Ocean initiatives and prospects for achieving 30 by  $30^1$ 

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## 1: Effects of marine protected areas (MPAs) and Japan's efforts

Marine protected areas (MPAs) are one of the most effective means of protecting biological habitats, including aquatic resources. Fishermen themselves understand this, and there are over 1,000 no-fishing areas in Japan that have been agreed upon by fishermen themselves<sup>1</sup>.



Figure Map of marine 1. protected areas in Japan (modified from UNEP-WCMC 2023). Protected areas outside Japan's EEZ belong to other countries. Additionally, this map does not show MPAs based on "designated water areas" such as Yamato Bank, which were shown in NACSJ (2012), and the actual MPAs are much wider.

The Aichi Biodiversity Targets 2010-2020 aim to cover 17% of land area and 10% of marine area as protected areas (PAs) or

"other effective area-based conservation measures" (OECMs). It was raised. Based on the Aichi Targets, each country discussed the definition of PA. For the Aichi Targets, many countries, including Japan, used only PA and did not use OECM.<sup>2</sup>

Without defining PA, "other" OECMs cannot be defined. According to the International Union for Conservation of Nature (IUCN <sup>3</sup>), PA includes seven categories from Ia to VI (Table 1). In other words, PA itself is diverse. However, whether it is strict protection or sustainable use, PA has these as its main objectives. was estimated to be approximately 369,000 km<sup>2, or approximately 8.3%</sup> (NACS-J 2012). In December 2020, four offshore seabed natural environment conservation

<sup>&</sup>lt;sup>1</sup> This is a personal translation of Matsuda (2024) Forest Environment 2024 in Japanese

<sup>(&</sup>lt;u>https://www.shinrinbunka.com/publish/shinrin/27655.html</u>, pp.127-131)

areas were added, bringing the total to approximately 13.3% and achieving the Aichi target (Figure 1). There are 1, 6, 10, 0, 264, 79, 100, and 20 MPAs in IUCN protected area categories Ia , Ib , II, III, IV, V, VI, and unknown, respectively, and a total of 480 including duplicates. The total area is 561,000 km2, which <sup>is</sup> approximately 13.9% of the total sea area (including EEZ) (SCBD 2012)<sup>4</sup>.

Table 1 Categories of protected areas and main management objectives (from Dudley2012)

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Ia	Strictly protected nature area	Strict protection/mainly scientific research
Ib	Wilderness area	Strict protection/mainly protection of wilderness
Π	National park	Mainly ecological conservation and protection
III	Natural monument	Primarily conserving certain natural features
IV	Habitat/Species Management Area	Conservation primarily through human management intervention
V	Terrestrial/Marine Landscape Conservation Area	Mainly terrestrial and marine landscape conservation and tourism.
VI	Sustainable resource use protected area	Mainly sustainable use of resources

## 2: Importance of OECM and how to use it in the sea

Japan's MPAs register joint fishing rights and fishing grounds as part of the MPA, not the OECM. Even in the OECM, there were no problems in achieving the Aichi targets. In the DIVERSITAS Committee during the development of the Aichi Targets, I strongly urged that they not be limited to legal MPAs. I hope that Japan will also make use of OECM in the next 30 by 30<sup>5</sup>.

The OECMs that I had in mind when setting the Aichi Targets were the seasonal fishing ban zone for walleye pollock in Shiretoko and the voluntary permanent notake zone for the Kyoto snow crab fishery <sup>6</sup>. They respectively brought the world natural heritage registration and Asia's first Marine Stewardship Council (MSC) certification. Neither is a legal sanctuary. However, the definition of PA is "legal or other effective means," and legal collateral is not a requirement if the primary purpose is protection.

In the 1960s, the Kyoto snow crab fishery suffered a heavy decline in stocks, and after discussion between fishers and a local scientist of Kyoto Prefectural Government, fishers established a permanent protection zone where the blocks were pacified and fishing physically impossible. As stocks recover within protected areas, fishermen are

willing to open more permanent reserves, and permanent reserves are now being created throughout the western Sea of Japan <sup>7</sup>.



Figure 2. Voluntary seasonal fishing ban area for walleye pollock (almost the entire area on this map is MPA. Modified from a map provided by Rausu Fisheries Cooperative Association)<sup>8</sup>.

Shiretoko is said to be the southernmost region in the northern hemisphere that experiences seasonal sea ice, and was the first in Japan to aim to be designated as a World Natural Heritage Site that includes a sea area. However, the sea area is a set net fishing area, and fishers are subject to stricter regulations in the future due to the World Heritage status. The fishers made the government promise not to do so. However, during the review process, it was recommended that the protection level of the marine area be improved. However, they originally established voluntary seasonal fishing ban areas and worked to ensure sustainable use. Registration was achieved not through legal restrictions, but by expanding the seasonal fishing ban area (Figure 2.).

## **3: OECM is the key to achieving 30by30 and mainstreaming bioregulation**

In 30by30, a PA is an area whose primary purpose is nature conservation, and an OECM is an area whose purpose is other than conservation, but which contributes to nature conservation, where conservation is a secondary purpose, or where the area does not profess to be protecting<sup>9</sup>. Voluntary fishing ban areas without legal regulations could invite poaching by outsiders if made public. Since protection is not the main purpose of OECM, it is necessary to objectively verify whether it is actually effective for protection. Land managers/owners themselves must apply for natural

symbiotic sites in Japan, but "places that they do not wish to publicly protect" will not apply on their own. Instead of a declaration system, OECM certification based on government ratings should also be considered. However, the problem is how to register the locations. In principle, information should be made public, but the location information of some endangered species is not made public in the first place.

