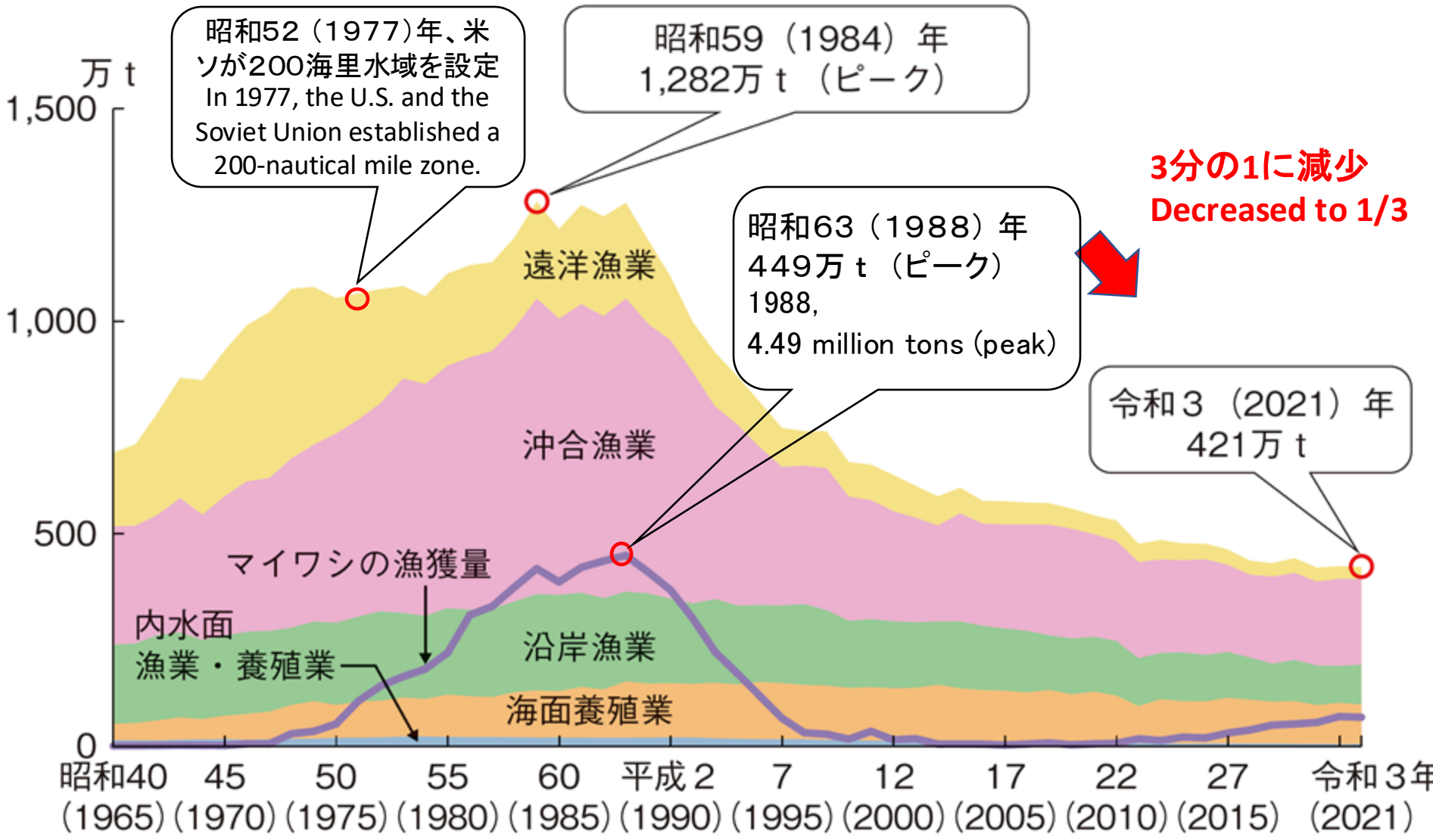


水産業の現状と課題 大日本水産会 関係資料 令和6年10月9日

Current Status and Challenges in the Fishing Industry
Japan Fisheries Association, Related Data October 9th, 2024

