Producing and using science for decision making

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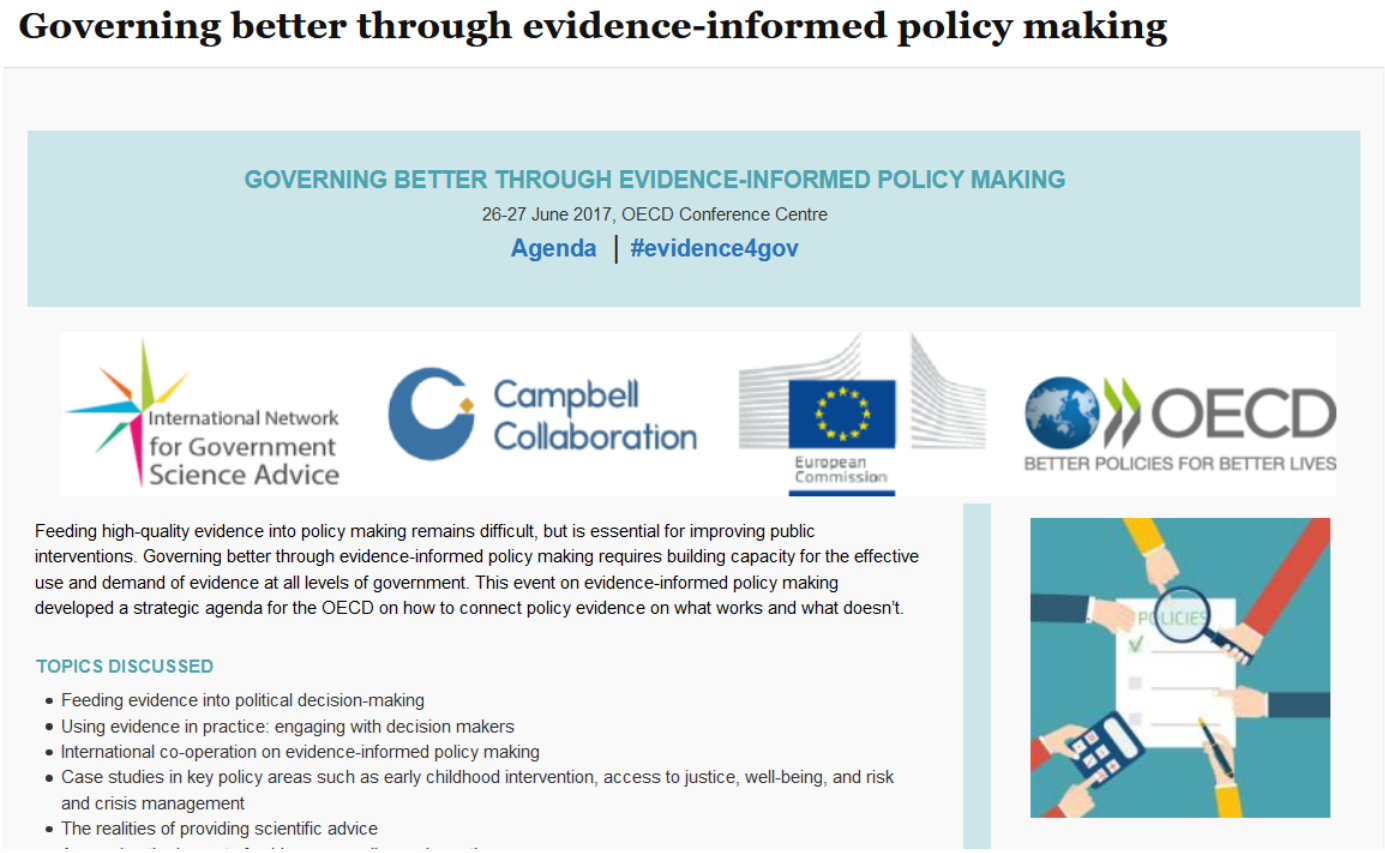
Good Governance Principles

Effectiveness of policies

- Most robust policies are typically based on sound understanding of the problem.
- Understanding the dynamics of civil society, business and stakeholder response to new policies helps design more successful policies.
- Policies developed on a ‘gut feel’ see more negative unanticipated impacts.
- Body of policy research improves over time as more evidence of success and challenges is gathered.



