



Report to the 53rd Meeting of the GEF Council

STAP

SCIENTIFIC AND TECHNICAL
ADVISORY PANEL

*An independent group of scientists that advises
the Global Environment Facility*



Red Fox moving North into the range of the Arctic Fox

STAP Panel Members



Michael Stocking
Senior Advisor to Chair



Rosina Bierbaum
Chair, USA



Thomas Lovejoy
Senior Advisor to Chair



Blake Ratner
International Waters
USA



Brian Child
Biodiversity
South Africa



Ricardo Barra
Chemicals & Waste
Chile



Annette Cowie
Land Degradation
Australia



Ferenc Toth
Climate Change
Adaptation
Hungary



Ralph Sims
Climate Change
Mitigation
New Zealand

Presentation Outline

Integration

Assembly Papers: Circular
Economy - Food, and Plastics

Other STAP Assembly Papers

Work Program Screening

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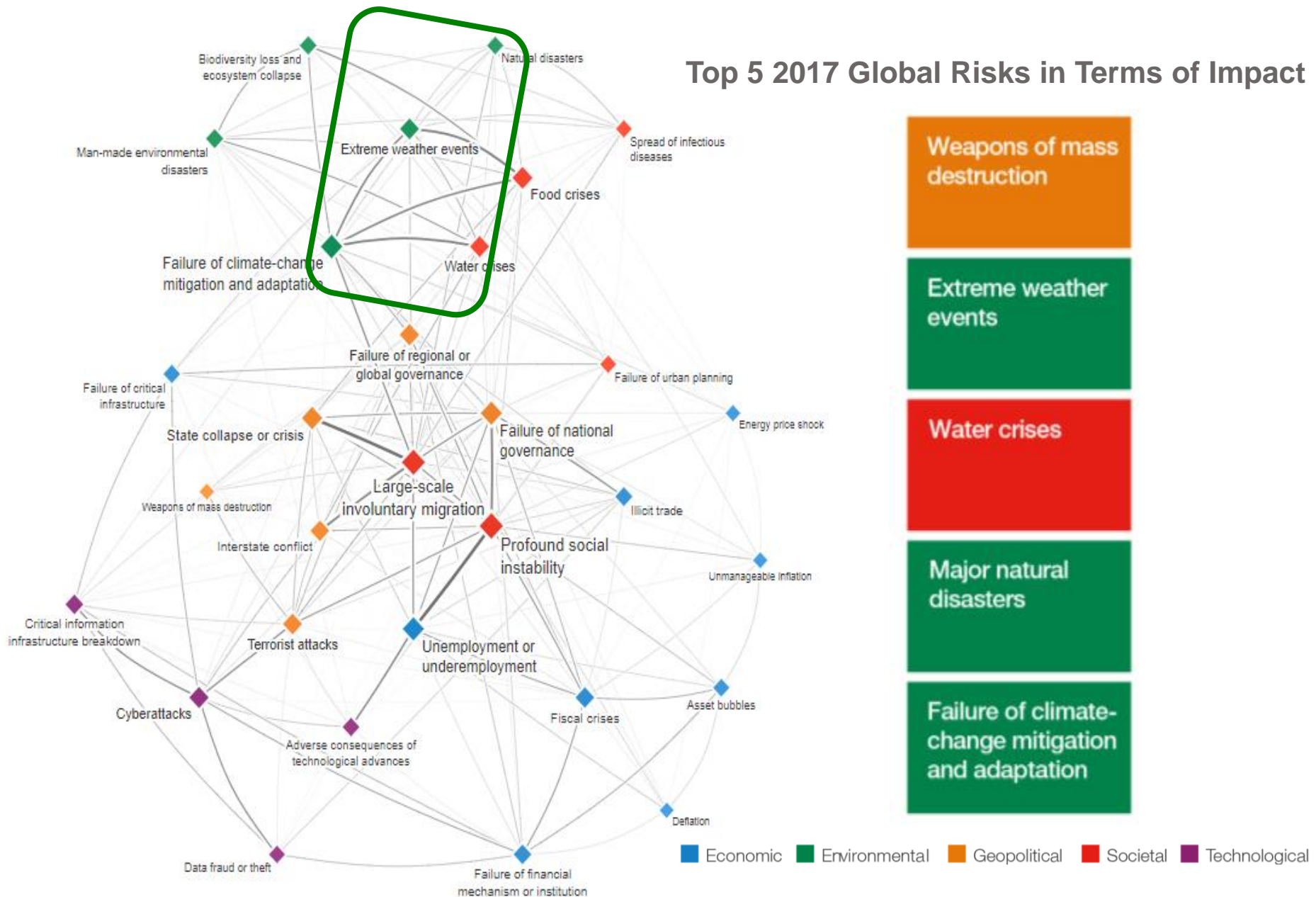
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Integration in the GEF

