The Economics of Ecosystems & Biodiversity

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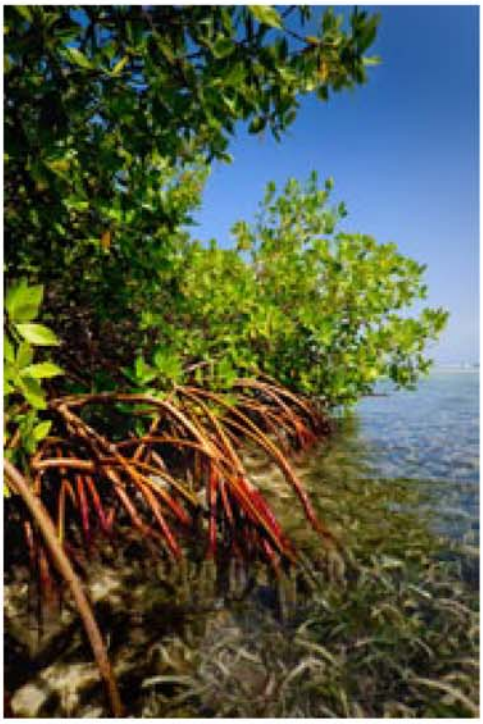
TEEB to release recommendations for National Policymakers

On November 13 in Brussels, TEEB will release a summary of key recommendations for national and international policymakers. A summary document will be available and detailed chapters will be available on the TEEB website.



TEEB study addresses root causes of biodiversity loss iStockPhoto

The writing of this volume of the TEEB study has been coordinated by Patrick ten Brink, head of the Brussels office of the Institute of European Environmental Policy (IEEP). Over one hundred experts have contributed to this report from around the world

This TEEB for Policymakers report is informed by an overarching vision that the dominant economic model and the accounts of society are in need of serious change, and that recognizing and rewarding the value delivered to society by the natural environment, and taking steps to protect it must become policy priorities.

Increasingly there are calls from leading thinkers to reform the institutional framework in fundamental ways such as: including natural capital formation and destruction in the accounts of society; expanding the reach of markets in order to enable payments for ecosystem services and so on. Each one of these big changes would go a long way to address the root causes of biodiversity loss and ecosystem degradation.

The challenge, as always, is change and its many dimensions: its nature, its scale, its speed, and its unintended consequences. TEEB's review and synthesis of the vast literature on the economics of ecosystems and biodiversity, its key messages, and recommendations to end-users are all intended to be a valuable part of that change.

What is TEEB?

The Economics of Ecosystems and Biodiversity (TEEB) study is a major international initiative study is a major international initiative to draw attention to the global economic benefits of biodiversity, to highlight the growing cost of biodiversity loss and ecosystem degradation and to draw together expertise from the fields of science, economics and policy to enable practical actions moving forward. Over 200 experts from over 26 countries are contributing to the study.

Who is it for?

It is for national and international policymakers; regional and local administrators and policymakers; business and enterprise and citizens.

Timeline

The final findings of the TEEB study will be presented in the autumn of 2010. Sections of the report will be released along this time line. Chapters for the ecological and economic foundation of TEEB can be found online. TEEB for policymakers is available from 13 November 2009. TEEB for regional and local policy-makers and administrators will be released in Spring 2010 and the report for business and enterprise will be released in Summer 2010.

www.teebweb.org

"By releasing this volume of the TEEB study now, we hope that it will provide guidance for policymakers in considering actions that address the economic dimension of biodiversity and ecosystem service loss. By making chapters available on the web we are providing deeper information for those that require it, while also still keeping the door open for input, in keeping with our open-architecture model", says study leader Pavan Sukhdev.

Any additional recommendations from ongoing discussions will be included in the final published chapters of the TEEB for Policymakers report, as well as the TEEB synthesis report. The synthesis report will gather key findings from across each of the deliverables of the TEEB study and will be released in the autumn of 2010.

TEEB for Policymakers available 13 November http://www.teebweb.org

World Economic Forum Summit on the Global Agenda tackles Biodiversity Loss

Last year's inaugural Summit on the Global Agenda in Dubai heightened an appreciation of the urgency and necessity to address global challenges in an integrated way. Following this initial success, the second Summit on the Global Agenda will be held on 20-22 November in close partnership with the Government of Dubai and a total of 78 councils will be interacting during the three day event.

The members of Global Agenda Council on Ecosystems and Biodiversity Loss will explore ways to tackle governance gaps, as well as examine interlinkages among the various councils. These deliberations and the Councils' recommendations to improve international cooperation will provide important input for organizing sessions at the 40th Annual Meeting in Davos-Klosters in January 2010.

Pavan Sukhdev and Josh Bishop, chief economist for the IUCN, co-chair the Global Agenda Council on Ecosystems and Biodiversity Loss.

