Horizontal Evaluation of the Canadian Shellfish Sanitation Program

About the Program

The Canadian Shellfish Sanitation Program (CSSP) is a federal food safety program that aims to minimize health risks associated with the consumption of contaminated bivalve molluscan shellfish. Bivalve molluscan shellfish have two hinged shells with a soft-bodied invertebrate contained inside. Many are edible for example oysters, clams, cockles, and mussels.

Photo credit: PowerPoint Stock Photo

The CSSP, which dates back to 1925, has a long history of federal organizations working together and many of the activities of the present-day program (see details below) remain the same as those seen throughout its evolution. The CSSP, which is jointly delivered by the Canadian Food Inspection Agency (CFIA), Fisheries and Oceans Canada (DFO) and Environment and Climate Change Canada (ECCC), operates under a Memorandum of Understanding, signed in 2000, which has the stated goal:

To provide reasonable assurance that molluscan shellfish are safe for consumption as food by controlling the harvesting of all molluscs within the tidal waters of Canada

The CSSP controls shellfish harvest by classifying waters as approved, conditionally approved, restricted, conditionally restricted or prohibited. Water can also be unclassified. Classifications are based on comprehensive water quality monitoring and analysis, and pollution source assessments. Areas are given either an open or closed status according to whether shellfish can be harvested or not.

CFIA is the lead regarding the handling, processing, import and export of shellfish; the marine biotoxin monitoring program; and any other microbiological monitoring program not under the responsibility of ECCC. CFIA tests shellfish for biotoxins, and in response to incidents the agency will also test for micro contaminants such as salmonella.

DFO is the lead department regarding the harvesting of shellfish and notifying stakeholders and partners of the openings and closing of harvest areas. The department is responsible for licensing shellfish harvesting, enacting the opening and closing of shellfish harvest areas, and conducting patrols to enforce compliance of harvest.

ECCC is the lead department regarding recommending the appropriate classification of shellfish harvest waters based on sanitary and bacteriological water quality conditions. The department is responsible for monitoring water quality in shellfish harvest areas and identifying and evaluating sanitary pollution sources that may affect the quality of the waters where shellfish are being harvested for consumption.

About the Evaluation

The objective of the evaluation was to identify challenges and opportunities in the management and delivery of the CSSP to provide senior management from CFIA, DFO and ECCC with evidence-based information to support ongoing discussions about future program direction, decisions and improvements.

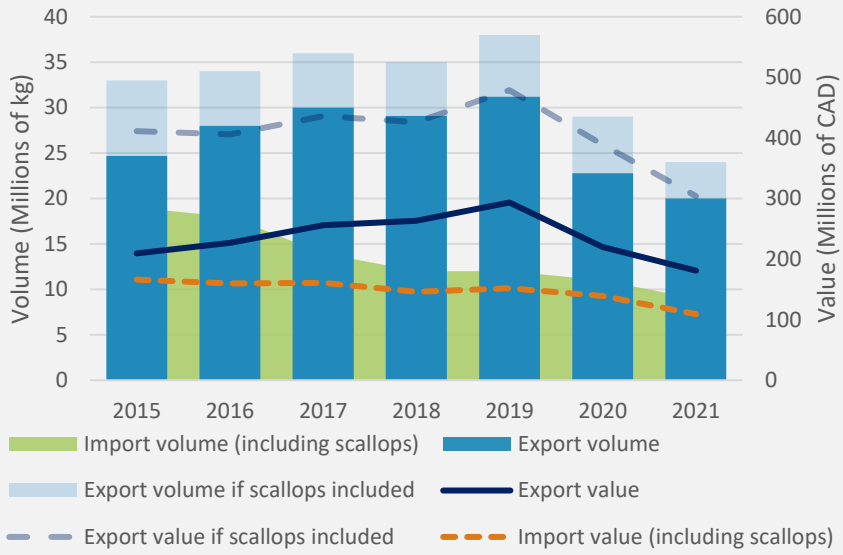
The evaluation examined the delivery of the program by all three federal partners and in all three regions where CSSP is implemented i.e., Pacific, Quebec and Atlantic regions over the last five years (2016-17 to 2020-21) and further back where relevant. The program's relevance, performance and design and delivery were examined through six lines of evidence including: international benchmarking, document/legislative review, data analysis, key informant interviews, financial/cost analysis, and process mapping.