It will be difficult to achieve 30% through MPAs alone, and the use of OECM will be essential in many countries. If we can encourage the cooperation of stakeholders whose primary purpose is not conservation, we can help mainstream biodiversity. It will make a big contribution.

In other words, the mainstreaming strategy for biodiversity envisioned by the OECM is not to increase the number of people who consider conservation as their primary objective, but to encourage people who do not consider conservation as their primary objective to care conservation. By linking with ESG investment (investment based on corporate ratings based on environmental, social, and corporate governance) and TNFD (Task Force on Nature-Related Financial Disclosures) for evaluation, companies will actively care nature conservation. There is a possibility of utilizing OECM registration as a means. This is true both on land and at sea.

It may be a taboo phrase, but future discussions will be more consistent if most designated sea areas (fishing grounds) in Japan are repositioned as OECMs rather than MPAs. The definition of OECM was not yet established in 2010, and this was before the Japan's Fisheries Act was revised <sup>10</sup>, so this redefinition has legitimacy. Under the Fisheries Act, which was revised in 2018, appropriate resource management can be considered a condition for the continuation of fishing rights. Rather than automatically registering all joint fishing rights fishing grounds, it would be better to set certain additional criteria, examine their main purpose, and redefine fishing grounds as MPAs, OECMs, and other areas under the revised Fisheries Act. good. Since the main purpose is to promote sustainable fishing, it is not necessarily necessary to meet the OECM conditions.

The offshore surface layer and the offshore seabed account for 24.3% and 19.7% of the area considered important from the perspective of biodiversity, evolutionary and biologically significant areas (EBSA), respectively. EBSA also includes spawning grounds for aquatic fish species <sup>13</sup>. However, EBSA is neither a necessary nor sufficient condition for MPA or OECM. If many offshore fishing grounds, including those other than EBSA, required some kind of consideration for biodiversity, such as measures against bycatch, and if many offshore fishers agree, it would be possible to achieve 30% of the sea area.

In addition, there are 197,000 km<sup>2</sup> of sea areas within Japan's territorial waters that are at least 200 meters deep, that is, offshore according to the above definition (4.6% of the offshore area). There EBSA is  $\underline{11}$ km<sup>2</sup> <sup>14</sup>. There are probably even more fishing grounds. These can also be candidates for MPA or OECM.

Location of offshore wind power generation can also be candidates for OECM if environmental considerations are taken into account <sup>14</sup>. The key to achieving 30 by 30 is to increase the number of marine areas where protection is not the main purpose, but to increase the number of people who care nature conservation. However, the former is not a means to the latter. On the contrary, 30by30 should be considered as a means to promote mainstreaming of the former.

## Literature <u>Cited (endnotes are not listed in the published version)</u>

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<sup>2</sup>World Database on Other Effective Area-Based Conservation Measures (WD-OECM) https://www.protectedplanet.net/en/thematic-areas/oecms

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<sup>4</sup>SCBD (2022) Aichi Biodiversity Target 11 Country Dossier: JAPAN.

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<sup>5</sup>Hiroyuki Matsuda (2010) Concerns at the 10th Conference of the Parties to the Convention on Biological Diversity. Biological Sciences. 62:46-48.

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<sup>9</sup> Agung, MF, Adhuri, DS, Ferse, SC, Sualia, I., Andradi-Brown, DA, Campbell, SJ, ... & Ahmadia, GN (2022). Marine conservation beyond MPAs: Towards the recognition of other effective areas -based conservation measures (OECMs) in Indonesia. *Marine Policy*, 137, 104939.

<sup>10</sup>Prime Minister's Office (2020) Study Group (SG) report on further expansion and management of marine protected areas.

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<sup>11</sup>Ministry of the Environment "Study group for establishing marine protected areas in offshore areas" (2nd meeting) August 2018 Related materials 1

https://www.env.go.jp/nature/naturebiodic/kaiyo-hogoku.html

<sup>12</sup>Central Environment Council Natural Environment Subcommittee (35th meeting) May 2018. Material 2-4 <u>https://www.env.go.jp/council/12nature/35\_1.html</u>

<sup>13</sup>Ministry of the Environment's "Study Committee on Areas of High Importance from the Perspective of Biodiversity." December 2011 Material 3 https://www.env.go.jp/nature/biodic/kaiyo-hozen/ima.html

<sup>14</sup> Japan Ocean Policy Society volunteers (2022) Opinion paper on the next national biodiversity strategy https://oceanpolicy.jp/activities/proposal

<sup>&</sup>lt;sup>1</sup> Yagi, N., Takagi, AP, Takada, Y., & Kurokura, H. (2010). Marine protected areas in Japan: Institutional background and management framework. *Marine Policy*, *34* (6), 1300-1306.

<sup>&</sup>lt;sup>3</sup> Forestry Agency Expert Meeting on Protected Forest System, etc. August 2014 Material 5