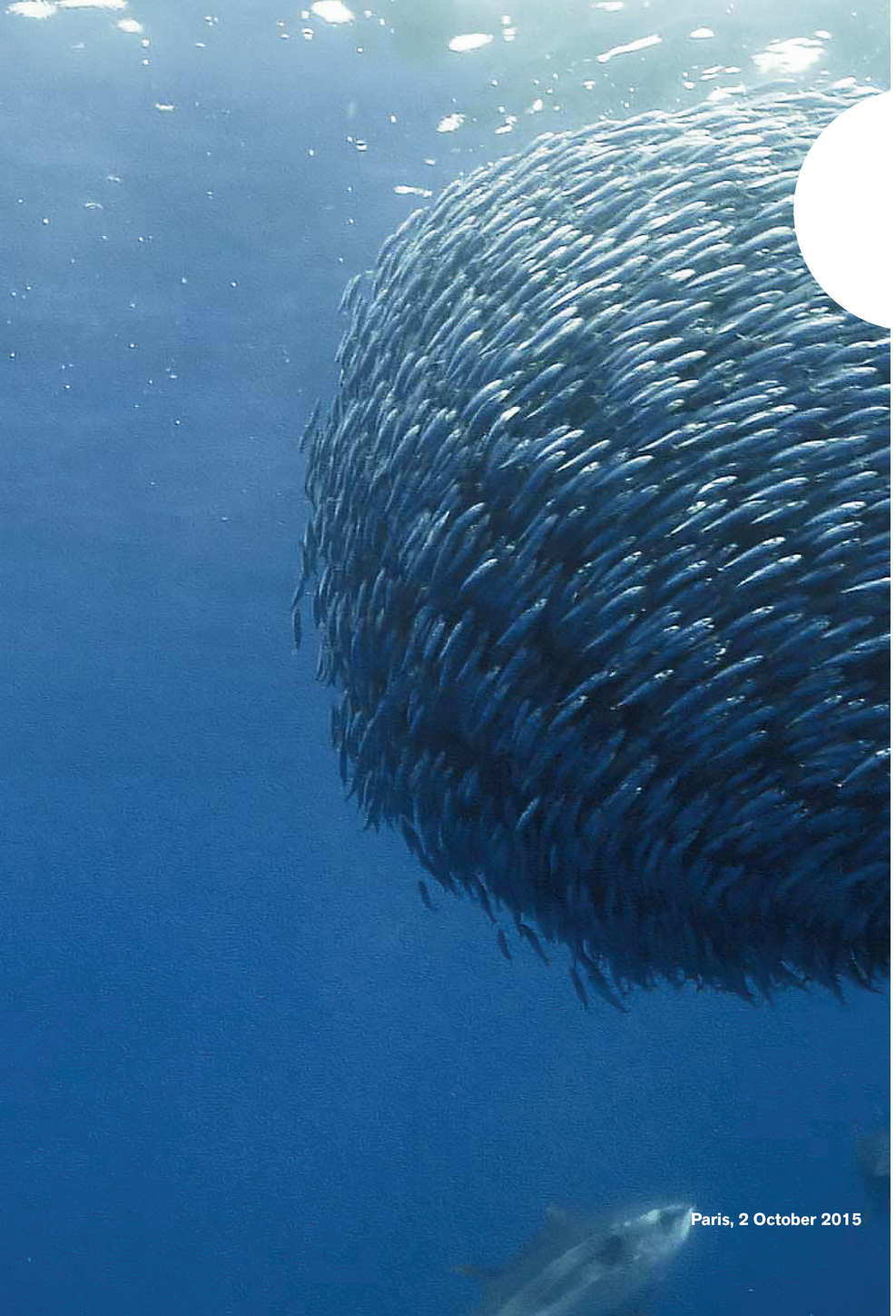


Oceanographic research and capacity development in support of SDG implementation

Vladimir Ryabinin

Executive Secretary

Intergovernmental Oceanographic Commission of UNESCO

Paris, 2 October 2015

Implementing the Ocean SDG: from knowledge to action

IDDRI

United Nations Educational, Scientific and Cultural Organization

Intergovernmental Oceanographic Commission

The Intergovernmental Oceanographic Commission of UNESCO:

