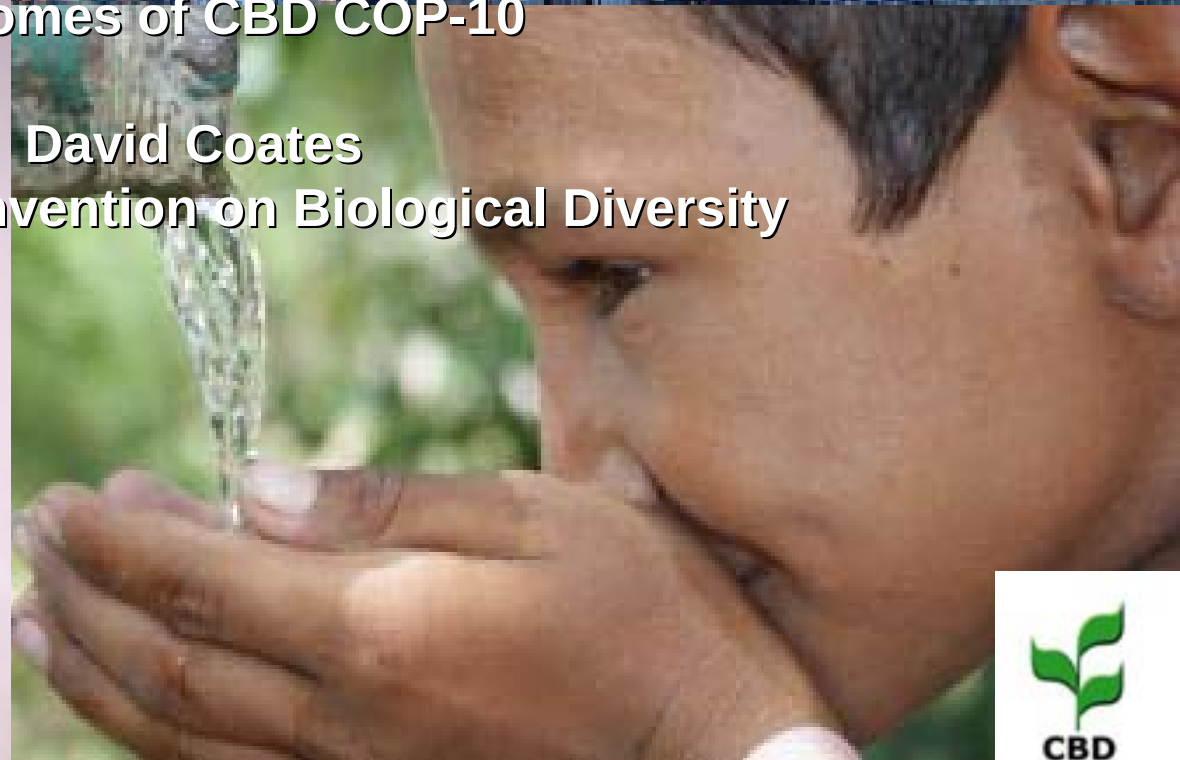


Biodiversity, Water and Cities

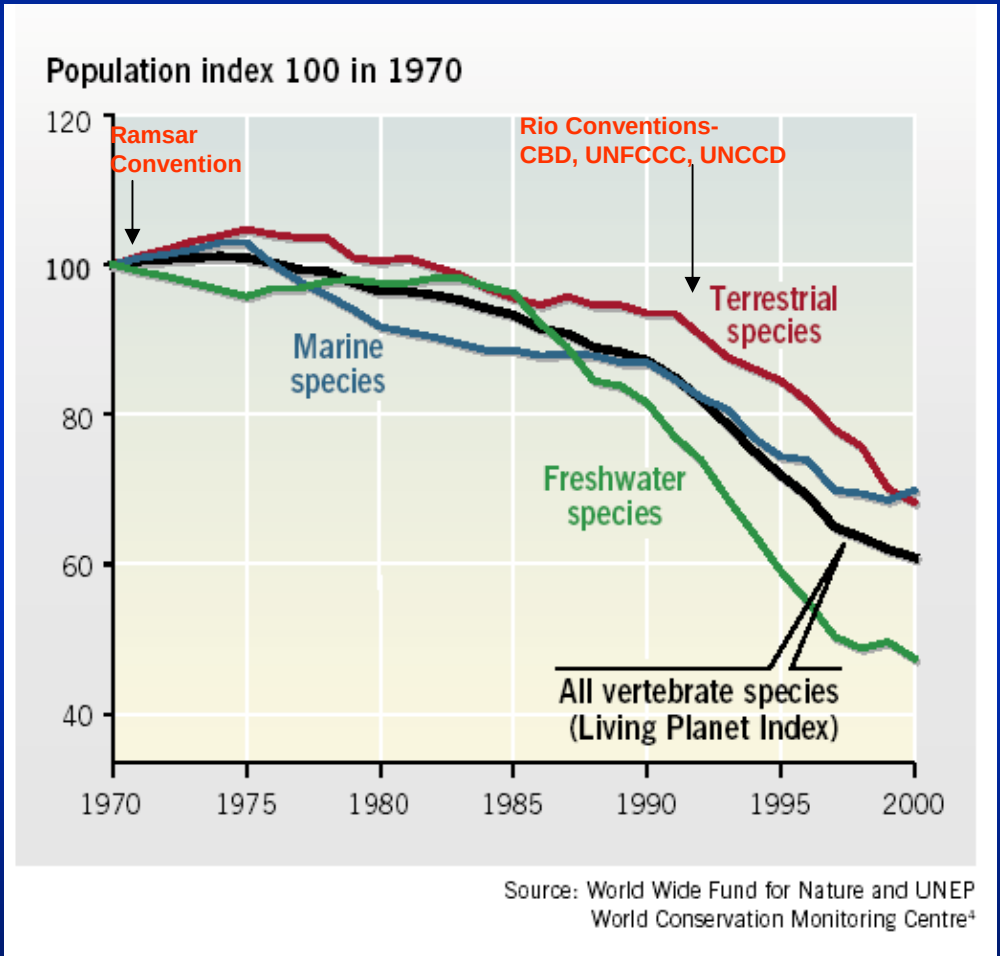
Outcomes of CBD COP-10

David Coates
Secretariat, Convention on Biological Diversity

Overview of the presentation:

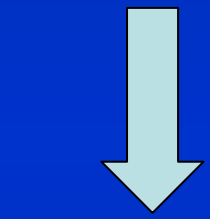
- Some conclusions re. the review of biodiversity and water underpinning outcomes CBD COP-10:
  - The importance of water (not covered in detail here – you know already!)
  - Water and poverty reduction
  - The economics of water
  - Water and climate change
  - Water and biodiversity linkages
- CBD COP-10 outcomes
  - On water
  - On cities and local authorities
- Ramsar COP-10 outcomes

The problem?


Population index 100 in 1970
120
100
80
60
40
1970
1975
1980
1985
1990
1995
2000
Ramsar Convention
Rio Conventions- CBD, UNFCCC, UNCCD
Terrestrial species
Marine species
Freshwater species
All vertebrate species (Living Planet Index)
Source: World Wide Fund for Nature and UNEP World Conservation Monitoring Centre[4]

