編者言

孕育地球的生命之母－我們的海洋

當人類積極面對氣候變遷帶來的全球重大威脅，並試圖找出各項對策之際，也發現健康的海洋在其間扮演的關鍵角色。

海洋面積約占全球總面積的 72%，她是地球無數物種的起源，也與人類的生活息息相關，舉凡食物、交通運輸、氣候調節等都與海洋脫離不了關係，海洋可說是地球的儲熱體、氣候的調節器，健康的海洋不僅有助於建立宜居的地球，更有助於減緩氣候異常。然而，長久以來，人類對於海洋健康的重視，似乎敵不過經濟發展的誘惑，人類在追求文明進步的過程中，對海洋資源的恣意掠奪、對魚群的過度捕撈、甚至無視於垃圾、廢水排放對於海洋生物的傷害，人類種種為了經濟、便利的恣意作為，使得原本充滿生機的蔚藍海洋，逐漸顯得死氣沉沉，雖然海洋不至於如法蘭克．薛慶的小說《群》中所描述，變得有智慧並開始獵殺人類，但海洋生態系的失衡，終究以氣候異常的姿態漸漸展開對人類無情的反撲。

為了喚起全球對於海洋議題的重視並且付諸實際行動，美國在 2014 年發起了第 1 屆「我們的海洋大會」(Our Ocean Conference, OOC)，大會的主要目的是在為各國政府、企業、科研機構與公民團體建立合作關係，分享應對海洋威脅的知識、技術，以及擴大資金支持。大會召開期間，與會各方圍繞著海洋面臨的威脅、氣候變遷對海洋的影響、海洋污染、永續漁業、糧食安全、藍色經濟、健康海洋等議題進行交流討論。截至目前為止，透過「我們的海洋大會」，全球已針對海洋議題提出了超過 2,160 多項承諾，投入約 1,300 億美元的發展資金。

臺灣作為一個海洋國家，自然也不能缺席，今年在希臘雅典舉行的第 9 屆 OOC 大會，臺灣以實際行動及具體承諾積極回應大會倡議的六大行動領域，包含氣候變遷、海洋保護區、永續藍色經濟、永續漁業、海洋污染及海事安全，除了舉辦「海洋保護區全球協力論壇」，並積極參與、擔任場內周邊會議與談等相關活動。

為了討論前述海洋相關議題，本期《當季專論》，特以〈2024「我們的海洋大會」觀察〉為主題，除回顧「我們的海洋大會」從 2014 年展開到目前的倡議成果外，也邀請專家學者分就今年大會中所探討的海廢、永續漁業及海洋保育區等議題進行深入的剖析。

而本期的《焦點企劃》，則以〈「我們的海洋大會」與會觀察—專訪國海院陳建宏院長及國合會史立軍副秘書長〉為題，分別採訪國家海洋研究院陳建宏院長及財團法人國際合作發展基金會史立軍副秘書長，邀請他們分享這次參與 OOC 大會的第一線觀察，以及對於未來臺灣在海洋相關事務上如何持續推動，以與國際接軌的看法。

知名的航海家哥倫布曾說過「除非你有勇氣抵達看不到岸的彼端，否則你永遠無法跨越海

洋。」正因為這句話，激起了人類的勇氣，不斷地向海洋釋出挑戰，也因為這樣的搏鬥，讓彼此都傷痕累累。藉著這期的文章，除了希望讓讀者能夠認識到目前全球對海洋議題的討論外，也能夠思考如何在海洋保育與人類文明的發展之間，取得和諧與共生的平衡，以及如何透過國際合作，把臺灣在海洋保育上的經驗，分享給國際社會。