The only intergovernmental body in UN specializing in ocean science, services, observations, data exchange and capacity development
1960, 147 Member States

Objectives:

* Healthy ocean
* Early warning for ocean hazards
* Resilience of society and ecosystems to climate change & variability
* Knowledge of emerging issues

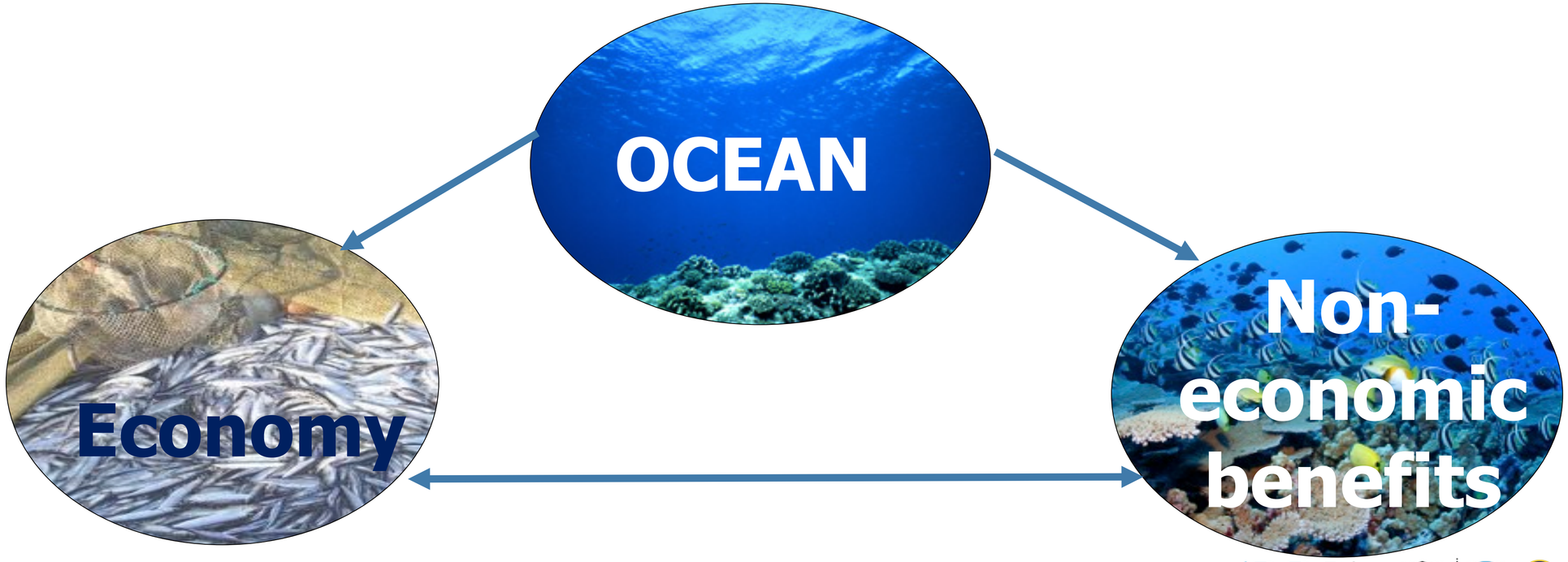
Sustainable Development Goals

3 Pillars for Ocean Post-2015 Agenda

1) SDGs INCLUDING THE SDG ON THE OCEAN (N.14) AND CLIMATE REGIME

2) POST 2015 DISASTER RISK REDUCTION FRAMEWORK

3) BLUE GROWTH (BLUE ECONOMY)



GOAL 14

CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

Observations
Research
Governance
Legal basis
Economy
Stakeholders
Capacity development
Technology transfer

