

# Information and Influence in Fisheries Management: A Case Study of the Shrimp and Groundfish Resources in the Brazil-Guianas Continental Shelf

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## Abstract

This study examined scientific information use and influence in managing the shrimp and groundfish resources in the Brazil-Guianas Continental Shelf. The study used surveys and content analysis to identify information pathways among various stakeholders. The opportunities for and barriers to effective and efficient use of scientific information were described.

## Introduction



Fig. 1 The Brazil-Guianas Continental Shelf

- The Shelf extends along the north-east coast of South America (Fig.1).
- Scientific information on the status of the marine resources is produced by national fisheries agencies and fisheries advisory bodies:

FAO (UN-Food and Agriculture Organization)  
CRFM (Caribbean Regional Fisheries Mechanism).

- This information is largely available as grey literature (reports are not controlled by commercial publishers).

- Continuing declines in the fisheries affect a wide range of stakeholders.

- Information may not be used efficiently in fisheries management.

## Guiding Questions

How is scientific information used by decision makers?

How is scientific information communicated in public policy decision-making?

What are the information pathways in policy-making for fisheries?

The conceptual flow of information between stakeholders (Fig. 2) is used as a guide in this study.

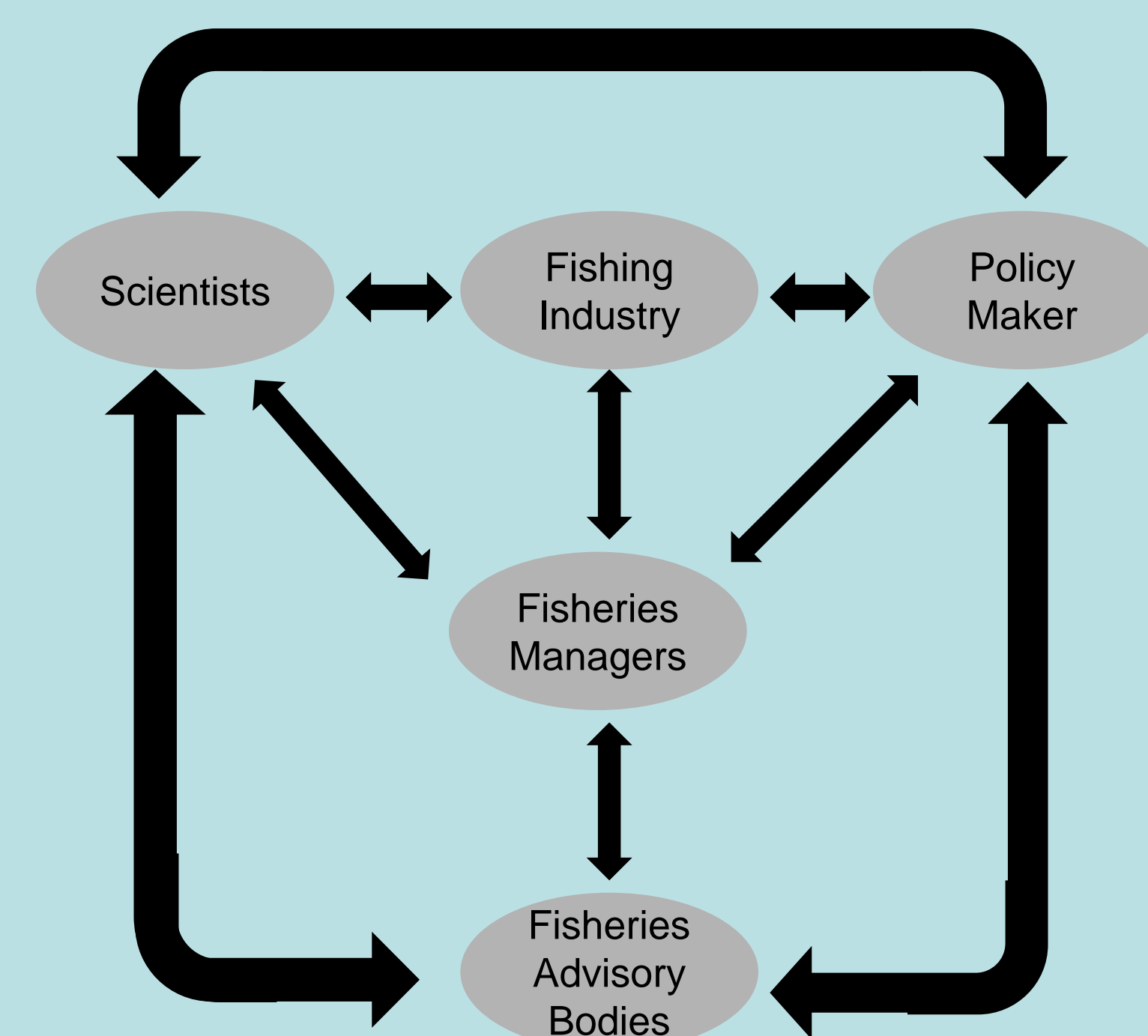


Fig. 2 Hypothetical flow of information



## Methods

This study was conducted from May to August 2009 under the project 'Environmental Information: Use and Influence' (B. MacDonald & P. Wells, co-investigators).

