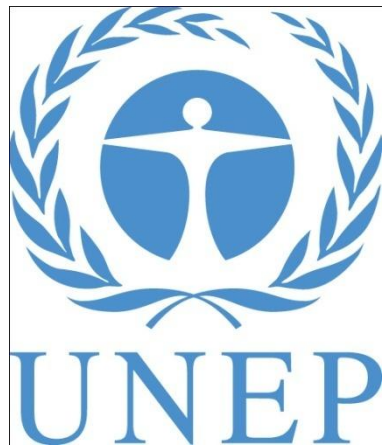




Introduction to The Economics of Ecosystems and Biodiversity (TEEB)

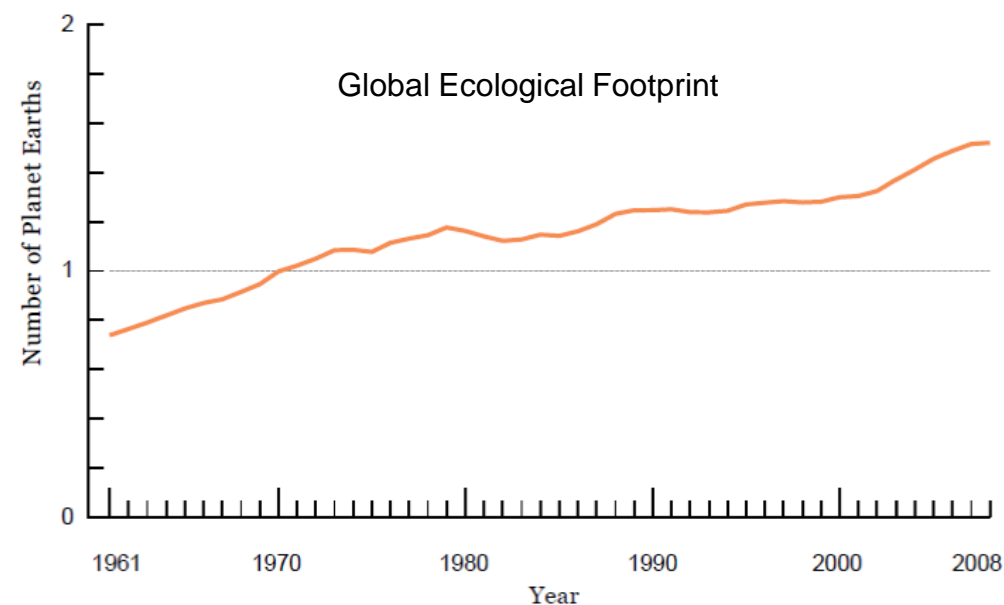
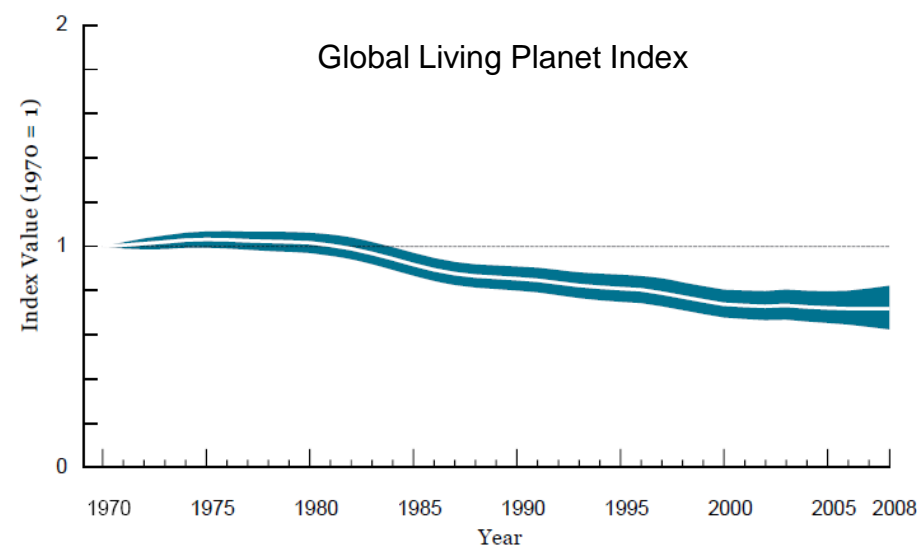
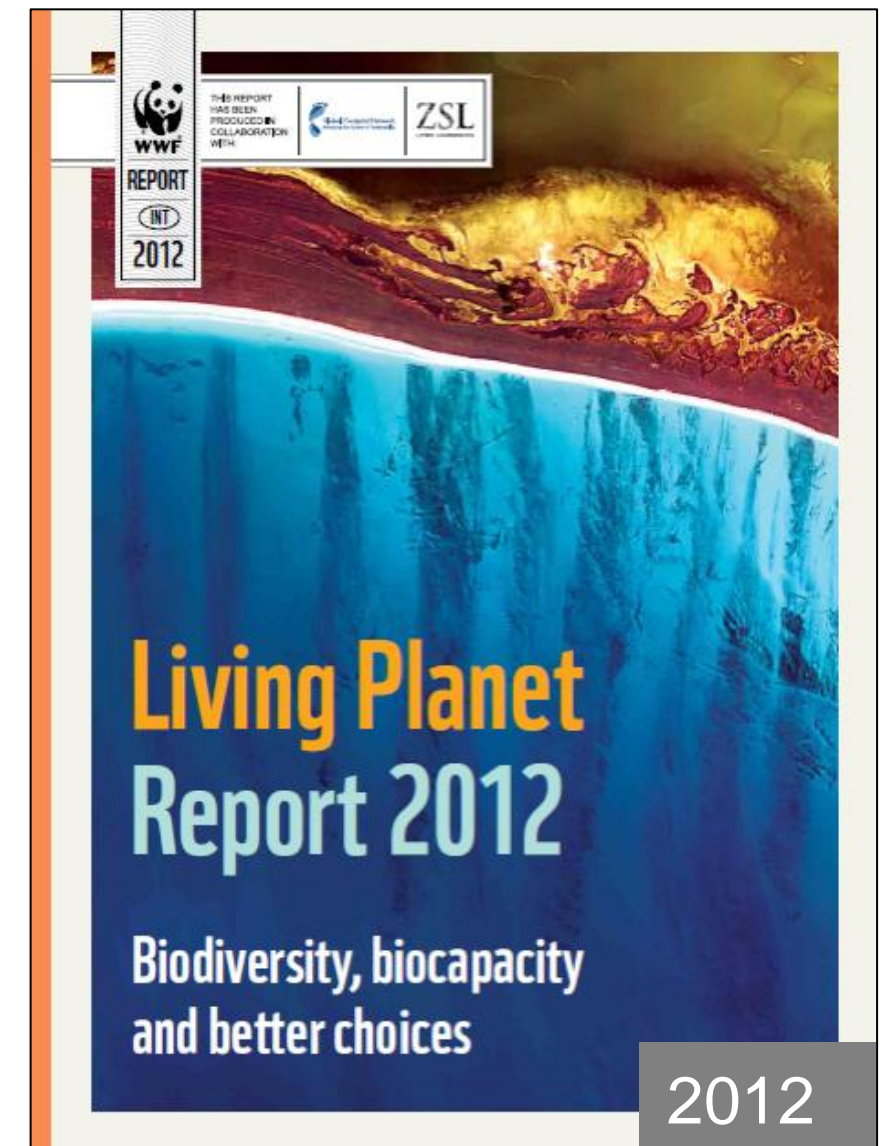


Nick Bertrand
United Nations Environment Programme

TEEB for Georgia Scoping Study: Inception workshop
28 May 2012
Tbilisi, Georgia

“In too many cases, the overexploitation of resources and damage or destruction of ecosystems are **highly profitable for a few stakeholders in the short term**; while the long-term benefits of protecting, maintaining and investing in natural capital are **inadequately valued or not valued in an economic sense at all**. As a result, the importance of biodiversity and ecosystem services is undervalued in economic and political trade-offs.”