- 1992: GEF established to support biodiversity, climate change, and desertification conventions
- 2000: OP 12 combined LD, BD, IW and CC
- 2002: multifocal area portfolio initiated
- 2014: Integrated Approach Pilot programs
- 2015: SDGs

Top 5 2017 Global Risks in Terms of Impact



Benefits of System Integration

- Understanding complexity
- Addressing multiple issues simultaneously
- Assessing feasibility of multiple goals
- Identifying policies and strategies
- Maximizing gains and minimizing costs



Source: <https://www.thegef.org/council-meeting-documents/draft-stap-working-paper-why-scientific-community-moving-toward>

OPS6: Examples of focal area integration

- Mainstreaming biodiversity associated with better outcomes & evaluations better ratings
- International waters - a catalyst for integration emphasizing learning & knowledge
- Land degradation delivers GEBs in multiple FAs, and socio-economic benefits

Source: <http://www.gefio.org/evaluations/ops6-gef-changing-environmental-finance-landscape>

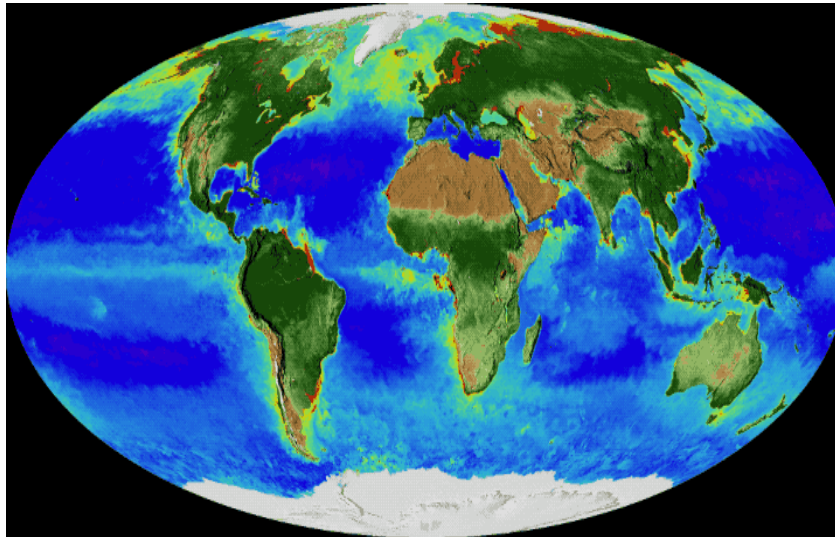
Essential characteristics of good MFA projects

- The project objective would not be achievable by addressing a single focal area.
- There are linkages and drivers of environmental degradation common to several focal areas.
- Integration maximizes global environmental benefits and minimizes trade-offs.
- A theory of change allows robust monitoring and assessment of outputs and specific indicators.

Source: <https://www.thegef.org/council-meeting-documents/draft-stap-working-paper-why-scientific-community-moving-toward>

The GEF has two unique assets

1. Scale
2. Access to Governments



Credits: NASA

Integration: IAPs



Good Growth
Partnership:
Cultivating
Sustainability
in the Global
Supply Chain



Sustainable
Cities –
Harnessing
Local Action
for Global
Commons



Fostering
Sustainability
and Resilience
for Food
Security in
Sub-Saharan
Africa

6 key elements for successful integration

1. Apply systems thinking
2. Articulate a theory of change
3. Engage stakeholders
4. Assess resilience
5. Devise adaptive implementation pathways
6. Develop good quality KM and learning



