Scientific and Technical Advisory Panel Report to the 60th Meeting of the GEF Council

Rosina Bierbaum, STAP Chair

Photo: Mike Korostelev

STAP Panel Members and Advisers

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Climate Change Mitigation

John Donaldson
Biodiversity

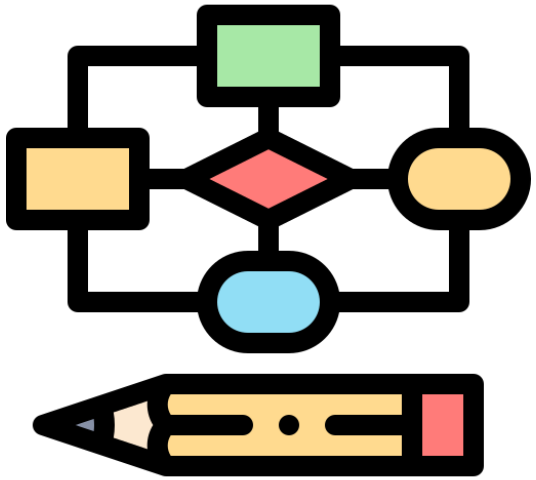
Jamidu Katima
Chemicals & Waste

Graciela Metternicht
Land Degradation

Blake Ratner
International Waters

Edward Carr
Climate Change Adaptation

New Science



STAP’s recent work, reports, and workshops

STAP’s future work program

STAP’s observations on the GEF work program

New Science

Biodiversity and Climate Change - IPBES-IPCC co-sponsored Report

- The combined effects of biodiversity loss and climate change can trigger **hard to reverse or irreversible** tipping points
- Satisfactorily **resolving** climate change or biodiversity requires consideration of the other
- Protected Areas have been **insufficient** to stem biodiversity loss
- NbS **can play an important role in climate mitigation**
- To meet CBD and UNFCCC goals requires transformative **interventions of a scale and scope never attempted before**

New Science: Making Peace with Nature

- Humanity's environmental challenges have grown in number and severity over the past 5 decades and now are a **planetary emergency**.
- Environmental changes are causing millions of premature deaths annually, **undermining hard-won development gains and impeding progress towards ending poverty**, hunger, and reducing inequalities.
- Climate change could become the biggest driver of biodiversity loss if the Paris climate goals are not met. **The coming decade is crucial.**
- **Earth's environmental emergencies should be addressed together to achieve sustainability.**

