



REGIONAL WORKSHOP SOUTHERN AFRICA

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Science-Policy Communication

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Gap Between Science and Policy

Science produce

Models, datasets, knowledge, indicators

Policymakers need

Decisions, priorities, Actions

Issue: different languages and timeframes

- 👉 Science = precision
- 👉 Policy = simplicity + urgency



Data (Science) informs decision-making

Bridging technical data and policymaking is critical for making decisions that are **effective, evidence-based, and responsive to real-world challenges**.

In Practice (Out of Many)

- Better Decision-Making
- Efficient Resource Allocation
- Improved Public Trust
- Innovation and Economic Growth
- Reduced Policy Failure

Key Challenges (Why the Gap Exists)

- Communication barriers (technical jargon vs. political language)
- Different priorities (long-term analysis vs. short-term political cycles)
- Limited data literacy among decision-makers
- Lack of accessible, well-translated data insights



Technical data is often complex. Policymakers need clear, concise, and actionable insights.

Why Technical Data Is Often Inaccessible

- **Complex Language and Jargon** - Technical reports are usually written for specialists, not general audiences.
- **Overwhelming Volume of Information** - Data is often presented in long reports, spreadsheets, or datasets.
- **Technical Formats and Tools** - Data may require specialized software or expertise to interpret.
- **Time Constraints in Policymaking** - Policymakers often work under tight deadlines.

Why Simplification Is Necessary

- **Enables Faster Understanding** - Simplified data—through summaries, visuals.
- **Supports Better Decisions** - Data is translated into clear implications and options.
- **Improves Communication Across Sectors.**
- **Increases Data Use and Impact**

Key Principles for Communicating Science to Policy Makers



- **Clarity** - presenting information in a way that is easy to understand, focused, and directly relevant to decisions.

Technical Statement: Mean annual temperature is projected to increase by 1.8°C under current mission scenarios.

Clear version: Temperatures are expected to rise significantly, which could reduce crop yields and increase heat-related illnesses. Reducing emissions now can limit these impacts.

Key Principles for Communicating Science to Policy Makers



Relevance - focusing only on information that is **directly connected** to their priorities, decisions, and context.

Irrelevant information: Global ocean temperatures are rising.

Relevant information: Rising ocean temperatures are reducing fish stocks, which threatens local fishing livelihoods and food security.

Key Principles for Communicating Science to Policy Makers



Accuracy - ensuring that information is factually correct, properly interpreted, and not misleading.

Inaccurate Information: Unemployment is rising rapidly
(based on outdated data)

Accurate Information: Unemployment increased from 8%
to 10% over the past year, according to
national statistics.

Key Principles for Communicating Science to Policy Makers



Simplicity - presenting analysed information in a direct, concise, and easy to grasp.

Complex: There exists a multifaceted interaction between agricultural productivity variables and climatic fluctuations...

Simple: Changing weather is reducing crop yields.

Use visuals, summaries, and analogies to explain complex findings.



Framing Messages to Inform Policymaking

Focus on policy implications, risks, and benefits.

presenting scientific or technical information in a way that highlights both the **potential negative consequences of inaction** (risks) and the **positive outcomes of acting** (benefits)





Framing Messages

What This Principle Means - Instead of just reporting data, you answer:

- **What could go wrong if we do nothing?** (risks)
- **What could improve if we act?** (benefits)



Why It Matters

- Policymakers make decisions under **uncertainty and pressure**
- Helps to balance **costs, public impact, and political feasibility**
- Risk–benefit framing helps to **compare options quickly and realistically**



Framing Messages

Key Elements of Risk–Benefit Framing

- Clearly State the Risks of Inaction
- Highlight the Benefits of Action
- Quantify when Possible
- Consider Time Horizons
- Present Trade-Offs Honestly





Framing Messages

Example: Climate Policy

Without framing:

Temperatures are rising.

Data alone does not drive policy —
clear communication does.

With framing:

Rising temperatures could reduce agricultural productivity and increase heat-related illness. Investing in climate adaptation can protect food supply and public health.

Example: Education Policy

Without framing:

School attendance is low in rural areas.

With framing:

Low attendance risks long-term skill shortages and unemployment. Providing school meals or transport could improve attendance and future workforce productivity.



Translating Technical Data (steps)

 Understand the audience (ministry, local gov., NGOs) :
Tailor information to decision needs

 Identify key findings : *what matters most?*

 Extract policy implications : *What is the meaning of the evidence?*

 Simplify without losing accuracy : *Make science accessible*

 Package into messages, visuals, policy briefs: *Turn evidence into action*



Conclusion

Effective communication bridges the gap between data and policy.

How to Bridge the Gap

- Translate data into **clear, actionable insights** (visuals, summaries)
- Use **policy briefs and dashboards** instead of raw reports
- Promote **data literacy training** for policymakers
- Encourage **collaborative platforms** between experts and government
- Employ **knowledge brokers** (data translators or advisors)



Plenary Discussion

1. What are the main barriers that prevent technical evidence from being adequately communicated to policy makers? and how can these barriers be overcome?
2. What practical approaches can be used to ensure proper **alignment** of technical data with policymakers' immediate priorities and decision-making needs?
3. Which platforms, partnerships, or communication channels have proven most effective in communicating science/research?
4. What roles can intermediaries such knowledge brokers, social media etc play in improving communication between technical experts and policymakers?