

The TEEB approach to the loss of biodiversity and ecosystem services

Nick Bern

United Nations Environment Program

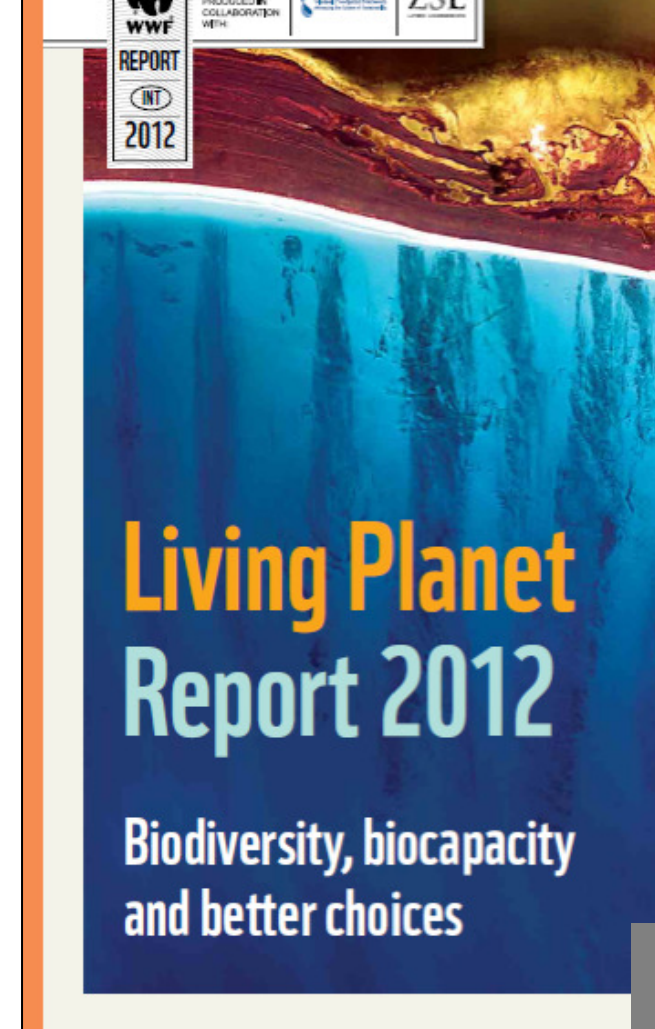
Sub-regional Workshop on Valuation and Incentive Measures
for Eastern Europe and Central Asia

29 - 31 May

Tbilisi, Georgia

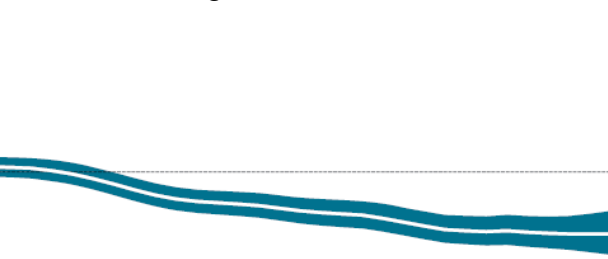


sources and damage or destruction of ecosystems are **highly profitable for many stakeholders in the short term**; the long-term benefits of protecting, maintaining and investing in natural capital are **inadequately valued or not valued in an economic sense**. As a result, the importance of biodiversity and ecosystem services is undervalued in economic and political decisions.

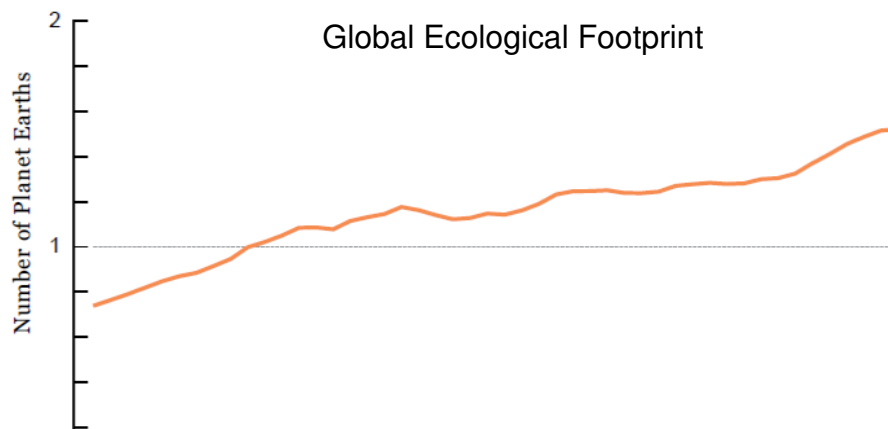


WWF, 2012

Global Living Planet Index

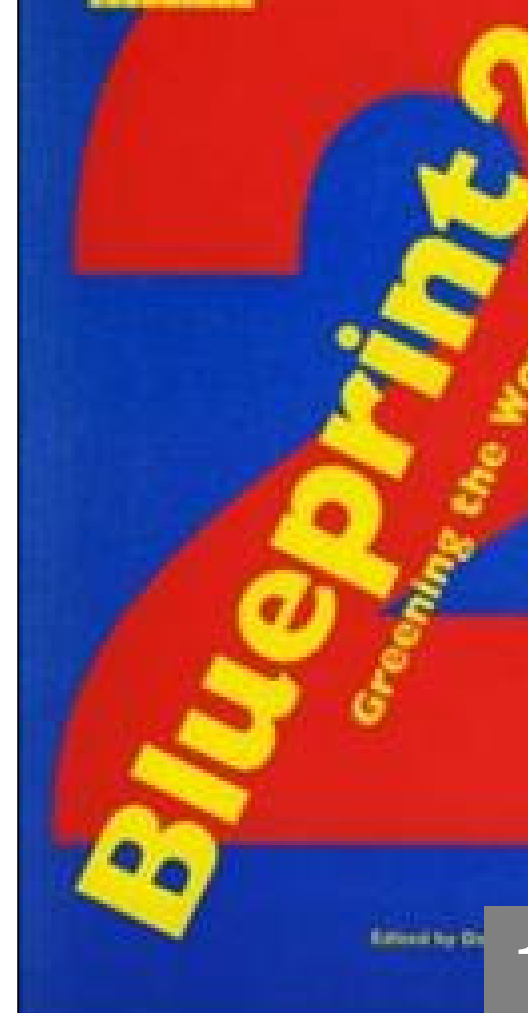


Global Ecological Footprint



Environmental services creates a *practical* problem of measurement – one of finding out what people preferences actually are in the context where there are no markets – but it does not generate a *conceptual* problem of measurement. (..) **people have preferences for environmental services and do express them in money terms** – otherwise it would be difficult to explain much of the behaviour towards the environment.”

