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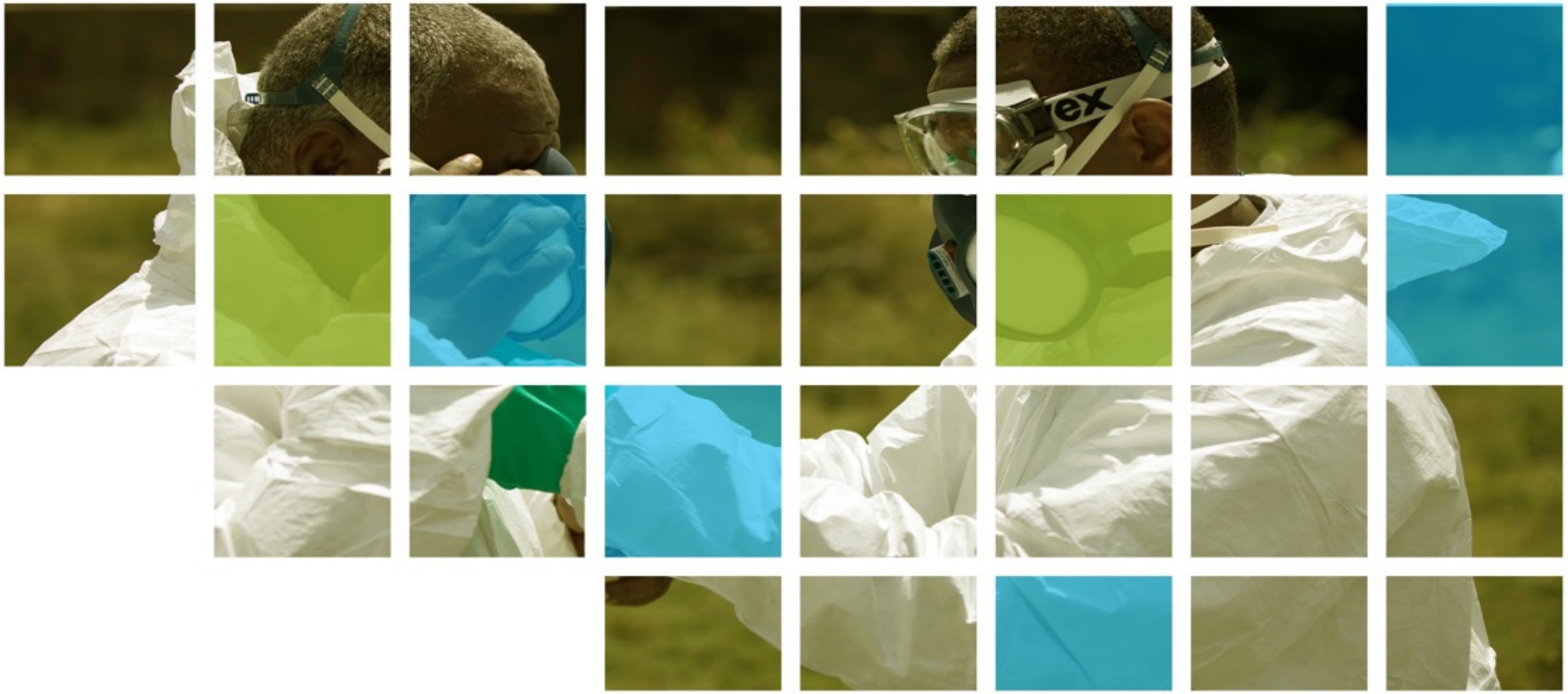
Science-Policy Panel

Chemicals, Waste and Pollution Prevention



Deep-Dive Dialogues on the Options for Functions of the Science-Policy Panel

31 January 2023

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Aim of the Dialogues

- To provide a discussion on the options for functions based on the UNEA Resolution 5/8 and the Working Document OEWG.1/5, and to highlight the diverse range of views to be considered by the OEWG, including on
  - Horizon scanning
  - Assessments
  - Knowledge management, communication and information-sharing, and stakeholder engagement
  - Capacity-building

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Speakers

Warefta E Murshed
Children and Youth Major Group

Miriam Diamond
IPCP & STAP

Andrea Hinwood
UNEP

David Kapindula
Zambia

Bob Watson
Former IPCC & IPBES chair

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OEWG.1/5

- It provides common definition(s) and identifies a range of approaches and associated implications for implementing each function, based on a review of mandates and activities by existing science-policy bodies

- **The OEWG may wish to** consider the options for a way forward and provide guidance on intersessional work (e.g., options for the institutional arrangements, rules of procedure)

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Warefta E Murshed
Children and Youth
Major Group

Youth Perspective

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Experience on the Ground

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Our Views on the Youth Engagement

- Young people with relevant background need to have rigorous training and capacity building for a certain time period to take things into action aligning with SPP.
- The role of the youth in evidence-based options, need-based analysis, and implementation-based activities related to functions of the SPP
- Institutional framework needed to provide opportunities, e.g., through early-career program

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Miriam Diamond
IPCP & STAP

Scope & Function

A Proposal

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Goal

UNEA Resolution 5/8

“to support and promote science-based local, national, regional and global action on the sound management of chemicals and waste beyond 2020.”

> *“science-based assessments to inform decision-making processes”*
>
> *“sound management of chemicals and waste is crucial for the protection of human health and the environment”*

- Raise attention to inform decision-making for solutions
- Authoritative & responsive to issues
- Influences meaningful change

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Summary of Proposed Scope & Functions

1. Broad, flexible & dynamic scope for function (horizon scanning)
2. Identify issues: Lack of scientific evidence ≠ Lack of harm
3. Innovation for effective assessments
4. Inclusive knowledge to define scope and function

    Interdisciplinary, inclusive of Indigenous and impacted communities
5. Issues beyond existing agreements & S-P bodies
6. Strict Conflict of Interest provisions

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1. Broad, Flexible & Dynamic Scope for Function (Horizon Scanning)

- Allows for breadth of global issues, breadth of chemicals & waste domain
- Avoid prescriptive definitions
- Prioritized by expert groups with strict Conflict of Interest provisions

- Future trends & factors affecting those trends
  - Economic changes, e.g., shift to C neutral technologies
  - Climate & land use change

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2. Identification of Issues

- Science-based, data-driven

BUT….

