

# A FRAMEWORK FOR ASSESSING DECISIONS ABOUT FOOD & AGRICULTURE

**THE FOOD SUPPLY CHAIN** is deeply interconnected with human health, the health of the environment, and social and economic systems. Decisions, therefore, have impacts far beyond the supply chain itself.

To ensure that the benefits of a decision outweigh its risks, decision makers must carefully consider the full range of potential effects in the health, environmental, social, and economic domains.



## THE FRAMEWORK

## SIX STEPS FOR ASSESSMENT



### Identify the **PROBLEM**

What is the goal of the assessment?

### Define the **SCOPE** of the assessment

What are the time, geographic, budgetary, and other limitations? What do we know from studies already conducted about potential drivers or effects? What are the gaps in knowledge?

### Identify the **SCENARIOS**

What are potential interventions (e.g. policies or practices) that should be considered and compared to the baseline scenario?

### Conduct the **ANALYSIS**

What are the data needs, and which analytic tools are most appropriate?

### **SYNTHESIZE** the results

What are the impacts and tradeoffs across the health, environmental, social, and economic domains? How can they be compared?

### **REPORT** the findings

Who are the key stakeholders to inform?

## EXAMPLE SCENARIO— APPLYING THE FRAMEWORK

# What if Americans ate more fish?

The 2010 Dietary Guidelines for Americans recommend consuming 8 ounces of fish every week—almost double the amount most Americans currently eat. This recommendation was made only on the basis of the possible health benefits of eating more fish (reduced risk for cardiovascular disease in adults and better cognitive development in children). But what are some of the other possible effects across domains?

### ENVIRONMENTAL

- Overfishing and depletion of wild stocks
- Increased fish farming and potential associated environmental effects



### SOCIAL

- Decreased food security for fish-exporting countries that rely on fish as a major source of protein
- Larger fish production and processing workforce leading to potential worker safety concerns



### ECONOMIC

- Need for a larger fish production and processing workforce leading to new jobs
- Increased imports affecting local and global markets and affordability



Because the fish supply chain is global in nature, any policy decision that affects fish consumption in the United States will also impact human health, environmental sustainability, and social and economic systems across the world. The IOM/NRC framework can help decision makers weigh tradeoffs and make decisions that integrate benefits, risks, and priorities across domains.

To learn more about the framework and how it could be applied to existing food and agriculture challenges, download the complete IOM/NRC report at [www.iom.edu/foodsystem](http://www.iom.edu/foodsystem).

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