

Section II: Roadmap

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CHAPTER 1 REGIONAL SPS COORDINATION PLAN & ROADMAP

The SPS Regional Coordination Plan Study & Roadmap report is comprised of two sections (Section I: Study & Analysis and Section II: Roadmap). The report was prepared as part of the activities commission by IICA and CRFM to increase CARIFORUM Member States' compliance with international SPS measures, standards, and procedures to enhance international and regional market access for seafood products. The combined findings from Section I of this report and other activities completed for this consultancy enable the development of a roadmap that can be considered for the enhancement and harmonization of SPS measures across Member States.

The roadmap has been prepared to outline key steps forward in the harmonization of SPS measures across the CARIFORUM region. The goal of the roadmap is to lay out the approach for Member States to improve the completeness of legislative instruments, demonstrate commitment to implementing this legislation, and acquire capacity to ensure safe and healthy seafood products. This roadmap and associated priorities are organized by (1) harmonizing and developing robust legislation related to SPS regulations, (2) supporting commitment for the full implementation of national legislation and SPS-related regulations, and (3) building capacity for Member States to realize successful SPS outcomes for fisheries. Timelines for implementation of the roadmap will be subject to negotiations between Member States regarding processes that would be conducive to harmonization.



Figure 1: SPS Roadmap Priorities

The roadmap was informed by activities conducted for this consultancy to date, which included desktop research and review, the legislative analysis, online surveys, semi-structured interviews, and a matrix analysis for the CARIFORUM region. The processes and systems for coordination at national and regional levels will be presented in this roadmap using a stepped approach. A stepped approach acknowledges the different levels of support that may be required for Member States across the region based on current levels of legislative completeness, commitment, and capacity, as outlined in SPS Regional Coordination Plan, Study, and Roadmap, Section I: Study & Analysis, Chapter 5. The connections and interdependencies of legislation, commitment to implementation of legislation, and the development of capacity are clearly recognized in the approaches to advance SPS measures in the region.

Several factors have been taken into consideration in developing the stepped approach to harmonize SPS measures in the region. The COVID-19 pandemic and extreme weather events have resulted in a high degree of uncertainty and disruption to local and regional supply chains, infrastructure, and economic activity. As such, all recommendations presented as part of the roadmap must be resilient to ensure progress can continue in the event of continued uncertainties, both economic and operational. Project activities also emphasized the significant financial barriers that can impede progress in SPS compliance and enforcement for fisheries. As such, roadmap objectives were developed to be fiscally manageable and consider sustainable financing, where applicable.

1.1 Objective 1: Enhance Fisheries SPS Legislation

An underlining objective for all Member States in harmonizing SPS measures in the CARIFORUM region is the establishment of dedicated and focused national legislation regarding SPS standards and protocols for fisheries. The research and analysis revealed that some Member States have legislation and regulations for SPS measures and standards in fisheries, but these measures are not always applied consistently. Legislation in other Member States may lack SPS measures for fisheries entirely. Any increase in the quality and rigorousness of SPS regulation, if effectively implemented, will raise national SPS standards and practices. This may increase local food safety and can facilitate international export of fisheries products. It is recommended that CARIFORUM Member States harmonize their SPS laws and regulations for the fisheries sector.

1.1.1 Consolidate SPS Measures for Fisheries

SPS measures are frequently implemented through several statutes involving different governance institutions in different fields. As noted in the NEXUS IICA SPS Project Stakeholder and Institutional Analysis Report, SPS laws are found in legislation related to (1) fisheries, (2) food, (3) health and environment, and (4) trade and standards. Since the fisheries sector has inherent differences with agricultural production, such as the harvesting of fish, consolidating SPS measures for fisheries into a single statutory framework may be a useful approach to address these differences and possible complexities in regulator responsibilities. Such a statutory framework could bring together most of the essential SPS requirements into one legislative instrument, while relying upon other agricultural statutes for particular SPS standards and processes that are not specific to the fisheries industry. As a result, SPS measures for fisheries would be consistent with national legislation for agricultural products, ensuring consistency in the application of SPS measures in the Member State.

Much work has been done in the 10th EDF SPS Project to develop harmonized legislative instruments related to SPS, particularly the Draft Model Legislation for Health and Food Safety in Fisheries and Aquaculture. However, draft harmonized legislation is still winding through legislative review and adoption process at the national level. Therefore, consideration can be given to augmenting the draft legislation to enhance clarity in SPS measures and the requirements for all fisheries value chain actors. For example, the participation of multiple regulatory authorities under the mandate of the competent authority can contribute to inconsistencies and confusions across the value chain. This is a particularly important consideration when different Member States designate different departments as competent authorities related to fisheries SPS matters. Harmonization of legislation should, therefore, be consistent in the designation of the competent authority as the same department in all Member States.

1.1.2 Defining Regulatory and Competent Authorities

At present, the Draft Model Legislation developed under the 10th EDF SPS Project (including the Model Legislation for Health and Food Safety in Fisheries and Aquaculture) designates a clear competent authority that has regulatory responsibility for SPS-related matters to ensure the consistent application of SPS standards for fisheries. Under this legislation, the competent authority should be defined as a single agency with regulatory authority to implement SPS measures. However, other regulatory authorities may be involved with some aspects of fisheries SPS matters. It appears that this approach to designating the competent authority is intended to establish a coherent, well-defined structure that could prevent duplication of, and conflicts between, areas of competence for SPS measures. Consolidation of these responsibilities into one government agency aligns Member States with international SPS standards and reduces regional inconsistencies in the application of SPS measures.

It is a requirement of several export markets that a clear competent authority be established to continually monitor SPS conditions nationally. This monitoring includes site visits and audits to ensure proper implementation of the hazard analysis and critical control points (HACCP) standards and the ability to trace fisheries products back to registered fishing vessels or aquaculture farms². Specifically, the EU regulations require that there be a single competent authority responsible for the application of SPS measures for all domestically produced, exported, and imported animals and animal products (including seafood), as well as plants and plant products. As such, the EU will only recognise health certificates that are issued by the single designated competent authority.