我が国漁業・養殖業生産量の推移 Trends in Japan's Fishery and Aquaculture Production



資料：農林水産省 Source: Ministry of Agriculture, Forestry and Fisheries (Japan)

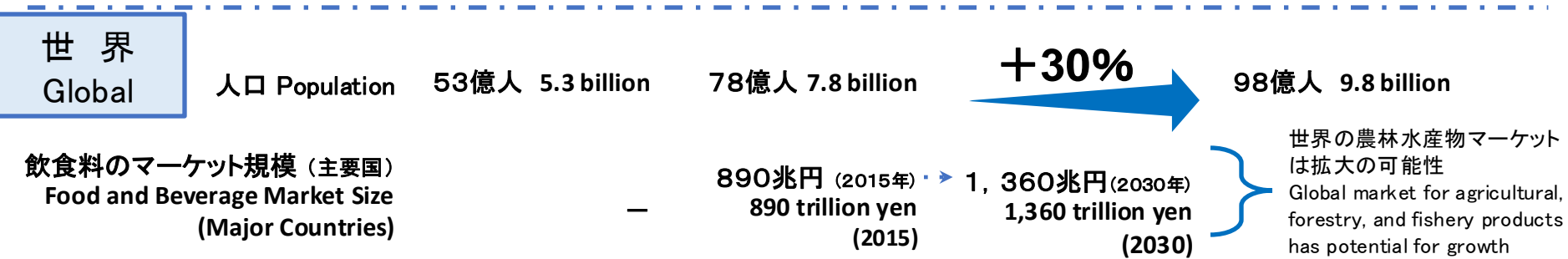
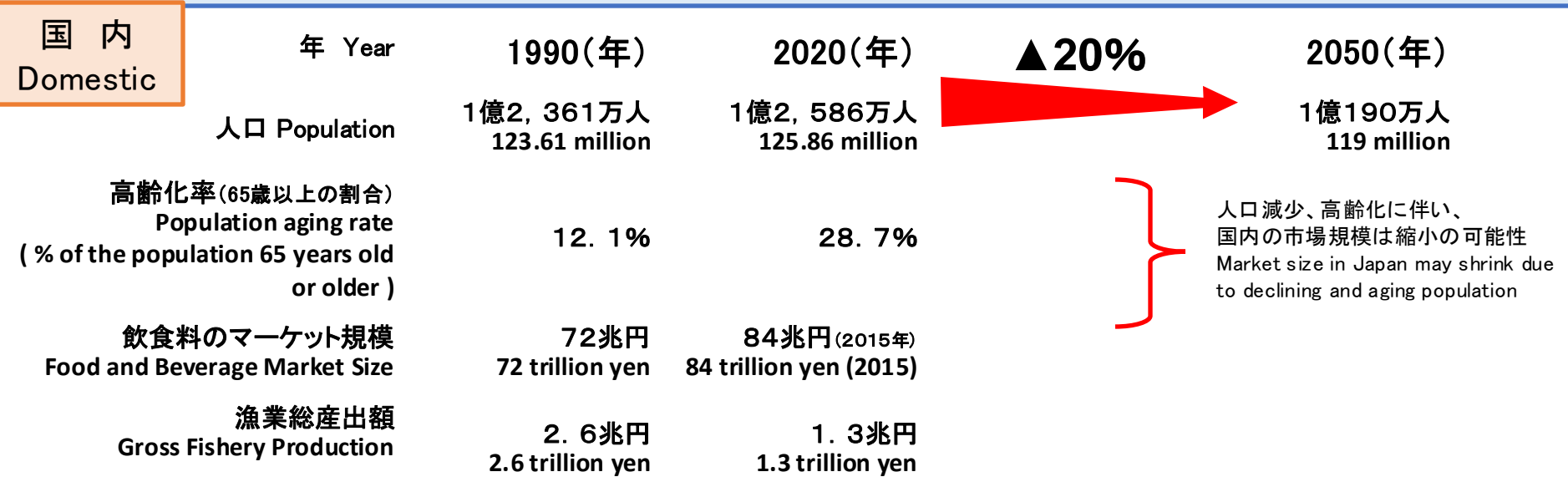
国内外のマーケットの変化

