

Bluefin Tuna Farm

~ Sojitz's challenge to achieve a sustainable food system ~



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Overview of Sojitz Corporation

Total assets

¥2.3 trillion

Number of Branches & Offices

84

Domestic: 5 (Including the Head Office)

Overseas: 79

Number of Subsidiaries and Affiliates

435

Domestic: 129

Overseas: 306

Number of Employees

19,463

Non-consolidated : 2,551

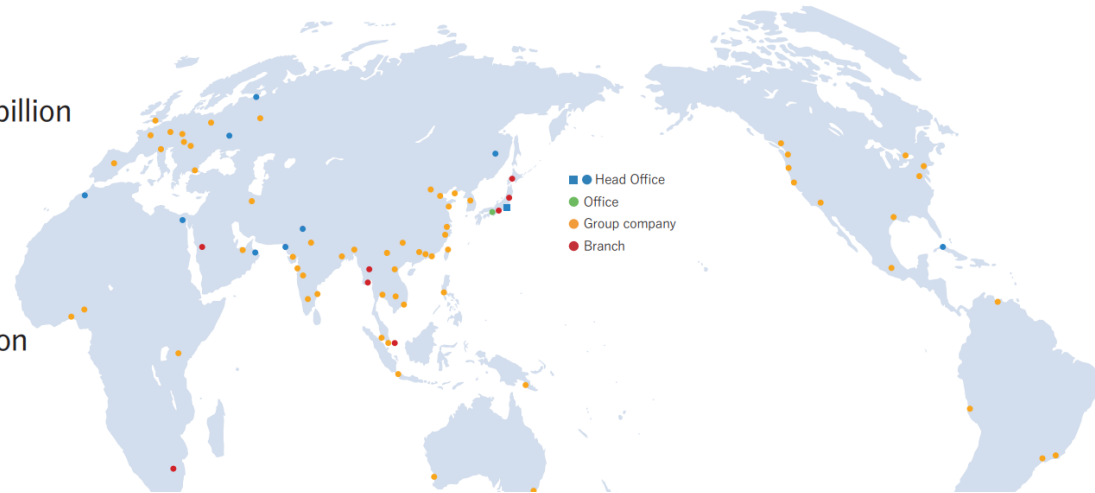
Consolidated: 19,463

Total equity

¥619.0 billion

Profit for the year

¥27.0 billion



Automotive Division



Aerospace & Transportation Project Division



Infrastructure & Healthcare Division



Metals, Mineral Resources & Recycling Division



