

# **Experiences of MPA management in Japan**

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# Definition of MPAs in Japan

Marine Biodiversity Conservation Strategy of Japan (2011)

“A marine and coastal protected area means any **defined area** within or adjacent to a marine environment, together with its overlying waters and associated flora, fauna and historical and cultural features, **which has been reserved by legislation or other effective means, including customs**, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings.”

Incl. areas protected by the local people's initiatives

# MPA Case 1: Walleye Pollock MPA in the Siretoko World Natural Heritage (WNH) area

- Shiretoko area was inscribed as the **WNH** in 2005.
- About 40% of local people works for fisheries industry.



- In order to protect the Spawning Stock of walleye pollock, local fishers autonomously planned, implemented, and enforced MPAs since 1995.
- Researchers has supporting such activity via scientific advice and stock assessment.
- When inscribed, UNESCO requested science-based and stricter management for walleye pollock. Then, fishers expanded MPAs in 2005. Also, fishers are collecting biological data of the pollock (size, sex, maturity, etc.)
- This MPA is now formally included as a part of the UNESCO World Heritage Management Plan.
- UNESCO Heritage Committee adopted in 2013 as “an excellent model” for the world heritage elsewhere.

# Autonomous MPAs to protect Walleye Pollock

- |               |               |                 |
|---------------|---------------|-----------------|
| 1 カギノ手・上平瀬    | 13 ローソク・ラクヨウ  | 25 赤岩・脚序        |
| 2 セキ上平瀬       | 14 ヲダマ        | 26 羅臼前下ブケ       |
| 3 フタリ上平瀬      | 15 中の瀬ウマノセゴ   | 27 飛仁帯前深み       |
| 4 カギノ手・テングのハナ | 16 沖の瀬        | 28 天狗岩前深み       |
| 5 セキ・テンジン     | 17 サシルイ・天狗岩   | 29 沖の瀬とメガネの中層深み |
| 6 フタリ・浜二      | 18 ガンゴ知刀良前・ルサ | 30 ルサ前深み        |
| 7 カワナカ・ソスケ    | 19 ワシ岩・セセキ    | 31 カモユンベ前深み     |
| 8 中の瀬川の縁れ上    | 20 相泊         | 32 モイルス深み       |
| 9 浜一          | 21 カモユンベ・ウズレ  | 33 瀬の下深み        |
| 10 ラウス前・チトライ  | 22 観音・デバリ     | 34 赤岩深み         |
| 11 中の瀬川の縁れ下   | 23 モイルス・ベキン   |                 |
| 12 中の瀬川の縁れ    | 24 瀬の淵・カブト    |                 |

[スズノ漁業]