Promoting Changes in Domestic and International Markets

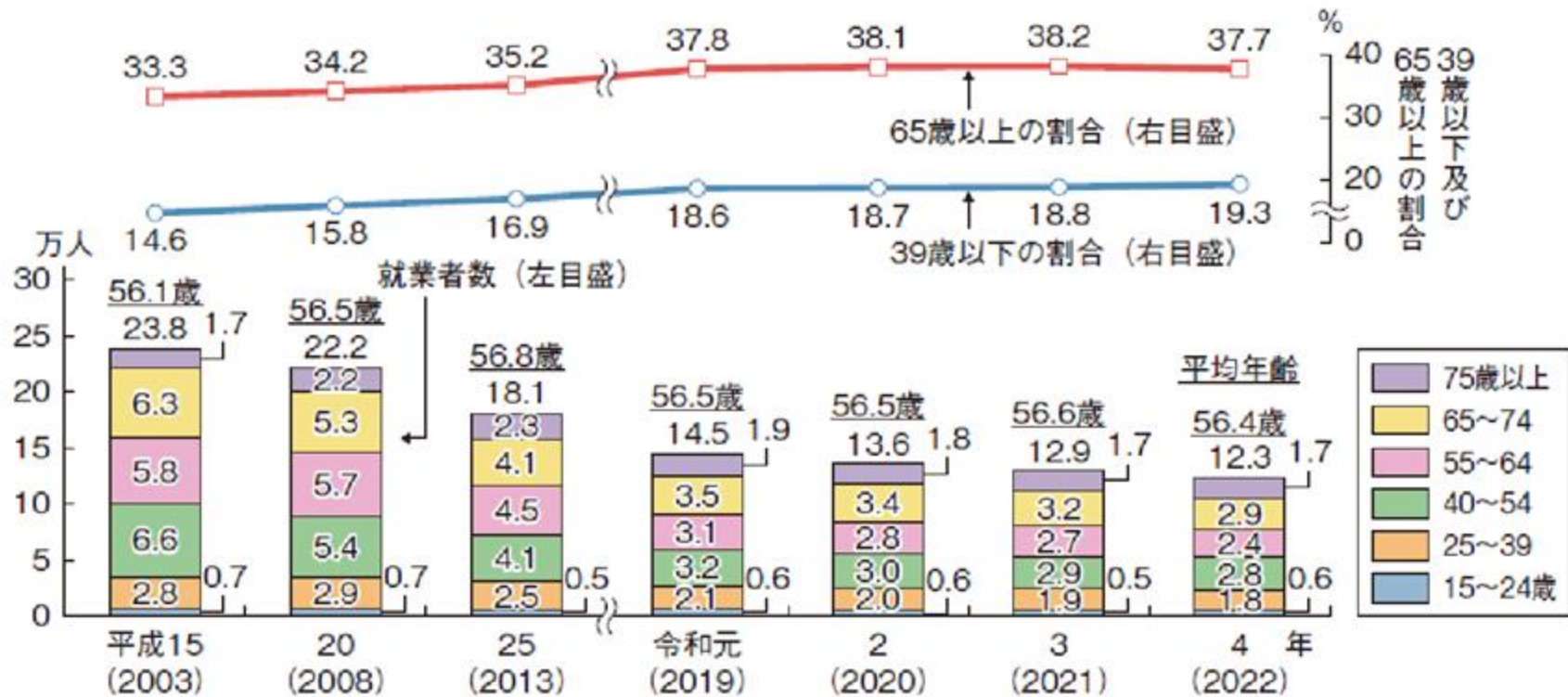
○国内の市場規模は、人口減少や高齢化に伴い、縮小の可能性。一方、世界の農林水産物マーケットは、人口の増加に伴い、拡大する可能性。

○国内外のマーケットの変化に鑑みれば、農林水産業の生産基盤を強化し、農林水産物・食品の輸出促進により世界の食市場を獲得していくことが重要。

- The domestic market size may shrink due to population decline and aging. On the other hand, the global market for agricultural, forestry, and fishery products is likely to expand as the population increases.
- In light of the changes in domestic and global markets, it is important to strengthen the production base of the agriculture, forestry, and fisheries industries and capture the global food market by promoting exports of agricultural, forestry, and fisheries products and food products.