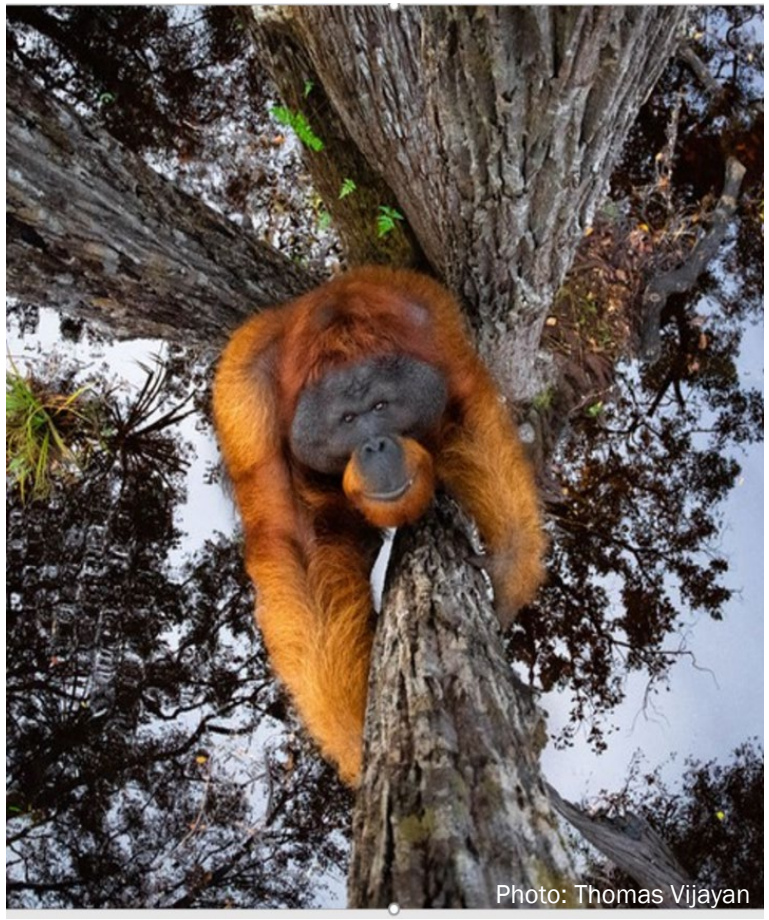


Photo: Thomas Vijayan

https://www.unep.org/resources/making-peace-nature

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