Source et al., 1991

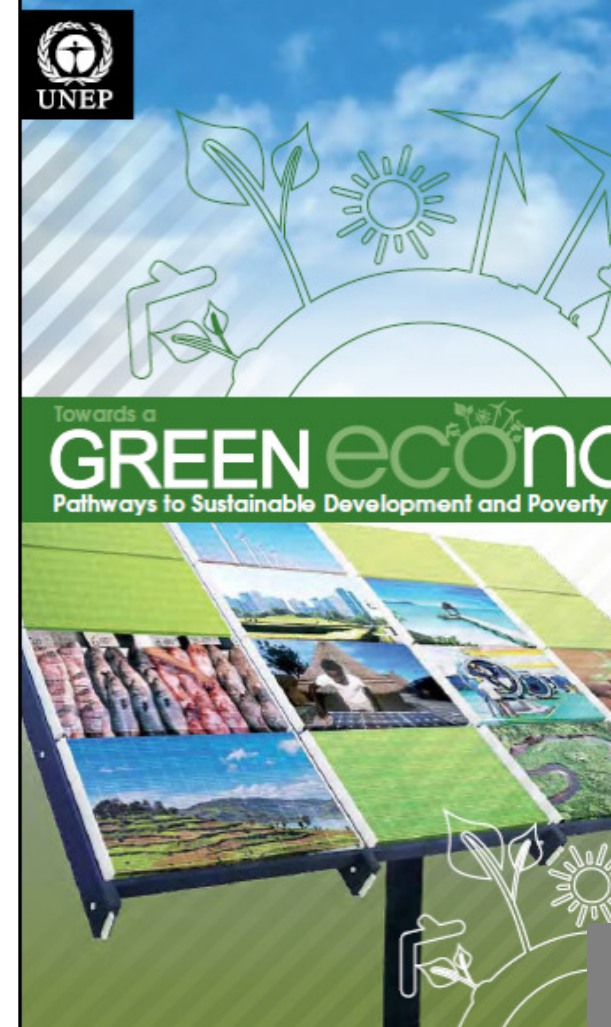


plement requires...

(1) improvements in
environmental valuation and policy
analysis to ensure that markets and
incentives incorporate the full costs and
benefits of environmental impacts

(2) implementing effective and
appropriate **information, incentives,regulations, investments and
institutional structure**

(3) Increasing **collaboration**
between environmental scientists,
policy analysts and economists





Why TEEB? Because...

the **economic invisibility of nature** is a problem

addressing losses requires knowledge from **many disciplines** (ecology, economics, policy,...) to be synthesized, integrated and acted upon

different decision-making groups need different types of information and guidance

because **successes** need be understood, broadcasted, replicated and scaled...

review

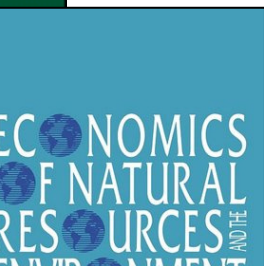
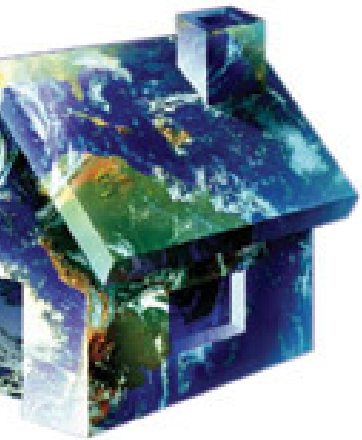
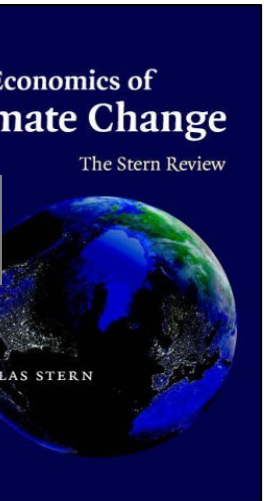


TEEB Study: timeline, products, people

TEEB approach

The way forward

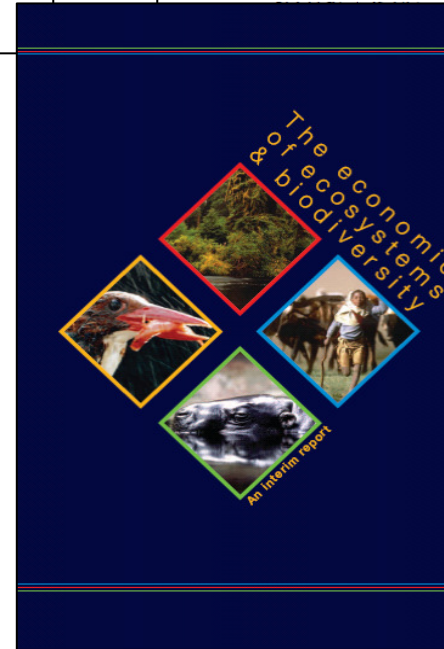
B Study: Phase I (2007-2008)



Potsdam Initiative – Biological Diversity 2010

“In a global study we will initiate the process of analysing the global economic benefit of biological diversity, the costs of the loss of biodiversity and the failure to take protective measures versus the costs of effective conservation.”

2007



B Study: Phase II (~2008-2011)

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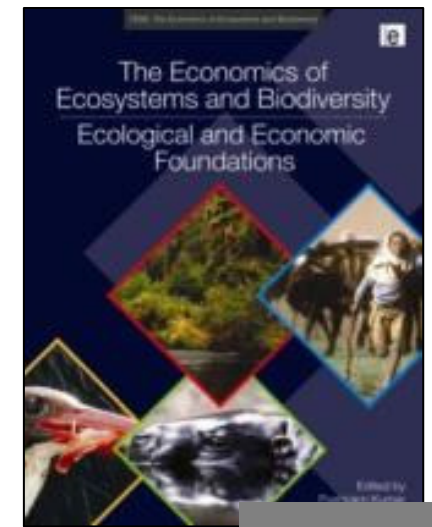
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administrators

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community

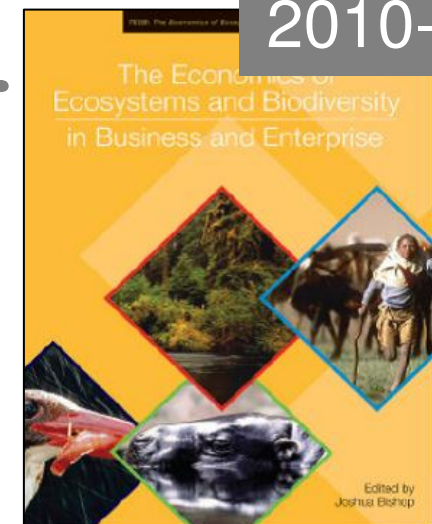
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Life in harmony, into the future
いのちの共生を、未来へ
COP10/MOP5