漁業就業者数の推移 Number of Fishing Industry Workers



資料：農林水産省「漁業センサス」（平成15（2003）、20（2008）及び25（2013）年）及び「漁業構造動態調査」（令和元（2019）年以降）

- 注：1) 「漁業就業者」とは、満15歳以上で過去1年間に漁業の海上作業に30日以上従事した者。
 2) 平成20（2008）年以降は、雇い主である漁業経営体の側から調査を行ったため、これまでは含まれなかった非沿海市区町村に居住している者を含んでおり、平成15（2003）年とは連続しない。
 3) 平均年齢は、「漁業構造動態調査」及び「漁業センサス」より各階層の中位数（75歳以上の階層については80を使用。）を用いた推計値。

海洋環境の変化 Changes in Marine Environment

○日本近海における2022年までのおよそ100年間にわたる**海域平均海面水温(年平均)の上昇率は、 $+1.24^{\circ}\text{C}/100\text{年}$** 。世界全体平均 ($+0.60^{\circ}\text{C}/100\text{年}$)や北太平洋($+0.62^{\circ}\text{C}/100\text{年}$)よりも大きい。

○数日から数年にわたり急激に海水温が上昇する現象である**海洋熱波**。その**発生頻度は過去100年間で大幅に増加**。2021年9月の北海道太平洋沿岸における赤潮が拡大した要因の可能性。

○長期的に親潮の南下が弱まり、本州太平洋北部の底水温が上昇。

The average sea surface temperature (annual) increase rate in the seas around Japan over the 100 years to 2022 is $+1.24^{\circ}\text{C}/100\text{ years}$, which is higher than the global average ($+0.60^{\circ}\text{C}/100\text{ years}$) and the North Pacific ($+0.62^{\circ}\text{C}/100\text{ years}$).

Ocean heat waves are phenomena in which ocean temperatures increase rapidly over a period of several days to several years. The frequency of their occurrence has increased significantly over the past 100 years, and may have been a factor in the expansion of the red tide along the Pacific coast of Hokkaido in September 2021.

Long-term weakening of the southward migration of the Oyashio Current and increase in bottom water temperature in the northern Pacific Ocean of Honshu (main island of Japan).

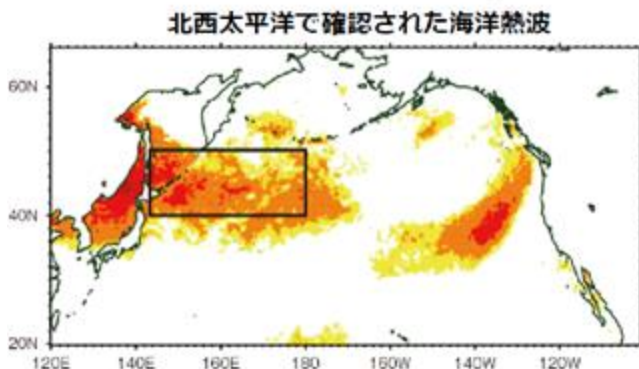
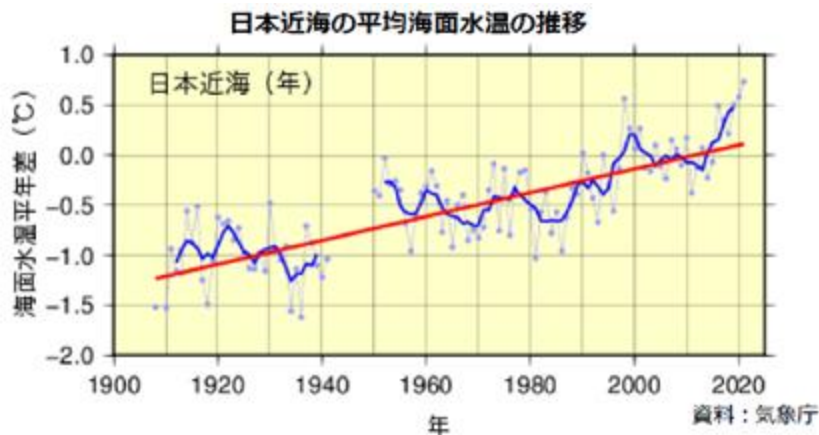
○サンマ、スルメイカ、サケの漁獲量は、引き続き**減少傾向**。

○海洋環境の変化は、**中層域～底層域**の資源にも影響。

Catch of saury, Japanese common squid, and salmon continues to decline.