TEEB partnership with India strengthened at New Delhi event

India's Minister of State for Environment and Forests, Shri Jairam Ramesh officially opened the first TEEB seminar in India on October 13. The seminar was held in New Delhi, in partnership with the Indian Institute of Forest Management and attended by a diverse audience that included renowned Indian conservationists, government officials and experts from various scientific organizations across the country.

The seminar strengthened TEEB's partnership with the Indian government. Following the successful discussions on internalizing biodiversity and ecosystem values in policy and planning, and the importance of natural capital for urban areas, the Seminar signalled the initiation of an Indian partnership into TEEB findings and further collaboration with the government, institutions and people of India.

Panel addressing biodiversity and ecosystem values in Indian forestry, planning and policy'.

The Minister also announced the launch of the TEEB Climate Issues Update in India and confirmed that all colours of carbon will be part of the negotiating process at Copenhagen in December.

Colours of Carbon key to combating Climate Change

A new report released on 14 October estimates that carbon emissions-equal to half the annual emissions of the global transport sector-are being captured and stored by marine ecosystems such as mangroves, salt marshes and seagrasses. Coastal ecosystem services have been estimated to be worth over US$25,000 billion annually, ranking among the most economically valuable of all ecosystems. A 'Blue Carbon' fund able to invest in the maintenance and rehabilitation of key marine ecosystems should be considered by governments keen to combat climate change.

Achim Steiner, UN Under-Secretary General and UNEP Executive Director, said: "If the world is to decisively deal with climate change, every source of emissions and every option for reducing these should be scientifically evaluated and brought to the international community's attention-that should include all the colours of carbon including now blue carbon linked with the seas and oceans."

A combination of reducing deforestation on land, allied to restoring the coverage and health of these marine ecosystems could deliver up to 25% of the emissions reductions needed to avoid 'dangerous' climate change. On land, green carbon, forests, also provide services such as freshwater, soil stabilization, nutrients for agriculture, eco-tourism opportunities and food, fuel and fibre - all of which will be key to buffering vulnerable communities against climate change impacts.TEEB is urging governments to factor these wider benefits and to consider all the colours of carbon in the negotiations at Copenhagen.

The report "Blue Carbon - The Role of Healthy Oceans in Binding Carbon"

can be accessed at http://www.unep.org
or at http://www.grida.no

Blue carbon	The world's oceans bind an estimated 55% of all carbon in living organisms. Most of this is stored in mangroves, marshes, seas grasses, coral reefs and macro-algae
Green carbon	The carbon stored in terrestrial ecosystems e.g. plant biomass and soils in natural forests and plantations, agricultural lands, wetlands and pasture
Brown carbon	C02 emissions from human energy use and industry
Black carbon	Formed through incomplete combustion of fossil fuels, bio-fuel and biomass and is emitted as soot

TEEB Ecological and Economic Foundation chapters on web

For those interested in looking into the ecological and economic foundations of the TEEB study, draft chapters for the D0 deliverables can be found on the TEEB website. Each of the chapters on the site has been peer-reviewed but TEEB still welcomes any additional input and comments up until March 31, 2010.

This information will focus on improving our understanding of the economic costs of biodiversity loss and ecosystem degradation. This assessment is the most comprehensive overview of existing thinking in this area to date, and the process is bringing scientists and economists together to provide the analysis and tools required in order to be able to create a robust methodological framework enabling the decision-makers at different levels to do economic analysis of ecosystem services and biodiversity.

This part of the TEEB study is co-ordinated by Dr. Pushpam Kumar of the University of Liverpool and over 90 experts are involved as authors and reviewers for this report.

The chapter content is as follows:

Chapter 1: frames the linkages of economy and ecosystem services

Chapter 2: presents the current state of knowledge on the relationships between biodiversity, ecosystems and ecosystem services. It explores the underpinnings of this relationship for economic valuation.

Chapter 3: provides a review of existing biophysical measures and indicators that are used to quantify and map our knowledge on biodiversity and ecosystem services.

Chapter 4: establishes the basis for a much needed encompassing understanding of valuation, including ecological, economic and social values, and discusses the social and cultural contexts of biodiversity and ecosystem service valuation.

Chapter 5: (not currently available) provides a detailed discussion of the merits, issues and challenges to applying (i) monetary valuation techniques and then (ii) benefits transfer in the context of this assessment.

Chapter 6: explores some of the ethical issues for economic valuation.

Chapter 7: (not currently available) presents a synthesis of the empirical economic valuation literature in the form of a matrix of values for the main types of ecosystems and ecosystem services.

Chapter 8: (not currently available) makes a preliminary analysis of the costs of action and inaction for several biomes including terrestrial and marine.

Chapter 9: (not currently available) explores the macroeconomic dimension of loss of ecosystem services. By focusing on green accounting, trade and multi sector growth models, it assesses the state of knowledge on changes in ecosystem services and its economy-wide implications.