19th – 20th Century perspective

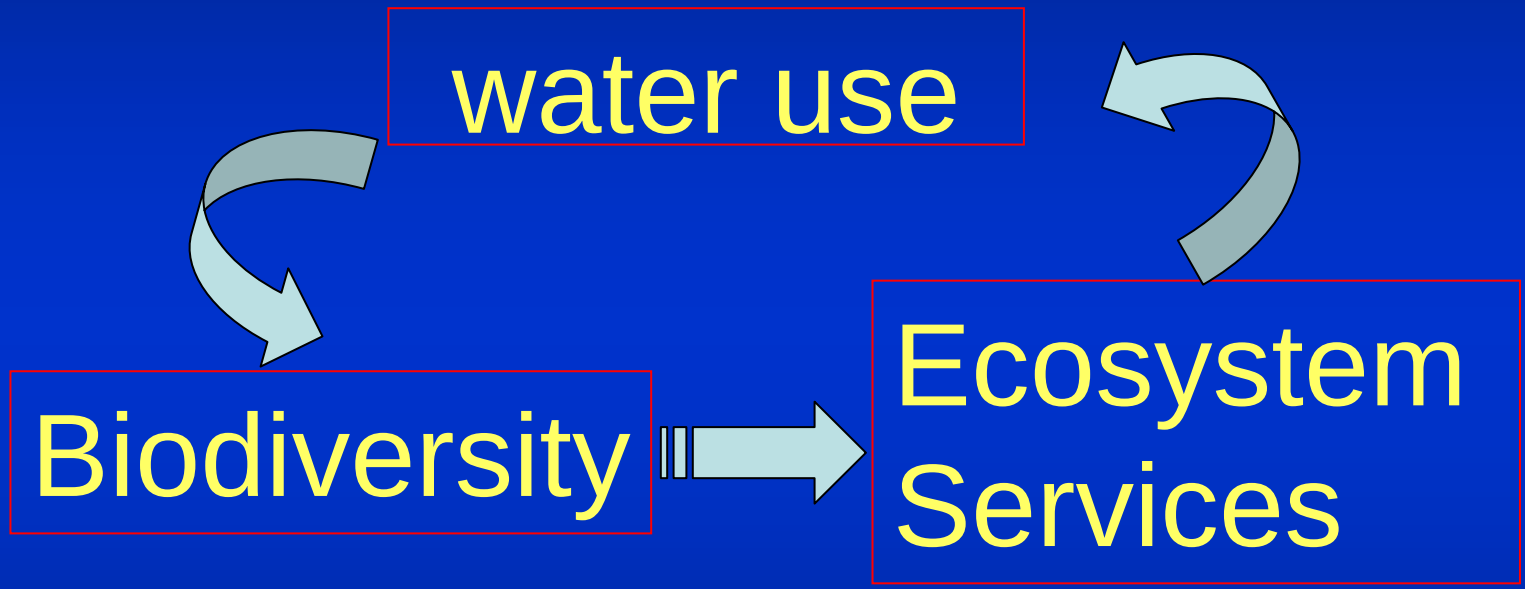
water use



Tough Luck

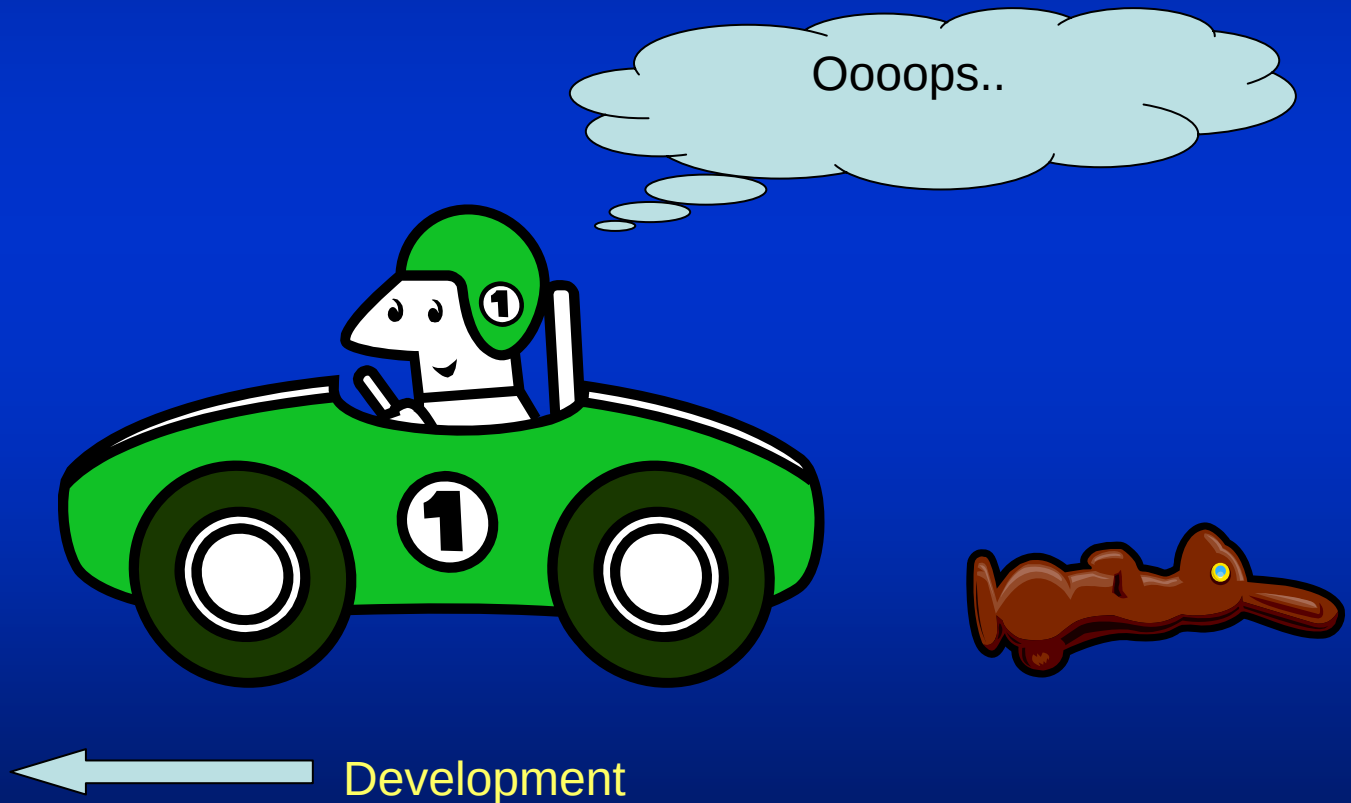
biodiversity

21st Century ?



19th – 20th Century perspective

Biodiversity as the victim (road-kill)



Development

21st Century ?

