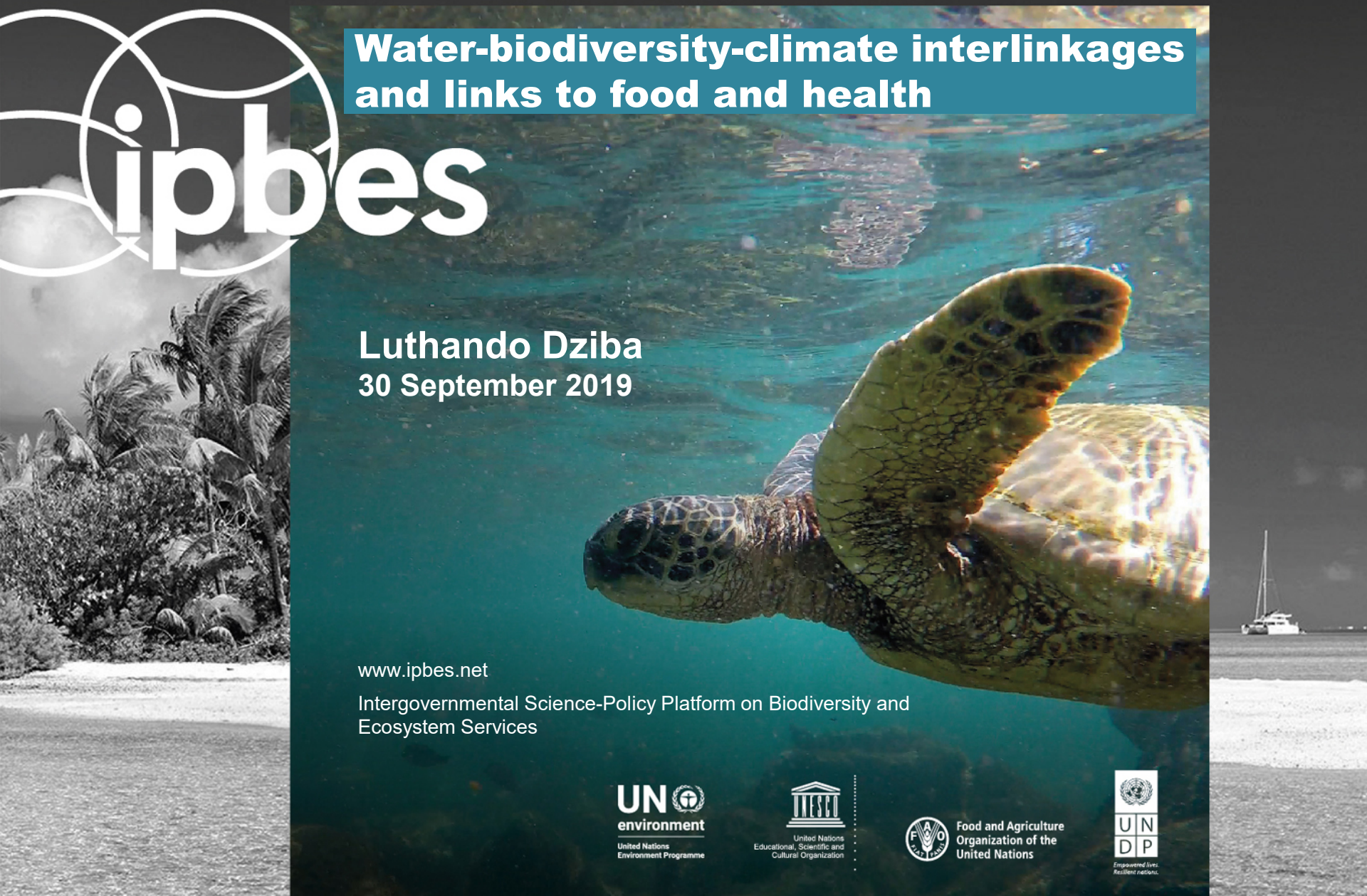
Nexus Assessment e-Scoping



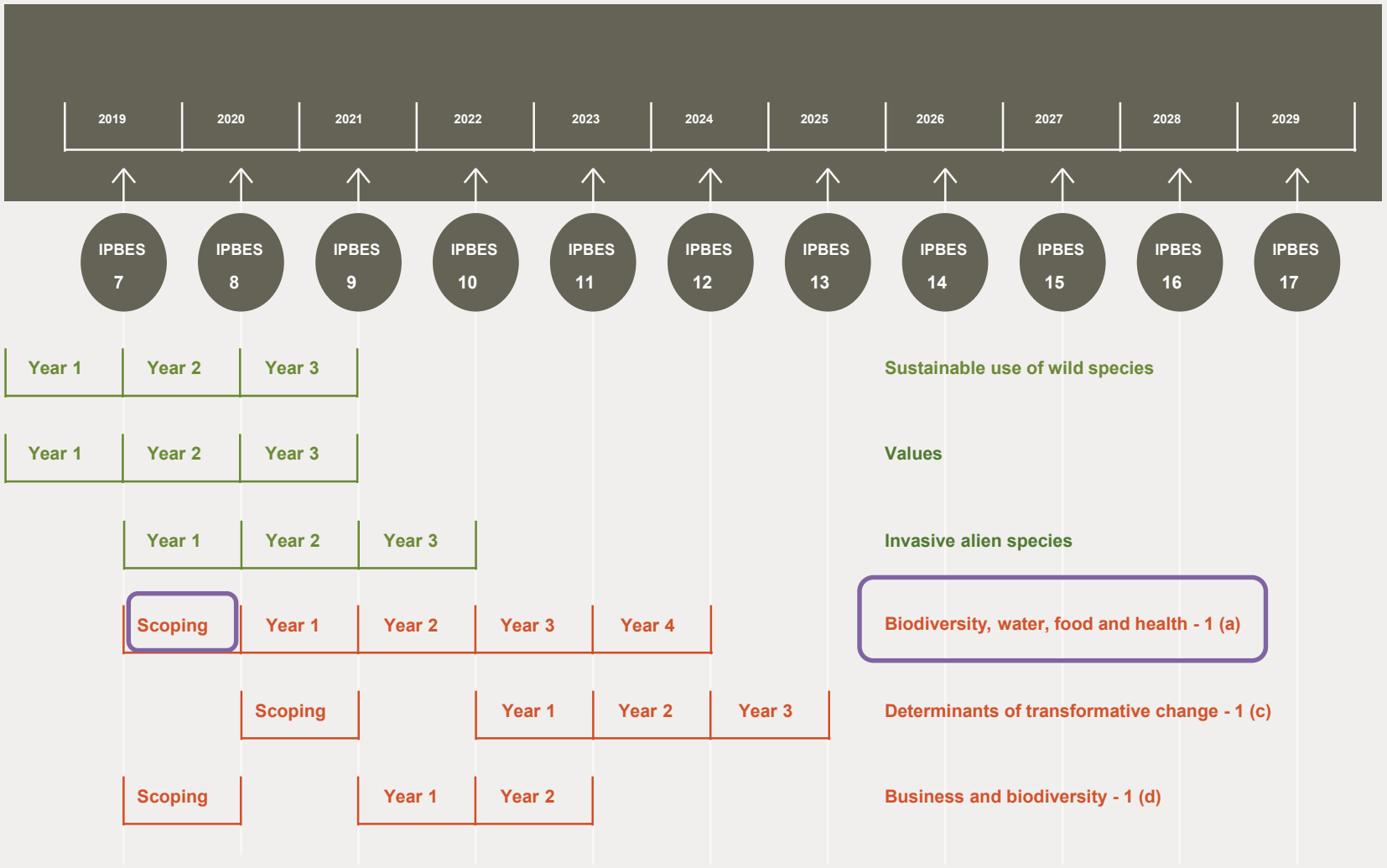
INTRODUCTION TO THE NEXUS ASSESSMENT

Deliverable 1 (a): Assessing the interlinkages among