Lack of evidence of harm doesn't mean no harm

Function of expanding base of evidence → capacity building

- Increased efforts where data are scarce and impact could be high, e.g., Global South
- Community representation

Inclusion of issues in the face of incomplete evidence & uncertainty

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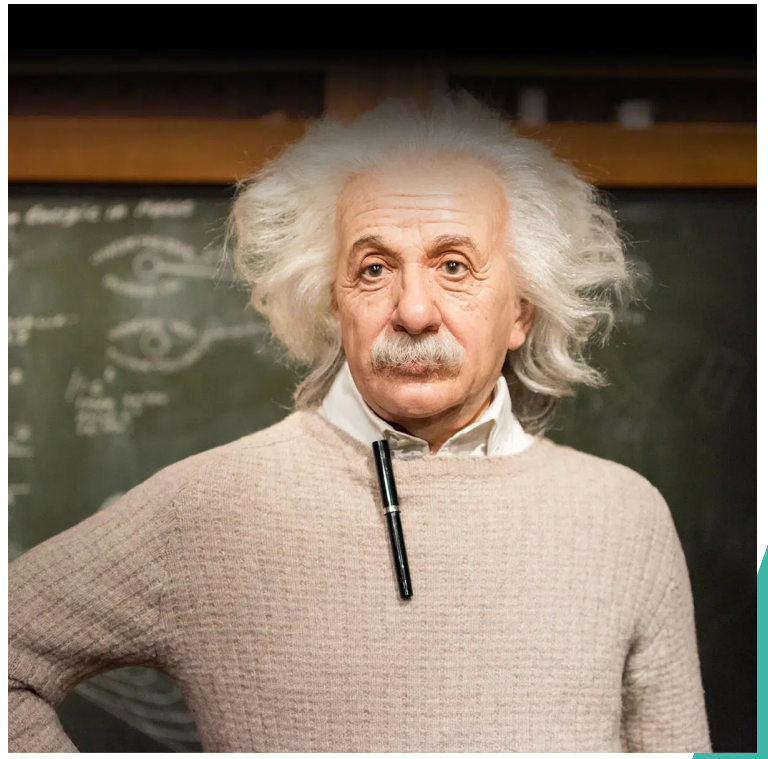
3. Innovation for Effective Assessments

We cannot solve our problems with the same thinking we used when we created them.

Albert Einstein 1946



- Issues expanding faster than the capacity for assessment & action
- Need for innovative and fresh thinking

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4. Inclusive Knowledge to Define Scope & Functions

- Physical & biological sciences needed, but not sufficient
- Social sciences, Indigenous knowledge
- Building capacity

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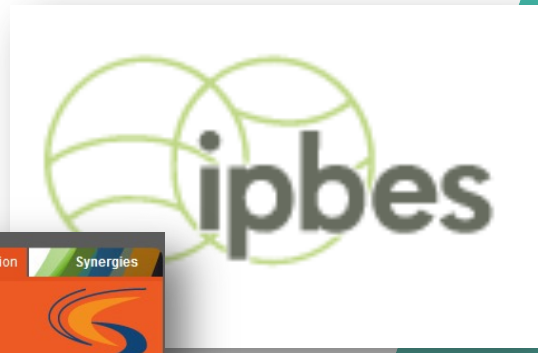
5. Aware of, but Beyond Existing S-P Bodies

UNEA resolution 5/8

"it could further support relevant multilateral agreements, other international instruments and intergovernmental bodies…."

- Issues that transcend existing S-P bodies
- Seek co-benefits



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5. Beyond Existing S-P Bodies

Examples:

- Proliferation of number of chemicals produced
- Systems analysis for comprehensive and integrative assessments
- Analysis of problem-solving methods

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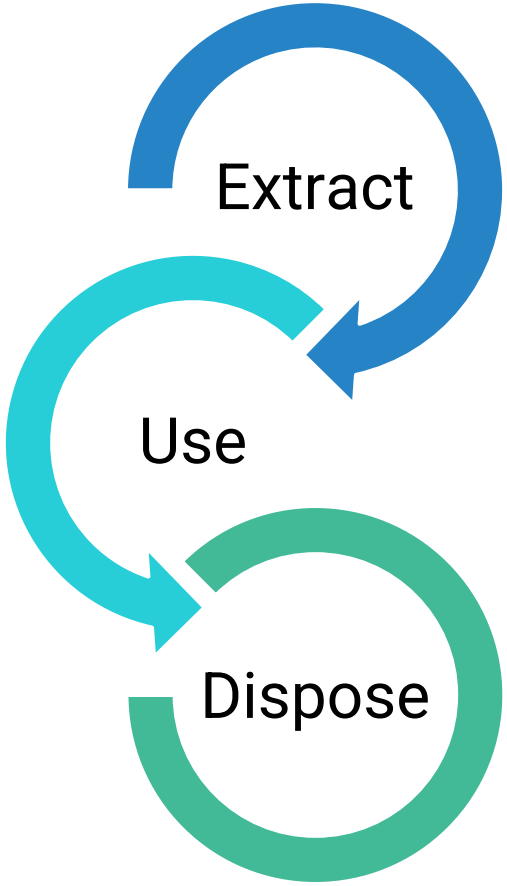
5. Beyond Existing S-P Bodies

"Grow Now,
Clean up Later"



Developing Country

Developed Country

Developing Country

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6. Strict Conflict of Interest Provisions

UNEA Resolution 5/8 Article 6

"*Further decides that the ad hoc* [OEWG] *should take into account the need to ensure that the panel:*

(f) Has the ability to address potential conflicts of interest…"

- COI impact which questions are asked, outcomes and uptake
- Work of independent experts
- Role of industry as one of consultation