Key Findings

Program Mandate & Evolving Context

- The food safety mandate of the CSSP has remained consistent since 1925 and aligns with the mandates of similar programs in other international jurisdictions.
- The delivery of the CSSP's mandate is focused on the commercial market and maintaining export.
- The CSSP's operational context has evolved, resulting in new and increased challenges, as well as additional demands that the program is unable to accommodate due to lack of internal capacity. While there is evidence that the program has been trying to adjust to this evolving context, progress is very slow.

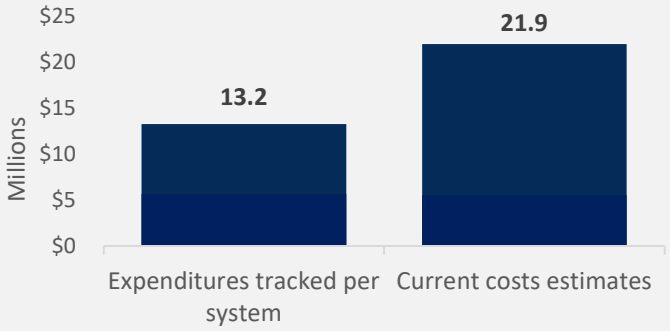
Volume and value of Canadian exports of mussel, oyster, clam, geoduck and scallop, compared to imports



Note: This graph excludes some species due to specificity of data. Further, data is presented both with and without scallops as often scallops are not covered under the CSSP but are not disaggregated from the data.
Source: https://inter-j01.dfo-mpo.gc.ca/ctr/canadiantrade/by_species?rpt=false&lang=en

Program Resources

Comparison of CSSP tracked expenditures and current costs estimates, by partner (in million $)



- The program, as a whole, does not have an accurate representation of actual CSSP funding and expenditures. While resource tracking issues have been noted in reviews dating back to the 2007 horizontal evaluation of the program, the CSSP has been unsuccessful at addressing them.
- There is a significant gap between tracked annual expenditures ($13.2 million) and what is estimated as the current cost to deliver the program on an annual basis ($21.9 million).
- CSSP partners face resource constraints, which adds to the significant pressures on the federal partners and increases potential risks.

Governance & Leadership

- Despite the governance mechanisms in place to support the implementation and delivery of the CSSP, there is a lack of strategic leadership for the program. There are long-standing issues, some of which were raised in the 2007 horizontal evaluation of the CSSP, that have not been resolved.
- Regional governance is working well, and operational roles and responsibilities are clear and well understood. However, the Regional Interdepartmental Shellfish Committees do not receive timely direction when they are not able to resolve regional issues by consensus. This is largely due to the decision-making structures within national governance committees.
- Overall, the program strikes the right balance of consistency and flexibility, but there are delivery differences in how regions apply monitoring and/or implement program controls in unclassified and declassified areas.

Program Delivery

- Despite some challenges and issues, evidence shows that the CSSP is achieving its intended results where the program is being delivered. Most interviewees, both internal and external, agree that the objective of minimizing health risks and ensuring shellfish safety and quality is being met to either a great or moderate extent.

There are some significant gaps in delivery which present barriers for some stakeholders and partners:

of internal interviewees

perceived that the program does not currently provide equitable and inclusive access to shellfish harvesting sites for safe consumption.

Key sources of information are lacking for operational decision-making and risk management, as well as for measuring and reporting on program performance:

of interviewees

perceived that the necessary information was available in a timely manner to support decision-making for the program

Recommendations

Recommendation 1

It is recommended that the CSSP ADM Steering committee develop, articulate and communicate to program staff renewed strategic guidance about the program's priorities, scope and reach to address increasing demands and evolving changes in its operating context.

Recommendation 2

It is recommended that the CSSP ADM steering committee clarify which federal partner is the lead of the CSSP. Further, it is recommended that they review all levels of interdepartmental governance and establish mechanisms to support more effective decision-making, ensure that long-standing issues are resolved, and operational staff are given timely guidance and advice when needed.

Recommendation 3

It is recommended that the CSSP ADM Steering committee seek out opportunities to address resource gaps facing the CSSP to meet existing and increasing demands for program services and delivery. Solutions are required to address current risks related to CSSP resource management in order to ensure that health risks are minimized, the shellfish industry remains strong, and stakeholder and partner needs are served appropriately by the program.

Recommendation 4

It is recommended that the CSSP ADM Steering committee review the CSSP's performance measures and develop an integrated performance profile with meaningful performance indicators and targets at the program level. Useful and accurate information on the achievement of results is needed to better support the management of the program. Ideally, program level performance indicators could be integrated into the broader results frameworks of the three respective partner organizations. CSSP performance data needs to be tracked, collected and reported consistently and in a timely manner across all three federal partners and all regions. Roles and responsibilities for collecting and storing the data should also be established.