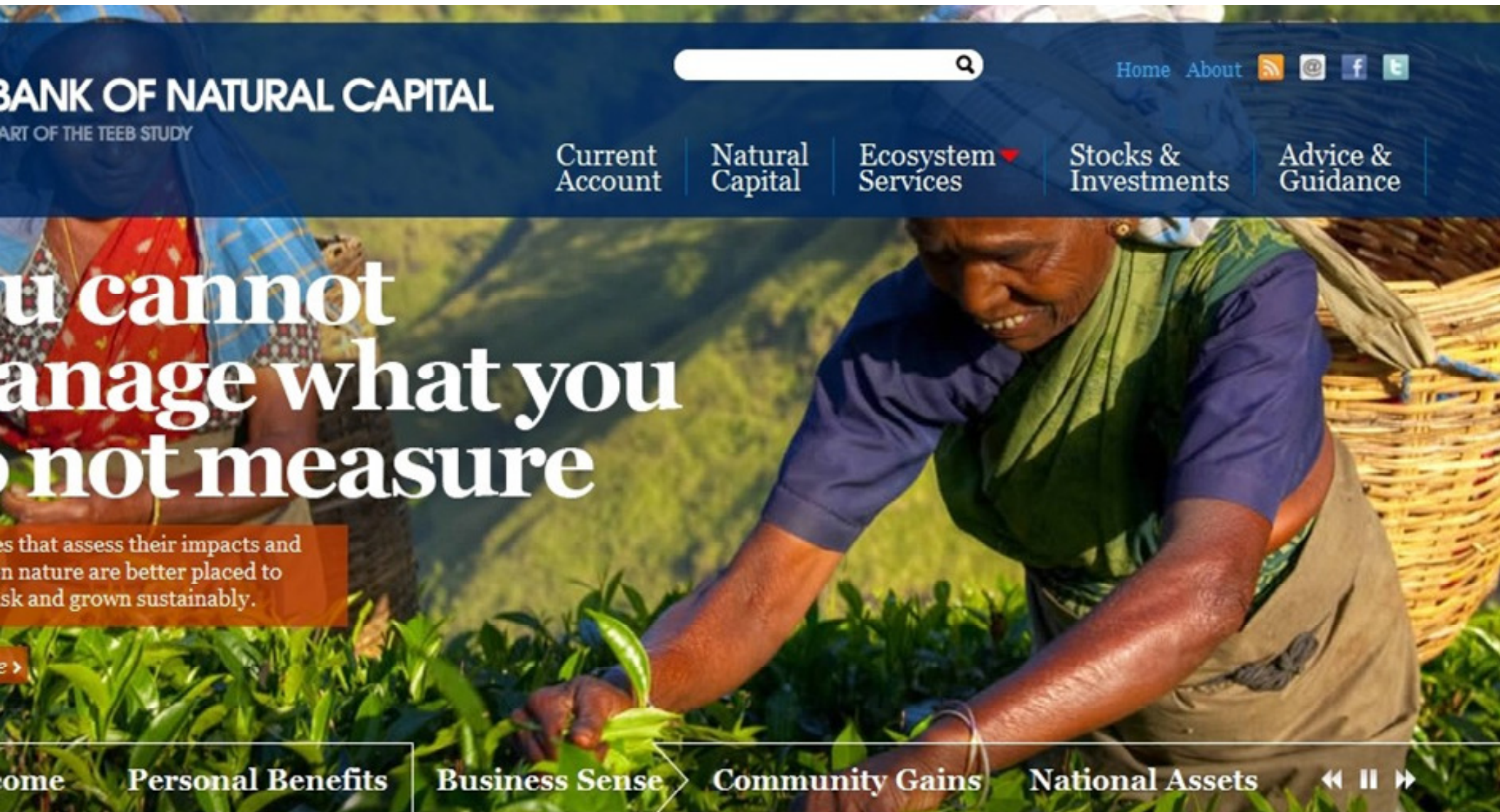


2010-2012



Routledge
Taylor & Francis

B Study: Citizens & consumers



BANK OF NATURAL CAPITAL
PART OF THE TEEB STUDY

Home About RSS Instagram Facebook Twitter

Current Account | Natural Capital | Ecosystem Services | Stocks & Investments | Advice & Guidance

You cannot manage what you do not measure

Businesses that assess their impacts and how they interact with nature are better placed to manage risk and grown sustainably.

Home | Personal Benefits | Business Sense | Community Gains | National Assets



B governance

dy Leader: Pavan Sukhdev

visory Board: scientific & policy leaders; civil society

sted by UNEP

entific coordination: UFZ, Leipzig

er 500 individual editors, authors and reviewers

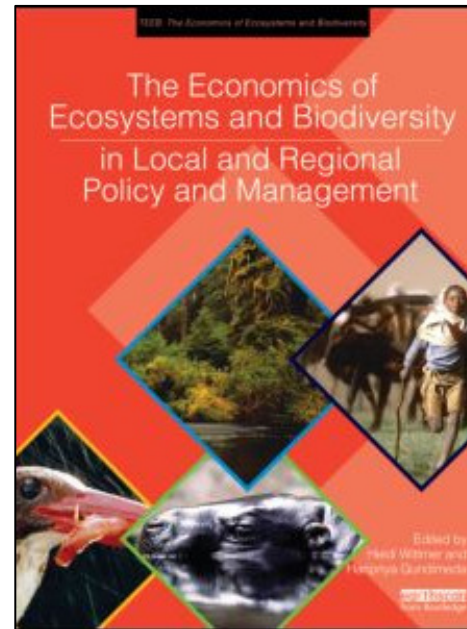
ancial donors and other institutional partners (partial list):



