DAY1 11.4 (WED) 9:30~11:30

The ocean is the key to protect our food resources

Food Security

Food security and fishery resources in the "new normal" era



講演「食料安全保障における水産資源の重要性」

Keynote: The importance of fishery resources for food security



THE IMPORTANCE OFFISHERY RESOURCES FOR FOOD SECURI

Manuel Barange Director, FAO Fisheries Division

Tokyo Sustainable Seafood Symposium November 2020



WHAT IS THE STATE OF GLOBAL FISHERIES AND AQUACULTURE: CONTEXT





- 690 million undernourished, 60 million more than in 2014
- We are not achieving zero hunger
- COVID-19 could add >100 million of undernourished people in 2020



HOW HAS SOCIETY BENEFITTED FROM FISHERIES AND AQUACULTURE?

World capture fisheries and aquaculture production





HOW HAS SOCIETY BENEFITTED FROM FISHERIES AND AQUACULTURE?

Annual growth rate - 1961-2013 (%)



Animal proteins by annual amount

Fish consumption growing at twice the rate of population growth A net contributor to the global nutrition revolution



* Exports * 2018 figures

Food and Agriculture Organization of the United Nations

HOW HAS SOCIETY BENEFITTED FROM FISHERIES AND AQUACULTURE?

Fish Trade 2018 trade comprised **67 million tonnes**, **38%** of total production valued at **164 billion USD* Capture fisheries** Aquaculture Exports Imports 2018 China United States of America China China India Norway Indonesia Japan Peru Indonesia Viet Nam China Viet Nam Spain India India **Russian Federation** Bangladesh Chile Italy *by volume *by volume *by value *by value * 2018 figures

Fish Trade trends

Fish is among the **most traded food** commodities in the world.





Fisheries Sustainability

UNCLOS, SDG14.4 – "...RESTORE POPULATIONS TO MAXIMUM SUSTAINABLE YIELD LEVELS" FAO BIOMASS-BASED INDEX – CAPTURES 70% OF LANDINGS



Stocks under intense management = Increasingly Sustainable or Rebuilding Stocks not under intense management = Deteriorating





WHAT DO WE EXPECT FROM FISHERIES IN THE FUTURE



By 2030 59% of fish for human consumtion will come from Aquaculture (52% now) By 2030 Fish production will exceed 200 Million tonnes (179 Mt now), plus 30 Mt aquatic plants Per capita consumption to grow to 21.5 kg/yr (20.5 kg now)



HOW DO WE MAKE THIS HAPPEN? = LEARN THE LESSONS



Lesson 1. Without Fisheries and Aquaculture the environmental impact of our food production systems would be much larger

Lesson 2. Conservation and Sustainable use are not incompatible. Successes on both fronts must be acknowledged – they help both

Lesson 3. The reasons for sustainability failures are complex and multidimensional, and require equally complex solutions

Lesson 4. Ecological sustainability is more difficult in places where hunger, poverty and political instability dominate

Lesson 5. There is no alternative: Sustainability is the only option



HOW DO WE MAKE THIS HAPPEN? = IMPLEMENT THE SOLUTIONS



Solution 1. Fish products must be more explicitly recognized in food security and nutrition strategies at global, regional and national level

Solution 2. Reciprocal mainstreaming: We must integrate better food security considerations and biodiversity objectives. Our objective should effective management of 100% of seascapes

Solution 3. Reinforce international and regional cooperative governance mechanisms – Support the 49 RFMOs making binding conservation and management measures

Solution 4. The world needs BLUE TRANSFORMATION programmes to turn fisheries and aquaculture from a problem to a solution

BLUE TRANSFORMATION – A New Narrative for Fisheries and Aquaculture

Food and Agriculture Organization of the

nited Nations



- Support sustainable intensification of Aquaculture
- Transform and add value to current and emerging supply chains

講演 「ニューノーマル時代における世界の サステナブル・シーフード・ムーブメント」

Keynote: Japan and the world: charting the course for sustainable seafood

Japan and the world: charting the course for sustainable seafood

Julie Packard

Executive Director, Monterey Bay Aquarium







State of the world

There is no alternative to sustainability

Given the livelihood and food security pressures in many developing regions, sustainability challenges need to be addressed

- The State of World Fisheries and Aquaculture 2020, UN FAO

The Role of Seafood

 60 million livelihoods rely on fisheries and aquaculture

 3.3 billion rely on fish as a main source of protein, nutrition

Consumption is growing faster than all other animal proteins

Most globally traded food commodity

Growth driven by aquaculture

Fishery problems are solvable

Sustainability

By 2030, 75% of global production is environmentally sustainable, making verifiable improvement, and adequate safeguards are in place to ensure social responsibility

Social Responsibility

- Protection of human rights, dignity, access to resources
- Equity for all workers, opportunity to benefit

SCORPTUR.