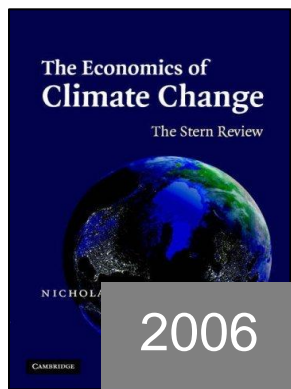
WWF, 2012





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
- **successes** need be understood, broadcast replicated and scaled...



2006



2005



2007



2008

Ecological & Economic Foundations

International and national policy makers

Business community

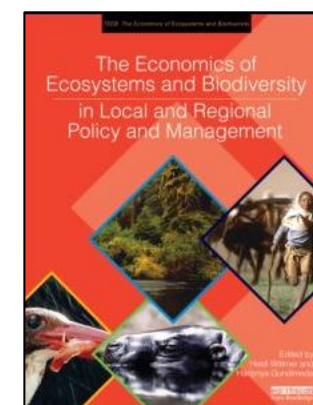
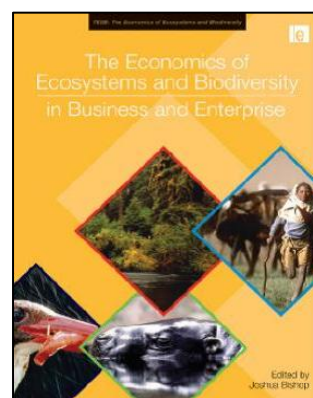
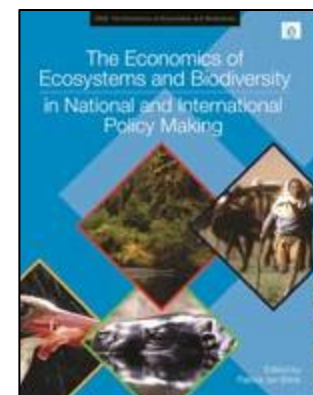
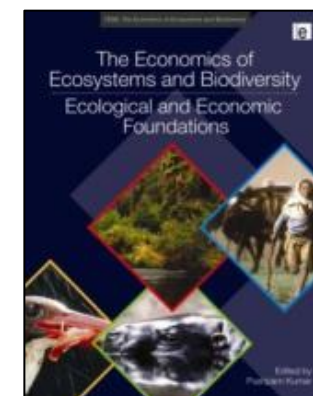
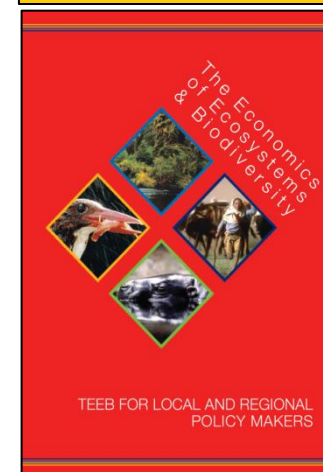
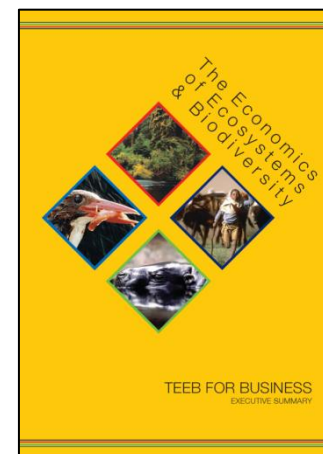
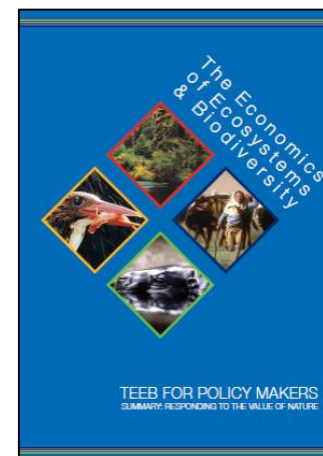
Local and regional administrators