biodiversity, water, food and health (thematic assessment)

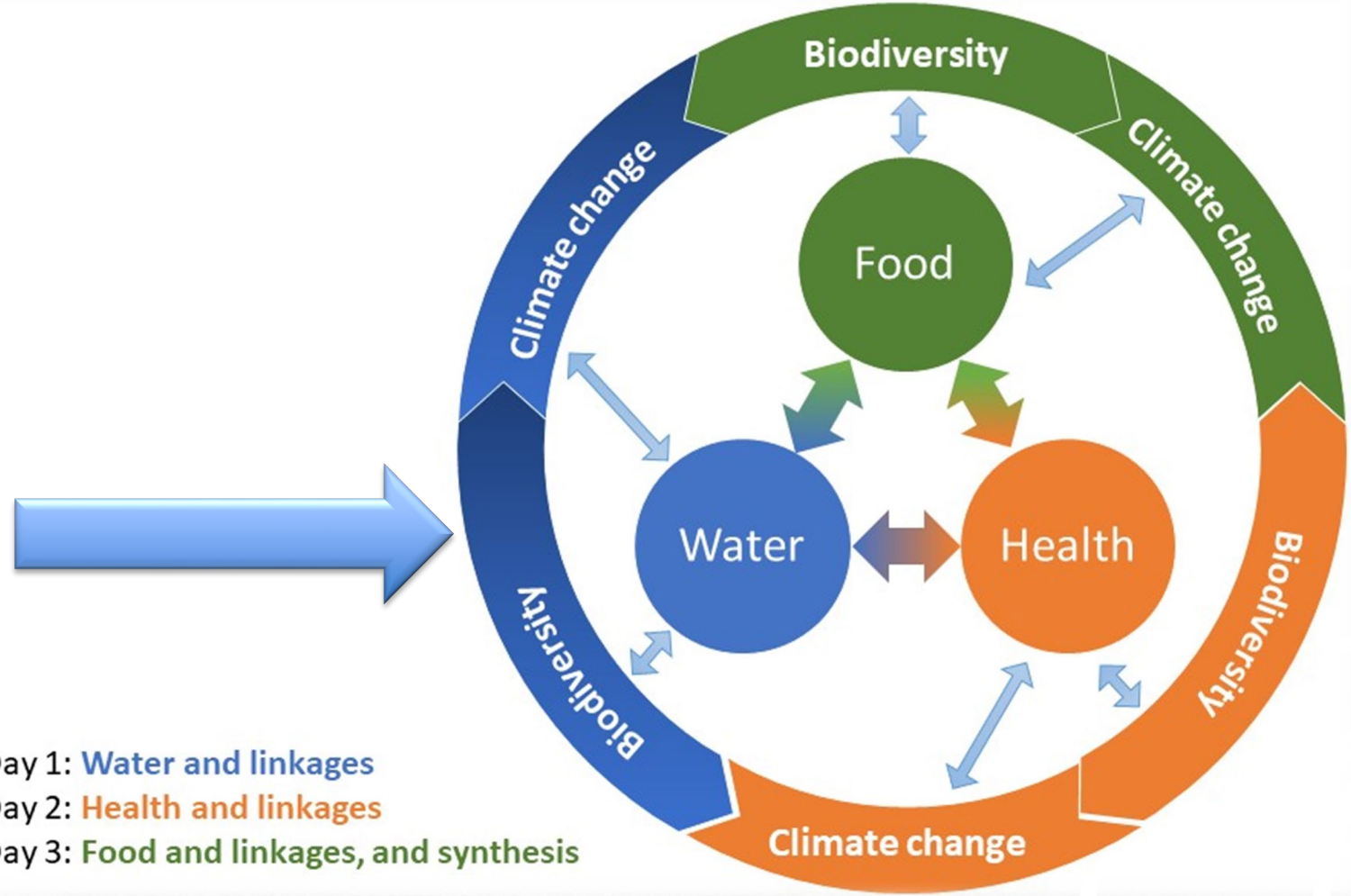
The new work programme of IPBES up to 2030 :
Overall structure: 6 objectives and 15 deliverables