While the competent authority will be the principal liaison body with the EU regarding all SPS matters, how a Member State manages SPS-related matters nationally is a matter of national regulation. Considering that SPS measures have implications on fisheries management, it may be appropriate that the regulatory agency responsible for fisheries management include fisheries SPS as part of their responsibilities. Accordingly, the national designated authority, which is the focus of SPS-related communication to the export market, should delegate operational fisheries SPS matters within the Member State to the department responsible for fisheries. As such, the department responsible for

¹ Also reviewed were the Draft Food Safety Bill (March 22, 2017) and Draft Animal Health Bill (June 27, 2016).

² CBI, 'What requirements must fish and seafood comply with to be allowed on the European market?' (updated 25 Mar 2021)

fisheries would be the regulatory authority for fisheries SPS domestically. Figure 2 illustrates how the Member State competent authority works directly with the EU with respect to SPS-related export matters while delegating responsibility to the fisheries department as the regulatory authority for the monitoring and enforcement of SPS standards domestically. Embedding the competent authority into national legislation provides the opportunity for stronger collaboration with domestic, regional, and international partners.

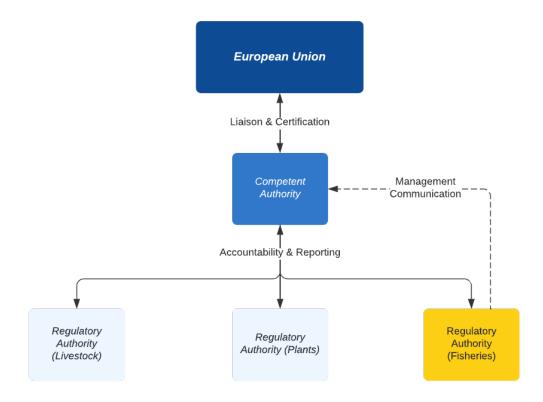


Figure 2: Proposed Organization of Competent Authority and Regulatory Authorities within Member States

The Draft Model Legislation developed under the 10th EDF SPS Project establishes a competent authority that is responsible for oversight and monitoring of SPS measures in Member States, which aligns with EU regulations of a single competent authority. In order to perform these functions, the competent authority may be required to delegate responsibility to a different government agency regarding fisheries SPS measures. In these instances, this delegation of responsibilities establishes the delegated agency as a regulatory authority for fisheries SPS. The delegation of responsibilities from the competent authority to a regulatory authority for certain aspects of fisheries SPS measures may appear to reduce duplication of effort for SPS enforcement by other non-fisheries departments. While reducing duplication of effort may be beneficial from a budgetary perspective, it can significantly reduce clarity in administrative reporting. This can create confusion across the fisheries value chain. Based on SPS import standards for the EU, the competent authority chosen to govern fisheries SPS measures is often a department in the Ministry which regulates fisheries and aquaculture³.

³ E.g., CBI, 'What requirements must fish and seafood comply with to be allowed on the European market?' (updated 25 Mar 2021)

Figure 2 outlines the general roles, responsibilities, and functions of the competent authorities and regulatory authorities for fisheries SPS as defined in the Draft Model Legislation developed for the 10^{th} EDF SPS Project. These diagrams highlight the separation between roles of competent authorities and regulatory authorities. However, according to the Draft Model Legislation, the competent authorities in different Member States may have regulatory authorities over specific components of the value chain. For example, a Member State may have a single competent authority for all matters related to SPS, but two or more different regulatory authorities for matters related to fisheries SPS across the value chain. This highlights the potential administrative complexity in dealing with fisheries SPS. As such, having a separate competent authority for fisheries SPS may meet both the requirement for a clear competent authority for fisheries SPS and administrative clarity. Accordingly, it is recommended that the regulatory authority for fisheries SPS be a government department that directly reports to the competent authority for fisheries SPS. This competent authority should be a government agency that is responsible for fisheries management.

Considering that fisheries management deals with every aspect of the fisheries value chain, from point of harvest to point of sale, decisions about SPS-related matters by non-fisheries departments can have significant impact on fisheries management outcomes. For example, SPS decisions that may require changes in investment by harvesters (e.g., equipment, ice, etc.), changes in fish handling processes, training required for fisheries workers, and the acquisition of infrastructure to protect SPS conditions for domestic and export markets can significantly impact profitability across the fisheries value chain. Investment required to meet SPS measures can incentivize increasing fishing effort and underreporting catch as harvesters seek to recoup the associated increased costs of fishing. As such, SPS is also a fisheries management matter, and it may be an appropriate consideration for the Ministry responsible for the fisheries department to be designated as the regulatory authority for fisheries SPS-related matters within each Member State. In this scenario outlined in Figure 2, the fisheries department would be the designated regulatory authority within the competent authority for fisheries SPS-related matters.



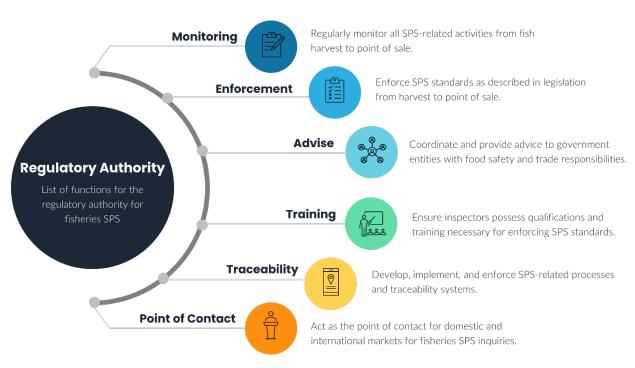


Figure 3: List of Functions for Competent Authority and Regulatory Authority

For the purposes of advancing fisheries SPS-related matters, legislation must define responsibilities of the competent authority, which is an EU-defined entity, and regulatory authorities, which implement national SPS regulations for fisheries. The regulatory authority, which is recommended to be the fisheries department, may work collaboratively with other government departments to carry out SPS monitoring activities. In this case, the fisheries department would be responsible for ensuring

that all SPS measures are met in accordance with national regulations, while a department responsible for veterinary or public health would be responsible for analytical testing. As such, the fisheries department would be responsible for reporting to the competent authority regarding fisheries SPS measures. Accordingly, the fisheries department would be responsible for oversight and monitoring of fisheries SPS matters from the point of harvest to the point of export, at which time the competent authority assumes responsibility for certification for the export market.