Chemicals Division



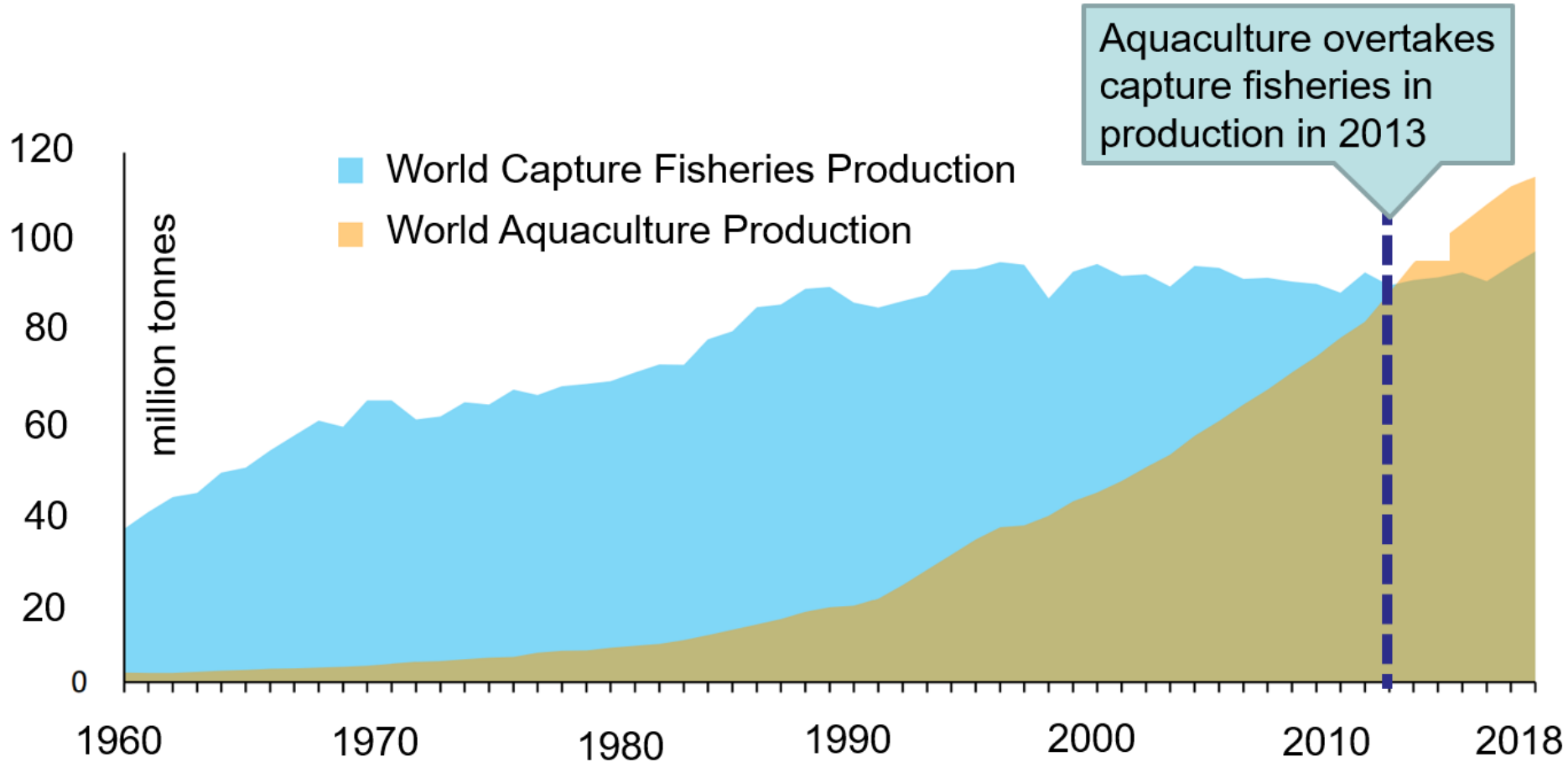
Consumer Industry & Agriculture Business Division



Retail & Consumer Service Division

The Rise of Aquaculture

- The global aquaculture has grown continuously over the past 40 years
- Aquaculture holds the key to meet the ever-increasing demand for fish

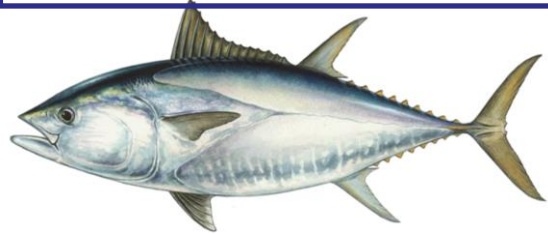


(Source: FAO "Fishstat", The Fisheries Agency)

Bluefin Tuna Under Threat...



Atlantic Bluefin Tuna/Pacific Bluefin Tuna(クロマグロ)



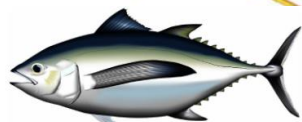
Southern Bluefin Tuna
(ミナミマグロ)



Bigeye Tuna(メバチ)



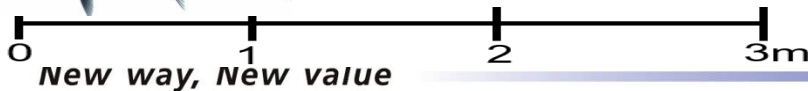
Yellowfin Tuna(キハダ)



Albacore Tuna(ビンナガ)



Skipjack Tuna(カツオ)