• Food and livelihood security

Monterey Bay Aquarium Seafood Watch Program

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NOT THE MALERS OF SHIEL BUSI

SEALON FOR SECURING AN ADDRESS

Global Initiatives

22

www.atina.co.id



MontereyBayAquarium.org

Progress in Japan

Japan's global leadership





Thank you.





対談 「生物多様性と持続可能な海のサプライチェーンの構築」

Dialogue: Biodiversity and building a sustainable ocean supply chain



ニッスイグループ 持続可能な水産資源への取り組み **Activities for Seafood Sustainability**

TSSS2020

2020.11.4

伊勢 宗弘

Nippon Suisan Kaisha, Ltd.

日本水産	株式会社
執行役員	Executive Offic



Munehiro Ise

経営方針・CSR行動宣言 Management Policy



経営の基本方針 Management Policy

私たちは、水産資源の持続的利用と地球環境の保全に 配慮し、水産物をはじめとした資源から、多様な価値を創 造し続け、世界の人々のいきいきとした生活と希望ある 未来に貢献します。

We will champion the sustainable utilization of marine resources and the preservation of the earth environment, continue to create diverse value from resources.





CSR行動宣言(CSR方針)

私たちニッスイグループは、地球や海に感謝し、創業時より受け継ぐ5つの遺伝子から多様な価値を創造し、事業を通じて社会の課題解決に取り組みます

The Nissui Group will appreciate the earth and the sea, and create diverse values from 5 genes (mission, innovation, hands-on approach, global, and value the customers) inherited since its foundation and try to solve social issues through the business activities.

お客様 For the customer We provide safe and secure high quality products which are valuable for the customers. 私たちは、安全・安心で、お客様にとって価値ある品質の商品をお届けします We utilize bounty of the sea and provide the delights of foods and the rich and healthy lives through the innovation. 私たちは、海の恵みを活かし、イノベーションにより、食の美味しさや楽しさと健やかな生活をお届けします For the employee 従業員 We act in accordance to the norms of the society with sound ethics and aim to build a socially trusted company. • 私たちは、高い倫理観を持ち、社会規範に則って行動し、より信頼される企業を目指します · We respect diverse values and individualities, and achieve growth through teamwork by learning from others. 私たちは、多様な価値観や個性を尊重し、互いを磨き合う中でチームワークの発揮により成長し続けます。 For the business partner ビジネス・パートナー We maintain fair and clean business relationship with all of our business partners. • 私たちは、ビジネス・パートナーとの公正で公平な関係を維持します We try to build mutual trusting relationship with business partners and seek a sustainable society with them. 私たちは、ビジネス・パートナーと相互の信頼関係を築き、共に持続可能な社会を目指します For environment 環境 We work hard to reduce environmental burdens and preserve natural environment and bio diversity. We recognize that our business is relied on the bounty of the earth and the sea, and work hard to utilize resources in a sustainable manner. 私たちは、環境負荷の低減および自然環境と生物多様性の保全に努めます 私たちは、地球や海の恵みを受けて事業を営んでいることを心にとめ、資源の持続的な利用に努めます。 For the shareholder 株主 We operate in a transparent manner and improve disclosure of information. 私たちは、株主への情報開示に努め、健全で透明な経営を行います We try to enhance corporate value and continue a proper distribution of profit to the shareholders through stable business growth. 私たちは、安定的に成長し続けることで企業価値を高め株主への適正な還元を行います For society We work hard to develop local society and cultivate next generation through the knowledge and the technology of the Nissui 社会 私たちは、ニッスイグループの知見や技術を通じ、地域社会の発展と次の世代の育成に努めます We respect diverse cultures and customs in the world and try to contribute to keeping the local society alive with the development of our business. 私たちは、世界各地の文化や習慣を尊重し、事業の発展とともに地域社会に貢献します。

マテリアリティ、水産資源の利用と調達目標 Materiality

2030年までにニッスイグループが調達する水産物 の持続性が確認されている状態を目指します

aim to finish confirming sustainability by 2030

ニッスイグループが掲げるマテリアリティ

Materiality

- Preserve bountiful sea and promote the sustainable utilization of marine resources and the procurement
 - Marine Environment
 - Plastic
 - Sustainability of Marine Resources
 - Sustainable Procurement
- Contribute to the healthy lifestyle with safety and security
 - Health & Well-Being
 - R&D and Innovation
 - Food Safety & Quality
 - Food Loss & Waste
- Aim to be the company where diverse human resources play an important role to address the social agenda
 - Diversity
 - Human Resouce Development