Coordination of SPS Regulatory Matters

Currently, the Draft Model Legislation establishes an advisory committee with a mandate to provide advice to the fisheries department and the competent authority and defines the committee composition to include representatives from various ministries and industry. However, this advisory committee does not have an inter-departmental coordination function, which would be needed if the competent authority for fisheries SPS was separate from other food production value chains.

Establishing a separate competent authority for matters related to fisheries SPS from other food production value chains will require high-level coordination to ensure SPS approaches and standards are consistently addressed across the different value chains. A high-level coordination committee should be established and include relevant departmental permanent secretaries or their designates as well as food production sector representatives including fisheries. This may facilitate cohesive approaches to SPS monitoring and control across the multiple food production value chains. This coordination committee should be the forum for discourse on national food safety, national SPS standards, and priority areas for support to enhance SPS measures in fisheries. Furthermore, the coordination committee could also fill a communication gap between the public and private sector that was identified through research and analysis.

Financial Support for Fisheries SPS

The fiscal impact of enhancing SPS can put additional financial burden on competent authorities and associated regulatory authorities. Therefore, consideration should be given to how enhancing SPS measures can be conducted without significant financial stress on departmental budgets. National legislation should clearly define the allocation of fiscal resources necessary to enable the competent authority to acquire sufficient resources to meet their regulatory responsibilities. This may include core budgetary support for departmental operations (e.g., technical staff, administrative staff) and user fees such as licence fees, permit fees, and cost recovery from value chain actors for monitoring and laboratory analysis services. Furthermore, while standardized training may be delivered by national or regional government organizations, training should be made available on a fee-for-service basis to value chain actors.

1.1.3 Set Regionally and Internationally Consistent SPS Standards

Legislation must be adopted or enhanced to reflect common international standards to ensure clear mandates for SPS measures in CARIFORUM Member States. The precise SPS standards selected for fisheries legislation may have different effects depending on the priorities of the Member State for the fisheries sector. A Member State may decide to apply strong standards to protect local health, but those standards may not align with the requirements imposed upon a trading partner for export. If a Member State aligned its SPS legislation to the requirements of one major trading partner, such as

the European Union, the resulting legal regime should also protect domestic consumers and tourist markets. Furthermore, all Member States must implement international standards in order to protect the market reputation for the region. Harmonized legislation could increase consistency in how SPS protocols and standards are implemented across the region to increase overall food safety for local and international consumers.

Harmonized legislation should include clearly defined processes by which value chain actors are certified that they meet SPS standards necessary for export of seafood product to international markets. This certification should assure markets that these value chain actors meet agreed upon SPS standards and operating procedures. This certification should be uniformly applied across all Member States to ensure the quality of seafood does not compromise the marketability of seafood products from the region. Furthermore, the legislation should provide details on the conditions for certification, the renewal of certification permits or licences, and audit requirements for renewal.

In order to effectively implement SPS standards, procedures, and certification, Member States should define monitoring and enforcement responsibilities in the same national legislation that establishes the competent authority for fisheries SPS measures. Establishing a clear authority for monitoring and enforcement activities, as well as defining these activities, enable Member States to ensure that standards are being met across the fisheries value chain. For instance, in a scenario the Ministry responsible for fisheries is the competent authority and the fisheries department is the regulatory authority for fisheries SPS-related matters, monitoring and enforcement activities would be conducted solely by the fisheries department. Regarding monitoring and enforcement activities, product traceability for seafood should also be built into national legislation, including record keeping and similar practices. While one of the fundamental purposes for SPS legislation for seafood products is to protect the health and safety of consumers, cohesive SPS legislation that defines monitoring and enforcement practices protects international trade and the fisheries value chain. In particular, having robust legislation on SPS measures for fisheries reduces the risk for importing nations to use SPS as an artificial trade barrier.

1.1.4 Establish Legislative Requirements for Training

To address capacity barriers regarding knowledge about SPS measures along the value chain, national legislation should include requirements for training in SPS-related matters. Specifically, regionally standardized training requirements for inspectors would improve the ability of Member State competent authorities to enforce SPS standards across the fisheries value chain throughout the region. This component aligns with international SPS-related legislation, as competent authorities must guarantee that SPS standards are met across the fisheries value chain in order for fisheries product to access international markets, including effective enforcement and auditing requirements with the importing region. Regionally embedding fisheries SPS competencies into inspectors' training programs could address inconsistent knowledge of SPS measures in the region, which consequentially supports regional fish exporters in ensuring their fisheries products can access the international

⁴ European Commission, 'EU import conditions for seafood and other fishery products', https://ec.europa.eu/food/system/files/2018-06/ia_trade_import-cond-fish_en.pdf, pp 3-4 (emphasis in original). Note that CBI, 'What requirements must fish and seafood comply with to be allowed on the European market?' (updated 25 Mar 2021), specifies the frequency of audits as being approximately a two-year period.

market. Specific competencies that inspectors must have should be detailed in harmonized fisheries SPS legislation.

1.1.5 Establish Legislative Requirements for Record Keeping

Robust food safety systems help prevent safety hazards and reduce the likelihood of contaminated food entering the market. Having comprehensive and up-to-date programs in place will help to meet consumer expectations, build a trusted regional identity for seafood products, and open doors to access new international markets. A well developed and maintained quality and food safety program could save costs by preventing product recalls, receiving fewer customer complaints, and reducing waste. Defining record-keeping in national legislation keeps standards across the fisheries value chain consistent and allows for an opportunity for education and training efforts specific to achieving these standards. Records that must be kept should be specific to each node of the fisheries value chain, from harvesting to export, to address the differing roles and circumstances for each node. Embedding record keeping requirements in legislation allows for consistency and clear responsibilities for all value chain actors. Presently, record keeping requirements in draft legislation are focused on traceability, however, greater attention should be paid to record keeping practices that are specific to the sanitary conditions of seafood products and the conditions in which they are produced.

