

국외출장 결과보고서

(로마, 이탈리아)

비인중 수산물에 대한 지속가능성 제고 국제 전문가
워크숍

2020. 4.

〈출장자〉

수산연구본부 양식어업연구실

이상철 전문연구원



한국해양수산개발원
KOREA MARITIME INSTITUTE

국 외 출 장 결 과 보 고 서

1. 출장 개요

1) 출장목적

- UN-FAO와 글로벌 지속가능한 수산물 공익 단체인 GSSI가 공동으로 개최하는 비인증 수산물에 대한 지속가능성 전문가 워크숍 참석
- 워크숍 참석을 통해 국제 동향 파악 및 지속가능성 추진 정보 수집
- '19년 8월 FAO 양식 소위에 상정된 지속가능한 양식 규범 가이드라인에 대한 추진 동향 정보 수집

2) 출장자 및 예산항목

- 출장자 : 양식어업연구실 이상철 전문연구원
- 예산항목: 글로벌 해양수산거점 연구협력사업

3) 출장기간 및 출장지

- 2019.10.8.(화) ~ 2019.10.12.(토), 3박 5일
- 로마, 이탈리아

4) 출장일정

일자	방문일정	내용	비고
10.8(화)	부산-인천-로마	○ 부산 → 인천 → 로마 이동	KE931
10.9(수)	로마	○ FAO 수산양식국 업무협의	
10.10(목)	로마	○ FAO-GSSI 비인증 수산물에 대한 지속가능성 워크숍 1 참석	

일자	방문일정	내용	비고
10.11(금)	로마-부산	o FAO-GSSI 비인증 수산물에 대한 지속가능성 워크숍 2 참석 o 21:25분 로마-인천-부산 이동	
10.12(토)	부산	o 부산 도착	KE932

2. 출장 수행 내용

1) FAO 수산양식국 업무협의

□ 활동 개요

○ 일시 : 2019년 10월 9일(수)

○ 주요 참석자 : Matthias Halwart (FAO 수산양식국장), Lionel Dabbadie (FAO 아부다비지부장), 이상철 전문연구원 등

○ 주요 협의 내용

- (지속가능한 양식 가이드라인 추진 방향) FAO는 지난 8월 양식 소위에서 지속가능한 양식 가이드라인 작성을 승인 받았으며 앞으로 4년간에 걸쳐 가이드라인 작성 추진
- 각 대륙별 공청회가 아프리카를 시작으로 진행되며 아시아 지역 회의도 예정되어 있음
- FAO는 한국 등 수산양식 선진국의 지속가능한 양식 추진 사례에 관심이 있으며 이를 지속가능한 가이드라인의 베스트 프랙티스로 제시하는 것은 한국이 국제사회에 대한 기여가 될 수 있음
- (농수융합형 양식) 농수융합형 양식에 대한 KMI측 최신 연구 논문을 사전 공유하였으며 해당 논문(2019년 SCI급 저널 게재)에 대한 전문가 의견을 받음
- FAO는 농수융합형 양식이 개도국 지역 기아 문제를 해결할 중요한 정책수단으로 인식하고 있으며 이를 확산시키기 위해

국제 컨퍼런스를 지속적으로 개최하고 있음

- 농수융합형 양식에 대해 2018년 프랑스에서 대규모 회의와 워크숍을 진행하였으며 관련 내용을 정리한 연구보고서를 출간 예정
- 2차 회의는 중국 상해에서 10월 14일부터 개최예정이며 농수융합형 양식의 확산에 기여할 것으로 전망함
- 농수융합형 양식 활용에 대한 FAO측 의견은 한반도 지역의 경우 만성적인 식량 부족 사태에 직면한 한반도 북부 지역을 중심으로 농수융합형 양식 사업을 추진하여 단백질과 탄수화물을 동시에 생산할 수 있는 생산 체재를 구축하는 것이 인도적 지원 측면에서 타당할 것으로 보고 있음

2) 비인증 수산물에 대한 지속가능성 제고 전문가 워크숍 1일차

□ 활동 개요

○ 일시 : 2019년 10월 10일(목)

○ 주요 참석자 : Audun Lem(FAO 수산양식 정책국장)외 FAO 수산양식국 직원, 이상철 전문연구원의 국제 전문가 22명

○ 주요 내용

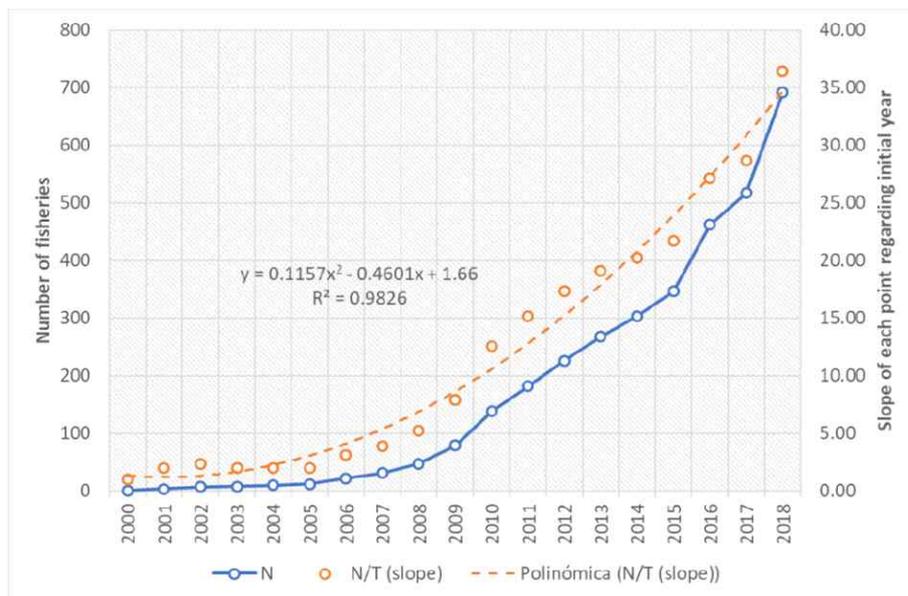
- (기조연설) Audun Lem(FAO), 현재 FAO에서 제정한 국제규범에 기반한 지속가능한 수산물 민간 인증제가 널리 확산되고 있지만 이러한 영역에 있는 수산물은 생산물량 기준으로 5%가 되지 않고 있음
- 실제 전 지구적인 수산분야 지속가능성을 달성하기 위해서는 인증제도 밖에는 있는 수산물 생산에 대한 지속가능성 제고 노력이 필요함
- FAO와 GSSI는 지금까지 인증제 기반 지속가능성 향상을 위해 민간-공공 파트너십을 구축하여 추진하였으나 비인증 수산물에 대한 지속가능성 노력 제고를 위해 전 세계의 지혜를 모아야 함

- 본 워크샵에서는 수산부문 지속가능성 제고를 위한 주요 UN 산하기구의 연구 접근법을 공유하고 이를 향후 비인증수산물에 대한 지속가능성 제고 시범 사업 설계시 참고하려고 함

<그림 1> GSSI 파트너십 현황



<그림 2> GSSI 연계 수산물 인증 제품 증가 추이



<참고 참석 전문가>

Annex I – Workshop Participant List

Private sector

*= *Virtual participation*

Industry

Angel Matamoro Irago (Nueva Pescanova)
Bill DiMento* (Highliner Foods)
Gerald Knecht (Bali Seafood International)
Janelle Dong (China Aquatic Products Processing and Marketing Alliance)
Stephen Fisher (Sea Delight)

Retail

Hugo Byrnes (Ahold Delhaize)

Academia

Graeme Parkes (MRAG Americas)
Jill Swasey (MRAG Americas)
Mariska Bottema (Wageningen University & Research)
Paul Tuda (Leibniz Centre for Tropical Marine Research)

NGOs

Flavio Corsin (IDH, the Sustainable Trade Initiative)
Han Han (China Blue Sustainability Institute)
Hoyt Peckham (Ocean Outcomes)
Jennifer Kemmerly* (Monterey Bay Aquarium)
Sebastian Mathew (International Collective in Support of Fishworkers)
Sven Biermann (Fisheries Transparency Initiative)

IGOs

Joseph Wozniak (International Trade Centre)
Mathieu Lamolle (International Trade Centre)
Nima Bahramalian (United Nations Industrial Development Organization)
Ray Purnama (United Nations Industrial Development Organization)

National competent authorities

Annika Mackensen (Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ))
Sangchoul Yi, Korean Maritime Institute

FAO

Alexander Ford
Audun Lem (October 10th)
Danielle Blacklock
Henry DeBey
Joseph Zelasney
Nada Bougouss
Nianjun Shen (October 11th)

