

ABMTs, including Marine Protected Areas: Concepts and Trends

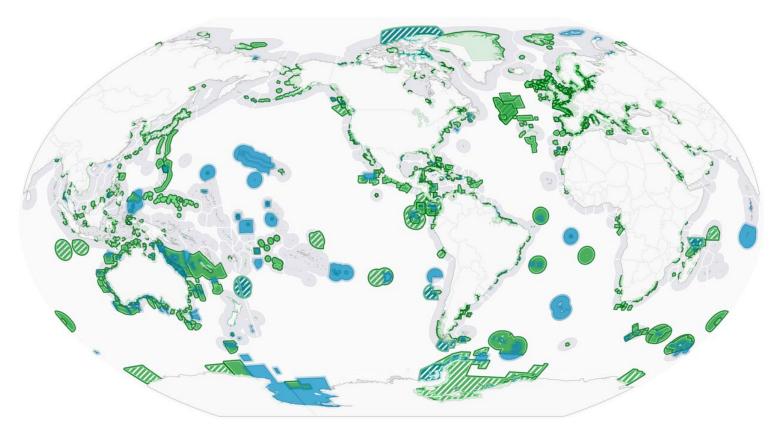


Associate Professor LIU Nengye



- BBNJ Agreement, Art 1 (1), "Area-based management tool" means a tool, including a marine protected area, for a geographically defined area through which one or several sectors or activities are managed with the aim of achieving particular conservation and sustainable use objectives in accordance with this Agreement.
- BBNJ Agreement, Art 1 (9), "Marine protected area" means a geographically defined marine area that is designated and managed to achieve specific long-term biological diversity conservation objectives and may allow, where appropriate, sustainable use provided it is consistent with the conservation objectives."
- Fully or strongly protected MPAs, also known as 'no-take' areas prohibit extraction or modification of biological and non-biological resources. There may also be restrictive measures for access or human disturbance (e.g., tourism) (Zacharias and Ardron,, 2020)
- 'Multiple-use' MPAs may permit the use and removal of resources, where such use is controlled to ensure that long-term conservation goals are not compromised. Multiple-use MPAs generally have a spectrum of zones within them, with some zones allowing greater use and removal of resources than other zones. (Zacharias and Ardron,, 2020)





Marine Protected Areas

Level of Protection

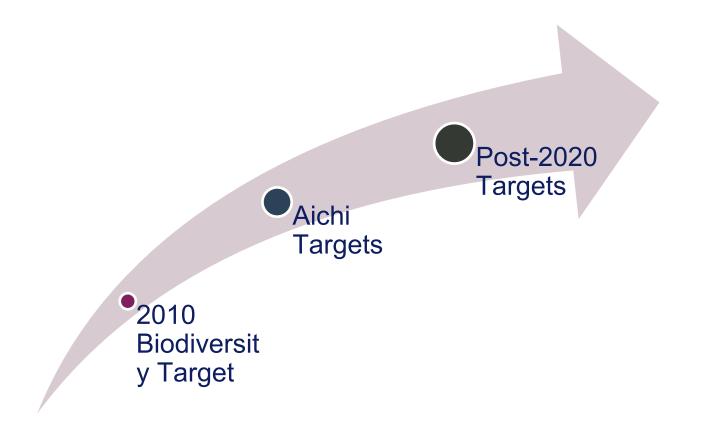
Highly-Fully Protected Zones

Less Protected Zones / Unknown

ZZZ Pending Implementation / Proposed







Target based approach

- World Summit on Sustainable Development (WSSD 2002) Plan of Implementation: Para 32 (C): "Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use and watershed planning and the integration of marine and coastal areas management into key sectors;"
- CBD COP10 Aichi Target: Target 11
 - By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.



Kunming – Montreal Global Biodiversity Framework

TARGET 2

Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective **restoration**, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

TARGET 3

Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measure





Antarctica and the Southern Ocean

Both polar oceans have continued to warm in recent years, with the Southern Ocean being disproportionately and increasingly important in global ocean heat increase - **IPCC Special Report on the Ocean and Cryosphere in a Changing Climate 2019**



Antarctic Krill: small crustaceans related to the prawn and lobster

The world's krill population weighs in between 300 and 500 million tonnes – the greatest biomass of any wild animal on the planet.



SMU SINGAPORE MANAGEMENT

> "The fauna-rich marine region of the Southern Ocean represents a microcosm of the dilemmas faced by States in the exploitation of marine resources", Donald F. Frank, ODIL 1983