Documentation and record keeping provide proof that proper safety and quality procedures are being followed and are key pieces of evidence sought during an inspection, audit, or product recall. Records of maintenance, sanitization and microbiological testing schedules must be kept legible and up to date. The records should detail the person responsible for testing, the frequency and methodology of testing, and the results. Records should track the product through receiving, grading, and processing with dates, as well as documenting times, temperature, and humidity and oxygen levels where possible. Embedding record keeping in national legislation ensures there is a legislative requirement to implement and enforce documentation of SPS standards.

In addition to embedding record keeping in national legislation, developing record-keeping templates would increase consistency and reliability of data being collected and documented by individual companies. Record keeping templates would standardize monitoring practices within the fisheries sector, leading to more efficient and streamlined inspections, lab testing, and auditing. Furthermore, as paper copies of records are most common in the global seafood industry, updating to a digital record keeping system should be a priority for companies serving international markets. Regional organizations could play a role in the modernization and development of record keeping systems, which could be harmonized throughout the region to further develop a trusted regional identity for seafood products in the Caribbean.

1.1.6 Regionalize National SPS Legislation for Fisheries

As a first step to regional harmonization of national SPS-related legislation, it is recommended that a gap analysis of the Draft Model Legislation for health and food safety in fisheries and aquaculture, amongst others, be conducted to ensure clarity in the legislative instruments and simplicity in the implementation of SPS-related measures. This gap analysis should be based on best practices nationally and internationally, as well as consider changes in international trade relations and food

security requirements. Regional organizations, such as CRFM and IICA, could facilitate the gap analysis and drafting of the updated Model Legislation.

It is further recommended that Member States seeking to trade with identified trading partners should seek to align themselves with the importation requirements of those partners. The model for this alignment adopted by the EU involves a dialogue between the interested Member State and the EU towards export certification, the selection of a Competent Authority, potential on-site audits, and the adoption and use of EU-standard forms and certifications. The following documents provide guidance on EU import certifications and requirements:

- 1. European Commission, (2022, Jan 6) 'EU import conditions for seafood and other fishery products' 5
- 2. Centre for the Promotion of Imports from developing countries (CBI), (2021, Mar 25) 'What requirements must fish, and seafood comply with to be allowed on the European market?' 6

Since several CARIFORUM states are already engaged in fisheries trading with the EU, their experiences should be used by Member States seeking such trading relationships. Any changes required in national legislation as a result of this latter process could then be incorporated into a revised version of the Draft Model Legislation. Finally, the Draft Model Legislation should be periodically reviewed since SPS requirements will change and evolve over time. Further considerations during reviews of the Draft Model Legislation may also be given to national perspectives on SPS best practices, which reflect changing national and regional circumstances in fisheries.

Current EU regulations provide value for consideration in the Draft Model Legislation developed under the 10th EDF SPS Project, ⁷ including the following regulations:

Food Safety Regulations

- 1. Regulation (EU) 2017/625 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, (15 March 2017)
- Commission Delegated Regulation (EU) 2019/625 regarding requirements for the entry into the Union of consignments of certain animals and goods intended for human consumption, (4 March 2019)
- Commission Implementing Regulation (EU) 2020/2235 regarding model animal health certificates, model official certificates and model animal health/official certificates, for the entry into the Union and movements within the Union of consignments of certain categories of animals and goods, official certification regarding such certificates, (16 December 2020)
- 4. Commission Implementing Regulation (EU) 2020/2236 regarding model animal health certificates for the entry into the Union and movements within the Union of consignments of

 $^{^{5}\} https://ec.europa.eu/food/system/files/2018-06/ia_trade_import-cond-fish_en.pdf$

⁶ https://www.cbi.eu/market-information/fish-seafood/what-requirements-should-your-product-comply

⁷ In particular the Model Legislation for Health and Food Safety in Fisheries and Aquaculture.

- aquatic animals and of certain products of animal origin from aquatic animals, official certification regarding such certificates, (16 December 2020)
- Commission Implementing Regulation (EU) 2021/403 625 regarding model animal health certificates and model animal health/official certificates, for the entry into the Union and movements between Member States of consignments of certain categories of terrestrial animals and germinal products thereof, official certification regarding such certificates, (18 March 2021)
- 6. Commission Implementing Regulation (EU) 2021/617 regarding model animal health certificates and animal health/official certificates for the entry into the Union of certain aquatic animals and products of animal origin, (14 April 2021)
- 7. Commission Implementing Regulation (EU) 2021/619 regarding transitional provisions for the use of animal health certificates, animal health/official certificates and official certificates, (15 April 2021).8

Maximum Residue Levels (MRL) Regulations

- 1. Regulation (EC) No 470/2009 lays down the procedure for setting MRLs for residues of pharmacologically active substances in food of animal origin, such as antibiotics⁹
- Regulation (EC) No 396/2005 establishes European Union MRLs for pesticides, which are laid down in various Regulations and a publicly available database maintained by the European Union
- 3. Regulation (EC) No 1881/2006 lays down MRLs for certain environmental contaminants such as heavy metals, including mercury

Note: Some other substances classified as "feed additives" in the European Union (coccidiostats and histomonostats) may also leave residues in food derived from animals reared on feed containing them. See the European Union Register of Feed Additives.¹⁰

Labelling Regulations

A number of EU laws regulate labelling of seafood products. For an overview, see the European Commission's, *A pocket guide to the EU's new fish and aquaculture consumer labels* (Luxembourg: Publications Office of the European Union, 2014), as available through https://ec.europa.eu/oceans-and-fisheries/fisheries/markets-and-trade/seafood-markets en (7 Jan 2022).