當期論文摘要

由「我們的海洋大會」思考國際開發合作的挑戰與機會

（黃俊揚，笹川和平財團海洋政策研究所主任研究員）

本文首先對「我們的海洋大會」的舉辦歷程進行爬梳，除了整理出每年所承諾的項目與金額外，亦探討這個大會持續舉行對於成為全球海洋保護討論平台的重要性，並進一步針對 2024 年於希臘所舉行的第 9 屆「我們的海洋大會」進行觀察，希望從中能夠勾勒出未來各國進行海洋保護工作的政策方向。接著則會針對當全球進行國際開發援助工作的時候，「我們的海洋大會」可以帶來什麼樣的省思進行探討，同時也以日本國際協力機構及國合會執行對外援助計畫為案例，說明國際援助機構如何為國際的海洋保護提供助力，最後，則是希望國合會在未來執行對外援助計畫時，能夠在目前既有的基礎上，加強與理念相近的國家合作，將各自的力量進行整合，以達到更大的成效，讓我國能夠擔負起做為真正海洋國家的責任。

全球海廢治理的新策略：臺灣與國際合作的前景

（顏寧，澄洋環境顧問執行長；胡介申，澄洋環境顧問研究主任）

隨著海洋廢棄物問題成為全球焦點，國際社會已採取多項措施來應對此一挑戰。自 1970 年代首次在國際公約中提及海廢以來，國際法框架已逐步強化，尤其是 2011 年的《檀香山策略》為海廢管理設定全面的全球策略。本文以日本與韓國在海廢管理的國際合作實例，顯示了跨國合作在解決海廢問題上的重要性。最後，臺灣可利用其在塑膠循環經濟和海廢治理的專業知識與技術，透過新南向政策加強與東協及南亞國家的合作，不僅提升區域的環境管理水準，也促進經濟與環境的雙重利益。這些合作案例不僅為地區提供技術和策略支持，也為全球海廢治理模式提供可行的範例。

以科學為基礎搭建永續漁業夥伴關係

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在 2024 年「我們的海洋大會」共計宣告了 469 項海洋永續行動，承諾總金額達 113 億美元。在漁業永續議題上，希臘宣布將建立兩處新的海洋保護區，並在 2030 年達 30% 保育目標、逐步禁止底拖網，全面撤銷圍網證照。歐盟著重防範與打擊 IUU 漁業、進行多功能海洋空間規劃、並著眼非洲地區加強海洋相關的科學與技術投入。而美國則重視各項承諾的資金

來源，佈局太平洋島國，致力培養具有藍色治理能力的青年領袖。臺灣在水產品生產、海洋資料建置、漁業資源評估、漁業管理、生態監測、海洋碳匯研究等領域均有長足的經驗與發展技術。在支持友邦的永續漁業的潛力上，應以協助建構永續漁業能力（capacity building），進一步強化以科學為基礎的永續漁業管理策略，並透過共同設計（co-design）與共同交付（co-delivery）深化永續漁業管理，以展現臺灣在永續漁業領域的影響力，同時突顯臺灣對藍色治理的能力與承諾。

全球海洋保護區的 30x30 目標和其面臨的挑戰

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海洋保護區（MPAs）是海洋保育最簡單、最經濟、最有效的方法。因為它不但能夠完整的保護海洋生物多樣性、讓漁業資源可以永續利用、藉遺傳資源的生物科技以及生態旅遊創造藍色產業的商機更是無窮。近年來科學家更發現海洋保護區具有「藍碳」（blue carbon）和「魚碳」（fish carbon） 的功能正是解決氣候變遷帶來衝擊最佳的「以自然為本的解方」（Natural based Solution, NbS）。

因此，在 2010 年《生物多樣性公約》（Convention on Biological Diversity, CBD） 的《愛知目標》（Aichi Targets） 以及 2015 年的《聯合國永續發展目標》（UN Sustainable Development Goals, SDGs）中，均設定 2020 年前海洋保護區的面積比例要達到 10%（10x20），2030 年《昆明 - 蒙特婁全球生物多樣性框架》（簡稱昆蒙框架）（Kunming-Montreal Global Biodiversity Framework, GBF） 則要達到 30%（30x30）的目標。最近幾屆「我們的海洋大會」也都將海洋保護區列為主要討論的議題。但要達成這項目標，必須要推動公海保護區的劃設以及將「其他有效保育區」（Other Effective Area-based Conservation Measures, OECMs）納入計算。此外，還需要落實保護區的有效管理，才能改善海洋生物多樣性仍在快速流失以及漁業資源無法永續利用的問題。

The Source of All Life of Earth - Our Ocean

Over the course of humanity's efforts to handle the major global threats posed by climate change and to try to find countermeasures, we have also discovered that the health of oceans plays a critical role in this process.

