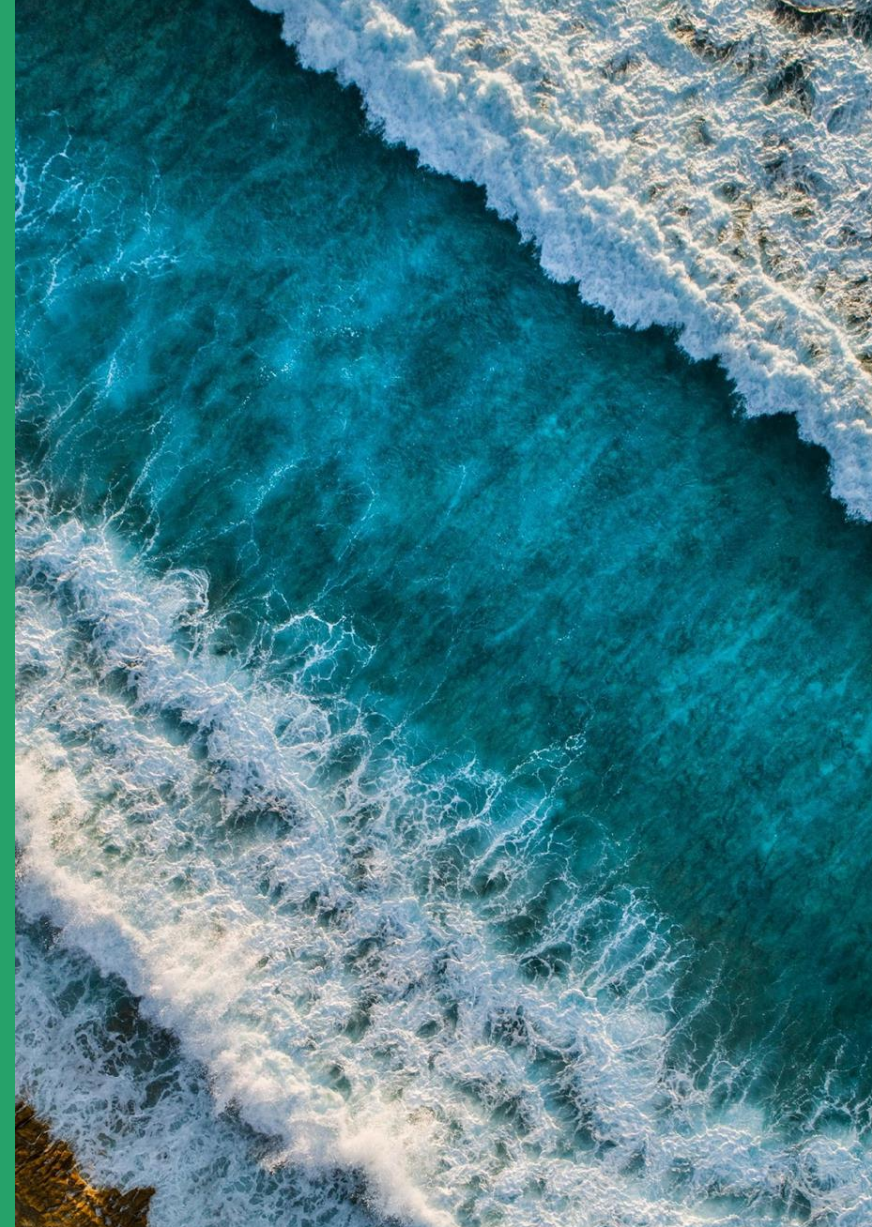


# How to address environmental sustainability in your evaluations

Andy Rowe, Patricia Rogers and Dugan Fraser

National Evaluation Capacities conference  
pre-conference workshop

25 October 2022



# Welcome

**We acknowledge and pay respect to the traditional owners and custodians of the lands on which we are all living, learning, and working from today.**



**Andy Rowe**



Dugan Fraser



Patricia Rogers



# Introductions

**Tell us a little about yourself**

**Your role(s) in evaluation?**

- 1. An evaluator (or someone who does evaluation)**
- 2. An evaluation commissioner or manager**
- 3. Both**
- 4. Other**

**What drew you to this workshop?**

# Overview of workshop

1

What is environmental sustainability?  
Why this matters  
Examples and challenges



2

Getting environmental sustainability on the agenda for M & E  
Identifying nexus between human and natural systems



3

Principles and methods for identifying potential, current and  
projected impacts



4

Addressing challenges  
Implications for M & E Systems  
Lessons to take away and next steps

# Session 1

What is sustainability?

Why this matters

Examples

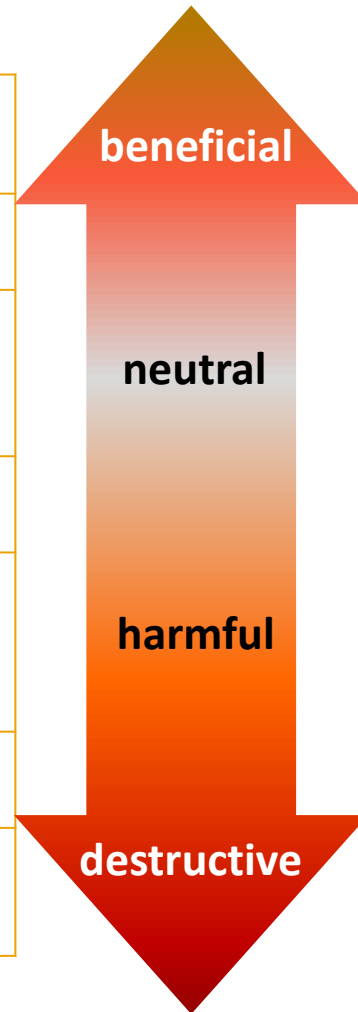
Identifying challenges



# What do we mean by sustainability?

- “Sustainable” development means development that meets the needs of the present **without compromising the ability of future generations to meet their own needs.**
- IPCC (2018) defines sustainability as a dynamic process that guarantees the **persistence of natural and human systems** in an equitable manner.
- In other words, **sustainability is about pursuing goals for the human system** (such as equity, food security) **while preserving** (or restoring degraded) **natural systems.**

<b>Restorative</b> Restores the natural environment so that it thrives
<b>No Net Harm to the Natural System</b> Practices cause no harm OR restoration offsets any harm
<b>Sustainability-Aware Practice</b> Sustainability-aware practices limit environmental damage
<b>Plunders the Natural System</b> Extractive and damaging practices cause serious harm



# Why this matters

This article is more than 2 years old

## We have 12 years to limit climate change catastrophe, warns UN

Urgent changes needed to cut risk of extreme heat, drought, floods and novertv. savs IPCC

This article is more than 3 years old

## Human society under urgent threat from loss of Earth's natural life

Scientists reveal 1 million species at risk of extinction in damning UN report

## Nearly half of planet's land in need of 'conservation attention' to halt biodiversity crisis

New study finds 44% of world's land surface needs increased protection, with 1m wildlife species at risk of extinction



## Banks lent \$2.6tn linked to ecosystem and wildlife destruction in 2019 - report

Lack of policies regulating impact on natural world means finance industry effectively bankrolling biodiversity loss, analysis finds

The world's banks must start to value nature and stop paying for its destruction



A view of land cleared of peatland forest for palm oil plantation in South Aceh, Indonesia. The peat swamp area is the habitat of the Sumatran orangutan, now on the verge of extinction. Photograph: Ulet Ifansasti/Getty Images

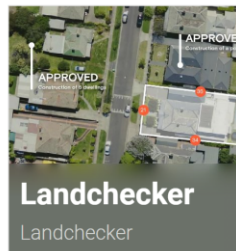
The world's largest investment banks provided more than \$2.6tn (£1.9tn) of financing linked to the destruction of ecosystems and wildlife last year, according to a new report.

## 69% average decline in wildlife populations since 1970, says new WWF report

World Wildlife Fund

Fri, October 14, 2022 at 12:47 AM · 6 min read

Wildlife populations in Latin America and the Caribbean plummeting at a staggering rate of 94%; Freshwater species populations have suffered an 83% fall; The report's Living Planet Index shows that there is no time to lose in securing a nature-positive society



# Why this matters – SDGs and equity

## Sustainability



Usual presentation of SDGs



# Why this matters – valid and useful M & E

- Sound evaluation always looks at unintended outcomes and impacts, not just intended ones. Right?
- “Non-environmental” change efforts are those that affect the natural system *unintentionally*.
- We (the planet) are at the **endgame**, where *every move counts*, both intentional and unintentional.



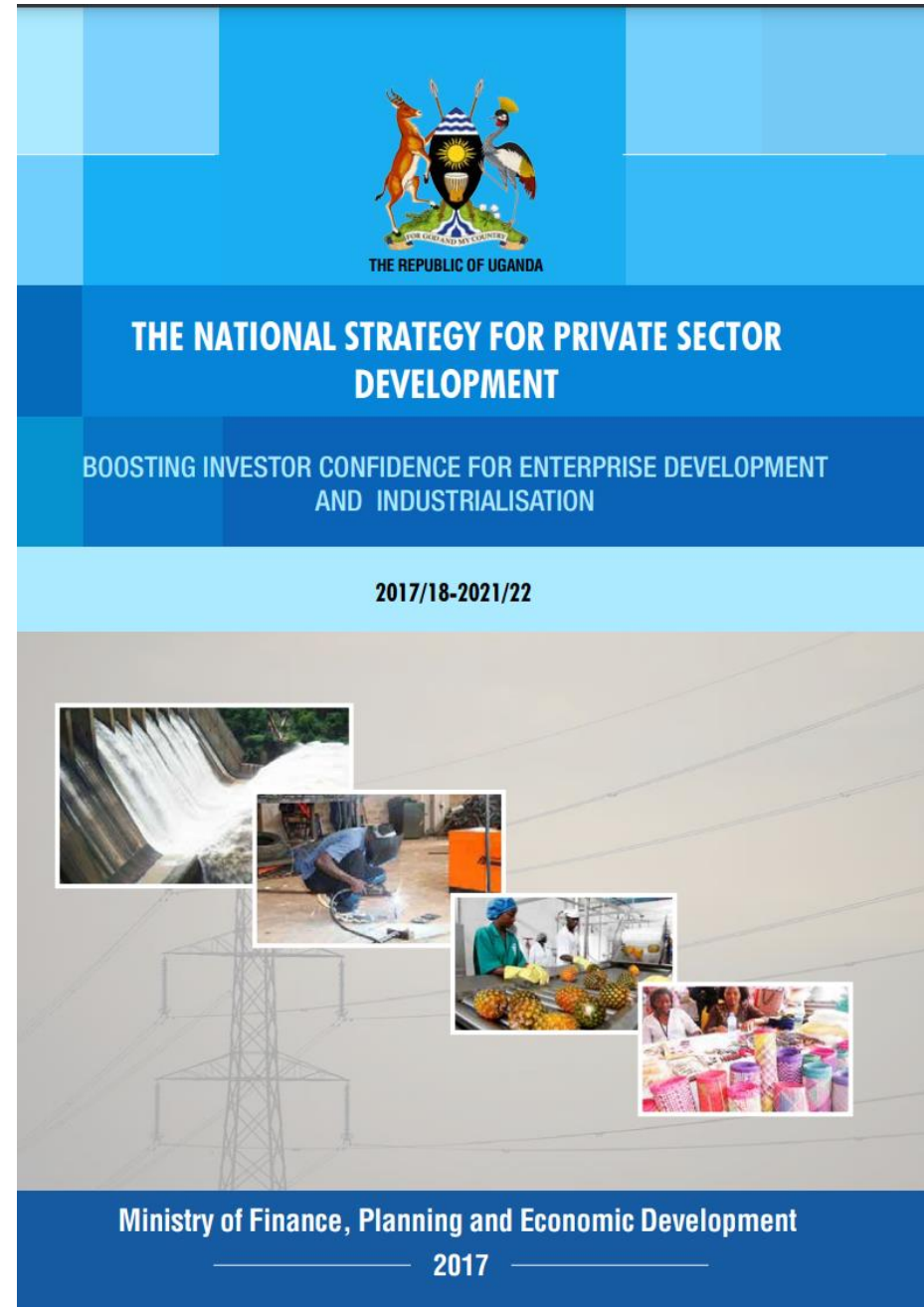
*“Yes, the planet got destroyed. But for a beautiful moment in time we created a lot of value for shareholders.”*

# Reflection and discussion

What are the main reasons **in your context** why environmental sustainability is important to include in monitoring and evaluation?

# Example 1:

## Mid-term review of National Strategy for Private Sector Development, Uganda

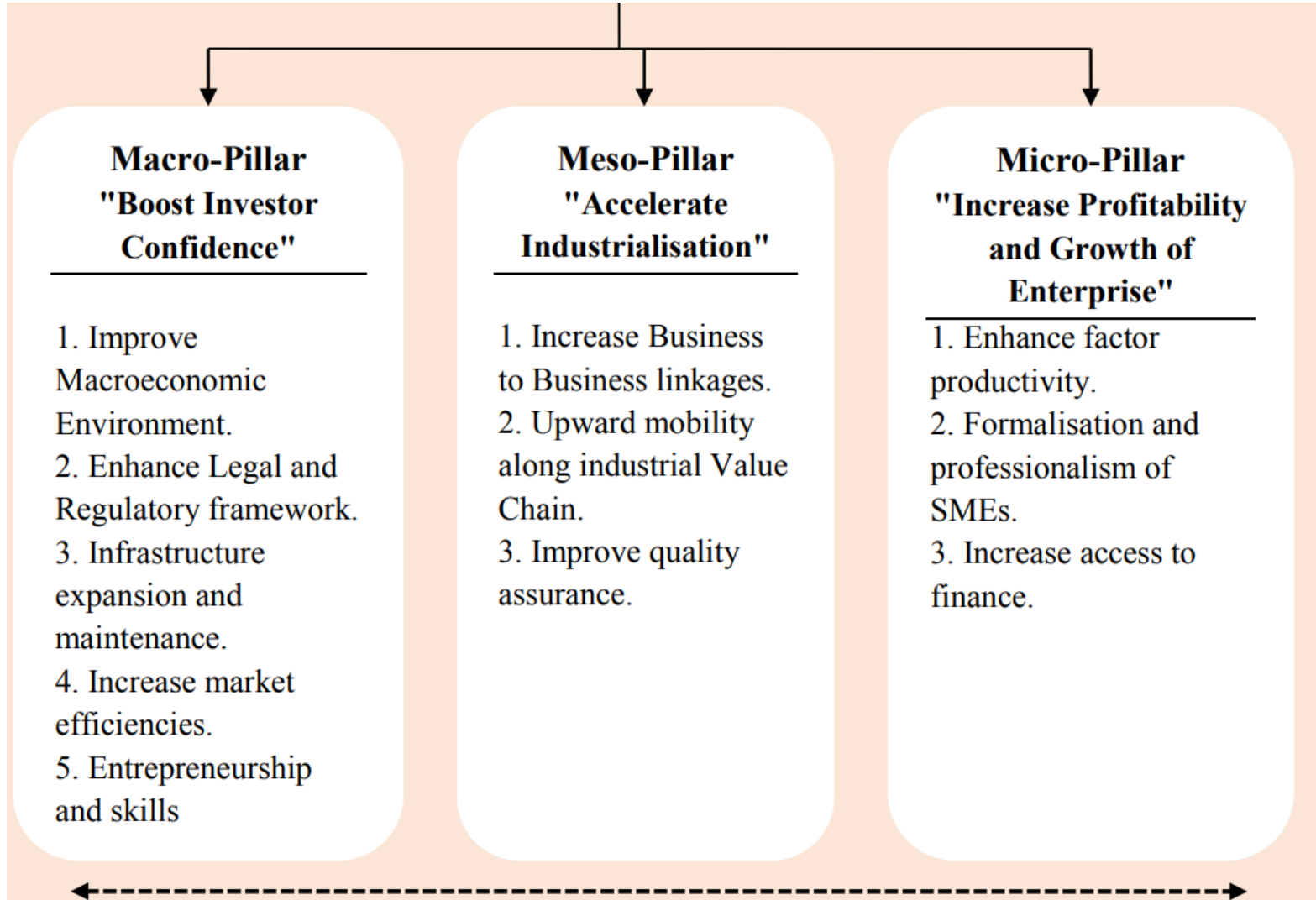


# Clear intent to include environmental sustainability

- **Evaluation objectives** – included to better align the NSPSD with the National Development Plan (which included specific environmental objectives)
- **Evaluation criteria** – included impacts – which covers social, economic, environmental and other development indicators
- **Valuing environment** – in National State of the Environment report  
Environment is categorized as a crosscutting issue in the national planning and budgeting processes and as such deliberate efforts must be put in place to mainstream environment actions in sectoral plans with budget allocations as necessary and sufficient conditions for sustaining the environment. Mainstreaming environment has extensive backward and forward linkages to the wider economy and if harnessed it has the potential to contribute to job creation, sustainable economic growth and the transformation of the country. Environmental sustainability is thus a critical determinant of sustainable economic development.”