Source: <https://www.thegef.org/council-meeting-documents/draft-stap-working-paper-why-scientific-community-moving-toward>

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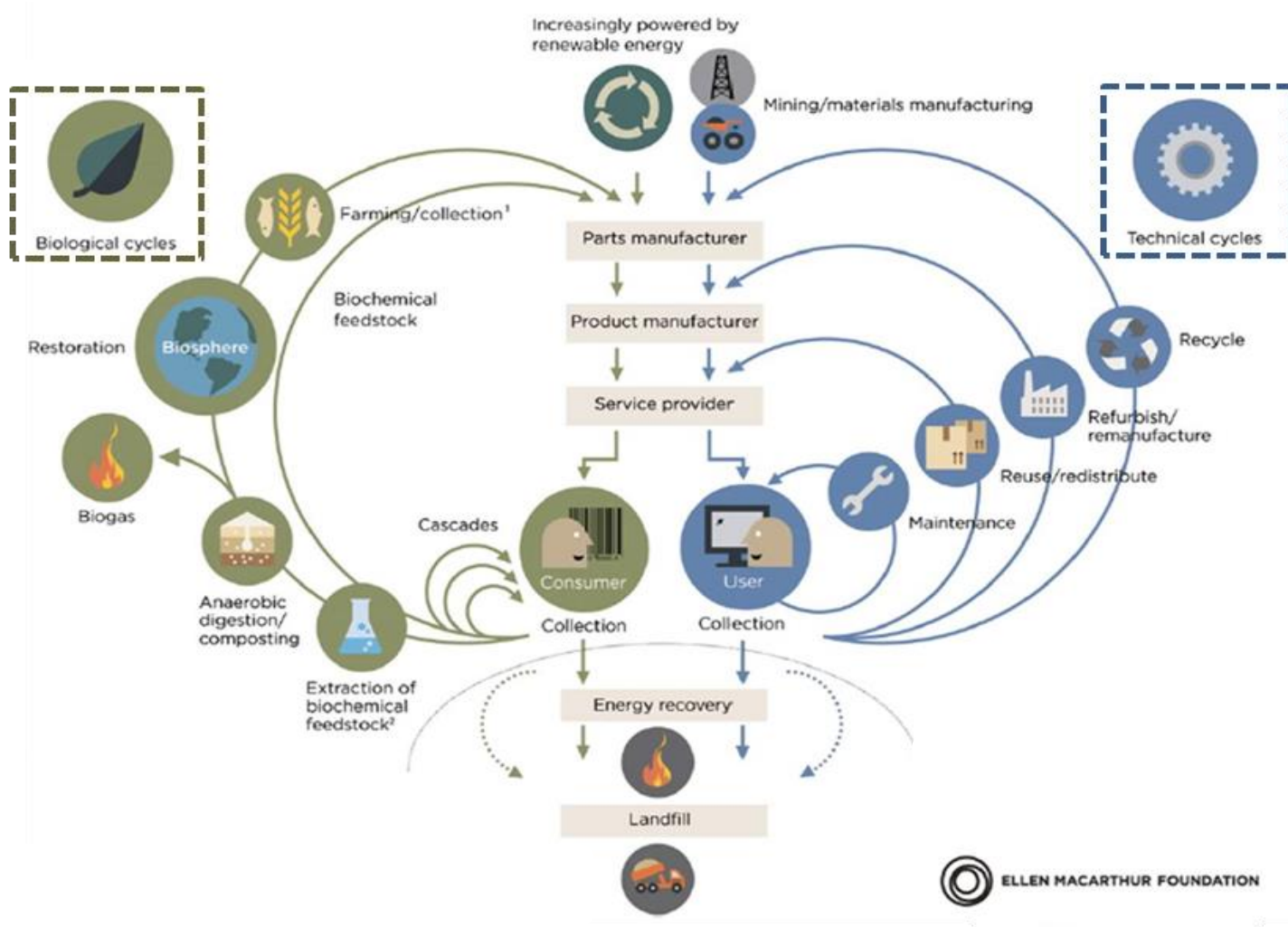
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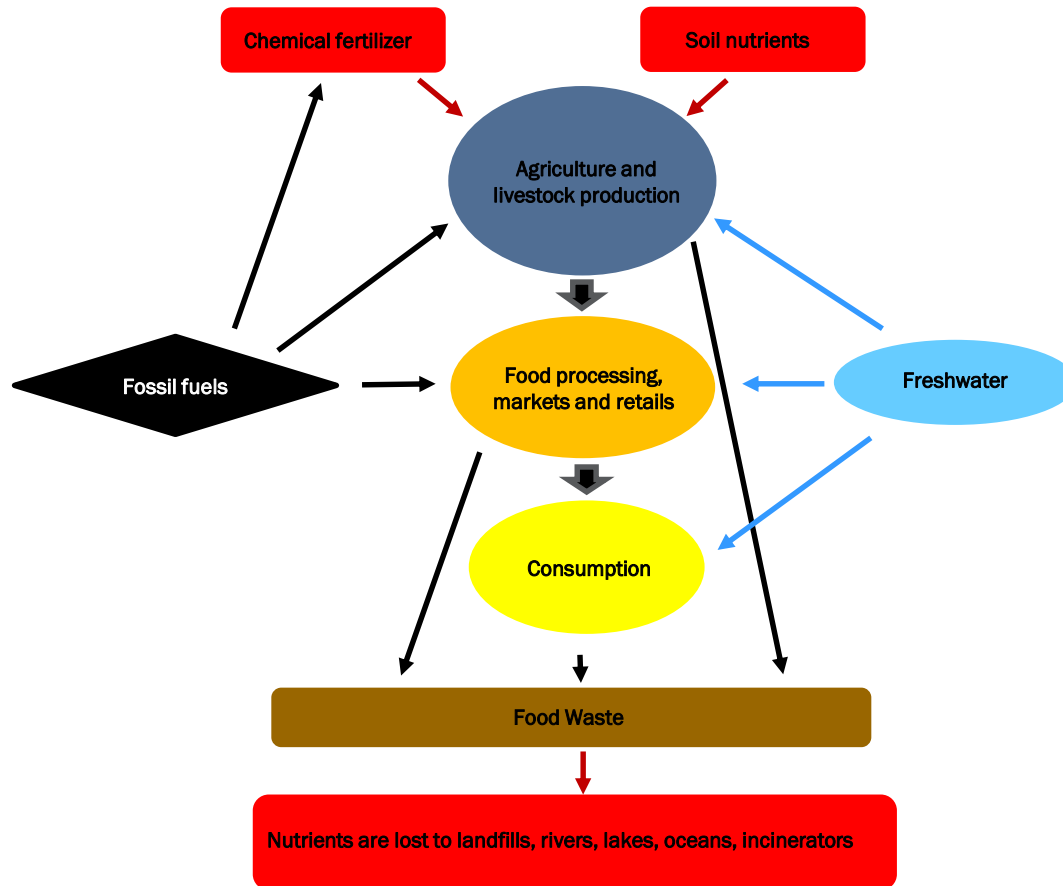
Work Program Screening

