

#### PRESS RELEASE

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New international study, *TEEB for Policy Makers*, launched today [13 November, 2009] outlines the vast economic and social benefits of taking care of the planet's ecosystems, the costs of inaction and the options for response.

The report, the latest from TEEB – an international initiative on The Economics of Ecosystems and Biodiversity – sheds light on the real value of our natural capital and the consequences of ignoring this – whether in market signals, our policy responses, business decisions or private consumption. We already know that over 60% of the worlds' ecosystems<sup>i</sup> are degraded with a raft of human and environmental impacts. Making the economic implications visible is essential in creating a robust and cost-effective response.

Eroding natural capital undermines the resource base for jobs, livelihoods and growth in rich as well as poor countries. The report underlines the urgency for policy makers to accelerate, scale up and embed investments in management and restoration of ecosystems.

It is not enough to address only the climate change challenge. Firstly biodiversity is part of the solution to climate change – both to help its mitigation, and to help in adaptation. Secondly, biodiversity loss will have dramatic impacts on economic prospects, and lead to social crisis.

Our economic interface with nature must change. A new economic approach means reforming harmful subsidies, getting polluters to pay for their damage instead of society and having people pay the full cost for the resources they use. Valuing nature involves change across the board – in policy decisions, in measuring prosperity and national accounts, in purchase decisions. The report shows that we already have ample tools to apply – and that our actions can make a difference, notably to alleviating global poverty.

# 1. Ecosystems are critical for people, the economy and climate. We need to understand and measure these values to better manage natural capital and safeguard its benefits into the future.

Ecosystems – forests, watersheds, wetlands, grasslands, marine areas – provide a huge range of benefits we often take for granted. Food, fuel, carbon storage, medicines, clean water, mitigation of risks from floods and tsunamis... the list is vast.

Ecosystems are everywhere – in the green infrastructure of cities, agricultural lands, lakes, coral reefs. Those with high biodiversity value are often designated as protected areas but others too can be managed to offer important benefits or could provide valuable services, if restored.

Worldwide, nearly **1.1 billion people – one sixth of the world's population – depend on protected areas for a significant percentage of their livelihoods**<sup>ii</sup>. Protected areas are far more than fenced-off zones for charismatic species - they are essential to help mitigate and adapt to climate change. The global network of protected areas currently stores around 24 times the carbon emitted every year. Degrading even part of the network would undermine our chances of addressing climate change.<sup>iii</sup>

**One in three of the world's hundred largest cities draws a high proportion of its drinking water from forest protected areas** - this service has **saved the city of New York a total of over \$6 billion in water treatment costs.** Typically we only appreciate this kind of free service once it fails – leaving public utilities and rate payers to foot the bill.

All governments need to undertake national assessments of the value of their natural capital - what is being lost and where investments in nature can offer value-for-money. TEEB shows how we can combine incentive schemes, rules and market-based instruments to keep our ecological assets healthy - and directly reward the people on the ground who make this possible.

## 2. Global subsidies (worth over \$US 1 trillion per year) include many that are harmful environmentally, have outdated objectives and need reform.

The report puts energy, agriculture, transport and fisheries subsidies under the microscope to identify opportunities to make better use of available funds.

Fisheries subsidies worldwide amount to **\$15-35 billion/year**<sup>iv</sup>. Yet 80% of stocks are already overexploited or fully exploited<sup>v</sup> and the World Bank estimates that annual yield is \$50 billion less than would be the case were they better managed<sup>vi</sup>.

The G20 (Pittsburgh Summit, September 2009) called for action to address energy subsidies, including biofuels. These were once heralded as a win-win for climate, agriculture and rural development yet their carbon savings are not what they first seemed. Converting forest lands to biofuels releases more carbon from trees and soil than any CO<sub>2</sub> savings from using biofuel in transport. Yet over  $\triangleleft 1$  billion is spent on biofuel subsidies per year in the US, EU and Canada combined<sup>vii</sup>

Agricultural subsidies of different kinds are running at around \$ 261 billion/year in the OECD<sup>viii</sup> countries.

## We need a systematic and transparent inventory of subsidies and development of a road map for reform so as to reduce the pressure on the public purse as well as on nature.

3. Monitoring problems and taking early action makes economic sense. Preventing damage is nearly always far cheaper than trying to restore damaged ecosystems at a later date. Avoiding the cumulative build-up of problems helps us to anticipate 'tipping points' that can have catastrophic impacts on economic sectors and individuals.

Biological invasions by **invasive alien species** show the wisdom of 'prevention is better than cure'. In the Mediterranean, failure to take rapid action after detecting a square metre patch of *Caulerpa taxifolia* in 1984 had drastic impacts on native species, tourism, commercial and sport fishing and diving: by 2001, the marine algae covered over 12,000 hectares across at least five countries and eradication was no longer feasible.