# But how – given challenges?

- **Scope of the Strategy** - 3 pillars – macro, meso and micro, 11 objectives across many different sectors
- **Scope of the evaluation** – environment one of 2 cross-cutting issues in addition to main focus on coherence, effectiveness, efficiency in terms of objectives
- **Logistic challenges** – Limited opportunities for meetings, interviews, access to databases





# Relevance – what success looks like

<b>Criteria</b>	<b>What success looks like in terms of cross-cutting environmental issues</b>
<b>Relevance</b>	The goals and implementation of the NSPSD are compatible and harmonise with the Private Sector Development Program in the National Development Plan and other national plans, strategies and policies and international environmental commitments.

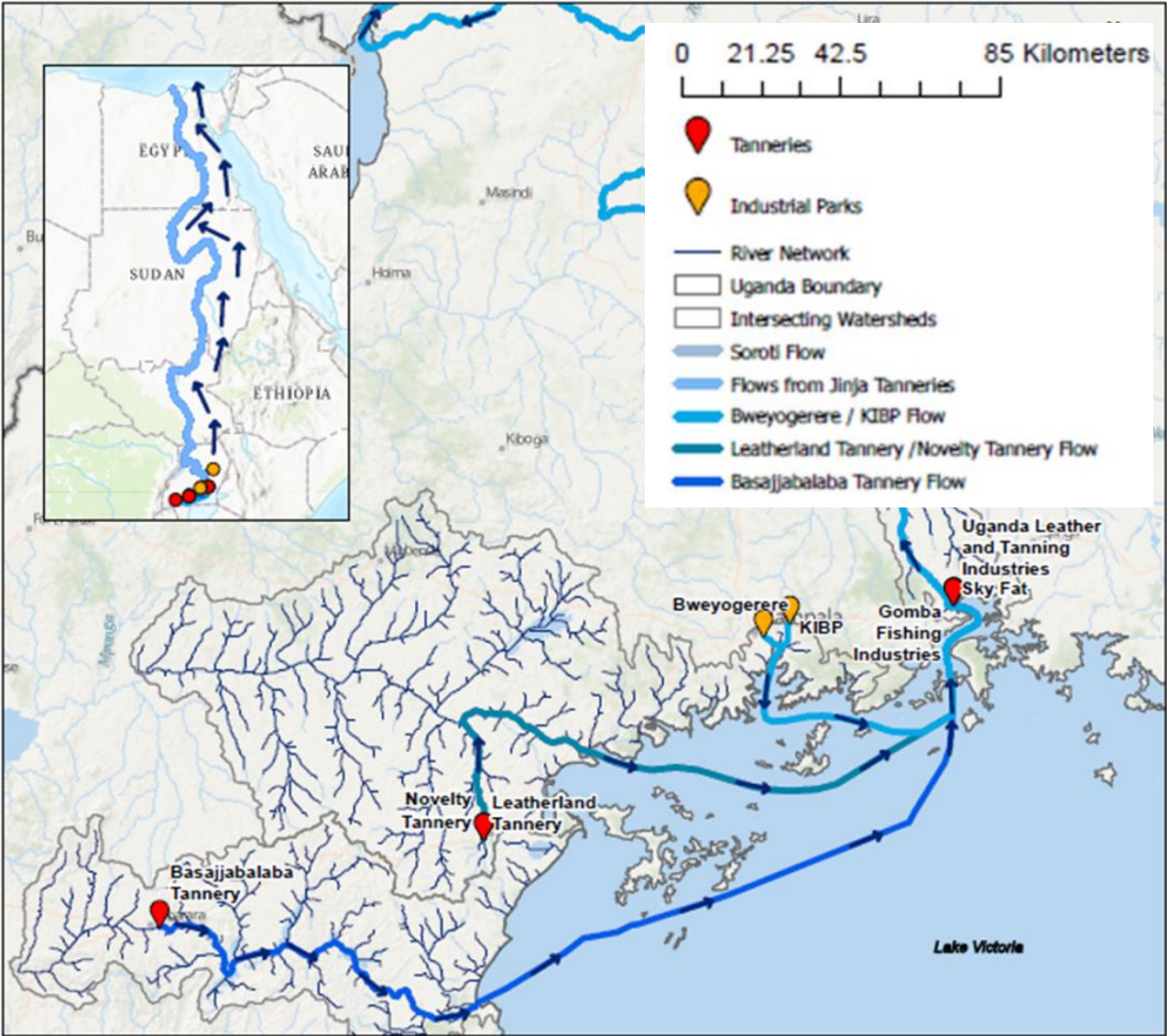
# Addressing environmental sustainability in terms of evaluation criteria

Criteria	What success looks like	Potential (and available) sources
<b>Coherence</b>	Consistent with international obligations and other policies (e.g. National Development Plan, Paris Agreement, Convention on Biological Diversity)	<ul style="list-style-type: none"> <li>• Statements of international commitments (World Fact Book), and related national, state and local policies</li> </ul>
<b>Impact</b>	Potential negative environmental impacts are identified and risk mitigation strategies put in place (e.g. risks of water pollution from tanneries' waste disposal)	<ul style="list-style-type: none"> <li>• Previous research and evaluation studies of negative environmental impacts of electrification, industrial parks and tanneries</li> <li>• Information on risk mitigation strategies through documents (especially Environmental Impact Statements and interviews)</li> </ul>
	Actual negative environmental impacts are monitored and addressed (e.g. risks of water pollution from tanneries' waste disposal)	<ul style="list-style-type: none"> <li>• Reported incidents</li> <li>• Available data from monitoring systems – or lack of these</li> <li>• Published research (e.g. graduate theses)</li> </ul>
<b>Sustainability</b>	Strategies are in place to make it likely that positive strategy impacts are resilient and sustained in the face of environmental changes (e.g. impact of changes in water table on plans for irrigation and value-added agriculture)	<ul style="list-style-type: none"> <li>• Information on resilience strategies from documents and interviews</li> </ul>

# Impact – evidence sources

Questions	Actual and planned sources of evidence
What are the potential risks (in terms of negative consequences) and additional benefits?	Previous research and evaluation Risk management guidance Environmental impact statements
What are appropriate risk mitigation strategies?	Previous research and evaluation Risk management guidance Environmental impact statements
Are these strategies being implemented (at all and effectively)?	Key informant interviews Documentation of processes Evidence of reporting and actions in response to it
Are these changes to the natural system happening (or likely to happen)?	Government monitoring data and reports Community monitoring data Incident reports, including news items Other research and evaluation – including graduate theses Direct measurement

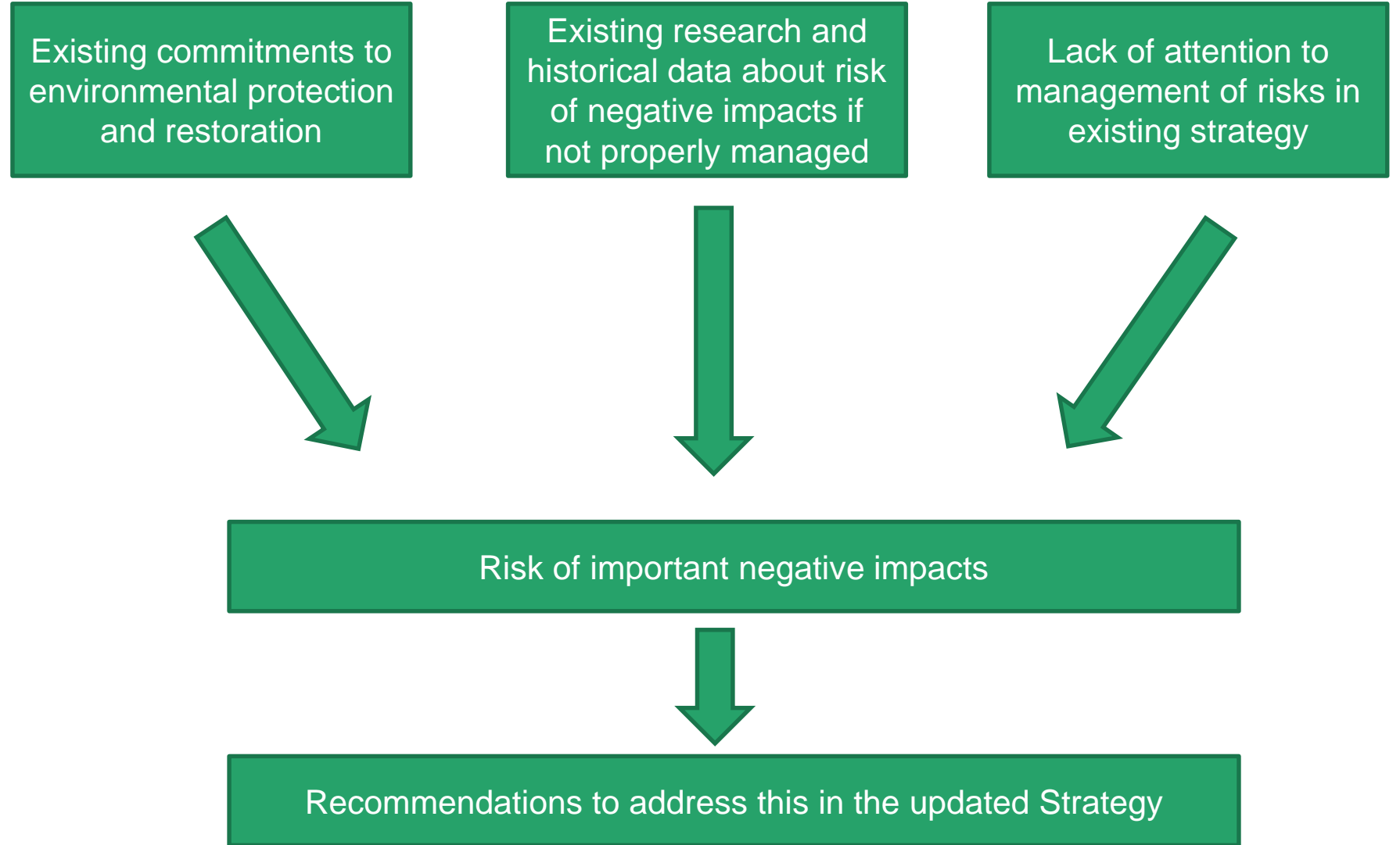
# Downstream Rivers Connected to Watersheds Intersecting with Ugandan Tanneries and Industrial Parks



Drawing on available data about risks

Credits: Laura Mills, author | Data courtesy of HydroSHEDS, geoBoundaries, Earth Resources Observation and Science (EROS) Center, BetterEvaluation | Created February 18, 2021 | Updated March 4, 2021

