

# Japan's Strategy for Conservation of Marine Biodiversity and Capacity Development Needs

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(Courtesy of Naoki Amako

Ministry of the Environment, Japan)

1. Strategy for Conservation  
of Marine Biodiversity

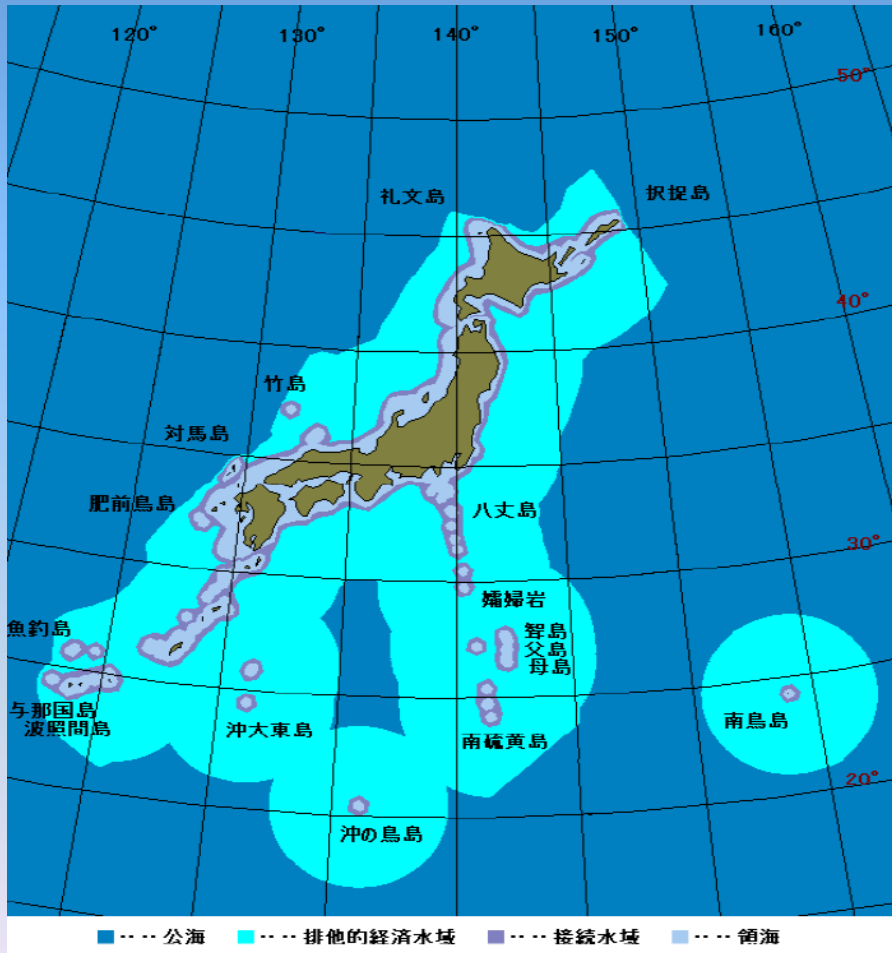
2. Capacity Development  
Needs

# Marine Biodiversity Strategy

- Formulated in March 2011
- It outlines the perspectives to be recognized and the direction of measures for the conservation and sustainable use of marine biodiversity.
- It clarified the definition of MPAs in Japan, and it indicates that Japan expands its MPAs and improves the management of them by utilizing existing legislation such as natural parks law, and promotes the development of a network of MPAs.
- English translation is in progress