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Andrea Hinwood
UNEP

Horizon Scanning

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Background

- Resolution 5/8 *"undertaking horizon scanning to identify issues of relevance to policy makers and where possible proposing evidence-based options to address them"*
- Horizon scanning – systematic detection, collection and interpretation of issues and signals of change within a specific field
- To be effective, a horizon scan is carried out in the context of a process that facilitates the downstream use of outputs
- **Horizon scanning is typically carried out as part of a Strategic Foresight exercise to make sense of signals and decide how outputs are used**

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Horizon Scanning Aspects

- During scanning, signals are spotted, phenomena are constructed from signals, and emerging issues are systematically identified and evaluated
- Can be constrained or broad noting time, data, availability and cost issues
- Often short-term but some scans necessitate both short- and long-term
- Usually involves issues identification
- Analysis approaches determine how an issue is identified as a signal
- Most processes, including megatrends analysis, involve the engagement of experts to sense check and give perspectives on issues

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Horizon Scanning – Possible Roles for the SPP

- Scanning for new and emerging issues and novel phenomena on a rolling process
- An exploratory horizon scan that speaks to scope of the SPP followed by a series of issue-centered scans in shorter time frames
- Outputs of horizon scan used to prioritize topics for assessment, i.e., short-, medium- and long-term, but will require a process and criteria
- Rolling process of nomination of issues combined with a foresight exercise to determine how and what to focus on: e.g., rapid reviews, or full scientific assessments on priority topics, take a 5-year horizon scan and determine a work program for 1, 3 and 5 years based on outputs.

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Advantages and Challenges

- Engagement of stakeholders via process for the nomination of issues (noting depending on scope this has cost, time and data implications)
- Open accessible transparent data (accessing data, information and knowledge could be a challenge)
- Provide an ongoing 'state of the environment' about chemicals, waste and pollution – old and new
- An agreed methodology and approach up front avoiding the '*my issue is more important than yours'* debate
- Prioritization of efforts based on an agreed process & evidence base
- Identification of signals that can be monitored
- Ability to undertake different types of assessment depending on the maturity of knowledge, e.g., rapid reviews through to implementation issues

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Concluding Remarks

- A robust horizon scanning process with a foresight exercise encompassing risk ranking could enable targeting of the type of assessment required, i.e., whether focused on solutions; underlying science; policy or legislation or behavior or social sciences assessments
- The number of issues that could be covered is extremely large, and compounded by the varying issues in different regions. The scope of the panel will impact how this function could be implemented
- An approach and methodology would need to be designed and criteria developed
- It would require a method, process and subsidiary body

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David Kapindula
Zambia

Potential Additional Function to Consider

Capacity Building

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Introduction

- Capacity-building is not explicitly listed as a principal function under resolution 5/8.
- However, the four principal functions mentioned in paragraph 2 of resolution 5/8 are described as being “among others”.
- This implies that it is possible to “include” other functions of the SPP.
- Thus, at ad-hoc OEWG1.1, some representatives called for an additional function of “capacity-building” or “capacity development”.

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Examples of Capacity-building Functions Provided for by Existing Science-Policy Bodies

- Activities mostly focus on capacity at :
  - individual level (particularly related to the body's work) and
  - in some cases, at the organizational level
- Existing activities can be grouped into three broad categories:
  - activities that ensure the effective participation of scientists and other stakeholders in the science-policy panel's assessment work (e.g., webinars, e-learning courses and regional workshops)
  - activities that engage and enable young people and early-career professionals (Masters in Chemicals Risk Management programme by the University of Cape Town, South Africa); and
  - more broad-ranging means of developing the capacity of individuals and organizations in a general sense (deploying training materials, facilitating connection and matchmaking, and promoting and facilitating national and regional branches)

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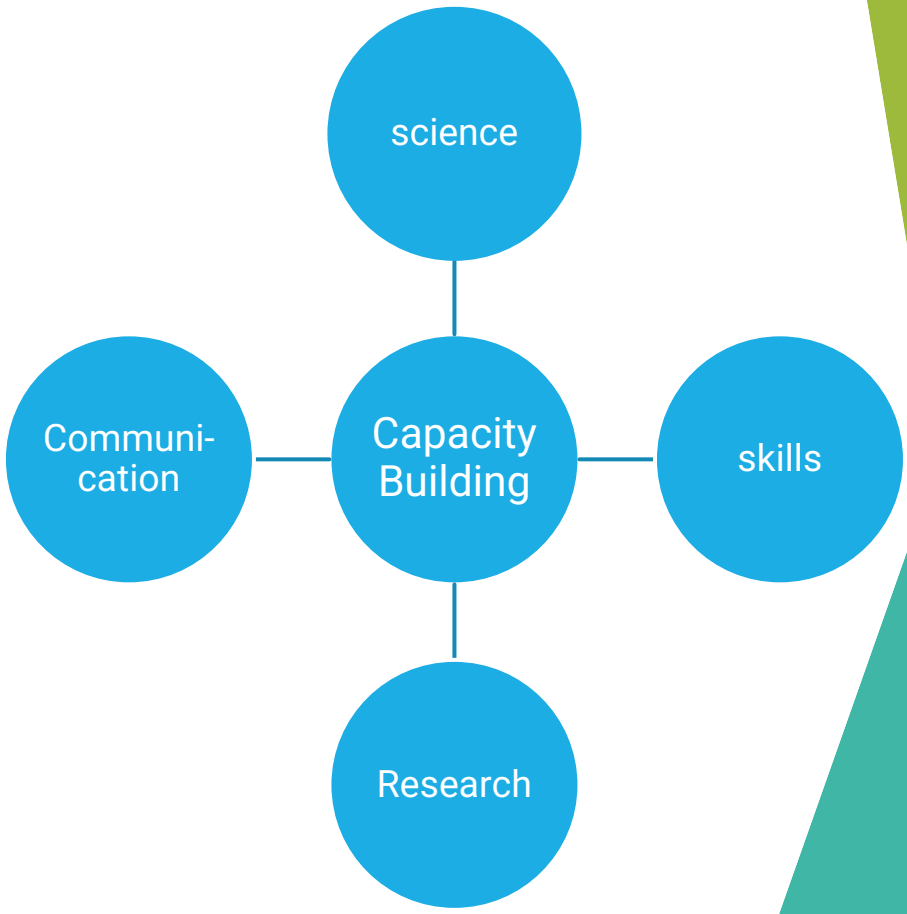
Possible Ways to Incorporate Capacity-Building in the Work of the SPP