# Analytical approach



# Example 2:

**Thematic Evaluation  
of IFAD's Support  
for Smallholder  
Farmers'  
Adaptation to  
Climate Change  
2020-2022**

# Sources of Evidence



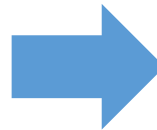
Case Studies



Learning Theme Studies



E-Surveys



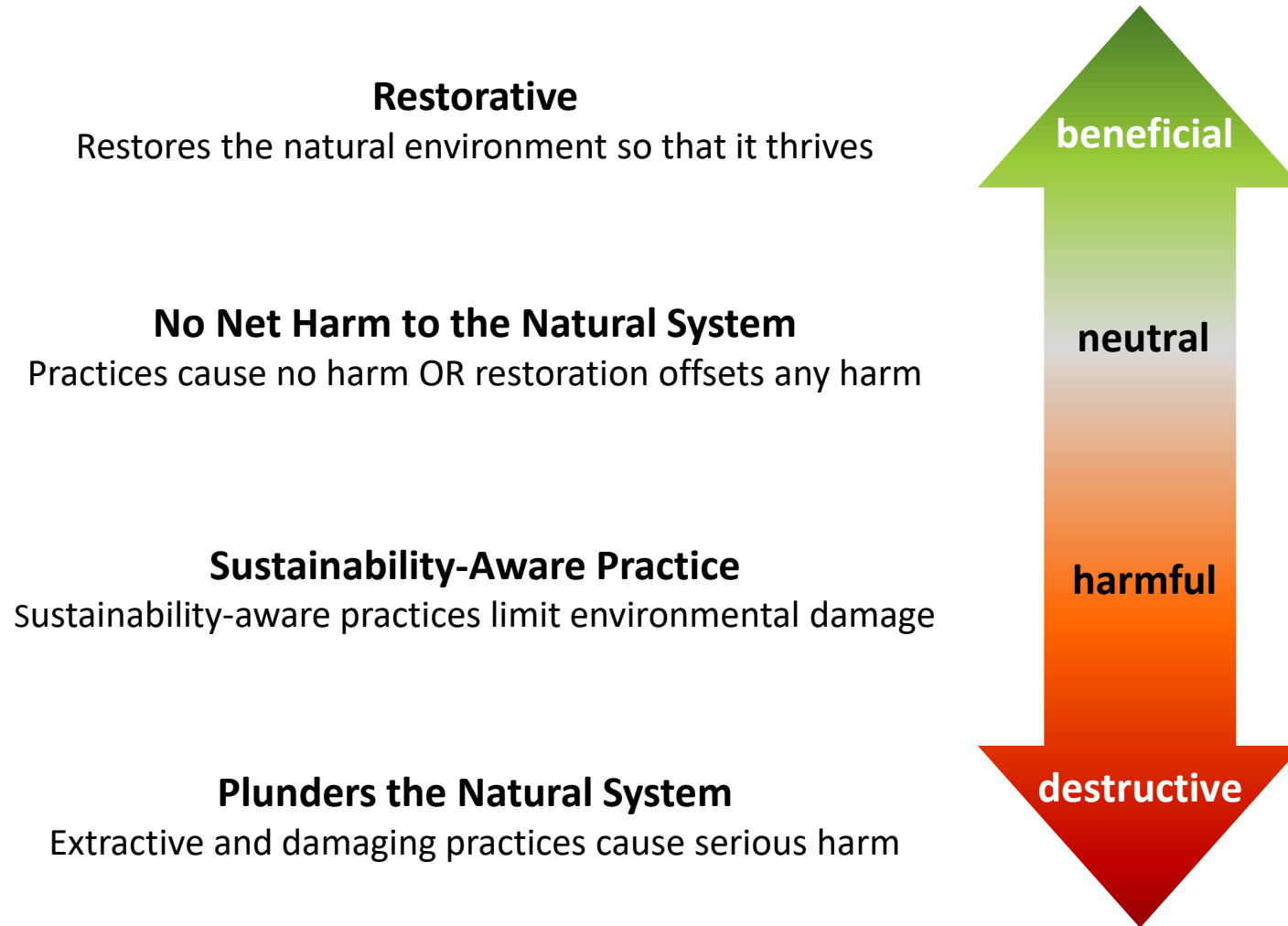
HQ Interviews



Document Review

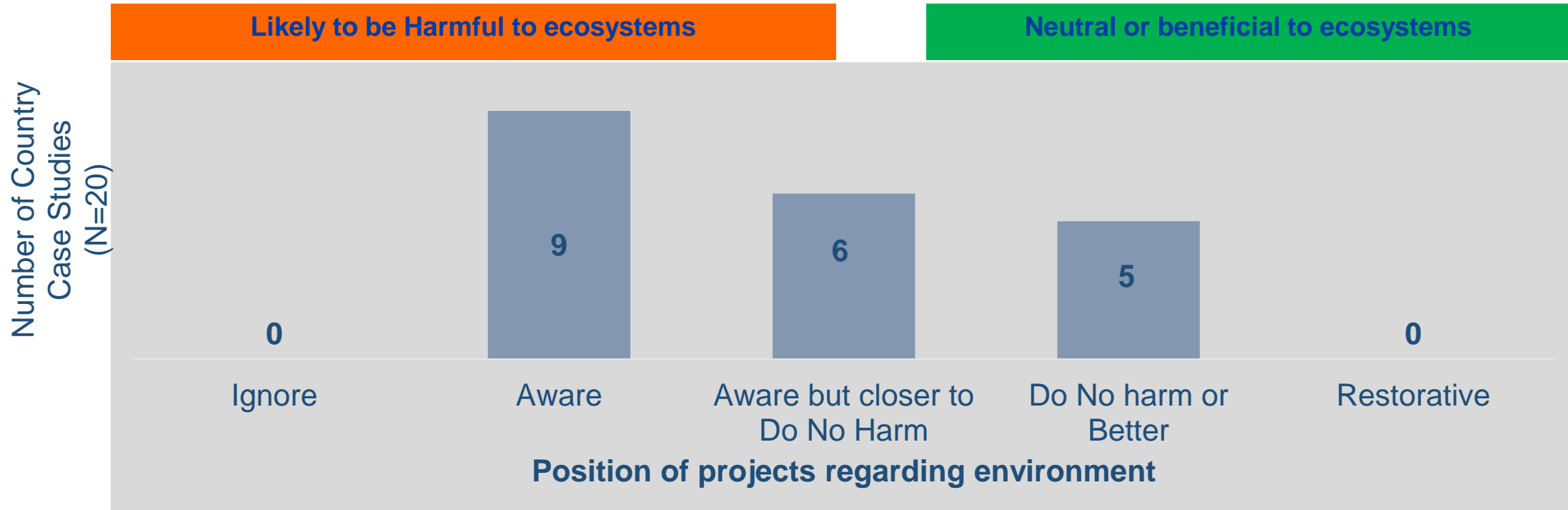
- 20 (35 projects – 14% of IFAD climate portfolio, stratified purposive sampling)
- Knowledge Management, Scaling Up, Human-Natural systems nexus, Rapid Evidence Assessment - secondary evidence from published literature)
- Feedback from IFAD and Project Staff (227 responses)
- HQ Stakeholders (EB, IFAD staff)
- Project, Country and Corporate level documents and data analysis; IOE Evaluations; Analysis of GIS data

# Making overall judgements





# Impact of CCA: Ecosystem – Human System Nexus



Successful projects pursued integrated approaches with nature-based solutions

**Failure to 'Do No Harm'** is likely to lead to low sustainability of benefits of IFAD interventions

A strong subset of IFAD climate projects were performing at or beyond doing no harm

# Applying typology in IFAD evaluation

- IFAD application had benefit of a large and very knowledgeable team and support from the IOE
- Was undertaken as a major part of a special nexus study that was part of the larger evaluation
- Process
  - It was applied to the 20 detailed case studies (35 projects – 14% of IFAD climate portfolio, stratified purposive sampling)
  - Nexus study leader reviewed all case study materials, portfolio reviews and summaries to generate an initial assessment and supporting evidence
  - Case study leader and evaluation team leader reviewed each, in most cases with ensuing discussion to clarify and recalibrate assessment
  - In about five cases the assessment was changed following discussion and further review

# Key Findings: Typology

## 1. Proof of concept

- It is technically possible and feasible to assess the environmental sustainability of interventions
- Consensus seeking process with knowledgeable teams can generate credible and usable assessments
- The typology proved salient for evaluation team, evaluation office, country and management and readers of the evaluation

# Next Steps: Typology

- Develop rubrics to enable scaling-down use with smaller evaluations
- Options for processes to feasibly engage interventions, local and Indigenous knowledge holders and experts in applying rubrics
- Starting with priority areas (e.g. known sustainability impacts) and demonstration areas (e.g. interventions without environmental outcomes)

# Reflection and discussion

- What did you take away from the two examples?
- What questions or comments do you have on them?

# What are the key challenges for you in including environmental sustainability in M & ?

1. **LIST** Write down in a list the problems and obstacles that come to mind.

2. **REFRAME** Take the first problem and reframe it so it's a question that starts with "How Might We" (HMW for short). For instance, if your problem was "Poor quality data", your HMW reframe will be: "HMW improve data quality?" Write this on a separate Post-It note. Repeat until you get to the last one.

3. **GROUP** Group the notes by theme. You'll see which areas have the most challenges to solve.

4. **PRIORITISE** Vote on the biggest pain points; no more than 3. Place a dot vote next to the chosen HMW questions You can use more than one vote for the same question!

# Session 2 (a)

Identifying nexus between human and natural systems

# Getting environmental sustainability on the agenda

What can be done **in evaluation policies, procedures and templates** to include environmental sustainability in all monitoring and evaluation?

What can be done **by those developing Terms of Reference** if environmental sustainability is not one of the stated objectives of a programme, project or policy?

What can be done **by evaluators** if environmental sustainability is not explicitly included in the Terms of Reference for an evaluation?





# Getting environmental sustainability on the agenda in your country

What are the forces in favour of including environmental sustainability in all monitoring and evaluation?

What are the forces against doing so?

What would it take to make it happen in your agency/area?

What would it take to make it happen as a shared all-of-government responsibility?

# 3 ways to get environmental sustainability on the agenda for M & E



1. Make a compelling argument that this is important and urgent
2. Infuse environmental sustainability into some of the OECD-DAC criteria - relevance, coherence, impact, and sustainability
3. Ensure that the Key Evaluation Questions (KEQs) include consideration of environmental issues

# Option 1: Make a compelling argument

## Why this matters

● This article is more than 2 years old

### We have 12 years to limit climate change catastrophe, warns UN

Urgent changes needed to cut risk of extreme heat, drought, floods and more, says IPCC

● This article is more than 3 years old

### Human society under urgent threat from loss of Earth's natural life

Scientists reveal 1 million species at risk of extinction in damning UN report

### Nearly half of planet's land in need of 'conservation attention' to halt biodiversity crisis

New study finds 44% of world's land surface needs increased protection, with 1m wildlife species at risk of extinction

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World Wildlife Fund

10 October 2022 at 12:47 AM · 8 min read

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Wildlife populations in Latin America and the Caribbean plummeting at a staggering rate of 94%. Freshwater species populations have suffered an 83% fall. The report's Living Planet Index shows that there is no time to lose in securing a nature-positive society



### Banks lent \$2.6tn linked to ecosystem and wildlife destruction in 2019 - report

Lack of policies regulating impact on natural world means finance industry effectively bankrolling biodiversity loss, analysis finds

● The world's banks must start to value nature and stop paying for its destruction

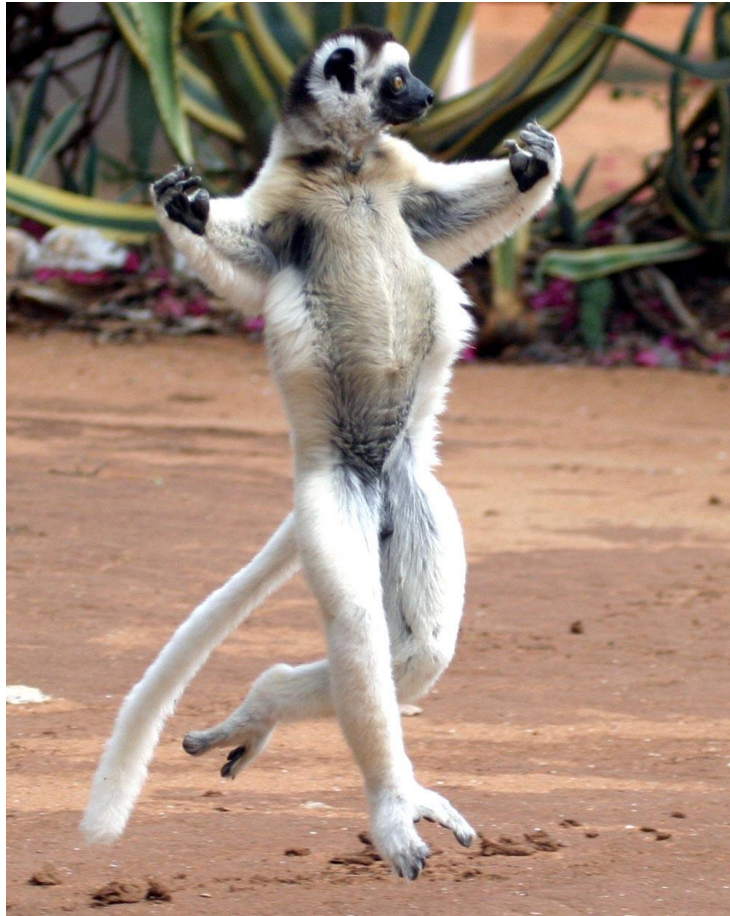


▲ A view of land cleared of palm oil forest for palm oil plantation in South Aceh, Indonesia. The palm oil area is the habitat of the Sumatran mangrove, now on the verge of extinction. Photograph: ©191 Howard Talley Images

The world's largest investment banks provided more than \$2.6tn (£1.9tn) of financing linked to the destruction of ecosystems and wildlife last year, according to a new report.

# Making the argument for including environmental sustainability in evaluation

INVITE  
PEOPLE IN,  
LIKE THIS



DON'T ARGUE WITH THEM, LIKE THIS!



## Option 2: Use existing evaluative criteria

**RELEVANCE**  
is the intervention  
doing the right things?

**EFFECTIVENESS**  
is the intervention  
achieving its objectives?

**IMPACT**  
what difference does  
the intervention make?



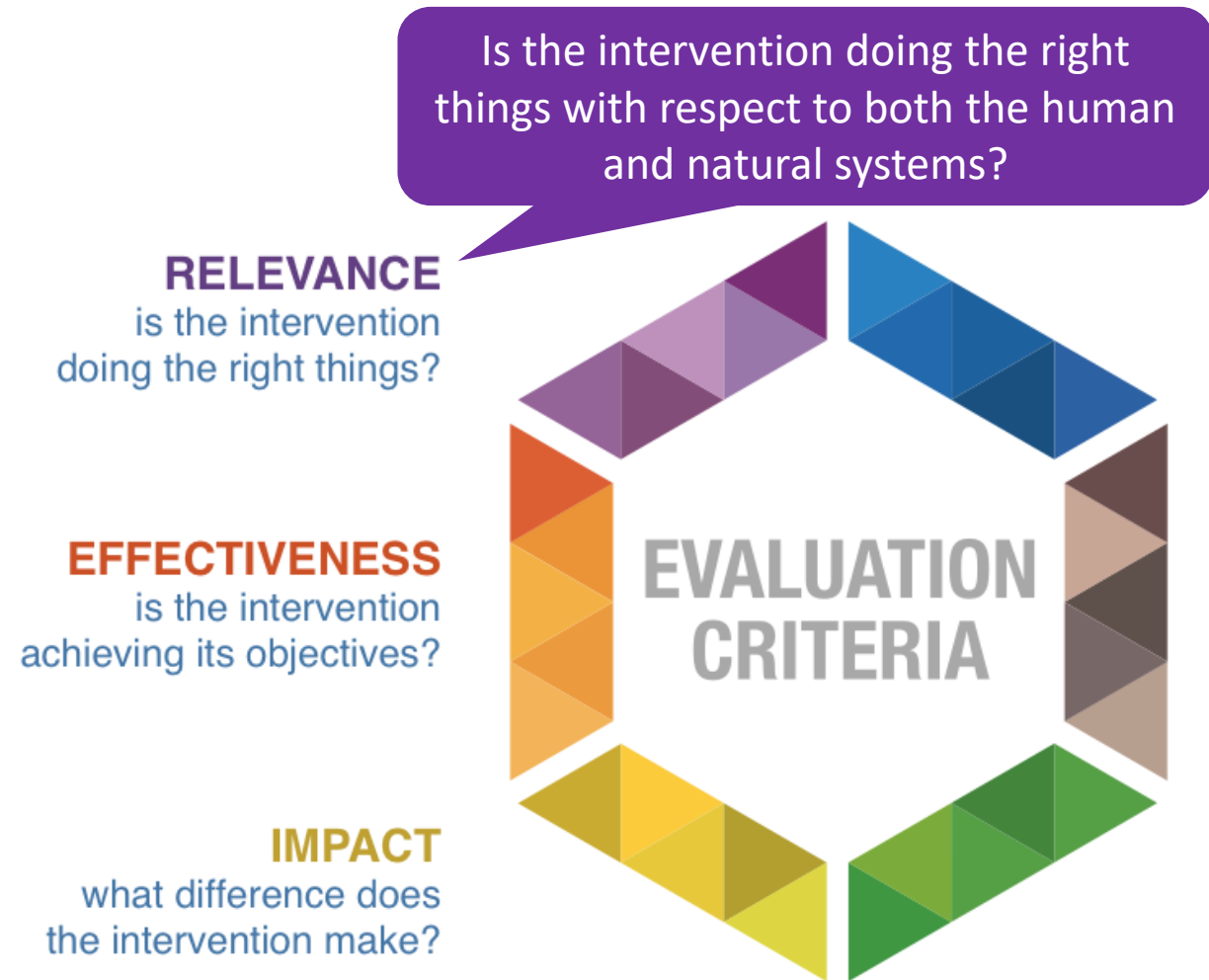
**COHERENCE**  
how well does  
the intervention fit?