# EEZ of Japan is Huge

## I.E. Difficult to achieve Aichi Target

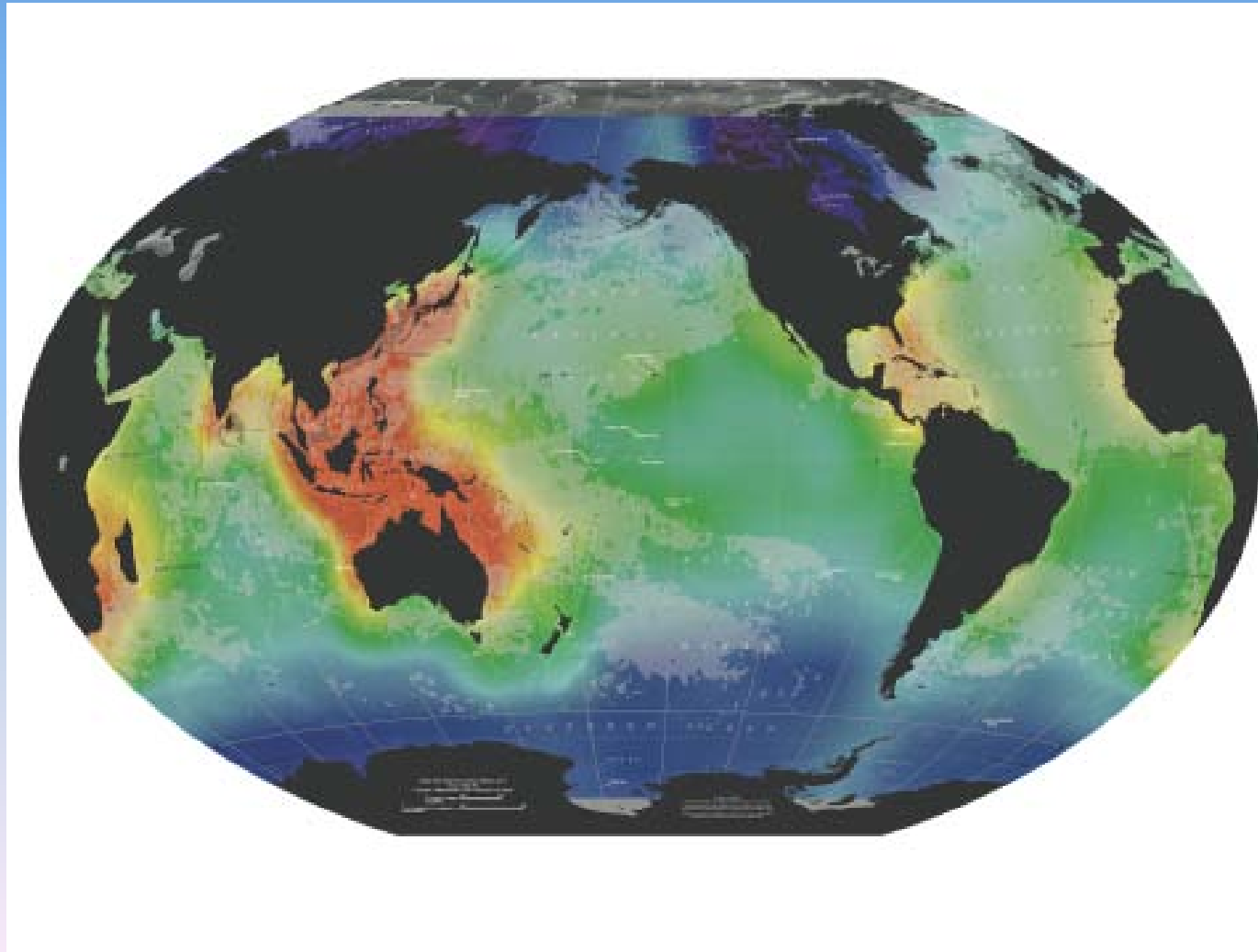


EEZ(排他的経済水域)の国別リスト

国名	EEZ+領海	国名	EEZ+領海+領土
アメリカ	11,351,000 km <sup>2</sup>	ロシア	24,641,873 km <sup>2</sup>
フランス	11,035,000 km <sup>2</sup>	アメリカ	20,982,418 km <sup>2</sup>
オーストラリア	8,148,250 km <sup>2</sup>	オーストラリア	15,835,100 km <sup>2</sup>
ロシア	7,566,673 km <sup>2</sup>	カナダ	15,583,747 km <sup>2</sup>
カナダ	5,599,077 km <sup>2</sup>	ブラジル	12,175,831 km <sup>2</sup>
日本	4,479,358 km <sup>2</sup>	フランス	11,709,843 km <sup>2</sup>
ニュージーランド	4,083,744 km <sup>2</sup>	中国	10,476,979 km <sup>2</sup>
イギリス	3,973,760 km <sup>2</sup>	インド	5,559,733 km <sup>2</sup>
ブラジル	3,660,955 km <sup>2</sup>	日本	4,857,193 km <sup>2</sup>
チリ	2,017,717 km <sup>2</sup>	ニュージーランド	4,352,424 km <sup>2</sup>
ポルトガル	1,727,408 km <sup>2</sup>	アルゼンチン	3,925,953 km <sup>2</sup>
インド	1,641,514 km <sup>2</sup>	チリ	2,773,813 km <sup>2</sup>
アルゼンチン	1,159,063 km <sup>2</sup>	ポルトガル	1,819,799 km <sup>2</sup>
マダガスカル	1,225,259 km <sup>2</sup>	マダガスカル	1,812,299 km <sup>2</sup>
中国	877,019 km <sup>2</sup>		

# Need to protect biodiversity in Japan

- 2<sup>nd</sup> Highest biodiversity of the world
- Facing to variety of threats