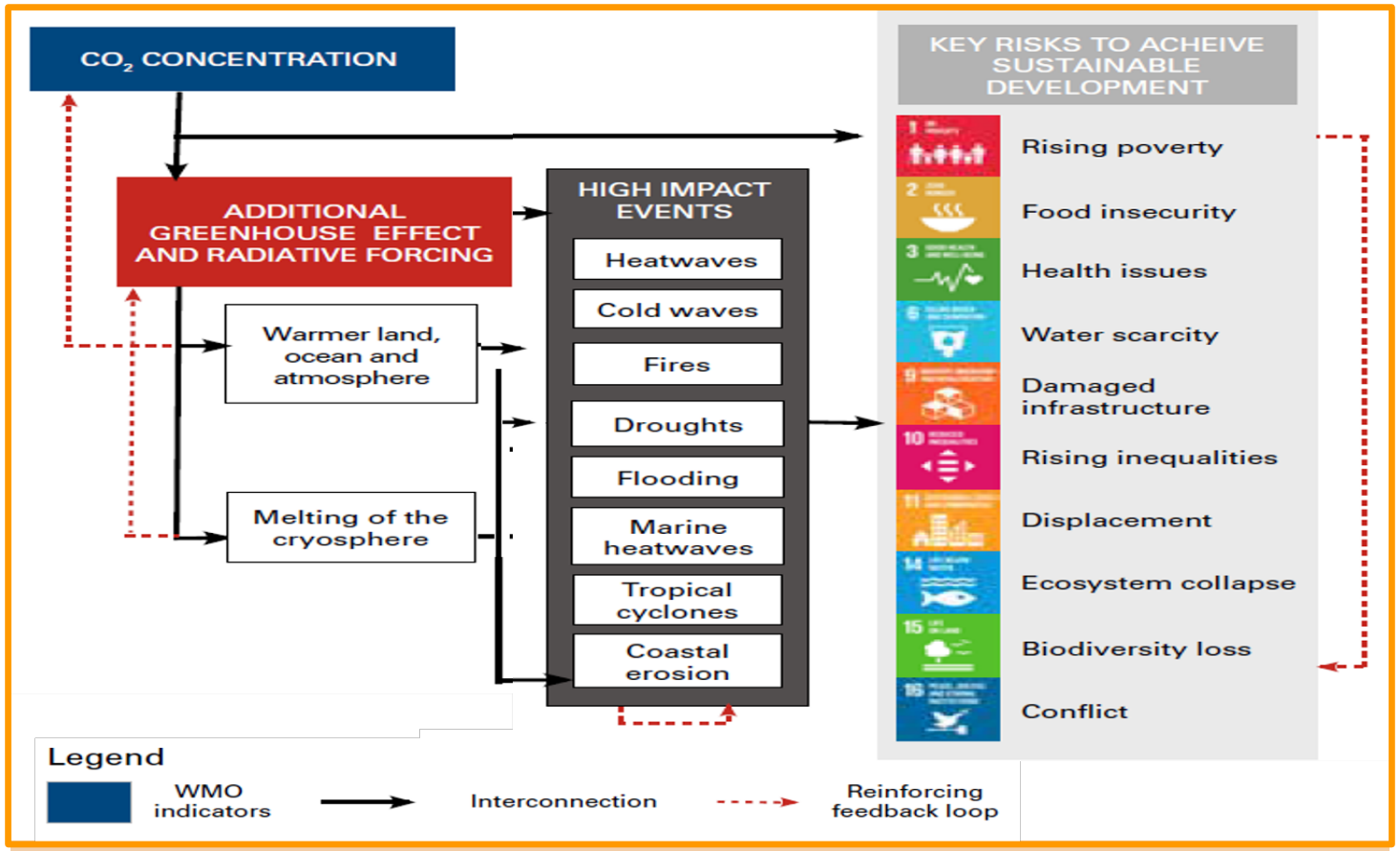
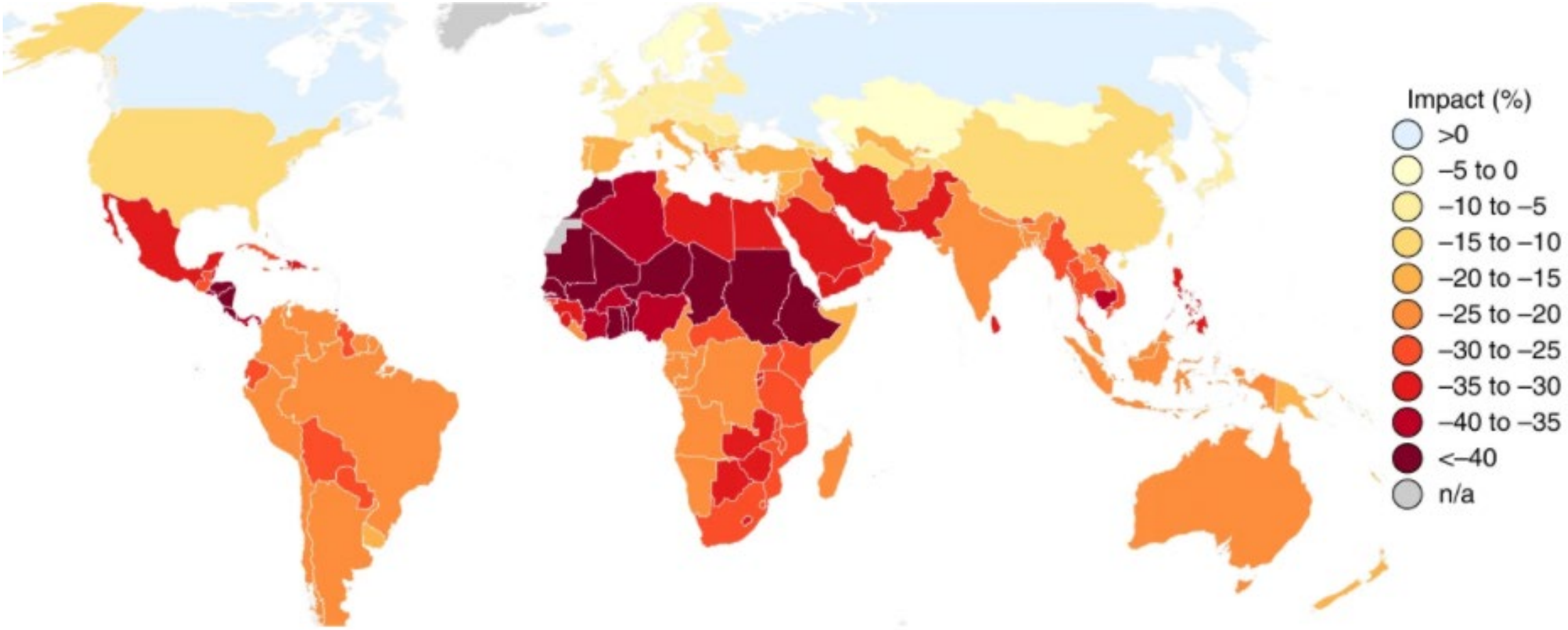
New Science: WMO State of the Global Climate 2020