Circular Economy



ELLEN MACARTHUR FOUNDATION

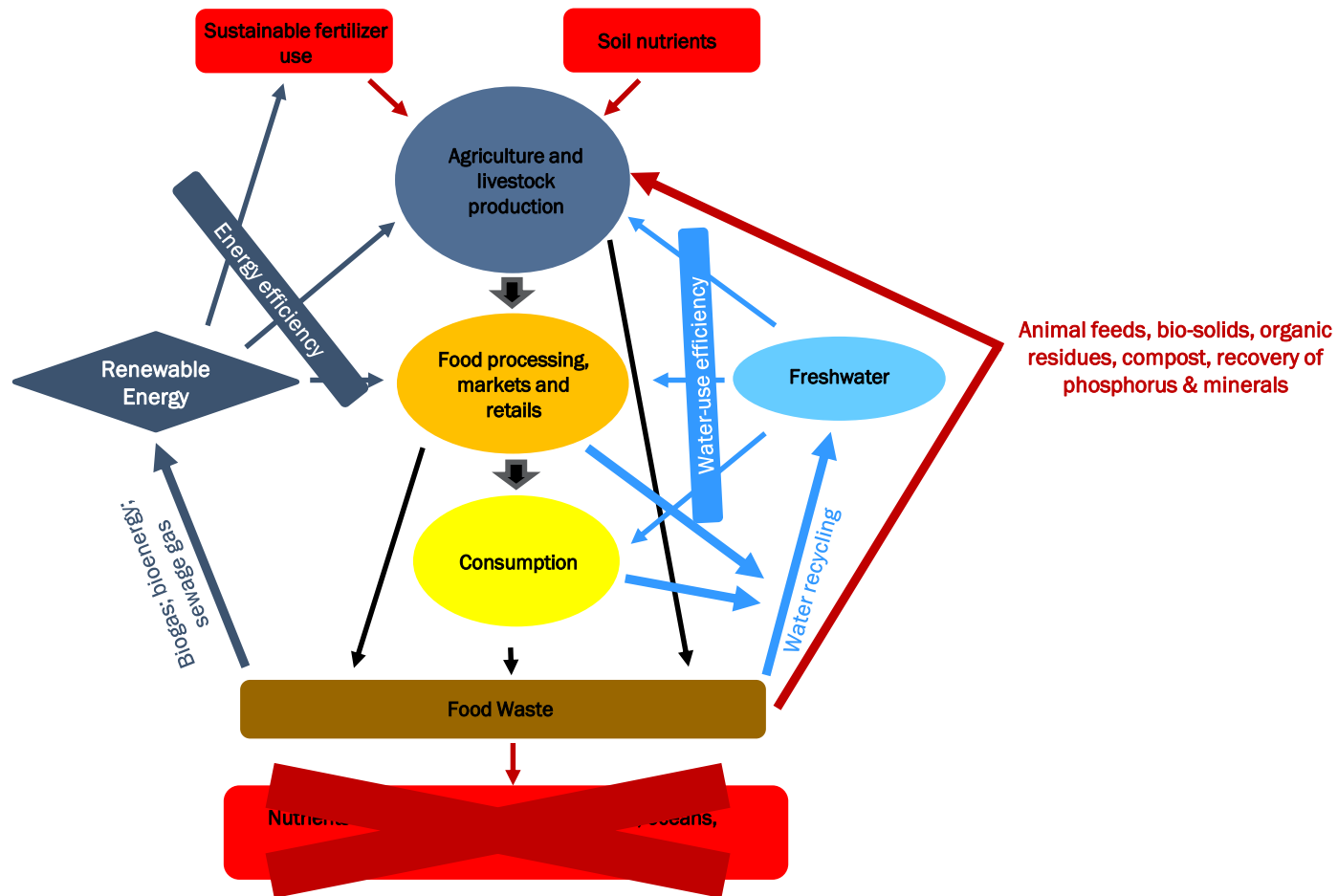
Agri-food Systems



What is the issue?

- 1/3 of total end-use energy
 - 1/4 of total GHG emissions
 - 2/3 of terrestrial biodiversity loss
 - 1/3 of land degradation
 - depletion of 2/3 of commercial fish stocks
 - over-exploitation of 1/5 of the world's aquifers
-

Agri-food Systems – more sustainable



What is the solution?

- Closing the nutrient cycle
- Reducing competition for productive land
- Reducing chemical fertilizers
- Reducing freshwater use
- Maintaining sustainable agro-ecological systems
- Deploying low-carbon energy, waste for energy
- Producing food within the urban landscape