- Incorporation through the programme of work
  - Capacity-building is not explicitly listed as a principal function under resolution 5/8, but can instead be achieved through direct inclusion within the SPP's work programme
- Incorporation as a principal function in the initial mandate
  - For example: "Promoting capacity building, including the required scientific basis, the skill sets, the technical capability, the needed research acumen, as well as financial resources to execute national research that can directly feed into global assessments."
- Link finances specifically to capacity-building that is related to the SPP work



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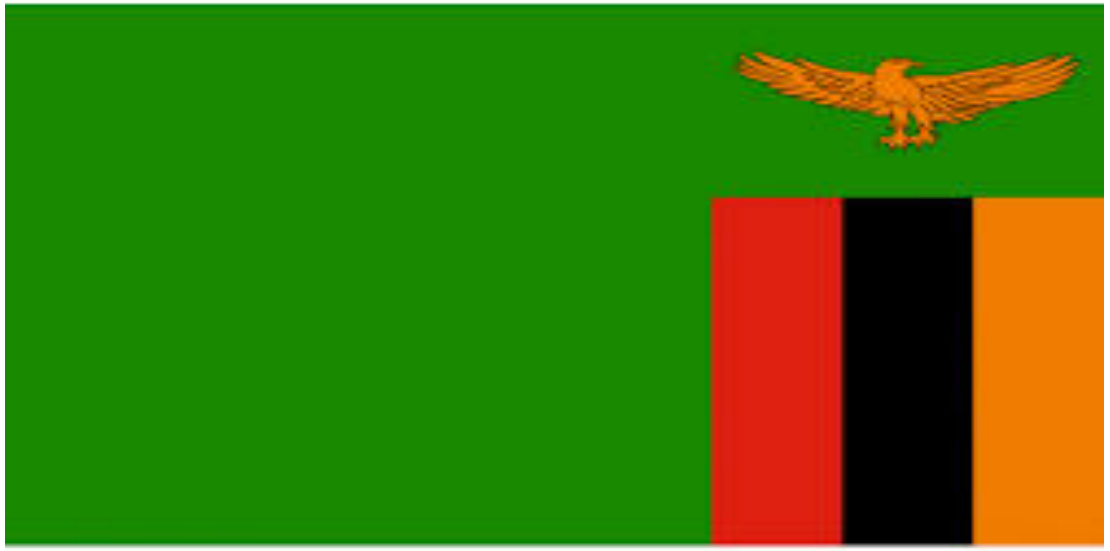
Case Study



Data generation for ratification of the Minamata Convention

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Mercury in River Sediments and Fish of the Kafue River Basin Project

Source of funding: Finnish Environment Institute (SYKE)

Commencement: 2010

Completion: December 2014

Overall Goal: The overall objective of the component on chemicals was to build capacity to analyse and gather information on the chemical contamination of the environment in Zambia by training the personnel and enhancing the technical capacities of the existing laboratories.

Project implementation: Zambia Environmental Management Agency (ZEMA)

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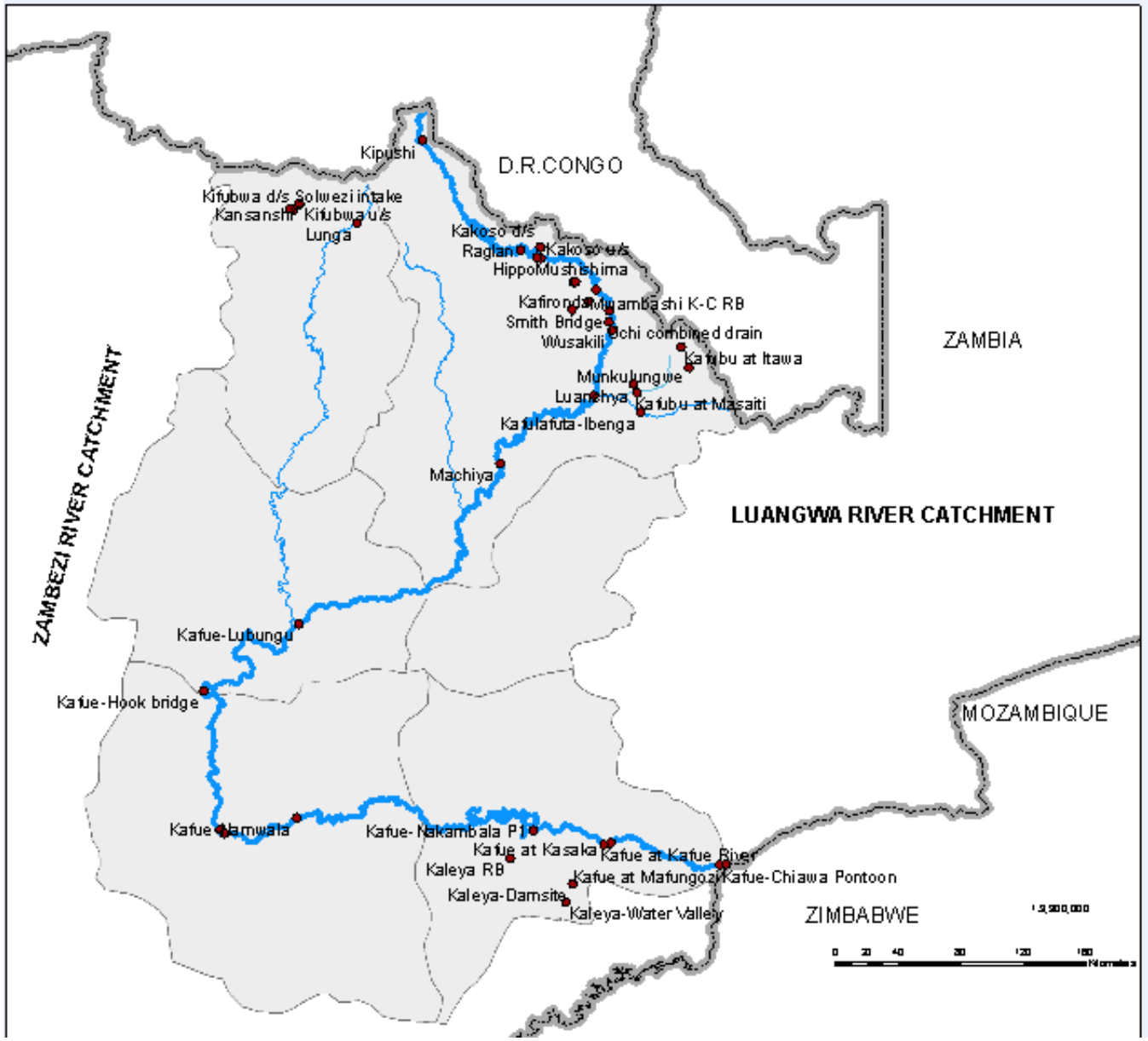
KAFUE RIVER WATER QUALITY NETWORK MAP (AUGUST 2009)