# Background for the formulation of the Strategy

## <Internationally>

**UN Convention on the Law of the Sea (1982)**

**Jakarta Mandate (1995) and all the “marine” CBD COP Decisions that followed**

**Plan of Implementation of the World Summit on Sustainable Development (2002)**

## <Domestically>

**Basic Act on Ocean Policy (2007)**

**Basic Plan on Ocean Policy (2008)**

**National Biodiversity Strategy 2010 (2010)**

# Definition of MPAs in Japan

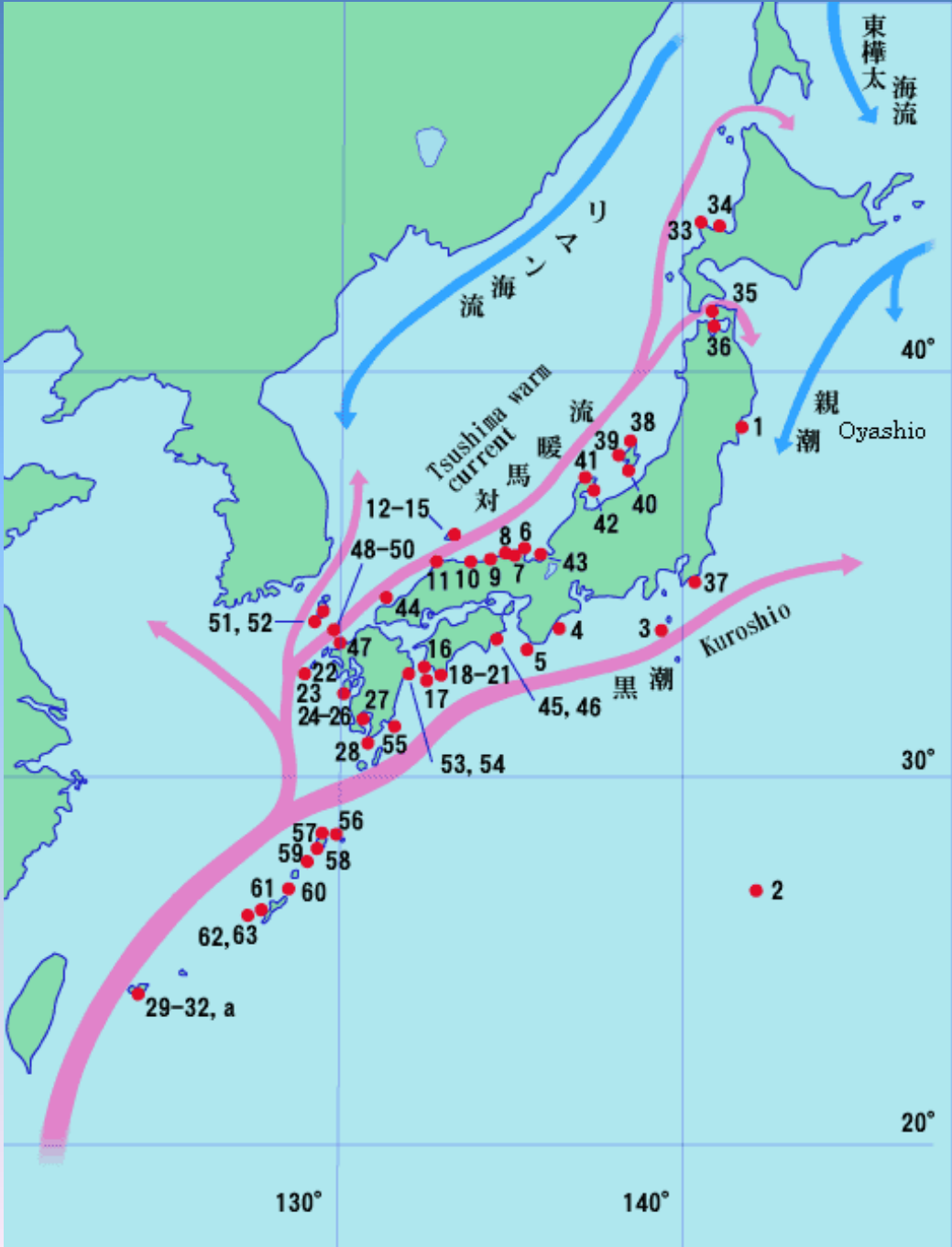
- “Clearly identified marine area, which is managed through law or other effective means while giving consideration to the utilization form, with the aim of conserving the biodiversity that supports the healthy structure and function of marine ecosystems and/or ensuring sustainable use of ecosystem services”
- IUCN’s definition of an MPA was used as reference

# Existing MPAs

## <Protection of Natural Scenery>

- National Parks, Quasi-National Parks, Prefectural Natural Parks (Natural Parks Law)
- Natural Coastal Protected Zone (Law Concerning Special Measures for Conservation of the Environment of the *Seto* Inland Sea)

# Marine Parks



# Existing MPAs

## <Protection of Natural Environment or Habitat>

- Nature Conservation Area (The Nature Conservation Law)
- Wildlife Protection Area (Wildlife Protection and Hunting Law)
- Natural Habitat Conservation Areas (Law for the Conservation of Endangered Species of Wild Fauna and Flora)
- Natural Monument (Law for Protection of Cultural Properties)

# Existing MPAs

## <Protection and Cultivation of Fishery Resources>

- Protected Water Surface (Fisheries Resource Protection Law)
- Coastal Fishery Resources Development Area, Designated Marine Area (The Law Relating to the Promotion of Marine Fishery Resources Development)
- Designated Marine Areas designated by Prefectures and Fishery Associations (Fisheries Law, Fishery Resources Conservation Law, Fishery Cooperative Act)
- Common Fishery Right Area (Fisheries Law)

# Existing MPAs

- Total Area = 8.3 % of territorial waters + EEZ
- Area does matter, but improving the level of management in the existing MPAs is also important
- Challenge for the near future: Expanding the MPAs through the existing legislations to meet the Aichi Target 11

1. Strategy for Conservation of Marine Biodiversity
2. Capacity Development Needs

# Current Capacity Building

- The Ministry of the Environment has been holding ICRI (International Coral Reef Initiative) East Asia Regional Workshop and has helped formulate the ICRI East Asia Regional Strategy on MPA Networks 2010, developed MPA database and published coral reef habitat map in the region



