

Cost Analysis of Social and Environmental Improvements in Fiji's Longline Albacore Tuna Fishery



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CONSERVATION
INTERNATIONAL



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Significance

Fiji's domestic longline albacore tuna fishery is an integral part of the country's economic success but currently faces social and environmental challenges, including labor rights abuses, bycatch, and illegal, unreported, and unregulated (IUU) fishing. Implementing interventions such as a living wage, Marine Stewardship Council (MSC) certification, and electronic monitoring, can help alleviate these environmental problems as well as help the fishery have more market access and higher market prices for more sustainable tuna.

Approach

We evaluated the economic viability of the following interventions:

1. Raising wages to a living wage;
2. Certifying 100% of the Fijian domestic longline fleet to Marine Stewardship Council (MSC) standards; and
3. Establishing electronic monitoring on 100% of vessels.

We calculated the cost of each intervention across a five-year timeline. We then estimated a metric called the "cost recovery premium" (CRP) - how much the average price of tuna would need to increase to recover the cost of implementing the intervention.

Environmental & Social Impact

The Fijian fishing industry and government are actively working to better Fiji's domestic longline albacore tuna fishery. The 2022 Memorandum of Understanding (MOU) agreement between industry and government actively seeks to implement electronic monitoring on vessels, pursue Marine Stewardship Council (MSC) certification, and raise wages for workers. Insights from this cost analysis can provide traction to support these initiatives to ensure social and environmental sustainability are achieved in the fishery.

Our metric can also support Conservation International's efforts to improve sustainable management of neighboring fisheries in the South Pacific, such as New Caledonia, Samoa, and the Cook Islands.

Findings

Our cost analysis results show that improvements in the fishery are financially viable. While we initially anticipated that implementing MSC certification, electronic monitoring, and living wage across 100% of the fleet would be too expensive to achieve, our analysis revealed that the total cost of all improvements is within the estimated willingness to pay of tuna market buyers.

Current Price of Albacore
(USD/kg)

\$3.10

+

Proposed Premium
(USD/kg)

\$0.76

=

New Proposed Price
(USD/kg)

\$3.86

New Proposed Price
(USD/kg)

\$3.86

<

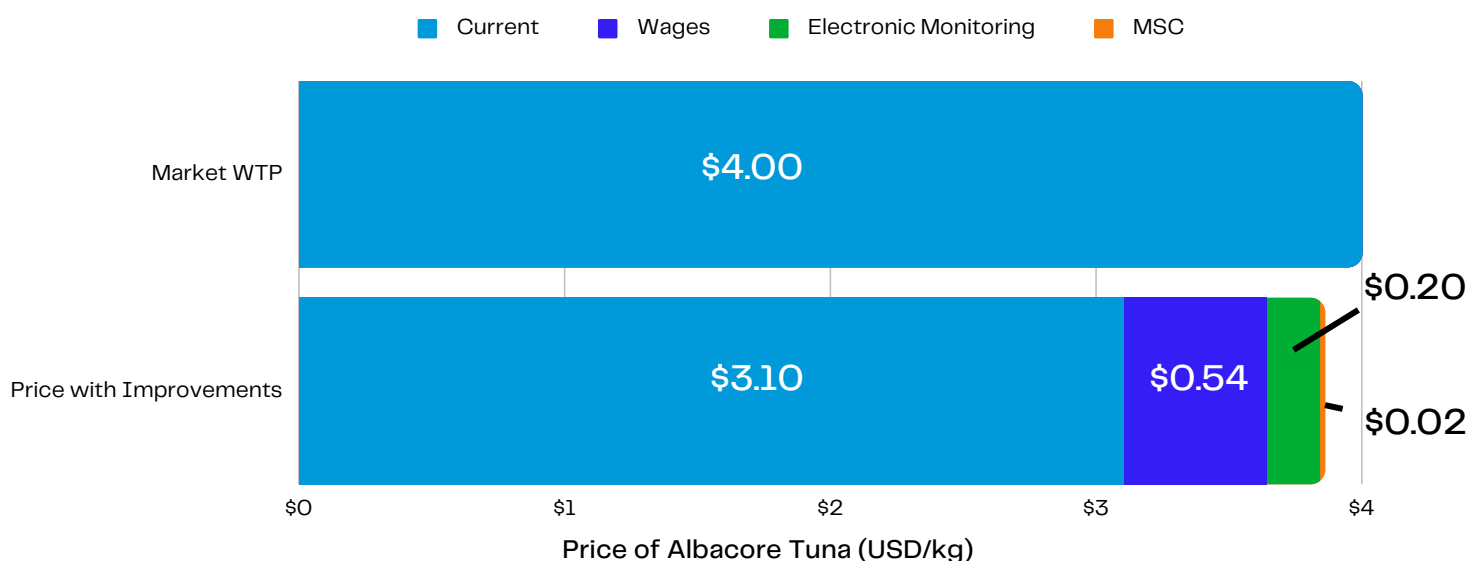
Industry Willingness to Pay
(USD/kg)

\$4.00

Achieving 100% MSC certification, raising wages to a living wage, and implementing EM across 100% of the fleet will require a premium of \$0.76 USD per kg, which is a 25% increase from the existing ex-vessel price of \$3.10 USD per kg.

A leading buyer in the tuna industry indicated they would be willing to pay \$4.00 USD per kg for sustainable tuna. This suggests that the industry would support price premiums associated with sustainability initiatives, and that the total price premium necessary to cover the cost of all three interventions is within their price range.

Market Willingness to Pay is Higher Than Improvement Costs



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