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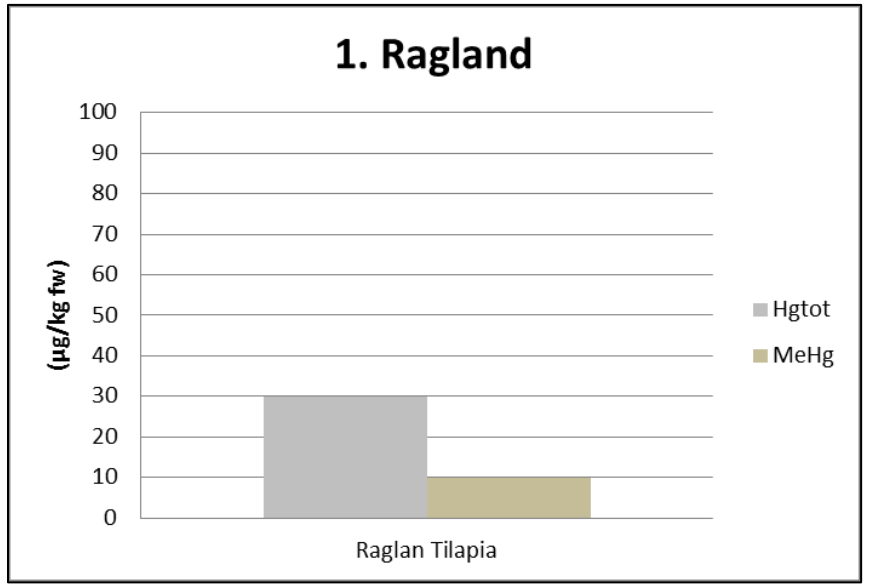
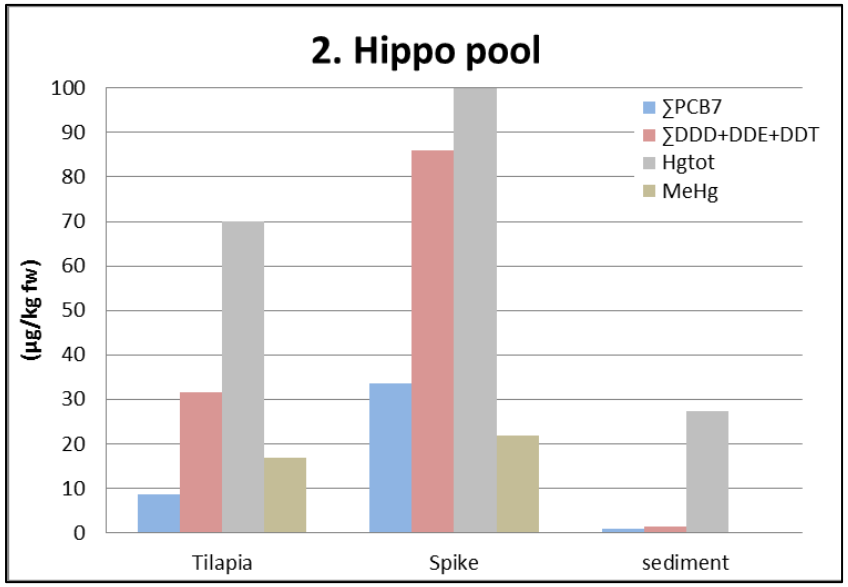
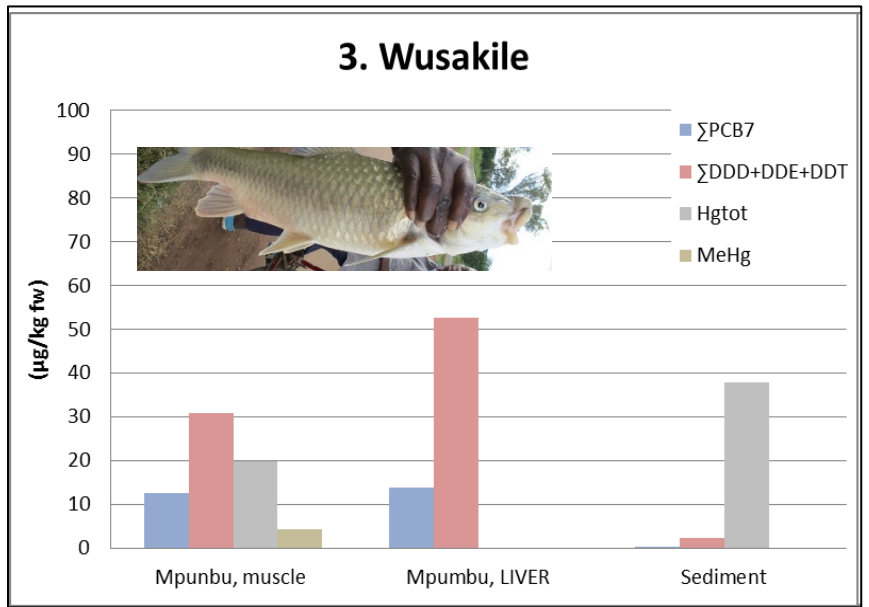
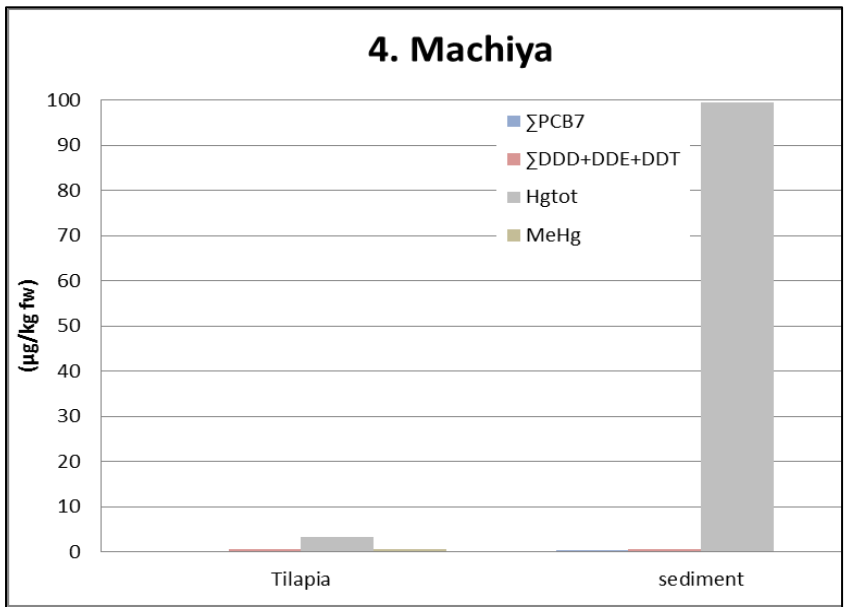
Mercury in River Sediments and Fish of the Kafue River Basin