GSSI

Herman Wisse
Eva Mudde

- (주제 발표1) Mariska Bottema(Wageningen University), 수산물 인증 관련 제도 및 시스템이 수산물 지속가능성 향상에 미치는 영향에 대해 발표함. 제도권안(인증제품)에서는 지속가능성 향상에 긍정적인 영향을 미치는 것으로 판단됨
- (전체 토론1) 참석자 Angel Matamoro Irago (페스카노바 CSR 담당 임원), Flavio Corsin (IDH, 지속가능한 교역 담당), Han Han (중국 블루 지속가능성 재단, 이사), Hoyt Peckham(오션 아웃컴 대표), Hugo Bymes (Product Integrity 회장)
- 본 토론에서는 세계 각국의 비인증 수산물 생산에 대한 실태를 소개하고 지속가능성 제고를 위한 전 지구적인 노력이 필요함을 역설함
- (UN 기관 발표) 참석자 Danielle Blacklock (FAO 지속가능한 양식 담당), Henry Debey (FAO, 청색성장 담당), Joseph Zelasney (FAO 소규모 어업 담당), Nima Bahramalian(UNIDO 산업 발전 전략 담당)
- 본 세션에서는 대표적인 UN 산하기관인 FAO와 UNIDO의 2030 agenda 달성을 위한 노력을 조명하고 각 부분별 정책 사업을 소개하였음. 민간-공공간 연계 사업이 SDGs 및 2030 agenda 달성에 도움이 될 수 있음을 주장함
- (전체 토론2) 참석자 jill Swasey (MRAG America 어업기술 국장), Mathieu Lamolle (국제 교역 센터, 지속가능성 기준 및 벨류체인 담당), Paul Tuda (열대해양 연구센터 연구원), Stephen Fisher(Sea Delight 지속가능성 국장) Sven Biermann (수산업 투명성 재단 이사)
- 본 세션에서는 정보가 수산업 지속가능성에 영향을 미치는 것을 토의하고 특히 비인증 수산물의 지속가능성 제고에 기여할 수 있음을 주창함. 특히 정보의 유통과 보고 체계에 대해 논의함

3) 비인증 수산물에 대한 지속가능성 제고 전문가 워크숍 2일차

□ 활동 개요

○ 일시 : 2019년 10월 11일(금)

○ 주요 참석자 : Audun Lem(FAO 수산양식 정책국장)외 FAO 수산양식국 직원, 이상철 전문연구원의 국제 전문가 22명

○ 주요 내용

- (전체토론3) Herman Wise(GSSI), FAO-GSSI가 추진중인 정보 시스템 구축(Seafood Map)과 정보 유통을 통한 비인증 수산물의 지속가능성 제고에 대해 토의함

<그림 3 Seafood MAP 구성도 및 정보 유통 과정>

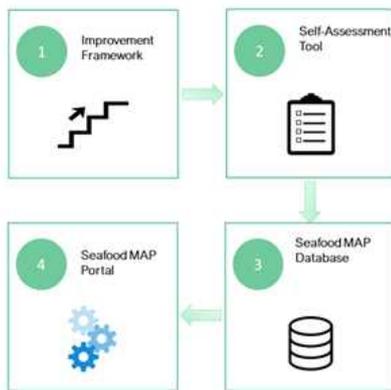


Figure 4 Key components of Seafood MAP

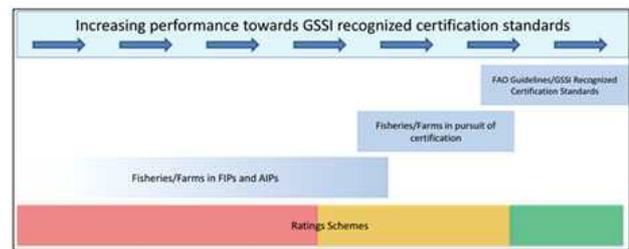
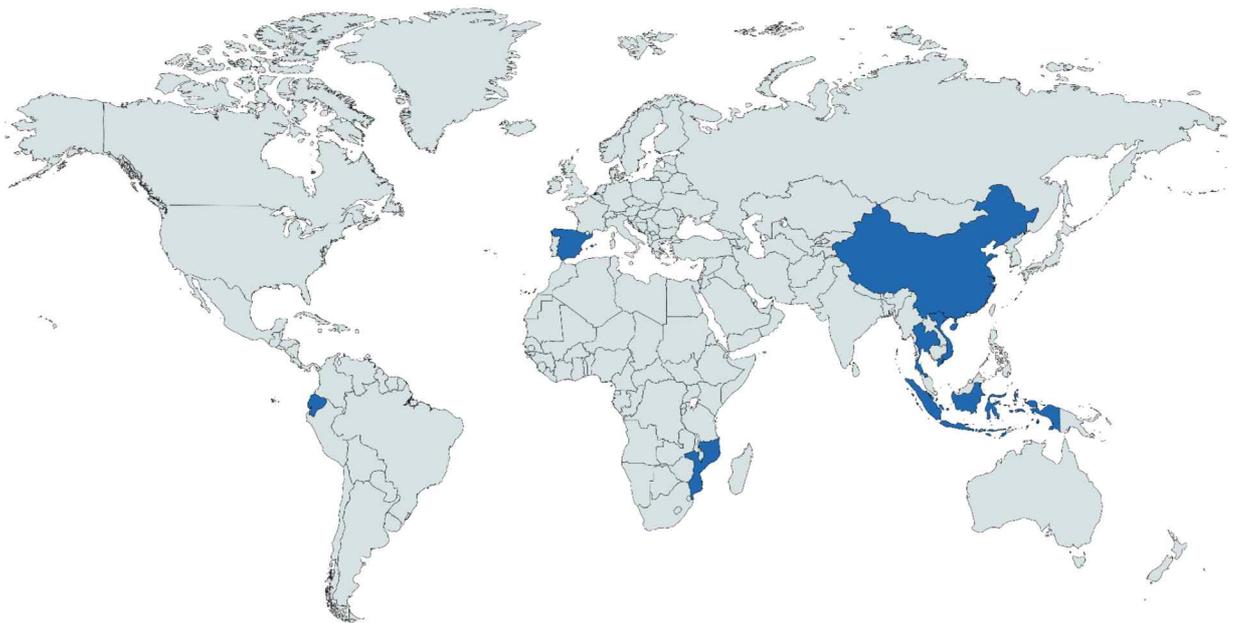


Figure 5 The full theoretical range of performance with respect to responsibility and sustainability of seafood production showing approximate positioning of different initiatives including certifications, FIPs, AIPs and Ratings. A significant proportion of global seafood production is not engaged with any of these independent seafood sustainability programs.

- Seafood Map은 4가지 주요 요소로 구성되어 있으며 기존 지속가능성 규범(CCRF 등)을 반영한 Improvement framework, 작업자가 자기기입방식으로 데이터를 수집 및 처리하는 Self-assessment tool, 데이터가 수집 보관되는 Database, 그리고 이를 웹상으로 구현된 Seafood Map portal로 구성되어 있음
- GSSI 주장에 따르면 이러한 시스템은 민간 지속가능 인증제에 비해 저비용이며 비용 부담으로 지속가능성 인증제에 접근하지 못하는 개도국 양식어가에 지속가능성 제고를 위한 기회를 제공할 수 있다고 함

- (전체토론4) Gerald LKnecht(Bali Seafood Internatioanl), 본 전문가 워크샵은 국제기구 사무국과 수산관련 NGO, 민간 유통업체 관계자들이 참석하였으며 민간-공공형 파트너십을 통해 Seafood MAP 프로그램 시범 사업을 추진하는 것을 모색함
- 북미 및 유럽지역 민간 유통업체는 지속가능 수산물 취급을 확대하고 있으나 전통적인 거래처와의 사업 관계를 고려하여 저비용 지속가능 인증도 함께 고려하고 있음 Seafood MAP은 이러한 노력의 일환으로 여겨지며 산업계에서 본 시범사업을 위한 funding을 제공할 용의가 있음
- (온라인 토론 1: 2019년 10월부터 2020년 2월까지 온라인 토의가 이루어졌으며 시범 사업지 확정됨)
- 시범 사업지는 UNIDO의 사업 관할인 Indonesia와 주요 양식국인 중국, 에콰도르, 태국, 베트남이 선정 되었으며 지역적 균형을 고려하여 아프리카 모잠비크가 시범 사업지로 선정됨