### Surveys

Sample were drawn from populations in Trinidad and Tobago and from Venezuela.

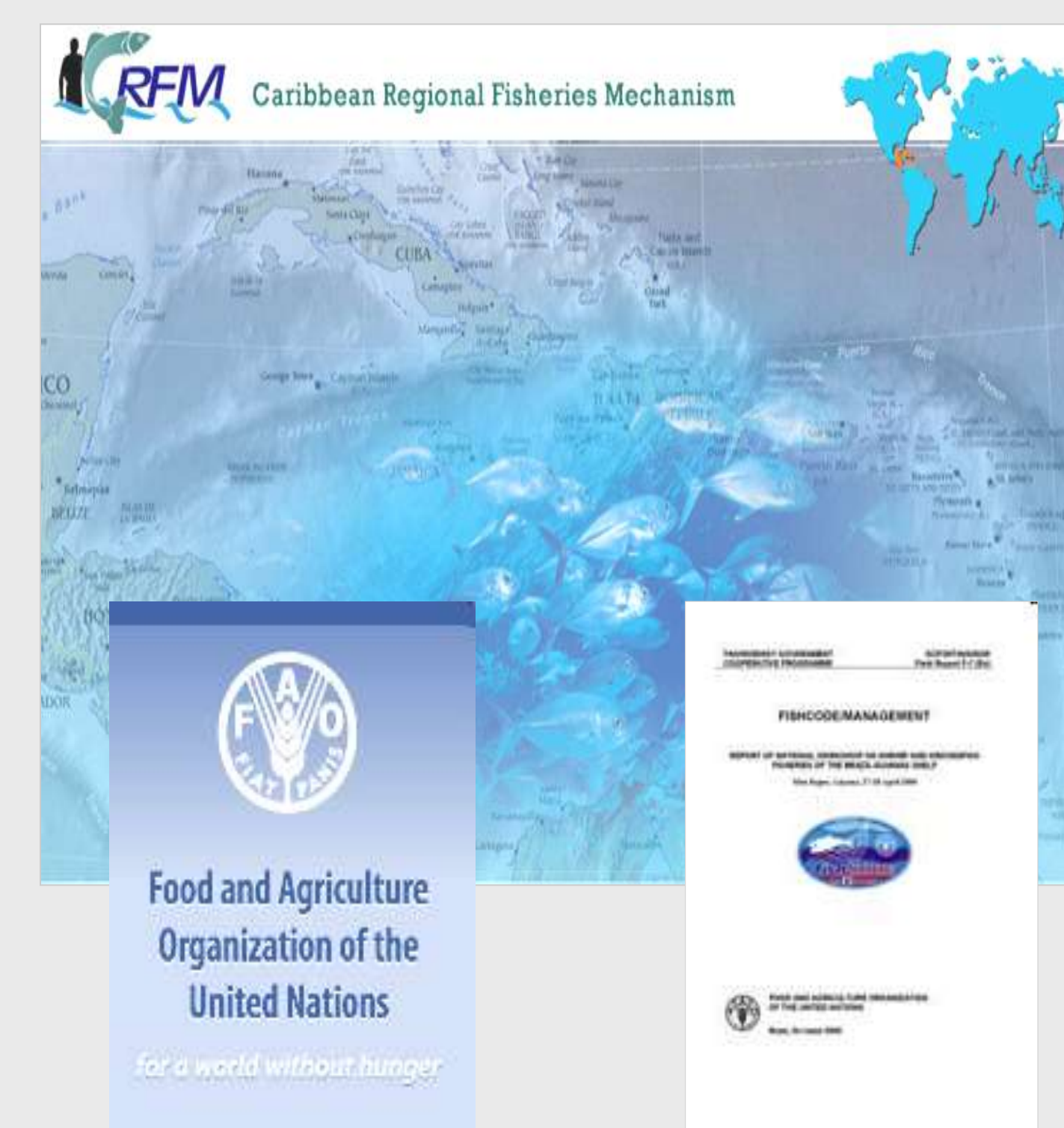
Responses were received from 23 out of 25 participants selected from the five major stakeholder groups in the fishery (Fig. 2):

- Scientists
- Fisheries Managers
- Policy Makers
- Fishing Industry
- Fisheries Advisory Bodies.