B Coordinators



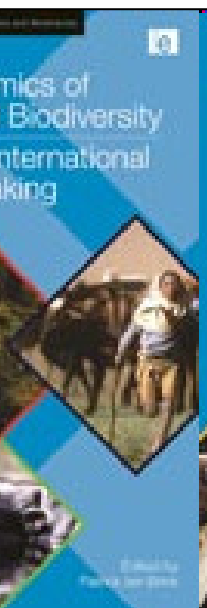
Pushpam Kumar



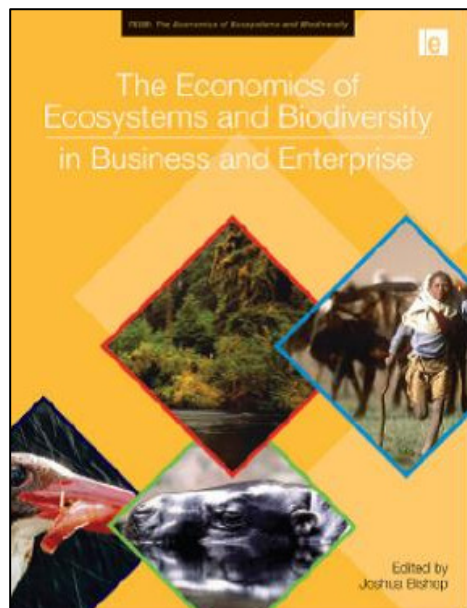
Haripriya Gundimeda



Heidi Wetmer



Patrick ten Brink



Joshua Bishop



B Study: some success factors

Dependence (Study leader, advisory board)

Relevance (coordination group, advisory board, active promotion/communications, simple tailored messages, high level policy uptake, media coverage)

Broad experience (more than 500 international contributors, international organisations, public administration, business, research institutes, NGOs, civil society architecture)

B Study: response in media

1,500+ news articles in 65 countries

1,400+ websites

5,000+ followers on facebook and twitter



B Study: response in policy

Carta di Siracusa (2009)
G8 Leaders Statement (2010)

WGD COP-10

Decision X/2 on the Strategic Plan for Biodiversity 2011-2020

Decision X/21 on Business Engagement

Decision X/44 on Incentive Measures

WGD Resolution X.12 on “Principles for partnerships between the Convention and the business sector”

WGD COP-15

WGD COP-10

WGD biodiversity strategy to 2020, “Our life insurance, our natural capital” (2011)

t TEEB is aiming for...

synthesis of existing knowledge on economics of ecosystems and biodiversity
focused analysis and key messages for different end-users
effective and worldwide dissemination to these users
awareness raising and mainstreaming

EB is not...

academic effort
global valuation study





TEEB Study

TEEB approach

The way forward

ECOSYSTEM SERVICES

Supporting

- NUTRIENT CYCLING
- SOIL FORMATION
- PRIMARY PRODUCTION
- ...

Provisioning

- FOOD
- FRESHWATER
- WOOD AND FIBER
- FUEL
- ...

Regulating

- CLIMATE REGULATION
- FLOOD REGULATION
- DISEASE REGULATION
- WATER PURIFICATION
- ...

Cultural

- AESTHETIC
- SPIRITUAL
- EDUCATIONAL
- RECREATIONAL
- ...

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Cultural

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- SPIRITUAL
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- RECREATIONAL
- ...

CONSTITUENTS OF WELL-BEING

Security

- PERSONAL SAFETY
- SECURE RESOURCE ACCESS
- SECURITY FROM DISASTERS

Basic material for good life

- ADEQUATE LIVELIHOODS
- SUFFICIENT NUTRITIOUS FOOD
- SHELTER
- ACCESS TO GOODS

Health

- STRENGTH
- FEELING WELL
- ACCESS TO CLEAN AIR AND WATER

Good social relations

- SOCIAL COHESION
- MUTUAL RESPECT
- ABILITY TO HELP OTHERS

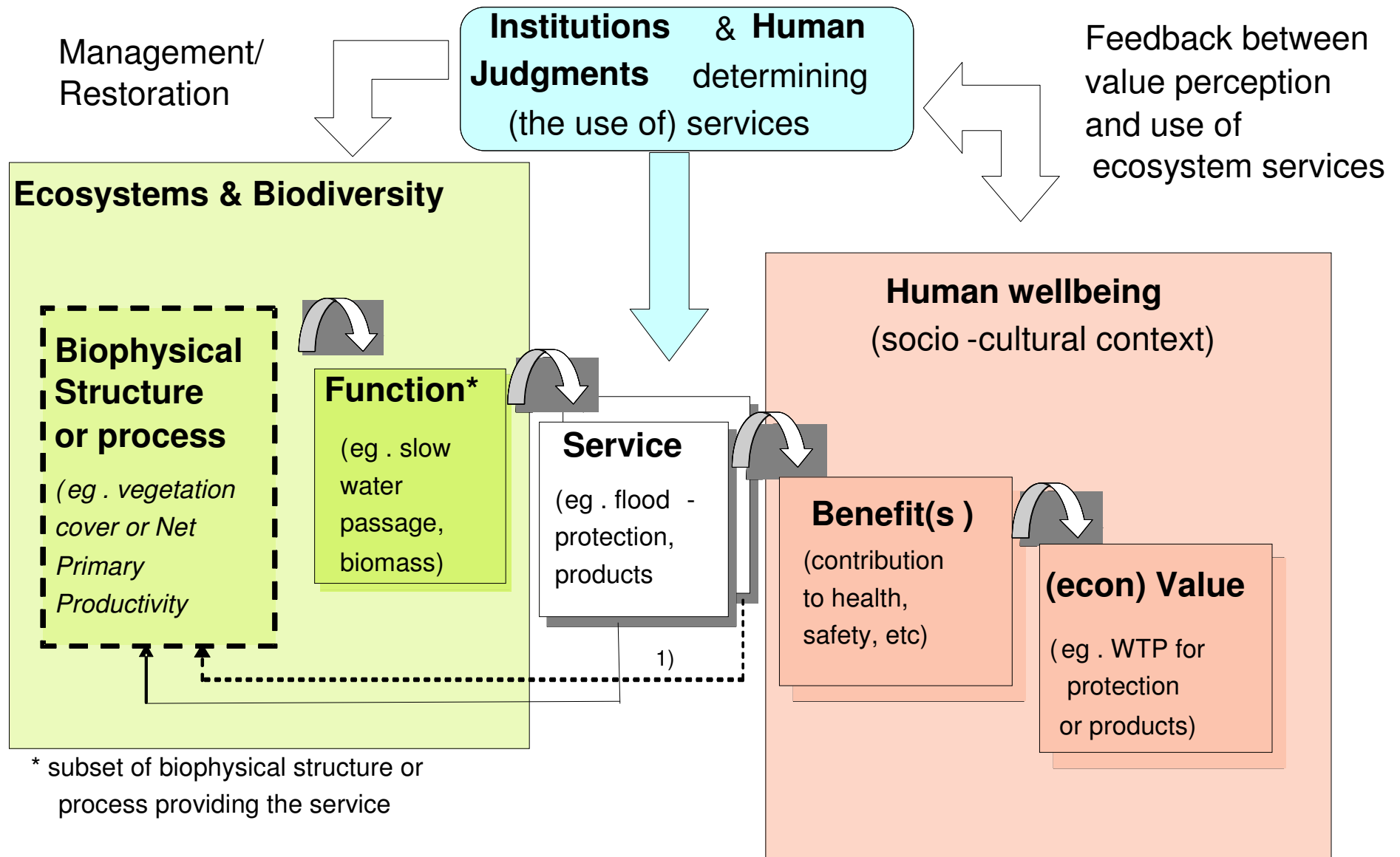
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IFE ON EARTH BIODIVERSITY

before economic valuation: assess ecosystem changes in biophysical terms





EB is more than economic valuation...