◆豊かな海を守り、持続可能な水産資源の利用と調達を推進する

- 海洋環境
- プラスチック
- 水産資源の持続可能性
- CSR調達

◆安全・安心で健康的な生活に貢献する

- 健康
- R&D・イノベーション
- 品質
- フードロス

◆社会課題に取り組む多様な人材が活躍できる企業を目指す

- ダイバーシティ
- 人材育成









ONISSUI

CSR推進体制 CSR Management





世界水産物生産量 World Fisheries and Aquaculture





2016年グループ取扱水産物の資源状態等の調査(2018年9月発表)

2016 The Survey of Procured Marine Resources Sustainability . released in 2019





ニッスイグループ調達基本方針 Procurement Policy



ニッスイグループは本方針に従って、お取引先の理解とご協力、ご支援を仰ぎながら、信頼関係に基づく 調達を推進します <u>https://nissui.disclosure.site/en/themes/107</u>

①調達原則 1. Procurement Policy

・お取引先は品質、コスト、デリバリー、サービスを総合的に勘案し 選定

- ・新たなお取引先に対しては等しく門戸を開放
- ・適正な品質・価格での取引
- ・安全性担保と品質の向上を前提としたコストダウン

②遵法•調達倫理 2. Compliance, Procurement Ethics

- ・各国の法令・ルールや社内規則を遵守
- ・お取引先と交わした契約を誠実に履行
- ・情報の重要性を理解し、機密保持
- ・公正・公平な対応、透明性の高い手順で信頼関係の構築
- ・不適切な利益供与や受領等の不正行為を排除

③環境配慮 3. Consciousness of Environmental Preservation

- ・環境保全に配慮されている原料等の調達を推進
- ・持続可能性・生物多様性・生態系の維持への配慮確認に 努める
- ・資源・エネルギー等の循環利用に配慮されている原料等の調達に 努める

- ④人権配慮 4. Respect for Human Rights
 - ・強制労働・児童労働・従業員の非人道的扱いに係る原料等 でないことを要請
 - ・差別のない職場から供給される原料等の調達に努める
 - ・労働安全・衛生管理が適切な職場から供給される原料等の 調達に努める
- ⑤お取引先との協働 5. Collaboration with Suppliers and Partners
 - ・重要なビジネスパートナーとしてお取引先と密接に協働
 - ・調達方針をご理解頂き、支援とご協力を仰ぐ
 - ・お取引先からのご提案については真摯に検証・検討する



グローバル企業の連携による課題解決(SeaBOS)

Seafood Business for Ocean Stewardship

ONISSUI



森・川・海保全活動 社員と共に取り組む活動

Preservation Activities **ONISSUI**



おさかなをはぐくむ湧水と海を守る森(鳥取県)



ONISSUI

豊かな海を守る活動 社員と共に取り組む活動 CSR						ONISSUI	
14 808406 833 885 885 885 885 885 885 885 885 885	活動名称		テーマ	guvilles 实施場所	SDGs Target	対象者	
海を守る	荒川環境学習		河川生態系保全 マイクロ・プラスチッ ク	東京 荒川	14 esteration 14 esteration 17 esteration 17 esteration 17 esteration 17 esteration 14 esteration 15 esteration 15 esteration 16 esteration 17 esteration 18 esteration 19 esteration 10 est	新入社員研修 CSR推進委員	
海を 守る	ニッスイグループ クリーンアップ作戦		海洋環境保全 海ごみ <mark>ゼロ</mark> ウィーク	全国	14 and and a second sec	ニッスイグルー プ 従業員	
海を 守る	藤前干潟 生き物と触れあう活 動		海洋環境保全 生物多様性保全	名古屋		従業員と家族 日本クッカリー小牧 十味惣	
海を 守る	宇津貫緑地 里山保全活動		里山保全	八王子		従業員と家族	
海を 守る	知行浜 海を作る活動		海洋環境保全 生態系保全	福岡		従業員と家族 博多まるきた水産 金子産業	
海を 守る	おさかなをはぐくむ 湧水と海を守る森 保全活動		森林および 海洋環境保全	鳥取		従業員 弓ヶ浜水産 共和水産 鳥取県	
海を 守る	須磨水族園 生き物と触れあう		海洋環境保全 生態系保全	兵庫	17 mittant	従業員と家族	10



NISSUI PEACEFUL BLUE

海や水にまつわる話題を中心に自然と自分のつながりを考えるサスティナブルな10分間

海洋プラスチックごみ問題や水辺の生物多様性、水産資源の現状や未来など、海と 水にまつわる話題を取り上げ、リスナーに持続的な未来のために自らできることを考 えていただくきっかけを作ります Provide FM radio programs on the topic of sustainability.