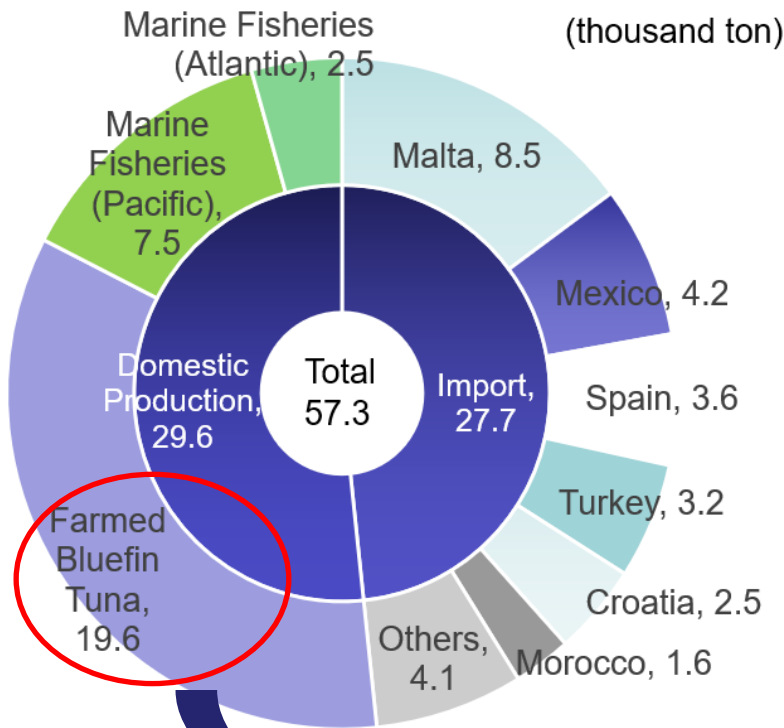
Facts about Bluefin Tuna

- Highly prized as sashimi and sushi
- Pacific Bluefin Tuna was designated as “Vulnerable” in 2014