Illegal, Unreported, and Unregulated (IUU) Fishing Regulations

EU Regulations attempt to prevent illegal, unreported, and unregulated (IUU) fishing and require exporters to prove that their seafood products are sourced legally through, inter alia, catch certificates. See further the EUR-Lex summary of Regulation (EC) No 1005/2008, entitled 'Eliminating illegal, unreported and unregulated fishing', as available at EUR-Lex - pe0005 - EN - EUR-Lex (europa.eu) (7 Jan 2022).

⁸ These regulations are all available through the EUR-Lex portal at https://eur-lex.europa.eu/homepage.html (7 Jan 2022).

⁹ See the complete list of substances and their MRLs in the Annex to Regulation (EU) No 37/2010

¹⁰ CBI, 'What requirements must fish and seafood comply with to be allowed on the European market?' (updated 25 Mar 2021)

1.2 Objective 2: Commit to Implement SPS Legislation

The second objective of the harmonization roadmap is to increase commitment levels through the implementation of national legislation and regulations related to SPS measures. Information collected through project activities revealed the disconnect between what is legislated and what is happening 'on the ground' with respect to SPS in fisheries. As such, the development of resources related to education and training are imperative to improve communication and awareness levels of SPS regulations across the value chain and incentivize compliance with such regulations. The development of materials that simplify SPS processes can also encourage value chain actors to become engaged with SPS and comply with regulations.

1.2.1 Establish Financial Support and Incentives for SPS Standards

Investment will be required equally from both the public and private sector to increase commitment to implement SPS regulations in fisheries¹¹. Government budgets should allocate sufficient financial resources based on legislative requirements for the implementation of SPS regulations. In particular, capital and continuous maintenance investments will need to be made available to fulfill legislative requirements. The private sector should allocate financial resources to ensure that they are fulfilling their SPS-related responsibilities. These investments will vary from hiring specific personnel to implement SPS standards to developing SPS-related infrastructure. These investments into improving SPS conditions may provide economic benefits for the region, as findings from the 10th EDF SPS Project showed that for every \$1 (US) spent on SPS compliance, \$3.14 (US) of economic benefits may be derived. Improved commitment from both the public and private sector regarding investments into SPS implementation in the fisheries may improve national economic circumstances, increase domestic and international food safety, and enhance international market access for the region.

To ensure sufficient financial support for the public sector, annual budgets that reflect the true cost of laboratory operating expenses related to labour, facilities maintenance/renewal, consumables (e.g., reagents, personal protective equipment, etc.), and quality assurance (e.g., calibration, etc.) are needed. Therefore, it is recommended that a review of laboratory operating costs be conducted. These operating costs should be used to define governmental budget allocations and service fees that may be needed to augment core operating budgets necessary to cover incremental costs created by services to clients.

Consideration should also be given to public-private partnerships (PPPs) as a means of providing financial capital for SPS-related infrastructure, such as ice machines, cold storage facilities, and laboratories. PPPs typically involve a long-term arrangement where a private sector company pays for the construction of a public sector project, or service, and the private company is paid for the operation of the facility through a fee for service from the public sector for a defined term, after which the public sector either takes ownership or relinquishes ownership to the private company. As such, PPPs offer a means to combine governments incentives with private sector innovation in a timely and affordable manner. With respect to the advancement of SPS measures, PPPs may be useful in the

¹¹ IICA. (2015). Final Report: Cost Benefit Analysis and Impact of Compliance and Non-Compliance with Sanitary and Phytosanitary Requirement for CARIFORUM Countries. 126p.

¹² IICA. (2015). Final Report: Cost Benefit Analysis and Impact of Compliance and Non-Compliance with Sanitary and Phytosanitary Requirement for CARIFORUM Countries. 126p.

establishment or renovation of laboratories to conduct official SPS analysis, which could enhance analytical capacity in the region. Furthermore, PPPs may enable laboratories to obtain additional non-government contract work that could increase profits and ensure continuity of analytical services.

To facilitate improved commitment from both the public and private sector, Member States should allocate financial resources to the development of the high-level coordination committee on fisheries SPS, as outlined in section 1.1.2. The coordination committee would provide a forum for discourse regarding the investments needed from the public and private sector to ensure fulfillment of SPS-related responsibilities. Furthermore, discussions may also address matters related to the development and management of PPP arrangements. The coordination committee could also support regionalization through implementing cohesive approaches to fisheries SPS investment and enhancement across the value chain.

1.2.2 Implement Record-Keeping into the Fisheries Value Chain

SPS standards are important regardless of whether seafood products are sold in the domestic or export markets. The incentives and motivations may differ between the domestic and export fisheries, which may lead to different levels of compliance and enforcement. However, without proper documentation and evidence that SPS standards have been met, domestic and export fisheries may risk losing access to their respective markets. This is particularly important for export fisheries where there is a larger focus on meeting international SPS requirements to retain or access markets. Therefore, record-keeping must be implemented into the fisheries value chain to ensure that SPS standards are being met.

In order for record-keeping requirements to be implemented along the value chain, there must be resources available to ensure that value chain actors are able to fulfill SPS responsibilities. Each node of the value chain should allocate resources to the hiring of personnel to implement record keeping practices, including the specific monitoring requirements as defined in national legislation. Furthermore, government agencies should allocate resources and personnel to enforce self-monitoring practices, including record-keeping, as part of SPS-related inspections and follow-up corrective action.

Regional organizations should consider providing advisory and technical support to fisheries value chain actors regarding proper record keeping practices. In this regard, regional organizations should establish a working relationship with organizations representative of fisheries enterprises to conduct a gap analysis of their record keeping skills and practices to identify where SPS measures can continually be enhanced and where appropriate corrective actions can be made (e.g., updating sanitation protocols, logbooks, and record-keeping documents). These extension and advisory services may involve education and training support to ensure fisheries value chain actors fully understand the nature and importance of SPS regulations and the need to improve SPS conditions. Providing these services at a regional level may facilitate improved voluntary compliance by value chain actors and reduce the negative effects of punitive actions and inconsistencies in responses to non-compliance. Regionalizing extension and advisory services can enable cost-effective coordination of consistent advice to industry across the region and delivery through standardized materials that can be provided through virtual means. Furthermore, enhanced SPS-related record keeping combined

with traceability record keeping can contribute to improved economic performance of fisheries enterprises in the marketplace.