※ 警漁区 4, 8, 11, 14, 23, 24, 25

※ 警漁期間 3月20日 ~ 漁期終了

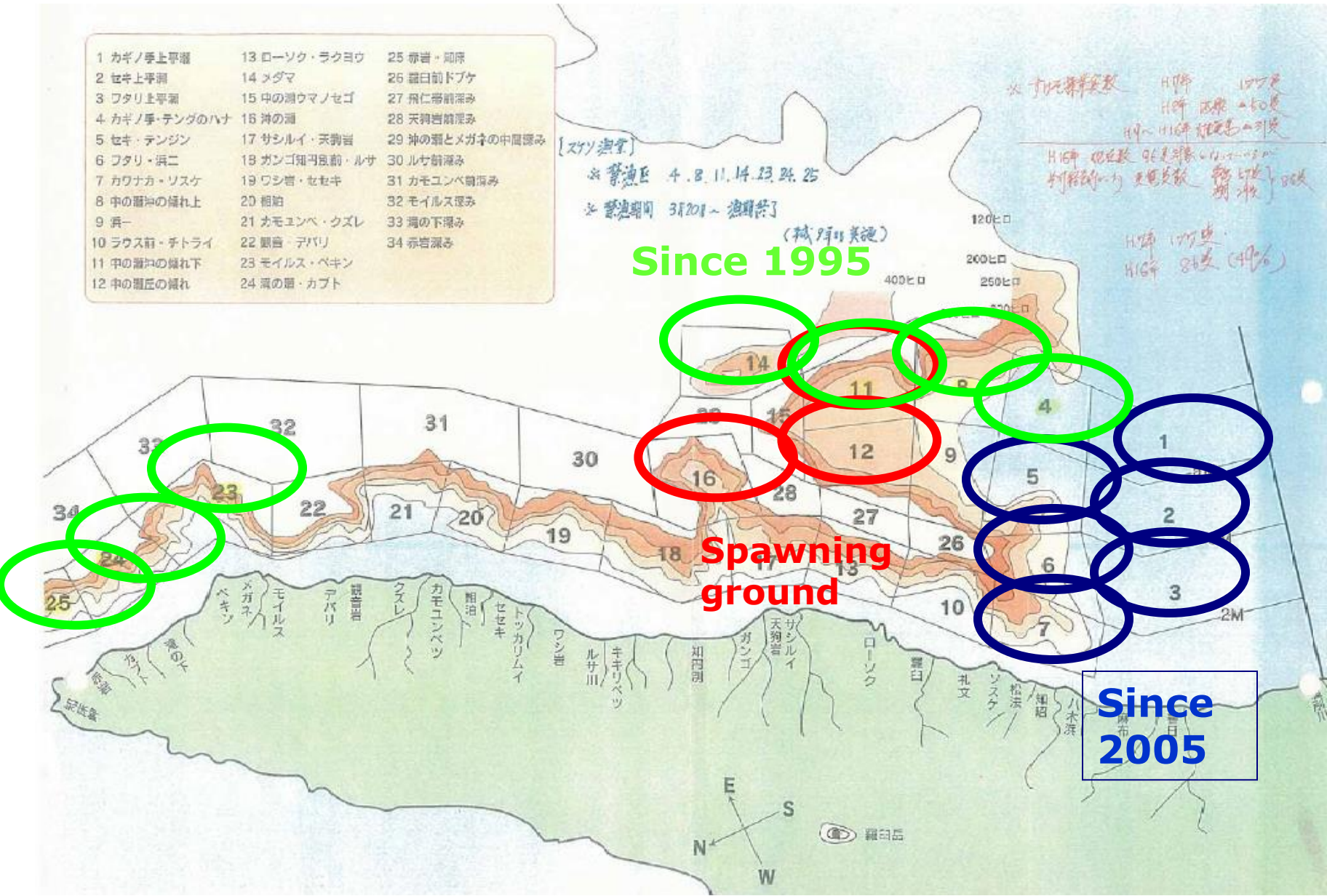
(概算) 1000m

Since 1995

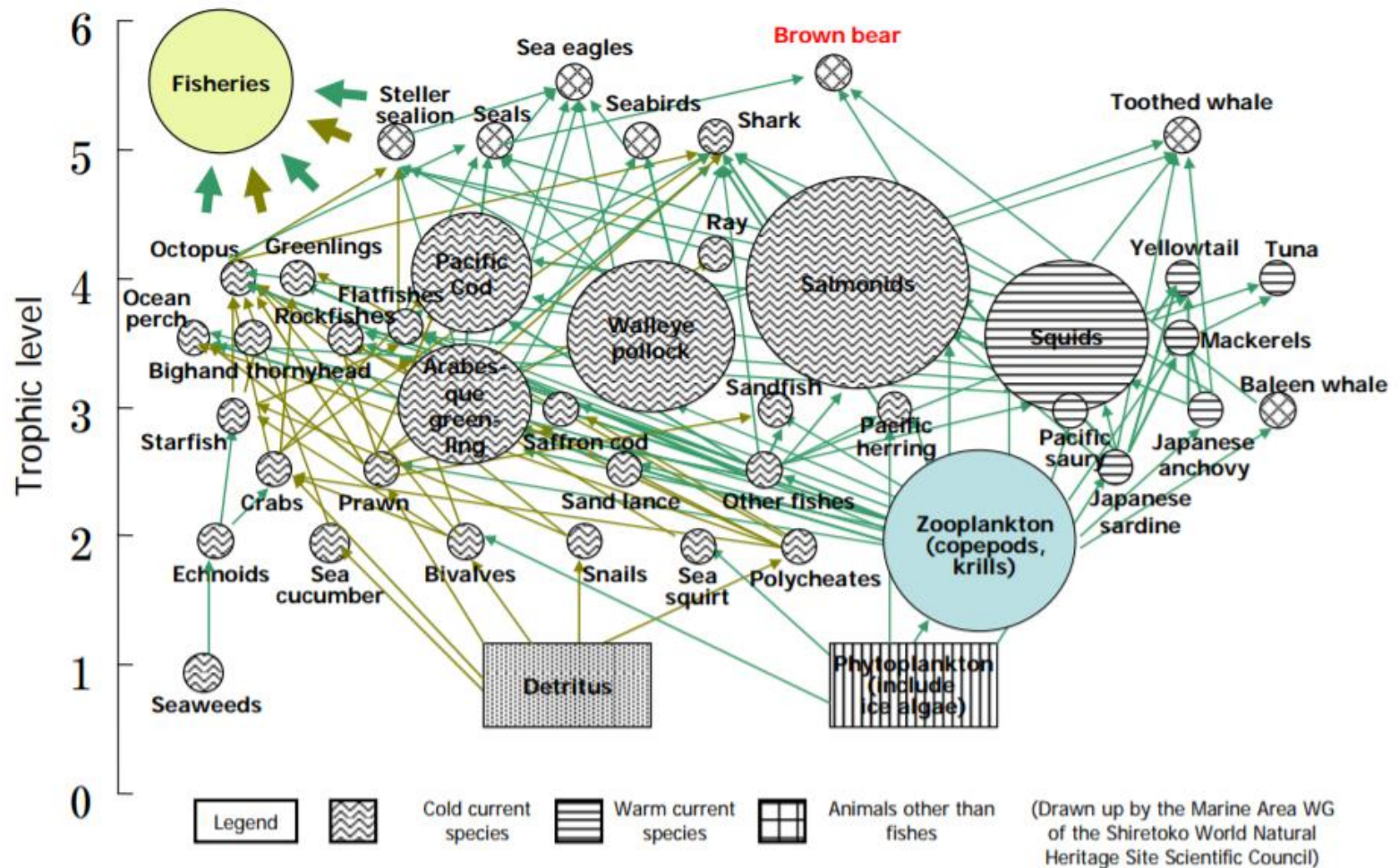
Spawning ground

Since 2005

※ 寸此警漁区 H17年 10ヶ所  
 H18年 15ヶ所  
 H19~H16年 10ヶ所  
 H16年 10ヶ所 96隻 (100%)  
 H17年 17隻 (17%)  
 H18年 8隻 (49%)



# Coastal Food web at Shiretoko WNH area (WNH Scientific Council, 2007)

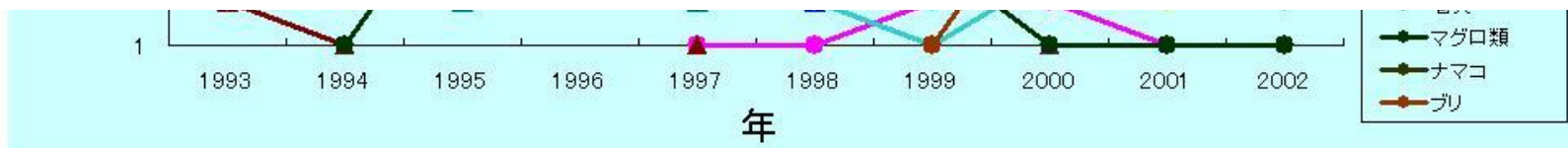


Many of them are the fisheries target (we are eating them).