<그림 4> Seafood Map 시범 사업지



3. 출장 결과 활용 및 시사점

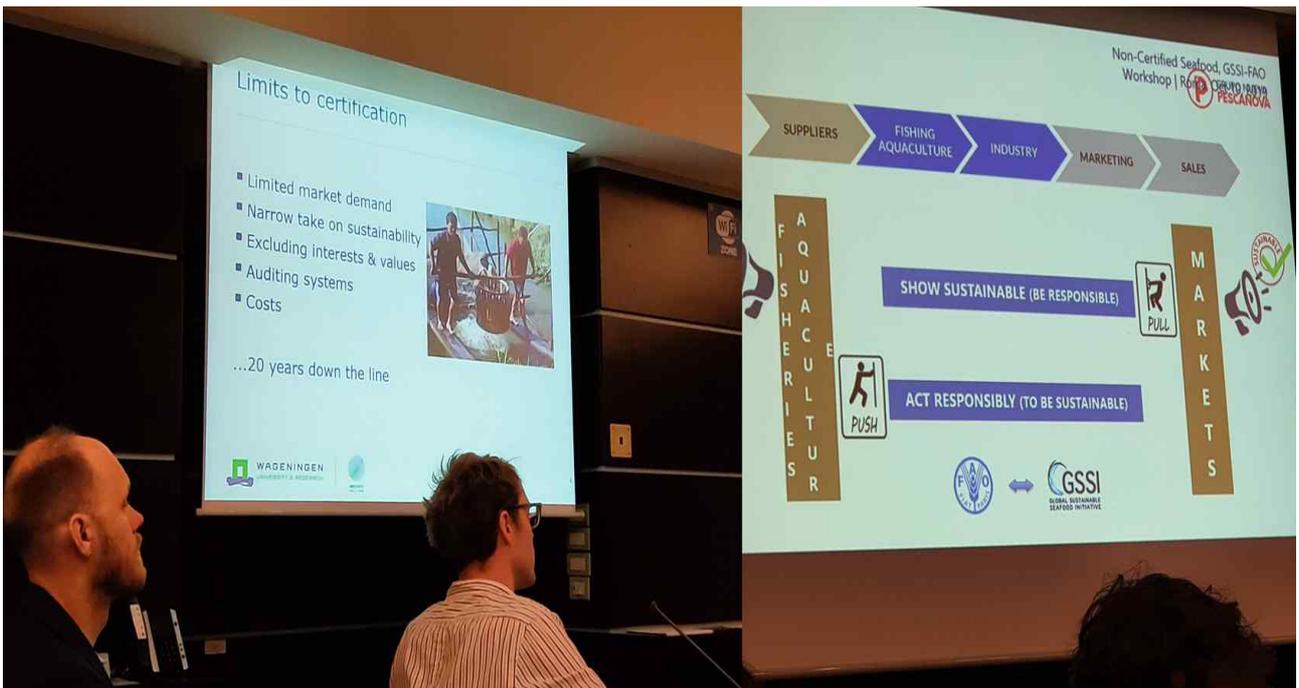
- 수산분야 지속가능성 제고를 위한 국제사회의 합의는 이뤄졌으나 달성 방법은 현재까지 논란의 여지가 있음
 - ASC와 같은 민간 인증의 경우 효과성 면에서는 우수한 것으로 인식하고 있으나 고비용 구조로 인해 개도국 수산양식 업계에서 받아들이기에는 많은 시간과 소비자의 참여가 요구됨
 - 전세계에서 생산되는 수산물의 95%가 비인증 수산물임을 고려할 때 수산양식분야 지속가능성 제고를 위해 이들 비인증 수산물의 지속가능성 제고 노력이 필요하며, 인증제의 핵심인 인증정보의 저비용 유통을 통해 이를 달성할 수 있음
 - GSSI의 Seafood MAP의 경우 추진 논리는 명확하지만 민간 주도 인증제 특성상 제2의 저비용형 ASC 인증으로 발전할 여지가 있음

- 한국은 ASC, GSSI Seafood MAP 등의 출현을 통해 급속도로 변화하는 양식생산 및 소비 환경 변화를 주의깊게 모니터링하고 이에 대한 대응 전략을 수립해야 함
 - GSSI Seafood MAP 시범 사업에 대한 결과를 모니터링하고 후속 참여와 같은 한국의 대응 수위를 결정해야 함
 - 수산양식 분야 블록체인 활용 분야로 Seafood MAP과 유사한 개념의 공익형 지속가능성 인증체계를 만들어 국제사회에 제시하는 방안도 고려 가능함

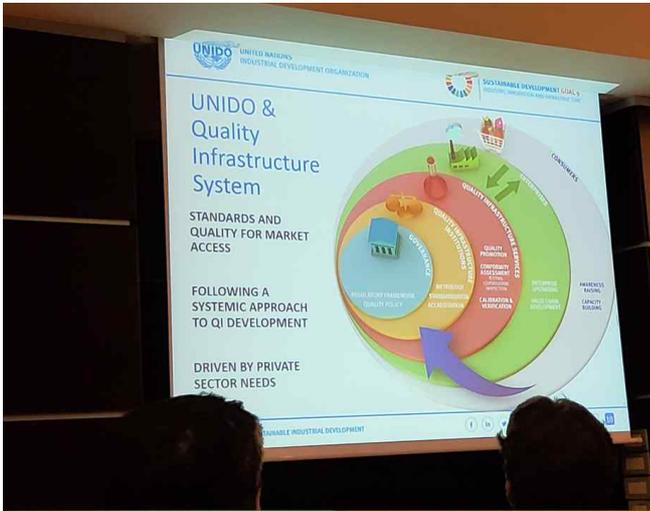
현장 스케치



Note: FAO 행사장 전경



Note: 주요 내용 발표



Note: UN 기관 및 공익 단체의 지속가능성 제고 노력 소개

REPORT

Expert consultative workshop on non-certified seafood

October 10th and 11th 2019

FAO Headquarters, Viale delle Terme di Caracalla, 00153 Rome, Italy

Acknowledgements

The GSSI Steering Board and Secretariat would like to express their gratitude to FAO for hosting and inviting GSSI to organize this workshop.

Over the past year the GSSI Board, with support from FAO, UNIDO and IDH, has contracted MRAG Americas to explore how GSSI can build from the success of its Benchmark Tool and leverage its industry partnership and collaboration with FAO to help accelerate change in seafood which is currently not certified. As a result, MRAG prepared a concept note that described a revised theory of change and the outlines this a proposed program for GSSI (Seafood MAP) that complements GSSI's continued work on benchmarking. This concept note was shared with participants prior to the workshop.

We thank FAO, UNIDO and IDH for their support; and MRAG Americas for preparing the concept note, which informed many of the workshop discussions.

Lastly, thank you to all workshop participants for the excellent exchange of information and ideas. We appreciate your input and positive attitude and look forward to continuing the work on the proposed program, incorporating the outcomes of this workshop.

Introduction

On October 10th and 11th 2019, the Global Sustainable Seafood Initiative (GSSI) convened an expert consultation workshop on non-certified seafood, hosted by the Food and Agriculture Organization of the United Nations (FAO) in Rome, Italy.

Thirty experts from the private sector, academia, intergovernmental, non-governmental, and governmental organizations (Annex I) convened to discuss how to measure and accelerate sustainability improvements in non-certified seafood. Particular emphasis was put on the potential of public-private collaborations and the creation of more efficient pathways to allow initiatives to better communicate their efforts to drive improvements in non-certified seafood production systems.

The group of participants formed a diverse representation from both developed and developing countries and brought in expertise on inter alia traceability and certification, fisheries management, aquaculture systems and seafood markets.

The FAO invited GSSI to host this workshop based on GSSI's successful Global Benchmark Tool founded in the Code of Conduct for Responsible Fisheries (CCRF) and other internationally agreed instruments; current collaboration with the FAO to explore how GSSI can leverage its partnership to help create a pathway for sustainable development of seafood production systems in developing countries; and the potential of the GSSI partnership to become one of the platforms for collaboration between FAO and the private sector, thereby improving the effectiveness of public-private partnerships to advance improvements in seafood production systems and value chains and so make an important contribution to achieving Agenda 2030 and the Sustainable Development Goals (SDGs).

The workshop recognized that:

- Not all non-certified seafood is unsustainable;
- Certification alone is limited in recognizing and improving sustainability, in particular in non-western markets;
- The sustainability performance of a significant proportion of global seafood production is unknown;
- Both public and private efforts are required to accelerate change in non-certified seafood: GSSI may offer a platform to promote sector-wide collaboration to achieve this.

The opening remarks of the workshop were given by Dr. Audun Lem, Deputy Director of the Policy and Resources Division in the Fisheries and Aquaculture Department, FAO.