OBJECTIVES of the work programme	**TOPIC 1** Promoting biodiversity to achieve the 2030 Agenda for Sustainable Development	**TOPIC 2** Understanding the underlying causes of biodiversity loss and determinants of transformative change to achieve the 2050 vision for biodiversity	**TOPIC 3** Measuring business impact and dependence on biodiversity and nature's contributions to people	**Supporting the achievement of the overall objective of IPBES**
OBJECTIVE 1 Assessing knowledge	**Deliverable 1 (a): Assessing interlinkages among biodiversity, water, food and health (thematic assessment)** **Deliverable 1(b):** Assessing the interlinkages between biodiversity and climate change (technical paper)	**Deliverable 1 (c):** Assessing the underlying causes of biodiversity loss and the determinants of transformative change (thematic assessment)	**Deliverable 1 (d):** Assessing the impact and dependence of business on biodiversity and nature's contributions to people (fast-track methodological assessment)	
OBJECTIVE 2 Building capacity	**Deliverable 2 (a):** Enhanced learning and engagement **Deliverable 2 (b):** Facilitated access to expertise and information **Deliverable 2 (c):** Strengthened national and regional capacities			
OBJECTIVE 3 Strengthening the knowledge foundations	**Deliverable 3 (a):** Advanced work on knowledge and data **Deliverable 3 (b):** Enhanced recognition of and work with indigenous and local knowledge systems			
OBJECTIVE 4 Supporting policy	**Deliverable 4 (a):** Advanced work on policy tools and methodologies **Deliverable 4 (b):** Advanced work on scenarios and models of biodiversity and ecosystem services **Deliverable 4 (c):** Advanced work on multiple values			
OBJECTIVE 5 Communicating and engaging	**Deliverable 5 (a):** Strengthened communication **Deliverable 5 (b):** Strengthened engagement of Governments and stakeholders			
OBJECTIVE 6 Reviewing effectiveness	**Deliverable 6:** Reviewed effectiveness			

The new work programme of IPBES up to 2030 :
Timing of initial assessments



The outline of the e-scoping process for the Nexus Assessment



Day 1: Water and linkages
Day 2: Health and linkages
Day 3: Food and linkages, and synthesis

- IPBES recognizes **strong interlinkages** among the **globally agreed goals** of **food and water security**, **health** for all, **protecting biodiversity on land and in the oceans** and **combating climate change**, among others.

- In fact, **the Sustainable Development Goals** are **regarded as "integrated and indivisible"**, ***balancing the economic, social and environmental dimensions of sustainable development***.

- Similarly, **the objectives of the Rio Conventions** (Convention on Biological Diversity, United Nations Framework Convention on Climate Change and United Nations Convention to Combat Desertification) **are seen as interlinked**.

- Interlinkages take various forms, including synergies, co-benefits and trade-offs.

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The assessment will cover interlinkages among/between:

1. the health of people, crops, livestock, soil, wildlife and the environment including through the One Health approach;
2. food production and biodiversity (within and outside production systems), including the control of pests and diseases, pollination and nutrient cycling;
3. fertilizers, crop nutrition and productivity, water quality, biodiversity (in terrestrial, freshwater and marine systems) and greenhouse gas emissions;
4. dietary diversity, health and the diversity of crops, livestock and other components of biodiversity in agricultural ecosystems;
5. the composition and diversity of the human microbiome and biodiversity in the environment, and implications for human settlements;
6. climate mitigation and adaptation strategies, including ecosystem based approaches, and how these could affect biodiversity

The assessment will also look at:

6. The significance of **marine biodiversity for human health**, including for **food security**, and the consequences of multiple stressors on marine ecosystems (including **pathogens, chemicals, climate change** and **habitat degradation**);

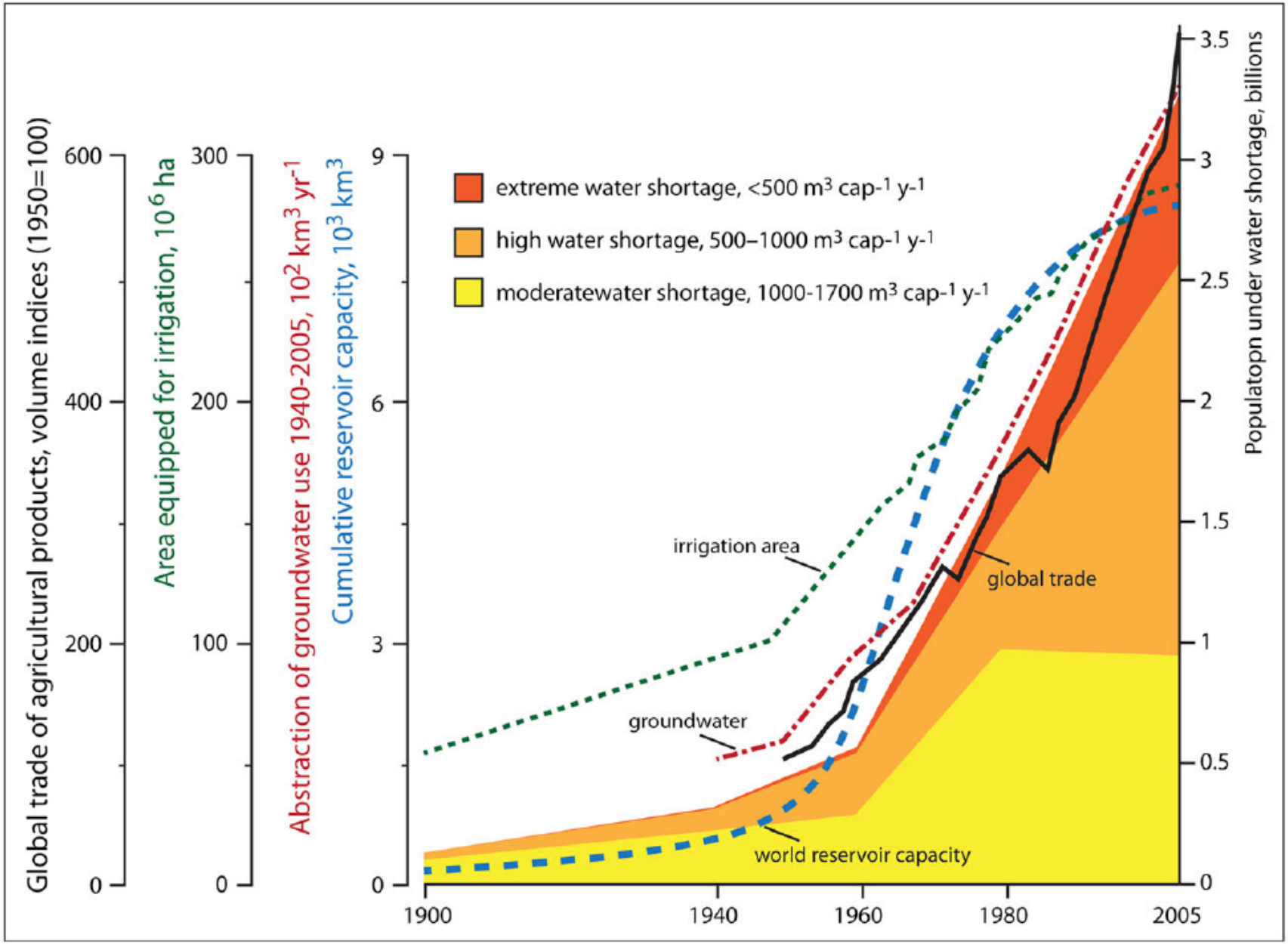
7. The **contribution of biodiversity** and the natural environment in **promoting mental and physical health, particularly in urban areas**;