incorporation of nonmarket values of ecosystems in
resource management decisions

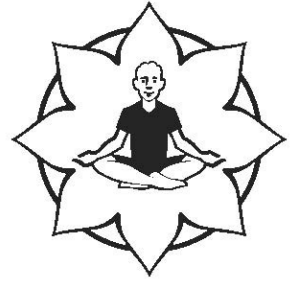
elimination of subsidies that promote excessive use
of ecosystem services (and, where possible, transfer these
subsidies to payments for non-marketed ecosystem
services)

measures to **reduce aggregate consumption** of
unsustainably managed ecosystem services

greater **use of economic instruments** and market-
based approaches in the management of ecosystem
services (where enabling conditions exist)

B tiered approach

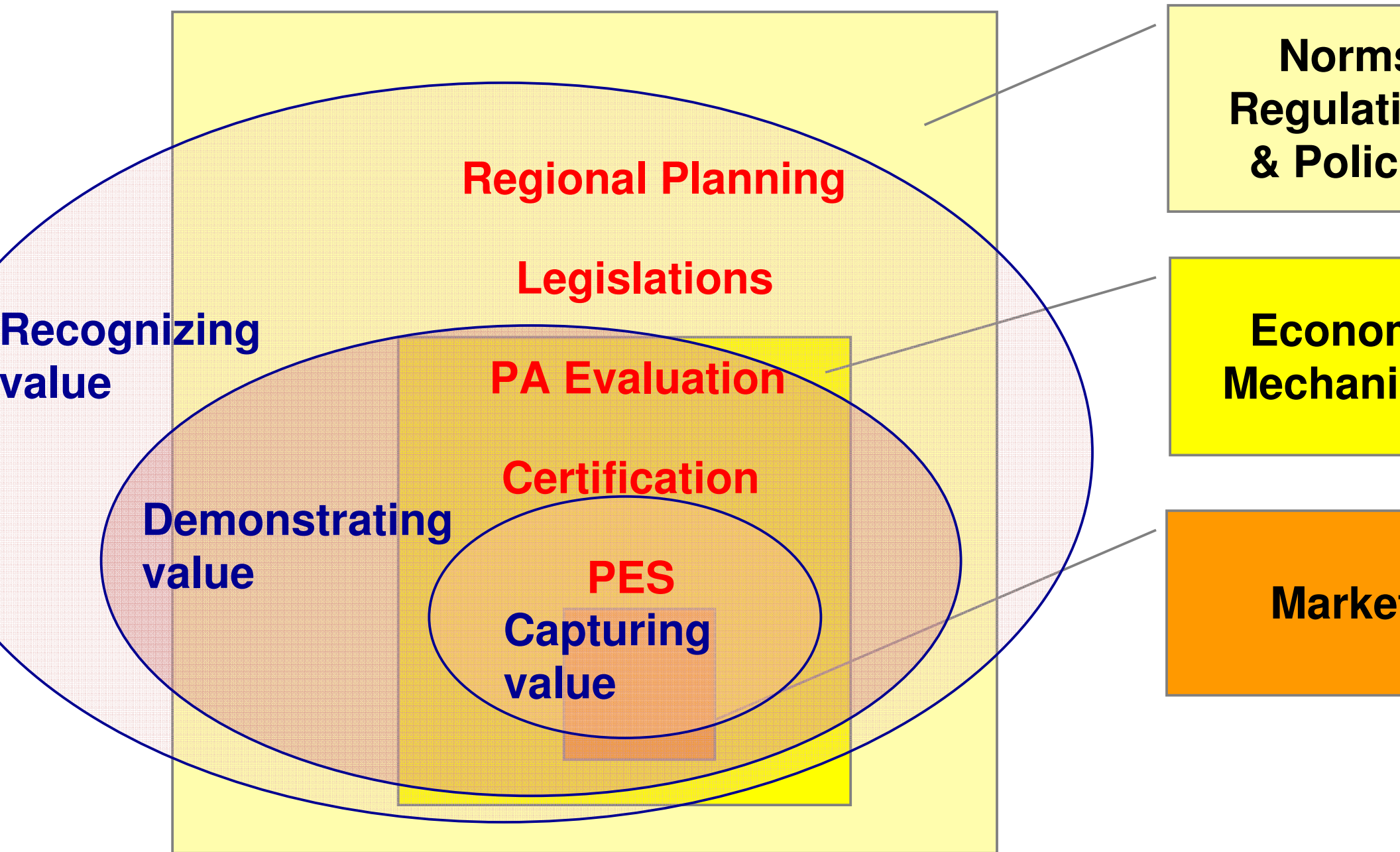
1. **Recognizing value**: a feature of all human societies and communities