The now notorious **coastal 'dead zones'** caused by fertiliser run-off not only spell trouble for biodiversity but also threaten the commercial fisheries of many nations and generate hundreds of millions of dollars in damage <sup>ix</sup>. Once tipping points are passed, these zones form seasonally in economically vital ecosystems worldwide, including the Gulf of Mexico and Chesapeake Bay. The latest count showed 405 dead zones now dotting coastlines around the world.

The Institute for European Environmental Policy (IEEP) has coordinated this groundbreaking report which draws together research from over a hundred economists and scientists across the world, looking at cutting-edge valuation and practical policy responses from different economic, institutional and cultural settings. Led by **Patrick ten Brink**, Head of IEEP's Brussels Office, it builds on close engagement with policy makers and experts through the wider TEEB Study under the leadership of Pavan Sukhdev.

Patrick ten Brink, TEEB for Policy Makers Coordinator, and Senior Fellow at the Institute for European Environmental Policy, IEEP, said:

"Ignoring the vast array of values of nature in our economic system ignores the true wealth of nations that underpins the well-being of societies and individuals.

It means overlooking cost-effective solutions that nature already provides to address the challenges we face – climate change, food security, poverty - and exacerbates the current financial and biodiversity crises. We all pay, though the rural poor are the hardest hit."

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TEEB is an independent study, lead by Pavan Sukhdev, hosted by the United Nations Environment Programme with financial support from the European Commission; the governments of Germany, the UK, the Netherlands, Norway and Sweden. For 2010 additional collaboration with countries across the world is programmed – including China, Latin America and Japan, which is the host of CBD COP 10 in Nagoya in November 2010.

### A summary document and detailed chapters will be available on the TEEB website – as is the TEEB press release (<u>http://www.teebweb.org</u>).

**For further information and IEEP comment please contact:** Patrick ten Brink Institute for European Environmental Policy (IEEP) in Brussels Tel: + 32 (0) 2738 7482 email: <u>ptenbrink@ieep.eu</u> www.ieep.eu

**To request an interview with Pavan Sukhdev please contact:** Georgina Langdale UNEP-TEEB Tel: +49 228 929 87 572 Mobile: +49 1707 617 138 Email: georgina.langdale@unep-teeb.org

#### Notes to Editors:

- The Economics of Ecosystems and Biodiversity study (TEEB) was launched by Germany and the European Commission in response to a proposal by the G8+5 Environment Ministers (Potsdam, Germany 2007) to develop a global study on the economics of biodiversity loss.
- The study aims to draw together experience, knowledge and expertise from all regions of the world in the fields of science, economics and policy to enable practical actions in response to the growing evidence on the impact of the loss of biodiversity moving forward.
- The Institute for European Environmental Policy (IEEP) is a leading centre for the analysis and development of environmental and related policies in Europe. <u>www.ieep.eu</u>
- Scientific co-ordination for the TEEB study is undertaken by the Helmholtz Centre for Environmental Research in Leipzig. <u>www.ufz.de</u>

<sup>iii</sup> Specific reference for figure: Kapos V., Ravilious C., Campbell A., Dickson B., Gibbs H.K., Hansen M.C., Lysenko I., Miles L., Price J., Scharlemann J.P.W. and Trumper K.C. (2008) *Carbon and biodiversity: a demonstration atlas.* UNEP-WCMC, Cambridge, UK.

<sup>iv</sup> UNEP (2008a) Fisheries Subsidies: A Critical Issue for Trade and Sustainable Development at the WTO: An Introductory Guide. UNEP, Geneva.

<sup>v</sup> FAO (2006) *State of World Fisheries and Aquaculture 2006.* Food and Agriculture Organization of the United Nations, Rome. & FAO (2008) *Biofuels: prospects, risks and opportunities*, The State of Food and Agriculture 2008. Food and Agriculture Organization of the United Nations, Rome.

<sup>vi</sup> World Bank (2008) *Sunken Billions: The Economic Justification for Subsidies Reform*, International Bank for Reconstruction and Development, Washington, D.C.

<sup>vii</sup> Value for 2006 based on GSI (2007) *Biofuels – at what costs? Government support for ethanol and biodiesel in selected OECD countries*, Global Subsidies Initiative, International Institute for Sustainable Development (IISD) & OECD (2008b) *Biofuel Support Policies. An Economic Assessment*, OECD, Paris.

viii OECD (2009) Agricultural Policies in OECD Countries. Monitoring and Evaluation, OECD, Paris.

<sup>ix</sup> Juncosa B. (2008) Suffocating seas, Climate change may be sparking new and bigger "dead zones", *Sci Am*, 299(4): 20-22.

<sup>&</sup>lt;sup>1</sup> Millennium Ecosystem Assessment (2005a) *Ecosystems and Human Well-being: Biodiversity Synthesis.* World Resources Institute, Washington, DC.

<sup>&</sup>lt;sup>ii</sup> See Chapter 8 of TEEB for Policy Makers: *Recognising the value of protected areas* (specific reference for figure: UN Millennium Project (2005) *Environment and Human Well-being: a Practical Strategy*. Report of the Task Force on Environmental Sustainability. Earthscan, London.