**EFFICIENCY**  
how well are resources  
being used?

**SUSTAINABILITY**  
will the benefits last?

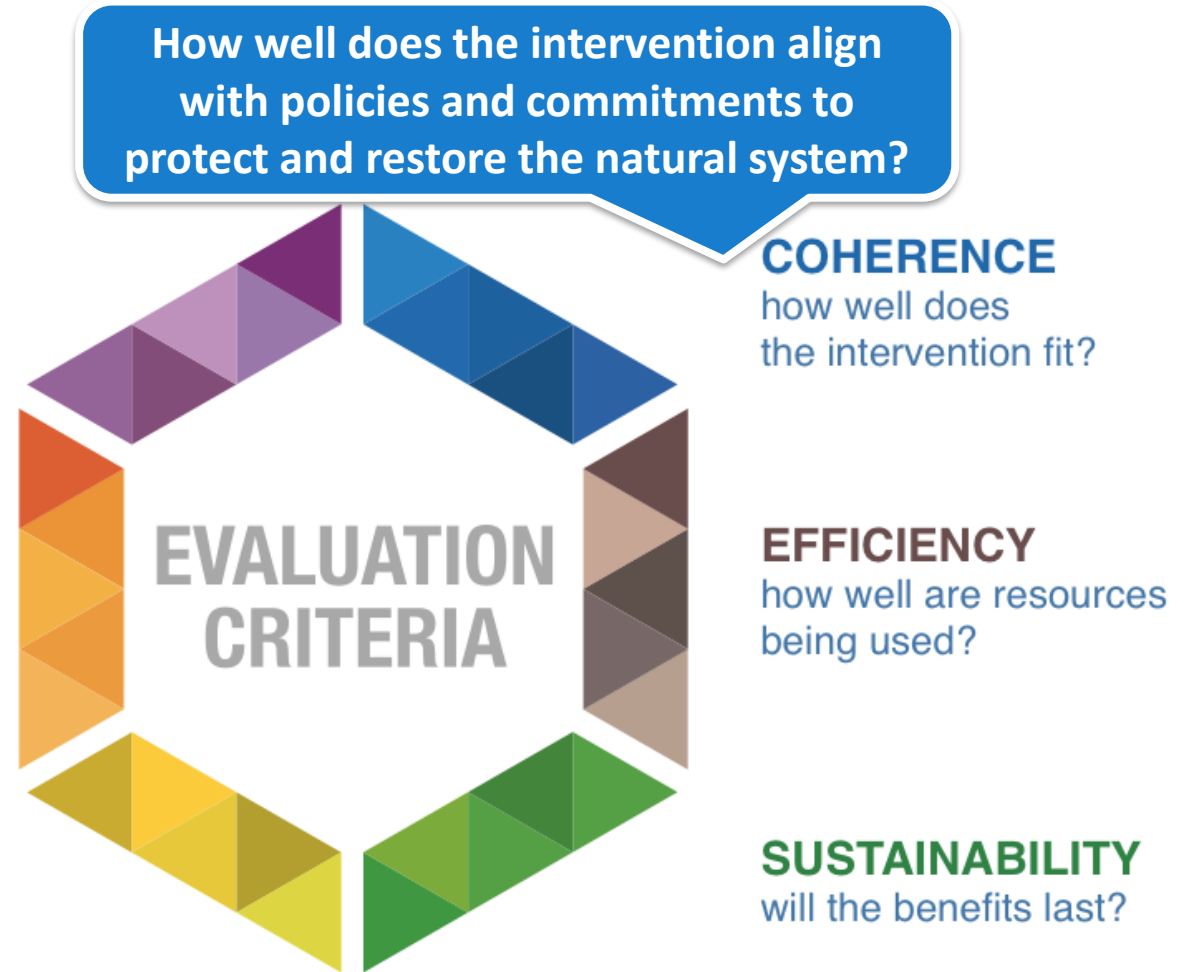
# OECD DAC criteria: Relevance

- **Equitably addresses the issues** in the human and natural systems.
- Recognises that the accumulated harm we have done to the natural system threatens all life and that **restoration of natural system function is a global responsibility.**
- **Addresses any systemic or structural issues** that have been causing environmental damage, especially in areas where human wellbeing is impacted and where natural functions are severely threatened.



# OECD DAC criteria: Coherence

- Point to natural system-relevant policies or commitments that the initiative should logically be aligned with:
- International environmental commitments or treaties
- Local or national government policies, agreements and treaties
- Organisational strategy, policy and/or value statements



# For example, here are Sao Tome and Principe's international agreements on the environment



THE WORLD FACTBOOK

Countries Maps References

## Sao Tome and Principe

**party to:** Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Climate Change-Paris Agreement, Desertification, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Ozone Layer Protection, Ship Pollution, Wetlands, Whaling

**signed, but not ratified:** Comprehensive Nuclear Test Ban



# OECD DAC criteria: Impact

The OECD DAC criteria guidance identifies two ways we should incorporate natural system impacts:

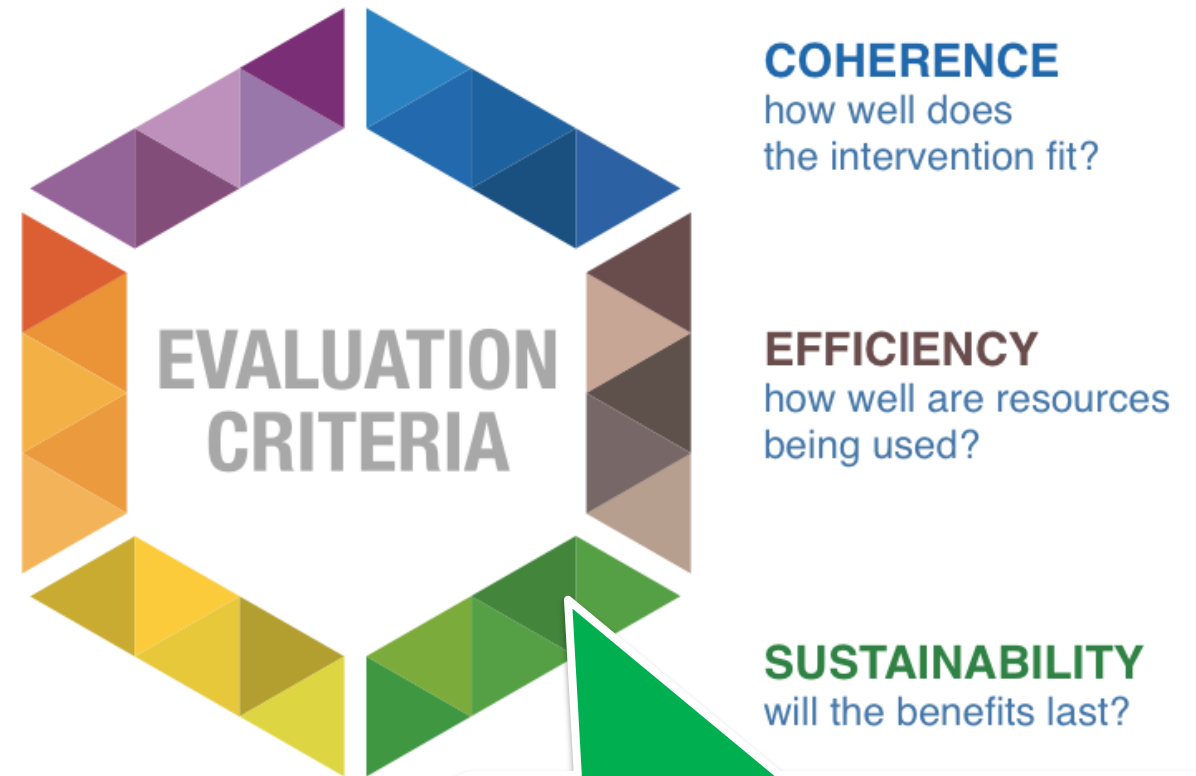
*“Evaluators should pay particular attention to negative impacts, particularly those that are likely to be significant including – but not limited to – **environmental impacts** ....*

*“Transformational change can be thought of as addressing **root causes, or systemic drivers of ... environmental damage.**”*



# OECD DAC criteria: Sustainability

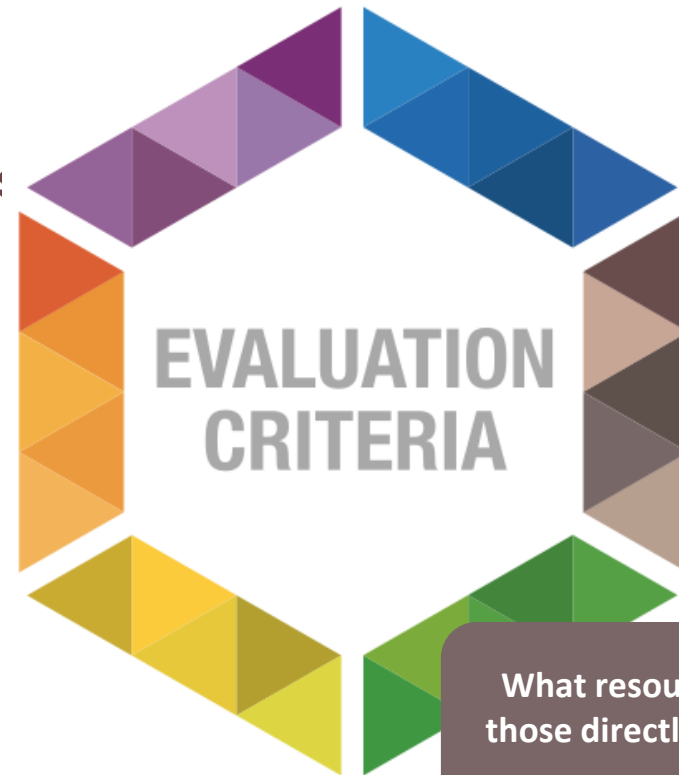
- **Worthwhile solutions are durable and their impacts are sustained over time.**  
To maximize durability and lasting impact, strategies need to be in place to make it likely that positive impacts are resilient and sustained, especially in the face of emerging environmental change.



How resilient and well sustained are the benefits in the face of emerging environmental changes?

# OECD DAC criteria: Efficiency

- Efficiency needs to consider the resources beyond those being paid for directly by the implementing organisation –
- For example, destruction or reduction of ecosystems, carbon sequestration



**COHERENCE**  
how well does  
the intervention fit?

**EFFICIENCY**  
how well are resources  
being used?

What resources are being used – not only those directly paid for by the implementing organisation

# Use existing evaluative criteria

Is the intervention doing the right things with respect to both the human and natural systems?

How well does the intervention align with policies and commitments to protect and restore the natural system?

**RELEVANCE**  
is the intervention doing the right things?

**EFFECTIVENESS**  
is the intervention achieving its objectives?

**IMPACT**  
what difference does the intervention make?



What resources are being used – not only those directly paid for by the implementing organisation?

**SUSTAINABILITY**  
will the benefits last?

What difference does the intervention make to both human and natural systems?

How resilient and well sustained are the benefits in the face of emerging environmental changes?

# Reflection and discussion

- How might you draw on these ideas when using OECD-DAC criteria to shape evaluations and monitoring systems?
- What other questions or comments do you have?

**Option 3:**  
**Ensure that the KEQs include consideration of environmental issues**

# Key Evaluation Questions (KEQs) to guide Footprint Evaluations

The key evaluation questions (KEQs) are designed to support the inclusion of environmental sustainability by embedding consideration of the environment in each evaluation question rather than adding environmental considerations as a standalone question.

[View Resource](#)

## Key Evaluation Questions (KEQs) to guide Footprint Evaluations

Jane Davidson and Andy Rowe  
DRAFT v2 – April 26, 2021

### Contents

Introduction	2
KEQ 1: Relevance & Coherence	3
KEQ 2: Design & Adaptation	3
KEQ 3: Implementation	3
KEQ 4: Outcomes & Impacts	4
KEQ 5: Patterns, Outliers, and Links	5
KEQ 6: Durability	5
KEQ 7: Overall Value	5
Glossary	6
Other key concepts	6

# Key Evaluation Questions

## 1. Relevance & coherence

How relevant is the evaluand to the issues facing the population/sector and the natural environment – and how well does it complement other related efforts in the context?

## 2. Design & adaptation

How well does the design address the strengths, needs, and aspirations of both human and natural systems – in ways that are equitable, restorative, and enable both to thrive?

## 3. Implementation

How well has the evaluand been implemented so that the right people and natural system elements receive what is most needed at the right times and places and in the right ways?

## 4. Outcomes & impacts

How good, valuable, and important are the outcomes and impacts on both human and natural systems, particularly where equity and/or previous harm needed to be addressed?

## 5. Patterns, outliers & links

How did the evaluand influence change – and then how did that change continue to unfold – in the relevant coupled human and natural systems? Where, when, for whom, and under what conditions did we see the most and least valuable outcomes? Why?

## 6. Durability

How resilient and durable are the changes that the evaluand has contributed to, and how well are they likely to last in the face of emerging environmental and other changes?

## 7. Overall value

How good, valuable, or worthwhile is the evaluand overall, given its relevance and coherence, design and implementation, the value of its outcomes and impacts, their durability, and what it cost to achieve them?

How good, valuable, and important are the outcomes and impacts on both human and natural systems, particularly where equity and/or previous harm needed to be addressed?

*Quick explainer of what's included under outcomes and impacts:*

Outcomes and impacts include **changes contributed to or prevented by the evaluand** across their relevant temporal scales – and their shelf life (sustainment).

This **includes effects on** the human system as well as **the natural environment** – all affected subgroups, communities, organisations, society, the economy, and the natural systems within which they exist – both intended and unintended, for both the target population/ environment and anyone or anything else substantially impacted.

*Sub-questions to consider under this KEQ :*

**How substantially did the evaluand contribute to (or adversely impact) the most important strengths, needs, and aspirations of both human and natural systems – particularly of the most critical and/or threatened parts of the natural system** and those who had been most marginalized, oppressed, and/or least well served in the human system?

How appropriately does the evaluand **value, privilege, protect, or exploit different parts of the relevant human and natural systems** (e.g., different groups of people, different parts of the ecosystem)?

How well did the evaluand contribute to or achieve the **needed systemic and structural changes**, including processes and capacities, so that **root causes are addressed (not just symptoms) and results sustained**?



# Reflection and discussion

- How might you draw on these ideas when developing key evaluation questions to shape evaluations?
- What other questions or comments do you have?

