

If I was an ecosystem service  
I would be \_\_\_\_\_

...because \_\_\_\_\_

## Sub-Global Assessments: Tools and techniques for undertaking and using Ecosystem Assessments

Hollie Booth & Matthew Ling

UNEP-WCMC

# Conservation Campus Objectives

We hope that by the end of the day you will...

- ✓ **Know** some of the major tools and techniques used in ecosystem assessments
- ✓ Be able to **apply** some of these tools to assess and value ecosystem services
- ✓ **Understand** how these tools can be used for **developing outputs** and **communicating findings**.

# Conservation Campus Overview

We hope to achieve this through...

- ✓ Improving **awareness** of widely recognized and understood tools and techniques
- ✓ Providing **practical training** in how to use these tools
- ✓ Establishing their **usefulness** in decision-making processes and **demonstrate** how they can be used to translate science into policy-relevant information
- ✓ Creating a relaxed and informal atmosphere for lots of **interaction, discussion and knowledge sharing**

# Conservation Campus Overview

- ✓ Introductions
- ✓ An introduction to tools and techniques for ecosystem assessments
- ✓ **Measuring** ecosystem services (am)
- ✓ **Valuing** ecosystem services (pm)

# Introductions

## **The Sub-Global Assessment Network:**

A global knowledge-sharing platform for ecosystem assessment practitioners

# Over 90 SGAs around the world



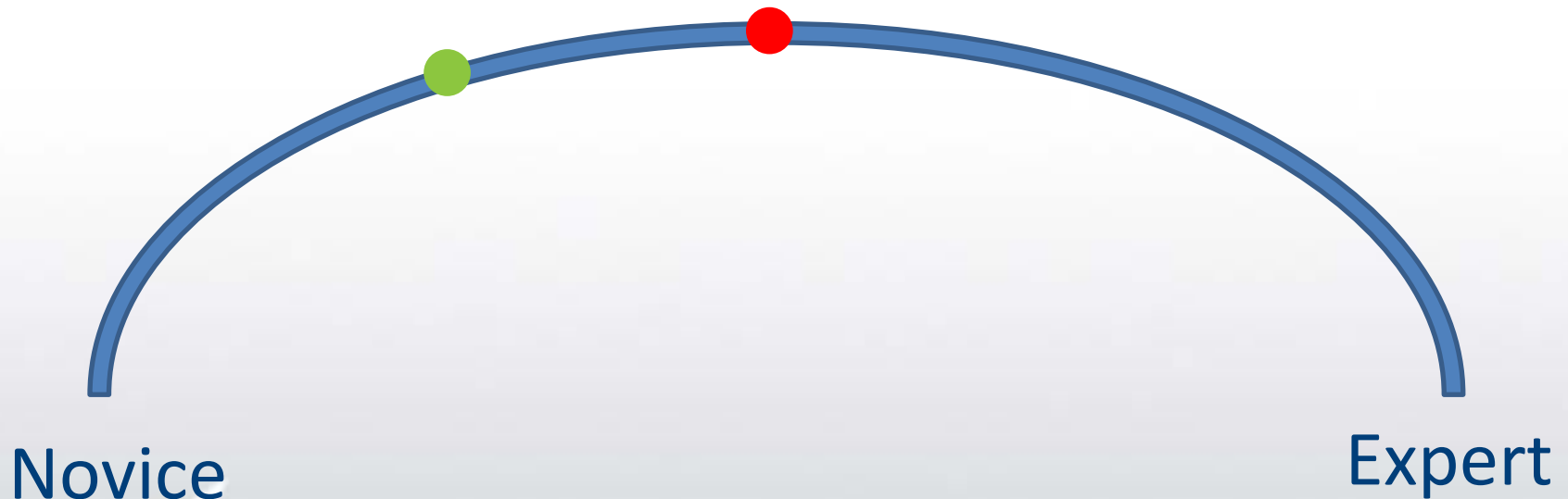
# The SGA Network

- ✓ Build capacity to *undertake* assessments and *use* the results
- ✓ Support relevant global processes such as *IPBES* and the *MEAs*



# Introductions

Ecosystem Assessment experience and understanding



# Introductions

- Name
- Affiliation
- Why you are here today
- If I was an ecosystem service I would be \_\_\_\_\_  
because \_\_\_\_\_

## Tools and techniques for Ecosystem Assessments

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What is an ecosystem  
assessment?

