

ANNUAL REPORT 2010



UNEP

United Nations Environment Programme

ANNUAL REPORT

A YEAR IN REVIEW

The mission of the United Nations Environment Programme is to provide leadership and encourage partnership in caring for the environment by inspiring, informing and enabling nations and peoples to improve their quality of life without compromising that of future generations.

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These icons appear throughout the report to indicate the six cross-cutting thematic priority areas identified for UNEP in its Medium-Term Strategy 2010-2013:



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• UN Secretary-General, BAN Ki-Moon ©UN

Message from United Nations Secretary-General

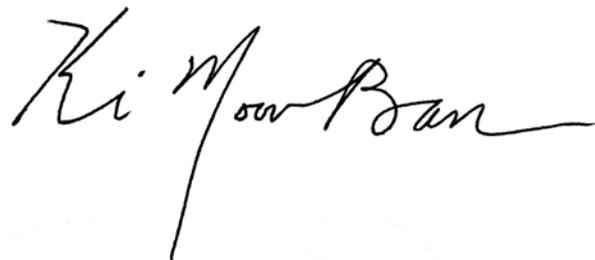
The global environment claimed headlines throughout 2010. Greenhouse gas emissions and global temperatures continued to rise. Pakistan suffered its worst floods in more than a century; Russia fought unprecedented wildfires and China faced drought, flooding and mudslides of an intensity not seen in decades — a pattern of increasingly extreme weather events consistent with the assessments of the Intergovernmental Panel on Climate Change.

On a more positive note, at the climate change conference in Cancun, Mexico, governments took an important step towards building a low-emissions, climate-resilient future by agreeing on a balanced package of measures that formalizes mitigation pledges and includes progress on forest protection, climate finance, adaptation and technology.

Throughout the year, UNEP worked to expand understanding of how environmental sustainability and green growth are mutually supporting elements for achieving the Millennium Development Goals and speeding recovery from the global economic crisis. Tackling climate change, water scarcity, biodiversity loss and ecosystem degradation, and addressing shifting demographic and consumption patterns, will require bold new approaches. Green economics can weave together these multiple strands and will be an important focus for my High-level Panel on Global Sustainability, whose work will feed into preparations for the Rio+20 United Nations Conference on Sustainable Development in 2012 and other international deliberations.

UNEP is also central to promoting environmental sustainability throughout the United Nations system, so we can truly claim to practise what we preach. That effort encompasses coordinating emission-reduction planning for UN entities and spearheading the UN-wide Greening the Blue campaign that highlights how we can all do more, from sustainable procurement to more resource-efficient peacekeeping. Green principles also underpin the ongoing renovations of the UN Headquarters complex in New York.

Better managing our finite natural resources is a job for all — from governments to individuals. I look to UNEP to continue to provide leadership and ideas as we work together for a more sustainable, equitable and secure future.

A handwritten signature in black ink, reading "Ki Mow Ban". The signature is written in a cursive, flowing style with a long, thin tail on the letter "n".



• UNEP Executive Director, Achim Steiner © UNEP

Introduction by the Executive Director

2010 was a year of many signals and mixed feelings. As UNEP's scientific assessments and reports showed, global indicators demonstrate that the world is still heading in the wrong direction for sustainable development.

However, UNEP documented through its work including on the 'transition towards a green economy' a remarkable momentum at local and national levels to 'change course'.

Global environmental action and governance have come under increasing scrutiny. Perhaps it is time to consider the implications of these developments and remind ourselves that multilateralism must combine a top-down with a bottom-up approach to succeed. Nowhere has this become more visible than in the fields of climate change and biodiversity.

While the UN's International Year of Biodiversity began on a sobering note when the *Global Biodiversity Outlook 3 Report* indicated that not a single country had met the target to substantially reverse the rate of biodiversity loss, it ended on a far higher one.

In October, in Nagoya, Japan, governments re-engaged on the biodiversity and ecosystem challenge, setting new and in some cases, more ambitious targets by 2020.