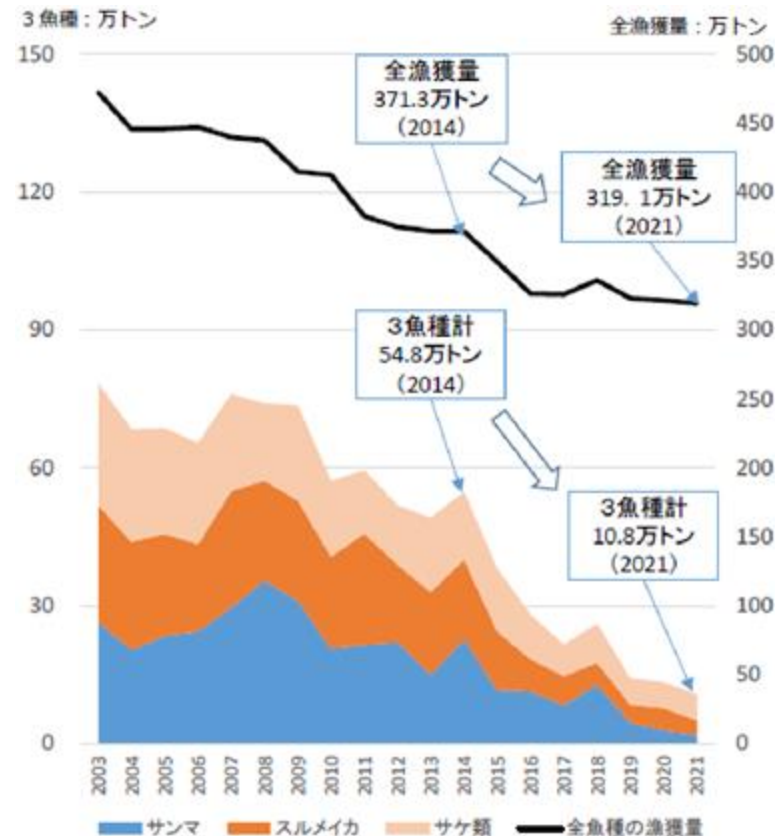
Changes in the marine environment have also affected **mid- to bottom-water resources**.

我が国漁獲量・3魚種漁獲量の推移
Trends in Japan's catch and catch of 3 fish species



資料: 原著論文 Kuroda and Setou (2021) Remote Sens. 13, 3989 より抜粋。

注: 図中の色は、2021年7月30日の海洋熱波の強度(30年間の日別水温からの差を規格化)を示す。黒枠の領域での2021年7~8月の海洋熱波は、昭和57(1982)年以降で最大であった。



資料: 漁業・養殖業生産統計

水産業の生産力向上と持続性の両立に向けた取り組み

Efforts to Improve Productivity and Sustainability of the Fishing Industry

漁場・ 資機材

1. 漁場環境の保全、 環境負荷軽減の推進

- (1) 水産資源の維持・増大
 - ・資源調査・評価の充実・科学的知見に基づく資源管理
- (2) 藻場・干潟の保全、創造
- (3) 漁船・漁具の環境負荷低減
 - ・電化・燃料電池化、LED照明等の活用
 - ・漁具・漁網のリサイクルの推進
- (4) 養殖における環境負荷低減
 - ・沖合域を含む養殖適地の確保、浮沈式生簀等の普及
 - ・養殖種苗の人口種苗化
 - ・輸入魚粉に依存しない配合飼料、魚粉代替飼料の開発
- (5) 漁港施設等への再生可能エネルギー導入や省エネ対策

生産

2. 海洋環境の変化も踏まえた持続的 かつ効率的な生産体制の構築

- (1) 生産性・労働環境・安全性の向上、環境負荷低減
 - ・漁船・養殖施設を含め、漁業・養殖のスマート化、効率化
 - ・効率的操業を可能にするための漁船、養殖施設、機器等の導入
 - ・労働環境の改善、若者の就業促進、女性の活躍
- (2) 海洋環境に柔軟に対応した生産体制
 - ・獲れる魚種・漁場の変化に対応できる漁法
 - ・漁獲対象種や漁法の複合化・転換
 - ・養殖種苗の改良、育種技術開発
- (3) 経営の安定