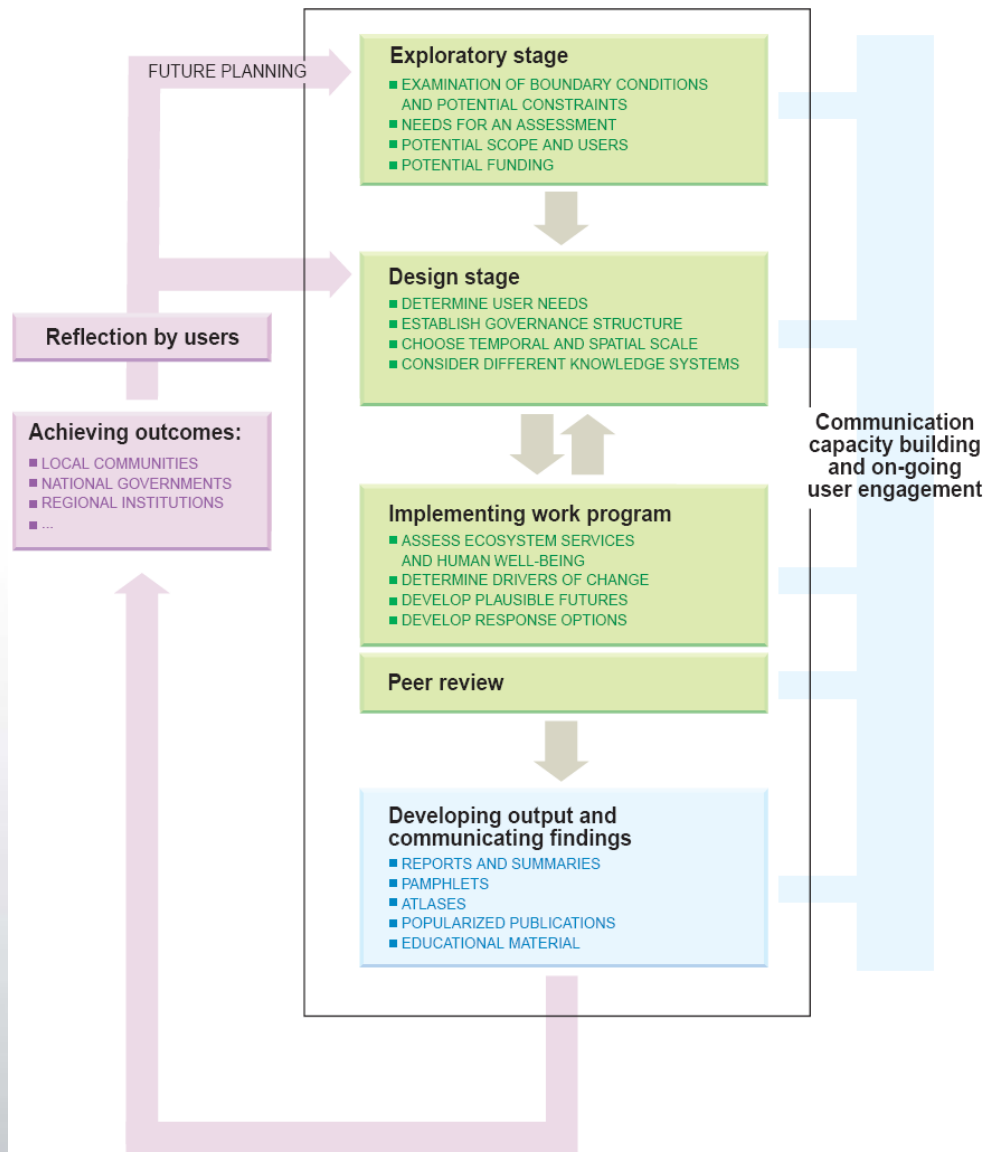
# Ecosystem assessment

A ***social process*** which establishes a ***scientific connection*** between environmental issues and people