1.2.3 Develop Voluntary SPS Best Practices Program for Domestic Fisheries

While record-keeping should be implemented in domestic and export fisheries, there are additional barriers to smaller scale operations where the implementation of SPS measures will be challenging. As a result, it is important to consider specific SPS-related activities that will improve conditions in artisanal fisheries.

The level of investment required to improve SPS conditions across the fisheries value chain may be an onerous task for small-scale artisanal fishers. As artisanal fishers typically sell directly to the domestic market, insufficient improvement to SPS conditions of seafood products could put the domestic market at risk. A public awareness campaign to communicate health and safety risks regarding SPS conditions of seafood products may create an incentive for artisanal fishers to comply with enhanced SPS measures. This approach could improve the health condition of seafood products, which reduces the health risks and raises the price of seafood for local consumers. Furthermore, this approach could increase the relative return to harvesters in the long-term as they recoup their capitalization costs for SPS enhancement. Using informed consumers to promote changes in value chain actor behaviour is a market-oriented approach, much like eco-certification strategies. Regional organizations can facilitate this process by providing public with information about safe harvesting practices and the importance of SPS activities, as well as providing support to artisanal fishers to enhance their handling practices, such as training and information. However, it is important to note that while this approach could increase food security by enhancing the health condition of seafood products, this approach also could make seafood less accessible to lower-income households.

As the public and domestic fisheries sector becomes more aware of the importance of food safety, this may generate further interest in improved SPS standards in domestic fisheries. This may create demand for healthy and safe supply of seafood products in domestic markets. This demand can be formalized through a voluntary best practice program, where fish markets and fisherfolk may apply for and receive recognition that they have met a basic level of SPS standards for their seafood products. This SPS best practices program is designed to avoid creating additional financial burdens for artisanal fishers, but rather increase demand for a safe and healthy supply of seafood in the domestic market.

1.2.4 Invest in Certification for Export Market

Global retailers and consumers are increasingly looking for supplier assurances and 3rd party certifications to demonstrate that food that is harvested, processed, and stored in a manner that is safe for consumption and maintains product quality. Food suppliers can receive certification under a national or international food safety program which allows companies to maintain current export markets, access new markets, and can accelerate sales and business growth both locally and globally. The most globally recognized and accepted certification body for seafood is the Global Food Safety Initiative (GFSI), under which falls specific programs like BRC (British Retail Consortium) and SQF (Safe Quality Food). GFSI programs are well established, recognized, and accepted by most major global

retailers. Export fisheries should consider investing in certifications in order to protect their access to international markets.

1.2.5 Invest in Regional Food Safety Training

Regional organizations could play a role in the development and delivery of educational resources that includes a series of food safety training programs for seafood producers across the region that build on existing food safety manuals and guidelines. Regionalized training could also include the sharing of technical and financial resources, subject matter, and expertise to develop a shared foundation of SPS best practices. Harmonization of food safety training in the region would reduce inconsistencies between Member States that may result in loss of access to international markets for the region. Furthermore, common terminology and practices could assist in the development of a regional identity of seafood products.

A regional training program would provide up to date information and research on best handling and holding practices along the value chain to maintain product quality and meet consumer food safety expectations. Training will provide companies with the tools and knowledge to assess and update their current food safety program and identify gaps or areas of improvement to address. All companies, regardless of size or export status should strive for continuous improvement in order to keep processes efficient and seafood products safe.

1.3 Objective 3: Build Capacity for Successful SPS Outcomes

The third objective of the harmonization roadmap is to support capacity for the fisheries sector to act on and meet SPS-related legislative requirements. Research and analysis showed that all Member States face significant capacity constraints that limit the ability of government agencies and fisheries value chain actors to actualize and enhance SPS measures across the region. As such, financial, technical, and personnel resources must be provided and allocated accordingly to implement SPS-related legislation and associated regulations.

1.3.1 Increase Monitoring and Enforcement Capacity

To increase monitoring and enforcement capacity, government agencies must have access to sufficiently trained inspectors that are able to enforce regulations. There must be enough inspectors to enforce regulations and provide guidance on corrective action at different nodes of the value chain. Furthermore, industry must also have sufficiently trained personnel to perform SPS self-monitoring activities in their business operations, including record keeping and other required documentation. This reinforces the need for investment from the public and private sector to ensure that SPS measures in fisheries are being met.

1.3.2 Increase Laboratory Capacity

Official analysis of SPS samples is a fundamental component of SPS monitoring to ensure seafood products are safe for local consumers and export markets alike. Furthermore, official analysis is a requirement for continued access to existing international markets and access to new international

¹³ As presented in IICA. (October 2021). *Technical Assistance to Build Food Safety Capacity for the Fisheries Sector: Second Interim Report.* 72 pp.

markets. The online survey and semi-structured interviews showed that there is a wide range of laboratory capacity across the region, which parallels the findings from the other consultancies conducted for the 11th EDF SPS Project. ¹⁴ Some Member States have accredited laboratories and can conduct official analysis to meet international trade requirements, while many other Member States do not have a functional laboratory and as a result do not conduct analysis on seafood products. As such, laboratories have different needs that will require different levels of support.

Research and analysis identified that access to sufficiently trained staff and appropriate analytical instruments were limiting ability to perform mandated functions. While some of these constraints may be addressed through the allocation of appropriate financial resources, as previously discussed in Section I: Chapter 4, there are specific capacity constraints on acquiring and retaining laboratory staff with appropriate qualifications. As such, a regionalized training program can provide a cost effective means to standardize training on the technical requirements for SPS analysis in fisheries. This may include a training plan that Member States can use when training staff in laboratories or leverage existing capacity from regional universities that may be able to provide appropriate technical training. In particular, qualifications for laboratory staff should be standardized throughout the region, which will allow laboratories to meet their legislated mandates. Furthermore, training curriculum should reflect changing international SPS requirements and subsequent revisions of national legislation.