Citizens & consumers



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

2010



2010-12



TEEB Study: some success factors

- **Independence** (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, , open architecture)



TEEB Study: response in policy

- G8 Carta di Siracusa (2009)
- G20 Leaders Statement (2010)
- CBD COP-10
 - Decision X/2 on the Strategic Plan for Biodiversity 2011-20
 - Decision X/21 on Business Engagement
 - Decision X/44 on Incentive Measures
- Ramsar Resolution X.12 on “Principles for partnerships between the Ramsar Convention and the business sector”
- CITES COP-15
- CMS COP-10
- EU biodiversity strategy to 2020, “Our life insurance, our natural capital” (May 2011)



What TEEB is aiming for...

- Synthesis of existing knowledge on economics of ecosystems and biodiversity
- Focused analysis and key messages for different end-users
- Active and worldwide dissemination to these users
- Awareness raising and mainstreaming

TEEB is not...

- Academic effort
- Global valuation study

The Economics of Ecosystems & Biodiversity



ECOSYSTEM SERVICES

Provisioning

- FOOD
- FRESH WATER
- WOOD AND FIBER
- FUEL
- ...

Regulating

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

Cultural

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

Supporting

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

LIFE ON EARTH - BIODIVERSITY

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

Freedom of choice and action

OPPORTUNITY TO BE ABLE TO ACHIEVE WHAT AN INDIVIDUAL VALUES DOING AND BEING

Source: Millennium Ecosystem Assessment



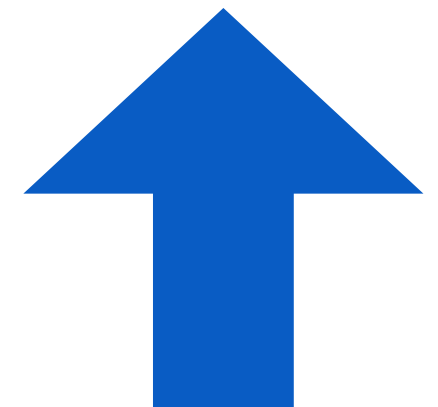
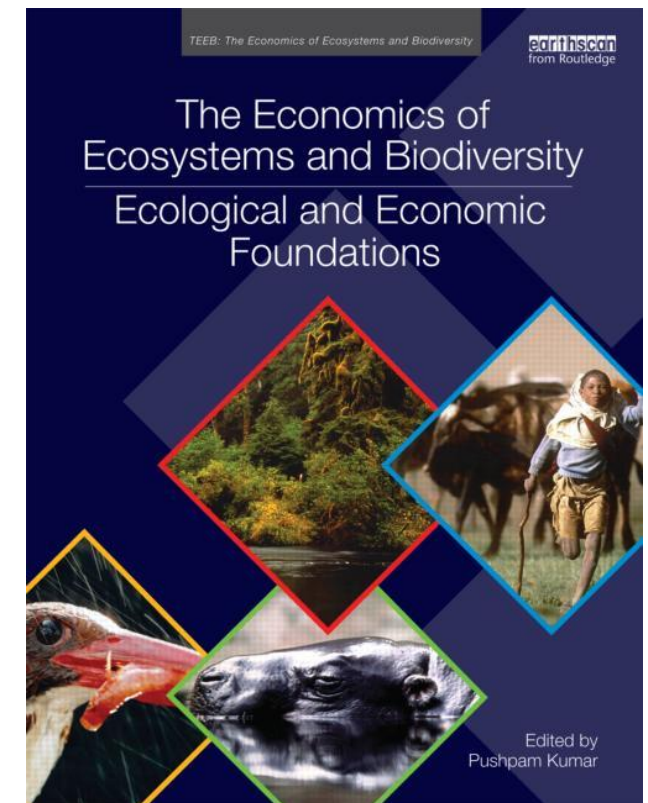
Economic valuation a means to...