Importantly, they also agreed — and after almost two decades of stalemate — an international regime on the access and benefit sharing of genetic resources (ABS).

Through '*The Economics of Ecosystems and Biodiversity*' study (TEEB), a global and pioneering partnership, hosted

by UNEP and bringing together economists and researchers, the economic valuation of biodiversity and ecosystem services broke new ground.

Such efforts were further strengthened by the UNEP coordinated process to establish an Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) — an 'IPCC for nature' if you will, which the General Assembly endorsed in December 2010.

In May, in New York, during the opening of the Commission of Sustainable Development (CSD) UNEP's work on Sustainable Consumption and Production (SCP) was spotlighted. The 10-Year Framework of programmes on SCP, which we hope to be agreed at this year's CSD, and the Green Economy will be key themes for the Rio+20 conference in 2012.

UNEP emphasised that a Green Economy echoes to the challenges and opportunities of all economies — be they more state-led or more market oriented in their policy outlook.

In a world of nearly seven billion, rising to nine billion people by 2050, it is in the interests of all nations to forge a development path that decouples growth from the unsustainable use of natural resources.

UNEP's contribution in the context of Sustainable Consumption and Production speaks to this objective, as did the decision of the UN's Environment Management Group to address the transition towards a Green Economy through a Joint Issues Management Group involving over twenty UN entities as well as the IMF and the World Bank.

The same imperative is at the centre of the climate change challenge. Like biodiversity, nations meeting in Cancun, Mexico re-engaged rather than retreated from the issue and agreed on steps to move forward in areas such as forests, the Green Fund and to anchoring the pledges made twelve months earlier in Copenhagen.

UNEP, working with climate modelling centres worldwide, provided a key reference document for countries in Cancun and beyond through its *Emissions Gap Report*. Even the most optimistic scenario shows an emission gap of some five Gigatonnes between what countries have pledged so far and where they need to be in 2020 to have a running chance of keeping a global 21st century temperature rise under 2° C.

Yet, what was also clear in 2010 was that despite the struggles of the formal negotiations, many countries, regional and national governments, companies and civil society, are already moving towards a low carbon path.

2010 has not been an easy year for many Member States as the on-going financial and economic crisis, which emerged in 2008, continues to challenge national budgets and development options in the North and South.

Despite a financially challenging year, UNEP embarked upon the implementation of its new results-based Medium Term Strategy and Programme of Work for 2010-2011.

Its Programme Performance Report for 2010 indicates that progress has been good and that the reform process has put UNEP on a new trajectory towards a more results-focused and effective organization.

In this respect, I wish to acknowledge the important and continued role of UNEP's Committee of Permanent Representatives in this process as well as the commitment and leadership of UNEP's Deputy Executive Director, Angela Cropper and our staff in 'delivering on the promise'.

I would like to end by expressing our deep appreciation to Member States and hundreds of partners for your continued support of UNEP's work across its range of activities, which I hope is providing new, fresh and inspiring direction to the sustainable development community and the work of the United Nations.



The United Nations Environment Programme

2010 was important for many reasons, a year of on-going financial instability set against an increase in the frequency and intensity of natural disasters and shifting weather patterns. UNEP's broad response through 2010 is catalogued in this report – from global assessments to rapid mechanisms in Haiti in response to the January earthquake and advisory services to countries interested in transitioning to greener economies. This report attempts to set UNEP's work over the last year in context and show its future relevance in meeting the emerging challenges of the coming years.

The core objective of the United Nations Environment Programme (UNEP) is to serve as an authoritative advocate for the global environment, to help governments set the global environmental agenda, and to promote the coherent implementation of the environmental dimension of sustainable development within the United Nations system.

2010 marked the beginning of a period of new, strategic and transformational direction for UNEP as it began implementing its Medium Term Strategy (MTS) for 2010-2013 across six areas: Climate change; Disasters and conflicts; Ecosystem management; Environmental governance; Harmful substances and hazardous waste; Resource efficiency, Sustainable consumption and production.