## Boundary conditions and limitations

IMPOSED BY FINANCIAL, POLITICAL, SOCIAL  
AND ENVIRONMENTAL CONTEXT



Source: Ash *et al.*, 2010

# Ecosystem assessment

Focuses on ***ecosystem services*** - the benefits that people obtain from the environment , and their links to **human well-being**





## Ecosystem structure

E.g. Semi-natural grassland



## Ecosystem function & processes

E.g. Rate of water flow



## Ecosystem service

E.g. Nutrient & water cycling



## Goods and benefits

E.g. Drinking water & water for crop production

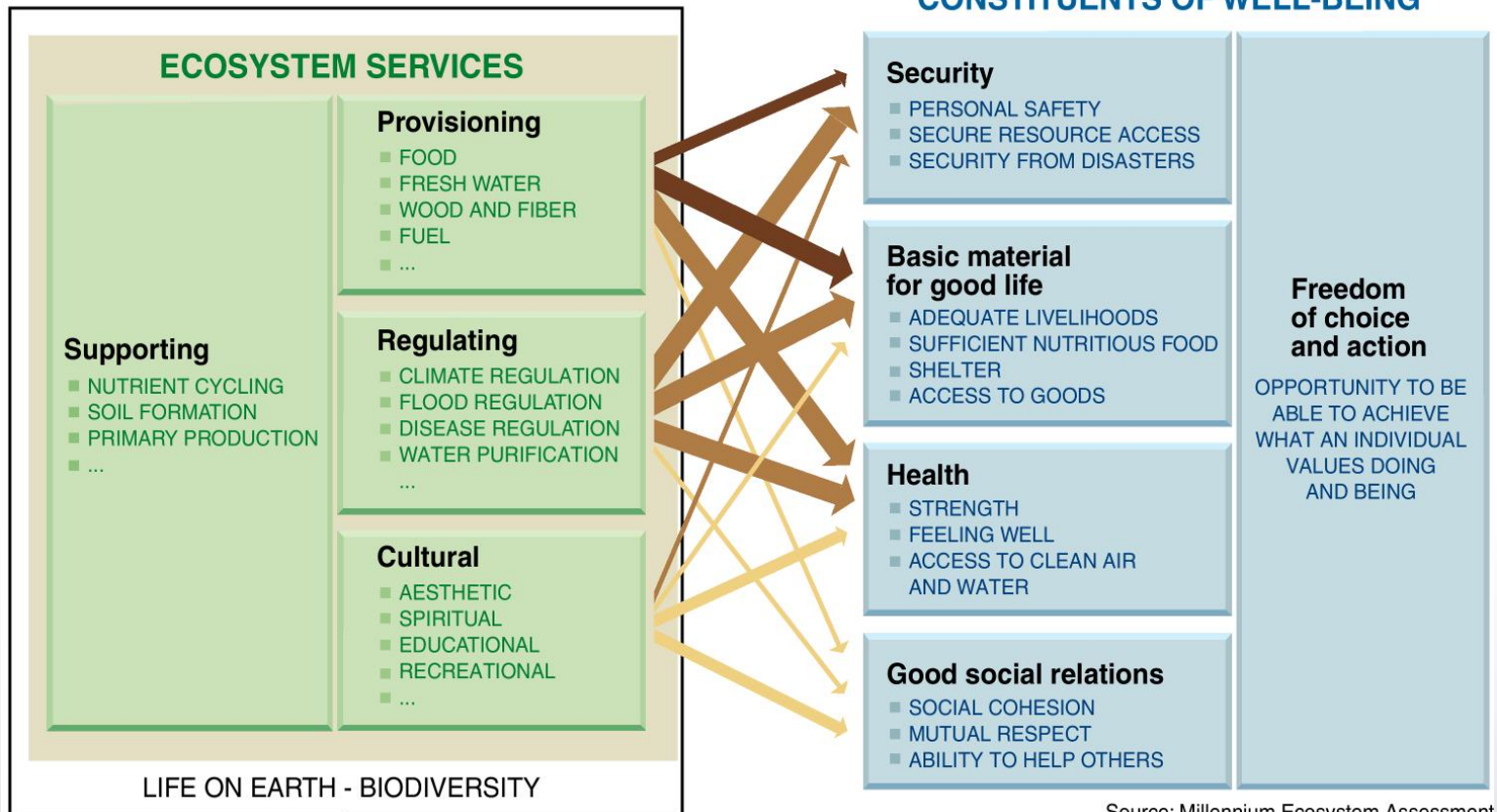


## Value

E.g. Health & economic support for livelihoods







Source: Millennium Ecosystem Assessment

**ARROW'S COLOR**  
Potential for mediation by socioeconomic factors

- Low
- Medium
- High

**ARROW'S WIDTH**  
Intensity of linkages between ecosystem services and human well-being

- Weak
- Medium
- Strong

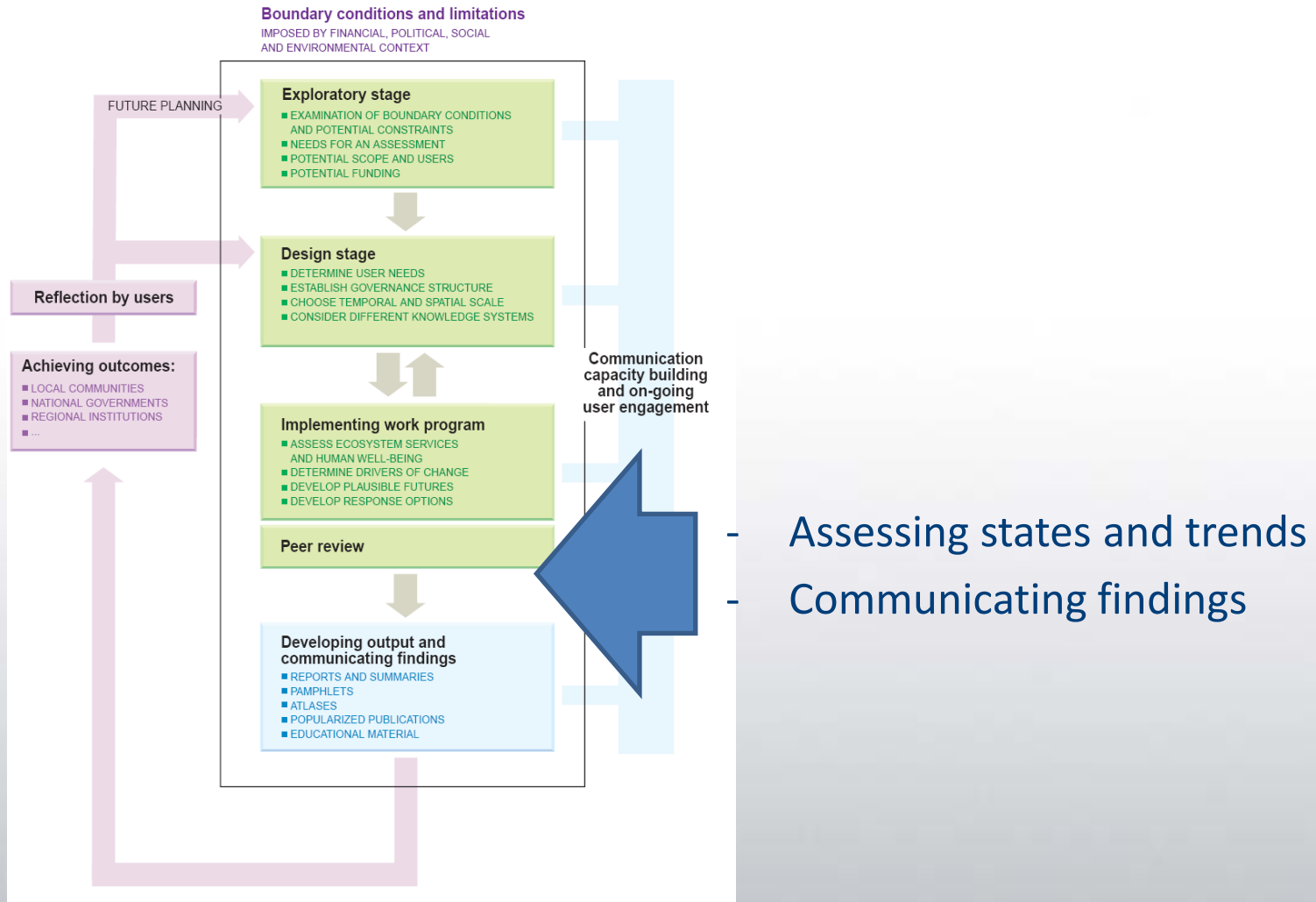


What are ecosystem  
assessment tools?

# Ecosystem Assessment tools

- ✓ Models, programmes, methods, concepts
- ✓ **Measure** and **quantify** environmental conditions, and the effects of change – **States and trends**
- ✓ Help us to **analyse, understand** and **communicate** information