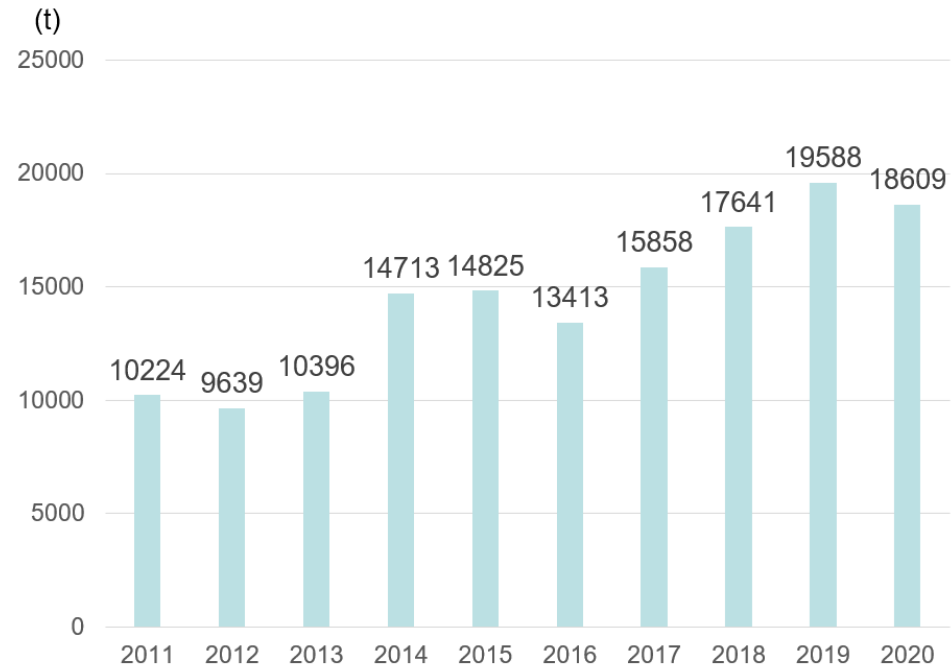


Sea Change in the Bluefin Tuna Farming

 **Bluefin Tuna Supply in Japan(2019)**



 **Farmed Bluefin Tuna Output in Japan**



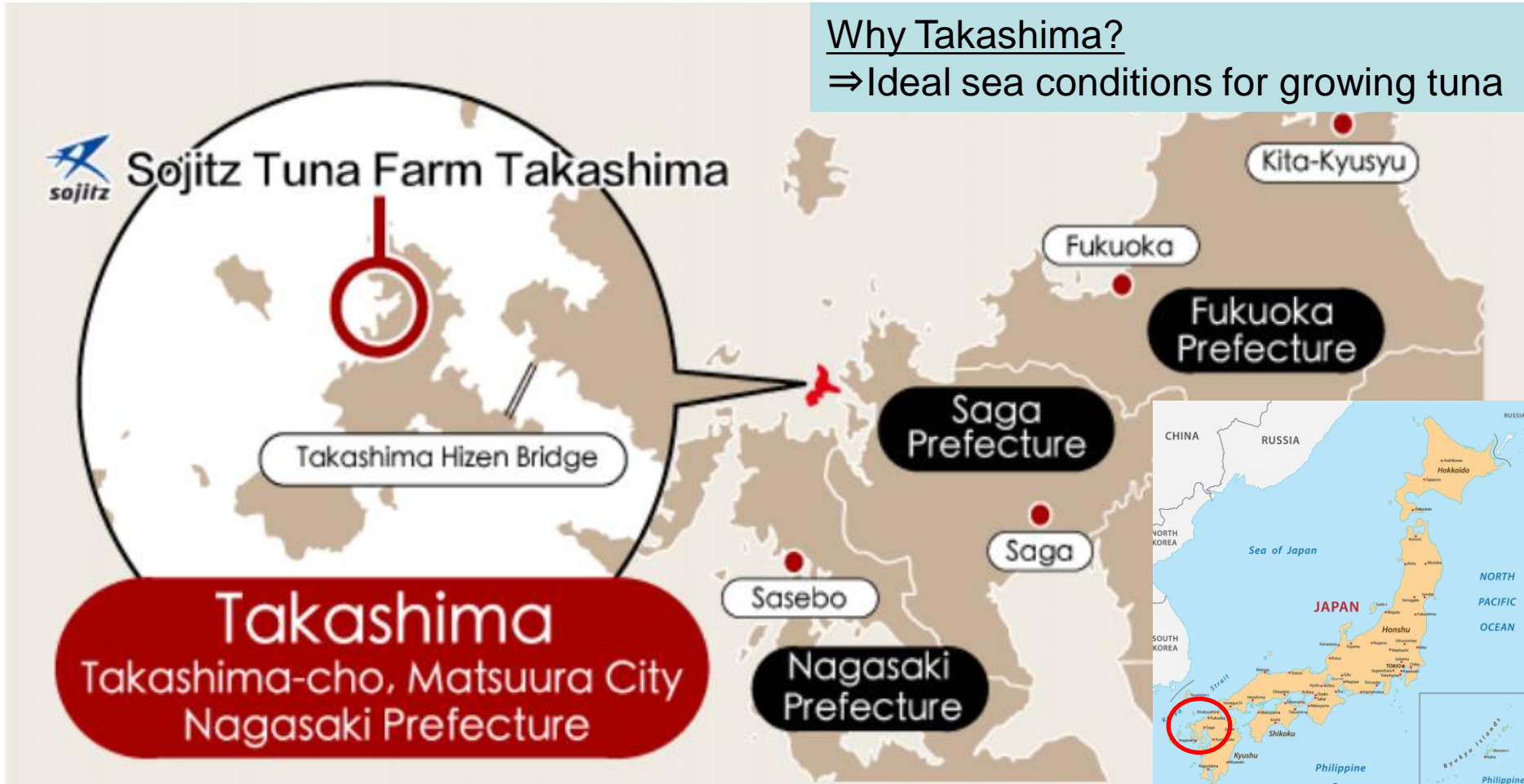
(Source: The Fisheries Agency)

Sojitz's Tuna Farm Takashima

- Sojitz has more than 30 years of experience in importing tuna
- Started the Bluefin Tuna Farming business in 2008 to provide a stable supply of safe and high-quality bluefin tuna

Why Takashima?

⇒ Ideal sea conditions for growing tuna



Tuna Farming Process

① Procurement of juveniles/artificial seeds



- Both wild-caught juveniles (90%) and artificially hatched seeds (10%) are procured
- Sojitz Tuna Farm acquired SCSA* Certification as a producer of sustainable seedlings

* SCSA: The Seedlings Council for Sustainable Aquaculture (a Japanese NPO)

New way, New value

② Feed Management



- Various initiatives are pursued to optimize feeding through the use of IoT/AI
- An automated feeding system is developed to provide the tuna with compound pellet feed

