

# Mainstreaming Ecosystem Services Approaches into Development

DAY 2: Economic valuation of ecosystem services

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Aberystwyth University

# Today's agenda

- 9:00 – 9:15: Introduction
- 9:15 - 10:30: Valuation methods: theory and practice
- 10:30 – 11:00: Break
- 11:00 – 12:30: Sharing experiences of valuation in Asia
- 12:30 – 14:00: Lunch
- 14:00 – 15:15: National and Global ecosystem assessments – theory and practice.
- 15:15 – 15:30: Break
- 15:30 – 16:00: Group activity: Ecosystem assessments of Asian biomes.
- 16:00 – 16:30: Sharing experiences of ecosystem assessments.
- 16:30: Close

- Lecturer in Environmental Economics at Aberystwyth University
- Recent research:
  - TEEB
  - UK NEA
  - Economic valuations of biodiversity and ecosystem services in UK, Africa, Caribbean, Solomon Islands

## Dr Mike Christie

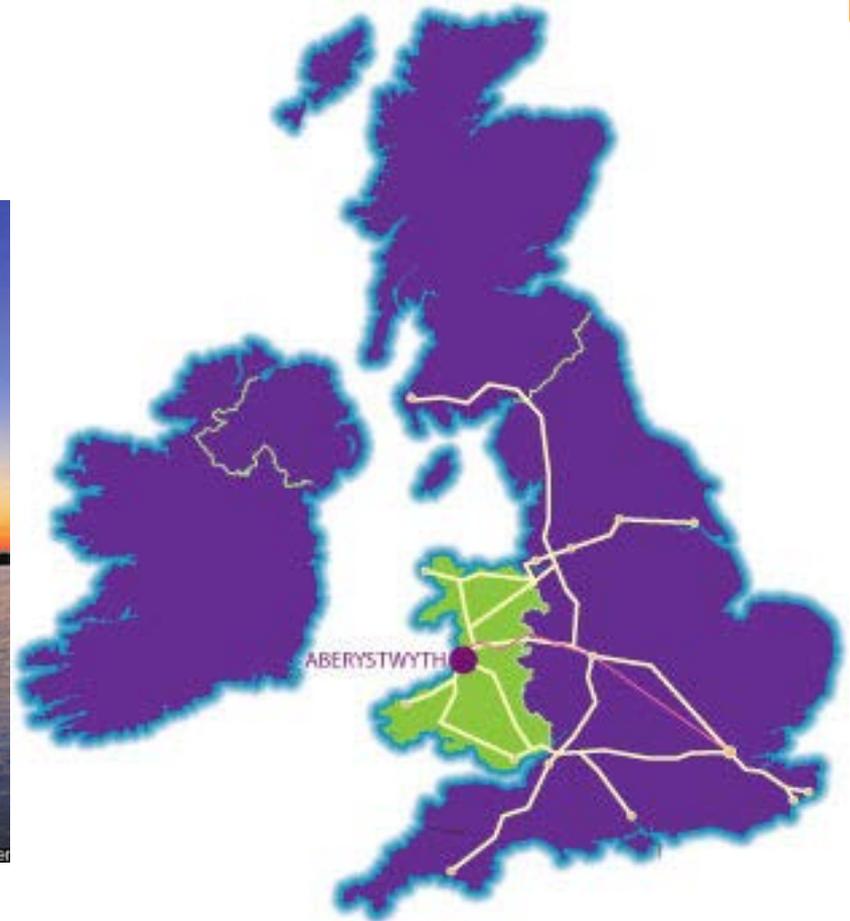
### About me!



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# Valuation methods

Theory and practice

# Sharing experiences of valuation in Asia (1)

- What are your experiences of valuing ecosystem services in Asia?
  - What ecosystems / services did you evaluate?
  - Which economic methods did you use?
  - What issues / problems did you encounter?
  - What lessons did you learn?

# Sharing experiences of valuation in Asia (2)

- Are valuation approaches applicable to Asia?
  - You will be split into 4 groups. Within each group you should discuss:
    - Does valuation work in Asia?
      - What works?
      - What doesn't?
    - How could valuation be improved / refined for application in Asia?
      - What are the key limitations/ knowledge gaps/ issues for valuation in Asia?
      - How might these be addressed?
    - What are the future research / capacity building needs?

# National and global ecosystem assessments

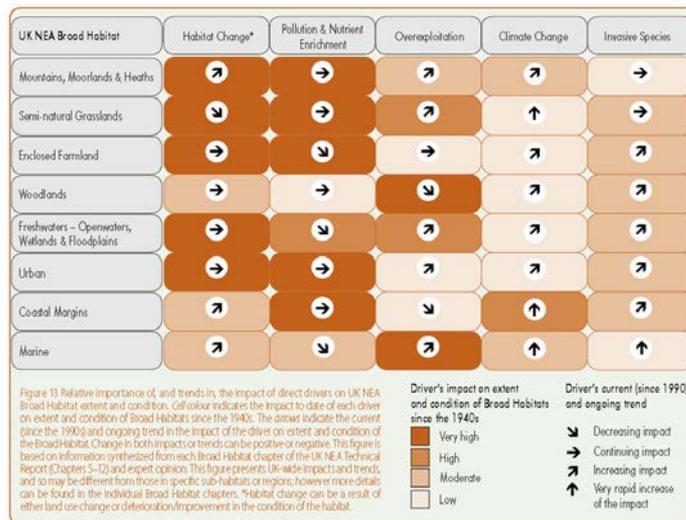
Theory and practice

# Ecosystem assessments of Asian Biomes

- Split into 4 groups and identify a biomes to study.
  - Identify **impacts** (high, med, low) and **trends** (↑ ↔ ↓) of **drivers of change** (e.g. climate change, demographics, land use etc) **on the biome.** (15 min)
  - Identify **impacts** (high, med, low) and **trends** (↑ ↔ ↓) of **drivers of change** (e.g. climate change, demographics, land use etc) **on the capacity of biome to deliver ecosystem services.** (15 min)
  - Discuss the extent to which data are available for the above assessment + what are the knowledge gaps. (5 min)
  - Feedback