# Ecosystem Assessment Tools



# Ecosystem Assessment tools

## ✓ Mapping/spatial analysis

- ✓ ARIES (+\$)
- ✓ CEV
- ✓ MIME (+\$)
- ✓ PRESS-PEER
- ✓ **InVEST (+\$)**

## ✓ Valuation

- ✓ Monetary and non-monetary
- ✓ Market prices, market alternatives, surrogate markets, stated preference, benefits transfer

## ✓ Scenarios

- ✓ Futures thinking
- ✓ Uncertainties
- ✓ Options and trade-offs



Why are these skills  
valuable?

# Using Ecosystem Assessment tools

- ✓ To **analyse and understand ...**

- ✓ Ecosystems
- ✓ Ecosystem services
- ✓ Their contributions to human well-being
- ✓ The effects of change

- ✓ To **communicate** findings

- ✓ Maps
- ✓ Value
- ✓ Policy options

# Using Ecosystem Assessment tools

To support **better informed decision making**  
on **key conservation issues** such as  
natural resource allocation and land-use



Thank you for coming along to our  
conservation campus!

Any questions?

# AM Session: Measuring ecosystem services using InVEST

10.00-10.15	Introducing InVEST
10.15-10.45	Warm up exercise - “Best Coast Belize”
10.45-11.00	Introduction to case studies
<b>11.00-11.15</b>	<b><i>Coffee break</i></b>
11.15-11.45	Group work - Analyzing ecosystem service tradeoffs