8. The relationships among **biodiversity, ecosystem degradation and infectious disease emergence**, including the effects of ecological community structure and composition, habitat disturbance, human-wildlife contact, and the implications for **land use management**;

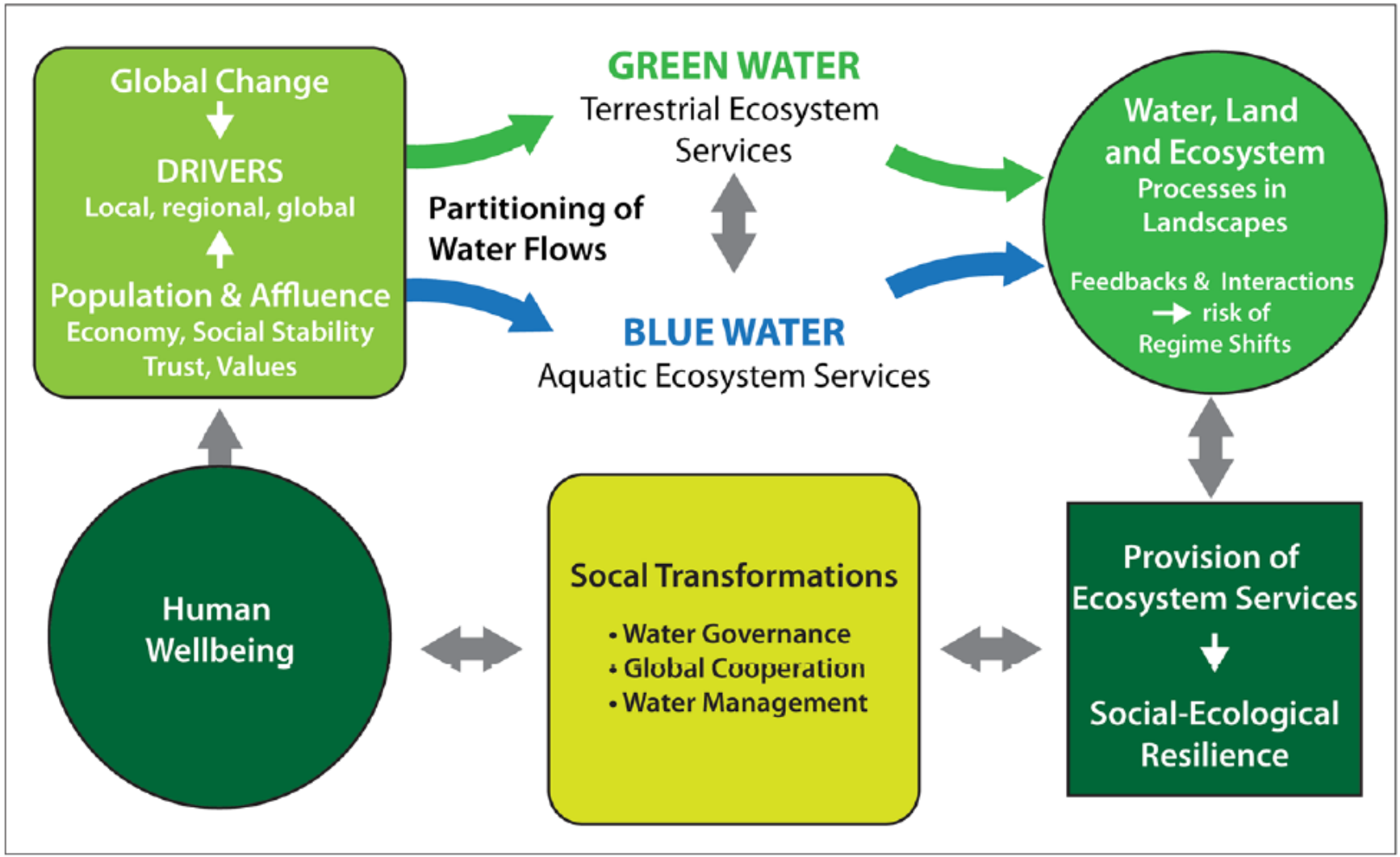
9. The ways in which projected changes in climate will affect biodiversity and projected biodiversity losses will affect climate;

10. The ways in which projected changes in climate and biodiversity loss will affect agricultural production, water resources and human health.