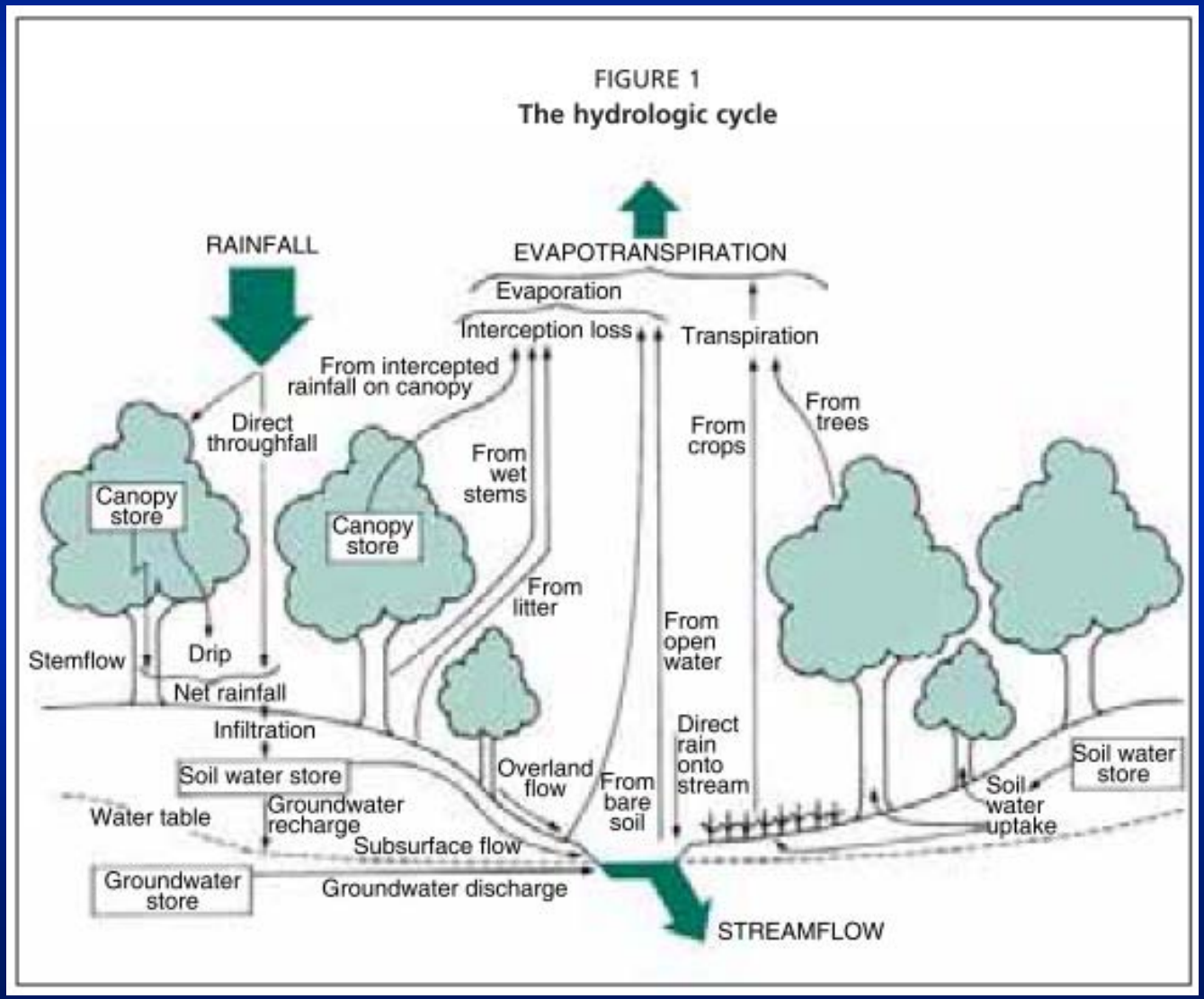
Biodiversity in the right place

Sustainable development

What is the relationship between biodiversity and water?

The role of biodiversity in water supplies

- İnterdependency between terrestrial, soil/ground and aquatic ecosystems needs better recognition