Presentation Outline

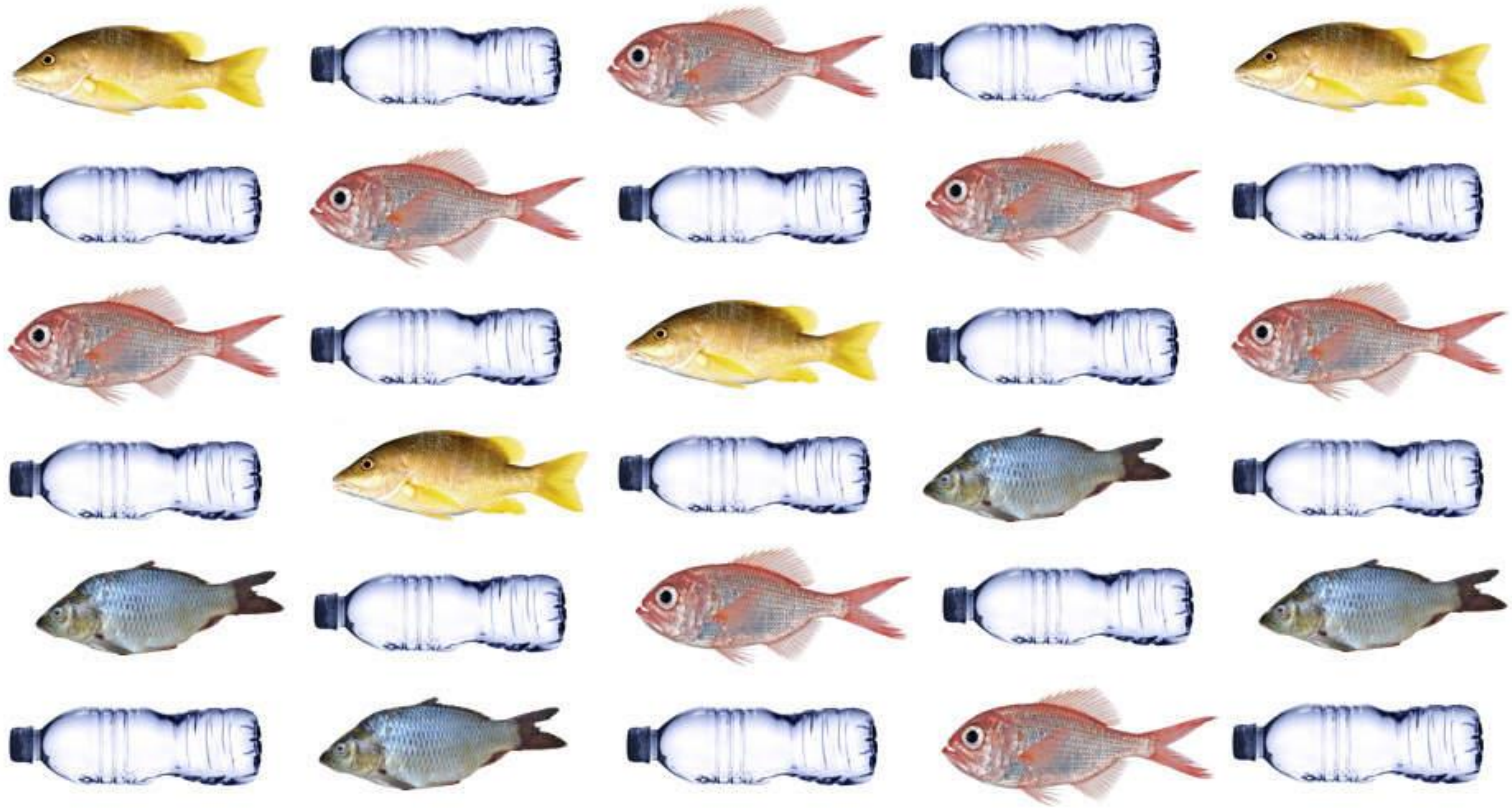
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