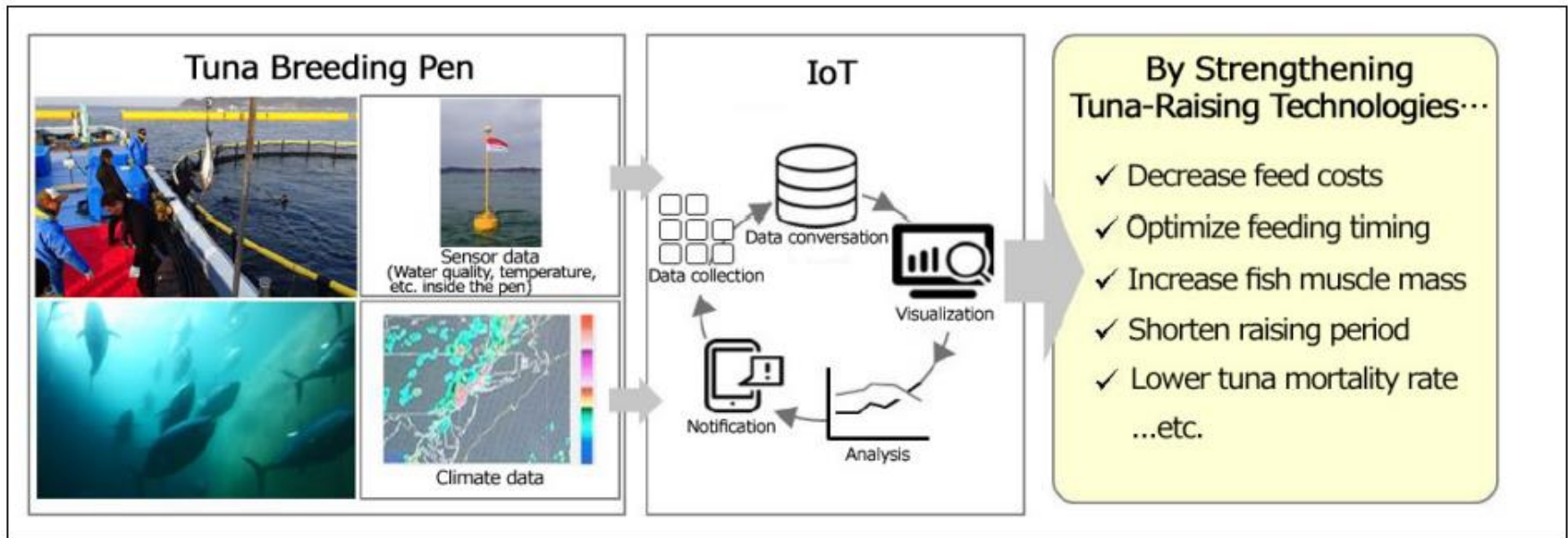
③ Shipping



- Sojitz Tuna Farm obtained ISO/FSSC22000 (Certification for Food Safety Management System) for the first time in Japan
- Only a 1.5 hours drive to Fukuoka Airport and then to the global market