The role of biodiversity in water security

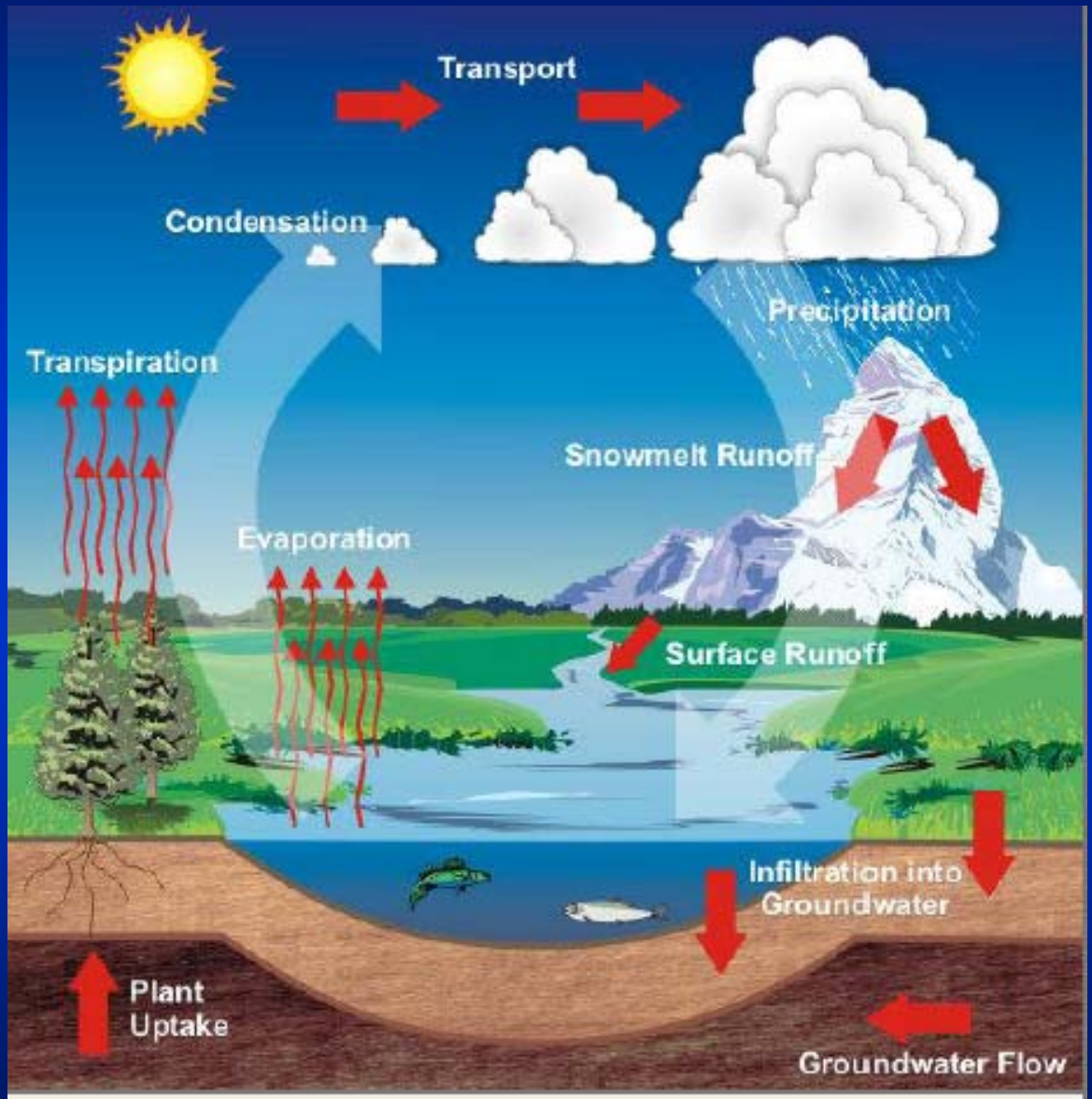
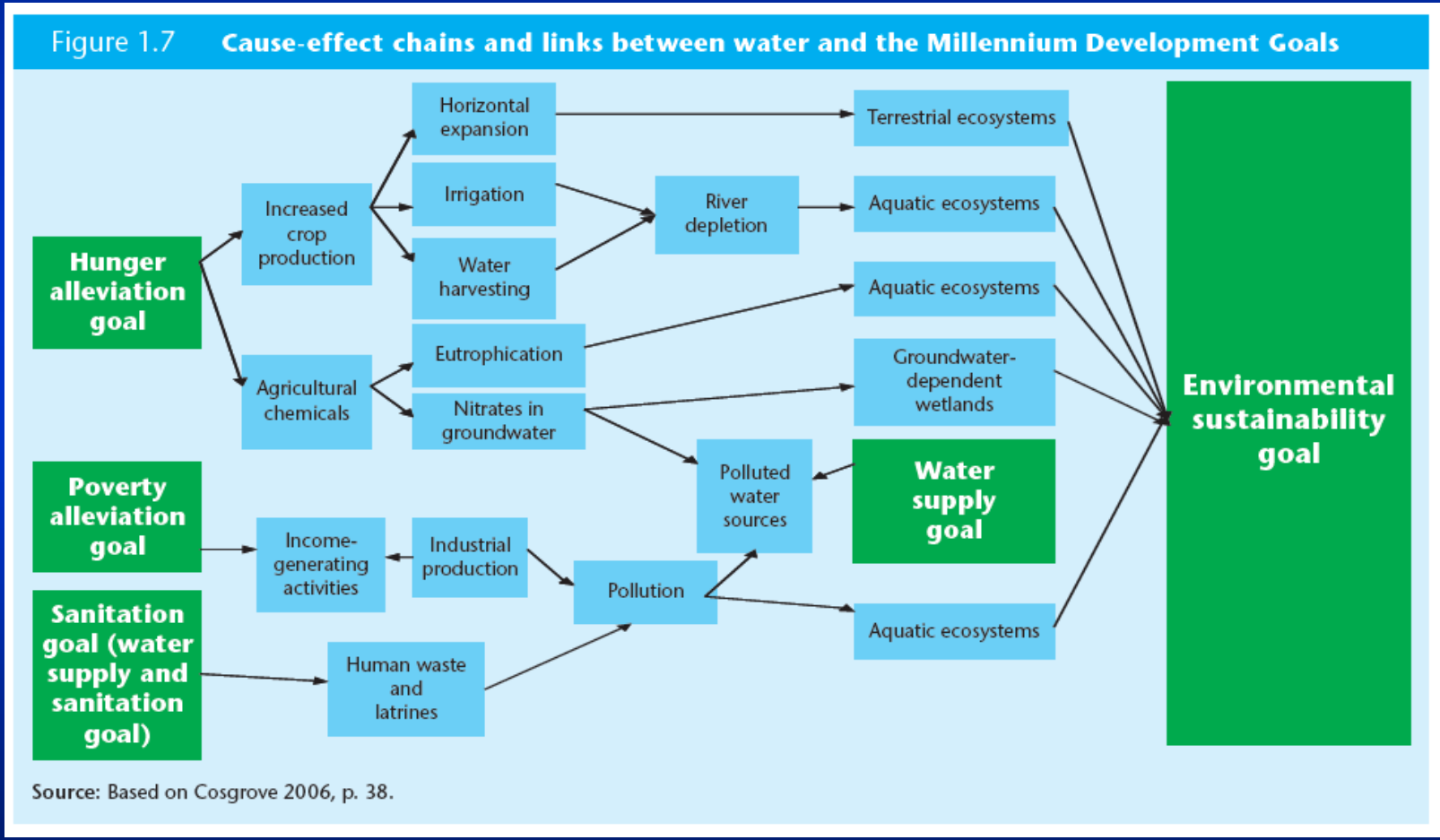