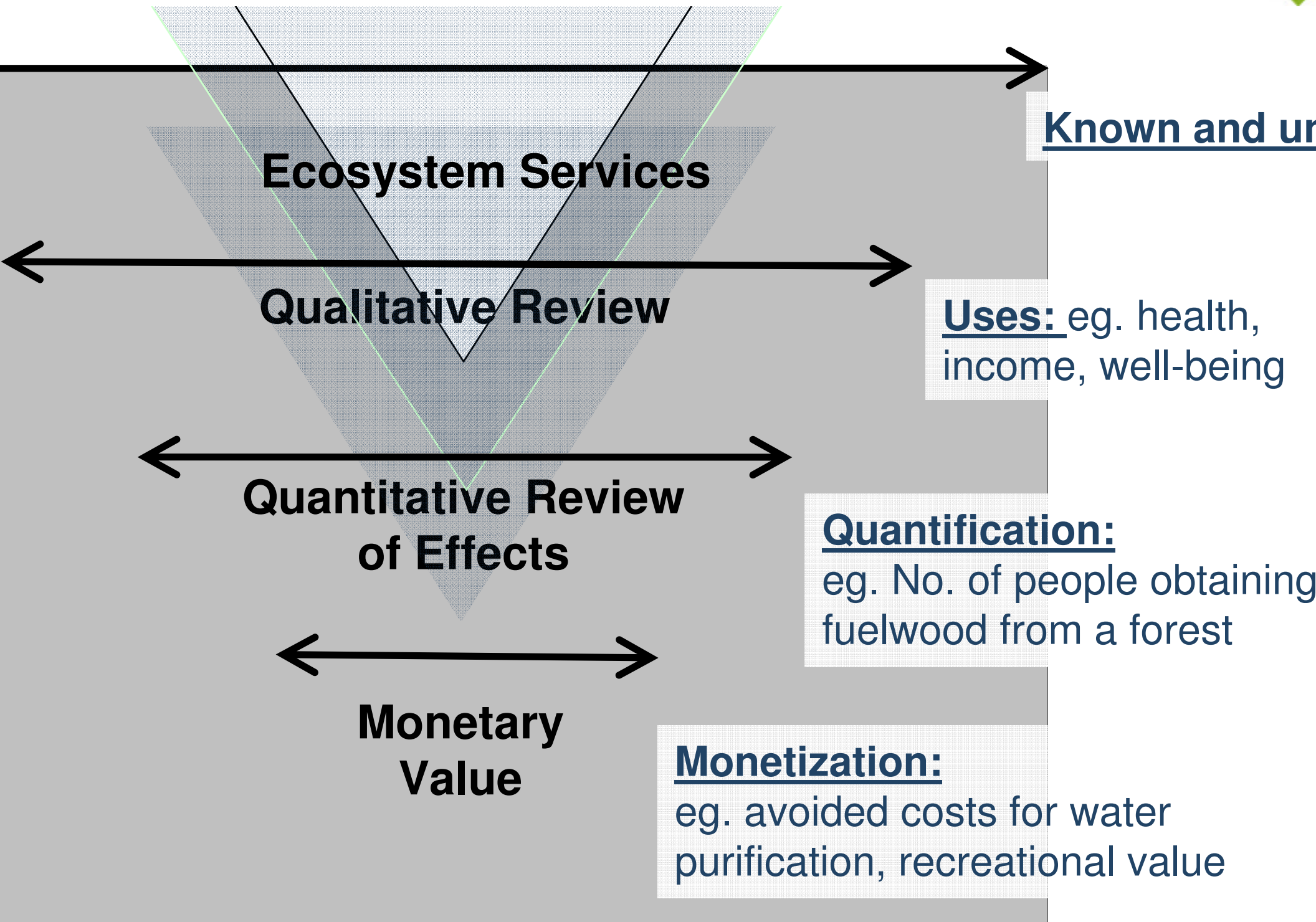
2. **Demonstrating value**: in economic terms, to support decision making

3. **Capturing value**: introduce mechanisms that incorporate the values of ecosystems into decision making





valuation challenge: different assessments





Valuation: key themes

Valuation decision itself has “trade-offs” that need to be recognized (long-term concerns)

Valuation is a human institution (who values)

Define the purpose of valuation (why value)

Valuation has ethical implications (uncertainties and risks)

Discounting implies ethical choices (equity)

economic valuation a means to...



recognise, demonstrate and, possibly, capture value.

raise awareness of the role of ecosystems in human well being.

help us to **measure better** so that we can **manage better**

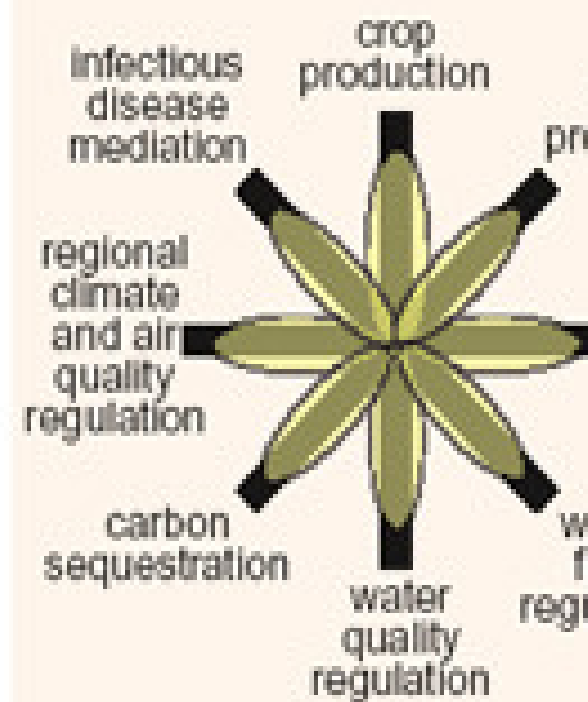
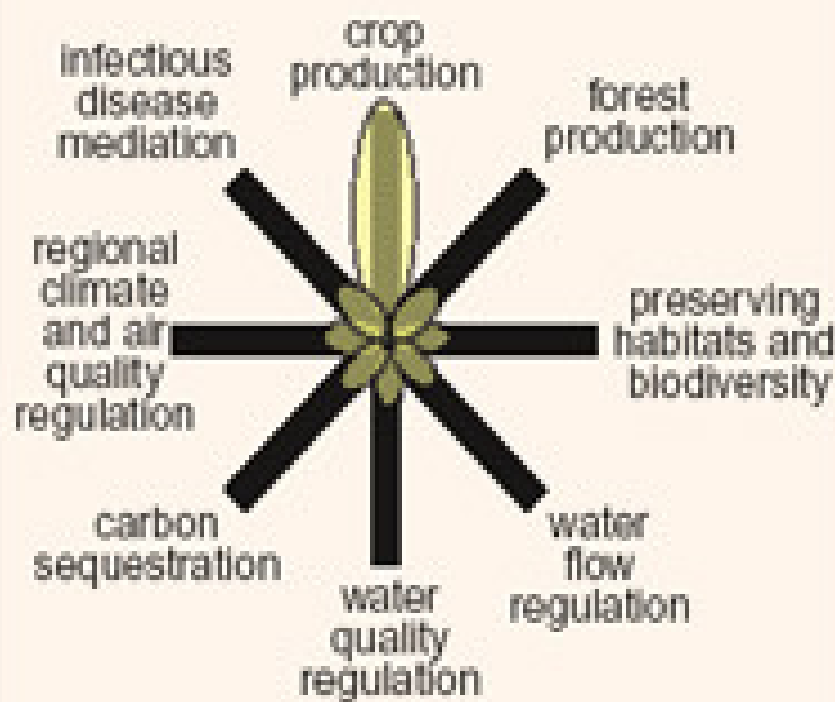
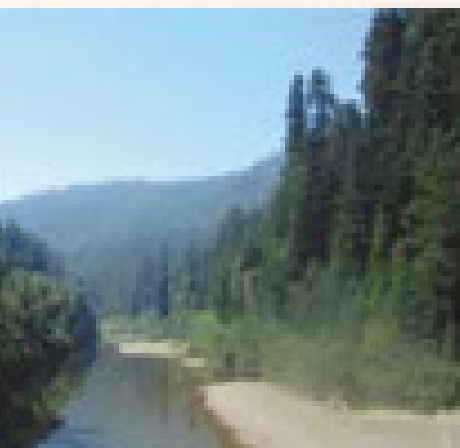
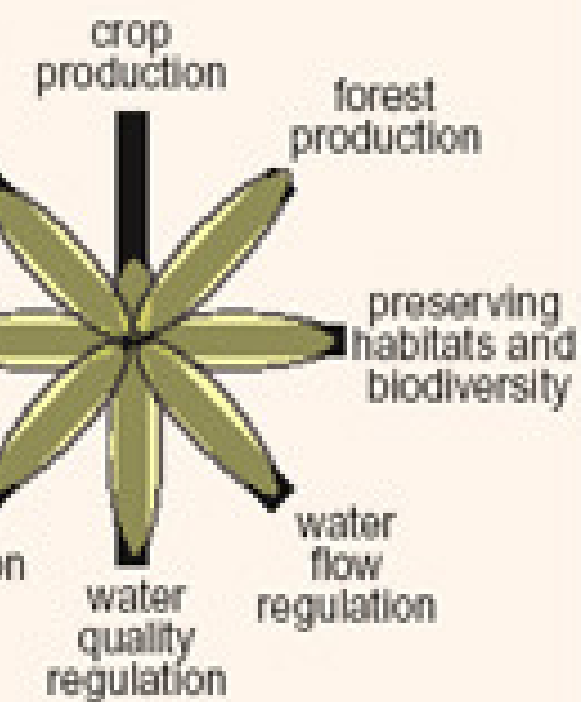
Identify 'true' costs of business as usual