Chapter 10: (not currently available) draws key conclusions and recommendations from the other chapters within this report.

Elinor Ostrom wins Nobel Economics Prize

For the first time, the Nobel economics prize has gone to a woman, Elinor Ostrom of Indiana University. She shares it with colleague Oliver Williamson.

Ostrom was awarded the Nobel Prize "for her analysis of economic governance, especially the boundaries of the firm," according to the Royal Swedish Academy of Sciences. Ostrom's work on common ownership shows that markets, not distant governments, manage things better.

Ostrom and Williamson have focussed on the management of resources, particularly resources that are owned in common, like forests, parks and fisheries.

"She observes that resource users frequently develop sophisticated mechanisms for decision-making and rule enforcement to handle conflicts of interest, and she characterizes the rules that promote successful outcomes," the Royal Swedish Academy of Sciences noted.

Biodiversity Scientists more engaged in policy debates

At the recent international DIVERSITAS Open Science Conference in Capetown, Stanford University Professor Hal Mooney, who chairs DIVERSITAS highlighted the shift in focus for biodiversity science:

"The focus of biodiversity science today is evolving from describing problems to policy relevant problem solving. Experts are rising to the immense challenge, developing interdisciplinary, science-based solutions to the crisis while building new mechanisms to accelerate progress. Biodiversity scientists are becoming more engaged in policy debates."

At the conference scientists advanced planning to create a science-based global biodiversity observing system called GEO-BON to improve coverage and consistency in observations at ground level and via remote sensing. GEO-BON will help create a comprehensive baseline against which scientists can track biodiversity trends and evaluate the status of everything from genes to ecosystem services.

In Nairobi in early October, environment ministers from around the world considered the creation of a new body, called IPBES, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, an international mechanism to unify the voice of the biodiversity science community to better inform policy making. Its function would be similar to that of the International Panel on Climate Change.

Many Countries Factoring Environmental Investments into Economic Stimulus Packages

The Asian economies of China and the Republic of Korea are emerging as global leaders in their commitments to invest significant slices of their stimulus packages in environmental, 'green new deal' projects.

A Global Green New Deal update by the UN Environment Programme (UNEP), launched as G20 nations met in Pittsburgh, Pennsylvania, shows that over a third of China's recovery spending is being focused on areas ranging from railways and water infrastructure to energy efficiency and renewables like wind and solar.

The Republic of Korea is going even further in terms of setting the stage towards a transition to a low carbon, resource efficient Green Economy. Close to 80 per cent of its stimulus package or around $31 billion is aimed at promoting energy efficient buildings and water and waste management-but also investments in areas such as renewable energy, low emission vehicles and railways.

Other countries that have in part seized the economic crisis as an opportunity for a different development path include Australia, the United States, Japan, Germany, South Africa and France.

In terms of the green stimulus per head of population, the Republic of Korea also emerges as a forerunner with over $1,230 per person followed by Australia, $420 per person; the United States, $365 per person and Japan, over $280 per person.

The Global Green New Deal update is available at: http://www.unep.org/pdf/G20_policy_brief_Final.pdf

Sweden's High level meeting: Visions for Biodiversity beyond 2010 calls for integration of economic value of ecosystem services into economic systems

In September the Swedish EU Presidency hosted a High Level meeting for environment ministers in order to prepare for the revision of the Strategic Plan for the Convention on Biological Diversity.

The Chair's conclusions from the meeting emphasized the need to develop a bold and cross-sectoral vision and set ambitious international action oriented targets for biodvieristy and ecosystem services as a cornerstone for sustainable development and for reaching the Millennium Development Goals.

Strategic principles included the full integration of the economic value of ecosystem services in economic systems, in national accounting, policy assessments as well as in strategies for sustainable development. They also highlighted the need to make full use of the contribution of ecosystem services to an eco-efficient economy, recognizing the value of natural capital as a foundation of economies and well-being.

"I am very happy with the results of the EU meeting on biodiversity and the contribution from TEEB. We now look to the global climate summit in Copenhagen in December where the outcome is crucial for securing biodiversity and ecosystem services in the future. Ecosystem services will in turn be decisive for successfully implementing climate change policy, says Sweden's Minister for the Environment, Andreas Carlgren.

The host for the meeting, Andreas Carlgren, Sweden's Minister for the Environment, together with Pavan Sukhdev.
Photographer: Gunnar Seijbold

The meeting was held back-to-back with the centenary celebrations of the designation of the first marine national parks in Europe and the inauguration of the transboundary marine national parks, Kosterhavet (Sweden) and Ytre Hvaler (Norway).

Further information can be found at: http://www.se2009.eu/en/meetings_news/2009/9/7/high-level_meeting_visions_for_biodiversity_beyond_2010_people_ecosystem_services_and_the_climate_crisis

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