Selected climate change-related risks to the achievement of the SDGs

https://public.wmo.int/en/our-mandate/climate/wmo-statement-state-of-global-climate

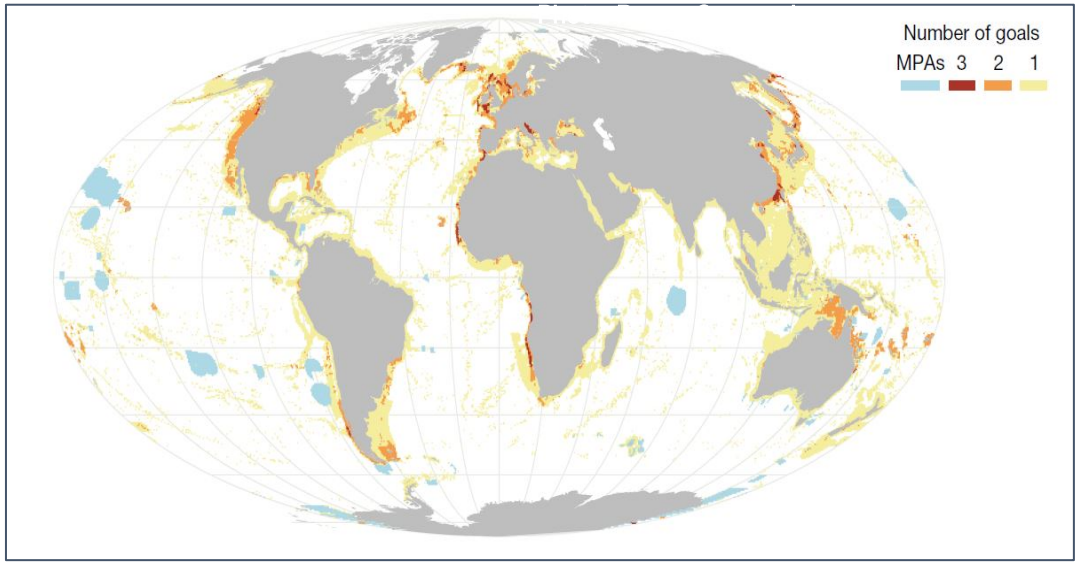
New Science: Climate change has slowed global agricultural productivity growth



Nature Climate Change, Ortiz-Bobea et al., 2021

We need Blue-Green solutions!