Regionalized Network of Laboratory Services

Designated laboratories are a requirement of EU regulations. However, it is a costly commitment for every Member State to maintain an independent laboratory. Therefore, consideration should be given to establish a network of laboratories across the region that can support the monitoring authorities in all Member States. Furthermore, this network should strive for all laboratory members of the network to obtain accreditation to ISO 17025.

A network of laboratories may address the varying levels of capacity for laboratory services across the region. The network could facilitate the sharing of laboratory capacities so that every Member State has access to microbiological and chemical analysis, quality assurance, and source water analysis across the value chain from harvest to export. The network can also facilitate delivery of the regionalized training program to laboratory staff and monitoring personnel involved with collecting samples for analysis. Shared capabilities and consistency in the delivery of training may ensure that laboratory procedures and analytical tests are being conducted to the same standards and practices across all Member States.

A regional network of laboratory services may reduce the fiscal burden on all Member States through access to specific analytical capacities that may not be affordable to some Member States since these capacities may not be required on a routine and regular basis. For instance, a regional network can facilitate regular audits of processing and storage facilities to ensure they meet permitting requirements that may be established by national governments, in addition to providing analysis of

¹⁴ INFOPESCA. (October 2021). Support to CARIFORUM Countries to Improve Laboratory Testing Capacity for the Fisheries and Aquaculture Sector: Interim Technical Report 1. 57pp.

random samples destined for export. Furthermore, the network may include ex-regional (US, EU, UK) laboratories that could provide analytical services at the end of the value chain. These services could be used on an as-needed basis in the event that regional laboratories are focused on other analytical needs that may occur within Member States due to public health or climate events. This builds resilience into the analytical network.

1.3.3 Increase Compliance Capacity

Regional organizations can develop courses and provide training for fisheries value chain actors to improve understanding of SPS measures, which in turn will improve ability of value chain actors to comply with SPS measures.

Training and educational resources should be developed in appropriate formats to reach the maximum number of value chain actors. These courses may be available either in person or may be provided online to increase accessibility. Live, online courses offer convenient access for trainees and opportunity for instructors to address questions and facilitate knowledge transfer amongst industry members. Basic training courses may also be digitally recorded to be provided to access for new entrants to the value chain (fishers, new staff at processing facilities, etc.), as needed. Course completion may be formally recognized through certificates and/or accreditation that reflects their ability to comply with SPS regulations. Training must be appropriate to the level of education and involvement in the fisheries value chain.

Not all value chain actors require the same information to build their capacity to meet SPS measures for both the domestic and export markets. In keeping with the information needs of value chain actors, training materials and resources should be designed to provide training on basic food safety and fish handling for fishers, food safety and best practices for processors, and export certification requirements for processors and exporters.

The following training addresses the needs identified in the analysis where foundational SPS capacities should be enhanced. There are currently no programs that value chain actors can access on a regular and continuing basis to meet their training needs. While there have been nation-specific training initiatives for value chain actors in the 11th EDF SPS Project, ¹⁵ consideration should be given to regional program and curriculum development that can provide uniform and consistent training across the region to existing and new value chain actors. Furthermore, training programs may require periodic review and revision in order to stay current with changing domestic and international market regulations.

Basic Food Safety and Fish Handling

This foundational food safety training is intended for fishers. Artisanal fishers may have limited infrastructure, technology, and resources to implement robust food safety standards and SPS best practices. As a result, training for fishers should be at an introductory level to increase general awareness of applicable regulations, food safety program basics, and best seafood handling and holding practices to maintain the safety, quality, and value of their seafood products. This training could be a requirement for artisanal fisheries to receive formal recognition of their adherence to the

¹⁵ IICA. (October 2021). Technical Assistance to Build Food Safety Capacity for the Fisheries Sector: Second Interim Report. 72 pp.

SPS Best Practices Program described in Objective 2. Furthermore, this training may be beneficial for workers at fish markets involved with basic handling and cutting of fish for sale in the domestic market.

Basic food safety and fish handling training should focus on developing the following SPS capacities:

- Local and Regional Regulations Increased awareness of food safety legislation and regulatory bodies so companies clearly understand what is expected of them in order to comply with existing laws.
- Basics of Food Safety Programs Understanding the key elements of comprehensive food safety programs including sanitation, pest control, maintenance of equipment and buildings, personal hygiene, staff training, preventing cross contamination, allergen control, and traceability.
- Best Handling Practices along Value Chain Understanding ways to reduce physical damage or shock to maintain product quality on-board the vessel, during stowing, transportation, grading, processing, and storage.

Food Safety and Best Practices

The food safety and best practices training programs are designed for processors selling into the domestic and export markets. Processors may have a dedicated facility, resources, staff, and basic food safety program already in place. However, support may be needed to update and improve existing food safety programs to meet national legislative SPS requirements. Furthermore, this training program can build an understanding of international food safety (SPS) and quality standards and international market regulations.

Training for companies that access, or are planning to expand into, international markets should focus on developing the following SPS capacities:

- Introduction to HACCP (Hazard Analysis Critical Control Points) How to develop a
 comprehensive food safety program by identifying and assessing risk of potential chemical,
 physical and biological hazards and developing measures to prevent, eliminate or reduce
 hazards to acceptable levels.
- Quality Control Training on sensory product evaluations to assess freshness, identify product defects and define acceptable tolerances for designated quality assurance staff.
- International Regulations Increased awareness of food safety requirements to allow for export into desired markets (e.g., EU, UK, US, etc.).
- Recall and Traceability Understanding what to do in the event of a recall and develop an
 effective traceability program to track product from catch to end consumer. Traceability is an
 increasingly important component of many international export requirements.