Figure 1: *Schematic of the hydrological cycle.*

"natural water infrastructure"

Water and the Millennium Development Goals



Some economic information

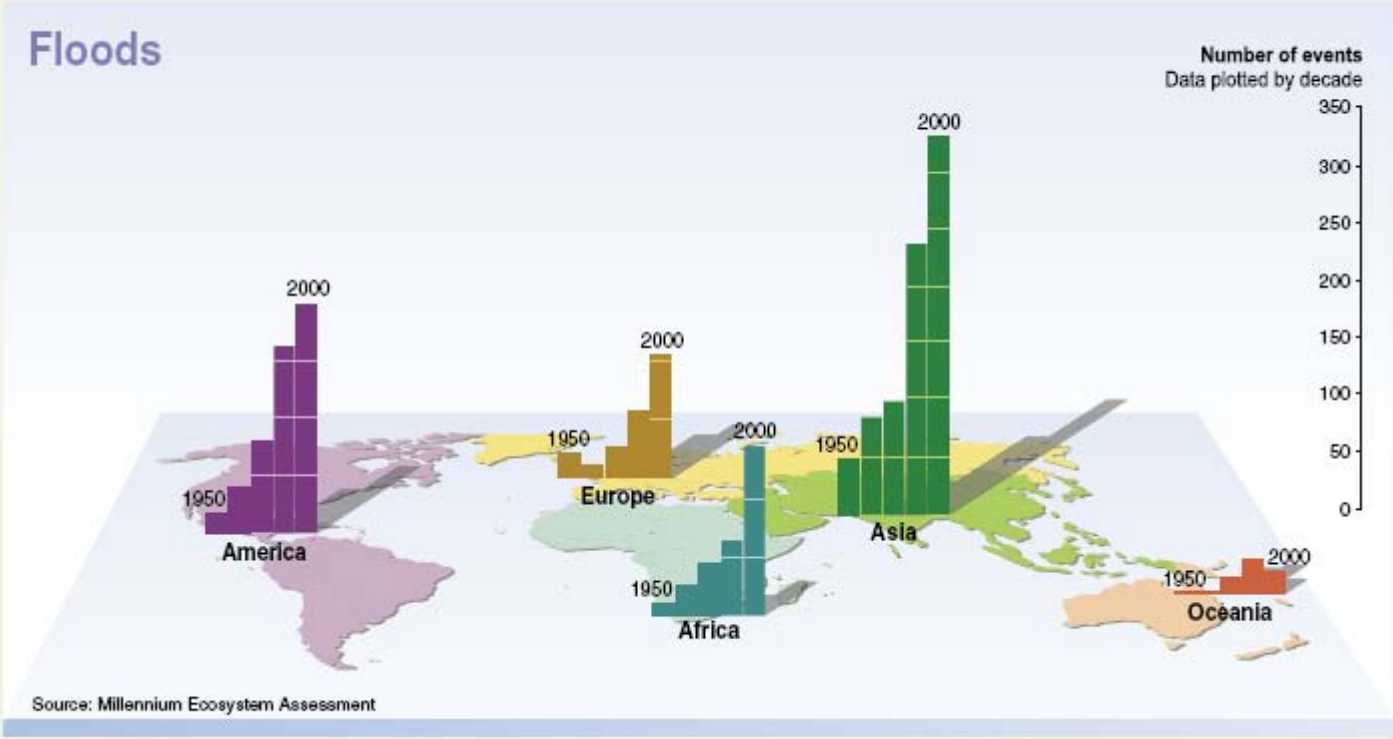
- OECD countries + BRIC (only)
  - Currently spend $750 billion per year on water infrastructure (high proportion being spent by cities)
  - Developing countries do not have this money to solve their water problems
    - They need better approaches
    - Better use of natural infrastructure
- Estimates of investment requirements in water infrastructure by 2030:
  - $ 22 trillion

- 2009 World Economic Forum:

  "We are living in a water “bubble” as unsustainable and fragile as that which precipitated the collapse in global financial markets", concluding that "We are now on the verge of water bankruptcy"

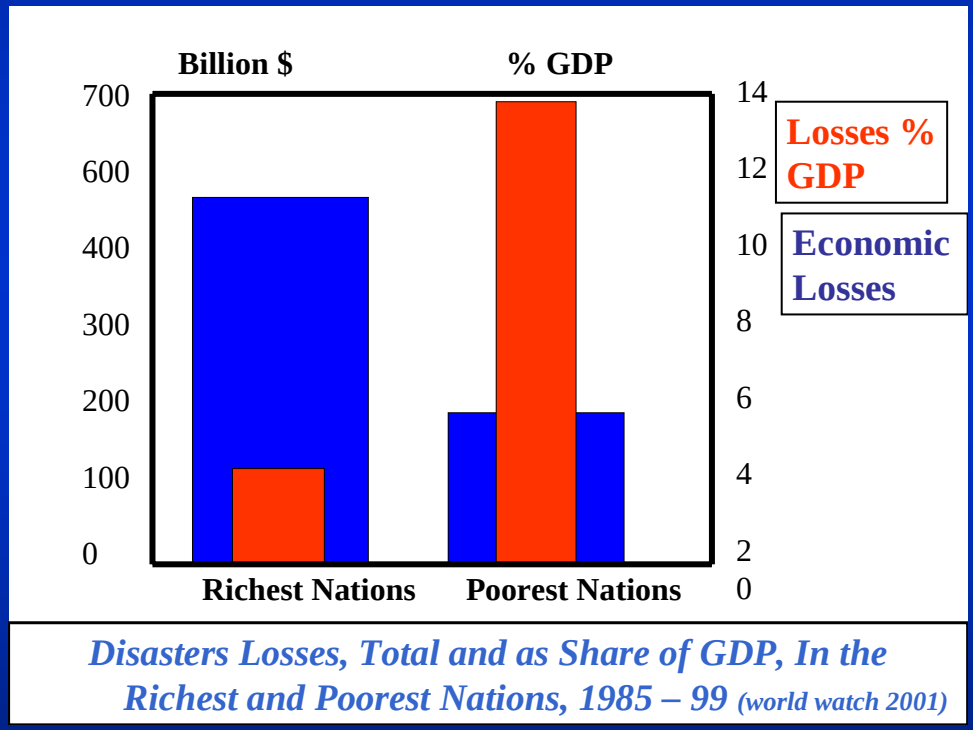
An example – trends in natural disasters - flooding

Appendix Figure A.7. Number of Flood Events by Continent and Decade Since 1950 (C16 Fig 16.6)



Economic costs of natural disasters

(- mostly water related)



Disasters Losses, Total and as Share of GDP, In the Richest and Poorest Nations, 1985 – 99 *(world watch 2001)*

