Report: Sunken Billions II and Ocean Prosperity Roadmap Research Collection

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Email: Tala.Chmiel@fleishman.com with any questions
About the Ocean Prosperity Roadmap research collection

• A comprehensive collection of research that begins a conversation about the opportunities to create significant economic gains while reducing poverty, increasing food production, replenishing fish and conserving ocean health for future generations.

• The goal is to inform and inspire decision-makers to create better ocean and coastal resource management strategies that maximize social, economic and conservation benefits.

• Result of work from The Economist Intelligence Unit (EIU), Environmental Defense Fund (EDF), the Gordon and Betty Moore Foundation, the David and Lucile Packard Foundation, California Environmental Associates (CEA), the University of California at Santa Barbara (UCSB), and the University of Washington (UW).

Visit www.OceanProsperityRoadmap.org to access the research and other information

Matt Elliott, CEA
Coastal Governance Index

Charles Goddard, Economist Intelligence Unit
Coastal Governance Index Results
• Coastal areas are home to 44% of the world population.
• In countries like the US, more than a third of the gross national product originates in coastal areas.
• Most countries score in the top half of the index suggesting that governments have taken initial steps to balance the needs of the environment and economic development.
• At the same time, no country is perfect, and none scores highly in all six categories.
The Potential for Global Fish Recovery: How Effective Fisheries Management Can Increase Abundance, Yield and Value

Chris Costello, University of California, Santa Barbara
Amanda Leland, Environmental Defense Fund
A Triple Win for Oceans: More Food, More Profits, More Fish

14% more in harvests per year

168% more in profits per year

36% more fish biomass in the water

*Relative to Current
A Stark Choice:
Sustainable Fishing vs. Business as Usual for the World's Fisheries

[Graph showing the comparison between historic, sustainable fishing, and business as usual scenarios over time from 1980 to 2040]
The Ocean’s Tremendous Potential

- **More Food**: 23% more in harvests per year (+17 MMT/year)
- **More Profit**: 315% more in profits per year (+$90 billion USD/year)
- **More Fish**: 112% more fish biomass in the water (+782 MMT/year)

*Relative to BAU*
Country-Level Costs vs. Benefits of Improved Fishery Management

Chris Costello, University of California, Santa Barbara
Global Benefits of Reform Vastly Outweigh Costs

- Sustainable practices will increase global management costs
- Profit upside is substantial
- Global Benefit/Cost Ratio > 101

Scenario:
- Additional Benefit or Cost
- Business As Usual

*For all global fisheries in our cost database.
Every country stands to gain from sustainability

Is reform “worth it” in a country?

Reforms bring 3 benefits

• More fish
• More food
• More profit

Focus only on profit:

• Benefit exceeds cost in all major fishing countries of the world
• Reforms
  • ITQs
  • TURFs
  • Cooperatives
  • Other RBFM
• Many countries have B/C>10

Could transition be partially financed by private sector?
Difference Between Annual Benefits and Costs:
Sustainable Management Compared to Business As Usual

![Chart showing the difference between annual benefits and costs.](chart.png)
Fisheries Governance Survey: Comparing across Countries and Stocks

Ray Hilborn, University of Washington
Project background

• The study addresses the need to provide publicly available information on the status of fisheries management globally.

• An independent survey was completed by experts for 28 countries, representing 80% of the world’s total catch.

• The survey characterized four dimensions of fisheries governance:
  o Research, monitoring, and assessment
  o Management response to stock status
  o Enforcement of management measures
  o Social and economic aspects

• The results were collected to develop a country-level index of the effectiveness of fisheries governance systems.
Findings

• The United States, Norway, Iceland, and Russia ranked at the top of the index.

• Among emerging markets, four countries that performed well in the survey are South Africa, Argentina, Chile, and Peru.

• The study highlights opportunities for several countries to improve their management systems and position themselves to increase harvests, profits, and conservation protection.

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Governance index by dimension and country

The new governance index helps identify specific areas in which countries are performing well and in which areas they can improve their fisheries management.
Governance index: scores by respondent

The following chart shows country scores by respondent, with the red line indicating the average country score.
Correlation between governance score and upside potential

The governance index largely explains the level of upside profit, meaning that countries that perform lower on the governance index also demonstrate the highest upside potential.

This study reaffirms that fisheries management reform is a necessary step to unlock triple-bottom-line benefits.