Workshop objectives

Four **objectives** formed the basis of discussions in the various workshop sessions:

- To identify reasons why a significant proportion of global seafood production is not certified;
- To get a collective understanding of current public and private efforts working to improve non-certified seafood;
- To get a collective understanding of the needs and opportunities to scale and accelerate improvements in non-certified seafood;
- To recommend next steps to develop an approach to help scale and accelerate improvements in non-certified seafood.

In preparation of the workshop, four studies were prepared in collaboration with external experts:

1. Global review of current Theory of Change, including FIPs/AIPs, to improve sustainability in non-certified seafood with identification of challenges and opportunities
2. Review of potential FAO-GSSI collaborations to promote blue growth, sustainable seafood and SDGs
3. Preparation of a pilot project proposal for non-certified seafood in a BGI priority country jointly with Seafood MAP
4. Review of international instruments and initiatives framework for the establishment of the framework of non-certified seafood improvement.

The outcomes of these studies were presented in Powerpoint format at the workshop in structured panel discussions. The PDFs of the presentations, together with this report, form the final study reports.

Study	Report
Global review of current Theory of Change, including FIPs/AIPs, to improve sustainability in non-certified seafood with identification of challenges and opportunities	<p>“Scaling up improvement in non-certified seafood” by Mariska Bottema, Wageningen University & Research</p> <p>Panel: “Non-certified seafood – a global picture”</p> <ul style="list-style-type: none"> • Angel Matamoro Irago, Chief Corporate Social Responsibility and Institutional Relations Officer, Nueva Pescanova Group • Flavio Corsin, Aquaculture Director, IDH, the Sustainable Trade Initiative • Han Han, Executive Director, China Blue Sustainability Institute • Hoyt Peckham, COO, Ocean Outcomes • Hugo Byrnes, Vice President Product Integrity, Ahold Delhaize
Review of potential FAO-GSSI collaborations to promote blue growth, sustainable seafood and SDGs	<p>Panel: “UN Series: Collaboration to promote Blue Growth, SDGs and sustainable seafood towards 2030”</p> <ul style="list-style-type: none"> • Danielle Blacklock, FAO • Henry DeBey, FAO • Joseph Zelasney, FAO • Nima Bahramalian, UNIDO
Preparation of a pilot project proposal for non-certified seafood in a BGI priority country jointly with Seafood MAP	<p>Panel: “Information to the rescue – how can the landscape of non-certified seafood be organized?”</p> <ul style="list-style-type: none"> • Jill Swasey, Fisheries Technical Division Director, MRAG Americas • Mathieu Lamolle, Senior Advisor - Sustainability Standards & Value Chains, International Trade Center • Paul Tuda, Leibniz Centre for Tropical Marine Research • Stephen Fisher, Sustainability Director, Sea Delight, LLC • Sven Biermann, Fisheries Transparency Initiative <p>“Proposed initiative to measure and accelerate improvements in non-certified seafood” by Herman Wisse, Global Sustainable Seafood Initiative</p>
Review of international instruments and initiatives framework for the establishment of the framework of non-certified seafood improvement.	<p>Panel: “Information to the rescue – how can the landscape of non-certified seafood be organized?”</p> <ul style="list-style-type: none"> • Jill Swasey, Fisheries Technical Division Director, MRAG Americas • Mathieu Lamolle, Senior Advisor - Sustainability Standards & Value Chains, International Trade Center • Paul Tuda, Leibniz Centre for Tropical Marine Research • Stephen Fisher, Sustainability Director, Sea Delight, LLC • Sven Biermann, Fisheries Transparency Initiative

Workshop sessions¹

The first day set the scene by giving participants the opportunity to share their experience working, directly or indirectly, with non-certified seafood in fisheries and aquaculture. Panel sessions were held to discuss themes related to identification of non-certified seafood, mechanisms for improvement, alignment with the UN Sustainable Development Goals (the SDGs), and information systems. For the full workshop agenda, see Annex II. Slides of all presentations and panels will be shared with workshop participants.

It was agreed that there is an opportunity and need for development of a program to measure sustainability performance and improvement and accelerate change in non-certified seafood. Discussions that took place covered different topics from different angles. Four recurring themes were identified:

- Definition of a common goal and a theory of change;
- Local communities and local knowledge;
- Incentives, roles and responsibilities; and
- Risk assessments.

Definition of a common goal and a theory of change

Workshop participants agreed that there is a critical need to improve resiliency of seafood resources for food security, ocean health and livelihoods, and therefore a shared vision to work towards sustainable and healthy seafood coming from well-managed sources, as well as decent jobs and livelihoods for the projected population growth through 2050.

It was also emphasized that 100% certification of globally produced seafood is **not** the end goal, and an unlikely reality.

The SDGs are well-defined and play an important role in defining globally acknowledged targets for sustainable development and indicators to track progress towards those goals. Relevant SDGs and SDG targets should provide the backbone for the future development of Seafood MAP as these can form the basis for a holistic approach to sustainability covering environmental, social and economic aspects.

SDGs provide the basis of incentives for sustainable production as well as responsible action; and contribute to improved food security in those areas of the world where it is most needed.

The 2030 Agenda and SDGs reflect an ambition for transformational change towards sustainability that may require change in the way actors currently collaborate and approach sustainability.

Local communities and local knowledge

Any effort aimed at improving the sustainability of seafood production systems should engage local communities from the get-go. Workshop participants highly recommended a system that harnesses the knowledge and capabilities of local communities to work towards more sustainable seafood production systems and improvement of local priorities; and that may allow fisheries and farms to be competitive in the market.

Communities should have the opportunity to share indigenous knowledge, thus promoting the empowerment of local communities. This would also allow small-scale operations to communicate about the sustainability of their practices and make connections with potential markets where connections do not yet exist.

¹ Contributes to Study 1 “Global review of current Theory of Change to including FIPs/AIPs, to improve sustainability in non-certified seafood with identification of challenges and opportunities” and Study 2 “Review of potential FAO-GSSI collaborations to promote blue growth, sustainable seafood and SDGs”

Incentives, roles and responsibilities

Many different actor groups play a role in the landscape of non-certified seafood. Any effort aimed to measure and accelerate sustainability improvements in non-certified seafood needs to clearly articulate the value of the program for each actor group. There was consensus that such an effort will be more successful when the incentives for each group to participate are credible and well-communicated.

Broadly, the range of actors can be placed in four categories:

- Producers
 - Fishers
 - Farmers
- Market players
 - Intermediaries
 - Processors
 - Distributors
 - Retailers
 - Etc.
- Investors
 - Debt investors
 - Equity investors
- Improvement drivers
 - Intergovernmental organizations
 - Philanthropic organizations
 - Non-governmental organizations
 - Governmental organizations

Recognizing and achieving value for each actor group requires a combination of top-down and bottom-up approaches. Top-down approaches are those that are brought to the producers, generally without their engagement and collaboration, and can include incentives and regulations coming either from policies or from downstream supply chain actors. Bottom-up approaches recognize the important role played by the organization of fisheries and farms on the ground; and the provision of a platform through which they can share their knowledge with other actors.

Risk assessments

Factors that determine the seafood sustainability landscape are related to the organization of communities; supply chain and market characteristics; infrastructure; and management and governance systems. This creates a diverse landscape meaning there is no one-size-fits-all solution to address sustainability issues in non-certified seafood.

There is a need to expand beyond traditional approaches for measuring sustainability, which are generally performance-based and limit opportunities for small scale operations, to include concepts of risk and reward.

The concept of risk assessment and mitigation is prevalent throughout seafood production systems. 'Risk' is a cross-cutting concept, and recognition of risk and options to reduce risks are recommended to be addressed. The level of risk associated with a specific country; area; or organizational structure may influence various concepts identified during this workshop:

- How can we verify the information generated in a means to both ensure sustainability is achieved and not increase the cost and burdens to the system substantially?
- What levels of trust and assurance can be associated with a self-declaration of sustainability performance and other sustainability performance outputs?

Risk assessments may be at the heart of each key domain that drives transformations in fisheries and aquaculture towards sustainability (see presentation “Panel 2 – UNIDO”). If, for example, a country’s quality infrastructure is well developed, with credible conformity assessment bodies to assess the sustainability of fishing and farming practices, the level of risk associated with the seafood production systems in that country will decrease.