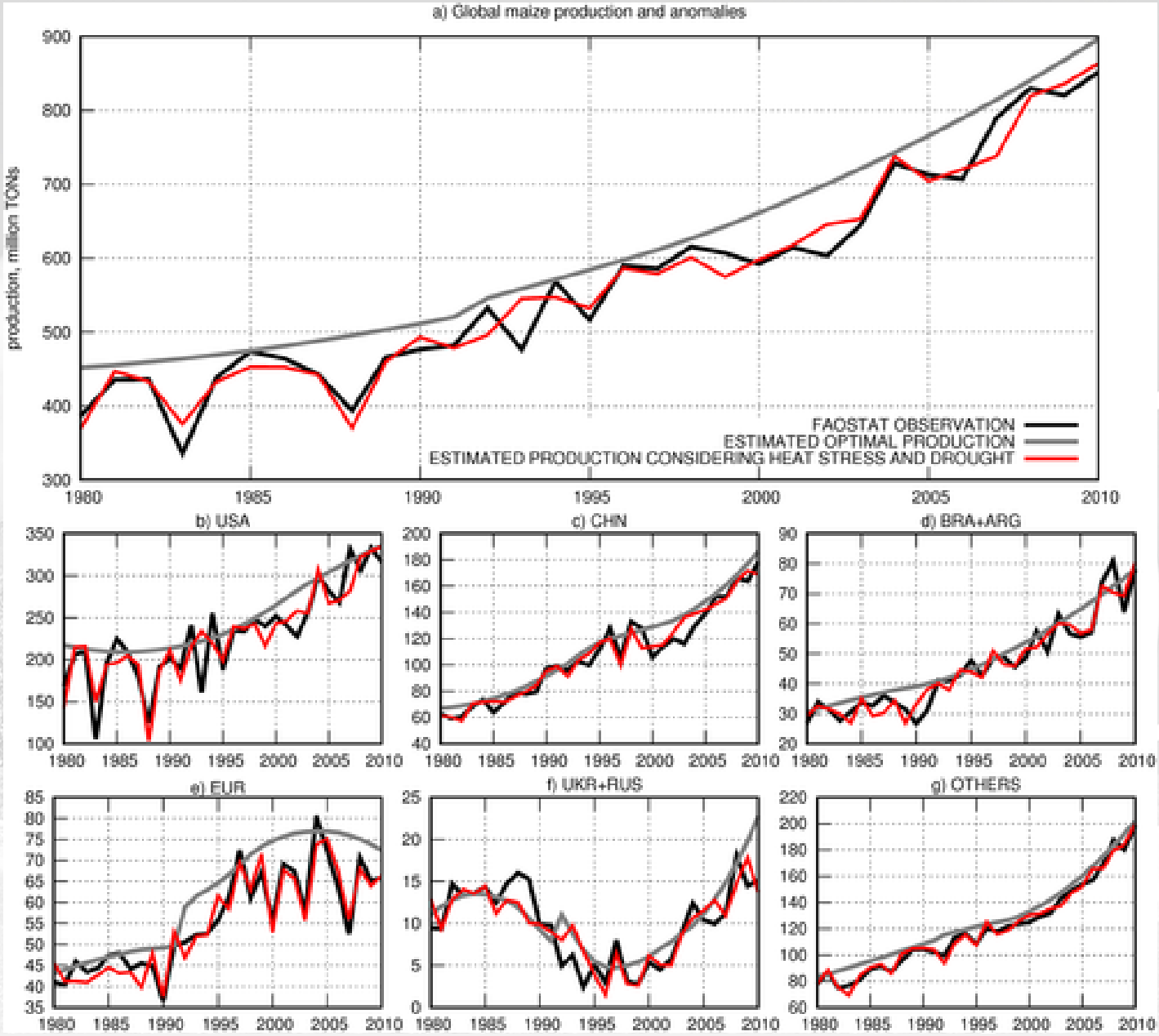
Global water use / water allocation trends



Interconnectedness of the water resources system



When Will Current Climate Extremes Affecting Maize Production Become the Norm?



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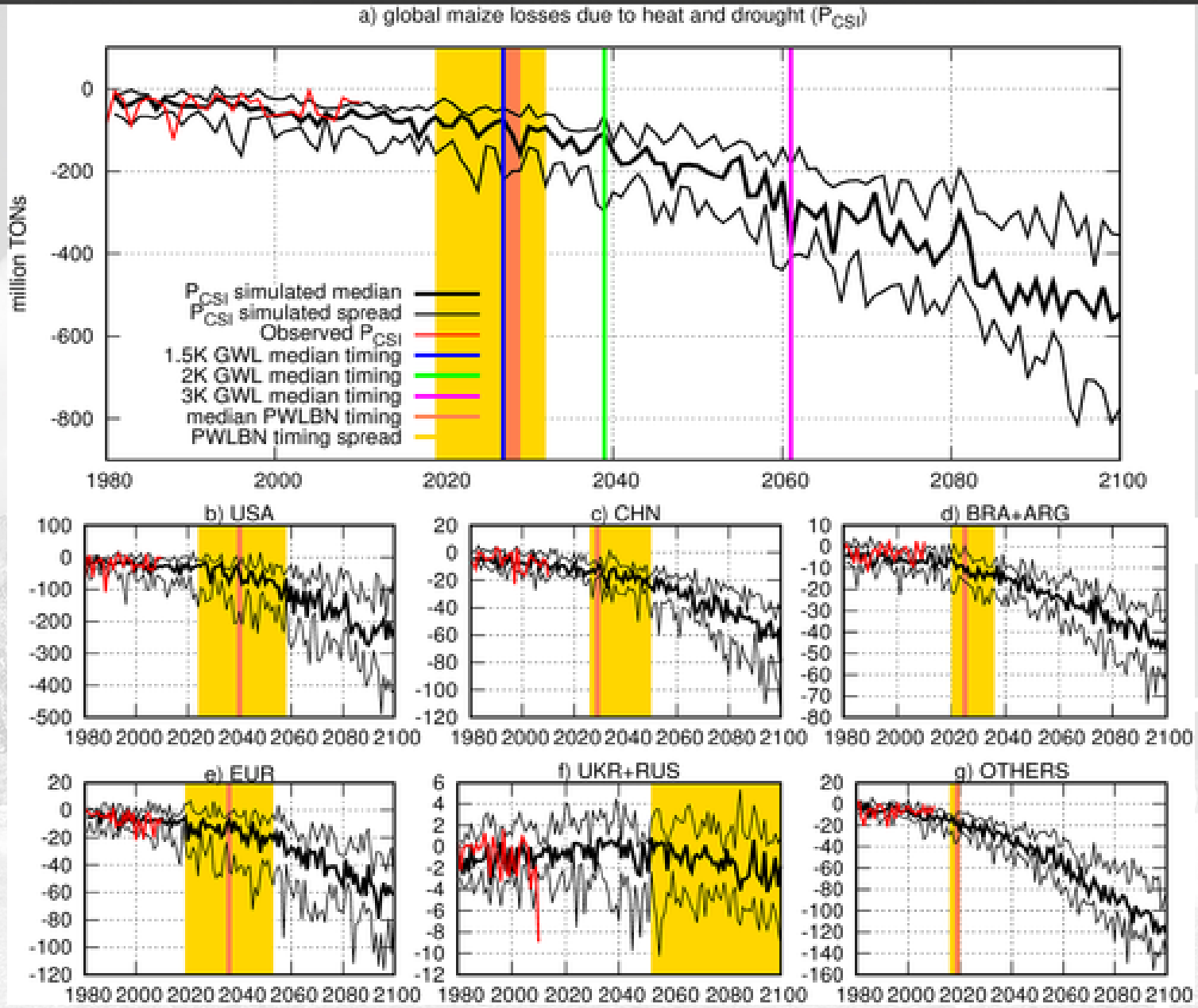