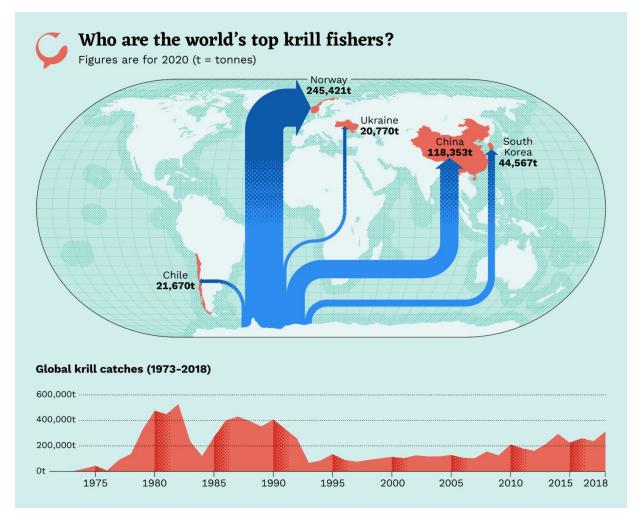
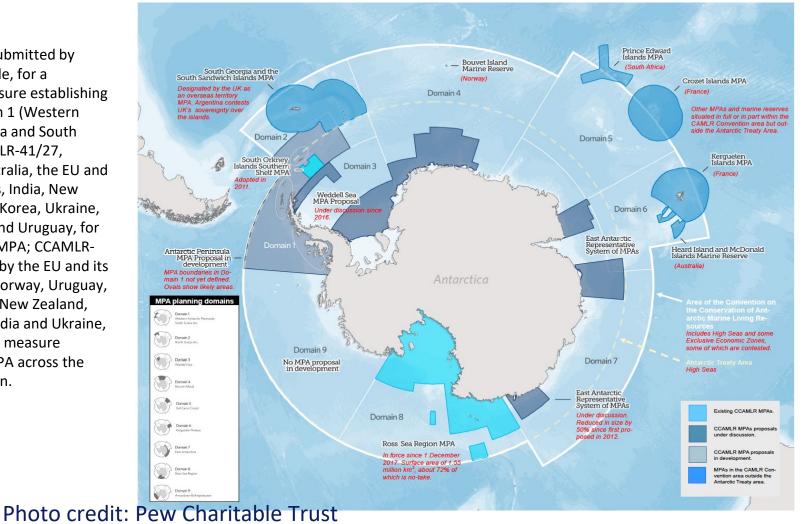


Photo credit China Dialogue



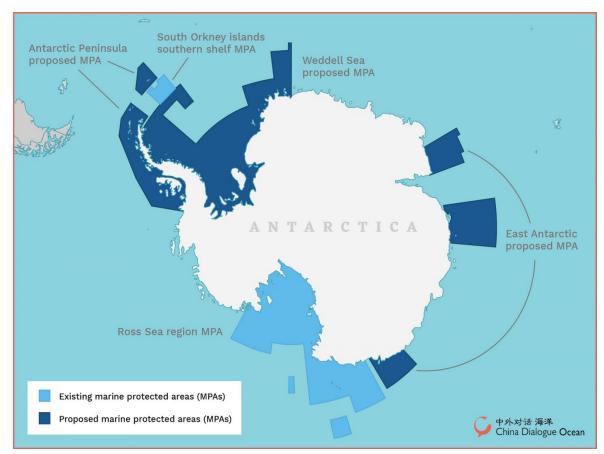
Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) Marine Protected Areas

CCAMLR-41/34, submitted by Argentina and Chile, for a conservation measure establishing an MPA in Domain 1 (Western Antarctic Peninsula and South Scotia Arc); CCAMLR-41/27, submitted by Australia, the EU and its Member States, India, New Zealand, Norway, Korea, Ukraine, the UK, the USA and Uruguay, for an East Antarctic MPA; CCAMLR-41/28, submitted by the EU and its Member States, Norway, Uruguay, Australia, the UK, New Zealand, the USA, Korea, India and Ukraine, for a conservation measure establishing an MPA across the Weddell Sea region.





Establishment of MPAs in the Southern Ocean





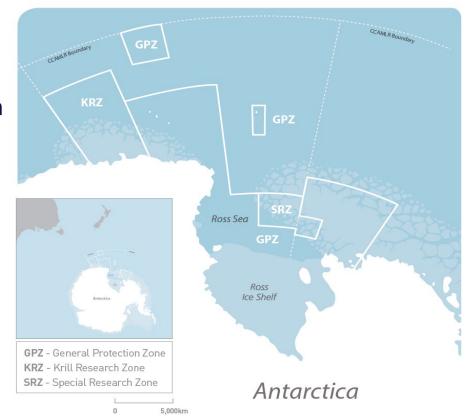
Establishment of Ross Sea region MPAs in the Southern Ocean





Establishment of MPAs in the Southern Ocean

- Ross Sea region MPA was established in 2016
- The size was reduced to 1.55 million square kilometres, comparing to originally proposed 2.27 million square kilometres
- Three zones: General protection zone, Special Research Zone and Krill Research Zone for a duration of 35 years







SMU Trend 1: relationship between conservation and rational use

Article II (2) CAMLR Convention, for the purpose of this Convention, the term "conservation" includes rational use. As pointed out by Ronald Frank in 1983, "the language of Article II must be viewed in a political context". It showcases a vague balance between fishing states – Japan and Soviet Union, and conservationist States, in particular the U.S. on effective management of the Antarctic marine living resources.

Trend 2: Decision-making process for the establishment of high seas MPAs

- Article XII (1) CAMLR Convention, "Decisions of the Commission on matters of substance shall be taken by consensus. The question of whether a matter is one of substance shall be treated as a matter of substance."
- Article 23 (1) BBNJ Agreement, "As a general rule, the decisions and recommendations under this Part shall be taken by consensus."
- Article 23 (2) BBNJ Agreement, "If no consensus is reached, decisions and recommendations under this Part shall be taken by a three-fourths majority of the Parties present and voting, before which the Conference of the Parties shall decide, by a two-thirds majority of the Parties present and voting that all efforts to reach consensus have been exhausted."

Soviet Union and Antarctic Governance Regime - Boleslaw A. Boczek, 1984 AJIL



- The Soviet Union boasted more than 50 percent of the world's tonnage of fishing vessels in early 1980s.
- One of the largest and most obviously resource-oriented geological research programs in Antarctica



