Appendix K: 2020-093: Discussion papers on seafood traceability and labelling

Background

Seafood has a global, complex supply chain with multiple touch points and changes to products from wild-caught fish or harvesting of farmed fish through to end consumer products. As trading partners and consumers seek greater transparency in the products they buy, the industry faces pressure to improve the traceability of seafood through the supply chain.

Historically, Australia's regulatory body, Food Standards Australia and New Zealand (FSANZ) has required a 'one up one down' traceability approach. This involves a knowledge of a supplier 'one down' the supply chain where the goods come from and the customer 'one up' the supply chain the goods will be sold to. However, this methodology is becoming increasingly insufficient as internationally the focus has shifted to 'end-to-end' supply chain traceability also known as the 'bait to plate' approach.

Traceability forms a fundamental part of The National Agriculture Innovation Policy Statement released by the Federal Government in October 2021. Priorities one, three, and four emphasize building world-class traceability systems across processing, distribution, export, and retail value chain areas to provide confidence and assurance of Australian products in domestic and international markets.

This project produced two documents. The first document (Discussion paper A) defines the importance of traceability, barriers to adoption, challenges, and relevant laws to suggest options and risks going forward. The second document (Discussion paper B) updates the issues, challenges and relevant laws for seafood labelling, to suggest options and risks going forward. Both documents attempt to capture the dynamic environment of this complex space. These two reports are to be used as first version working documents, with further updates to occur every 12-18 months.

Description of the project

Table 86 Project summary of project 2020-093

Project code	2020-093
Title	Discussion papers on seafood traceability and labelling
Research Organisation	Intuitive Food Solutions
Principal investigator	Meaghan Dodd and Ewan Colquhoun
FRDC project manager	Carolyn Stewardson
Period of funding	2020-2021
FRDC investment	$33,000
FRDC program allocation	100% industry

Rationale	FRDC has identified a growing need for end-to-end traceability in the seafood industry. This project aimed to establish the groundwork for a living report of challenges of achieving end-to-end traceability, while raising industry awareness to support strategic planning and policy development.
Objectives	• Discussion Paper A aimed to highlight the importance of seafood traceability, covering Australian and international guidelines, as well as traceability methods in development • Discussion Paper B focused on the regulations and standards surrounding seafood labelling, waste generated by food labels, and emerging initiatives in this space
Activities and outputs	• Completed desktop research and delivery of two discussion papers • Consulted with key industry stakeholders • Produced two living documents that inform fishers, supply chain managers, and other stakeholders on improving traceability on farm and post-harvest • Developed a case study on tagging of Jewfish swim bladders in the Northern Territory and recommended the need for a national tagging system to limit the risk of sale of jewfish on the black market • Developed a case study on Sydney Fish Market's upgrade to a digital trading platform, Blockchain-enabled Fish provenance And Quality Tracking (BeFAQT) system that streamlines the handling and QA checks of products
Outcomes	• Enhanced seafood traceability through identification of technologies and current weaknesses in the supply chain • Recommendations for improved regulatory frameworks to address labelling gaps
Potential impacts	• Provided improved focus on sustainable and ethical supply chains • Potential for increased adoption of best practice for traceability within the fisheries industry • Contribution to higher levels of implementation for lessons learned from case studies developed as part of the project • Potential contribution to greater market access and consumer trust in Australian seafood • Contribution to improved decision-making for traceability-related policies

Project investment

A breakdown of FRDC investment in the project and contribution by others by financial year is shown below in Table 87.

Table 87 Total investment in project 2020-093 from FRDC

Year ending June 30th	FRDC ($)	Others* ($)
2020/21	$23,000.00	-
2021/22	$10,000.00	-
Total	**$33,000.00**	**-**

Source: Documents provided by FRDC.

*Contributions to the project cost not sourced from FRDC e.g. in-kind contributions

For the BCA, the cost of managing the FRDC funding was added to the FRDC contribution for the project using a management cost multiplier of 1.157. As per impact assessments in previous years, this multiplier was estimated based on a five-year average of the ratio of total FRDC non-project cash expenditure to project expenditure as reported in FRDC's Cash Flow Statement (FRDC Annual Reports, 2019-2023).

In undertaking the impact assessment, all past costs were expressed in 2023/24-dollar terms using the Implicit Price Deflator for GDP.

Summary of impacts

Table 88 below provides a summary of the expected triple bottom line impacts (economic, environmental, and social) from the project.

Table 88 Triple bottom line impacts, including those valued as part of this evaluation (in bold)

Economic	• Potential improved market access, premiums and volume of sales
Environmental	• Greater focus on sustainable supply chains that have minimal environmental impact
Social	• Contribution to improved trust in Australia's seafood industry • Improved focus on ethical supply chains • Greater understanding of sustainable seafood practices within the Australian industry for consumers and industry

Public versus private impacts

The potential impacts from this project will accrue across public and private beneficiaries. In the public sector, improvements to traceability across the supply chain will lead to improved environmental and sustainability outcomes for the industry. Improvements in the Australian seafood industry's traceability, regulatory frameworks and labelling are likely to directly benefit consumers.