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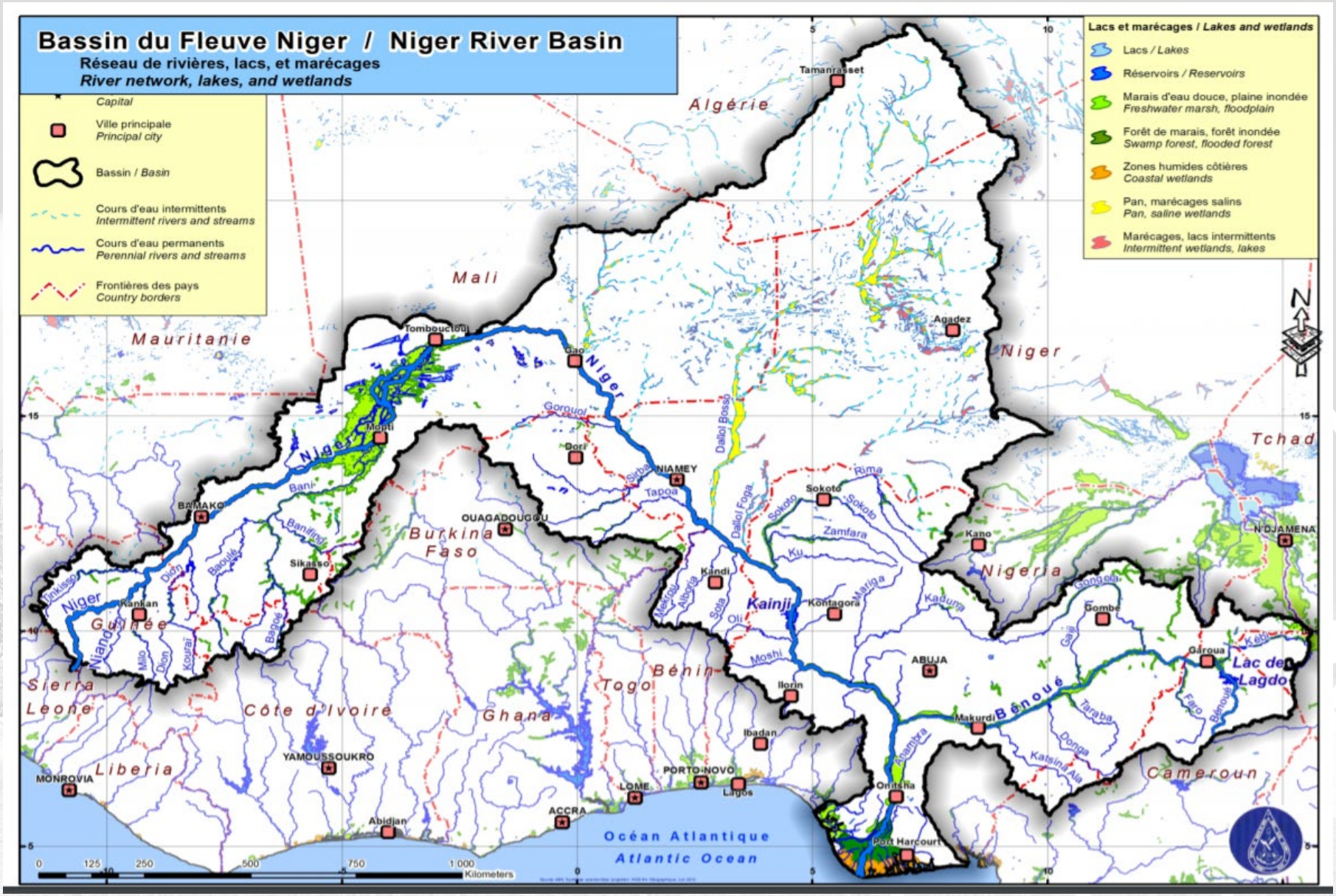
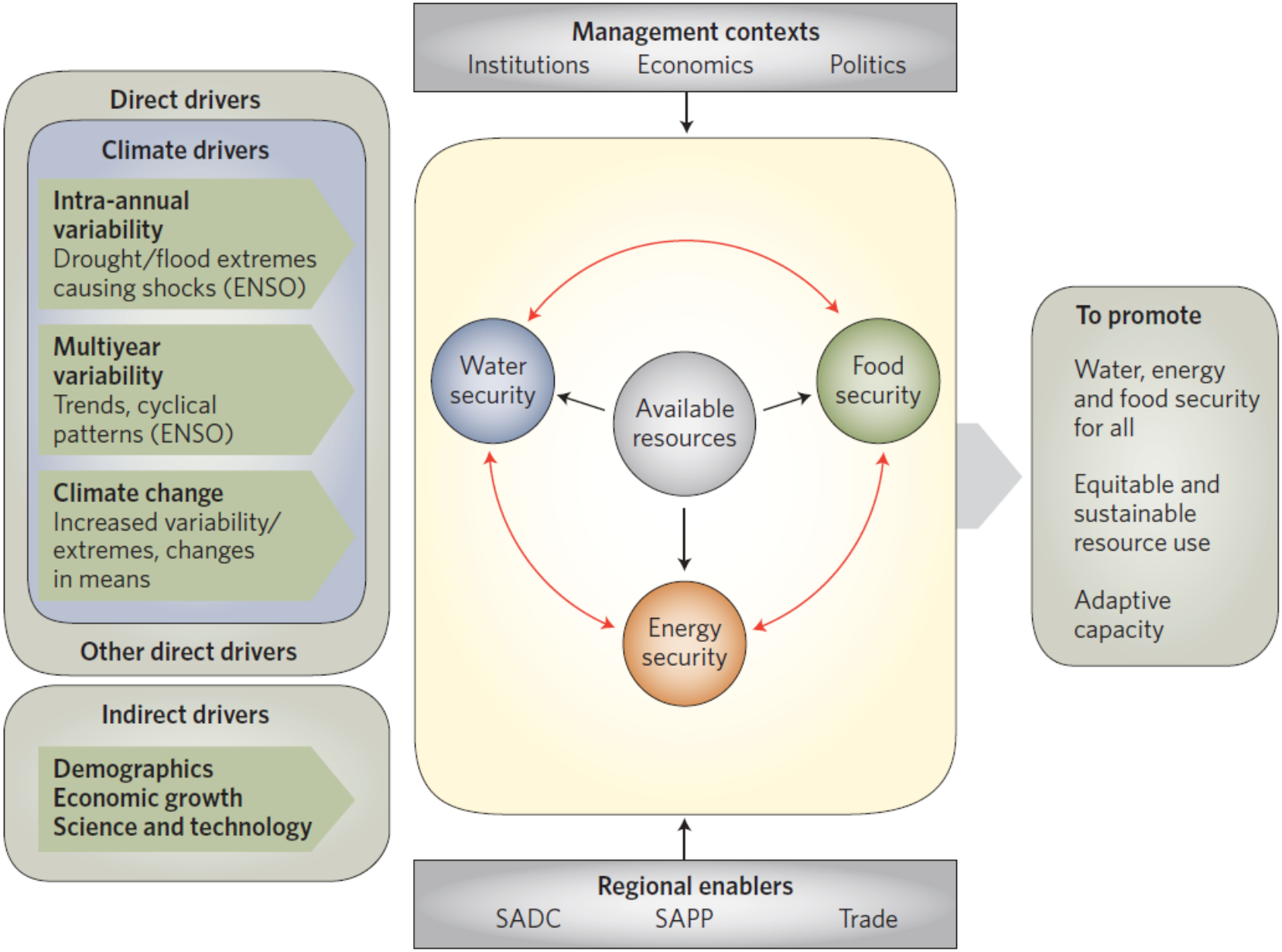
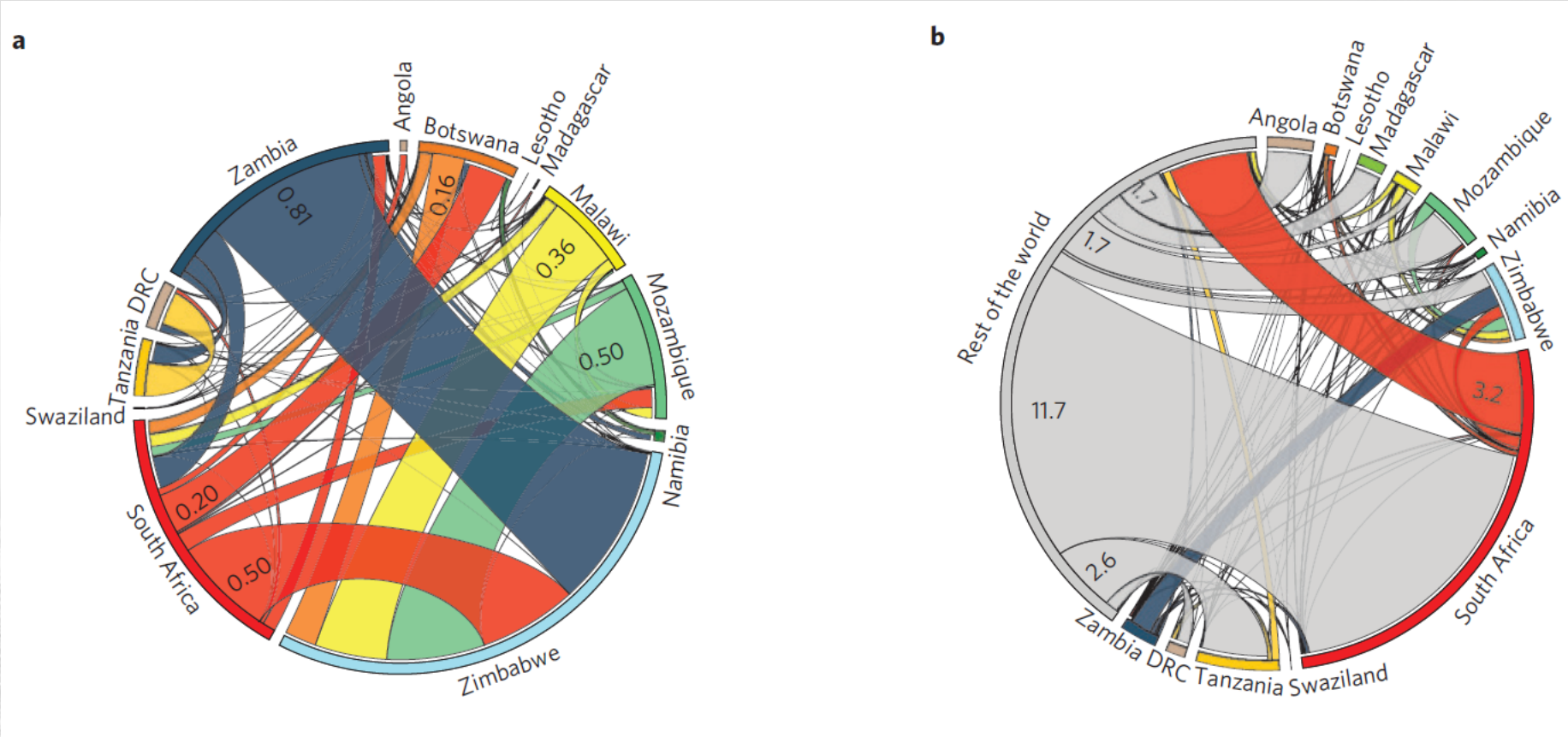
The river basins…