- Less than 3% of the ocean is highly protected
- A substantial increase in ocean protection could have multiple benefits for biodiversity, food, and climate*.
- The vast majority of priority locations are in the 200-mile Exclusive Economic Zones of coastal nations.
- A globally coordinated effort could be nearly twice as efficient as uncoordinated, national-level conservation.



*Red areas have the highest potential to achieve all 3 goals.

Sala, E., Mayorga, J., Bradley, D. et al. Protecting the global ocean for biodiversity, food and climate. Nature 592, 397–402 (2021).

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New Science: The Dasgupta Review

We have collectively failed to engage with Nature sustainably

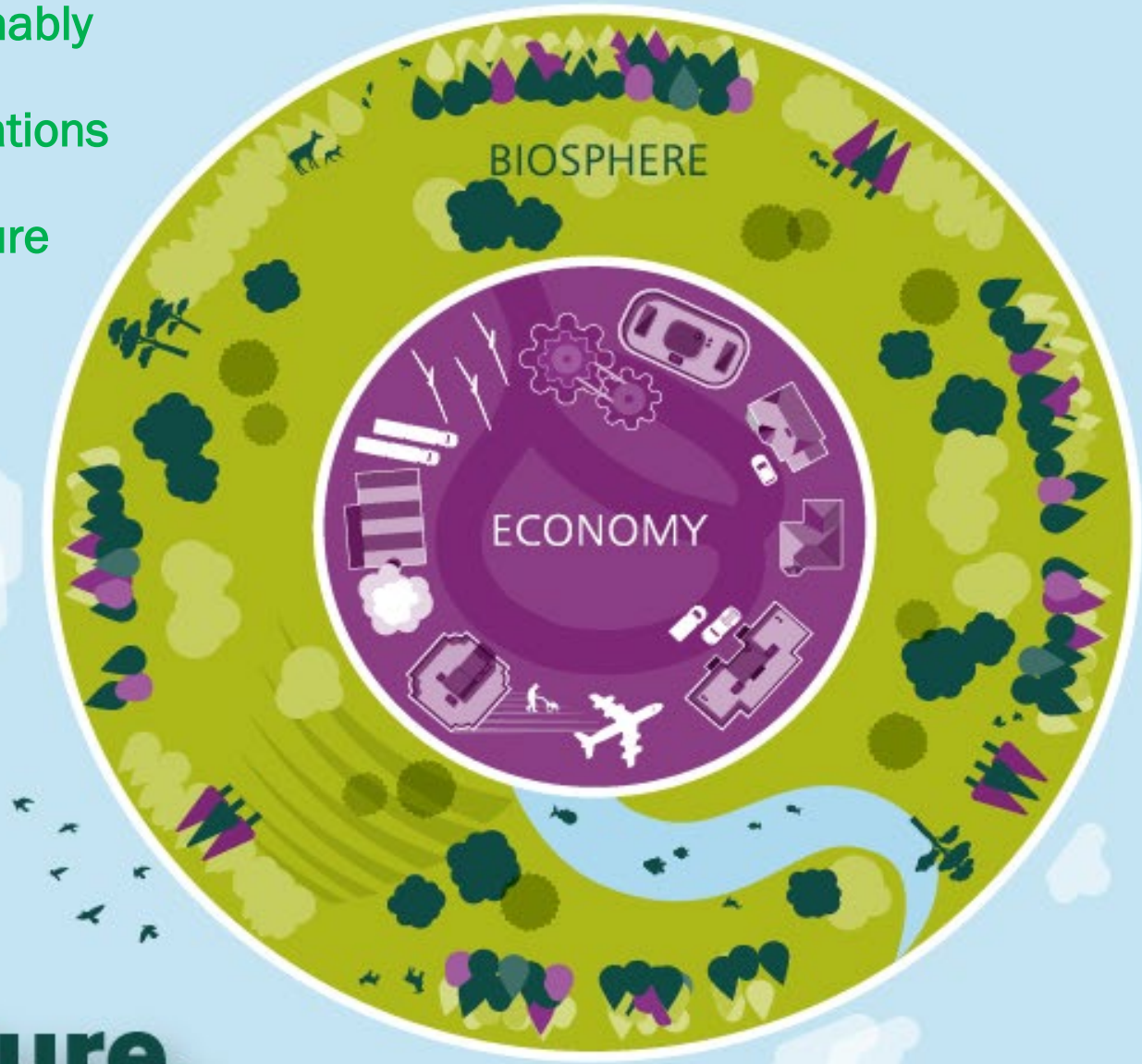
We endanger the prosperity of current and future generations