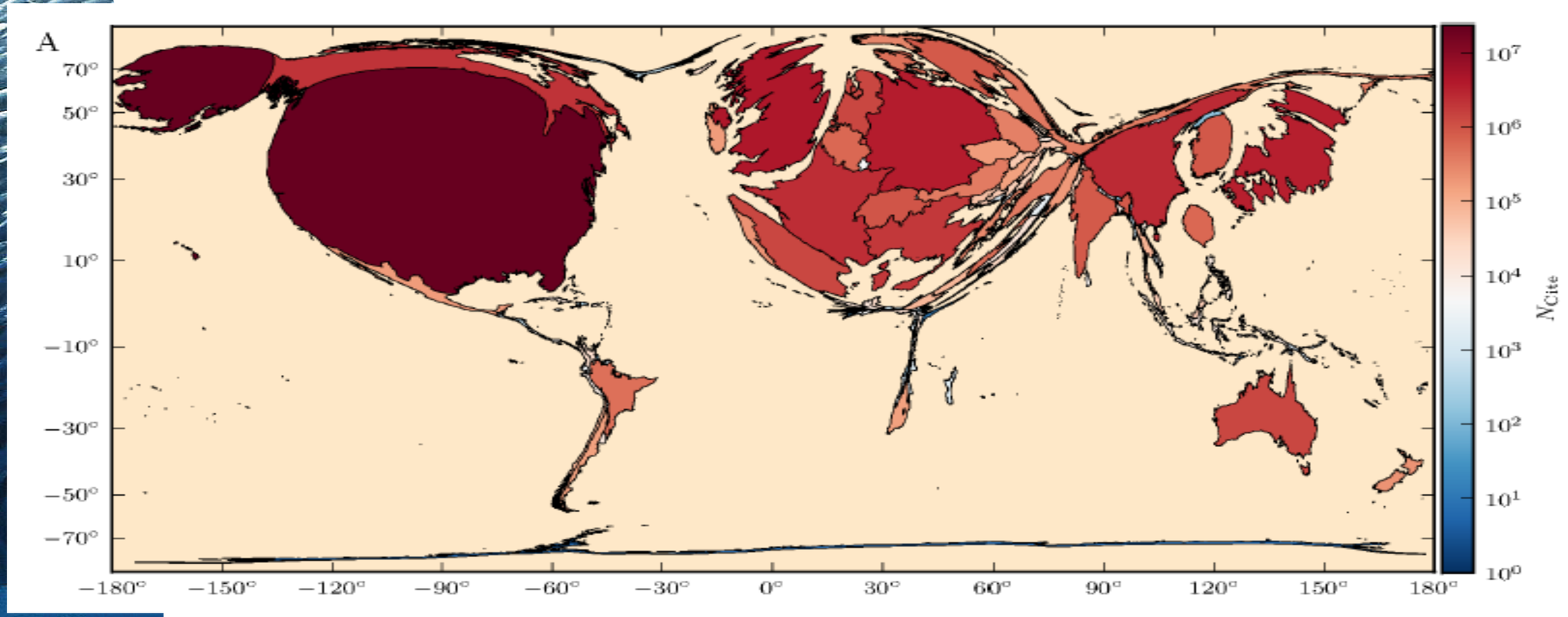
- Reduce marine pollution of all kinds
- Manage and protect marine and coastal ecosystems
- Minimize and address the impacts of ocean acidification
- Eliminate over+IUU fishing, use science based management to restore fish stocks
- Conserve > 10% of coastal and marine areas
- Prohibit fisheries subsidies
- Blue Economy for SIDS and LDC including sustainable management of fisheries, aquaculture and tourism
- Use IOC Criteria and Guidelines on the Transfer of Marine Technology to ensure that SIDS and LDCs benefit from marine biodiversity
- Provide access for small-scale artisanal fishers to marine resources and markets
- Use UNCLOS for conservation and sustainable use of oceans and their resources

State of Knowledge for Ecosystem Services

HABITATS ECOSYSTEMS	GOODS and SERVICES: Organic matter input/chemo-synthetic primary production	Nutrient cycling	Resil-ience	Habitat	Food, minerals, oil, gas	Micro organ-isms	Climate regulation	Bio-remediation	Educational, scientific, spiritual
Continental shelves	some	little	little	some	some	no	no	little	little
Continental slopes	some	little	no	little	some	no	no	little	little
Abyssal plains	some	little	no	little	little	no	no	little	little
Submarine canyons	little	little	no	little	little	no	no	little	little
Deep-sea trenches	little	no	no	little	little	no	no	little	no
Seamounts	some	little	no	some	some	no	no	no	little
Carbonate mounds	little	little	no	little	no	no	no	no	no
Hydrothermal vents	some	no	no	some	some	some	no	no	some
Cold seeps	little	little	little	little	some	some	little	little	little
Mud volcanoes	little	little	no	little	little	some	little	no	little
Cold-water corals	some	no	little	some	some	no	no	no	some
Deep-sea sponge fields	little	no	no	little	no	no	no	no	little
Whale falls	some	little	little	little	little	little	no	no	no

