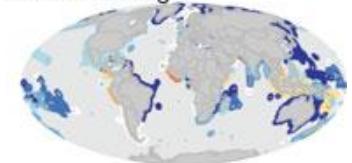
Clean waters



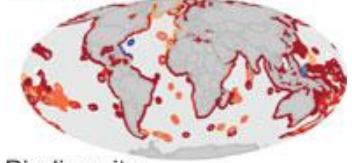
Artisanal fishing opportunity



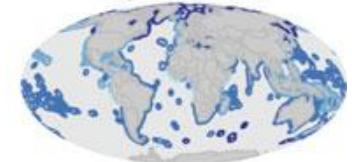
Carbon storage



Tourism and recreation



Biodiversity



BS Halpern *et al.* *Nature* **488** (2012) doi:10.1038/nature11397

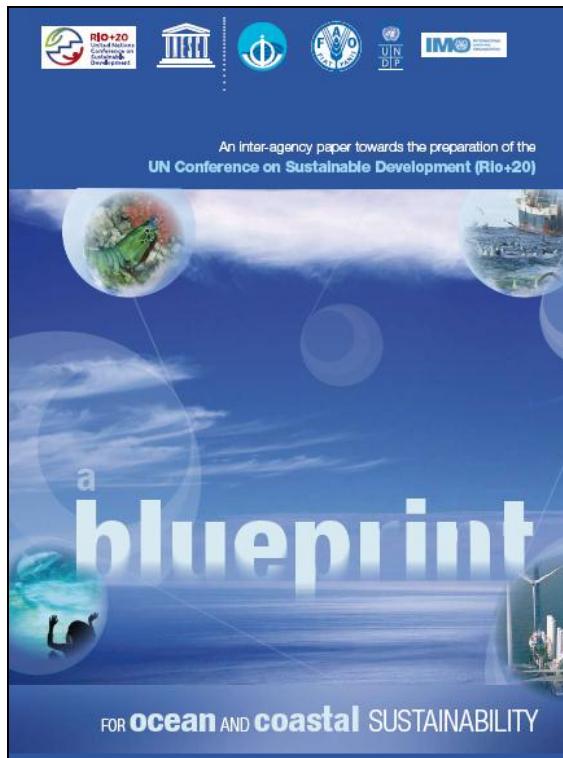
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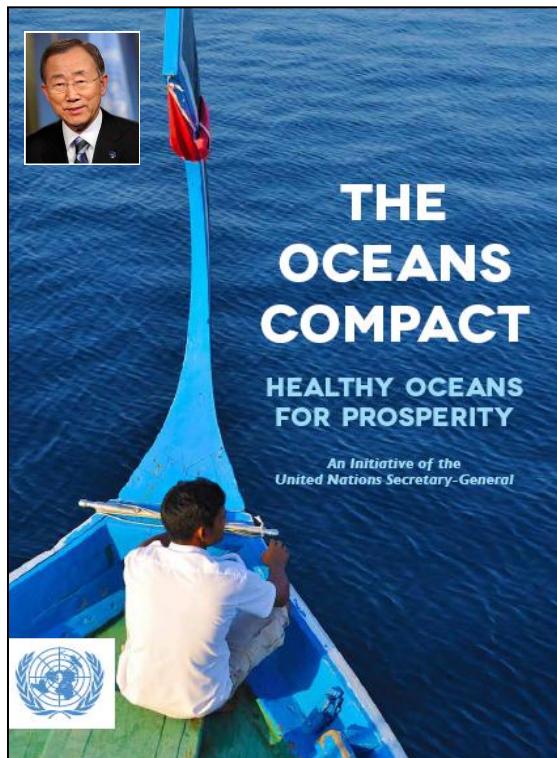


Increasing momentum for Sustainable management of the World's Ocean

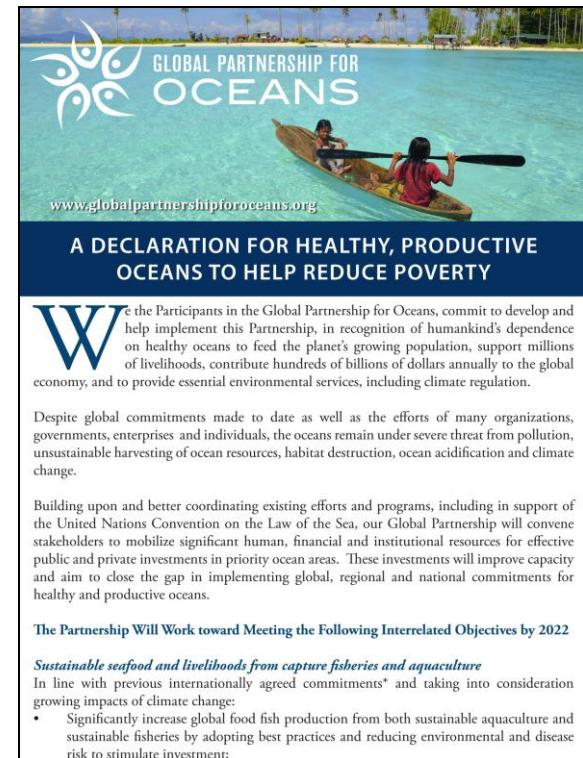
Rio+20



The Oceans Compact



Global Partnership for Oceans



We the Participants in the Global Partnership for Oceans, commit to develop and help implement this Partnership, in recognition of humankind's dependence on healthy oceans to feed the planet's growing population, support millions of livelihoods, contribute hundreds of billions of dollars annually to the global economy, and to provide essential environmental services, including climate regulation.

Despite global commitments made to date as well as the efforts of many organizations, governments, enterprises and individuals, the oceans remain under severe threat from pollution, unsustainable harvesting of ocean resources, habitat destruction, ocean acidification and climate change.

Building upon and better coordinating existing efforts and programs, including in support of the United Nations Convention on the Law of the Sea, our Global Partnership will convene stakeholders to mobilize significant human, financial and institutional resources for effective public and private investments in priority ocean areas. These investments will improve capacity and aim to close the gap in implementing global, regional and national commitments for healthy and productive oceans.

The Partnership Will Work toward Meeting the Following Interrelated Objectives by 2022

Sustainable seafood and livelihoods from capture fisheries and aquaculture

In line with previous internationally agreed commitments* and taking into consideration growing impacts of climate change:

- Significantly increase global food fish production from both sustainable aquaculture and sustainable fisheries by adopting best practices and reducing environmental and disease risk to stimulate investment;

Moving forward: Sustainable management of the world's Ocean

WE NEED

- to highlight the importance of the Ocean sciences for human activities and progress
- to increase education, to create awareness of the role of humankind as a modifying agent of the global ecology
- to provide tools and mechanisms

WE ARE

- global citizens, and must face the challenge to balance individual and global interests in order to protect the World's Ocean



Protecting our ocean...together



One planet, one ocean

<http://ioc.unesco.org>

Thank you/Obrigada!