Identify potential opportunities

Improve decision making when tradeoffs are necessary and useful information is lacking.

Provide a basis for policy formation and analysis

Management of a portfolio of ecosystem services



Summary



Making Nature's Values Visible: improved evidence base for improved governance, awareness for action – government (all levels), business, people

Measuring better to manage better: from indicators to accounts, valuation & certification

Changing the incentives: payments, taxes, charges, subsidy reform, markets

Protected areas: biodiversity riches that can also offer value for money, recreation and cultural identity, tourism.

Ecological infrastructure and benefits: climate change (mitigation/adaptation), air pollution & health, et al

Cultural capital and poverty reduction: investment for synergies – livelihoods, food, water, fuel.

Instream the economics of nature: across sectors, across policies, seek synergies across disciplines.

review

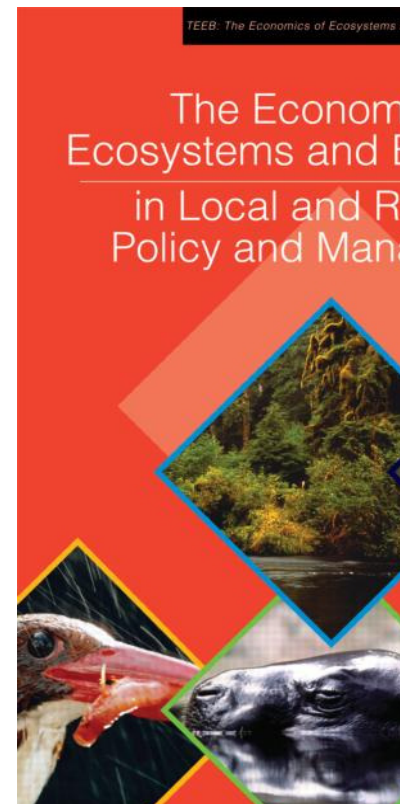
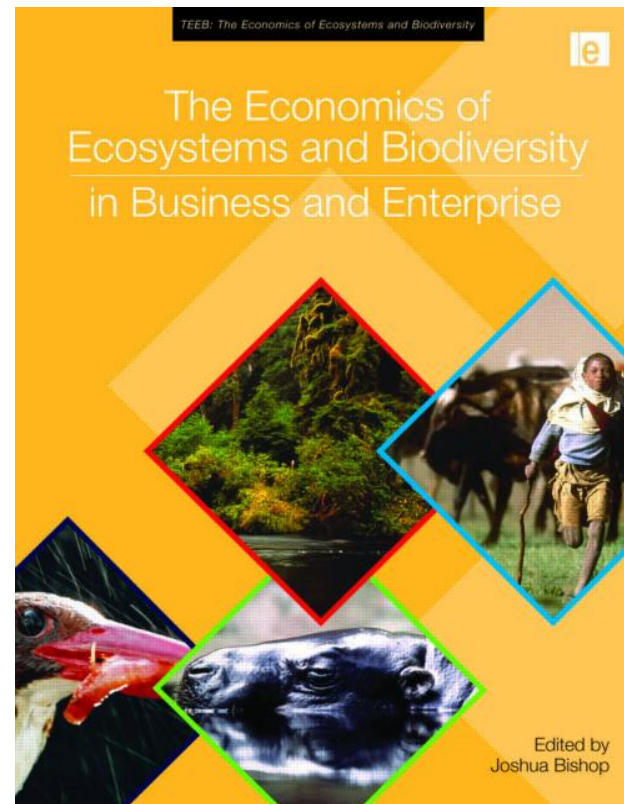
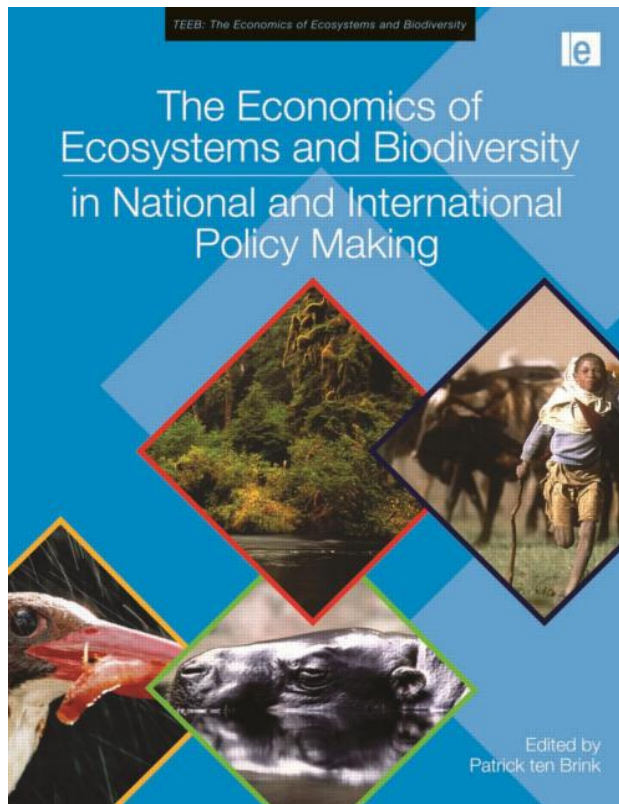
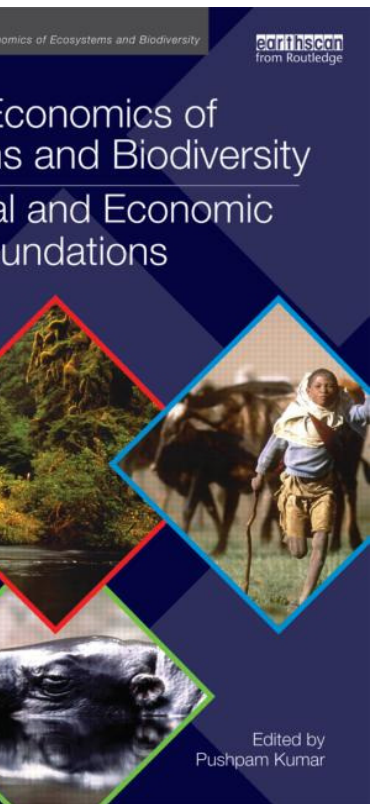