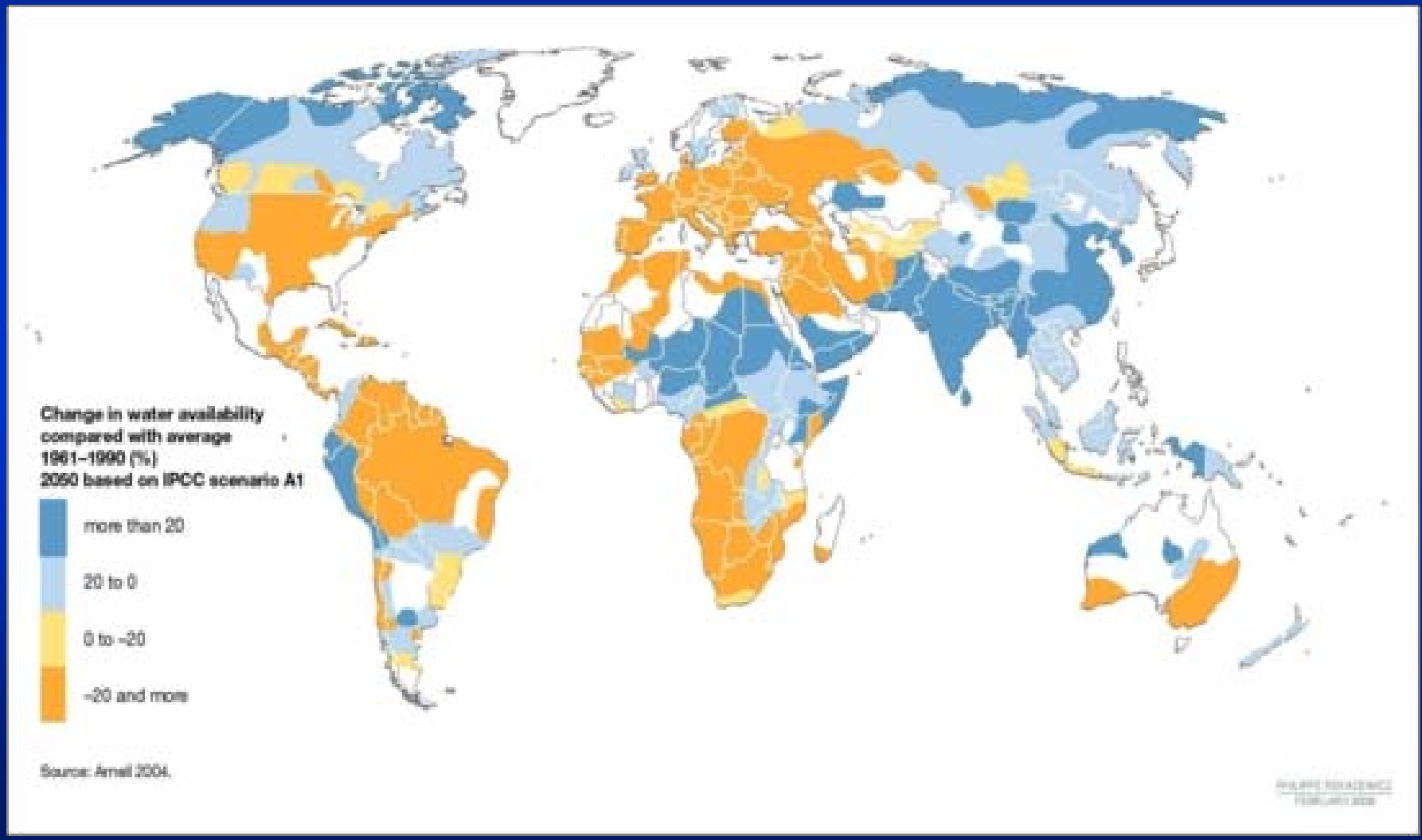
Water and climate change

How important should water be as an issue under climate change?

- ***IPCC:***
  - ***"the relationship between climate change and freshwater resources is of primary concern and interest"***;
  - ***"water resource issues have not been adequately addressed in climate change analyses and climate policy formulations"***;
  - ***"water and its availability and quality will be the main pressures, and issues, on societies and the environment under climate change"***

- *climate change mitigation is about carbon – adaptation is about water*

CLIMATE CHANGE
Changes in water availability
2050 (compared to 1961-1990)



Using natural infrastructure for sustainable water supplies for cities:

- **Many cities already actively use natural infrastructure to solve water related problems:**
  - **Catchment management/rehabilitation for improved water quality**
    - **PES schemes already well developed**
  - **Wise use of wetlands (natural infrastructure) for flood management**
- **35-45% of cities get their water from protected areas**
- **A key response to pressures and trends will be to store more water**
  - **Consider storage options in ecosystems**

Outcomes of CBD COP-10

CBD COP-10:

- Water recognised as :
  - A service provided by ecosystems (both quality and quantity)
    - underpinned by biodiversity
  - The key global natural resource challenge
  - A key link between the various MDGs
  - The principle link between biodiversity and broader economic, development, public, political interests
    - Makes biodiversity more obviously relevant to broader range of stakeholders (mainstreaming biodiversity)
  - The key link between biodiversity, desertification and climate change (3 Rio Conventions)
  - A cross-cutting issue for the Convention
- Water now incorporated better into the (new) Strategic Plan for Biodiversity 2011-2020
  - Specifically under target 14 – water has “paramount importance”

CBD COP-10
recognition of the roles of sub-national and local governments

- **Decision IX/28** encourages CBD Parties to recognize the role of cities in national strategies and plans, invites Parties to support and assist in implementing the Convention at local level
- **Decision X/22** endorses the Plan of Action
- **Strategic Plan for Biodiversity**: “By 2020, biodiversity values have been integrated into local development and poverty reduction strategies”

Plan of Action on Sub-national Gvts, cities and local authorities 2011-2020

- Subnational and local gvts encouraged to prepare Biodiversity Strategies and Action Plans in line with National BSAPs
- Biodiversity incorporated into and measured for subnational and local/urban planning, use of relevant tools and guidelines;
- CEPA activities in support of the CBD take place at each level;
- Broader engagement of sub-national gvts in implementing the CBD and better understanding of biodiversity issues by subnational and local gvts

Partners

Steering Committee of Cities

Advisory Committee of Sub-National gvts

"in development"

(Role for scientific institutions?)

Global Partnership on Cities and Biodiversity

Ramsar Convention

- Lead implementation partner for wetlands for the CBD
- Has developed extensive guidance on wetland management
- Ramsar COP-10 (Changwon, Korea, 2008)
  - Resolution X.27: “Wetlands and urbanisation”
    - Recognises the importance of wetlands to urban areas
    - Recognises the importance of urban authorities in promoting the wise use of wetlands

Summary

- CBD COP-10 (and Ramsar COP-10) important:
  - Cities identified as a key stakeholder group
  - Water/wetlands identified as one of their key interests
  - The approach moves beyond “providing water for nature” to:

    “using nature to sustainably supply water”
  - Rapidly developing partnerships for implementation


Thank you


Thank you