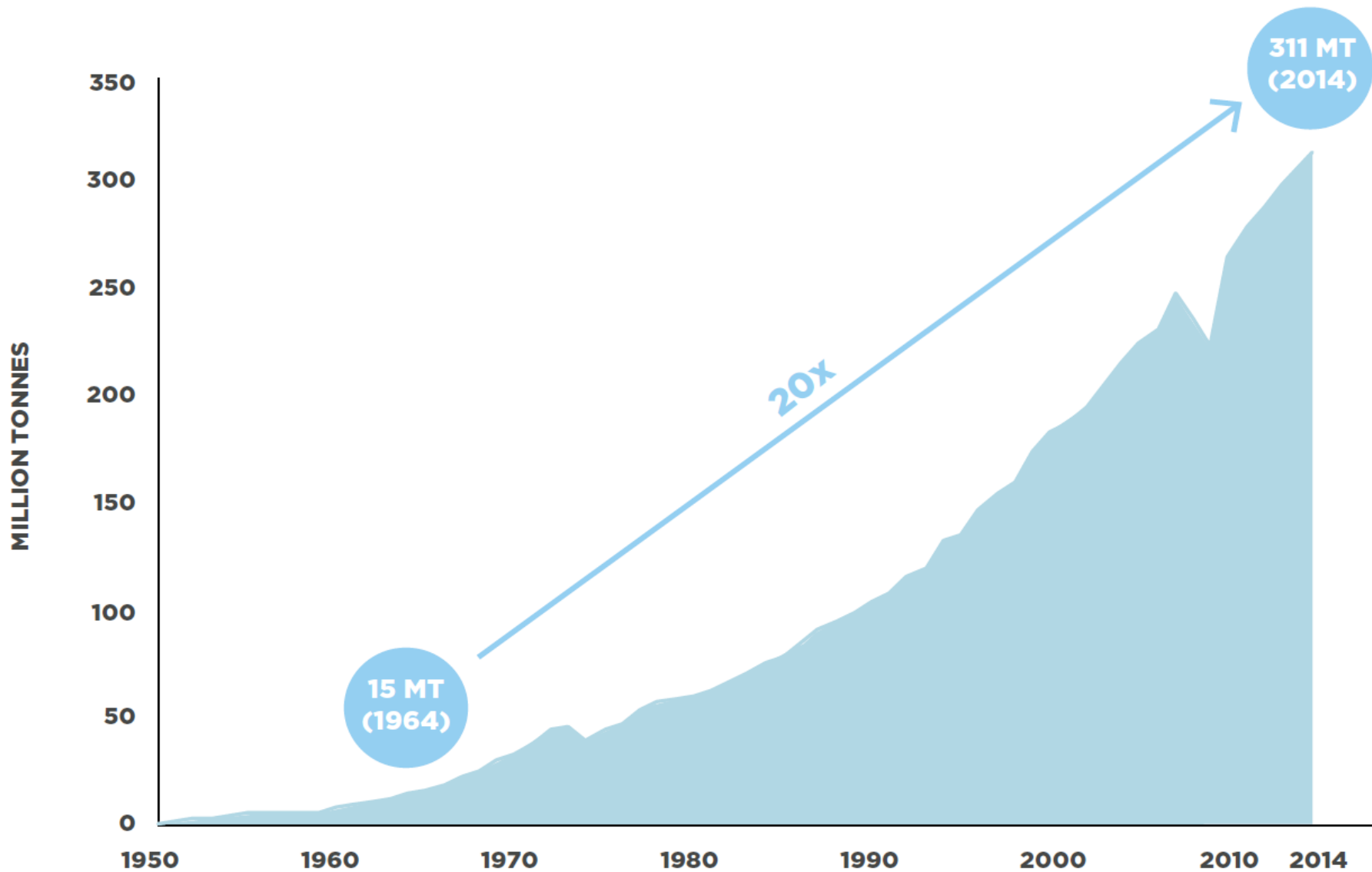
Assembly Papers: Circular
Economy - Food, and **Plastics**

