Identifying industry-informed research priorities for pelagic fishes and fisheries

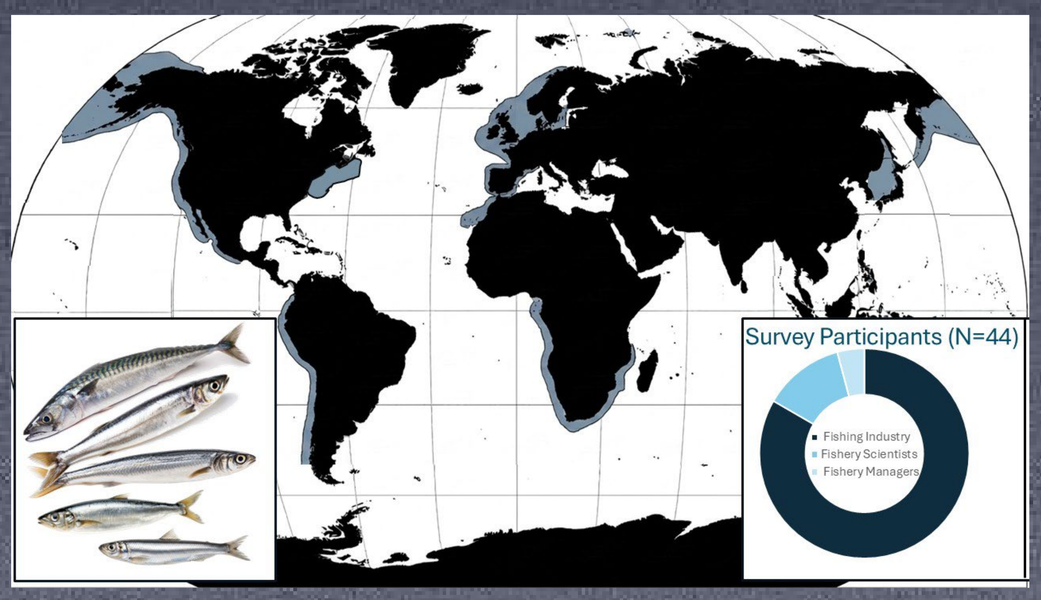
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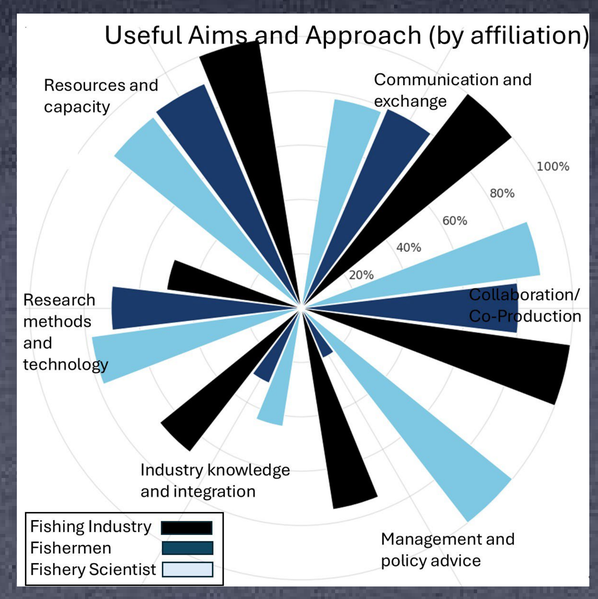
Introduction

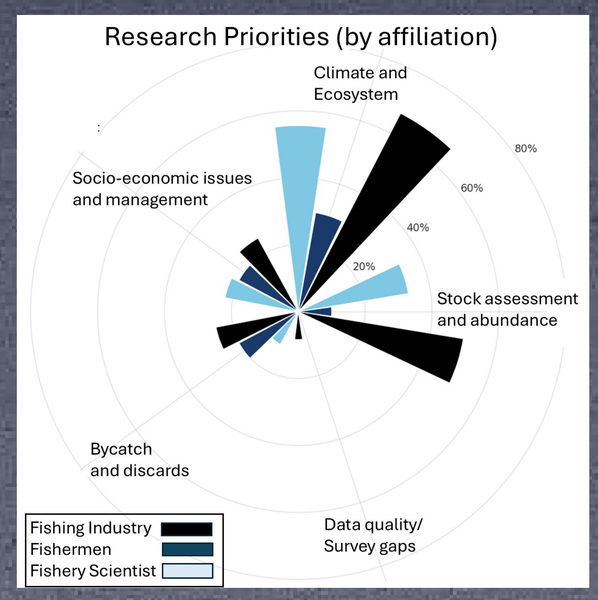
Priorities for research in fisheries are often divorced from insights, perspectives, and interests of commercial industries, fleets, and fishers. As part of the ICES-PICES working group on small pelagic fishes, survey results were compiled from 44 participants in 22 pelagic fisheries.

