



Vital Economic and Environmental Role of Wetlands Must Be Recognized to Avoid Further Degradation and Losses

An Estimated 50 Per Cent of Wetlands Lost During the 20th Century

Hyderabad (India), 16 October 2012 – The key role that rapidly diminishing wetlands play in supporting human life and biodiversity needs to be recognized and integrated into decision-making as a vital component of the transition to a resource-efficient, sustainable world economy, according to a new TEEB report released today.

Water security is widely regarded as one of the key natural resource challenges currently facing the world. Human drivers of ecosystem change, including destructive extractive industries, unsustainable agriculture and poorly managed urban expansion, are posing a threat to global freshwater biodiversity and water security for 80 per cent of the world's population.

Global and local water cycles are strongly dependent on healthy and productive wetlands, which provide clean drinking water, irrigation for agriculture, and flood regulation, as well as supporting biodiversity and propping up industries such as fisheries and tourism in many locations.

Yet, despite the high value of these ecosystem services, wetlands continue to be degraded or lost at an alarming pace, according to *The Economics of Ecosystems and Biodiversity (TEEB) for Water and Wetlands* report, released for consultation today at the 11th meeting of the Conference of the Parties to the Convention for Biological Diversity.

Half of the world's wetlands were lost during the twentieth century – due mainly to factors such as intensive agricultural production, unsustainable water extraction for domestic and industrial use, urbanization, infrastructure development and pollution. The continuing degradation of wetlands is resulting in significant economic burdens on communities, countries and businesses.

The report also highlights that the restoration of wetlands and their water-related services, also offers significant opportunities to address sustainable and cost-effective solutions to water management problems.

“Policies and decisions often do not take into account the many services that wetlands provide – thus leading to the rapid degradation and loss of wetlands globally,” said UN Under-Secretary General and UN Environment Programme Executive Director Achim Steiner.

“There is an urgent need to put wetlands and water-related ecosystem services at the heart of water management in order to meet the social, economic and environmental needs of a global population predicted to reach 9 billion by 2050,” he added.

The report – initiated by the Ramsar Convention on Wetlands with financial support from the Norwegian, Swiss and Finnish Governments and developed by the Institute for European Environmental Policy (IEEP), together with the Secretariat of the Ramsar Convention, the Secretariat of the Convention on Biological Diversity, Wetlands International, the Helmholtz Centre for Environmental Research (UFZ), and the International Union for Conservation of Nature (IUCN) – lays out a raft of recommendations that would slow and ultimately halt the degradation of wetlands.

Taking account of the value of water and wetlands in public policy and private decisions; fully integrating the management of wetlands and securing their wise use in water management; and prioritizing the further loss and conversion of wetlands through strategic environmental assessments are among the many steps that must be taken, according to the report.

“In 2008 the world’s governments at the Ramsar Convention’s 10th Conference of Parties stressed that for water management carrying on ‘business as usual’ is no longer an option”, said the Ramsar Convention’s Deputy Secretary General, Nick Davidson.

“This report tells us bluntly just how much more important than generally realized are our coastal and inland wetlands: for the huge value of the benefits they provide to everyone, particularly in continuing to deliver natural solutions for water - in the right quantity and quality, where and when we need it. If we continue to undervalue wetlands in our decisions for economic growth, we do at our increasing peril for people’s livelihoods and the world’s economies,” he added.

Rapid Wetland Loss

Inland wetlands cover at least 9.5 million km² (about 6.5 per cent of the Earth’s land surface), while inland and coastal wetlands together cover a minimum of 12.8 million km².

Between 1900 and 2003, the world lost an estimated 50 per cent of its wetlands, while recent coastal wetland loss in some places, notably East Asia, has been up to 1.6 per cent a year. This has led to situations such as the 20 per cent loss of mangrove forest coverage since 1980.

The main pressures on wetlands come from:

- Habitat loss, for example through wetland drainage for agriculture or infrastructure developments, driven by population growth and urbanization;
- Over-exploitation, for example the unsustainable harvesting of fish;
- Excessive water withdrawals for use in, for example, irrigated agriculture;
- Nutrient loading from fertilizer use and urban waste water, which can lead to eutrophication – the excessive growth of algae that deprives other species of enough oxygen and can create dead zones;
- Climate change, which can alter ecosystem conditions through rising temperatures;
- Pollution, remarkably through extractive industries, invasive species and siltation.

Such pressures threaten wetlands’ natural infrastructure, which delivers a wider range of services and benefits than corresponding man-made infrastructure at a lower cost.

The Benefits of Wetlands

Water

Wetlands are a key factor in the global water cycle and in regulating local water availability and quality. They contribute to water purification, denitrification and detoxification, as well as to nutrient cycling, sediment transfer, and nutrient retention and exports. Wetlands can also provide waste water treatment and protection against coastal and river flooding.

For example, The Catskill / Delaware watershed provides about 90 per cent of the water used by New York City citizens. In 1997, a study showed that building a new water treatment plant would cost between US\$6 and

US\$8 billion, whereas ensuring good water quality through measures to reduce pollution in the watershed would only cost US\$1.5 billion. This study led to programmes to promote the sustainability of the watershed.