# Fisheries production statistics (tons) at Shiretoko WNH, compiled by 3 Fishers Orgs.



**Very informative time-series data!!**  
**Local fishers are playing the core role of**  
**the marine ecosystem monitoring.**  
**(and its very cheap!!)**



Other monitoring items, such as climate, sea ice, water quality, etc., are monitored by the government (role sharing). 7

## MPA Case 2: Coral reef rehabilitation in Okinawa

- **Overuses by scuba divers** (anchoring, incidental contacts, sand disturbance, etc.) caused deterioration of coral reefs since the 1990s.
- **Stakeholders:** local fishers, local scuba diving org., local research station, and Village Office.





- SHs' roles : **fishers** and **scuba diving org.** cooperatively planed and **set MPAs** (strictly no-entry zone), and conducted voluntary monitoring. **Research institute** made advice and training of scientific monitoring methods. Recently, the **Village Office** authorized MPAs as a part of village activities.
- **Link with high-level policy** : **Ministry of Env.** (National) certified this activity, and now formally promoting the “eco-tourism” in this area via Ministry's webpage.

# Eco-tourism webpage made by the Ministry of Environment

## エコツーリズム Ecotourism

エコツーリズムの  
ススメTOP | エコツーリズム  
とは | 推進法認定団体 | エコツーリズム  
推進法 | 環境省の  
取り組み | 地域の  
取り組み | サイトマップ

[エコツーリズムのススメTOP](#) > [推進法認定団体](#) > [渡嘉敷村エコツーリズム推進協議会及び座間味村エコツーリズム推進協議会](#)

### 推進法認定団体

エコツーリズム推進法で認定  
された団体

渡嘉敷村エコツーリズム推進  
協議会及び座間味村エコツー  
リズム推進協議会

1. 慶良間地域ではどのよう  
にエコツーリズムに取り組ん  
でいるのですか？

2. 慶良間地域のエコツーリ  
ズム推進全体構想はどのよ  
うなものですか？

渡嘉敷村エコツーリズム推進協議会(沖縄県渡嘉敷村)及び座間味村エコツーリズム推進協議会(沖縄県座間味村)

慶良間諸島は、沖縄県那覇市の西方10～40キロメー  
トルの海上に浮かぶ渡嘉敷島、座間味島、阿嘉島、慶留間  
島等の有人島をはじめ、大小30余りの島々で構成されて  
おり、行政上は渡嘉敷島を中心とする渡嘉敷村と座間味  
島を中心とする座間味村の2村に分かれています。