KEY MESSAGES

- The 2030 Agenda and SDGs reflect an ambition for transformational change towards sustainability that may require change in the way actors currently collaborate and approach sustainability;
- Factors that determine the seafood sustainability landscape are related to the organization of communities; supply chain and market characteristics; infrastructure; and management and governance systems. This creates a diverse landscape meaning there is no one-size-fits-all solution to address sustainability issues in non-certified seafood;
- Jurisdictional approaches that address sustainability issues beyond the level of an individual farm or fishery are increasingly needed to deliver efficient solutions;
- Any effort aimed at improving the sustainability of seafood production systems should engage local communities from the get-go;
- It is critical to develop incentives for production systems (of all sizes) and actors across the supply chain to move towards increased sustainability;
- There is a need to expand beyond traditional approaches for measuring sustainability, which are generally performance-based and limit opportunities for small scale operations, to include concepts of risk and reward;
- The key questions are: how can the information from producing communities; supply chains; markets; management and governance systems; and policies be organized to promote better coordination and more efficient collaboration to advance and promote responsibility and sustainability in non-certified seafood?

Proposed initiative to measure and accelerate improvements in non-certified seafood²

Following Day 1 presentations, panels and discussions, the workshop shifted to discuss whether the proposed mechanism developed by GSSI and consultants could provide the framework necessary to accelerate improvements and recognitions of non-certified seafood; and subsequently, what aspects should be included within that framework to achieve the designated goals.

An earlier conceptual version of the concept was discussed with GSSI partners at the GSSI Partnership Meeting on May 6th 2019. Based on the GSSI Partner Meeting discussions and the version of the concept note that was shared in May, electronic feedback was received from Ernesto Godelman (CEO, CeDePesca³). The feedback (Annex III) helped to sharpen the Seafood MAP concept note in preparation of the Expert Consultative Workshop on non-certified seafood.

'Seafood MAP – *Measuring and Accelerating Performance in Global Seafood Supply*' was presented on the second day. Key links to the discussions of day 1 were made:

- There are many different pathways that contribute to more sustainable seafood production systems. Fisheries and farms are likely to be coming from different starting points with different needs to help make improvements and achieve recognition;
- To be successful, Seafood MAP will need to create the common language framework that acknowledges sustainable and/or responsible efforts that have been put in by **producing communities** whilst at the same time giving **market players** a tool to base their sourcing commitments on and communicate with their supply chain; **investors** a risk-assessment tool to base their investments on; and **improvement drivers** to coordinate their efforts in an efficient manner, this would create value and will help strengthen those communities that depend on the production of sustainable seafood most.
- The Seafood MAP framework will be built around providing this common language for identifying and progressing towards sustainable seafood production. It will find its basis in internationally accepted codes and guidelines such as SDGs; CCRF and more.
- Seafood MAP should adopt an area-based approach by assessing risk in each of the key domains associated with a region, resulting in an output that determines the overall level of risk associated with that area. This assessment could be the starting point to identify which interventions should be prioritized and how producers, market players, investors and improvement drivers should collaborate to address these priorities (see Presentation "Opening Presentation Day 1 – Wageningen University and Research" and Presentation "Panel 3 – MRAG Americas" for examples and elaborations).

The value of Seafood MAP⁴

Workshop participants recognized the value of Seafood MAP in the following ways:

- To select, prioritize and direct interventions more efficiently;
- To identify collaboration partners when implementing interventions;
- To promote multi-stakeholder initiatives to eventually produce market access for non-certified producers;
- To assist and onboard small-scale producers on a pathway of socially and environmentally responsible production;
- To scale up current successful bottom-up community approaches;
- To provide an entry way for improvement efforts in challenging, unsustainable fisheries;
- To acknowledge current sustainable practices of Small-Scale Fisheries;

² Contributes to Study 2 "Review of potential FAO-GSSI collaborations to promote blue growth, sustainable seafood and SDGs"

³ www.cedepesca.net/

⁴ Contributes to Study 3 "Preparation of a pilot project proposal for non-certified seafood in a BGI priority country jointly with Seafood MAP" and Study 4 "Review of international instruments and initiatives framework for the establishment of the framework of non-certified seafood improvement"

- To remove confusion and develop consensus on how to efficiently work with multiple pathways of improvement;
- To demonstrate a company's responsible practices in areas that have not been reached by certification;
- To learn what approaches to promote responsible and sustainable production have and haven't worked.

GSSI's role would be to develop the Seafood MAP framework and platform in collaboration with relevant institutions. GSSI will then work with its partnership to promote structural use of Seafood MAP. GSSI will **not** play a role in on-the-ground capacity building and improvement efforts.

Proposed roadmap for development⁵

Following consensus on the value of Seafood MAP, workshop sessions and discussions led to the following proposed roadmap for further development of Seafood MAP:

- Develop a **strawman framework** and questionnaire for fisheries and aquaculture in consultation with:
 - The GSSI Partnership
 - GSSI Recognized Scheme Owners
 - FAO, with input from:
 - FAO Member States
 - Local fishing and farming communities/cooperatives
- Build a **digital decision tree** based on the strawman framework:
 - Explore options for development
 - Form partnership with experienced IT organization
 - Further address concerns regarding
 - Verification (of self-declaration)
 - Data quality
 - Data confidentiality
- Design and carry out **pilot projects** in collaboration with producers, market actors, investors and improvement drivers
- **Revise** framework based on results pilot projects
- Further develop Seafood MAP using an **adaptive learning** approach.

Considerations for funding

Development of Seafood MAP may be resource intensive and requires a well-defined funding strategy.

Industry participants indicated that Seafood MAP has the potential to generate interest from the seafood industry to partially fund its development.

Seafood MAP can help address some of the pressures NGOs operating in the space of non-certified seafood currently face. There may be interest from NGOs and/or philanthropic organizations to fund its development.

IGOs expressed their interest to partially fund framework development and/or pilot projects.

Countries may be interested to fund Seafood MAP development as they are also keen to invest in getting their own national certification. Seafood MAP is another way to work towards sustainability.

⁵ Contributes to Study 3 "Preparation of a pilot project proposal for non-certified seafood in a BGI priority country jointly with Seafood MAP" and Study 4 "Review of international instruments and initiatives framework for the establishment of the framework of non-certified seafood improvement"

Recommendations for strawman framework⁶

In a breakout session, workshop participants aimed to answer two questions for fisheries and aquaculture, respectively:

1. Based on what is proposed in the MRAG concept note for Seafood MAP, what should be included in an initial framework for fisheries and aquaculture?
2. What could be the incentives for fisheries and farms to participate?

Aquaculture session key messages

- SDGs form the overarching goals with which aquaculture should be aligned;
- Sustainable Aquaculture Guidelines are a potential additional base for indicator development that can feed into the framework once published;
- Sustainable aquaculture initiatives should address the **environmental** as well as the **socio-economic** sustainability pillar;
- Structure of the framework and self-declaration tool could be an “online decision tree” with a series of questions. The farmer would not have to answer all the questions as, while progressing, some of the questions will be answered for him or her. E.g. by government; markets/market analysts; risk assessments.
- Incentives for farms to participate could come from investor requirements; the market; educational value of the tool; government engagement; database ability to show progress in order to have access to a certain credit line.

Fisheries session key messages

- SDGs, the CCRF and the Small-Scale Fishery guidelines (where applicable) form the overarching goals and indicators with which fisheries should be aligned;
- Existing relevant GSSI benchmark components are an additional base for indicator development;
- Sustainable fisheries initiatives should address the **environmental**, **social**, and the **financial** sustainability pillars;
- Management systems and conditions of the enabling environment should be addressed alongside fisheries performance;
- An initial step to develop the framework content-wise is to conduct a mapping exercise across the SDGs; SSF guidelines; CCRF; Benchmark Tool etc. along the three sustainability pillars. This will define the framework, and hopefully identify any gaps from the Benchmark Tool against the SDGs and guidelines.

Collective recommendations

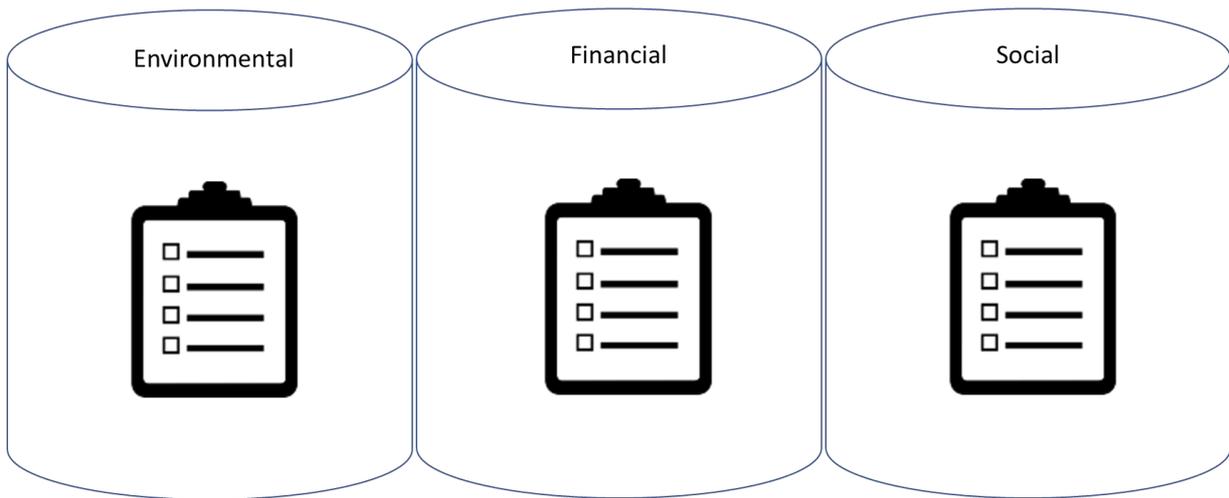
Feasible next steps were defined as follows:

1. An initial framework will be mapped out. A simple self-declaration tool in the form of a questionnaire will be derived from the framework. SDGs will be used as a starting point. The framework will cover environmental; social and economic sustainability, along with management systems and related enabling factors.
2. The option to build questions formulated in step 1 into a decision tree as the self-declaration/entry point and database will be further explored.