Producing science for decision-making

Environmental challenges

- Complex, systemic problems with human and planetary health impacts.
- Economic and social impacts, both from the environmental issues themselves but also the mitigation measures.
- Problems of collective action, either overuse of resource or pollution created by a large population.
- Solutions typically require collective action.

Relevance, legitimacy and credibility

Policymakers and scientists

- Typically speak ‘different language’.
- Have different needs when producing science for decision making.
- Policymakers need science that can be directly applied to their policy problem (relevant, salient)
- To encourage collective action, science must be viewed as legitimate (independent, views are geographically and gender balanced).
- Scientists must be seen to produce evidence through a credible process (peer reviews, published, etc.)

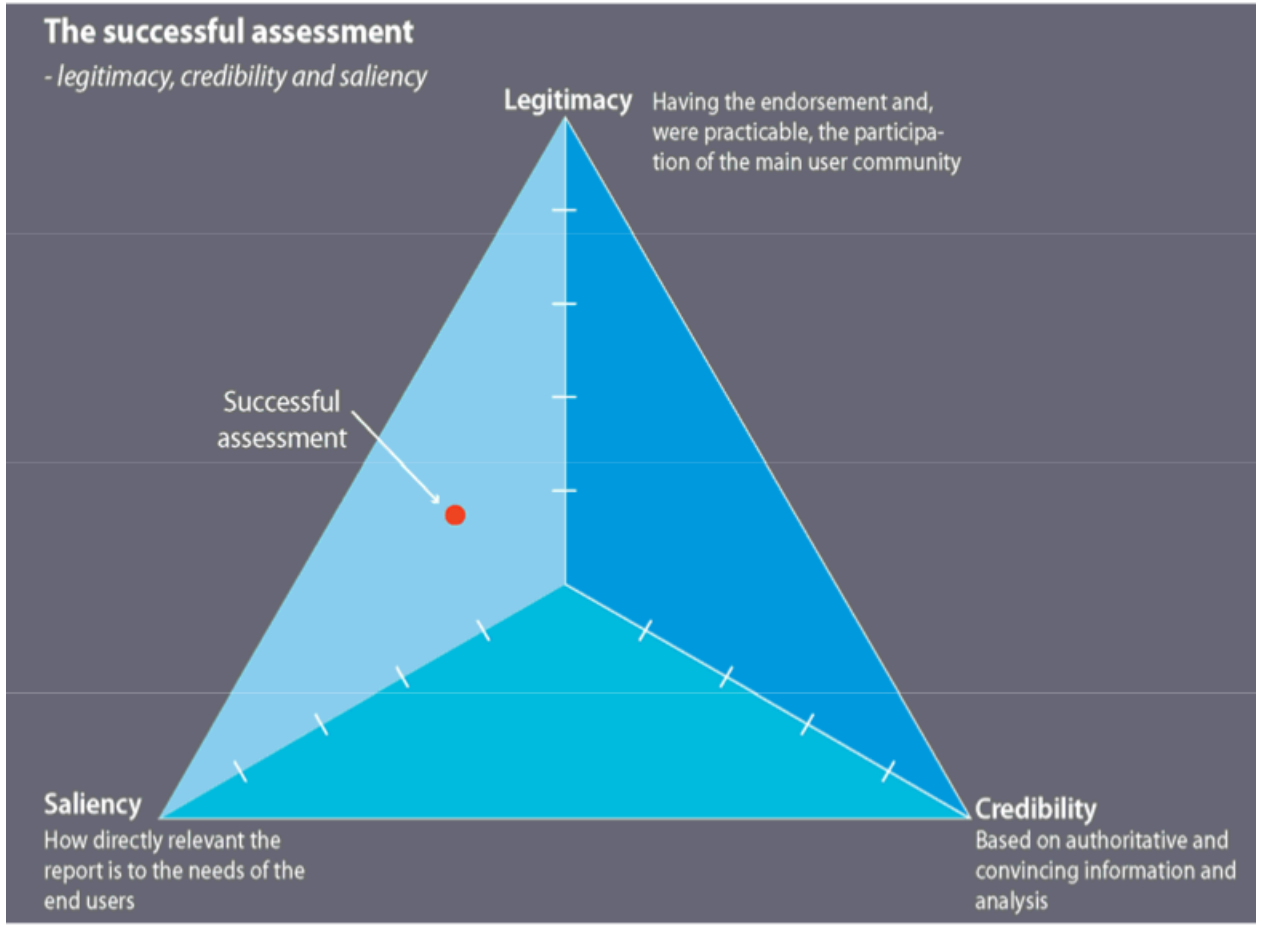


Figure 2.1: Legitimacy, Credibility, Saliency model (adapted from Cash *et al.* 2002)