The ocean accounts for about 72% of the world's total surface area. It is the origin of the countless species on Earth, and is also inextricably linked to human life. We rely on the ocean for everything from food to transportation and climate regulation. The ocean stores the Earth's heat and regulates climates. Healthy oceans help create a livable Earth and mitigate climate anomalies. However, humanity has long forsaken the health of oceans and in favor of economic development. In the process of pursuing civilization and progress, humans have plundered marine resources, overexploited fish stocks, and even ignored the discharge of garbage and wastewater, which harm marine life. Humans do whatever they want for economic growth and convenience have gradually taken life away from the blue oceans, which were so full of life. Although the oceans are not as bad as described in Frank Schätzing's novel The Swarm, where the oceans themselves became intelligent and hunt humans, the imbalance of the marine ecosystem has evidently resulted in a ruthless backlash against humans in the form of climate anomalies.

To increase global awareness of ocean issues and encourage real action, the United States launched the first "Our Ocean Conference" (OOC) in 2014. The main purpose of the conference was to provide opportunities for governments, enterprises, and scientific research institutions to establish partnerships with citizen groups to share knowledge and technologies, and expand their financial support to address ocean threats. During the conference, participating parties exchanged and discussed topics such as threats to the oceans, the impact of climate change on the oceans, marine pollution, sustainable fisheries, food security, blue economy, and healthy oceans. Through the OOC, entities across the world have made more than 2,160 commitments on ocean issues, and invested approximately US$130 billion in development funds.

As a maritime country, Taiwan cannot be absent from these efforts. At the 9th OOC held in Athens, Greece this year, Taiwan actively supported the six major areas of action proposed by the conference with practical actions and specific commitments. These areas included climate change, marine protected areas, sustainable blue economy, sustainable fisheries, marine pollution, and maritime security. In addition to hosting the "Global Collaboration Forum on Marine Protected

Areas", Taiwan also actively participated in on-site peripheral meetings, talks and other related activities.

To discuss the aforementioned ocean-related issues, this issue focused on "Observations on Our Ocean Conference 2024" and reviewed the results of the OOC from its launch in 2014 to the current initiative. It also invited experts and academics to conduct in-depth analyses on issues such as marine waste, sustainable fisheries, and marine conservation areas discussed at the conference this year.

The special report in this issue was titled "Observation of the Our Ocean Conference - Exclusive Interview with President Jiahn-Horng Chen of the National Academy of Marine Research and Deputy Secretary General Alex L. J. Shyy of the TaiwanICDF". We interviewed President Jiahn-Horng Chen of the National Academy of Marine Research and Deputy Secretary General Alex L. J. Shyy of TaiwanICDF and invited them to share their first-site observations from participating in the OOC as well as their views on how Taiwan will continue to promote maritime-related affairs in the future to align with international standards.

The famous explorer Christopher Columbus once said, "You can never cross the ocean unless you have the courage to lose sight of the shore." This quote has inspired humans to constantly challenge the ocean and the struggle it incited left both sides scarred. Through the articles in this issue, we hope that readers will gain awareness of the current global discussions on ocean issues and think about how to achieve a harmonious and symbiotic balance between ocean conservation and the development of human civilization, and how to achieve this through international cooperation and share Taiwan’s experience in marine conservation with the international community.

Summaries

The Challenges and Opportunities of International Development and Cooperation in the "Our Ocean Conference"

(Michael C. Huang, Senior Research Fellow, Ocean Policy Research Institute, the Sasakawa Peace Foundation)

This paper starts with a review of the history of the "Our Ocean Conference". In addition to compiling the projects and funds committed each year, it also explores the importance of the continuously reorganizingthis conference into a global discussion platform for marine protection, and observes the developments in the 9th "Our Ocean Conference" held in Greece in 2024,

with the aim of outlining the marine protection policies of different countries in the future. It then discusses the lessons learned from the "Our Ocean Conference" as the world engages in international development assistance work. It also uses the implementation of foreign aid projects by the Japan International Cooperation Agency and the TaiwanICDF as a case study to explain how international aid agencies can provide assistance for international marine protection. Finally, it suggests that when the TaiwanICDF implements foreign aid projects in the future, it aims to strengthen cooperation with like-minded countries on the existing basis, consolidate their strengths to achieve greater results, and help Taiwan shoulder its responsibilities as a true maritime country.