The heart of the problem is widespread institutional failure

Must change how we think, act, and measure success

We need to transform our institutions and systems –
in particular finance and education

We must reduce our demand - and
increase Nature's "supply"



**A simple truth:
our economies are
embedded within Nature.**

The Economics of Biodiversity: The Dasgupta Review, 2021

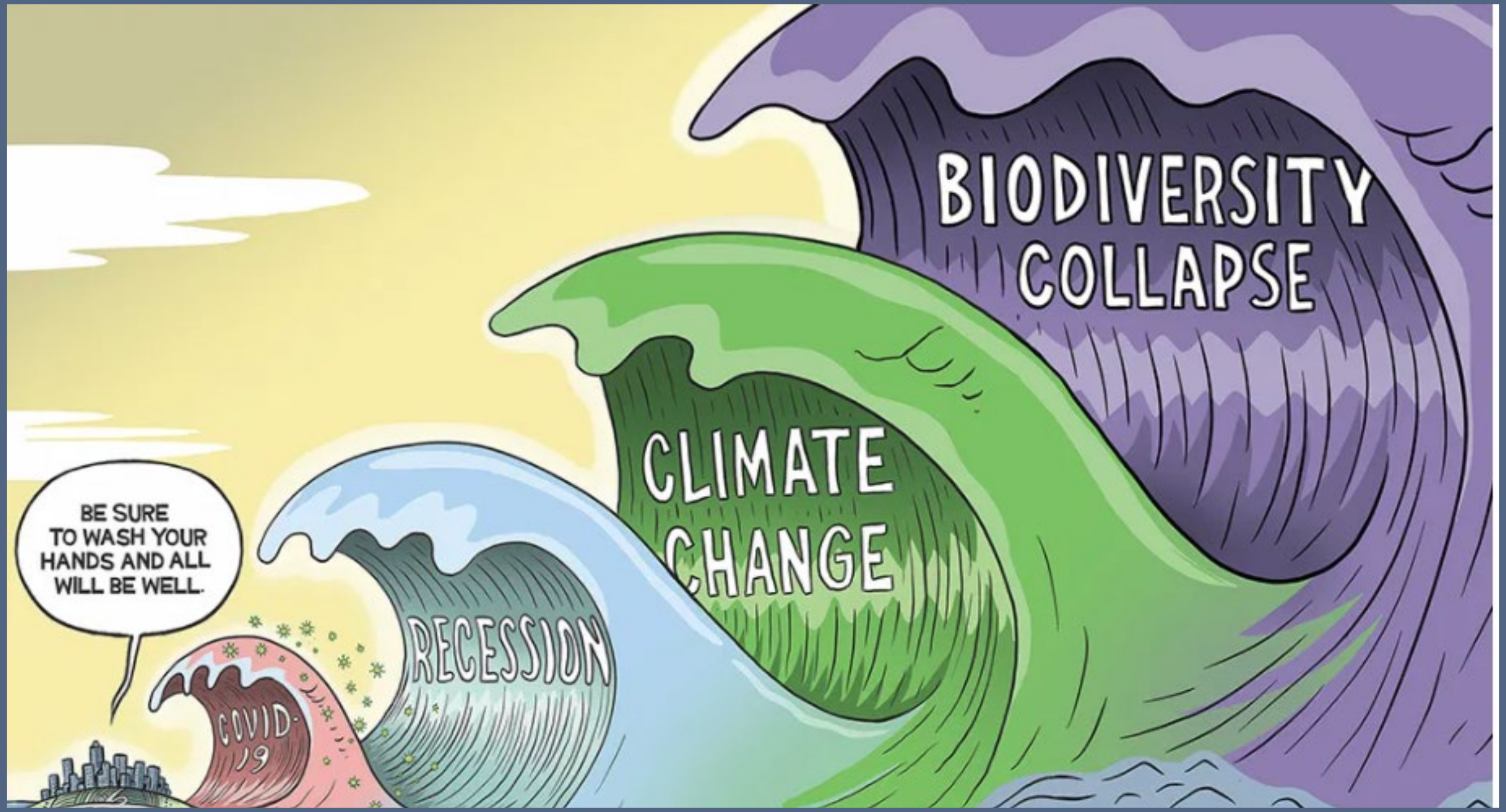
New Science: World Economic Forum

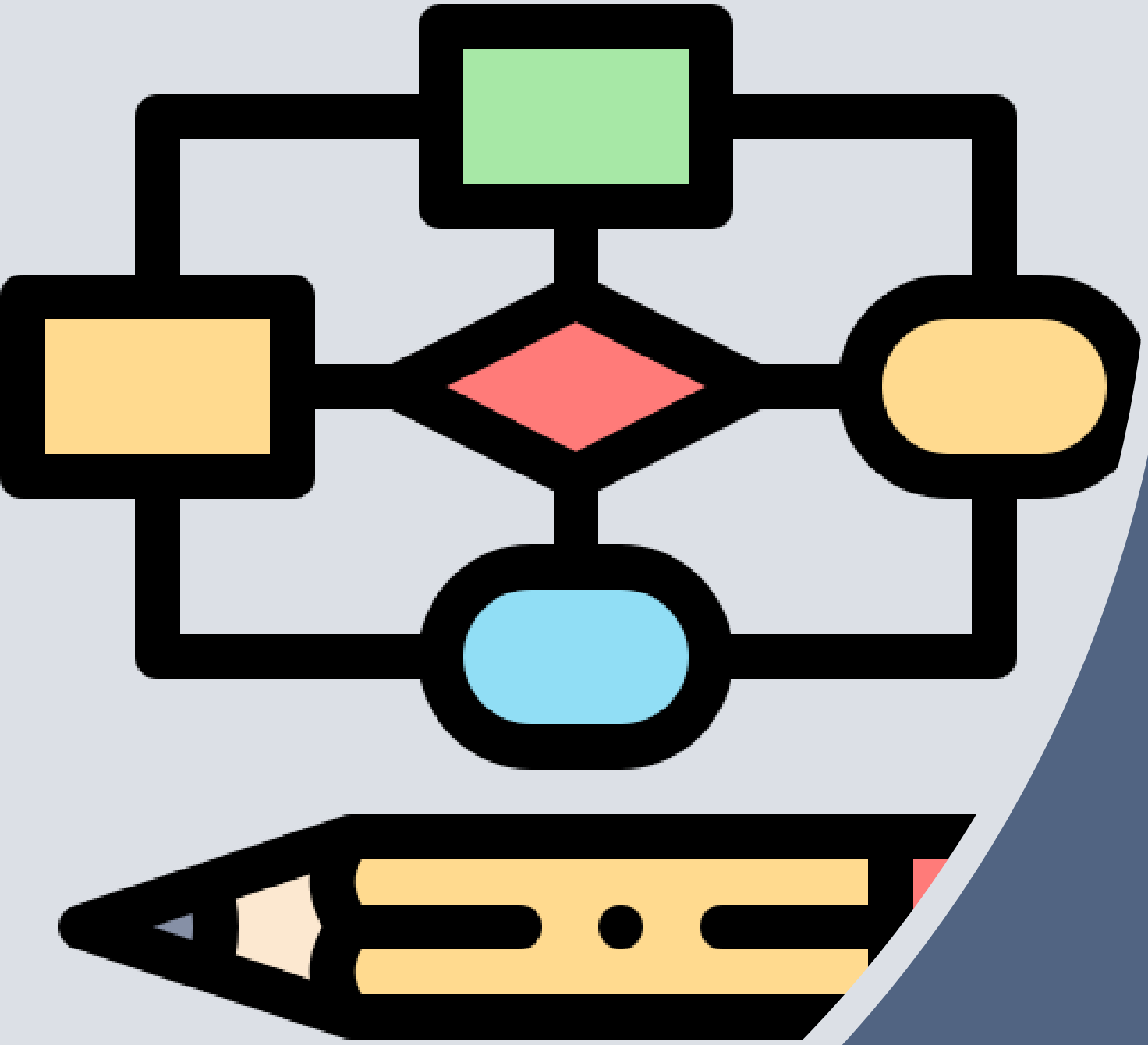
Top Global Risks by Likelihood

	1st	2nd	3rd	4th	5th
2021	Extreme weather	Climate action failure	Human environmental damage	Infectious diseases	Biodiversity loss
2020	Extreme weather	Climate action failure	Natural disasters	Biodiversity loss	Human-made environmental disasters

The risk of neglecting climate and biodiversity protection in the face of COVID-19 would not only be a setback on the sustainability agenda, but create greater risk of future pandemics.

(WEF COVID-19 RISKS OUTLOOK)


BIODIVERSITY COLLAPSE
CLIMATE CHANGE
RECESSION
COVID-19
BE SURE TO WASH YOUR HANDS AND ALL WILL BE WELL.