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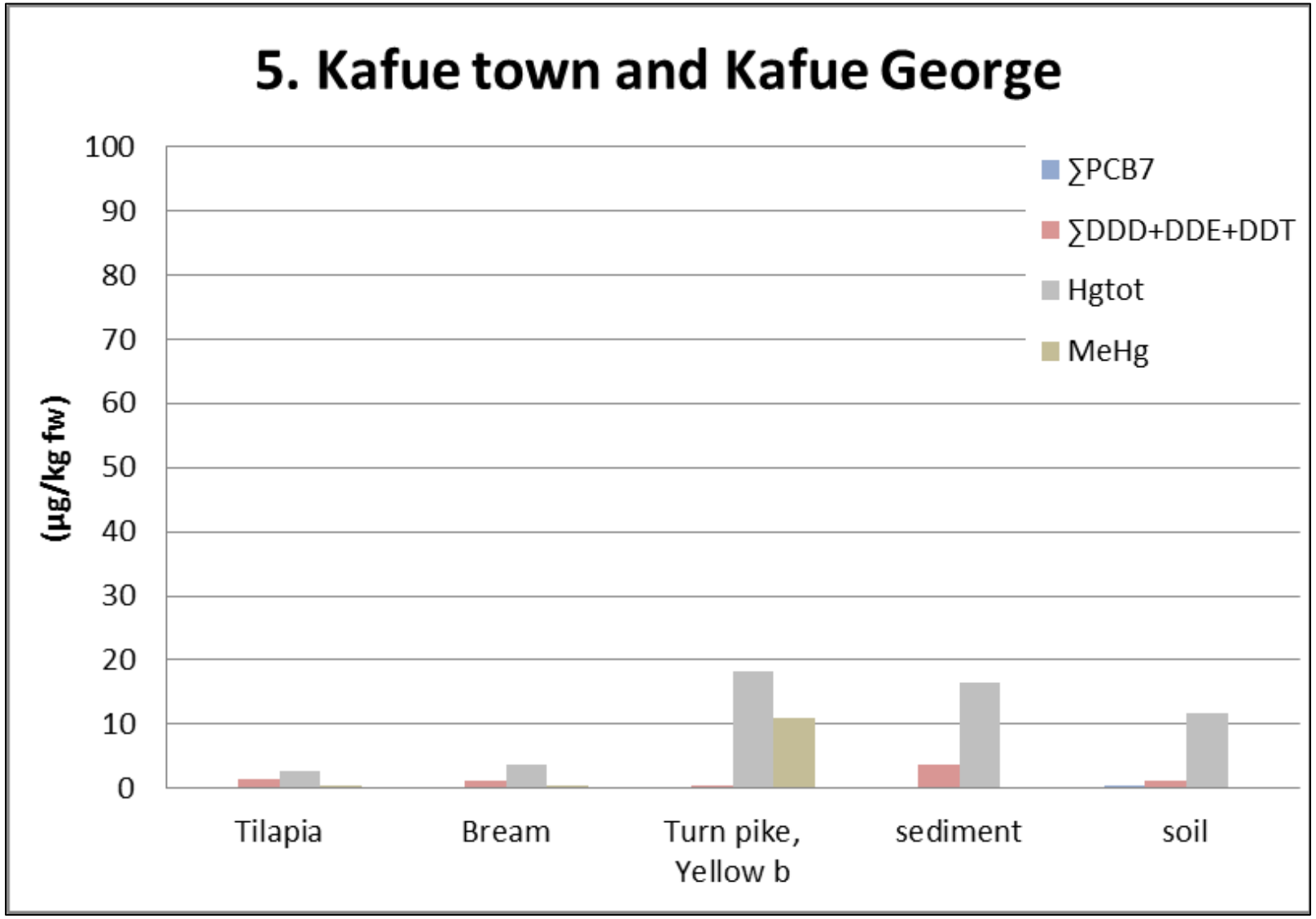
Mercury in River Sediments and Fish of the Kafue River Basin



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Conclusion

- Before new activities are initiated, a careful consideration of gap and coordination with existing activities will be key to ensuring cost-effectiveness and avoiding duplication of work.