# Session 2 (b)

Identifying nexus

# What Does Nexus Look Like?

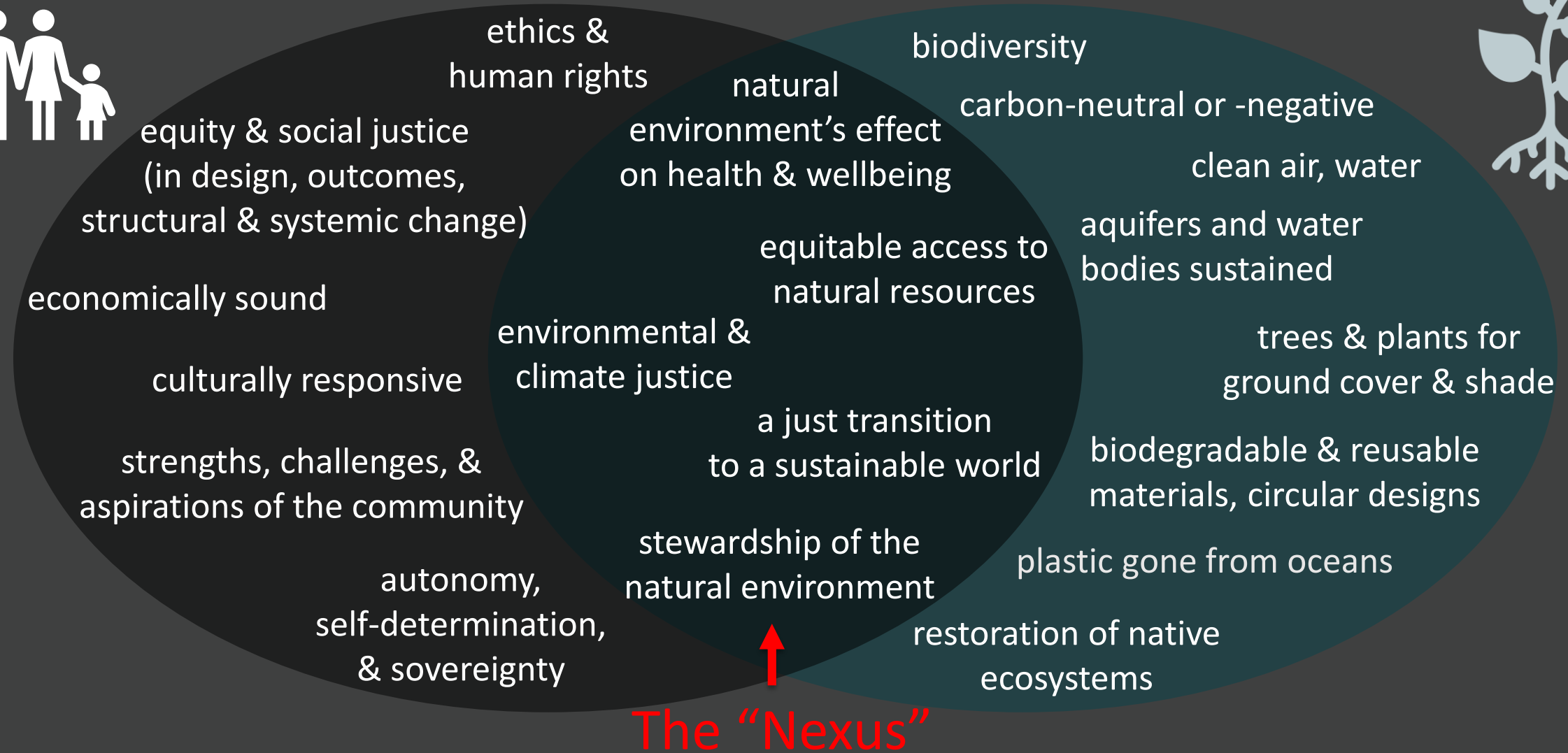
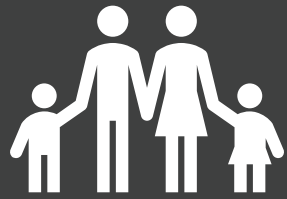
**At nexus, the value of both human and natural systems are recognised and addressed**

The 'look' of a given nexus point is a synthesis drawn from the interests involved with and affected by the intervention.

**Nexus is often a complex setting with characteristics such as:**

- Reciprocal effects and feedback loops
- Nonlinearity and thresholds
- Surprises
- Legacy effects and time lags
- Resilience
- Differences in temporal and spatial scales

# The main “values” relevant to human & natural systems



# Points of nexus at different levels: example: Community Corrections program

## Human systems focus

### Impacts

Increased and more equitable human well-being  
(social, health, economic, spiritual, cultural)

### Outcomes

Effective  
rehabilitation

Reduced  
re-offending

Fewer  
prisoners

### Outputs

Greater proportion of  
community corrections  
rather than custodial  
sentences

Might be changes in  
behaviours (including  
use of resources) or  
access to resources

### Activities

Recruitment, training and supervision of more  
community corrections officers, referrals to services,  
active supervision

# Exercise

If you were evaluating the 2022 NEC conference, what might be

- Some points of nexus between human and natural systems and
- Potential, actual and projected impacts of the conference?

How would you find potential points of nexus and potential impacts?



# Session 3 (a)

Principles for monitoring and evaluation that includes environmental sustainability

# Emerging principles for footprint evaluation

## 1. Value both human and natural systems

- Intrinsic value of natural systems, not only their value to human systems
- Address equity throughout
- Crafting win-win solutions rather than zero-sum game

## 2. Know the place

- Observe and engage - literally, virtually or vicariously
- Purposeful sampling

## 3. Expand the scope

- Spatially – downstream, downwind
- Temporally - intergenerational

## 4. Draw on multiple sources of evidence and expertise

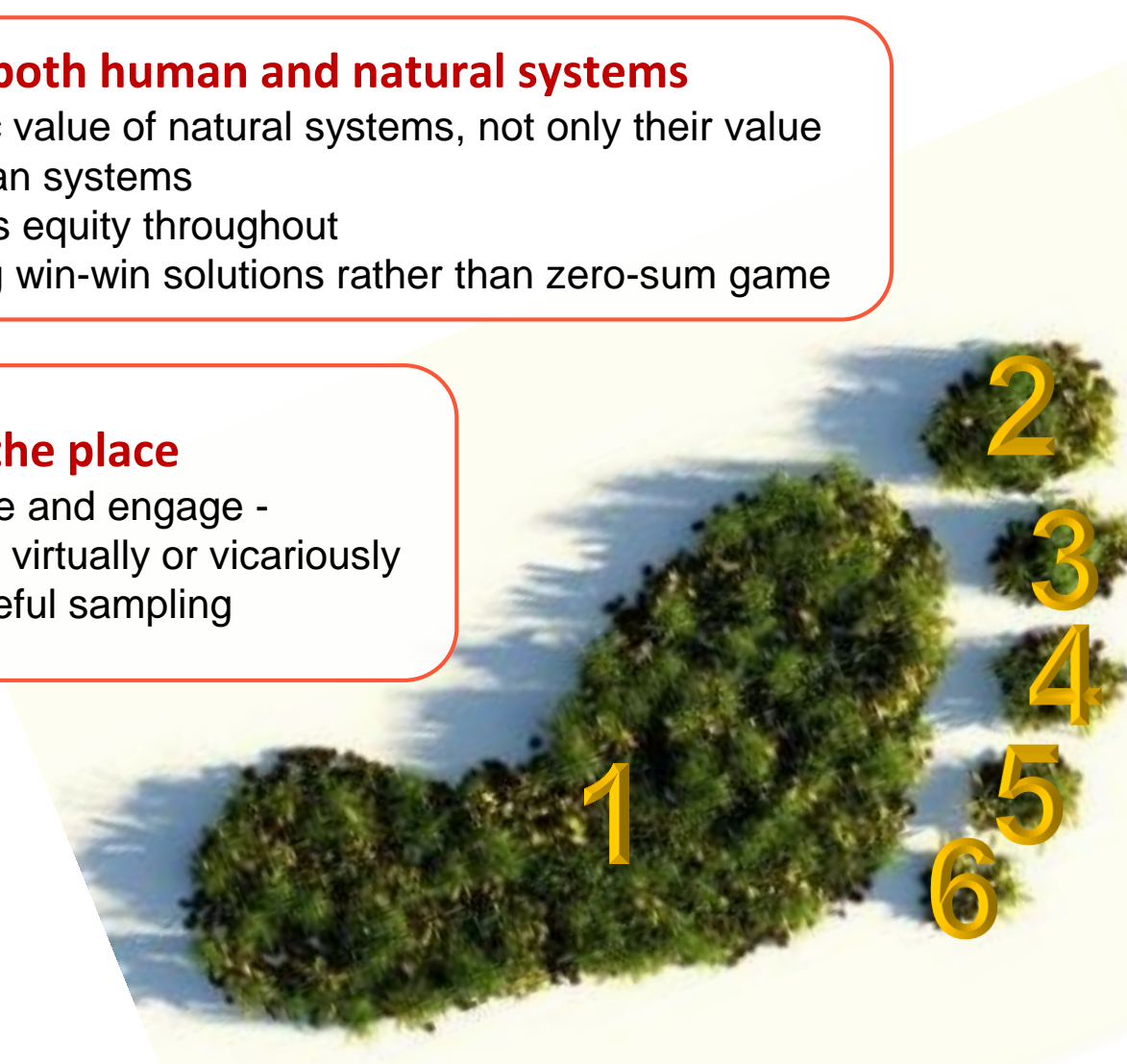
- Natural systems science
- Local and Indigenous knowledge

## 5. Use systems thinking

- Feedback loops, tipping points, fractals, boundary critique

## 6. Focus on the big issues

- Significant impacts not just what is easily measurable or achievable





# Session 3 (b)

Strategies for identifying nexus, potential, current and projected impacts

# Talk with people!

- Stories, narratives
- Rich Pictures
- New interviews
- Previous interviews (reported in media)
- Opinion pieces in blogs, newsletters, letters to the editor



[Overview](#) | [Methods and processes](#) | [Approaches](#) | [Themes](#) | [Resource library](#)

[Home](#) > Rich Pictures

## Rich Pictures

*Synonyms:* Mind map

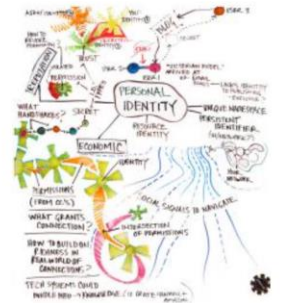
A Rich Picture is a way to explore, acknowledge and define a situation and express it through diagrams to create a preliminary mental model. A rich picture helps to open discussion and come to a broad, shared understanding of a situation.

This option was originally developed as part of Peter Checkland's Soft Systems Methodology (SSM), developing a rich picture covers steps 1 & 2 of the SSM which describe the real world:

1. Identify the issue you wish to address, and
2. Develop an unstructured description of the situation where the issues lies – how it is

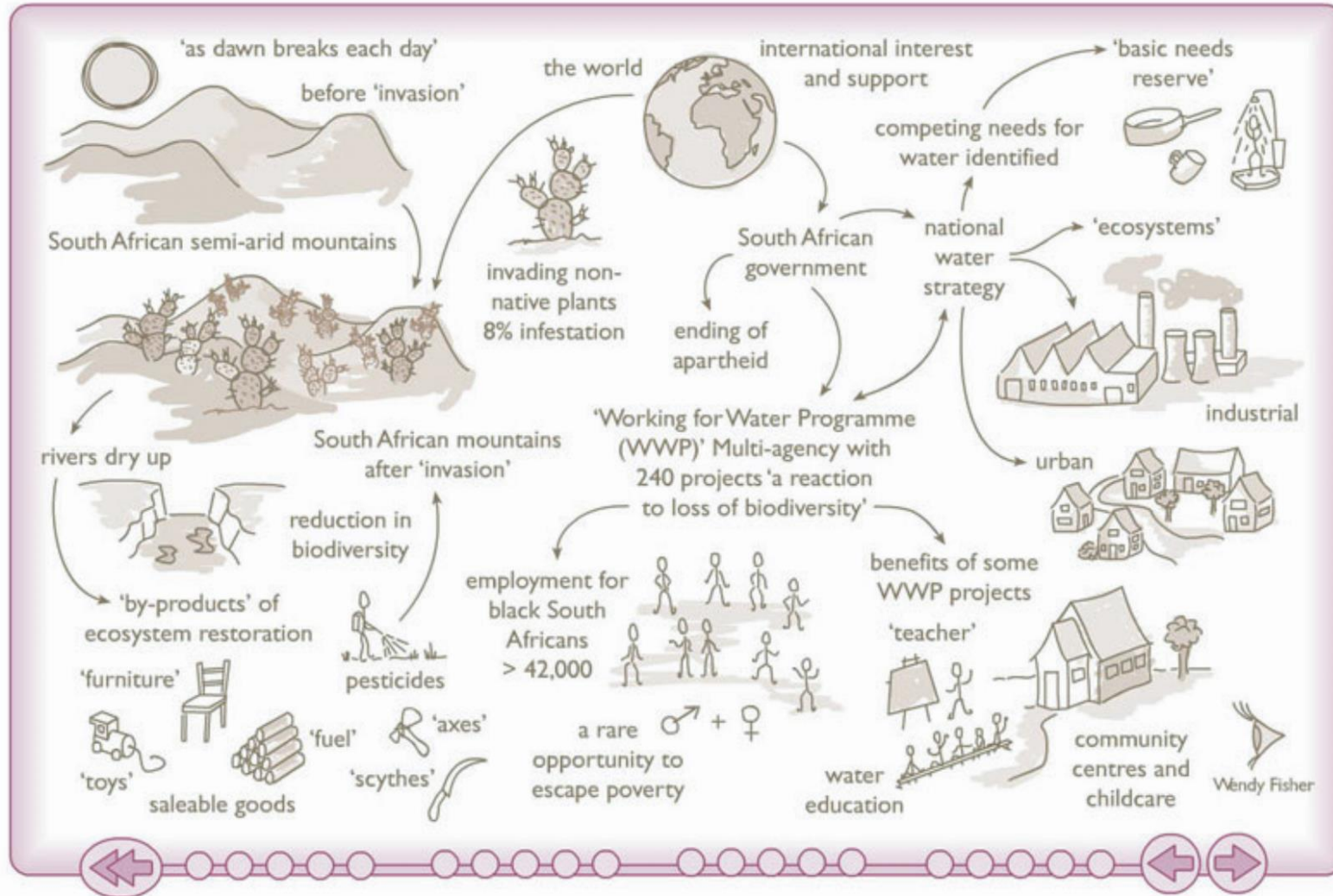
(Other steps in the SSM support systems thinking about the world as it might be. The tensions between the real world as it is, and as it might be and between different perspectives of the real world and how it might be provide sites for

Vaitina for abs-0.twima.com... to "Systems Concepts in Action: A Practitioner's Toolkit" by