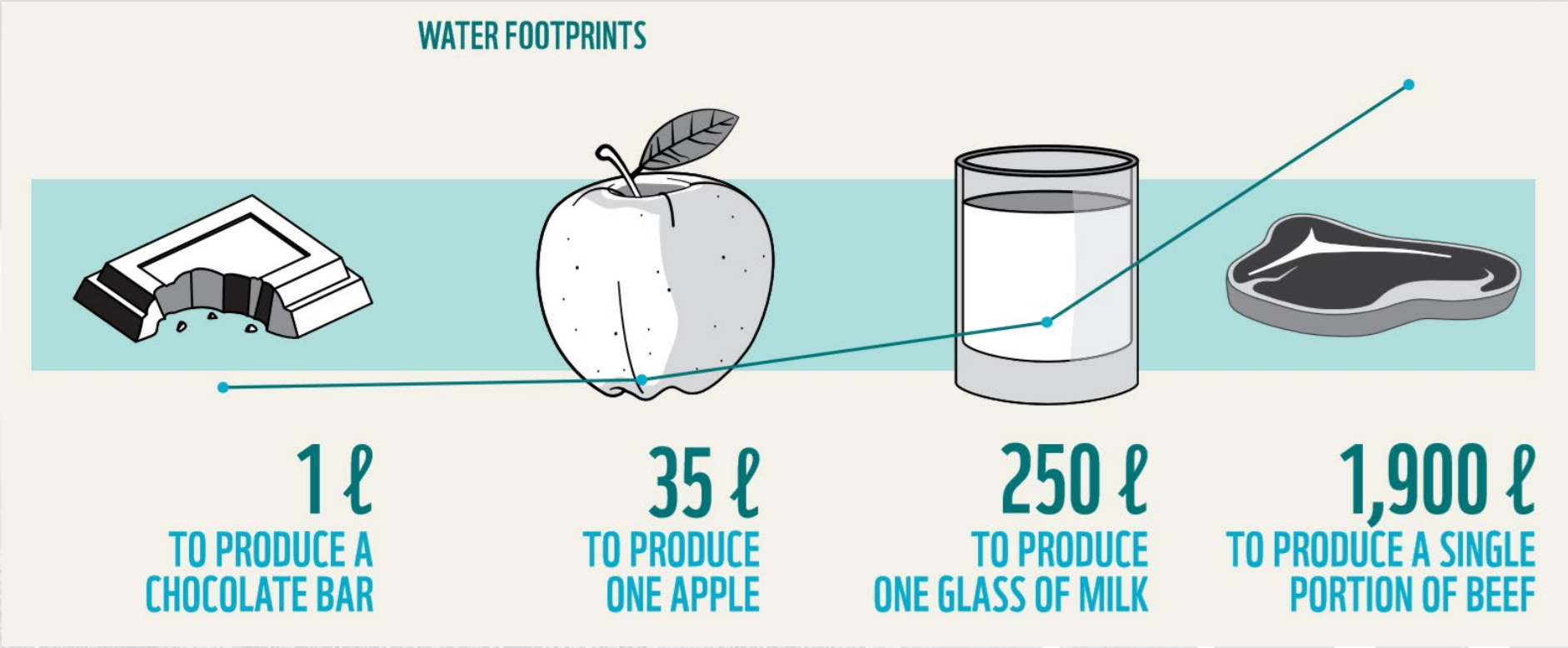
Climate drivers of the food-energy-water nexus in southern Africa