多様な魚食文化の維持・発展
国民への水産物の供給
地域の所得・雇用の増大
地球・海洋環境の保全

消費

4. 持続可能な消費の拡大 や魚食普及、食育の推進

- (1) 消費者ニーズへの対応、付加価値の向上
- (2) 魚食普及、食育の推進による需要の喚起、食品ロス対応
- (3) 持続可能な水産物の消費拡大(水産エコラベルの活用)
- (4) 輸出促進
- (5) 適切な価格転嫁
- (6) 消費者と生産者の相互理解促進、海業の推進

加工・ 流通

3. 持続可能な加工・ 流通システム 確立

- (1) 産地市場、流通の機能強化、合理化
 - ・ICT等の新たな技術や最新の冷凍技術・鮮度保持技術等の活用
 - ・多様な流通ルート構築
 - ・IUU漁獲物の排除
- (2) 加工業の生産性向上、環境変化への適応
 - ・持続可能な加工原料の調達(加工原料の転換や多様化)
 - ・先端技術を活用した機器の導入による生産性向上
 - ・環境負荷低減に資する機器の導入
 - ・ESG、人権

水産業の生産力向上と持続性の両立に向けた取り組み

Efforts to Improve Productivity and Sustainability of the Fishing Industry

Fishing grounds, Materials and Equipment

1. Preservation of the fishing ground environment, promotion of environmental load reduction

- (1) Maintenance and increase of fishery resources
 - Resource management based on scientific knowledge and enhancement of resource research and assessment
- (2) Preservation and creation of seaweed beds and tidal flats
- (3) Reduction of environmental impact of fishing boats and gear
 - Electrification, use of fuel cells, LED lighting, etc.
 - Promotion of recycling of fishing gear and nets
- (4) Reduction of environmental impact of aquaculture
 - Secure suitable aquaculture sites, including offshore areas, and promote the use of floating and sinking fish ponds, etc.
 - Use of artificial seedlings for aquaculture
 - Development of formula feeds that do not depend on imported fishmeal and alternative feeds to fishmeal
- (5) Introduction of renewable energy and energy-saving measures in fishing port facilities, etc.

Production

2. Building a sustainable and efficient production system that also takes into account changes in the marine environment

- (1) Improve productivity, working environment and safety, and reduce environmental impact
 - Promoting smart and efficient fishing and aquaculture, including fishing vessels and aquaculture facilities
 - Introduction of advanced fishing vessels, aquaculture facilities, and equipment to enable efficient operations
 - Improvement of the working environment, promotion of youth employment, and active participation of women
- (2) Production system that flexibly responds to the changing marine environment
 - Fishing methods that can respond to changes in the species caught and fishing grounds
 - Combining and conversion of fishing methods and target species
 - Improvement of aquaculture seedlings and development of cultivation technology
- (3) Management stability



Consumption

4. Expanding sustainable consumption, promoting fish diets and dietary education

- (1) Respond to consumer needs and increase added value
- (2) Promote fish consumption, stimulate demand by promoting nutrition education, and address food loss
- (3) Increase consumption of sustainable marine products (increase awareness of marine products eco-label)
- (4) Promote exports
- (5) Appropriate price pass-on
- (6) Promotion of mutual understanding between consumers and producers, promotion of marine industry

Processing and Distribution

3. Establishment of sustainable processing and distribution system

- (1) Strengthening and streamlining the functions of local markets and distribution
 - Utilization of new technologies such as ICT and the latest freezing and freshness preservation technologies
 - Establishment of diverse distribution routes
 - Elimination of IUU catches
- (2) Improve productivity of processing industry and adapt to environmental changes
 - Procurement of sustainable processing materials (conversion and diversification of processing materials)
 - Improve productivity through the introduction of equipment that utilizes cutting-edge technology
 - Introduction of equipment that contributes to reduction of environmental impact
 - ESG, human rights