### Content analysis

Available grey literature and survey responses were examined for:

- scientific information
- management advice
- requests for information
- mechanisms for communicating information.



## Results and Recommendations

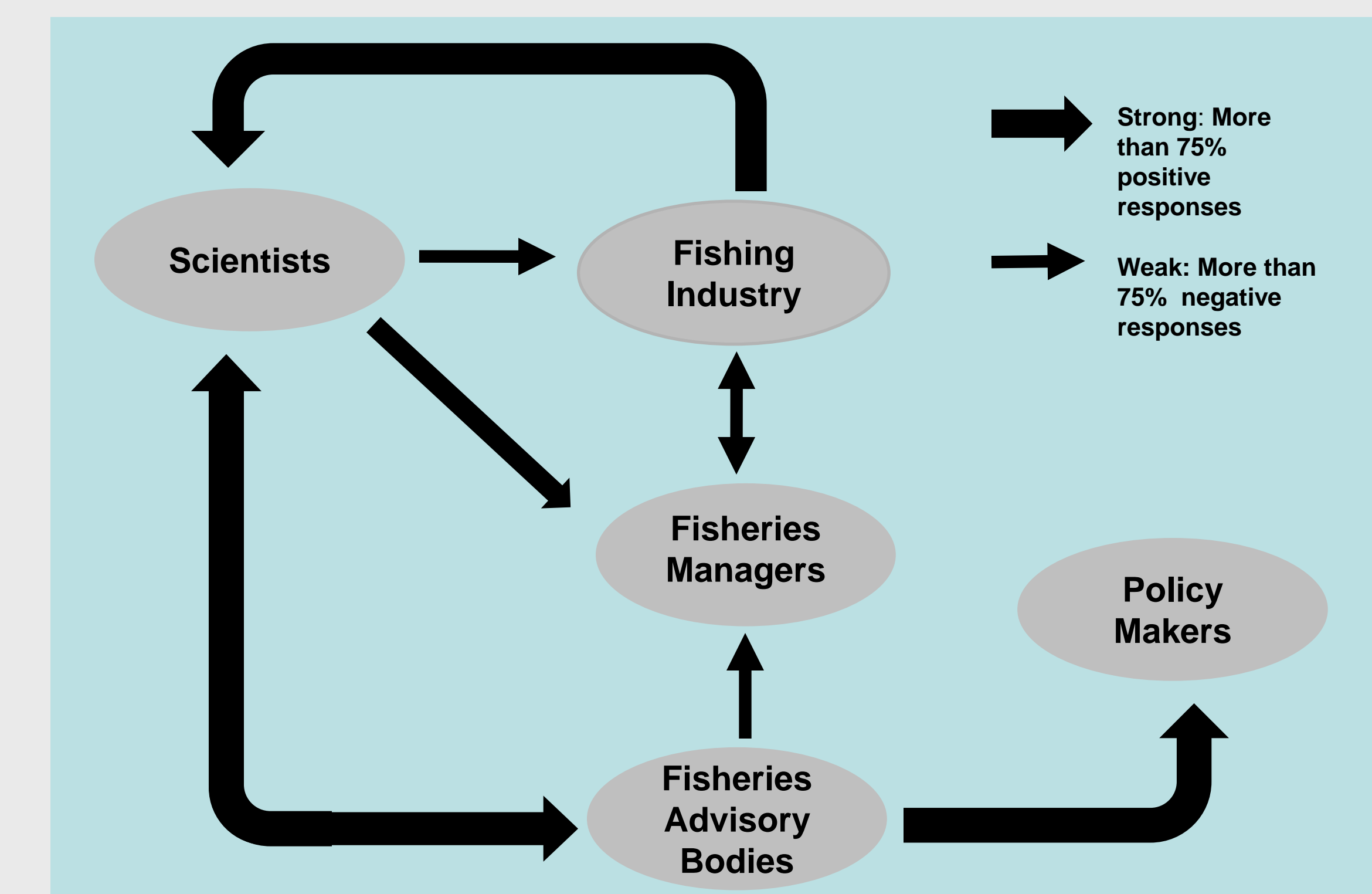


Fig. 3 Flow of information based on survey responses

### Responses show that:

- The primary aim of publishing scientific information is to inform the policy makers.
- Communication (two-way flow of information) is strongest between fisheries advisory bodies and scientists.
- Information flow is strong from fishermen to scientists and from scientists to fishery managers.
- Communication to the fishing industry is limited and weak.

### Recommendations:

- Scientists must develop capabilities and strategies to communicate information effectively to non-technical stakeholders.
- FAO and CRFM Working Group mandates can promote the communication of information.
- National fisheries extension services can be strengthened to disseminate information.
- FAO and CRFM can use existing communication pathways to promote credibility of scientific information.

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