Key: State of knowledge — good knowledge — some knowledge — little knowledge — no knowledge

A distorted World …

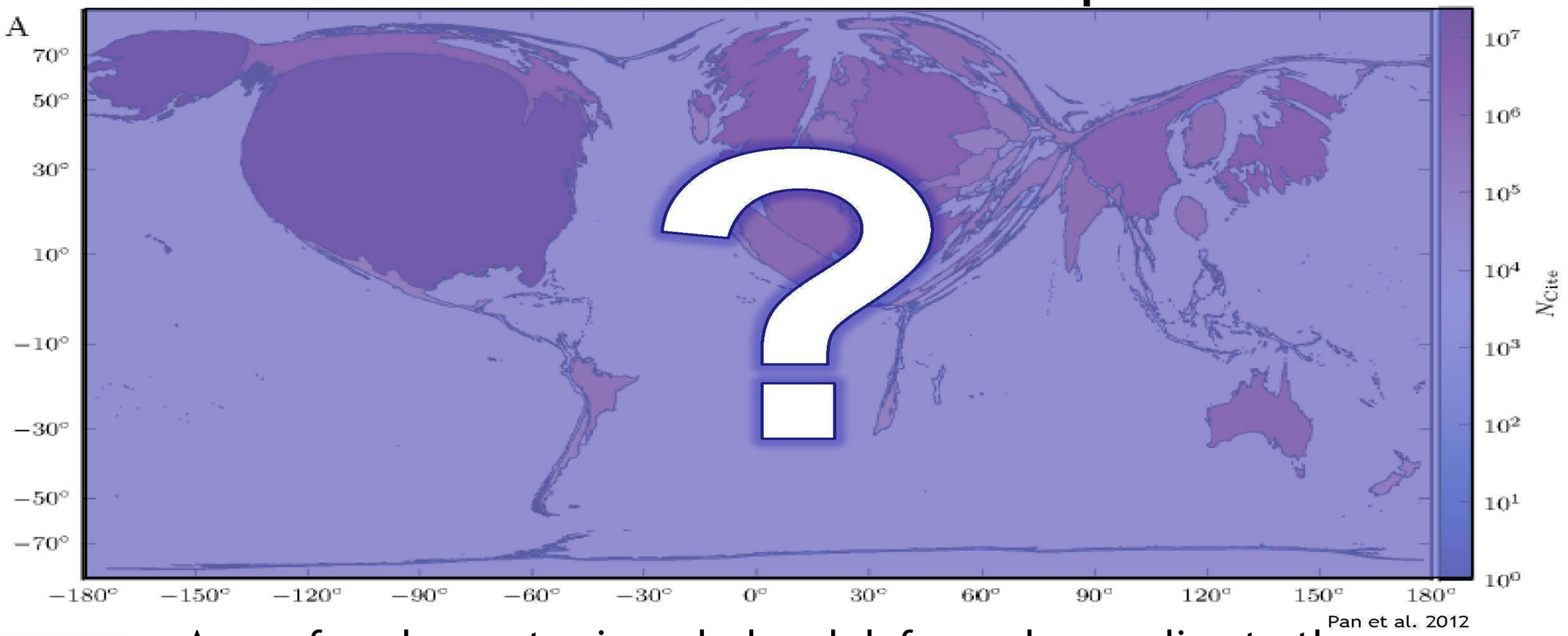


Global Science Citation map

Area of each country is scaled and deformed according to the number of citation received