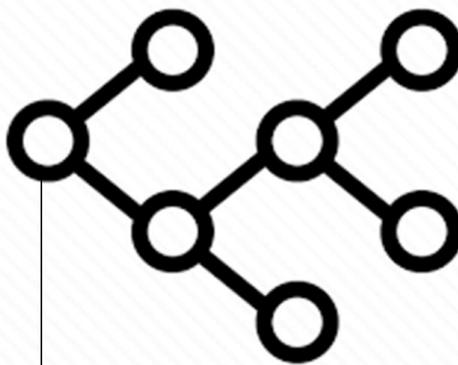
⁶ Contributes to Study 4 “Review of international instruments and initiatives framework for the establishment of the framework of non-certified seafood improvement”

Key considerations:

- The framework should remain broad and be able to accommodate multiple sets of indicators in each pillar of sustainability.
- Existing credible standards on sustainability should not be compromised.
- The process should be inclusive and use a combination of top-down and bottom-up approaches. GSSI, through its industry support and partnerships with FAO and NGOs is ideally positioned to ensure an inclusive process.
- In the consultation and development phases, at least the following groups should be engaged:
 - The **GSSI Partnership** can integrate the development process into the governance of the sector
 - Rightsholders in the space of non-certified seafood, e.g. **(small-scale) non-certified producers** should be adequately present and engaged in the process.
 - **Country input** and input from local communities can be gained through GSSI liaison with FAO to establish consultations in FAO regional meetings.
 - GSSI's relationship with **scheme owners** of credible seafood certification schemes is an advantage. Scheme owners can offer a good process of collaboration and should be consulted.
- The concept of continuous improvement should be strongly featured in future consultations. Discussions in this workshop focused mainly on creating the right incentives for key actor groups to participate.



- Farm / Fishery status
- Management system status
- Market status



Starting point of self-declaration tool. Each answer allows the user to move through a 'decision tree' structure and will provide the answer to a subset of the questionnaire that relates to e.g. management systems/institutional settings/market characteristics.

Figure 1 Proposed next steps: 1) Map out initial framework using the Sustainable Development Goals and other international codes and guidelines; 2) Develop questionnaire for self-declaration/entry assessment and digital decision tree from the framework.

Recommendations for pilot projects⁷

During the workshop, it was agreed that pilot projects will be designed to provide a proof of concept that the framework:

- Harnesses the knowledge of local producing communities and motivates their participation;
- Is a tool that can be used by buyers in markets currently not engaged with certification to make sourcing commitments in non-certified seafood and incentivize their supply chain to continuously improve their sustainability performance;
- Lets investors and improvement drivers coordinate their efforts in an efficient manner;
- Successfully assesses risk in key domains of sustainability to determine the level of risk and assurance associated with a specific area;
- Can be used to track progress in sustainability improvements.

The proposed Seafood MAP program was regarded by workshop participants as highly ambitious. It was recommended to design 'minimum viable' pilot projects and develop Seafood MAP using a process of *adaptive learning*. A number of potential pilot projects were highlighted by workshop participants.

1. **Farm and fishery operations in relation to institutional systems and quality infrastructure (Indonesia)**
UNIDO works in Indonesia to improve the performance of aquaculture and, to a lesser extent, fisheries. Focus lies on the role of the institutional system around these farms and fisheries to drive the improvement and the role of quality infrastructure to assess improvement and compliance. FAO is currently providing support to traceability for farmed shrimp in Indonesia which could be another angle to consider when developing this pilot project.
2. **Supply chain risk management (Indonesia)**
Local and international buyers may be interested to participate in pilot projects. A company such as Bali Seafood International could pilot Seafood MAP within their supply chain to test to what extent Seafood MAP works as a supply risk mitigation strategy.
3. **Area-based approaches and partnerships (Various countries)**
A number of projects that use an area-based approach, driven by IDH, the Sustainable Trade Initiative, to address sustainability issues were mentioned. Such projects generally help farming and fishing communities to form cooperatives; and develop partnerships using a multi-stakeholder approach. Various countries were listed as potential location for piloting Seafood MAP using an area-based approach:
 - China
 - Ecuador
 - Mozambique
 - Thailand
 - Vietnam
4. **Defining a pathway towards sustainability for basic fisheries (Vietnam)**
Seafood MAP could be piloted by a buyer in collaboration with local, very basic fisheries that generally do not have the requested data, or the incentive to engage in a FIP. This would help determine whether Seafood MAP can provide the very starting point for basic fisheries (and farms) to start their journey towards sustainable management.

⁷ Contributes to Study 3 "Preparation of a pilot project proposal for non-certified seafood in a BGI priority country jointly with Seafood MAP"

5. **Smallholders and domestic markets in developing countries (Various countries)**

One or several pilot projects should be focused on smallholders selling into domestic artisanal or local high-value markets in developing countries. There is a need to test whether Seafood MAP will be beneficial for those communities and can provide incentives for them to participate. The program could be tested on a case basis by e.g. Ocean Outcomes. Its scalability would need to be evaluated as a second step.

6. **Well-managed artisanal fisheries (Galicia, Spain)**

The Galician region in Spain has a well-established fisheries management system for what are largely small-scale fisheries. Complementing pilot projects in abovementioned regions with a pilot project in Galicia will enable the evaluation to compare how Seafood MAP functions in regions with well-developed fisheries management systems and lesser-developed fisheries management systems.

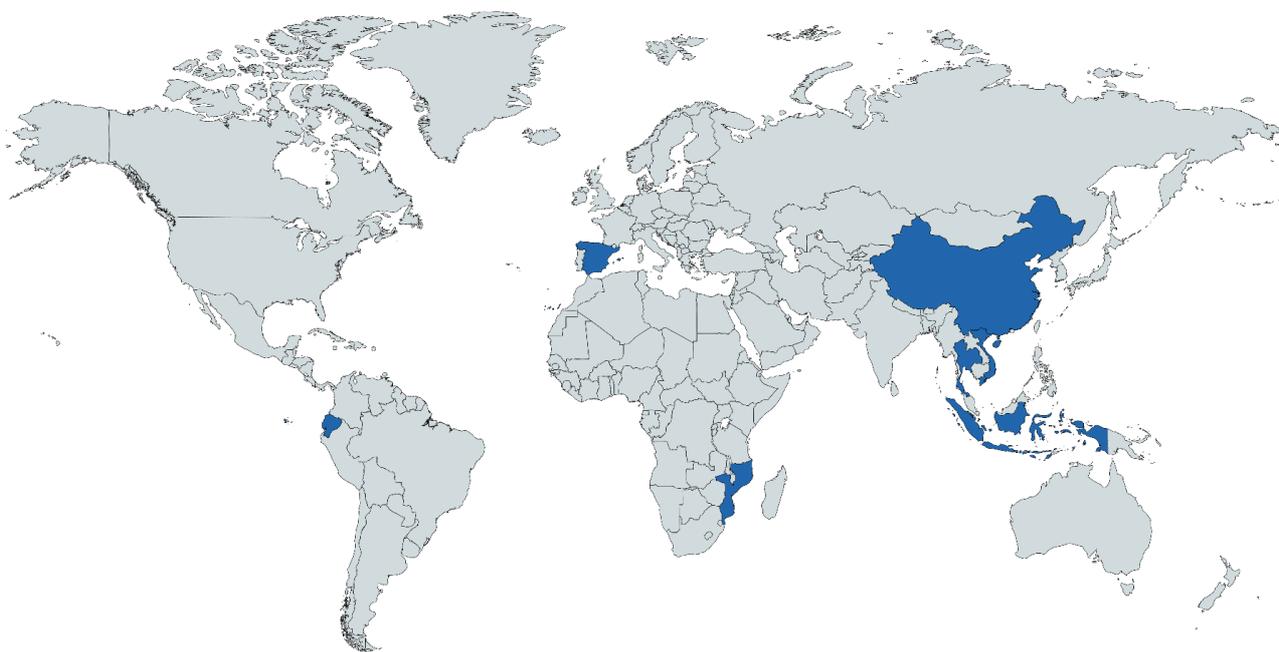


Figure 2 Proposed locations for Seafood MAP pilot projects

Annex I – Workshop Participant List

Private sector

**= Virtual participation*

Industry

Angel Matamoro Irago (Nueva Pescanova)
Bill DiMento* (Highliner Foods)
Gerald Knecht (Bali Seafood International)
Janelle Dong (China Aquatic Products Processing and Marketing Alliance)
Stephen Fisher (Sea Delight)