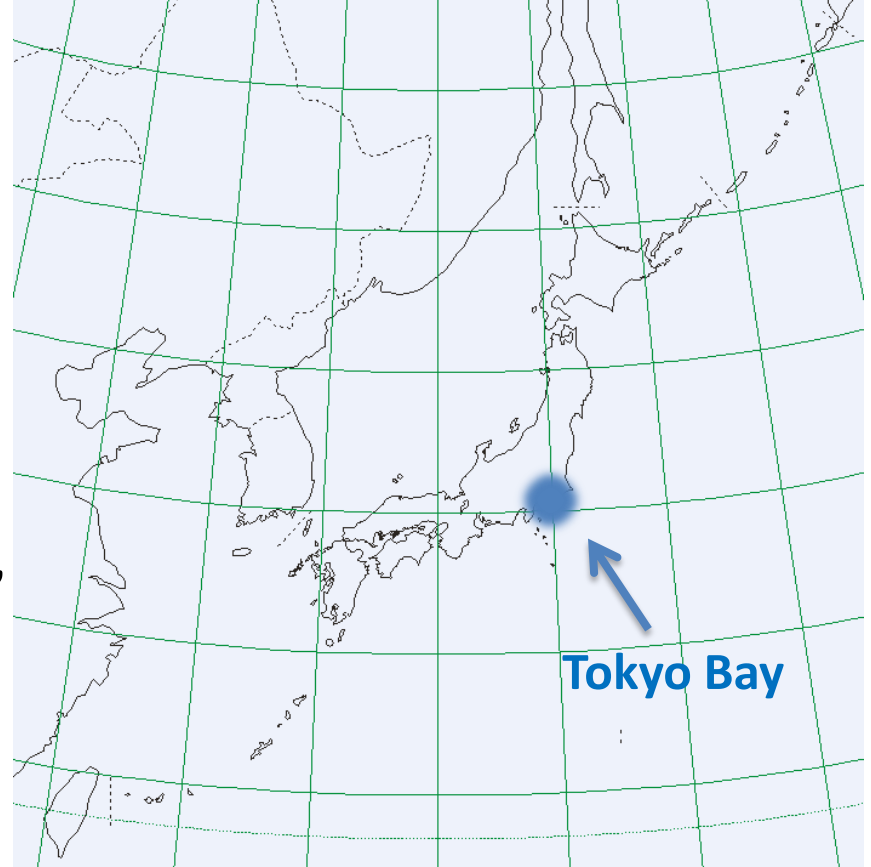
渡嘉敷島は、面積約15平方キロメートルで700人余りが  
住む慶良間諸島最大の有人島です。一方、座間味村は、  
有人3島(座間味島、阿嘉島、慶留間島)から成る面積  
19.74平方キロメートルの離島村で、人口は900人余り  
です。島の産業は、美しい慶良間の海を利用したダイビング  
などの観光関連産業や水産業、農業等です。島を訪れる  
年間15万人ほどの観光客のほとんどは、美しい海でのダイビングやスノーケリング、ビーチでの遊泳  
などを目的としており、海域のサンゴ保全と利用は地域経済の振興にも深く関わっています。



平成24年7月3日 認定書の手交

## MPA Case 3: Sea grass MPA in Tokyo Bay

- **The most urbanized bay** in Japan. In Yokohama city, only 500m of natural coast is left out of 140 km coastline.
- **Stakeholders:** Env. NGOs, local residents, local schools, local researchers, local fishers, recreational users, etc.



- An NGO started bottom clean up activities, and local researcher started experimental re-plantation (1990s-). Then, local fishers set the No-take zone at this area. Now, the re-plantation activities are joined by local residents, schools, etc.
- The formal alliance among above stakeholders was established, and governments (City, Fisheries Agency, Cabinet office, etc) financially support this alliance since 2003.

# Lessons from Japanese cases

- \* All local users of ecosystem services (eg. fishery, tourism, education, leisure, NPO, etc. ) , scientists and governments can cooperate together for effective MPAs
- \* A wide variety of MPAs could be established **autonomously and flexibly** to match to the **local specific objectives and problems** in each regions.