Water resources transfers through food trade (imbedded water)



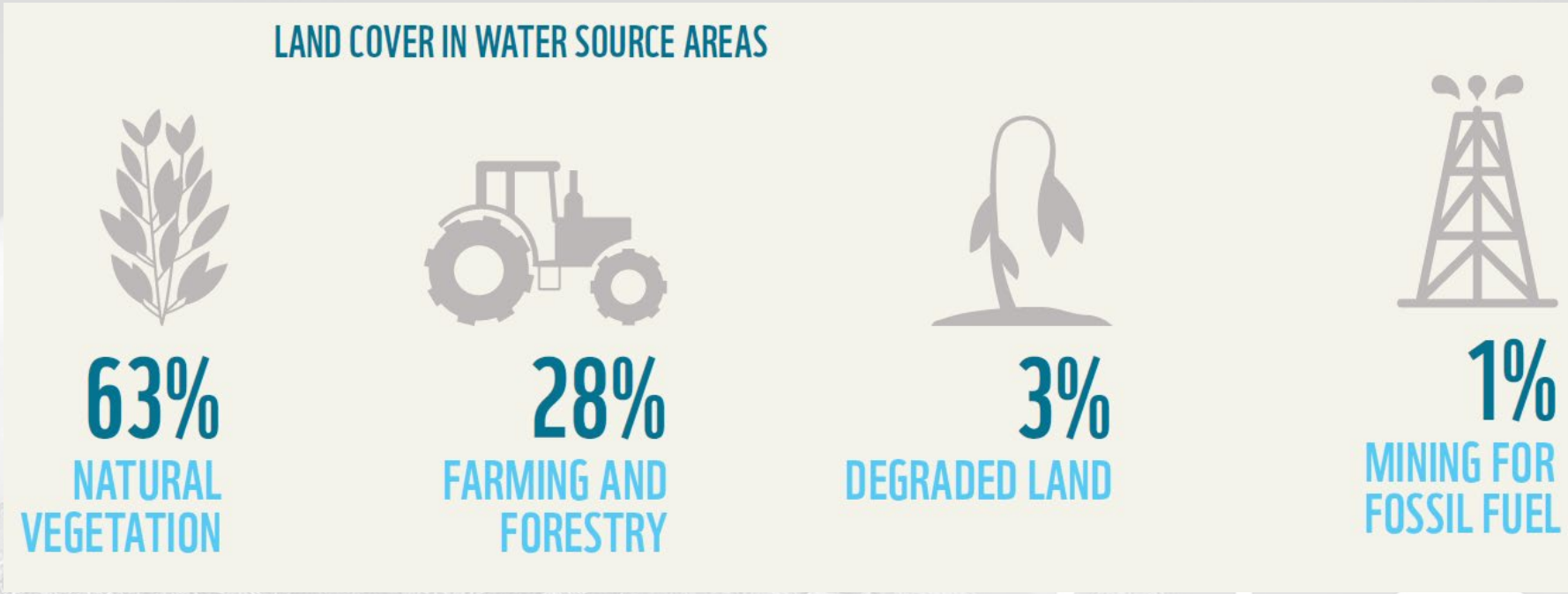
South Africa's national water footprint



25 LITRES
PER PERSON PER DAY IS FREE BASIC WATER

490mm
SOUTH AFRICA'S ANNUAL RAINFALL IS HALF THE WORLD AVERAGE

Land cover in water source areas: role of natural vegetation (biodiversity)



Integration…

Questions, Discussion…

Discussion

What are in your opinion the most important questions that should be addressed by the nexus assessment under topic 1: Synergies, co-benefits and trade-offs regarding water, biodiversity, and climate change; water and food; water and health?

ipbes

MERCI / THANK YOU / ENKOSI