Global Ocean Science Report

Global Ocean Science Citation map



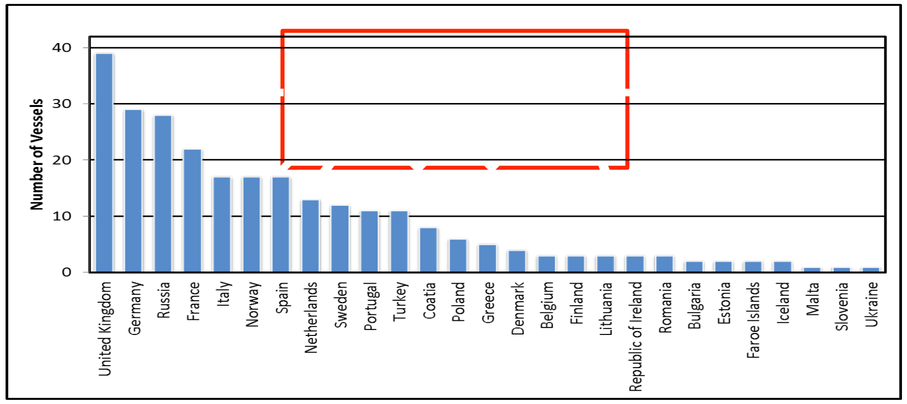
Pan et al. 2012

Area of each country is scaled and deformed according to the number of citation receive

Global Ocean Science Report

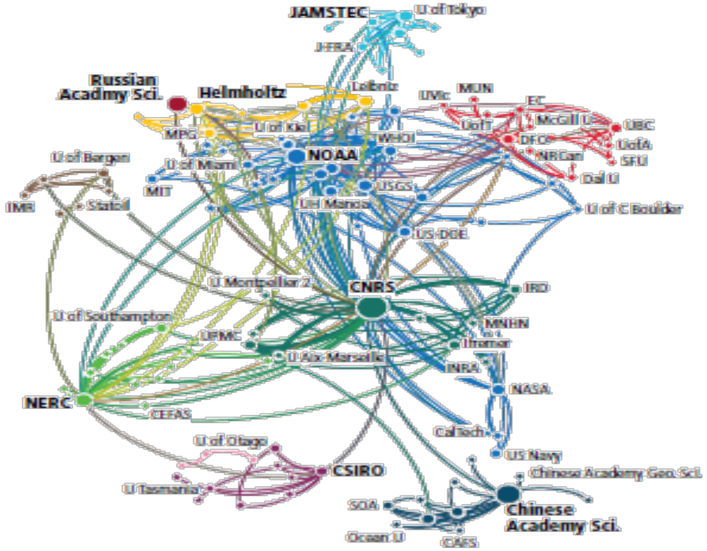
AT PRESENT –

No global mechanism for assessing and reporting on the level of human capacity, technology, investments, and needs of nations in ocean and coastal science, observations and services.



GOSR –

Tool for the SDG on the Ocean, to optimize the sustainable use of marine resources, with regard to the needs of developing countries, including capacity-building & transfer of knowledge and technology



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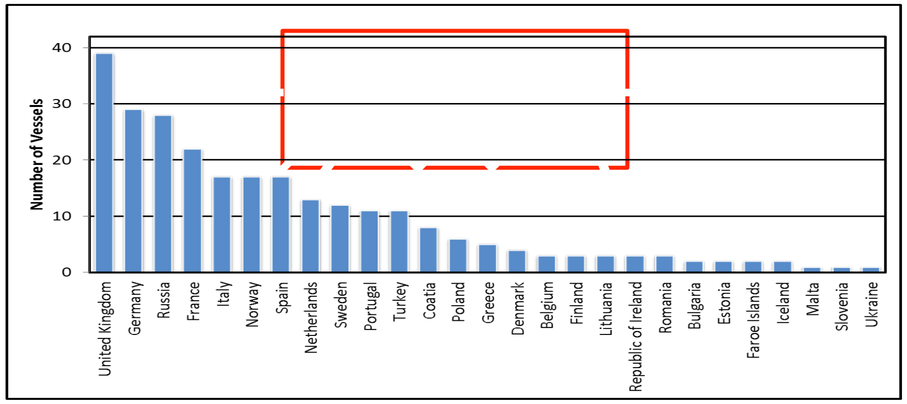