Retail

Hugo Byrnes (Ahold Delhaize)

Academia

Graeme Parkes (MRAG Americas)
Jill Swasey (MRAG Americas)
Mariska Bottema (Wageningen University & Research)
Paul Tuda (Leibniz Centre for Tropical Marine Research)

NGOs

Flavio Corsin (IDH, the Sustainable Trade Initiative)
Han Han (China Blue Sustainability Institute)
Hoyt Peckham (Ocean Outcomes)
Jennifer Kemmerly* (Monterey Bay Aquarium)
Sebastian Mathew (International Collective in Support of Fishworkers)
Sven Biermann (Fisheries Transparency Initiative)

IGOs

Joseph Wozniak (International Trade Centre)
Mathieu Lamolle (International Trade Centre)
Nima Bahramalian (United Nations Industrial Development Organization)
Ray Purnama (United Nations Industrial Development Organization)

National competent authorities

Annika Mackensen (Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ))
Sangchoul Yi, Korean Maritime Institute

FAO

Alexander Ford
Audun Lem (October 10th)
Danielle Blacklock
Henry DeBey
Joseph Zelasney
Nada Bougouss
Nianjun Shen (October 11th)

GSSI

Herman Wisse
Eva Mudde

Annex II – Workshop Agenda

Thursday 10 th October 2019	
8.30	Welcome & Registration
9:00	<p>Opening Remarks</p> <p><i>Audun Lem, Deputy Director of the Fisheries and Aquaculture Policy and Resources Division, FAO</i></p>
9:10	Introduction to workshop participants
9:20	<p>Presentation: Scaling up improvement in non-certified seafood</p> <p>This opening presentation will discuss how seafood sustainability tools (e.g. certification; FIPs/AIPs) have shaped the seafood landscape; and will discuss some potential new ways of thinking about improvement in non-certified seafood.</p> <p><i>Mariska Bottema, Researcher Aquaculture Governance, Wageningen University & Research</i></p>
10:00	<p>Panel and Plenary: Non-certified seafood – a global picture</p> <p>A range of speakers will share their experiences working with non-certified seafood in a variety of seafood producing regions around the world.</p> <p><i>Moderator: Herman Wisse, Managing Director, Global Sustainable Seafood Initiative</i></p> <ul style="list-style-type: none"> • <i>Angel Matamoro Irago, Chief Corporate Social Responsibility and Institutional Relations Officer, Nueva Pescanova Group</i> • <i>Flavio Corsin, Aquaculture Director, IDH, the Sustainable Trade Initiative</i> • <i>Han Han, Executive Director, China Blue Sustainability Institute</i> • <i>Hoyt Peckham, COO, Ocean Outcomes</i> • <i>Hugo Byrnes, Vice President Product Integrity, Ahold Delhaize</i>
11:15	Coffee and Networking break

11:45	<p>UN Series: Collaboration to promote Blue Growth, SDGs and sustainable seafood towards 2030</p> <p>This series will highlight relevant current areas of work of two UN organizations framed in the 2030 agenda; and will discuss how public-private collaborations can help advance this work.</p> <p><i>Moderator: Eva Mudde, Program Officer, Global Sustainable Seafood Initiative</i></p> <ul style="list-style-type: none"> • <i>Danielle Blacklock on FAO Sustainable Aquaculture Guidelines</i> • <i>Henry DeBey on FAO's Blue Growth Initiative</i> • <i>Joseph Zelasney on FAO Small-Scale Fisheries</i> • <i>Nima Bahramalian on UNIDO's industrial development and Quality Infrastructure work</i>
13:00	Lunch break
14.00	<p>Panel and plenary: Information to the rescue – how can the landscape of non-certified seafood be organized?</p> <p>This panel will dive into the role that information plays to close the current knowledge gap on sustainability in non-certified seafood. It discusses the diversity of information and reporting mechanisms.</p> <p><i>Moderator: Audun Lem</i></p> <ul style="list-style-type: none"> • <i>Jill Swasey, Fisheries Technical Division Director, MRAG Americas</i> • <i>Mathieu Lamolle, Senior Advisor - Sustainability Standards & Value Chains, International Trade Center</i> • <i>Paul Tuda, Leibniz Centre for Tropical Marine Research</i> • <i>Stephen Fisher, Sustainability Director, Sea Delight, LLC</i> • <i>Sven Biermann, Fisheries Transparency Initiative</i>
15:15	Coffee and Networking break
15:30	<p>Discussion: Identified opportunities and challenges – Recommendations for collaboration</p> <p><i>Moderator: Gerald Knecht, CEO, Bali Seafood International</i></p>
16:30	<p>Closing remarks Day 1</p> <p><i>Audun Lem</i></p>
17:00	End Day 1

Friday 11th October 2019

9:00	<p>Opening Remarks</p> <p><i>Hugo Byrnes, Vice President Product Integrity, Ahold Delhaize</i></p>
9:15	<p>Discussion: Proposed initiative to measure and accelerate improvements in non-certified seafood</p> <p><i>Moderator: Herman Wisse, Managing Director, Global Sustainable Seafood Initiative</i></p>
10:30	<p>Coffee and Networking break</p>
11:00	<p>Breakout Sessions</p> <p>Two breakout sessions will discuss in detail proposed program components; the need they address; identified challenges; and how these can help accelerate improvements in non-certified seafood through public-private collaborations.</p> <ul style="list-style-type: none"> • Measuring and accelerating performance in fisheries <i>Moderator: Eva Mudde, Program Officer, Global Sustainable Seafood Initiative</i> • Measuring and accelerating performance in aquaculture <i>Moderator: Herman Wisse</i>
12:30	<p>Lunch break</p>
13:30	<p>Presentation Outcomes Breakout Sessions</p> <p><i>Moderator: Hugo Byrnes</i></p>
14:30	<p>Discussion: Pilot projects to scale and accelerate improvements in non-certified seafood</p> <p>This plenary session will discuss and identify key regions for potential pilot projects for the GSSI concept program; and will explore the way forward for the GSSI concept program.</p> <p><i>Moderator: Eva Mudde</i></p>
15:15	<p>Coffee and Networking break</p>
15:45	<p>Discussion: Recommendations for accelerating progress in non-certified seafood</p> <p><i>Moderator: Herman Wisse</i></p>
16:45	<p>Closing Remarks</p> <p><i>Hugo Byrnes</i></p>
17:00	<p>End of workshop</p>

Annex III – Feedback from Ernesto Godelman (CeDePesca) on first version concept note

Please note that the feedback presented below is based on discussions held at the GSSI Partners Meeting on May 6th. The concept has been revised and sharpened extensively since the GSSI Partners Meeting.

On behalf of CeDePesca, I would like to send some comments regarding the eventual "entry way" process as it was presented at the last GSSI members meeting held in May 2019 in Amsterdam, which will be discussed again in October 2019 in Rome. I will not attend that meeting, but I'm copying here some colleagues from friend organizations that probably will attend.

As a remainder, it is important for you to know that CeDePesca has been involved with "entry way" (FIP) projects since 2007, and currently run 15 fisheries improvement projects around the world.

At the aforementioned report, it has been showed that currently 70% of seafood production is not involved with certification, assessments against certification standards, FIPs or AIPs. This situation would create an empty space that would call for a new "entry way", suggesting that GSSI could manage such program.

In our opinion, such photographic presentation of facts does not represent the moving reality. As the Figure 1 shows, it is not possible, nor true, to ignore that this "empty" 70% was much bigger just few years ago, and since 2007 the number of fisheries involved with management improvements and certifications has increased drastically.