STAP's recent work, reports, and workshop

STAP's views on GEF-8 programming directions

- STAP welcomes the centrality of a **theory of change**
- Emphasises the importance of being clear about **transformation, resilience, and durability**
- Strong focus on transformation and **innovation**,

  but no explicit recognition of risk

STAP's views on GEF-8 programming directions

- A new **system and metrics for monitoring transformation**
- Prominence given to **nature-based solutions**, and **circular economy**
- Importance of addressing **behavioral change** explicitly

STAP's views on GEF-8 programming directions

- "One Health, One Planet" requires more attention to **co-benefits**
- Avoiding "**leakage**" to ensure durable GEBs
- Addressing **climate adaptation** synergistically with GEF-8 programming
- Apply **learning** from IAPs/IPs in future integrated programming

Circular Economy and Climate Mitigation

Extraction, processing, handling and disposal of materials, food, and energy:

Likely responsible for more than 50% of greenhouse gases, and more than 50% of biodiversity loss

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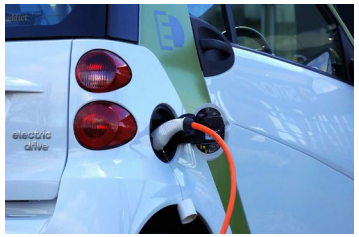
Circular Climate Mitigation Interventions

- Regenerative agriculture

- Resource efficiency in livestock

- Bio-based materials and the bio-economy

- Renewable energy transition



- Transport electrification


"...a *transformative investment* involves a *pathway* to *durable change* at a *sufficient scale* to deliver a *step improvement* in one or more *global environmental benefits.*"
©FRANS LANTING

Achieving transformation through GEF investments

STAP's three challenge questions:

- Could this investment be transformative?
- Is the investment goal credibly transformative?
- Is the proposed logic for achieving the goal plausible?

Making GEF investments resilient

Resilience thinking:

- resilience of what?
- to what?
- for whom?

Making GEF investments resilient

A simple scenario-based approach to imagine different futures, manage risks and uncertainty:

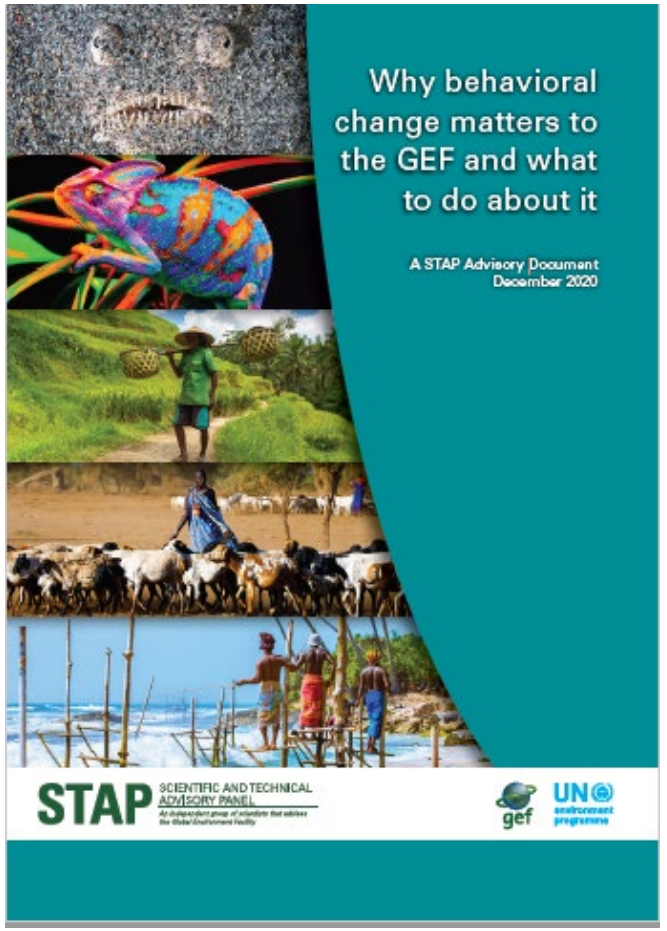
- Identify drivers of change, and consider 3 or 4 possible futures
- Develop possible responses
- Select the best robust response

Photo: Caroline Chauvet/AFP via Getty Images

Behavioral change

December 2020 advice:

- many projects involve behavioral change
- clear whose behavior needed to change
- but not ***how***
- checklist



March workshop discussed how behavioral change could benefit from social science

Behavioral change and the social sciences

Four points from the workshop:

- cultural settings and social norms matter
- build trust and legitimacy using multi-stakeholder dialogue
- build capacity to enhance durability
- GEF project cycle can be a challenge

Mainstreaming Biodiversity - Business

- Mainstreaming biodiversity in GEF-8, and CBD post-2020 Biodiversity Framework
- STAP advice in 2005 and 2014
- IEO evaluation of mainstreaming biodiversity (2019)
- STAP workshop in May focused on mainstreaming biodiversity from a **business perspective**