J-WAVE 81.3FM

every Saturday around 12:30 - 12:40 10minuites

brought to you by NISSUI

Navigator マリエ 環境省 森里川海アンバサダー モデル・タレント・デザイナー





"The Biodiversity of Marine Life and Circulating and Ecological Economy"

November 4, 2020 Ministry of the Environment, Administrative Vice-Minister NAKAI Tokutaro









The State of Biodiversity and the Goals of CBD-COP15

Aichi Targets

- At the 10th meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD-COP10) in 2010, 20 targets were selected to prevent the loss of biodiversity.
- The next international targets regarding global biodiversity that follow the Aichi Targets (the post 2020 GBF) are to be decided in the CBD-COP 15, held in China in 2021.

<Aichi Targets highly related to the oceans>

- Target 6 By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.
- Target By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems
 impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.
- TargetBy 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine11areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved
through effectively and equitably managed, ecologically representative and well connected systems of
protected areas and other effective area-based conservation measures, and integrated into the wider
landscapes and seascapes.

Global Biodiversity Outlook 5 (GBO5) (Sept. 2020)

- While nearly all of the Aichi Targets have seen good progress, none of the 20 targets have been fully achieved.
- To achieve the 2050 vision, living in harmony with nature, we need to stop doing business as usual.

<GB05 progress evaluation>

- Goal 6 While there has been substantial progress towards this target in some countries and regions, a third of marine fish stocks are overfished, a higher proportion than ten years ago. Many fisheries are still causing unsustainable levels of bycatch of non-target species and are damaging marine habitats.
- Goal 10 Multiple threats continue to affect coral reefs and other vulnerable ecosystems impacted by climate change and ocean acidification. Overfishing, nutrient pollution and coastal development compound the effects of coral bleaching. Corals have shown the most rapid increase in extinction risk of all assessed groups. Hard coral cover has declined significantly in some regions, and there has been a shift towards coral species less able to support diverse reef habitats. Other ecosystems especially in mountains and polar regions have experienced significant impacts from climate change, compounded by other pressures.
- Goal 11 The proportion of the planet's land and oceans designated as protected areas is likely to reach the targets for 2020 and may be exceeded when other effective area-based conservation measures and future national commitments are taken into account. However, progress has been more modest in ensuring that protected areas safeguard the most important areas for biodiversity, are ecologically representative, connected to one another as well as to the wider landscape and seascape and are equitably and effectively managed.

Japan will make proactive contributions to make sure that the post 2020 GBF ensure the protection of our oceans and sustainable usage.



Considerations of Biodiversity in Economic Activities

- International supply chains get longer and more complex due to expansion of international trade. Thus consumers do not have any incentive to act in a way that improves the current situation when they are unaware of negative impacts from agriculture, forestry and fisheries on biodiversity at the place of production.
- Therefore, it is important to incorporate <u>considerations for biodiversity into each step of production, supply, and</u> <u>consumption (establishment of procurement policy, promotion of certified items, "Let's choose" declaration in My</u> <u>Action Declaration, etc.).</u>
- Further, to mainstream biodiversity into economic activity, biodiversity needs to be built into management strategies of business, which then need to be disclosed in public.





Promotion of Certified Products for Marine Ecosystems



- To change consumer's behavior to help with biodiversity, we need sustainable bio-resource management built with consideration for the protection of biodiversity, and support of a certification system to encourage the supply of such products, etc.
- If the demand and share of products that promotes conservation of biodiversity increases, the supply chain can be used to mainstream biodiversity into business and consumer activities throughout the economy.



*Numbers are current as of the end of March 2020 (Source: Ministry of the Environment)



Contributions through the Satoyama Initiative

- This initiative has approximately 450 project track records. It is scheduled to continue after 2020, and <u>can</u> <u>contribute to the post 2020 GBF through the realization of societies in harmony with nature, including seascapes</u> <u>around the world</u>.