TEEB Study: timeline, products, people

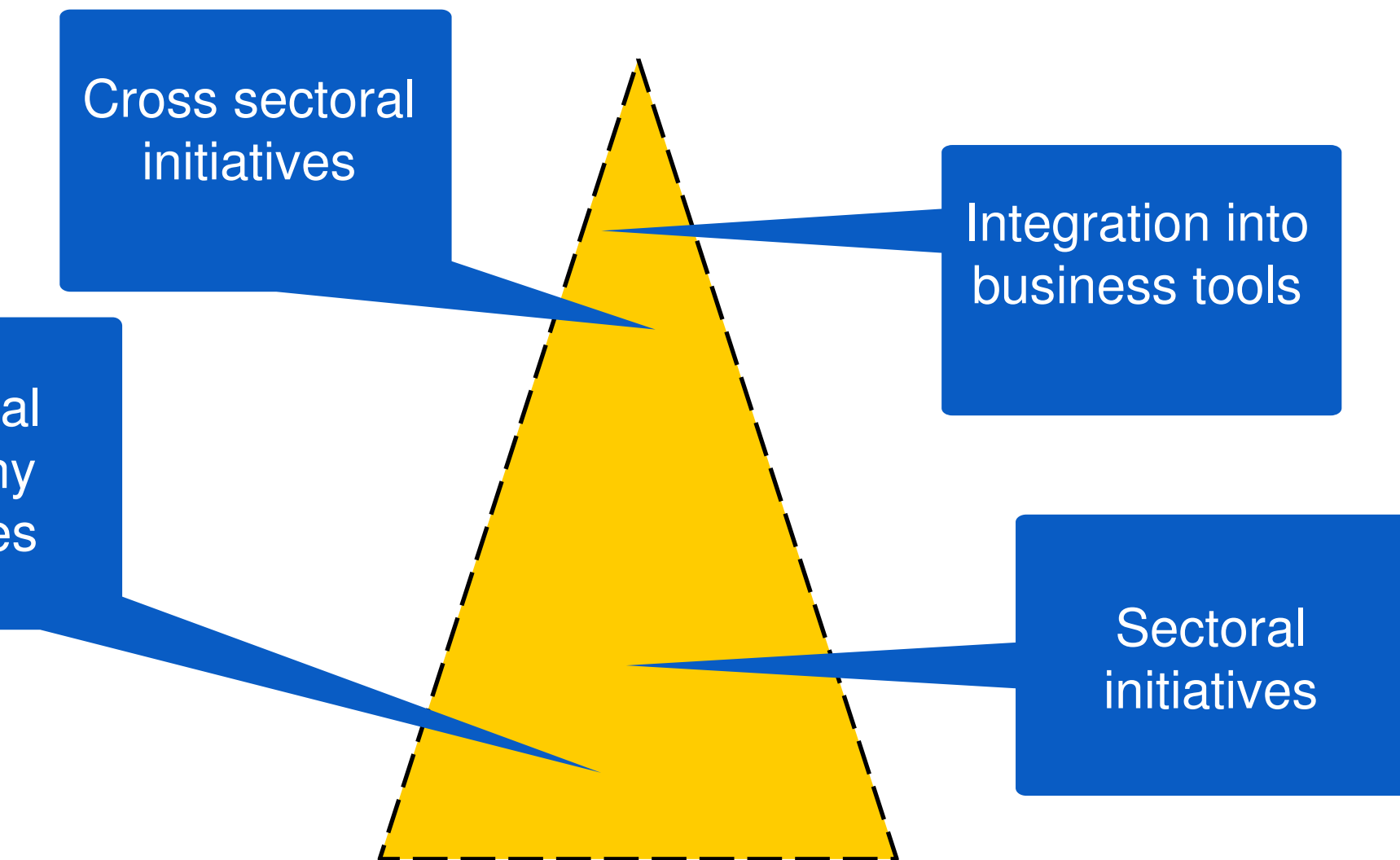
TEEB approach

The way forward

from study to implementation (Phase III)



Examples of TEEB implementation by business



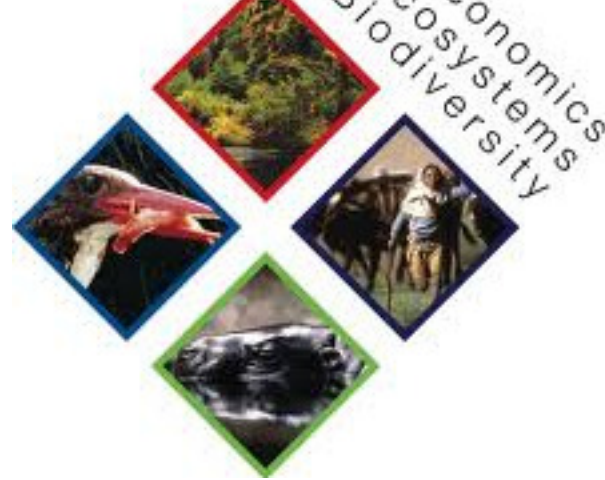


Survey: What are your TEEB Plans?

Have ecosystem valuation studies already taken place in your country?

What TEEB related actions will you make when you get back to your country after this workshop?

What kind of assistance will you be looking for to execute your TEEB plans?



TEEBweb.org