Identify **impacts** (high, med, low) and **trends** (↑ ↔ ↓) of **drivers of change** (e.g. climate change, demographics, land use etc) **on the biome.**

Driver	Impact	Trend
Habitat change		
Pollution		
Overexploitation		
Climate change		
etc		



Identify **impacts** (high, med, low) and **trends** (↑ ↔ ↓) of drivers of change (e.g. climate change, demographics, land use etc) on the capacity of biome to deliver ecosystem services.

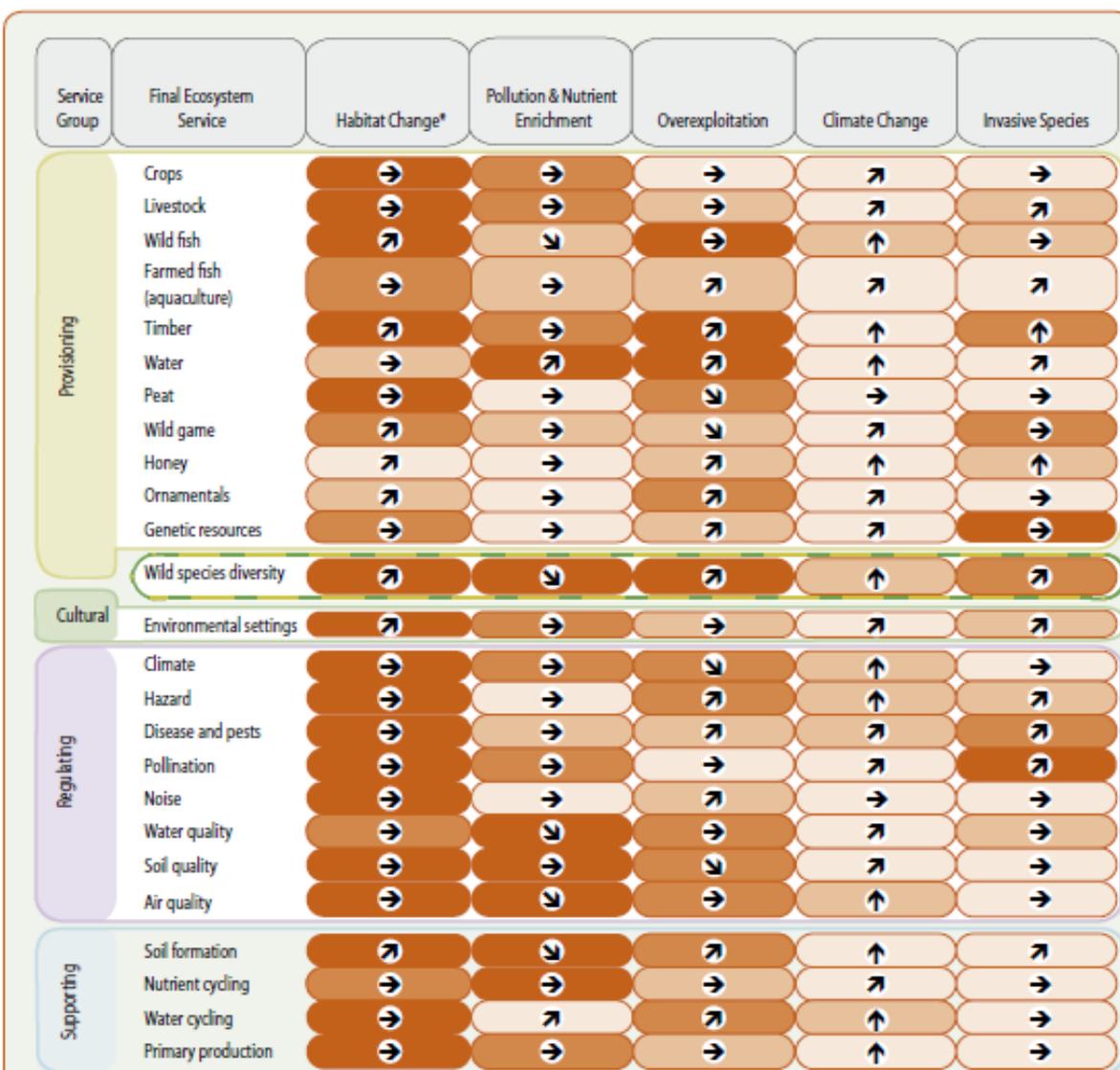
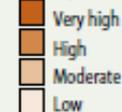


Figure 14 Relative importance of, and trends in, the impact of direct drivers on UK ecosystem services. Cell colour indicates the impact to date of each driver on service delivery since the 1940s. The arrows indicate the current (since the 1990s) and ongoing trend in the impact of the driver on service delivery. Change in both impacts or trends can be positive or negative. This figure is based on information synthesized from the biodiversity and ecosystem service chapters of the UK NEA Technical Report (Chapters 4 and 13–16), as well as expert opinion. This figure presents UK-wide impacts and trends, and so may be different from those for specific final ecosystem services; however more details can be found in the biodiversity and ecosystem service chapters. \*Habitat change can be a result of either land use change or deterioration/improvement in the condition of the habitat.

Driver's impact on ecosystem service delivery since the 1940s



Driver's current (since 1990) and ongoing trend