Adjustments needed as process moves on

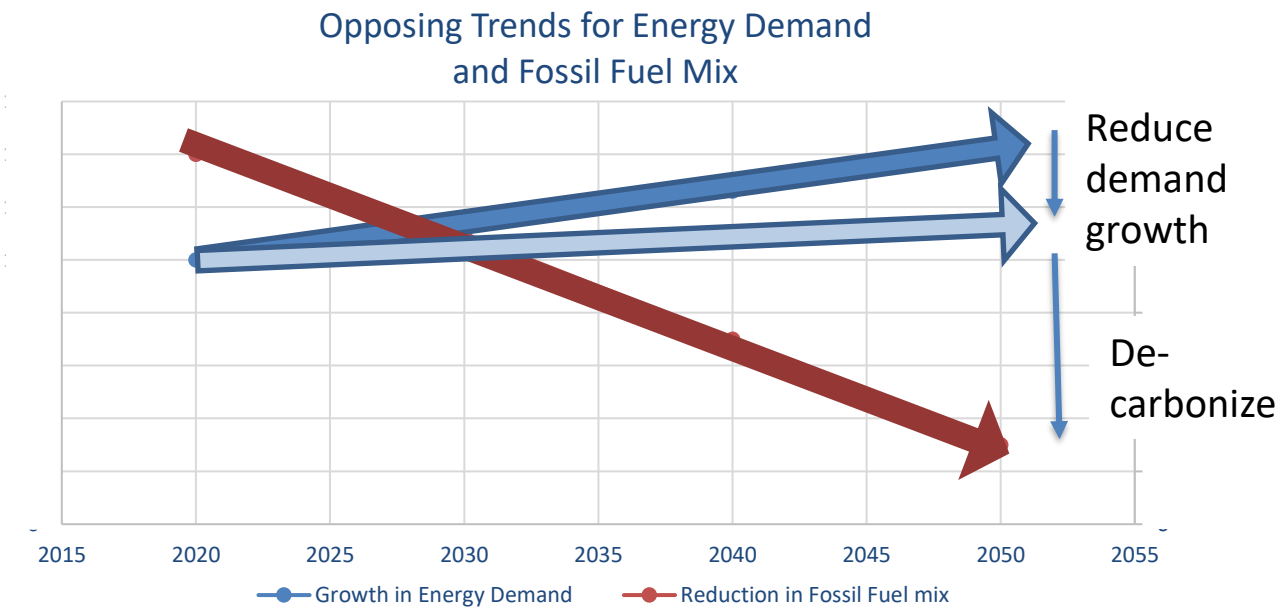
Differences of opinion, changes in approach

- Empirical scientists, social scientists work in different ways.
- Differing interpretations across different groups of scientists.
- Reconciling science from different published literature.
- ‘Assessing’ existing literature rather than conducting new research.
- Creating a compelling narrative rather than a scientific paper.
- Using other visuals effectively (graphics, maps, multimedia)