<https://www.betterevaluation.org/en/evaluation-options/richpictures>

# An example of a rich picture

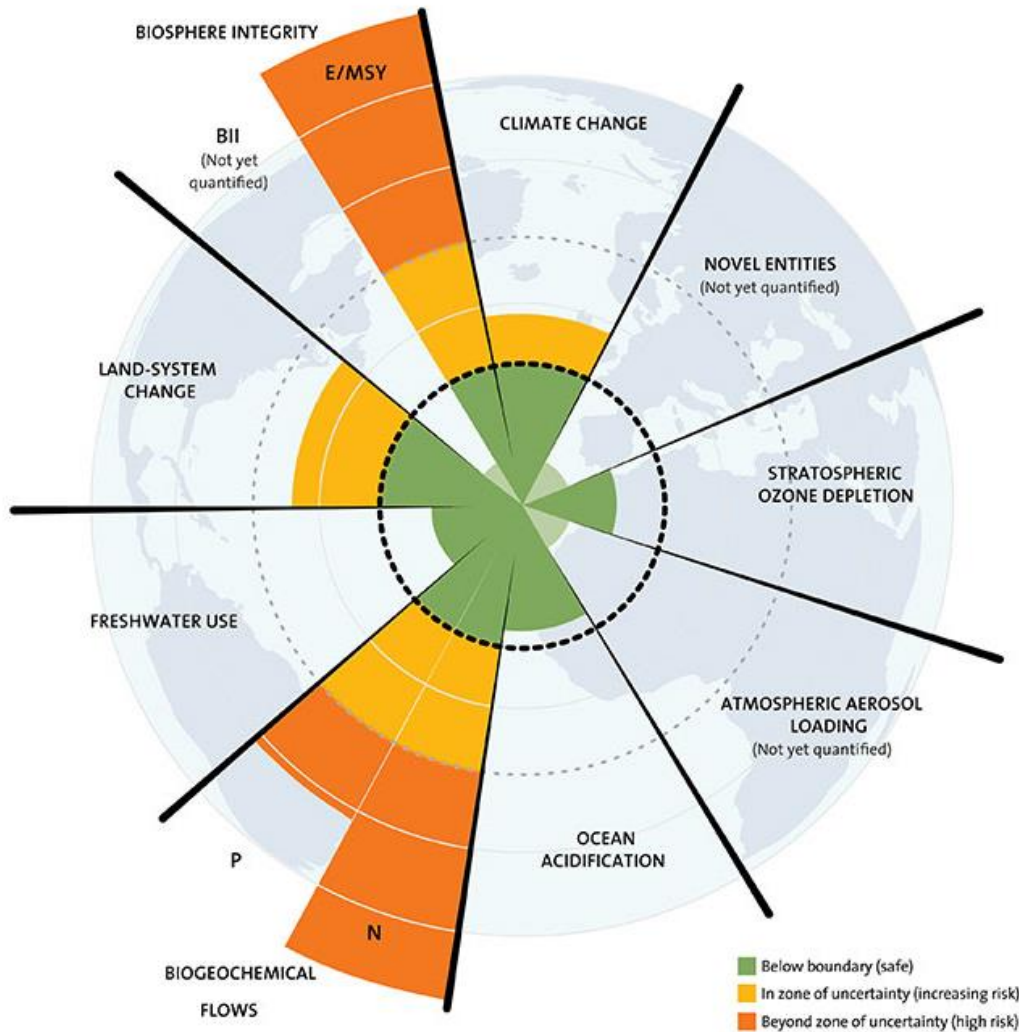


Rich picture: Wendy Fisher's perspective on WWP

Source: Open University course on Rich Pictures

<https://www.open.edu/openlearn/science-maths-technology/engineering-technology/rich-pictures>

# Planetary boundaries



## Nine Boundaries

- Climate change
- Novel entities (includes plastics, antibiotics)
- Stratospheric ozone depletion
- Atmospheric Aerosol Loading
- Ocean acidification
- Biochemical flows (nitrogen and phosphorus)
- Freshwater Use
- Land-system changes
- Biosphere integrity (function and genetic)

# Life cycle stages (cradle to grave)

Identifying **potential outcomes** for natural and human systems at each stage – and the factors which affected these

## Construction

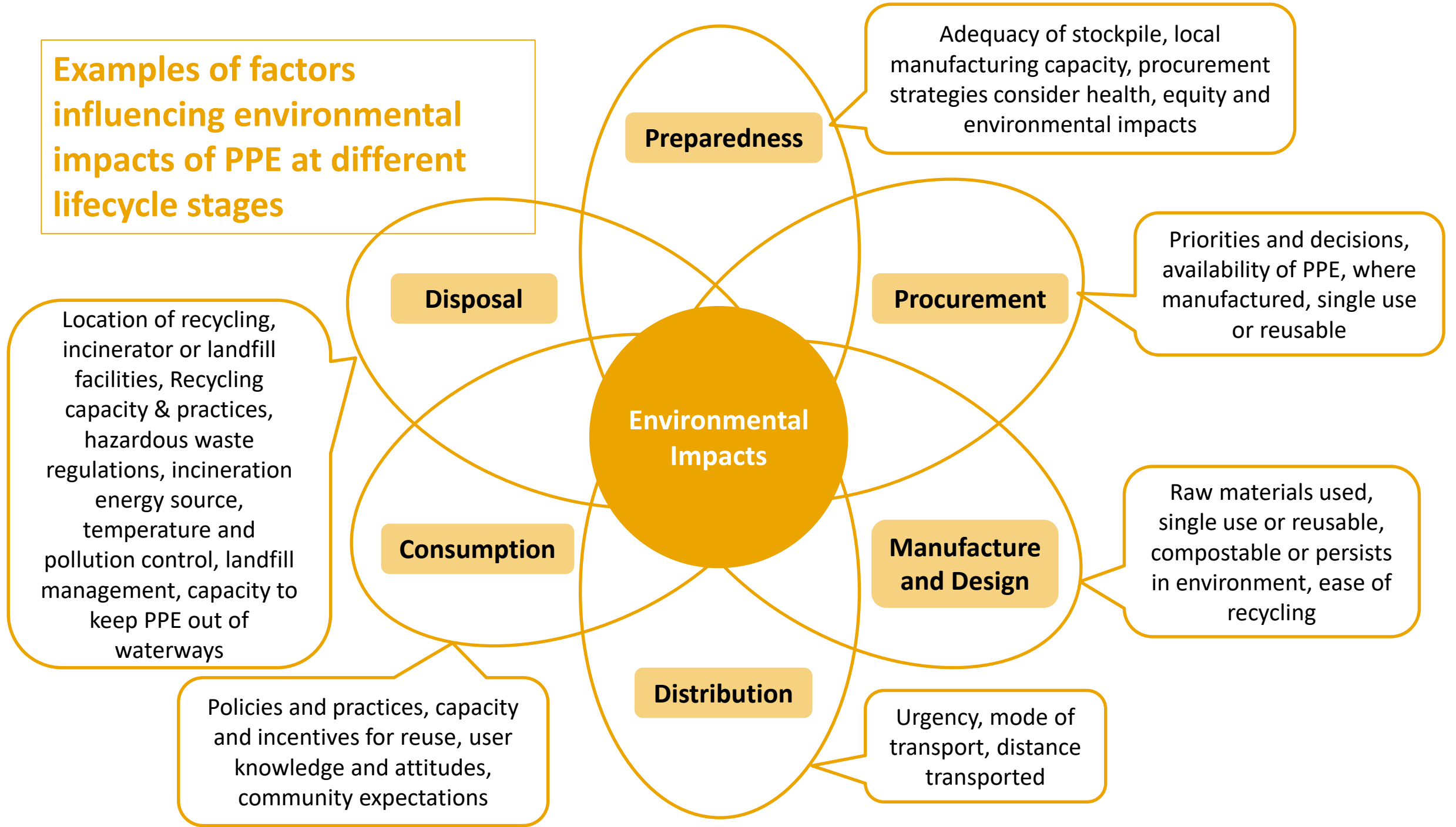
- Site acquisition
- Construction
- Operation
- Decommissioning

## Products:

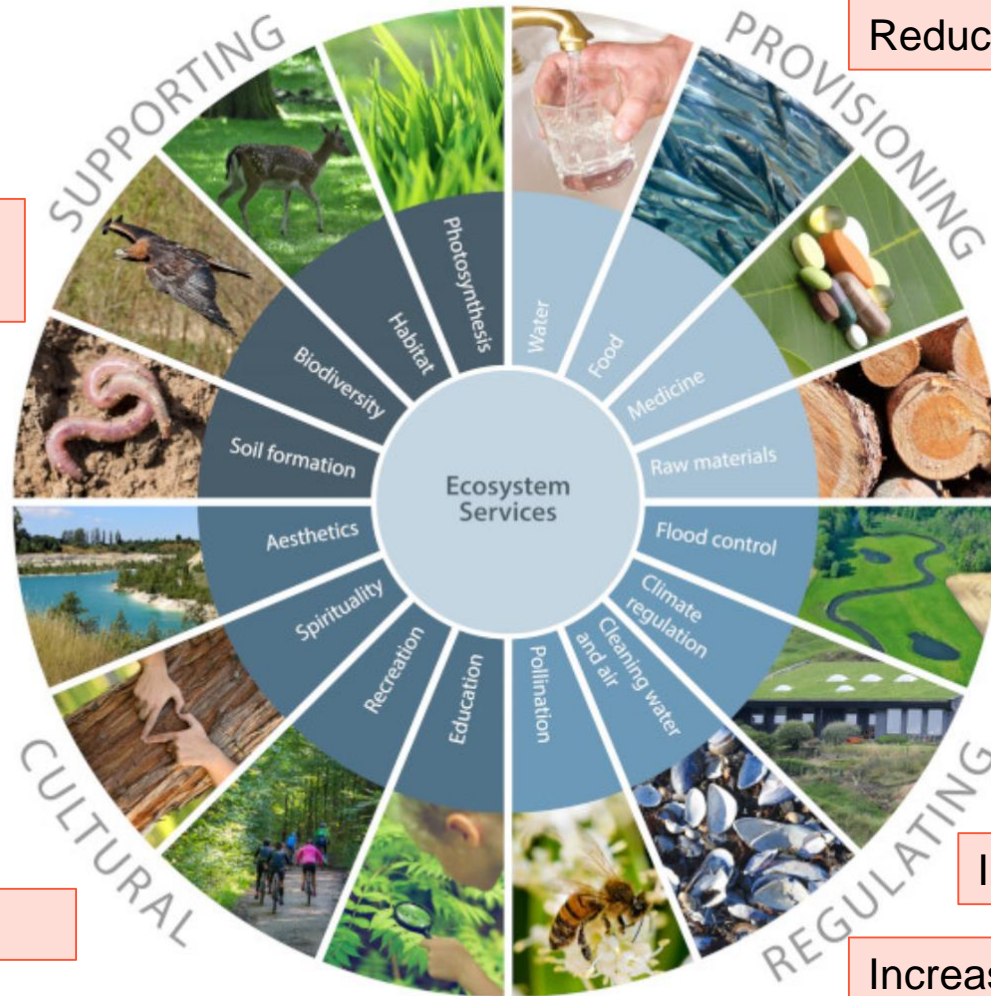
- Preparation
- Procurement
- Manufacturing and design
- Distribution
- Consumption
- Disposal



**Examples of factors influencing environmental impacts of PPE at different lifecycle stages**



# Biodiversity and ecosystem services – example: logging in Victorian central highlands



Reduced inflow to water catchment

Reduced numbers of endangered animals and plants and fungi

Timber for paper and pulp

Increased water runoff, debris, flooding

Increased CO2 production and decreased carbon sequestration

Barriers to cultural and spiritual activities

Increased risk of wildfire

Reduced recreation opportunities

Increased turbidity and decreased water quality

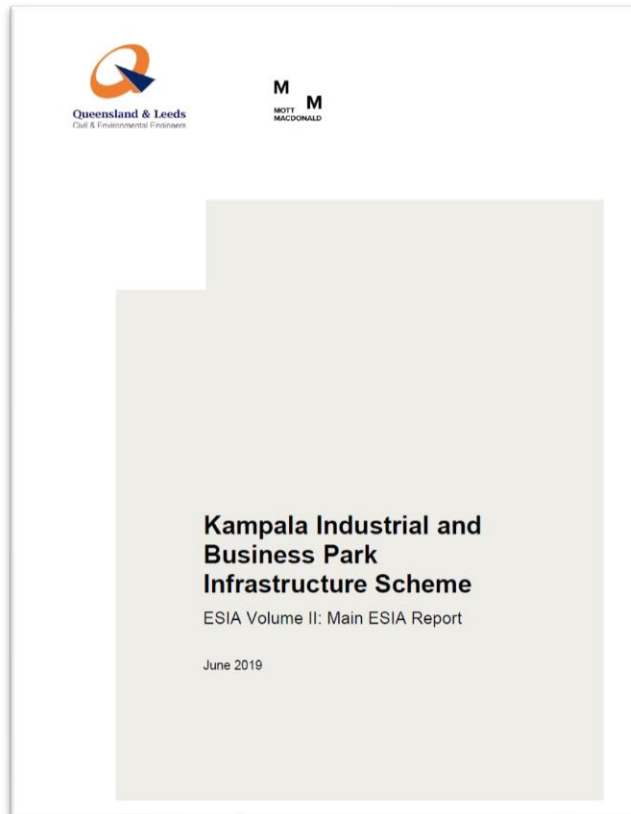
**More information:** Diagram: Department of Environmental Science, Aarhus University <https://envs.au.dk/en/research-areas/society-environment-and-resources/biodiversity-and-ecosystem-services> Impacts of logging <http://www.longtermecology.com/great-forest-national-park> , <https://www.pachamama.org/effects-of-deforestation>

# Regulations and guidelines





# Issues identified in EIS/EIA



**Table 18.1: Summary of significant residual environmental effects**

Topic	Significant Residual Effects
<b>Construction Phase</b>	
Air Quality	No significant residual effects.
Biodiversity	<ul style="list-style-type: none"> <li>Habitat loss of approximately 0.95km<sup>2</sup> within the Forest Reserve, habitat degradation within 500m of the Scheme site and spread of Alien Invasive Species within Forest Reserve;</li> <li>Pollution to Lake Victoria from effluents and spread of Alien Invasive Species;</li> <li>Pollution to River Namanve from effluents, siltation and increased risk of flooding and spread of Alien Invasive Species;</li> <li>Disturbance to birds from human activities, habitat and flora loss and degradation and hunting and poaching of wildlife due to improved access roads;</li> <li>Disturbance to mammals from human activities, habitat loss and degradation, injury or death, increase in road kills and injuries and hunting and poaching of wildlife due to improved access roads.</li> </ul>
Geology	No significant residual effects
Greenhouse Gases	<ul style="list-style-type: none"> <li>Emissions from the construction phase of the Scheme will represent a small part of national GHG emissions, at around 0.15% of 2014 levels (including land-use change and forestry).</li> </ul>
Heritage	No significant residual effects
Landscape and Visual	<ul style="list-style-type: none"> <li>Change in tranquility of the landscape character due to temporary presence of HGV movements and earthworks to impact representative views from settled cultivated land viewpoints during construction and operation</li> <li>Removal of the remainder of wetland vegetation and increase of anthropization of a natural area to impact visitors to the Namanve wetland during construction and operation</li> </ul>
Noise and Vibration	No significant residual effects.
Socioeconomics	<ul style="list-style-type: none"> <li>Economic displacement upon informal land users of KIBP site;</li> <li>Temporary employment generation for LAI villages and Scheme workers;</li> <li>Labour and occupational health and safety risks for Scheme workers;</li> <li>Increased revenue for local and regional businesses for Local and regional businesses and WAI;</li> <li>Scheme-induced in-migration for LAI villages;</li> <li>Traffic and other community health and safety hazards for LAI villages.</li> </ul>
Transport and Access	No significant residual effects.
Waste and Materials	<ul style="list-style-type: none"> <li>Waste generation – depletion of landfills impacting soil, biodiversity and human receptors.</li> </ul>
Water Resources	<ul style="list-style-type: none"> <li>Runoff of hazardous or poisonous substances from the cleaning of vehicles, machinery and equipment upon surface waters and groundwater.</li> </ul>
Cumulative Effects	<ul style="list-style-type: none"> <li>Cumulative effects upon air quality and noise</li> <li>Cumulative effects upon visual amenity</li> <li>Cumulative effects upon the Forest Reserve</li> <li>Cumulative effects upon flora and fauna</li> <li>Cumulative effects upon external roads users</li> </ul>

# Monitoring data identified in Environmental Impact Assessments

## 19.2.3.6 ESHS monitoring officers

Lagan-Dott ESHS monitoring officers will complete surveys and daily checks to confirm E&S compliance regarding aspects such as noise, air quality, geology, biodiversity, heritage, landscape and visual, transport, water quality, waste management, spill management and health and safety. Where evidence of pollution or contamination is found, ESHS monitoring officers will contact those responsible and request the issue is rectified. They will be responsible for ensuring previously identified non-conformities are completed to an appropriate standard, enlisting support from the ESHS site manager where required. The officers will have an ability to explain technical matters simply to non-scientific audiences.