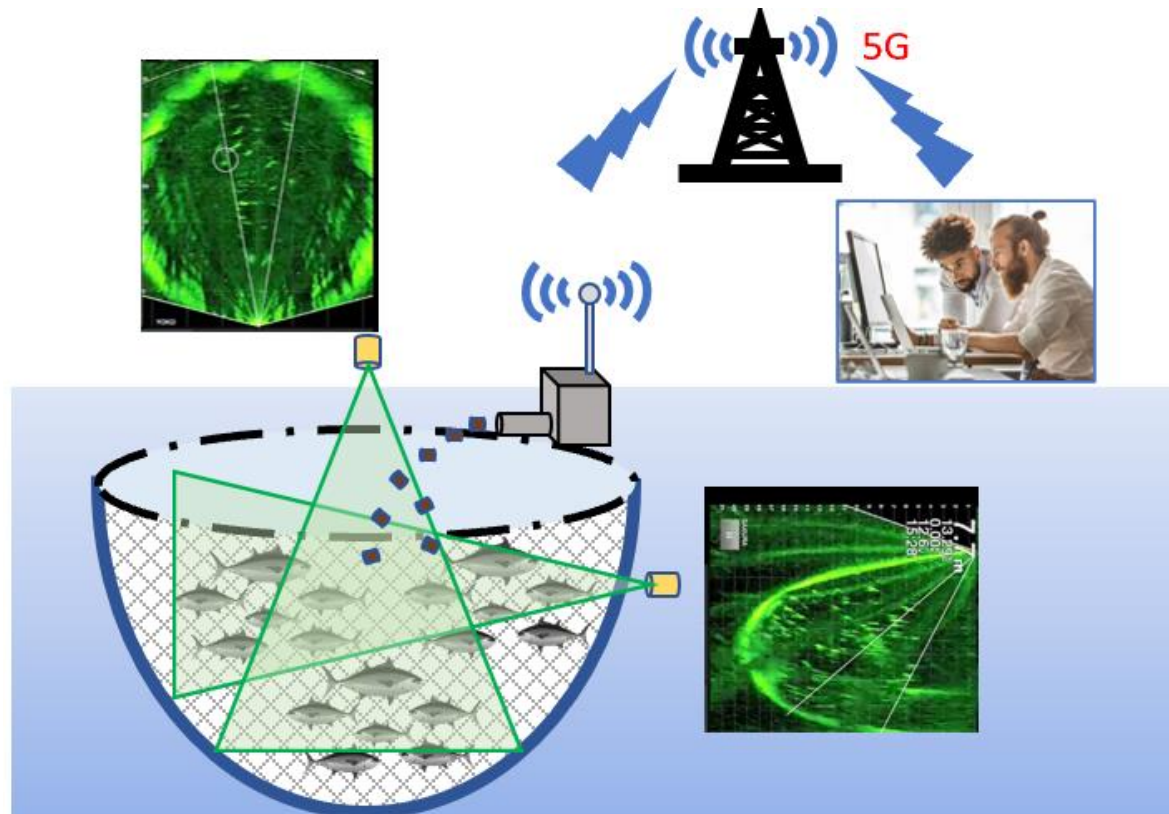
Use of IoT/AI ① Feed Optimization

- Feeding is an important operating factor in the Tuna Farm
- Sensors equipped with IoT technology obtain readings on the water temperature, amount of dissolved oxygen, salt concentration etc. to verify the optimal amount of feeding and time



Use of IoT/AI ② Automatic Feeding System

- Fish monitoring is indispensable for efficient feeding management
- An automated feeding system via portable sonar devices is developed which identifies the timings of compound pellet feeding.



Sojitz Corporation expresses support for FSS(Food Systems Summit) which is held to promote concrete actions for the transformation of Food Systems, for the purpose of delivering all the Sustainable Development Goals.

We are committed to provide a stable supply of food resources for contributing to the development of sustainable food systems.

【Commitment】

- ① We will pursue sustainable use of living marine resources by leading the spread of MSC certified sashimi tuna, which certifies it has been caught in appropriately managed fisheries.
- ② We will pursue sustainable and responsible aquaculture, especially by working on maintaining the certificate by Seedlings Council for Sustainable Aquaculture of tuna farming.
- ③ We recognize the potential of tuna farming and are actively seeking to further improve the efficiency of the aquaculture by promoting the use of IoT/AI technologies.

【References】

Sojitz Key sustainability Issues (Materiality)

<https://www.sojitz.com/en/csr/priority/>



Key to achieving SDGs

Benefits of Aquaculture

- Stable sources of food
- Restoration of threatened and endangered species
- Ease of access
- Bridging the gap of agriculture
- Lower prices for fish
- Job creation ...just to name a few

SUSTAINABLE DEVELOPMENT GOALS



Bon Appetit ~ Serving Sojitz Bluefin Tuna



Please come visit!



Restaurant name	Nama Honmaguro Isshin (生 本まぐろ 一心)
Address	Hatchobori 2-20-1 Chuo-ku Tokyo Japan
TEL	+81-3-3553-3661

Direct order available



Our Final Message

- ❑ Despite technological advances, challenges remain to achieve a fully sustainable bluefin tuna farm.
- ❑ Sojitz is committed to continue our efforts to pursue sustainable and responsible aquaculture.
- ❑ We strongly believe in the potential of tuna farming and are committed to further improve the efficiency of the aquaculture by promoting the use of IoT/AI technologies.
- ❑ Lastly, please visit Takashima in Japan, full of nature and history...and bluefin tunas!

Thank you very much for your attention.
ありがとうございました