Other STAP Assembly Papers

Work Program Screening

Plastics





Source: World Economic Forum: http://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf

What is the issue?

- Plastic production increased 20x 1964 -2015
- Expected to double in 20 yrs; quadruple 2050
- Some contain toxic chemicals (POPs)
- Stay in environment for up to 500 yrs
- End up in the food chain
- Projected to use 1/5 of oil by 2050



Photo credit: Justin Hofman

What is the solution?

Design for longevity, reusability, waste prevention

- Encourage production from biodegradable materials
- Use waste as a resource
- Recover for reintroduction back to the economy
- Provide incentives for recycling and reuse
- Support innovative research
- Create a supportive policy environment

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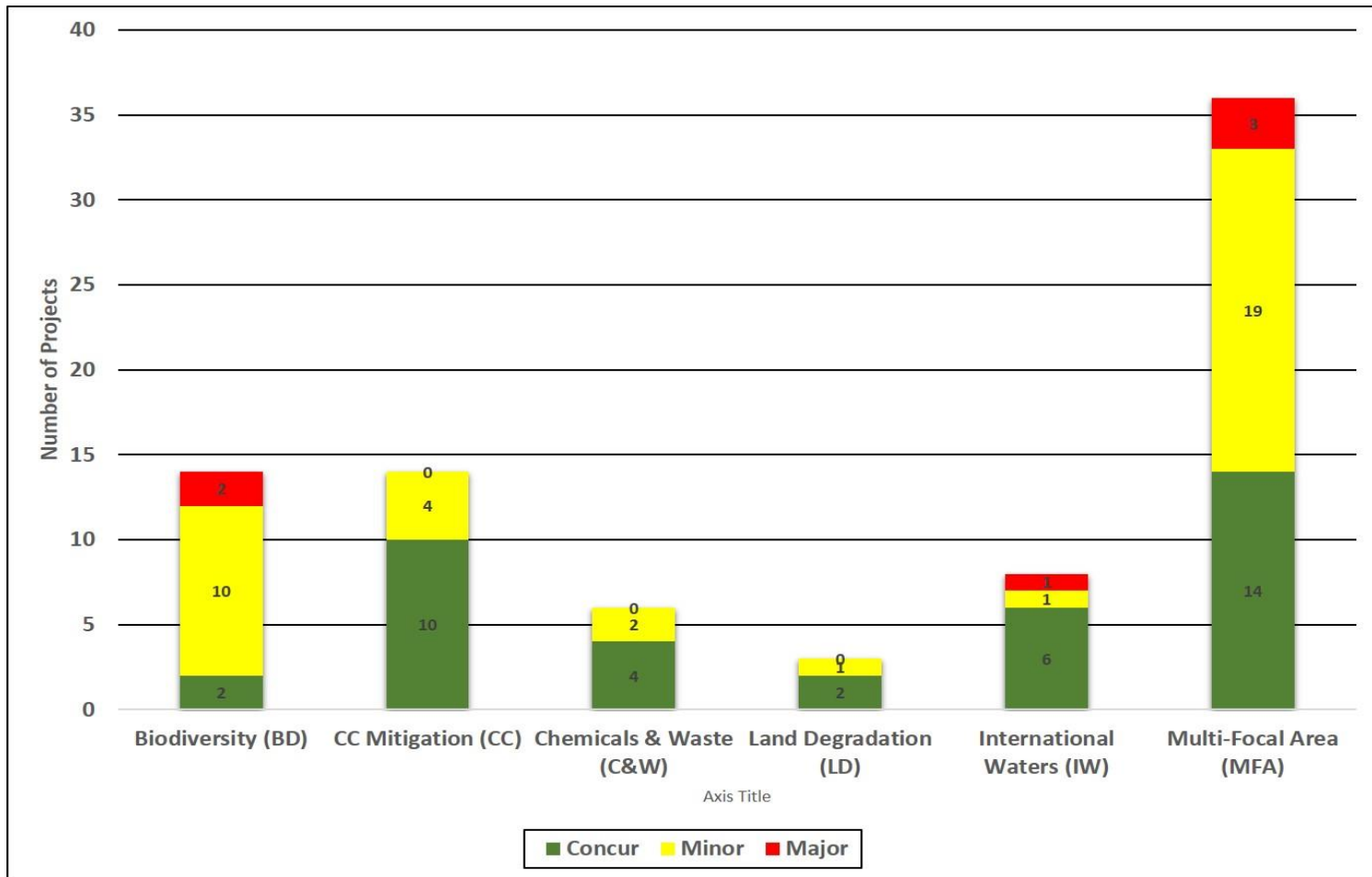
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2018 STAP Assembly Papers

Five other papers for GEF Assembly:

1. Environmental Security
2. Novel Entities
3. Innovation
4. Local Commons/Global Benefits
5. Key interactions between MEAs and SDGs
6. Science of integrated approaches
7. Knowledge Management
8. Circular Economy: Food and Plastics

Observations on the GEF Work Program



Observations from Work Program

- 82 projects screened representing about \$500m.
- 6 majors (7%), slightly lower % than usual.
- **Good projects:** clearly described, with a good theory of change; demonstrate strong understanding of the social-ecological system; build on strong baselines; well-designed interventions; engage all stakeholders; and capture learning.
- **Some projects would benefit from:** a clearer logic; assumptions substantiated; clearly defined strategies to address key drivers; resilience and adaptive management.

Questions?



Jellyfish Jockey: photo by A. Berberin