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Sir Bob Watson
Former IPCC &
IPBES chair

Sound Science – Sound Policy

The Role of Assessments

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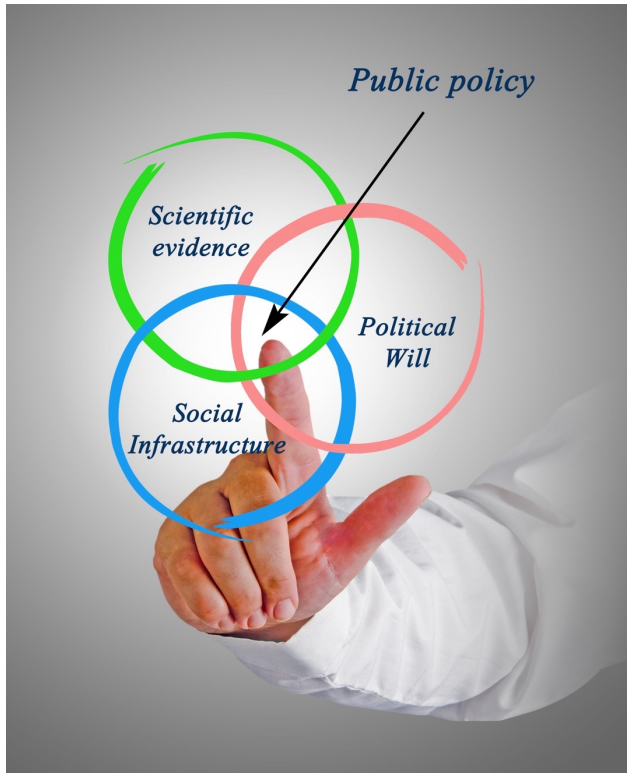
Sound Science is the Foundation of Informed Policy

- Scientific evidence is necessary for evidence-based policy formulation and implementation
- **Assessments need to**
  - Respond to the needs of all relevant decision-makers, i.e., demand-driven
  - Be credible, transparent, legitimate, and owned by all relevant decision-makers with well-defined principles and procedures
  - Provide a consensus assessment of the evidence in a digestible form , including what is known, unknown, and uncertain
  - Assess the implications of uncertainty for policy formulation
  - Assess the social, environmental, and economic implications of action and inaction
  - Recognize that technologies and policies are necessary, but behaviour change is also essential



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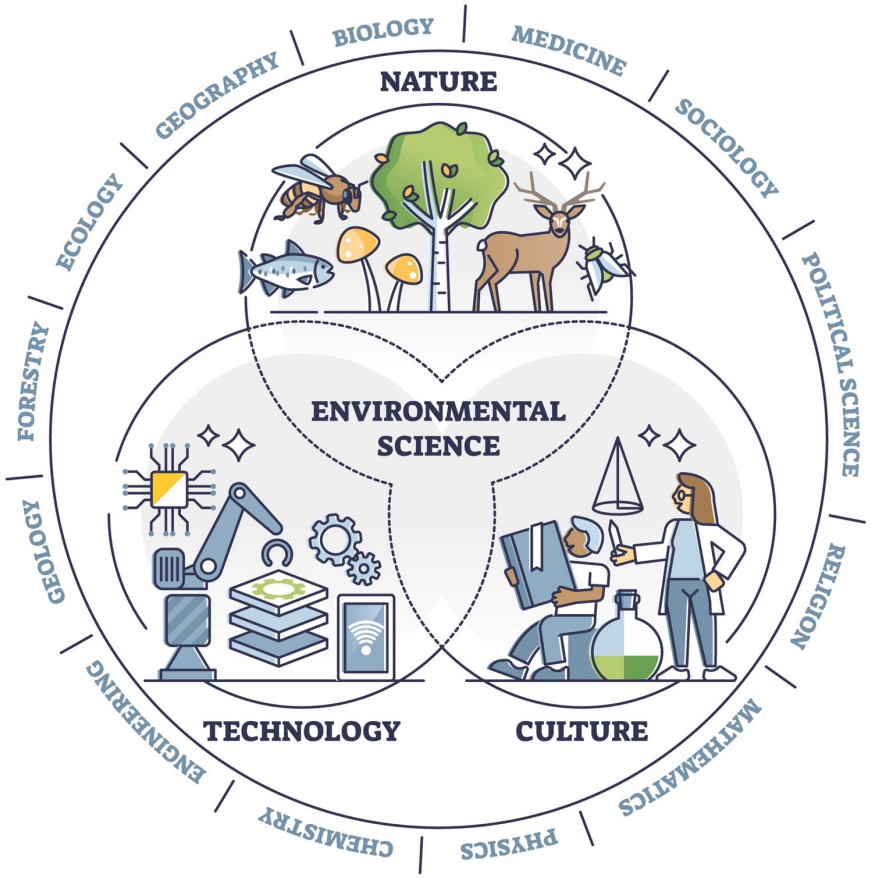
International Assessments

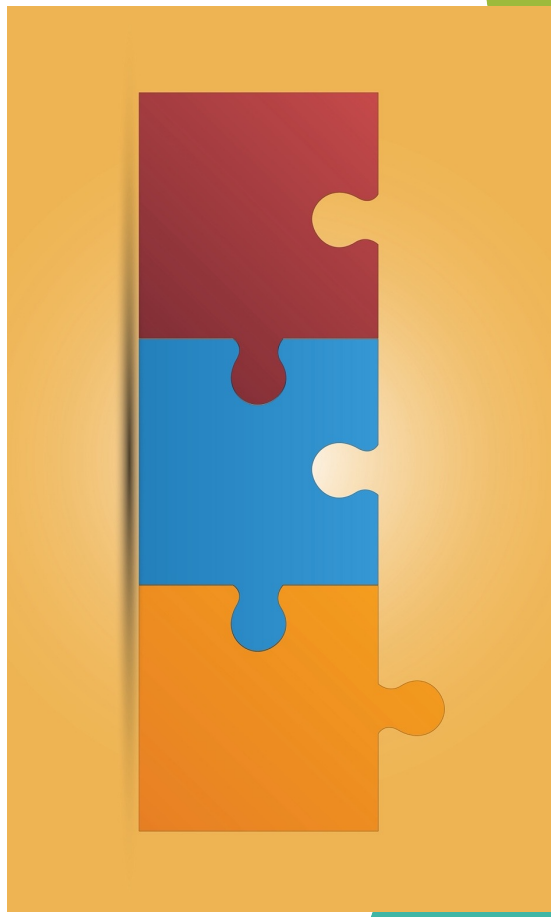
- Must be prepared by the world's best experts, with balanced **intellectual** (natural and social scientists, humanities, technologists), **geographic** (developed, developing and economies in transition) and **gender** participation - experts are involved in their individual capacity, nominated and chosen by open and transparent processes
- Multi-thematic (environmental, technological, social, economic); multi-spatial using a consistent conceptual framework; multi-temporal, i.e., historical to the future, employing plausible futures
- Link environmental issues to development issues, e.g., the SDGs and policy processes, e.g., the Paris Climate Agreement and the post-2020 CBD biodiversity framework
- Evidence-based, not based on ideological value systems
- Recognize diverse world views and value systems, and utilize ILK as appropriate