# Current Capacity Building

- Training Workshop on Coral Taxonomy as an activity of ESABII (East and Southeast Asia Biodiversity Information Initiative)
- JICA' s Capacity Enhancement Project for Coral Reef Monitoring in Palau (JICA = Japan International Cooperation Agency)
- There are other projects carried out by JICA and OFCF (Overseas Fishery Cooperation Foundation of Japan)

# Capacity Development Needs

- Enhancement of scientific information and knowledge
- Identification of EBSAs (Ecologically or Biologically Significant Areas)
- Identification of threats to marine biodiversity and implementation of mitigation measures
- Implementation of countermeasures
- Enhancement of MPAs (area and level of management) and networking

# Japan's Fisheries Management and Fishing-ground Conservation



Courtesy of Nobuyuki Yagi, Ph.D.

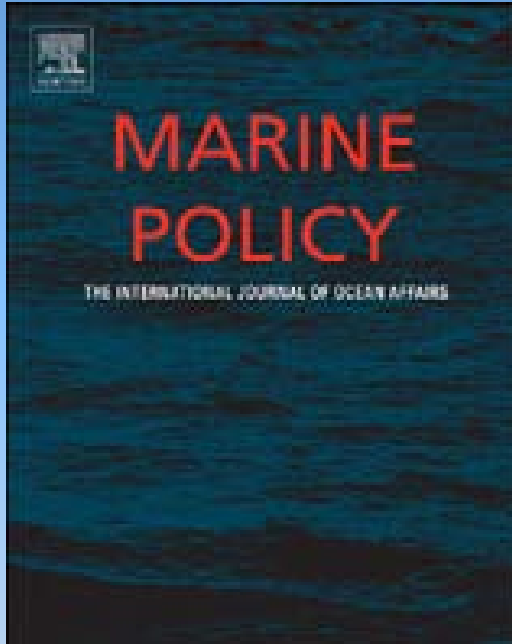
Graduate School of Agricultural and Life  
Sciences

The University of Tokyo

# Different situations and backgrounds between Japan and other countries

	<b>USA</b>	<b>Japan</b>
Institutional characteristics	Top-down	Bottom-up
Area scale	Large coverage	Small area
Basic approach	No-take, no-entry, or other restrictions	No-take and other measures (upstream tree-planting or other means)
Monitoring and enforcement	Gov't enforcement	Peer monitoring, gov't enforcement

# Number of MPAs in Japan



Marine protected areas in  
Japan: Institutional  
background and management  
framework  
(2010) Yagi et al. *Marine Policy*

- A survey was conducted to collect information of MPAs in Japan.
- 1161 locations of MPAs were identified.
- Of these, 30% are community-based autonomous MPAs managed by fishery cooperatives.

MPA type	Management authorities	Legal framework	Number of sites
Marine park areas	Ministry of the environment	Natural parks law	82
Marine special areas	Ministry of the environment	Nature conservation law	1
Wildlife protection areas	Ministry of the environment	Wildlife protection and appropriate hunting law	23
Protected waters	Ministry of agriculture, forestry, and fisheries	Act on the protection of fisheries resources	52
Legally-binding no-take zones	Ministry of agriculture, forestry, and fisheries	Prefectural fishery coordinating regulations	616
Community-based self-imposed no-take zones	Local fisheries cooperative association (FCA)	Published and unpublished FCA rules	387

Source: Yagi N. et al. Marine protected areas in Japan: Institutional background and management framework. Marine Policy (2010)

# Key characteristics

- 90% of the MPAs are fishery related regulation.
- The number of such MPAs roughly corresponds to the number of fishery cooperatives (around 1,000) in Japan.
- 30% of MPAs are self-imposed regulations agreed by local fishers in their tenure fishing areas.