- **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



Valuation: key themes

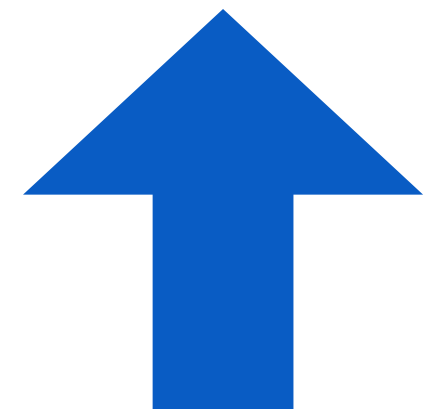
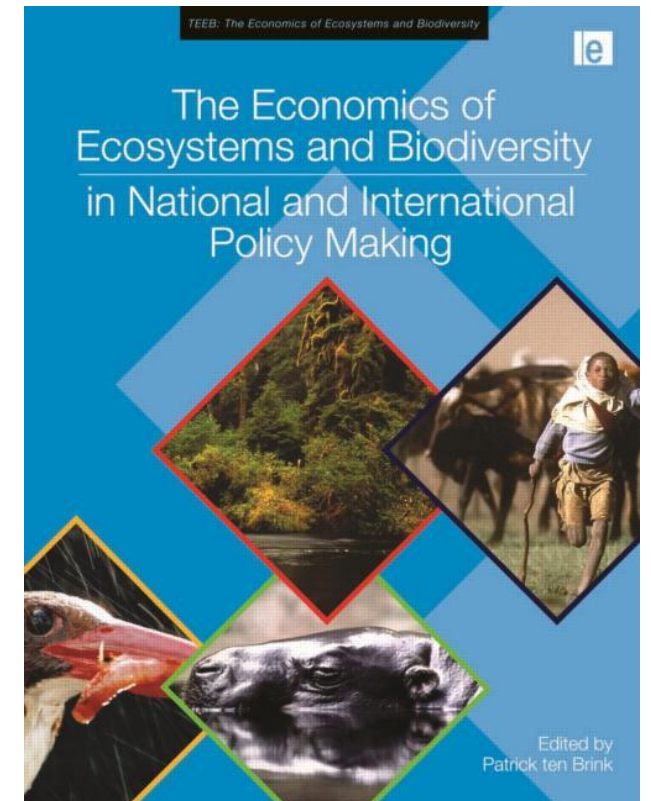
- Valuation decision itself has “trade-offs” that need to be recognized (long-term concerns)
- Valuation is a human institution (who values)
- Define the purpose of valuation (why value)
- Valuation has ethical implications (uncertainties and risks)
- Discounting implies ethical choices (equity)





TEEB is more than 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)

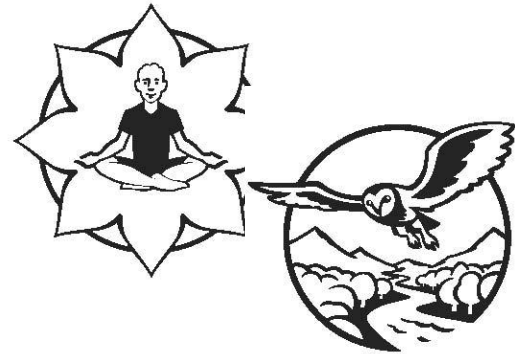




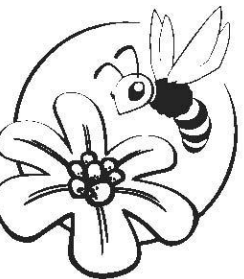
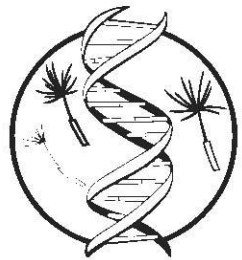
TEEB tiered approach