Strategies for further engagement of the fishing industry in setting research priorities, include:
— inventory processes to solicit industry input and identify information gaps and priorities
— review fisheries management forums to synthesize industry testimony
— analyze and collate research priorities and needs
— analyze and propose mechanisms to solicit industry priorities for research

Results will be communicated to fishery management councils (US), ICES (Europe) and similar management forums to document existing processes and inform future efforts.







Survey Results

Interest in collaborative research to improve assessment, reduce uncertainty, address environmental change and bycatch, and inform management decisions

Information and Data
— confidentiality and anonymization
— data-sharing agreements
— mutual trust
— feedback/results to industry
— standardized data formats
— evidence that data influence management

Economic Concerns
— predictability
— reduced waste
— stable allocation
— market access
— long-term viability

Institutions & Mechanisms
Need for mechanisms to make collaboration continuous, funded, trusted and connected to formal decision-making

Correlations

Data quality ↔ trust/confidentiality
Data sharing conditional on use, confidentiality, and feedback

Industry knowledge ↔ incentives
Industry knowledge contingent on certification and incentives

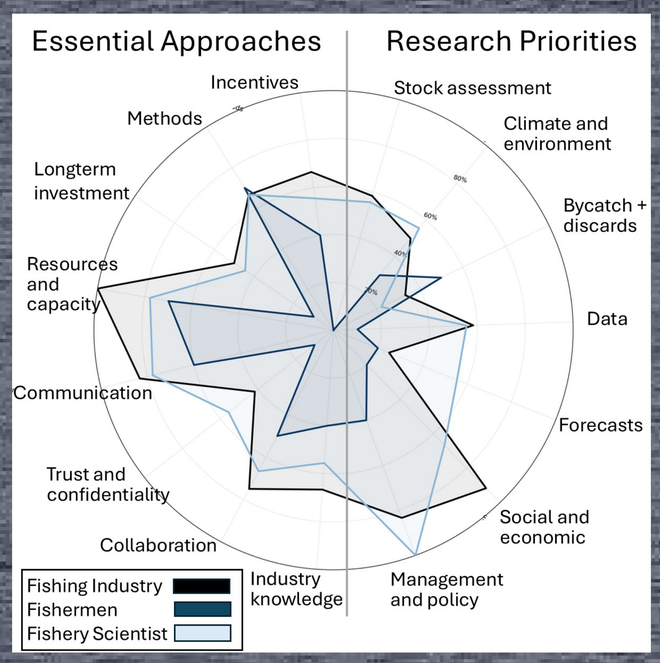
Data quality ↔ socioeconomics
Interest in using data to reduce uncertainty and improve economics

Participant Perspectives

Participants had more interest in the approach than the focus of research

—Industry Leads and Fishery Scientists focus on resources, communication, and collaboration

—Fishermen focus on capacity and methods



Industry and Fishery scientists prioritized stock assessment, data, economics and management relevance.

—More interest among scientists for data, forecasts and management

—More interest in industry on social/economic concerns and policy

—Fishermen had less interest in all areas; primary interest in bycatch and policy

Best Practices

— Engage industry early, prior to design of research
— Maintain engagement throughout the research cycle
— Co-develop questions and management scenarios
— Use fishermen's operational knowledge
— Return results to industry in accessible formats
— Make uncertainty and limitations explicit
— Establish long-term relationships
— Clear rules for data ownership, confidentiality, use
— Maintain standing scientist–industry working groups
— Link research priorities explicitly to advisory and management processes

Acknowledgements

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