11.45-13.00	Practical application – Mapping services
13.00-13.30	Knowledge transfer and wrap up
<b>13.30-14.30</b>	<b><i>Lunch</i></b>

# PM Session:

# Valuing ecosystem services - TEEB & valuation methodologies

- 14.40-15.00      Introducing TEEB
- 15.00-15.45      Overview of valuation methodologies
- 15.45-16.30      Group work - Applying valuation methodologies
- 16.30-16.45      *Coffee break***
- 16.45-17.30      Group work - Applying valuation methodologies cont.
- 11.45-13.00      Practical application – Mapping services
- 17.30-18.00      Knowledge transfer and wrap up

# Conservation Campus wrap-up

Now it's the end of the day we hope that you...

- ✓ **Know** some of the major tools and techniques used in ecosystem assessments
- ✓ Are able to **apply** some of these tools to assess and value ecosystem services
- ✓ **Understand** how these tools can be used for **developing outputs** and **communicating findings**
- ✓ Had fun!

**Thank you for coming!**



[www.ecosystemassessments.net](http://www.ecosystemassessments.net)



## Join us

- ✓ Secretariat hosted at UNEP-WCMC & The Cropper Foundation
- ✓ Funders: The European Commission and SIDA

Talk to: Hollie Booth or Matthew Ling

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