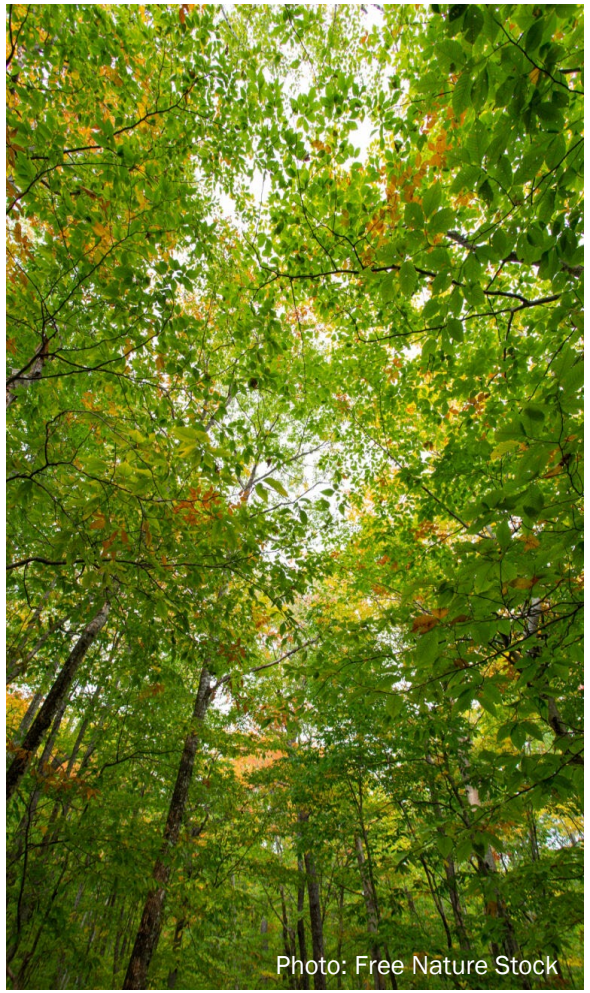


Photo: Free Nature Stock

Business and Mainstreaming Biodiversity

- Many businesses are working proactively on biodiversity, but not at a scale to deliver transformational change quickly

There is no biodiversity equivalent of “net zero”

- What can the national governments and the GEF do?
  - policy and institutional coherence
  - natural capital accounting
  - making biodiversity and carbon investable assets

STAP will do further work, and report back at the next Council.

Risk appetite and the GEF – moving towards transformation

How could the GEF approach programmatic risk to encourage higher risk/higher reward investments?

Main points from the workshop:

- **Tackling systemic problems upstream** offers higher potential leverage.
- **Distinguish between different types of risk**, and **decide on a risk appetite.**
- **GEF's ability to reduce/mitigate financial risk is attractive to the private sector. Experiment?**
- The **project cycle can constrain innovation.**
- **Need for learning and evidence** of successes, failures, and adaptive measures.

Climate Change Adaptation

- STAP is working with the GEF Secretariat to develop a **new climate adaptation strategy** for the LDCF and SCCF

- As the financial mechanism for several MEAs, the **GEF has a comparative advantage** because it can consider adaptation across all its the focal areas

- STAP welcomes the opportunities to **address adaptation synergistically in GEF-8 programming** with the new LDCF and SCCF adaptation strategy.

Photo: weadapt.org

STAP's perspective on Knowledge and Learning

We **simply** won't succeed in delivering transformational change if we don't learn from past investments.

We need learning before we can have knowledge.

And we need to know what works, what doesn't work, and why, and how, and in what contexts.

STAP's perspective on Knowledge and Learning

The lessons learned in developing and implementing the current crop of integrated programs should be harvested and applied to the next generation of integrated programming:

- How are the KM platforms operating in practice?
- Should platforms have the same basic approach to KM?
- How can the platforms be linked?
- How could agencies access each other's in-house KM systems?
- How does the GEF learn from the platforms?
- Can non-IAP/IP agencies and countries access the platforms?

STAP's observations on the GEF work program

Observations on the GEF work program

- Screened 29 projects: 25 (GEF); 4 (GEF+LDCF).
- Signs of progress:
  - All projects included a theory of change, and most projects included a climate risk screen
  - Behavioral change was mentioned in several projects
  - Innovation and higher risk appeared in some projects

STAP’s future work program

STAP's future work program

- Further work on: behavioral change; mainstreaming biodiversity; risk
- Working with GEF Secretariat: adaptation; knowledge management
- STAP's enabling conditions
- Consolidated advice on circular economy
- Climate risk screening
- Metrics for transformational change
- Co-benefits
- South-South Knowledge Exchange


THANK YOU!
Any Questions?
Photo; D. Alarcón, P.N. kaa Iya