# Existing research

## Theses and published research

MAKERERE



UNIVERSITY

IMPACT OF TANNERY EFFLUENT DISCHARGE ON THE  
NABAJJUZI WETLAND ECOSYSTEM

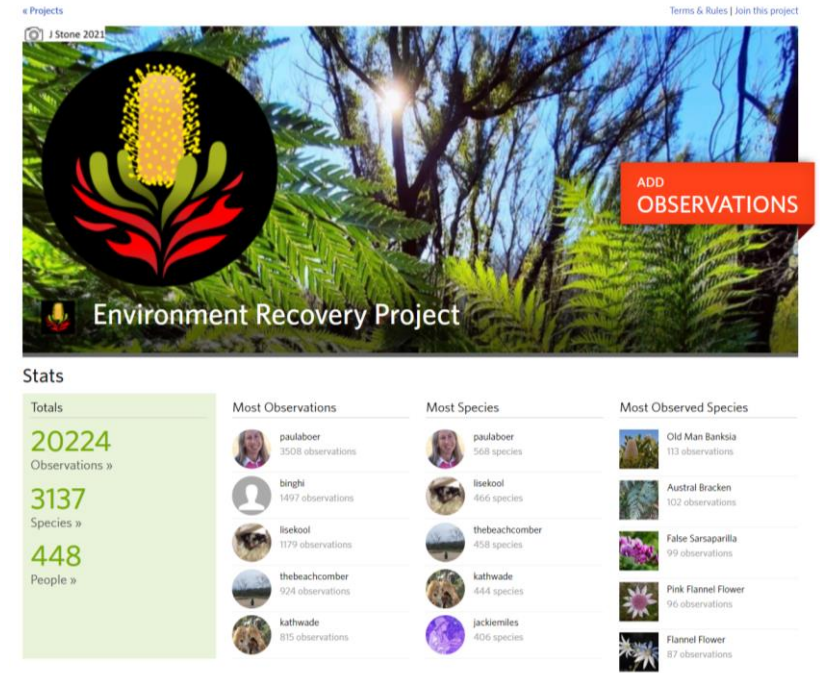
BY

PETER SSEKAJJA – 208008730

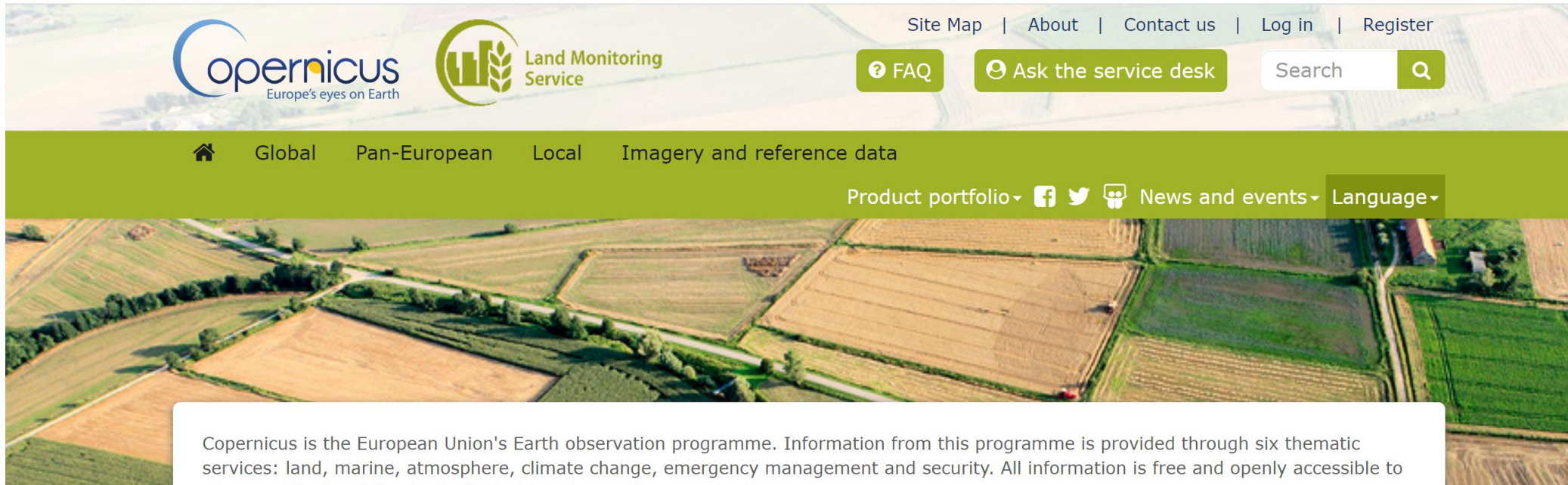
2015/HD02/578U



## Citizen science



# Existing data – eg Copernicus



Copernicus is the European Union's Earth observation programme. Information from this programme is provided through six thematic services: land, marine, atmosphere, climate change, emergency management and security. All information is free and openly accessible to all users. The Land Service is divided into four main components:



## Global

*provides a series of biogeophysical products on the status and evolution of the land surface at global scale at mid and low spatial resolution*



## Pan-European

*provides information about land cover and land use and its changes, as well as biogeophysical parameters at European scale at high resolution*



## Local

*focuses on different hotspots, i.e. areas that are prone to specific environmental challenges and problems*

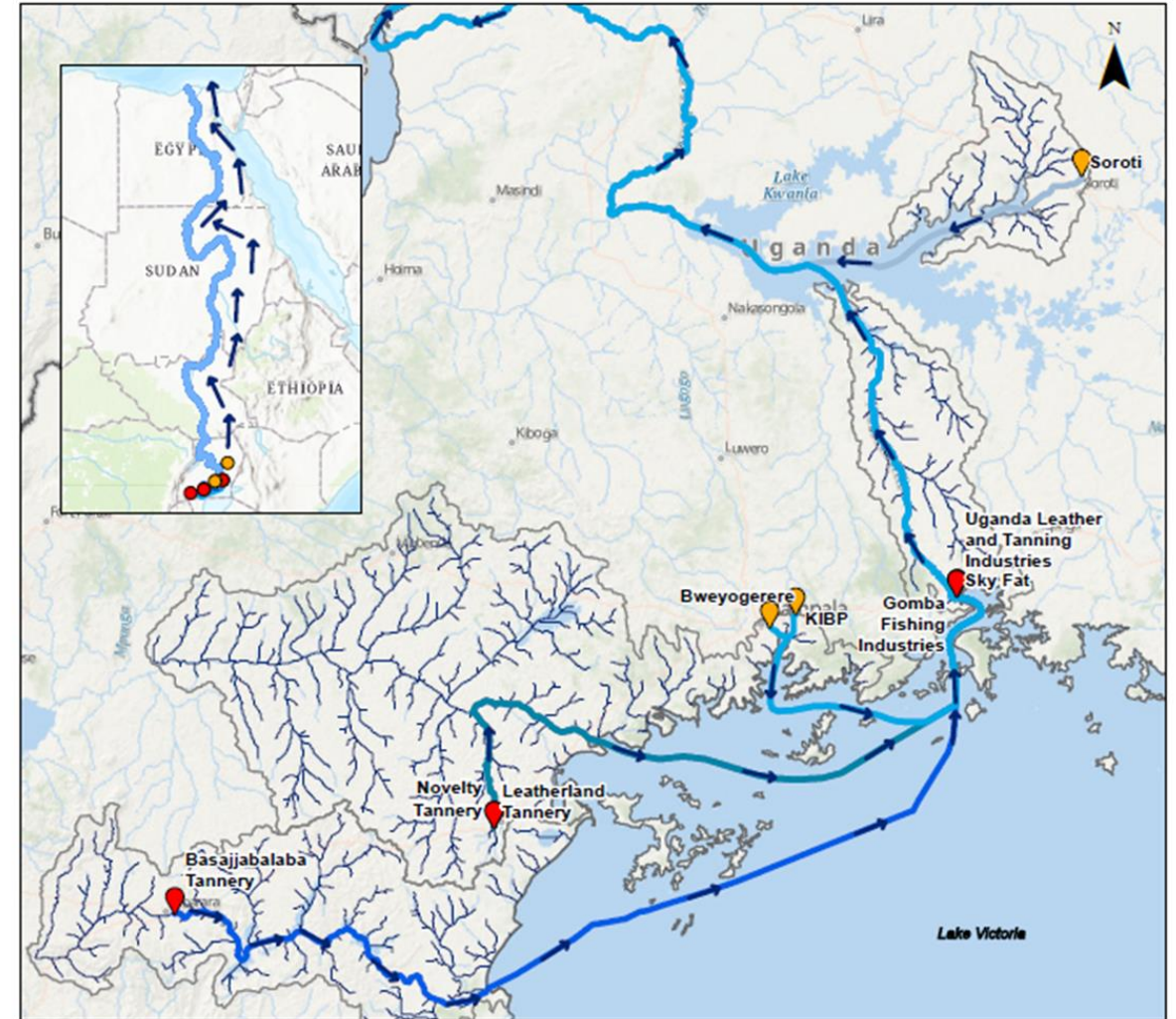
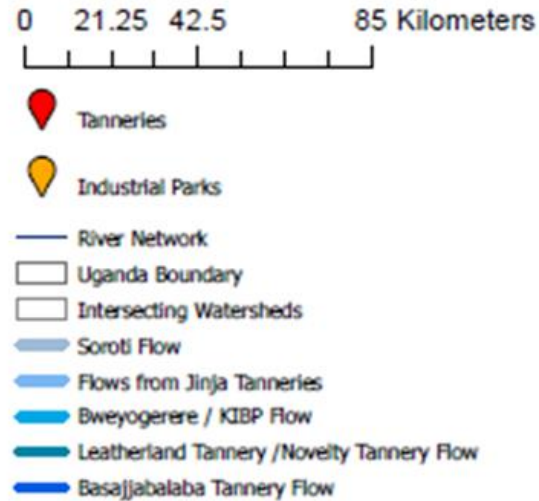


## Imagery and reference data

*satellite imagery forms the input for the creation of our products; and in order to ensure the efficient use of satellite imagery, in-situ data is required*

# GIS and databases

## Downstream Rivers Connected to Watersheds Intersecting with Ugandan Tanneries and Industrial Parks



**For your example,**

**What might be some nexus points between human and natural systems** - such as:

- Causal interactions where human actions affect natural systems
- Causal interactions where natural systems have impacts on human systems
- Interdependencies, where human and natural systems depend on and affect each other?

**What would be likely to be useful methods and processes for identifying potential, actual, projected impacts?**

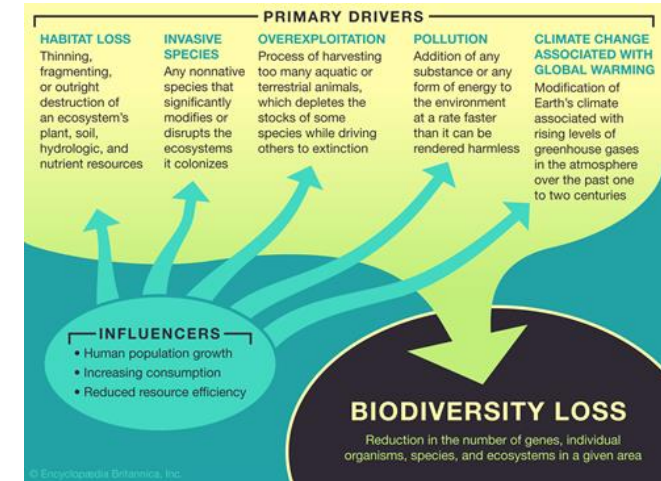
- Consultations, interviews, planetary boundaries, lifecycle stages, ecosystem services, regulations and guidelines, issues identified in EIS/EIA, monitoring of environmental risks, existing research, existing data? Others?

# Session 4 (a)

Implications for M & E

# Implications for evaluation practice and management

1. **Consider environment in ALL M & E** not only environment-focused programs & policies
2. **Include environmental issues such as resource use, pollution, biodiversity** as well as climate change
3. **Emphasise** real-time evaluation and **rapid use**
4. **Select and manage evaluation teams** to enable consideration of environmental sustainability
5. **Engage relevant expertise and representation of interests**
6. **Focus on facilitating use** of evaluation findings and processes
7. **Keep focus on both equity and environment**