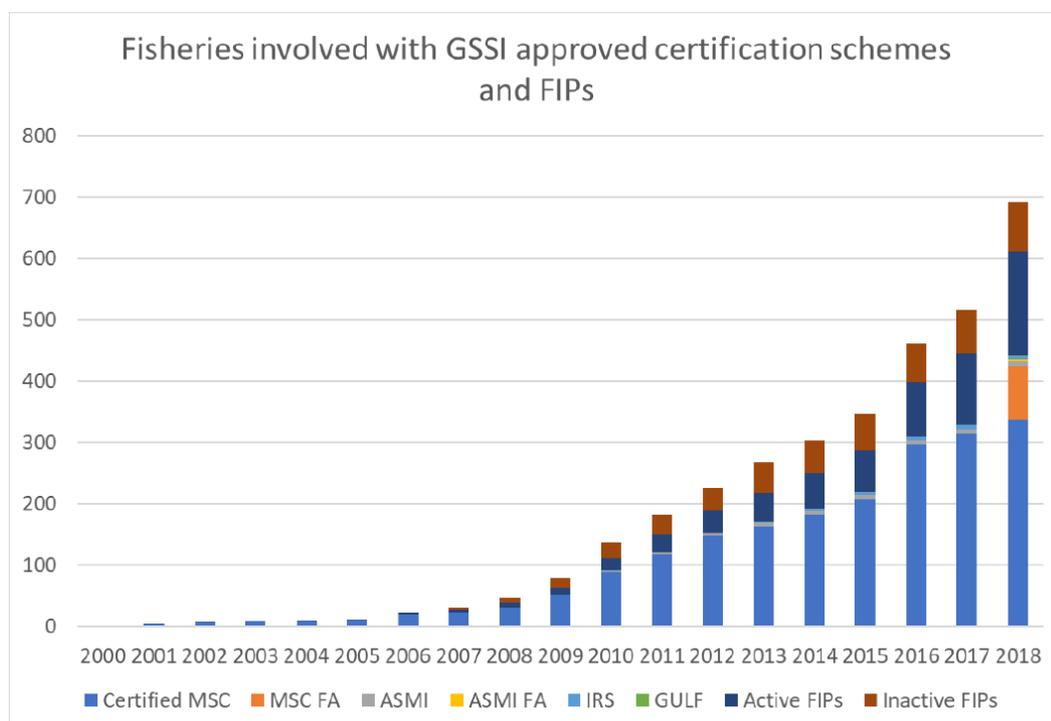


Figure 1: Currently, almost seven hundred fisheries are certified, following assessment or involved with FIPs. Just 10 years ago they were less than 50. (Sources: see References below)

As it is showed in Figure 2, the perceptible trend is to continue increasing, not to stagnation. So, in 10 more years, just with the current incentives, this 70% will become a lower number, even if the increase curve tends to saturate.

That is because currently market incentives exist, and several "entry ways" are already in place for Aquaculture and for Fisheries certification schemes. For example, MSC oriented fisheries are involved in FIPs following the guidelines of the Conservation Alliance for Sustainable Solutions. GULF is encouraging FIPs based on its standard. Out of GSSI, the IFFO RS standard includes the Improvers Program with the same goal.

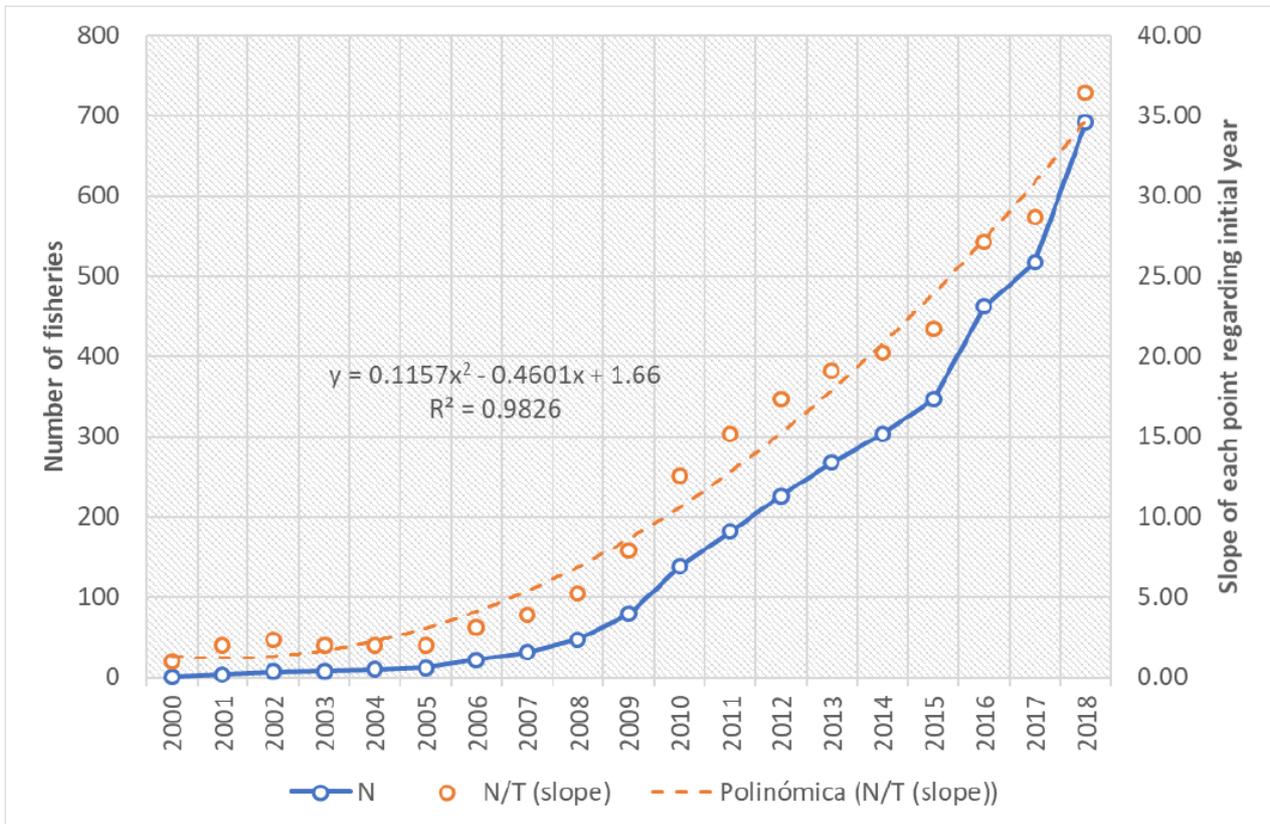


Figure 2: Trend of increasing in the number of fisheries engaged with GSSI approved certification schemes and FIPs. It is possible to observe that the slope trend is better fit by a polynomic function of 2nd degree, which means that right now the process is accelerating, not slowing down. (Sources: see References below)

If GSSI wants to be engaged directly with a new "entry way" (or FIPs type), that will need a) a standard to define the weaknesses and to design an action plan, and b) a verification system to avoid greenwashing (or bluewashing) in order to allow the sustainable/responsible markets to keep buying.

So, what would be the standard that GSSI "entry way" or FIP projects would use to understand what improvements are needed? And how GSSI will be engaged with a complex verification system fishery by fishery?

In our opinion, it is not the role of GSSI to build one more improvement program (with its associated standard) but rather benchmarking those already existing and encouraging those certification schemes lacking one to put it in place asap aligned with the GSSI benchmark.

An "entry way" GSSI benchmark could contribute to the global process by freeing it from one given, predominant standard, and granting credibility to those FIPs (or entry way projects) that demonstrate hard work and advances independently verified, no matter the time it takes to achieve ALL the improvements needed.

As final comments, it is important to note that most of the fisheries that are being marginalized of this growing process are mainly oriented to the domestic markets, or to foreign markets without any real commitments with responsible sourcing. So, besides encouraging all certification schemes to have an "entry way", the strategic need to keep the pace of the current trend is not creating a GSSI "entry way" but creating the incentives for those currently not involved markets to get engaged with the sustainable seafood movement.

Best regards Ernesto Godelman CeDePesca CEO

References:

<https://www.msc.org/docs/default-source/default-document-library/what-we-are-doing/global-impact-reports/msc-global-impacts-report-2017-interactive.pdf>

https://www.msc.org/docs/default-source/default-document-library/about-the-msc/msc-annual-report-2017-2018.pdf?sfvrsn=b0c19c3_4

<https://www.ourgssi.org/wp-content/uploads/2019/04/20160712-ASMI-GSSI-Benchmark-Report.pdf>

<https://www.alaskaseafood.org/rfm-certification/certified-fisheries/>

<https://www.responsiblefisheries.is/certification/certified-fisheries>

<https://www.audubongulf.org/certification/about-g-u-l-f-certification/>

<https://www.audubongulf.org/fips/>