New Strategies for Global Marine Waste Management: Cooperative Prospects between Taiwan and the International Community

(Ning Yen, CEO of IndigoWaters; Jason Hu, Research Director of IndigoWaters)

As the marine waste has become a global issue, the international community has taken a number of measures to face this challenge. Since marine waste has been first mentioned in an international convention in the 1970s, the international legal framework has been gradually strengthened, which is exemplified in the 2011 Honolulu Strategy for setting a comprehensive global framework for marine waste management. This paper uses the international cooperation between Japan and South Korea in marine waste management as an example, to show the importance of transnational cooperation in solving marine waste problems. Finally, Taiwan can utilize its professional knowledge and technology in plastic circular economy and marine waste management to strengthen cooperation with ASEAN and South Asian countries through the New Southbound Policy, which will improve regional environmental management and promote both economic and environmental development. These cases of collaboration provide technical and strategic support to the region as well as feasible actions for global marine waste management.

Building Science-Based Sustainable Fisheries Partnerships

(Chun-Pei Liao, Assistant Researcher, Traceability Certification and Inspection Center, National Taiwan Ocean University; Fan-Hua Nan, Distinguished Professor and Vice President of National Taiwan Ocean University)

The parties announced a total of 469 ocean sustainability actions and a total commitment of US$11.3 billion in the 2024 "Our Ocean Conference". On the issue of fishery sustainability, Greece announced that it will establish two new marine protected areas and achieve a 30% conservation goal by 2030. It will gradually ban bottom trawling and revoke all seine fishing licenses. The EU is focusing on preventing and combating IUU fishing, carrying out multi-functional marine spatial

planning, and devote in strengthening marine-related scientific and technological investment in Africa. The United States is paying close attention to the funding of various commitments, strengthening its presence in the Pacific Islands Countries, and cultivating young leaders with blue governance skills. Taiwan has considerable experience and developed technologies in aquatic product production, marine data construction, fishery resource assessment, fishery management, ecological monitoring, and ocean carbon sink research. In terms of supporting the potential of sustainable fisheries in allied countries, we should support capacity building for sustainable fisheries, strengthening science-based sustainable fisheries management strategies, and using co-design and co-delivery to enhance the management of sustainable fisheries, demonstrating Taiwan's influence in the field of sustainable fisheries, and highlight Taiwan's capabilities and commitment in blue governance.

The 30x30 Global Target for Marine Protected Areas and the Challenges

(Kwang-Tsao Shao, Emeritus Chair Professor at National Taiwan Ocean University and National Sun Yat-sen University; Former Acting Director and Chief Executive Officer of the Biodiversity Research Center, Academia Sinica)

Marine Protected Areas (MPAs) are the simplest, most economical, and most effective method of marine conservation. It comprehensively protects marine biodiversity, facilitates sustainable use of fishery resources, and creates endless business opportunities for blue industries through biotechnology with genetic resources and eco-tourism. In recent years, scientists have identified the "blue carbon" and "fish carbon" functions of marine protected areas as the best "Nature-based Solution" (NbS) for addressing the impact of climate change.

Therefore, both the 2010 Aichi Targets of the Convention on Biological Diversity (CBD) and the 2015 UN Sustainable Development Goals (SDGs) set a target for increasing the area ratio of marine protected areas to 10% (10x20) by 2020, and the Kunming-Montreal Global Biodiversity Framework (GBF) set a target of 30% (30x30) by 2030. The OOC meetings in recent years have also listed marine protected areas as a major agenda item. To achieve this goal, we must promote the designation of protected areas on the high seas and include "Other Effective Area-based Conservation Measures (OECMs)" in calculations. In addition, effective management of protected areas must be implemented to address the problems of rapid loss of marine biodiversity and unsustainable use of fishery resources.