# Session 4 (b)

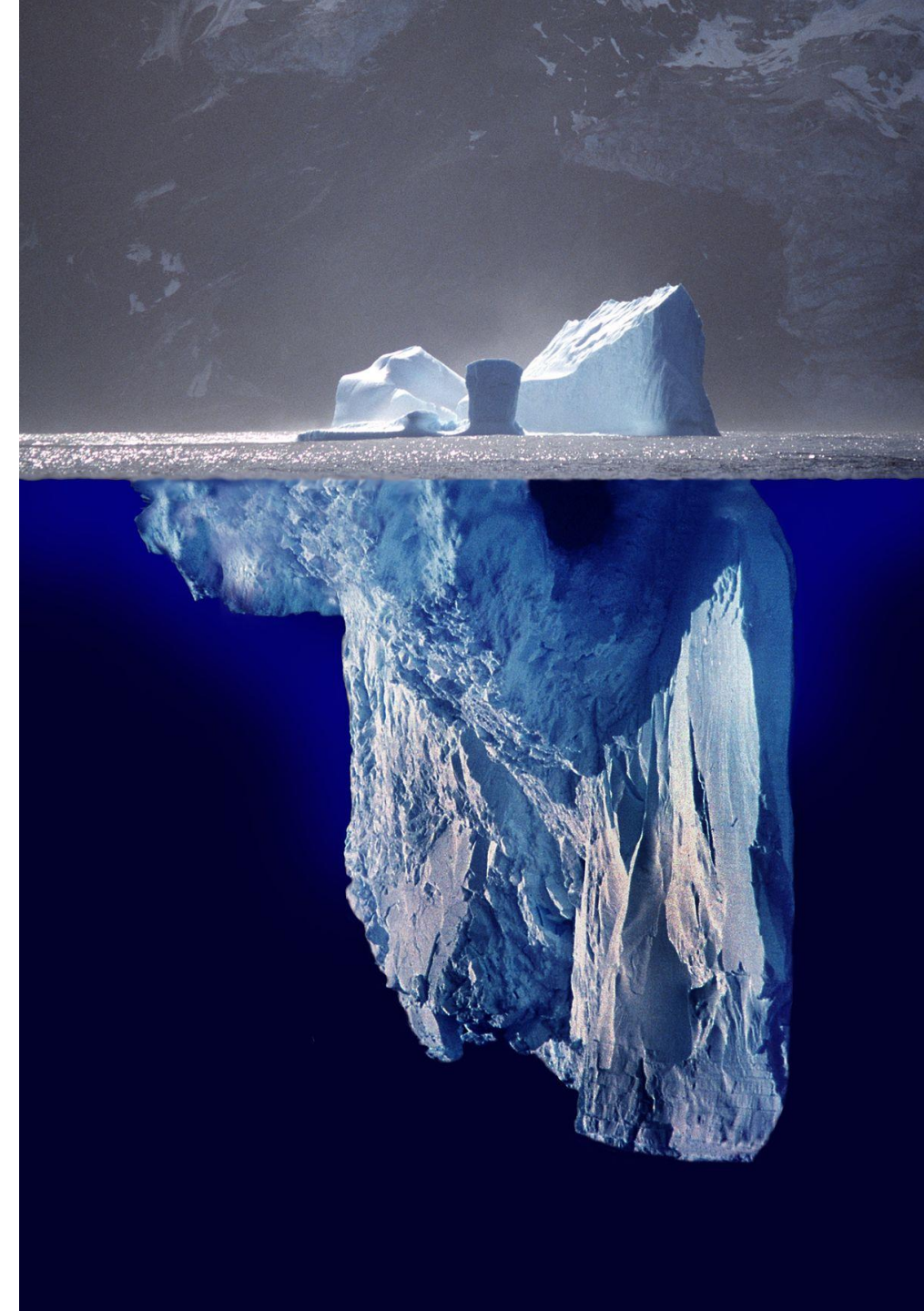
Implications for M & E Systems

# Implications for M and E systems

Systems, structures,  
policies, guidelines

Norms & practices;  
*“the way we do  
things around here”*

Beliefs, values,  
mindsets and  
assumptions

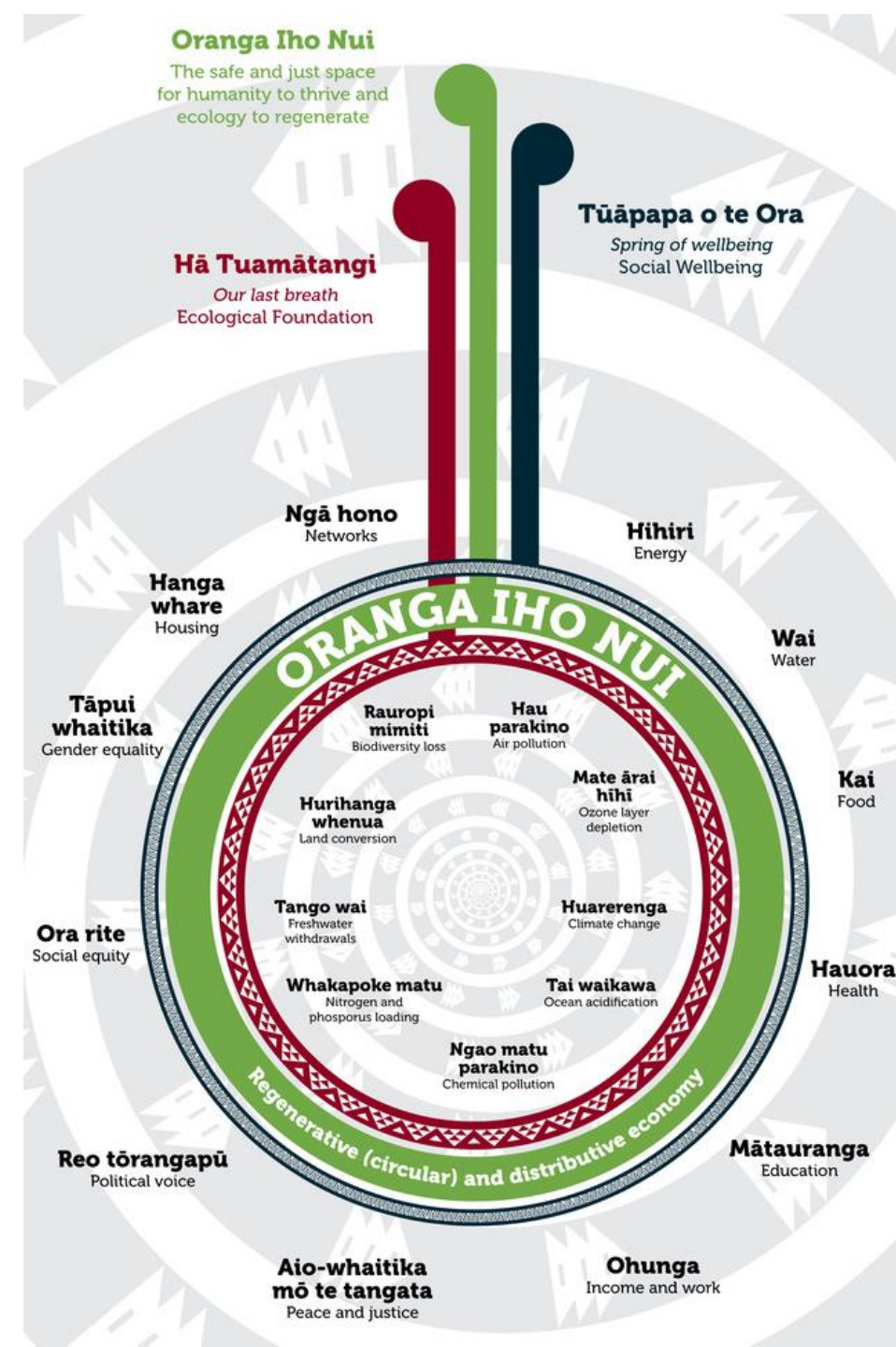


# Nexus thinking in economics

A Māori perspective on the iconic doughnut economic model (Kate Raworth, 2012), reimaged by Teina Boasa-Dean (Tūhoe) and Juhi Shareef.

*“This Indigenous reimaging puts the ecological foundation at the centre, denoting that it is Ranginui (the sky, the father of all things) and Papatūānuku (the earth, the mother of all things) that together, enable humanity to thrive.”*

Source:  
[www.projectmoonshot.city](http://www.projectmoonshot.city)





Canada's Treasury Board requires all new submissions to respond to three important sustainability-related questions:

- 1. Does the proposal have outcomes that will affect natural resources?**
  - a. Will it affect resource usage such as arable land, forest, etc.?
  - b. Will it affect the consumption of materials and production of waste?
  - c. Will measures be taken to encourage reduction, reuse, and recycling of materials?)

**What  
other  
countries  
are doing**



# What other countries are doing

Canada's Treasury Board requires all new submissions to respond to three important sustainability-related questions:

1. Does the proposal have outcomes that will affect natural resources?
- 2. Does the proposal have a known direct or likely indirect outcome that is expected to have considerable impacts on the environment?**
  - a. land, water and air, including all layers of the atmosphere
  - b. all organic and inorganic matter and living organisms;
  - c. the interacting natural systems that include components referred to in paragraph a and b?



# What other countries are doing

Canada's Treasury Board requires all new submissions to respond to three important sustainability-related questions:

1. Does the proposal have outcomes that will affect natural resources?
2. Does the proposal have a known direct or likely indirect outcome that is expected to have considerable impacts on the environment?
3. **Does the proposal have outcomes which are likely to affect the achievement of Federal Sustainable Development Strategy (FSDS) goals and targets (e.g., reducing Greenhouse Gas emissions, green procurement and sustainability of work operations)?**



## planning, monitoring & evaluation

Department:  
Planning, Monitoring and Evaluation  
REPUBLIC OF SOUTH AFRICA

### DPME Evaluation Guideline 2.2.22

Guidelines for applying the climate and ecosystems health criterion in the commissioning, design and implementation of evaluations

Created: 19 July 2022

What  
other  
countries  
are doing

<b>Addressed to</b>	Government departments who are undertaking evaluations (programme managers and M&E staff) Evaluators of government programmes and policies
<b>Purpose</b>	The purpose of this guideline is to provide technical guidance on applying a climate and ecosystems health (CEH) criterion/lens when undertaking evaluative work
<b>Policy reference</b>	National Evaluation Policy Framework All Department of Planning, Monitoring and Evaluation (DPME) evaluation guidelines Environmental, climate, ecosystems and biodiversity policies listed in this guideline
<b>Contact</b>	Evaluation Unit E-mail: <a href="mailto:Evaluations@dpme.gov.za">Evaluations@dpme.gov.za</a> Tel: 012 312 0110

# EU: European Green Deal

## The benefits of the European Green Deal

The European Green Deal will improve the well-being and health of citizens and future generations by providing



fresh air, clean water,  
healthy soil and  
biodiversity



renovated, energy  
efficient buildings



healthy and affordable  
food



more public transport



cleaner energy and  
cutting-edge clean  
technological  
innovation



longer lasting  
products that can be  
repaired, recycled and  
re-used



future-proof jobs and  
skills training for the  
transition



globally competitive  
and resilient industry



# Reflection

What would national M & E systems need to include to support all M & E to include environmental sustainability?

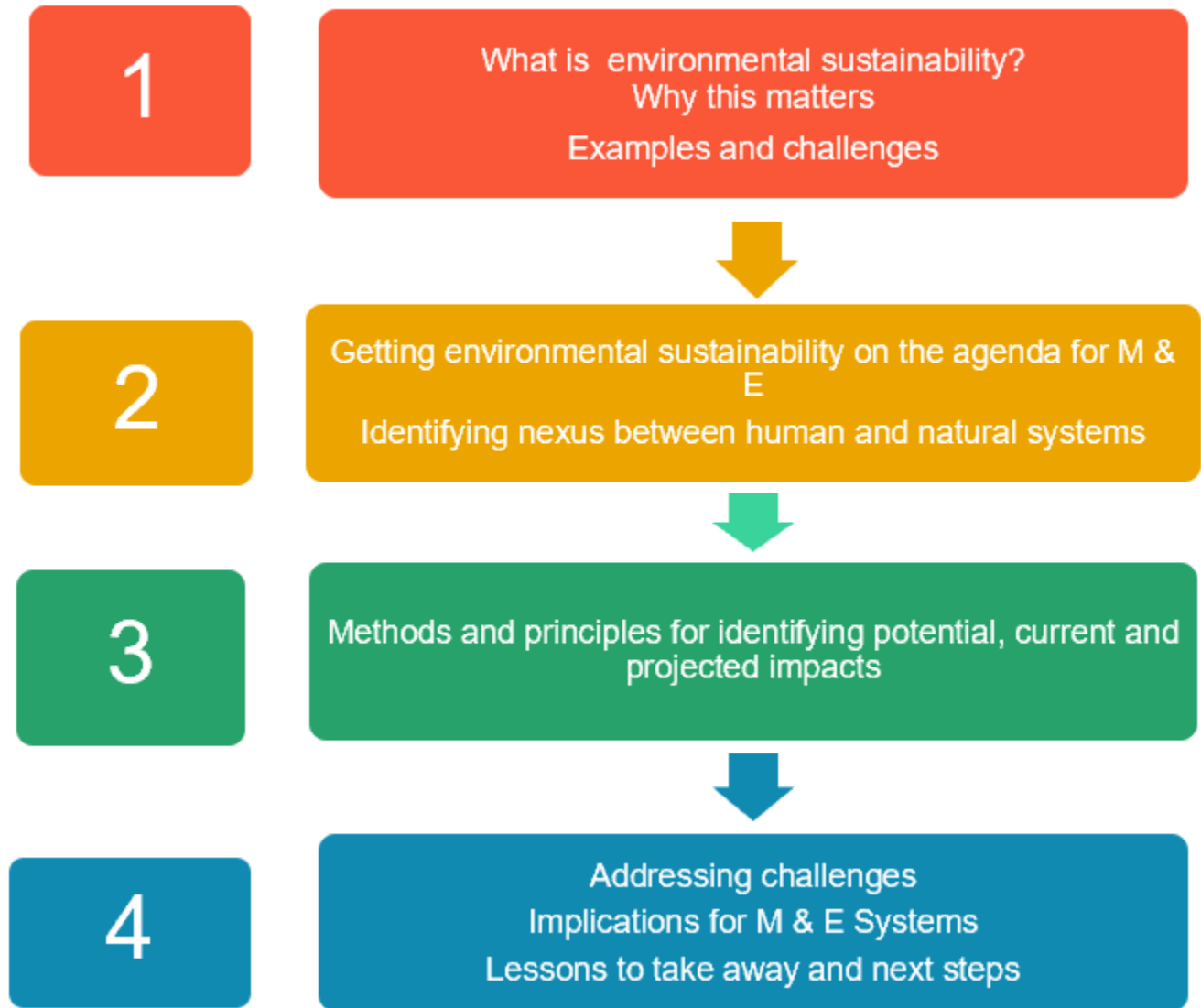
# Possible strategies for capacity-strengthening of evaluation teams and evaluation managers

1. **Templates and guidance** - eg the updated version of the generic Key Evaluation Questions), guidance for choosing evaluation teams,
2. **Education, training and professional development** - including short courses, graduate programs, self-paced online learning for evaluators, evaluation commissioners and other people involved in evaluation (including evaluation training for natural systems specialists)
3. **Evaluation policies and standards**
4. **Expert review of TOR, designs, reports** - to inform and improve them (not at the end)
5. **Examples** - of evaluations and evaluation guidance & policies
6. **Information about methods** - especially methods unfamiliar to many evaluators
7. **Reference material** - eg environmental standards, environmental risks
8. **Networks of practice** - including VOPEs and other networks

# Session 4 (c)

Lessons to take away and next steps

# Lessons to take away and next steps



# Lessons to take away and next steps

**Capture the following, one per post-it note:**

## **HERE**

Something in our time together that caught your attention, piqued your curiosity or, at the very least, you noticed. It might be a method, a comment from a fellow participant, a concept, a visual framework, etc...

## **THERE**

How you might take that specific example and implement it at work or in your personal life. Bring in as much detail as you can to make for easy implementation; imagine your future self doing it and the outcome it generates.

## **EVERYWHERE**

A generalized interpretation of this thing that would allow for more universal application – an underlying principle absent context



### Keep the conversation going:

- Visit the Footprint Evaluation page on BetterEvaluation  
[https://www.betterevaluation.org/en/themes/footprint\\_evaluation](https://www.betterevaluation.org/en/themes/footprint_evaluation)
- Join the Footprint Evaluation discussion group  
[https://www.betterevaluation.org/en/themes/footprint\\_evaluation](https://www.betterevaluation.org/en/themes/footprint_evaluation)
- Sign up for the Footprint Evaluation newsletter  
[https://www.betterevaluation.org/footprint\\_evaluation/get\\_involved](https://www.betterevaluation.org/footprint_evaluation/get_involved)
- Share resources, examples and advice

# Thank you

[www.betterevaluation.org/footprint\\_evaluation](http://www.betterevaluation.org/footprint_evaluation)