<text>

7

Circulating and Ecological Economy and Marine Biodiversity

International Expansion of Circulating and Ecological Economy with the Satoyama Initiative

Based on the idea of Circulating and Ecological Economy(local SDGs, and Redesign of the economy and society through a three-pronged transition to decarbonization, circular economy, and decentralization), the Satoyama Initiative move toward its goal of realizing societies in harmony with nature to contribute to the international expansion of Circulating and Ecological Economy. Economy.



9

Benefits from Connections among Forests, Countryside, Rivers and the Sea



Ecological services are created by forests, the countryside, rivers, seawater, and biogeochemical cycle.

Safe, sound, pure, and rich water; conservation of pure air and soil; safe and delicious food; biomass; local goods; culture rooted in local nature; disaster prevention; recreation 環境省

環境省

A sustainable, cyclic society

Circulating and Ecological Economy is local SDGs



Circulating and Ecological Economy =local SDGs

: **Visions** to implement SDGs locally っなげよう、 支えよう 森里川海 : Act

Project of "Let's Connect and Support Forests, the Countryside, Rivers and the Sea["] = SDGs for life : Actions for individual and company.

Work on Global SDGs from our regions and lives



The traditional mass production/mass consumption economic system

The Concept of Circulating and Ecological Economy

環境省

• Human =

Cells/organizations function independently

• Circulating and Ecological Economy =

Independent regions, being sustained by cyclic use of resources, **function together.**



• SDGs =

No one will be left behind. (Everyone contributes)



Regional resources are cycled at the optimal scale for characteristics of each region and the resources they have.

- ☐ Resources fit for cyclic use in small regions
 ⇒Cycled within small communities and municipalities
- ☐ Resources fir for cyclic use in larger regions
 ⇒Cycled in a wider area beyond the region, such as river basins, prefectures and countries

Source: United Nations Information Center



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Example (1): Food and Biodiversity

It ensures high-quality, brands, and stable supply of marine product, through Conservation Activities of Forest and Ocean.

- The Great East Japan Earthquake of March 2011 devastated the coastal areas of the Tohoku region.
- For sustainable oceans and forests, it is important to continue conservation efforts and ensure the stability of marine resources.
 - It uses the disaster as an opportunity to increase product quality through the smart usage of our oceans and forests.



- The Shizugawa Branch of the Miyagi Prefecture Fishery Cooperative Association has reduced the environmental impact on the <u>oceans by reducing the number of oyster farming</u> <u>rafts to about one-third of the one before the disaster. They focused on the production of large, high-quality oysters.</u>
- In 2016, they became the first fishery association in Japan to receive the ASC certification (an eco-label for the aquaculture industry).
- Saku Co., Ltd. <u>branded cedar, which has traditionally been produced in the region, as Minami</u> <u>Sanriku Cedar, in 2008</u>. A council was formed. And in October 2015, <u>the council obtained the</u> <u>FSC certification</u> (the four organizations, excluding Maruhei Wood Co., Ltd., have a total forest area of 1,315 hectares. Maruhei Wood Co., Ltd. acquired the CoC certification.).
- <u>With a focus on the connections between forests, the countryside, and oceans</u>, the project helps to revitalize the region while creating interaction among producers.





Example (2): Food and Biodiversity

It created rich forest through planting trees, cutting brush, and conducting delimbing in the upper stretches of a river .

- After the WW II, deforestation in Hokkaido caused deterioration of water retention capacity. Water mixed with sediment flowed into the sea with every rainfall.
- Marine resource along the coast is decreasing.
- It is important to preserve fishing spots and marine resources along the coast.

Tree-planting campaign to breed fish. Restoration of the beaches of 100 years ago



- Women's groups of fishery cooperative associations in various parts of Hokkaido have <u>focused on the relationship between forests</u>, rivers and the <u>sea</u>. Inspired by the idea of "fish -breeding forests," they have<u>been</u> <u>planting trees in the upper stretches of rivers since 1988</u>
- More than one million seedlings of Quercus crispula, Acer monohaematria, and Yezo spruce, have been planted to date.
- In 1998, the National Fishermen's Forest Summit was held in Tokyo. The <u>fishermen's tree-planting efforts</u> have spread across the country.







Social Change Through the Efforts of Citizens and Businesses



We will achieve a lifestyle innovation through initiatives of government and business, to enable each citizen to choose a comfortable, convenient, and decarbonized lifestyle.

- To make it easier to choose a comfortable, convenient, and decarbonized lifestyle, it is important for businesses to provide products and services with a low impact on the environment, as well as for the government to take steps to encourage them to do so.
- Working together with government and business initiatives, we encourage social change through lifestyle innovation with the choices of each individual.





Thank you for your attention.