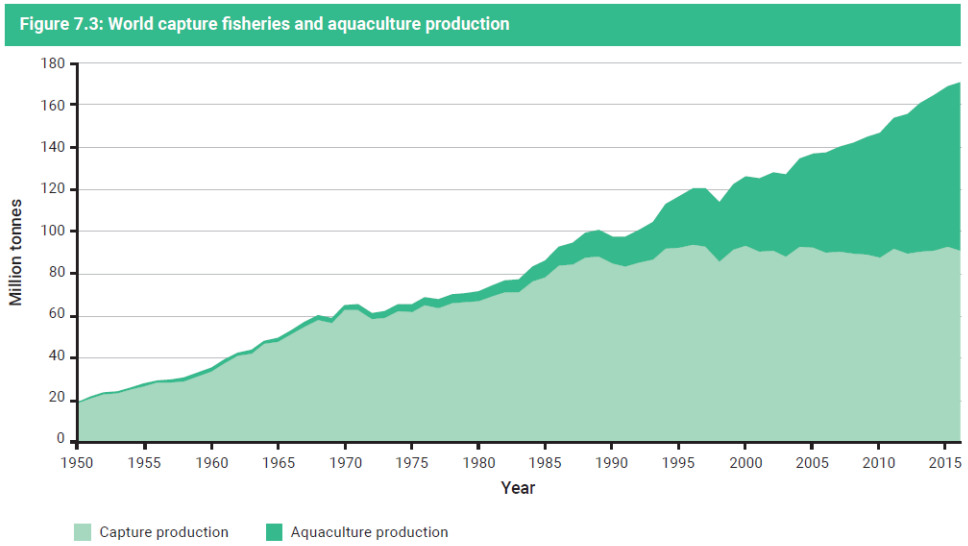
Clear policy goals

Defining the policy question

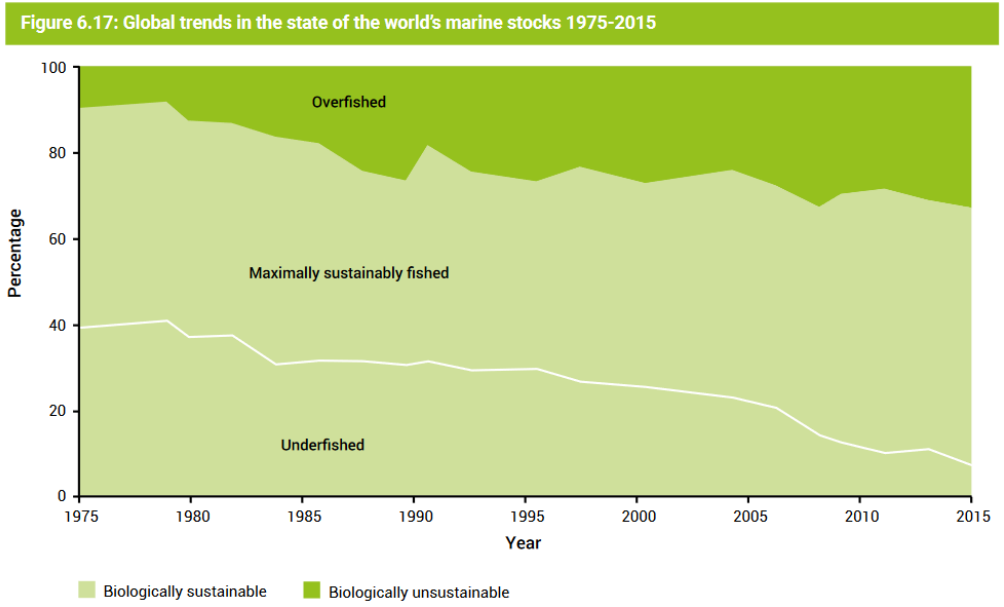
- Science helps define the problem. Provides the ‘what?’ and the ‘by when?’ of the policy question.
- Policy analysis, social science, economic analysis provides the ‘how’.
- Engaging the different affected groups helps enable the ‘how’.
- Creating partnerships for implementation will likely broaden the engagement of different actors.
- Designing policies with multiple benefits for different actors usually deepens the commitment.



Example: Territorial Use Rights for Fishing (TURFs)



Source: FAO (2018a).



Source: FAO (2018b).

Chilean Abalone fishery

- Stem from common property theory and community or local scale governance
- Reduce overfishing by stimulating resource stewardship among fishers themselves
- Communities have various sanctioning methods to hold everyone accountable
- In Chile there was a need to reduce pressure on a vulnerable species and reduce poaching
- Local communities developed and implemented their own TURFs, through a government organized process;
- Fish processing and marketing as well as NGOs were involved.
- Costs to government low, community managed

Using science in decision making

Briefing policy makers

- Putting science in context – policy analysts synthesize available science on a specific issue and suggests or recommends a government view on the evidence.
- Empirical science results will likely be included in analysis with social science and economic analysis to develop comprehensive advice to policymakers.
- Evidence / science likely will have a forward-looking component, highlighting longer term impacts or considerations

Tracking policy effectiveness

Adaptive management of policy

- Policy development cycle is complex and time consuming.
- Once policy is implemented there is typically not much tracking of effectiveness.
- Developing effectiveness indicators before the policy is put in place can help ensure that there is some tracking.
- Strategies for reacting to these indicators also needed to ensure that aspects of a policy approach can be adapted as data become available.
- Also, new policies may/could have impacts on other policies and adaptability is needed there.