## ***CBD (2001) “Ecosystem approach”***

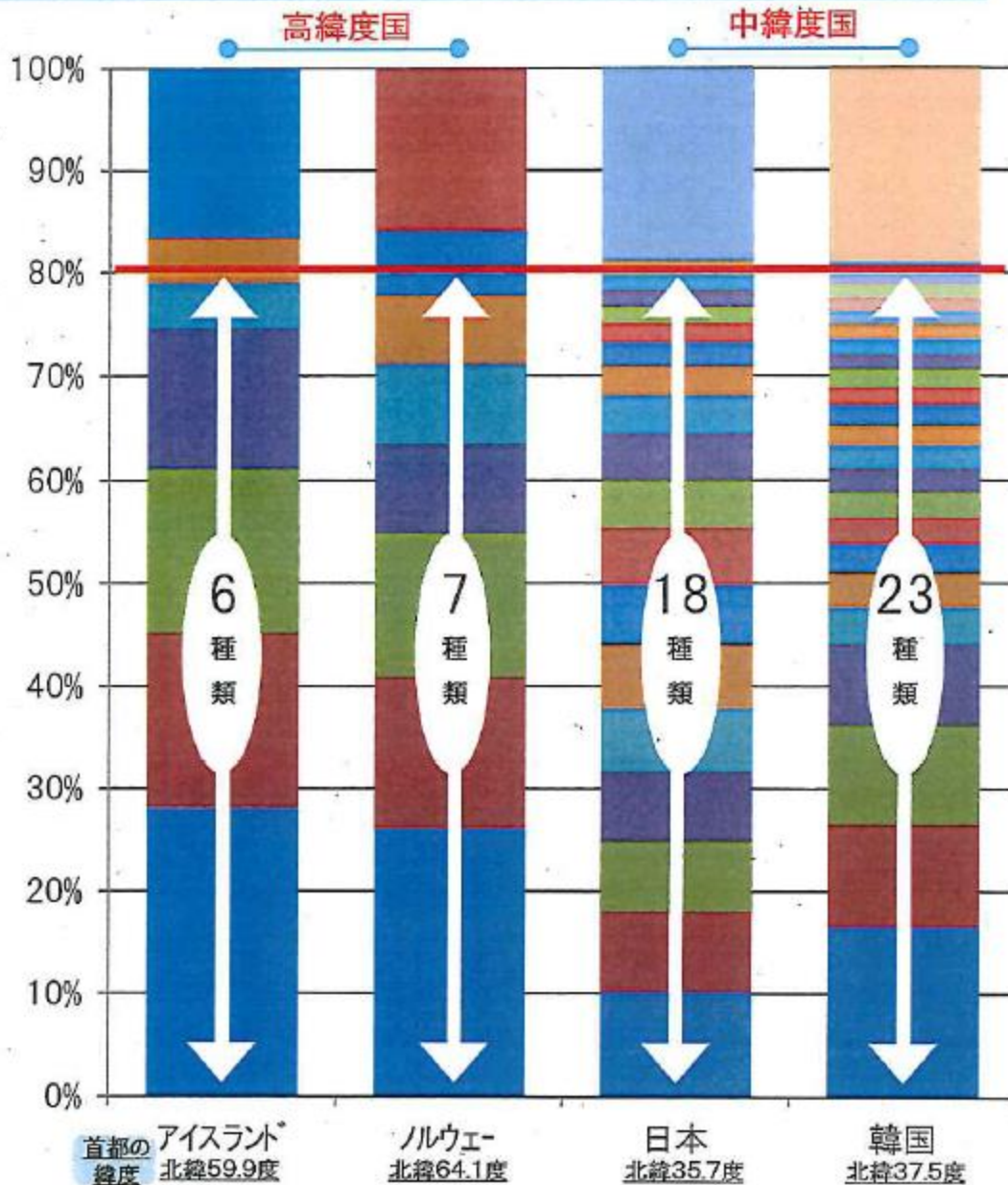
***Principle 1: The objectives of management ... are a matter of societal choices.***