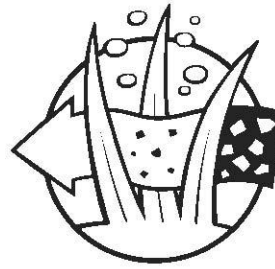
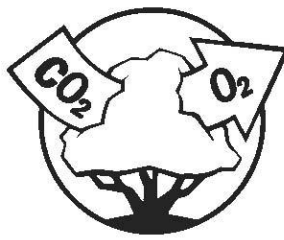
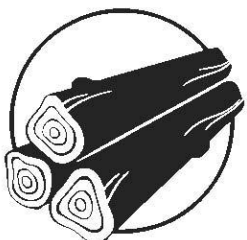
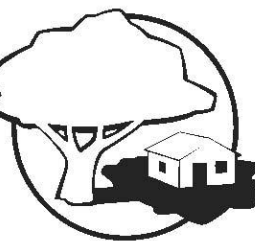
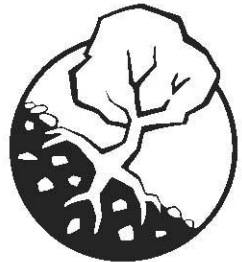
1. Recognizing value: a feature of all human societies and communities



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



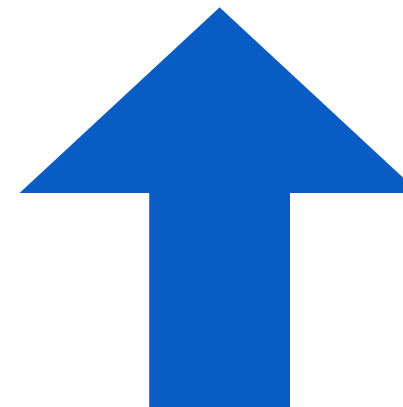
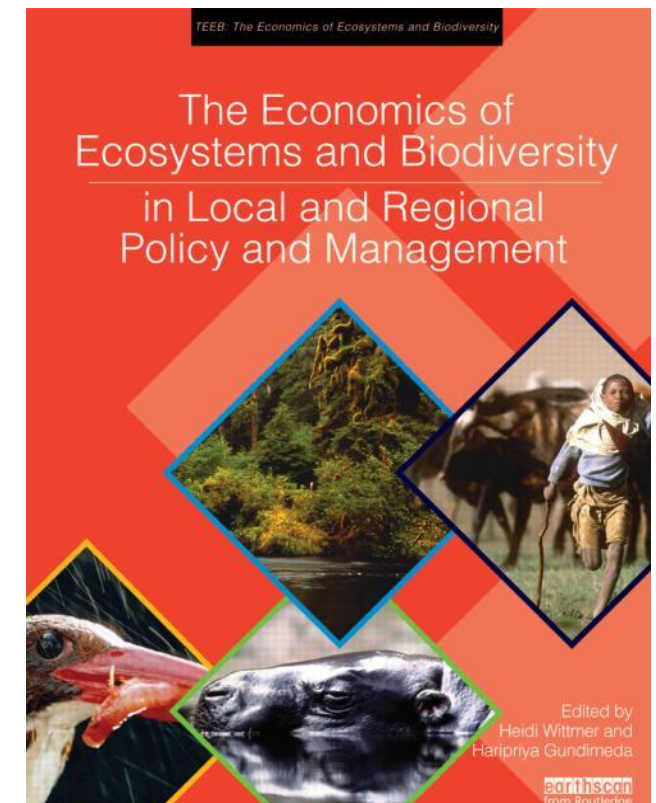
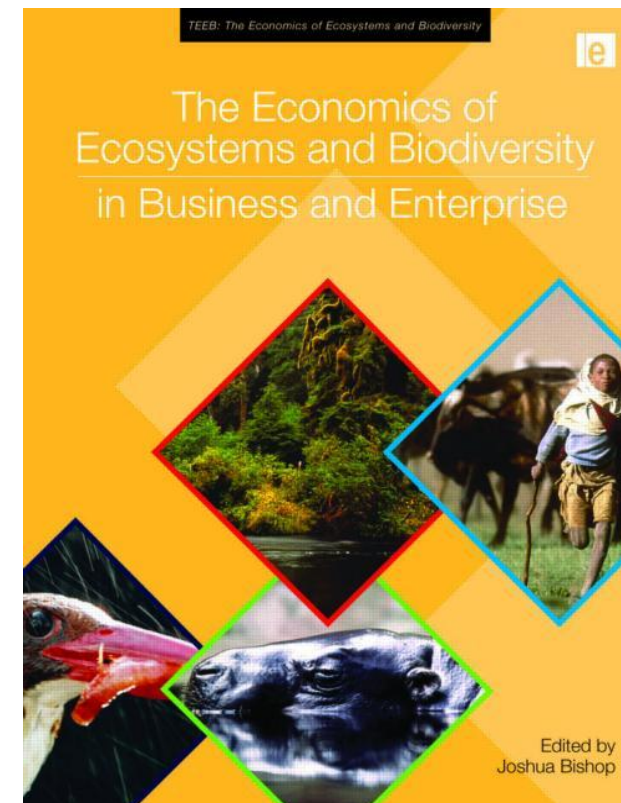
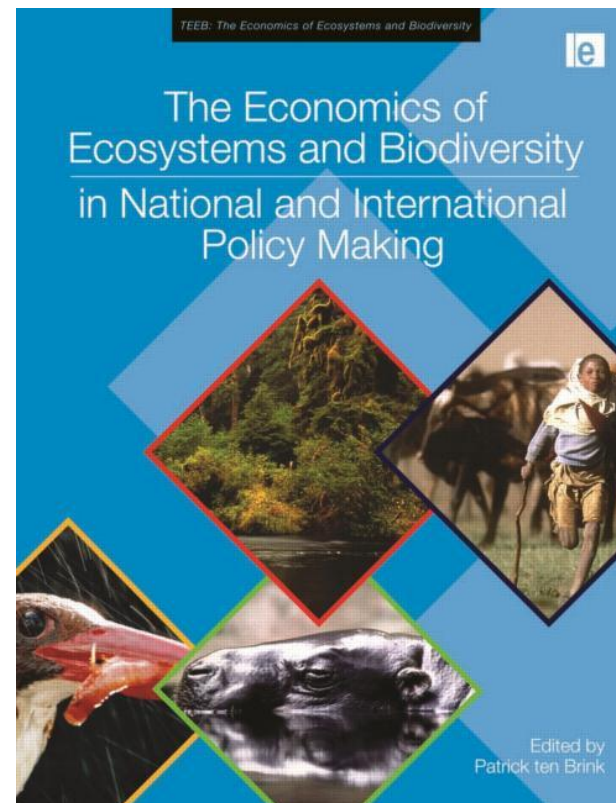
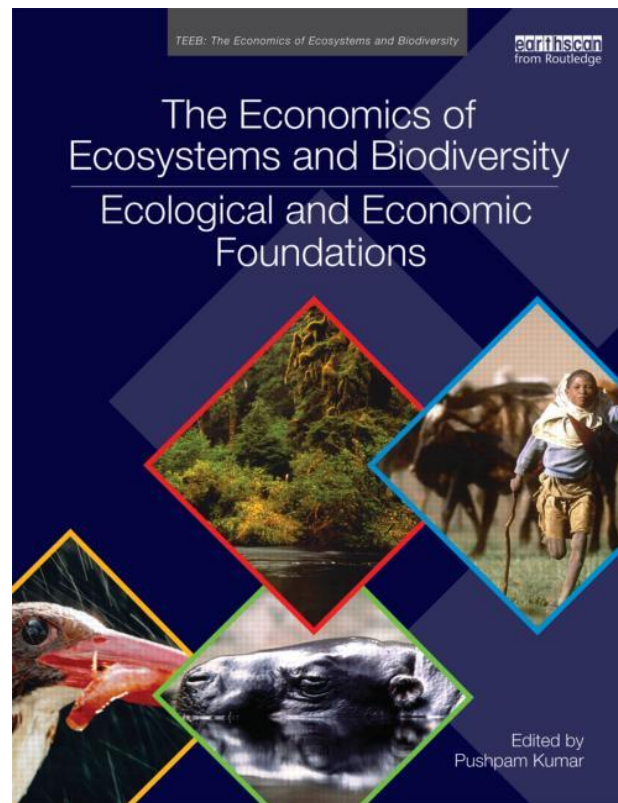
3. Capturing value: introduce mechanisms that incorporate the values of ecosystems into decision making