Food Security

Wetlands play a key role in the provision of food, and habitats and nurseries for fisheries. One example is the Amu Darya delta in Uzbekistan where Intensification and expansion of irrigation activities left only 10 per cent of the original wetlands. Yet a pilot restoration project initiated in the delta – with the support of community, government and donors – led to increased incomes, more cattle, more hay production for use and sale, and an increase in fish consumption of 15 kilogrammes per week per family.

Job Security

Wetlands can be important tourism and recreation sites and support local employment. For example In the Ibera Marshes in Argentina, conservation-based tourism activities have revived the economy of Colonia Carlos Pellegrini, near the Ramsar Site “Lagunas y Esteros del Iberá”, creating new jobs and allowing local inhabitants stay employed in the town rather than migrate to cities to look for work. Around 90 per cent of the population now works in the tourism sector. In order to favour local employment, the site managers provide local rangers and guides with training on working with guiding tourists. In addition, local communities receive support to establish municipal nature trails.

Biodiversity

Wetlands are some of the most important biologically diverse areas in the world and provide essential habitats for many species. Coral reefs, peatlands, freshwater lakes, waterbirds, amphibians and wetland-dependent mammals such as hippopotamus, manatees and river dolphins are among those examples of biodiversity covered by the global Ramsar Convention network of “Wetlands of International Importance”, which comprises over 2,000 sites covering over 1.9 million km.

Examples of major wetlands in the Ramsar network include: the Danube Delta in Romania and the Ukraine; the Pantanal wetlands across Brazil, Bolivia and Paraguay; and Lake Chad across Chad, Niger and Nigeria.

Climate change

Wetlands provide climate regulation, climate mitigation and adaptation, and carbon storage – for example in peatlands, mangroves and tidal marshes.

Peatlands cover 3 per cent of the world’s land surface, about 400 million hectares (4 million km²), of which 50 million hectares are being drained and degraded, producing the equivalent of 6 per cent of all global Carbon Dioxide emissions. While vegetative wetlands occupy only 2 per cent of seabed area, they represent 50 per cent of carbon transfer from oceans to sediments, often referred to as ‘Coastal Blue Carbon’.

Recommendations

At the global level there is a need to ensure that the role and value of water and wetlands are integrated into implementation of the Strategic Plan for Biodiversity 2011-2020, the Ramsar Strategic Plan 2009-2015, the UN Framework Convention on Climate Change (UNFCCC), and the Millennium Development Goals, among other international agreements.

The report also issued specific practical recommendations for actors at all levels, some of which are detailed below.

National and international policy makers should:

- Integrate the values of water and wetlands into decision making – for policies, regulation and land-use planning, incentives and investment, and enforcement;

- Regulate to protect wetlands from pressures that do not lead to improvements in public goods and overall societal benefits;
- Regulate to ensure that wetland ecosystem services options and benefits are fully considered as solutions to land- and water-use management objectives and development;
- Commit to and develop improved measurement and address knowledge gaps – using biodiversity and ecosystem services indicators and environmental accounts.

Local and regional policy-makers should:

- Assess the interactions between wetland ecosystems, communities, man-made infrastructure and the economy, and integrate this knowledge into river basin and coastal management;
- Ensure participation of communities, including indigenous peoples, and ensure that traditional knowledge is duly integrated into management solutions.

Researchers should:

- Systematically contribute to filling the gaps in knowledge on the values of water and wetlands, on improved governance solutions, and on measures and tools to support the development of environmental accounts;

The development cooperation community should:

- Integrate the appreciation of the multiple values of wetlands and potential cost savings to meet the objectives of development cooperation.

Businesses should:

- Assess the dependency of their businesses on water- and wetlands-related ecosystem services from the short to long term;
- Assess the risks to operation inputs, eventual liabilities, risk to reputation, and license to operate from both resource availability and impacts, including pollution pressures.

About TEEB

The UNEP-hosted Economics of Ecosystems and Biodiversity (TEEB) is a major international initiative to draw attention to the global economic benefits of biodiversity, to highlight the growing costs 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. TEEB is hosted by the United Nations Environment Programme (UNEP).

About the Ramsar Convention on Wetlands

The Convention on Wetlands (Ramsar, Iran, 1971) – called the "Ramsar Convention" – is an intergovernmental treaty that embodies the commitments of its member countries to maintain the ecological character of their Wetlands of International Importance and to plan for the "wise use", or sustainable use, of all of the wetlands in their territories.

Notes to Editors:

The executive summary of the report can be downloaded at: www.teebweb.org

The full report is available at: <http://www.cbd.int/doc/meetings/cop/cop-11/information/cop-11-inf-22-en.pdf>.

Media Contacts:

Bryan Coll, UNEP Newsdesk (in Hyderabad) on Tel. +254731666214 or E-mail: bryan.coll@unep.org / unepnewsdesk@unep.org

Anita Beck, TEEB Communications Officer (Geneva) on Tel. +41 22 917 8763, E-mail: anita.beck@unep.org

Oana Barsin, Ramsar Secretariat Communications Officer (Switzerland) on Tel. +41 22 999 0170, E-mail: barsin@ramsar.org