This training will also be beneficial for companies that sell only into the domestic market since domestic standards should meet international standards as a means to enhance food security.

Export Certification

This training program is intended to build knowledge for processors and exporters to maintain and protect access to international export markets. Many export markets require 3rd party certification through a globally recognized program, such as the Global Food Safety Initiative (GFSI), which requires a high level of investment and commitment. Therefore, costs and benefits of certification should be weighed carefully by companies to ensure certification does not comprise their operational viability. Some exporters from the CARIFORM region may already be recognized through a 3rd party certification program, while others may be required to be certified to meet the requirements of their existing markets.

Building SPS capacities for export-oriented companies should focus on:

- Introduction to 3rd party certification Understanding of different certification schemes and requirements, company benefits, and associated costs.
- Preparing for 3rd party certification Understanding gap assessments, internal auditing, and preparing for a third-party audit.
- Continuous Improvement Identify ways to update and improve existing food safety programs to ensure that companies maintain existing markets and stay profitable and competitive.
- Improving Food Safety Culture Developing a customized training program for staff and that prioritizes food safety and quality.

1.4 Recommendations for Regional Organizations

There are several actions necessary to meet the objectives to enhance fisheries SPS measures within the CARIFORUM region. However, in addition to the Member State specific actions, there are several recommendations for priority action at the regional level.

It is recommended that IICA and CRFM establish a working group to revisit and reassess the Draft Model Legislation from the 10th EDF SPS Project through a periodic review at national and regional levels. While this draft model legislation is currently being considered for acceptance by Member States through the CARICOM process, future reviews should address changes in market condition, market requirements, and the environmental state of fisheries. This working group should consider international legislation as well as current national legislation when reviewing the Draft Model Legislation to ensure clarity and effective implementation of fisheries SPS measures. This working group should include regional legal expertise, representatives of the competent authority from each Member State, and representatives from fisheries value chain actors, including fishers, marketers, processors, and exporters.

IICA and CRFM should also establish a working group to develop a regional training program that would support Member States in training fisheries value chain actors on food safety in fisheries. This working group should seek to develop and make available curriculum for food safety courses that

address common needs across the region. This builds on the work conducted in other consultancies for the 11th EDF SPS Project¹⁶.

Through virtual communication, the working group can also function as a forum for information exchange between Member States on SPS-related matters, for example, a virtual discussion board can provide opportunity for group members to discuss the current state of affairs in fisheries SPS, issues related to SPS regulations, and advancements across the fisheries value chain that promote best practices. This virtual discussion board can be monitored and managed by the working group to facilitate knowledge exchange across the CARIFORUM region. This can reduce a 'siloed' approach to SPS measures across the region and promote the regional harmonization of best practices for the fisheries sector. Finally, it is recommended that IICA and CRFM establish an inventory of SPS-related technical skills and equipment within the CARIFORUM region. This inventory can be used to facilitate Member State access to services that they may not be able to support on an ongoing basis but may occasionally need. Furthermore, IICA and CRFM should negotiate sharing mechanisms by which Member States can access the necessary SPS-related capacities.

¹⁶ IICA. (October 2021). Technical Assistance to Build Food Safety Capacity for the Fisheries Sector: Second Interim Report. 72 pp.

CHAPTER 2 SPS ROADMAP SUMMARY

Figure 3 provides a visual summary of the roadmap to enhance fisheries SPS measures in the CARIFORUM region. The solid black lines represent direct dependent linkages between activities needed to address priorities. These priorities are also ranked in accordance with the strategic approach to improve fisheries SPS capabilities in that legislative clarity is needed in order to determine the level of commitments required and, accordingly, capacities that must be enhanced. The dotted coloured lines represent interlinkages between these activities and the interrelationships between the priorities.

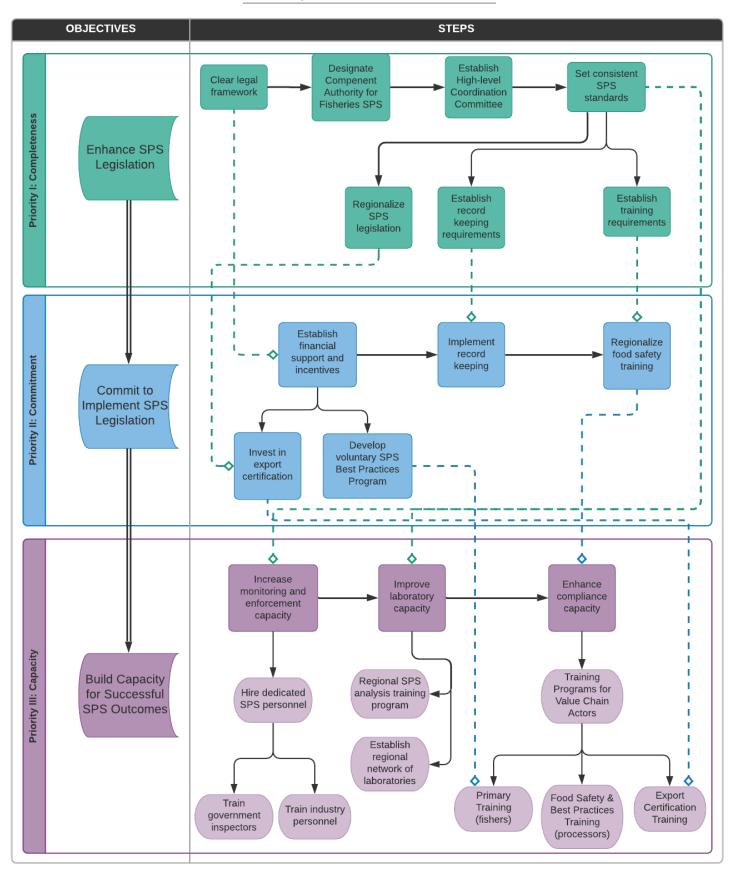


Figure 4: SPS Coordination Roadmap Summary Diagram