The Economics of Ecosystems & Biodiversity



From study to implementation (Phase III)



Tier 4 suppliers



Tier 3 suppliers

Leather tanning
Petroleum refining
Cotton weaving
and dyeing



Tier 2 suppliers

Outsole production
Insole production
Textile embroidery
and cutting
Adhesive and paint
production

Tier 1 suppliers

Shoe
manufacturing
Apparel
manufacturing
Accessory
manufacturing

Own operations

Offices
Shops
Warehouses
Business travel
Logistics
IT



The Economics of Ecosystems & Biodiversity



| | Water use | GHGs | Land use | Air pollution | Waste | TOTAL | |
|------------------------|-----------|-----------|-----------|---------------|-----------|------------|------------|
| | € million | € million | € million | € million | € million | € million | % of total |
| | 33% | 32% | 26% | 7% | 2% | 100% | |
| TOTAL | 47 | 47 | 37 | 11 | 3 | 145 | 100% |
| PUMA operations | <1 | 7 | <1 | 1 | <1 | 8 | 6% |
| Tier 1 | 1 | 9 | <1 | 1 | 2 | 13 | 9% |
| Tier 2 | 4 | 7 | <1 | 2 | 1 | 14 | 10% |
| Tier 3 | 17 | 7 | <1 | 3 | <1 | 27 | 19% |
| Tier 4 | 25 | 17 | 37 | 4 | <1 | 83 | 57% |
| | | | | | | | |
| EMEA | 4 | 8 | 1 | 1 | <1 | 14 | 10% |
| Americas | 2 | 10 | 20 | 3 | <1 | 35 | 24% |
| Asia/Pacific | 41 | 29 | 16 | 7 | 3 | 96 | 66% |
| | | | | | | | |
| Footwear | 25 | 28 | 34 | 7 | 2 | 96 | 66% |
| Apparel | 18 | 14 | 3 | 3 | 1 | 39 | 27% |
| Accessories | 4 | 5 | <1 | 1 | <1 | 10 | 7% |



Benefits to the company

- **Strategic** tool
- **Risk management** tool
- **Transparency** tool

"We chose to convert our environmental impacts into monetary terms to make them digestible and meaningful to a much wider audience. (...) we hope to stimulate debate and we welcome support from others to continually evolve and refine the methodology for valuing corporate environmental externalities" PUMA, 2011



In 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
- **Natural capital and poverty reduction:** investment for synergies – livelihoods, food, water, fuel.
- **Mainstream the economics of nature:** across sectors, across policies, seek synergies across disciplines.



TEEBweb.org