***Principle 2: Management should be decentralized to the lowest appropriate level.***

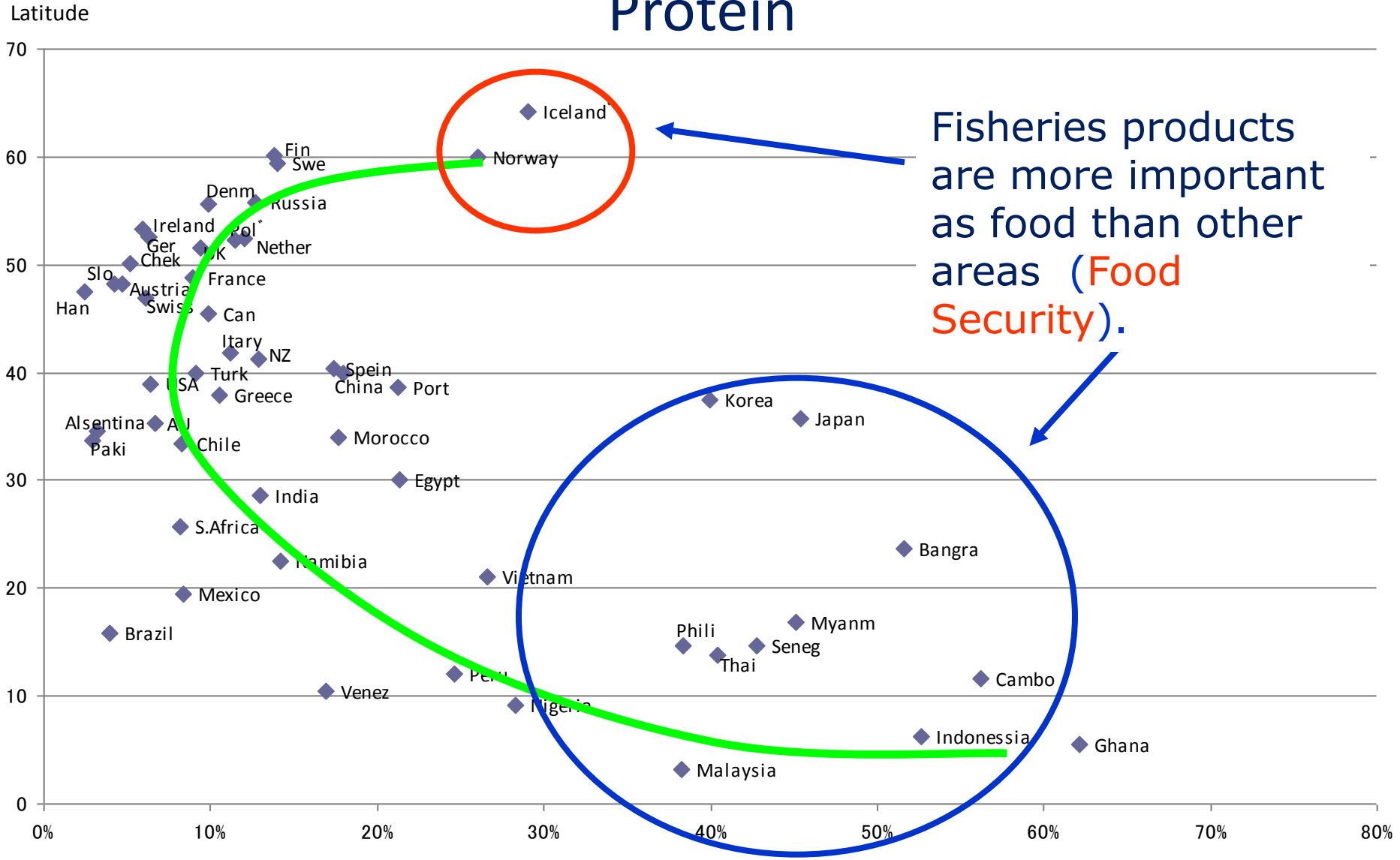
Thank you very much



# 全漁獲量の8割を占める魚種数の比較(平成23年)



# Percentage of Seafood as the source of Animal Protein





# Impacts to the National Policy

- **The Strategy for the Conservation of Marine Biodiversity (2011)** by the **Ministry of Environment**, formally recognized these “local and autonomous” activities, and says “Such **autonomous measures taken by the local people may become a more effective measure** in conserving and managing biodiversity than regulations based on laws, **because flexible and detailed management** by the related entities can be expected.”
- Then, **the National Biodiversity Strategy (2012)** set by the **Cabinet Office**, identified one of its 7 **Principal Perspective** as “locally based activities”.