Figure 11.1: Conceptual outline of policy effectiveness analysis

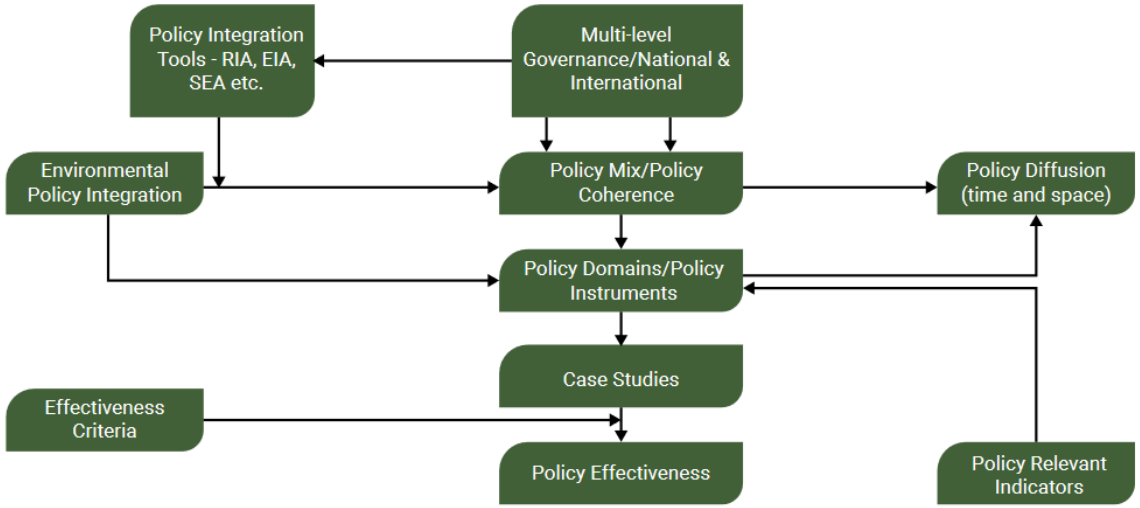
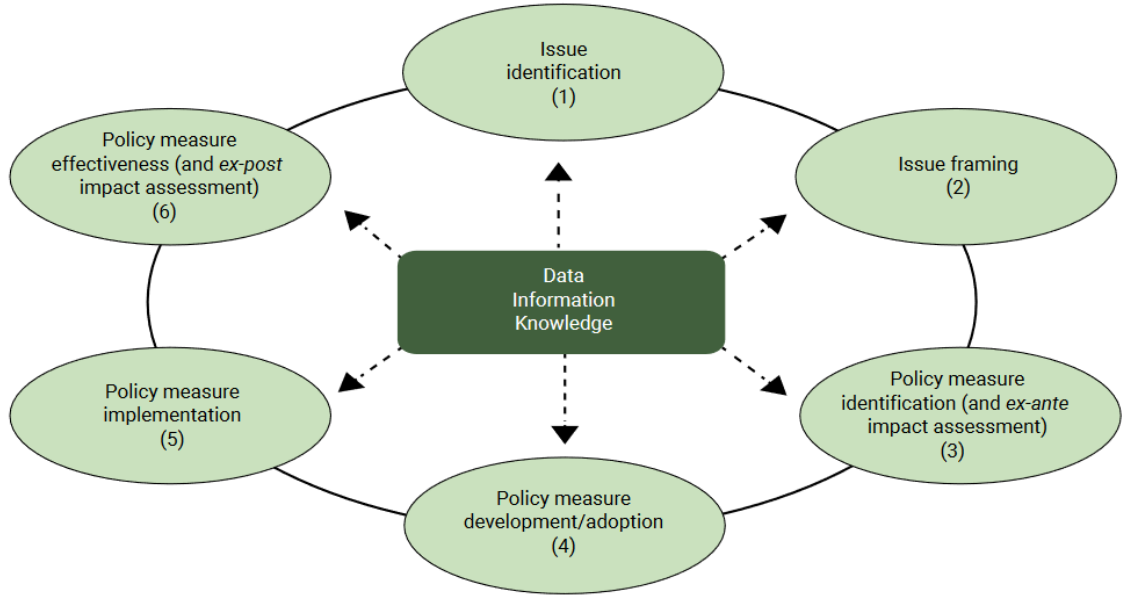


Figure 11.2: The policy cycle



Source: European Environment Agency [EEA] (2006)

Thank you

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