The adoption of best practices in terms of product traceability may provide access to new, or help retain existing, markets for the private sector. Fishers may be able to place a price premium on sustainably caught fish or the use of sustainable farming techniques for farmed fish.

Distribution of private impacts

Private impacts realised from this project are broad, expected to be distributed amongst fishers and supply chains across the whole industry.

Impacts on other Australian industries

Other Australian primary producers may benefit from the learnings this project produced.

Impacts overseas

Other countries are likely to be facing similar concerns, and may benefit from the culmination of research within this project.

Quantification of impacts

A BCA was not used to quantify the impacts. The project outcomes were not considered quantifiable due to the benefits being likely to accrue in diverse ways across the entire seafood industry. Achieving traceability in

the supply chain was found to be a multi-factorial challenge for the fisheries industry, this project is likely to form a basis for further investigations by individual, or combinedbusinesses.

Results

To maintain consistency for reporting and analysing projects, Table 89 displays the modelled Present Value of Costs (PV Costs). The PV Costs were discounted to 2023/24 using the Implicit Price Deflator for GDP. The PV Cost is displayed for the length of the investment period plus 30 years from the last year of investment (2023/24). The PV Costs for FRDC investment is the same as the PV Costs for total investment because FRDC contributed 100% of the investment costs for this project.

Table 89 Investment criteria for total investment in Project 2020-093

Year	0	5	10	15	20	25	30
PV Costs	$44,722	$44,722	$44,722	$44,722	$44,722	$44,722	$44,722

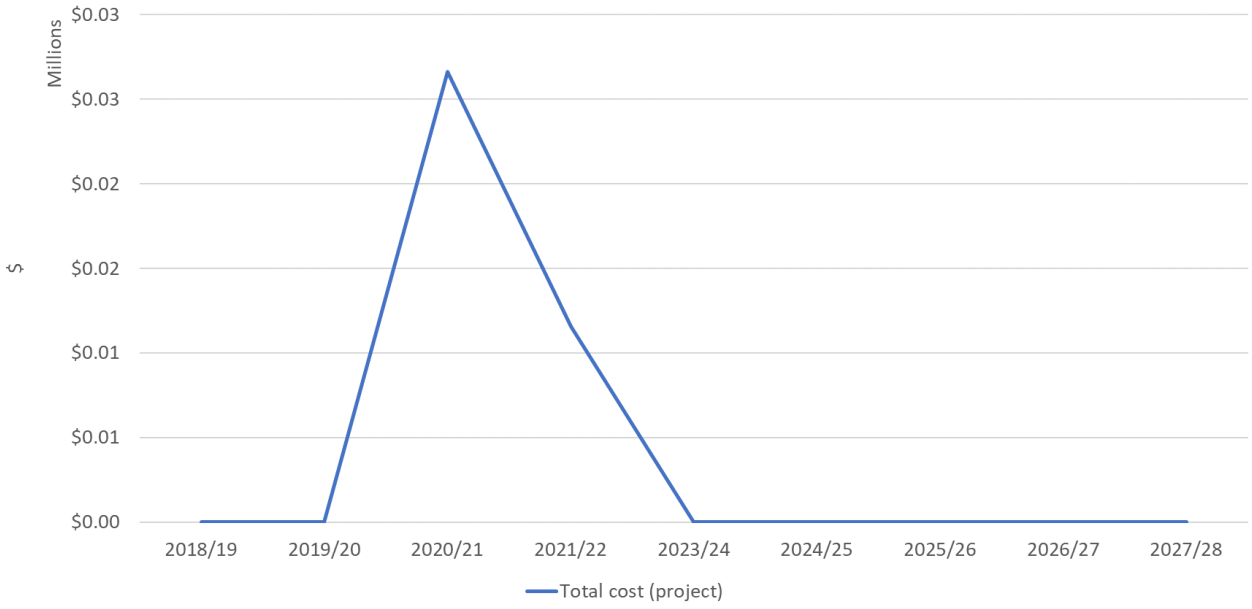

Figure 10 Flow of undiscounted costs from the project

Conclusions

Project 2020-093: Discussion Papers on Seafood Traceability and Labelling produced two living documents that describe the current status of traceability and labelling t for both aquaculture and wild-caught fisheries). These documents are to be revised every 12-18 months with updates, if any, to ensure that stakeholders remain informed. Traceability can be complexto navigate, but is necessary to build customer and end consumer trust while protecting brands. Ultimately, correct labelling of seafood and seafood products ensures that the consumer can make informed decisions about what they purchase.

The overarching outcome of this project was to provide information on two important areas of post-harvest, so that our industry had a better understanding of this very complex and rapidly changing space. The public impact of this project will be improved environmental sustainability outcomes for the industry. The private sector may benefit in the future through price premiums, access to new markets or retention of existing markets. As the emerging impacts are not yet able to be quantified, a BCA was not conducted for this study.

References

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