International Assessments

To facilitate transparency, credibility and salience an assessment needs:

- An agreed set of principles and procedures that address key issues such as:
  - Governance and institutional structures
  - Functions
  - Selection of topics to be assessed
  - Scope of the assessments
  - Nomination and selection of authors and review editors
  - Review processes
  - Approval and acceptance processes
  - Funding
- A conceptual framework to guide the assessments
- A priority-setting framework to guide the selection of topics to be assessed



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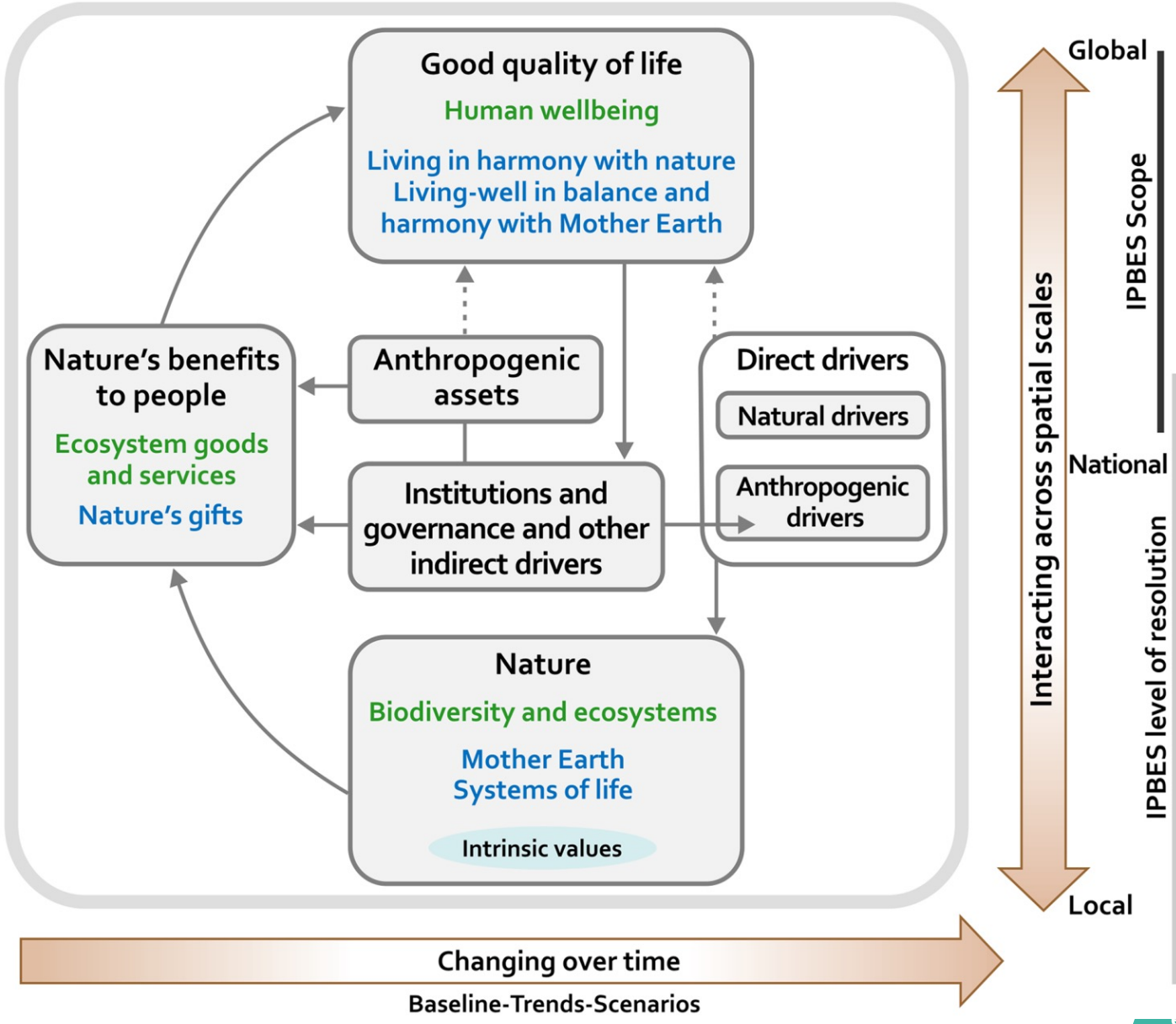
IPBES Conceptual Framework



Potential Elements for a Priority-Setting Framework for Chemicals, Waste and Pollution

- Implications for human well-being, e.g.,
  - Human health
  - Poverty alleviation
  - Food and water security
- Implications for other enviornmental issues, e.g.,
  - Loss of biodiversity and ecosystem degradation
  - Climate change
- Distributional equity considerations
  - Implications of inaction and action on different peoples, within and between countries
- Persistence
  - How reversible are the impacts of the chemicals/waste/pollutants
- Implications for economic and social values
- Trends identified by horizon scanning
- Value-added, i.e., not covered in other S-P processes

Priorities

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Q&A

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Thank you!

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