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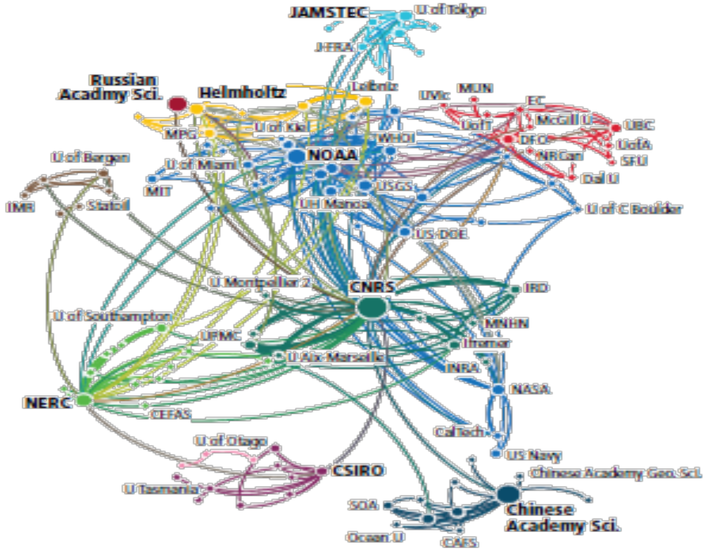

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Ocean Research Partnership ?

United Nations Educational, Scientific and Cultural Organization

Intergovernmental Oceanographic Commission

?

?

International Council for Science

SCOR

Scientific Committee on Oceanic Research

?

Projects, activities, initiatives

futurearth

research for global sustainability

?

?

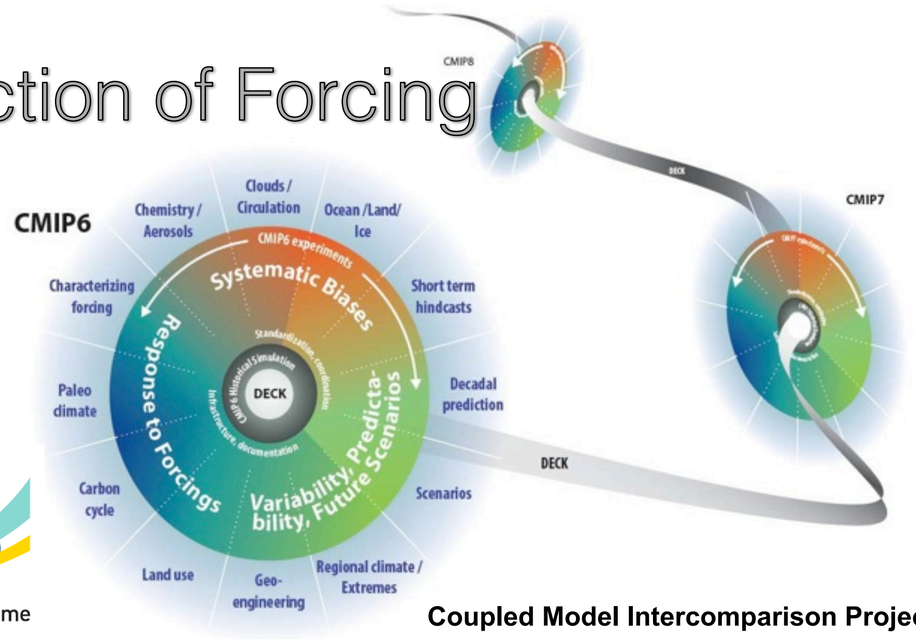
WCRP

World Climate Research Programme

?

What kind of project may be needed ?