Collective activities for habitat  
rehabilitation

# Activities outside of MPAs - river upstream tree planting -

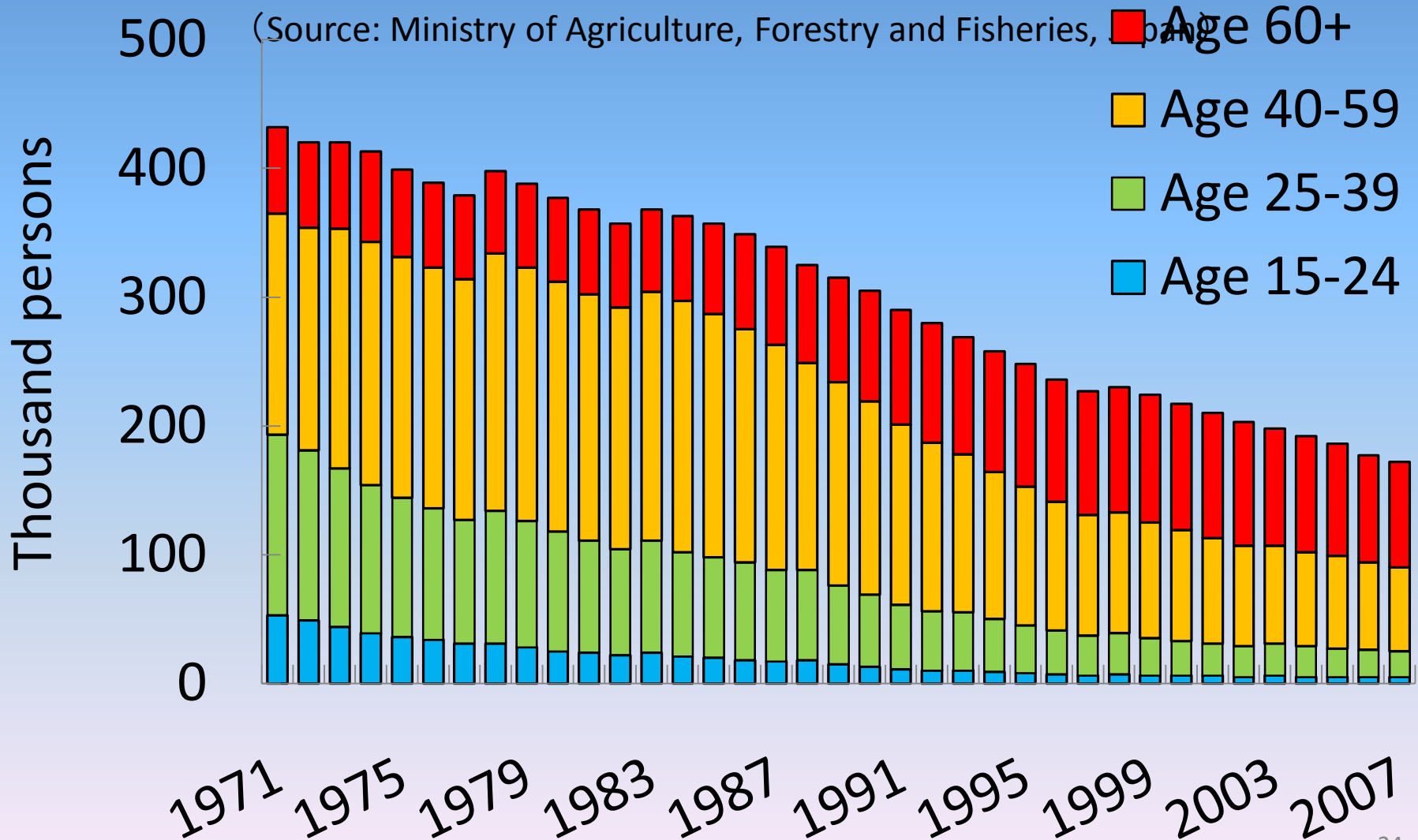


Pictures: <http://www.eco-akita.org/>

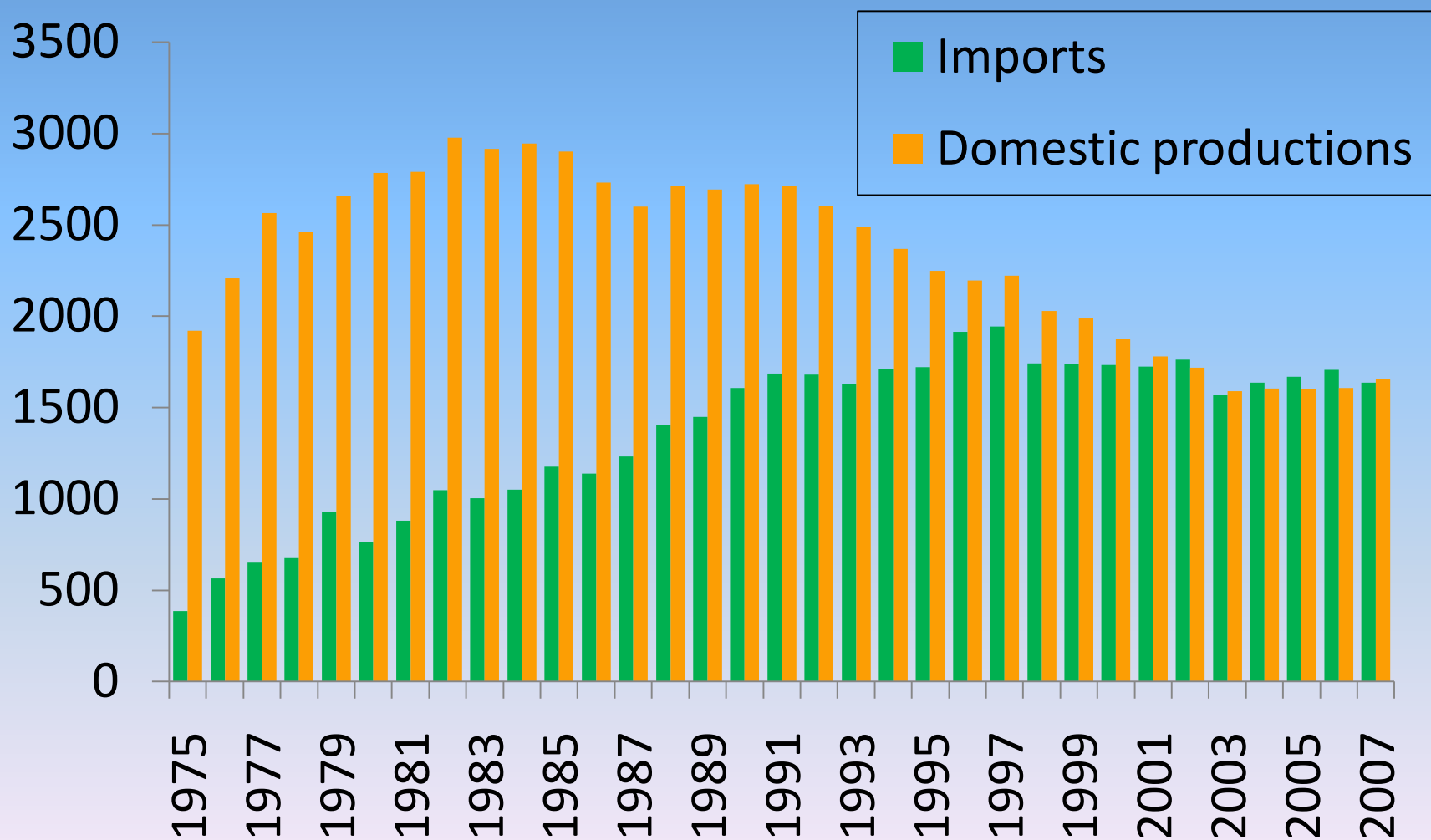
# But there are troubles:

## Number of fishermen in Japan

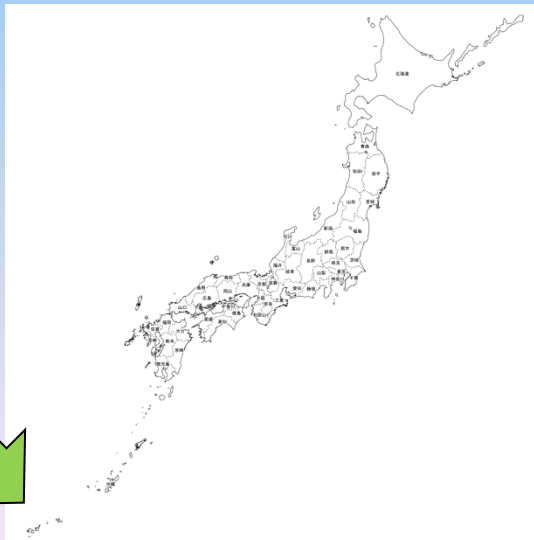
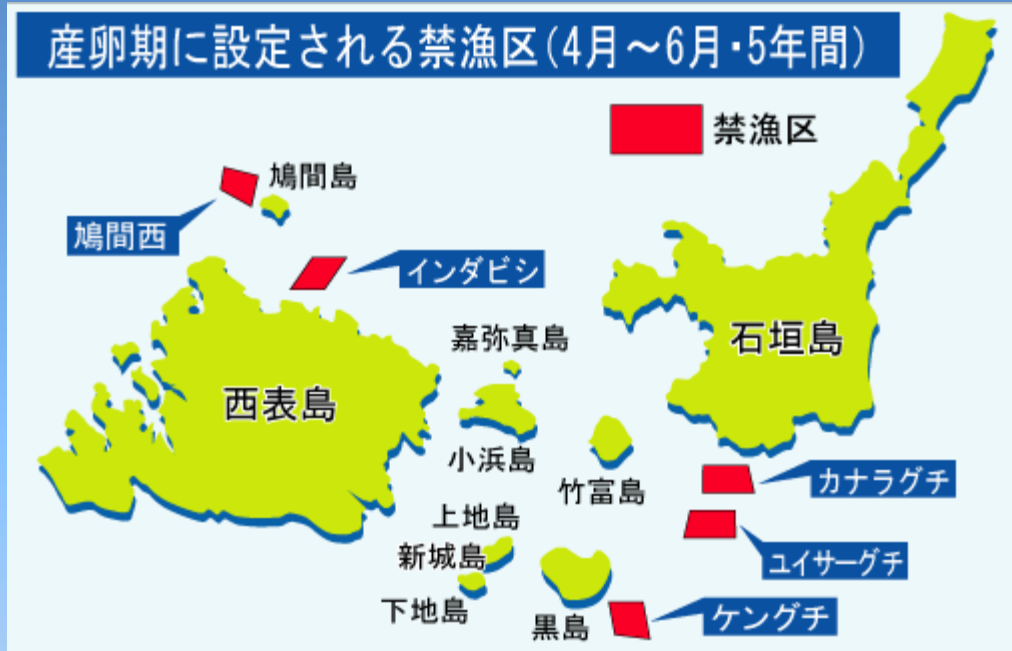
(Source: Ministry of Agriculture, Forestry and Fisheries, [Japan](#))



# Japan's domestic productions and imports in fishery products (unit: billion JPY)



# Example of no-take zone Yaeyama Islands Okinawa since 1998



# Conclusion

- Japanese MPAs are very large (8.3%), but addition of new areas is necessary to reach to the 10% Aichi Target.
- Fishermen play key role in the management of MPAs in Japan.
- The current system has been effective, but facing crises to sustain it.
- Establishment of good database of MPAs is urgent need for creating better MPA networks.
- NOWPAP framework can contribute for this need in the Japan Sea region.