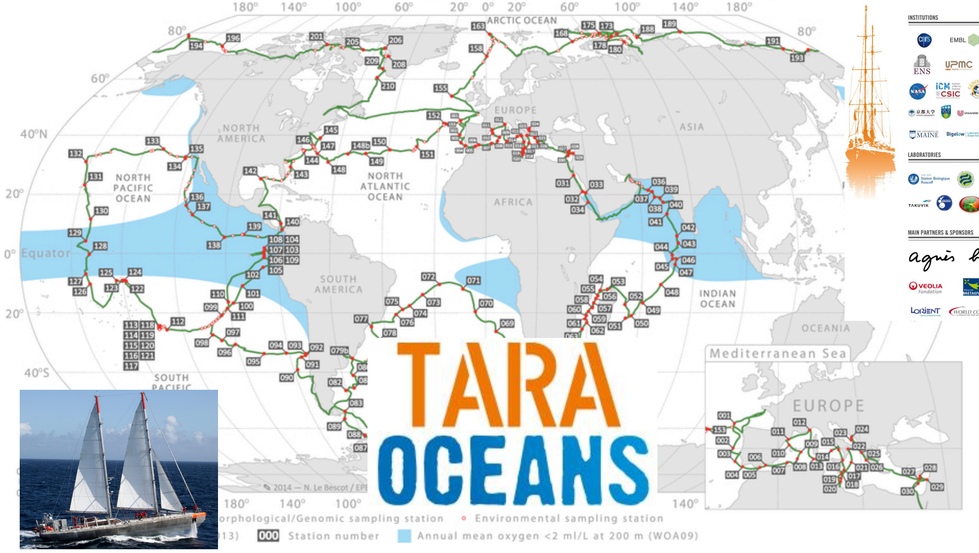
Prediction of Forcing

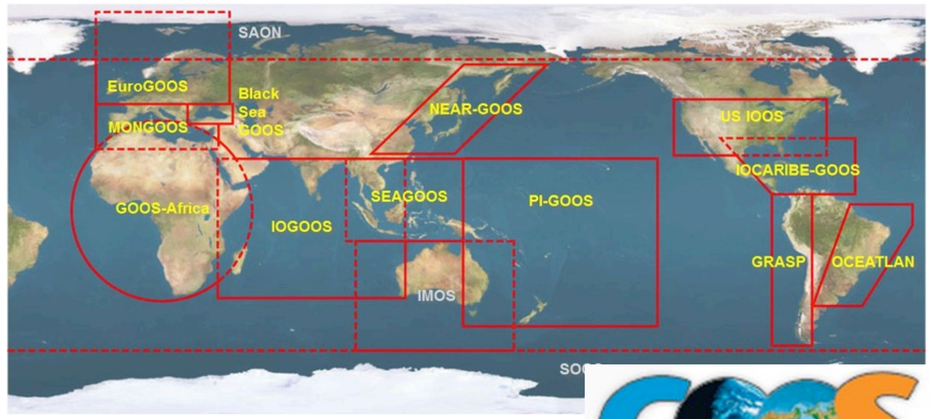


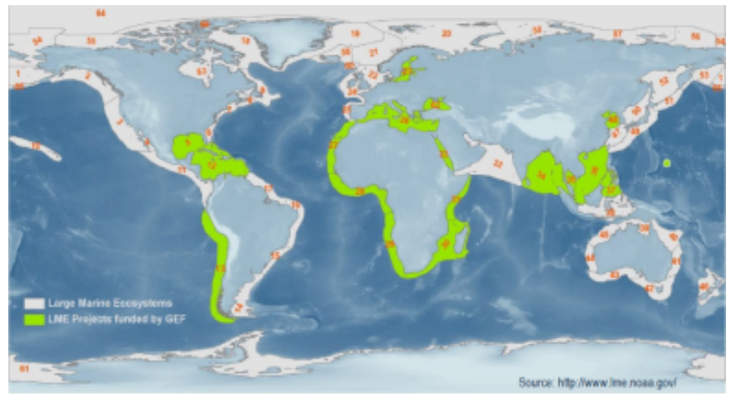
WCRP
World Climate Research Programme

Coupled Model Intercomparison Project

Breakthrough in biology







Global Ocean Observing System

Paris, 2 October 2015

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IOC Criteria and Guidelines on Transfer of Marine Technology

Donor country/ Private sector

- Strategic planning, including TMT component

Availabilities of marine technologies for transfer

Clearinghouse Mechanism (CH)

- Identify providers and describe types of technology
- Identify existing projects with TMT functions.
- Establish a regional/sub-regional focal point on TMT, preferably within its regional structure.
- Devise possible cooperation schemes, and facilitate contacts between identified donors and recipient countries
- Provide assistance for TMT implementation (expert mission, training, assessment of results)
- Enhance accountability and reporting on TMT implementation status
- Facilitate UN coordination on TMT

Recipient country

- Strategic planning, including TMT component

Needs for marine technology transfer

Post-2015 Technology Facilitation Mechanism ?

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Conclusion (partially based on IOC CD Survey of 2013)

- Consolidated ocean research is needed for most of SDGs
- Massive advances needed in marine biogeochemistry and biology and translation of the results into ecosystem management knowledge. All elements of such breakthrough research exist.
- SDG14 can give a new consolidating perspective to currently dominant project-oriented research
- May need national ocean research policies in support of SD
- Regional/global/specialized Transfer of Marine Technology mechanisms needed

Merci! Thank you! Спасибо!