A key feature of UNEP's transition was making the organization's work more strategic and coherent, while addressing country needs more effectively and demonstrating results.



Performance Highlights

A snapshot of the year

Serving as an authoritative advocate for the global environment

- The fifth *Global Environment Outlook* is being re-tooled to become more solution-oriented and of greater relevance for countries' decision making.
- An assessment of what the commitments and intentions of nations mean in terms of keeping a temperature rise below 2° C by 2050 was released for the inter-governmental climate change negotiations in December.
- Negotiations concluded to establish an intergovernmental platform to improve relevance of scientific findings on biodiversity and ecosystem services for human well-being and development.

Significant progress to help countries set the global environmental agenda

- Countries embarked on first steps to green their economies to achieve sustainable development.
- Negotiations began on a legally binding treaty on mercury
- With United Nations Development Programme (UNDP) and through GEF funding, countries with 'Economies in Transition' successfully phased out methyl bromide — an ozone depleting substance.
- Intergovernmental process on reforms for better international environmental governance gained momentum.

Improved coherence in the environmental dimension of United Nations work

- The UN system moved to become climate neutral: targeting 1.7 million tonnes of CO₂ emissions per annum.
- Countries' readiness for Reducing Emissions from Deforestation and Forest Degradation (REDD) improved through coordinated efforts between UNEP, FAO and UNDP. Pilot testing of new approaches for 'REDD readiness' began.
- UNEP's guidance and support to the aid community in Sudan resulted in nearly half of all aid projects integrating environmental activities within their programmes in 2010.
- Significant investments in environmental sustainability were catalysed in the aftermath of the January Haiti

earthquake, which led to 220,000 deaths and affected 3 million people.

- Six UN agencies and the European Commission established a partnership to jointly address conflict risks from natural resources and environmental factors in fragile states.
- The Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions, at their simultaneous extraordinary meetings in February, agreed on arrangements for joint activities, management and administrative services.

Measurable results in countries

- 43 UN Country Teams began integrating environmental sustainability in UN country programming processes.
- With UNDP, 22 countries are integrating environment into development planning.
- With UNIDO, a network of over 40 National Cleaner Production Centres are supported to promote resource efficiency in small enterprises with two additional countries introducing national 'Resource Efficient and Cleaner Production Programmes.'
- The Strategic Approach to International Chemical Management (SAICM) supports 117 projects undertaken by 97 governments and 12 civil society organizations involving activities in 95 countries, with donations of over 30 million dollars.
- Three countries joined 74 others in successfully phasing out leaded gasoline.

Completion of the UNEP reform process

- UNEP's new Science Strategy was approved by the Senior Management Team.
- Revamped programme and project review processes are achieving more synergy in UNEP's operations.
- Projects are increasingly integrating gender concerns into their design and implementation.
- UNEP's new Monitoring Policy, Programme Accountability Framework and Programme Information Management System (PIMS) are enhancing monitoring and achieving measurable results.
- UNEP's new Evaluation Policy has enhanced the independent nature of evaluation.
- Overall strategy for integration of UNEP's GEF portfolio was approved, with integration expected in January 2011.

UNEP DIVISIONS

- * DCPI
- * DELC
- * DEPI
- * DEWA
- * DGEF
- * DRC
- * DTIE

UNEP REGIONAL OFFICES, LIAISON OFFICES AND COUNTRY OFFICES

* ROA : NAIROBI

- ADDIS ABABA
- PRETORIA

* ROAP: BANGKOK

- BEIJING

* ROE : GENEVA

- BRUSSELS
- MOSCOW
- VIENNA

* ROLAC : PANAMA CITY

- BRAZIL
- MEXICO CITY

* RONA : WASHINGTON DC

* ROWA : MANAMA

- CAIRO

* NEW YORK

CONVENTION SECRETARIATS

- * BASEL CONVENTION
- * CARPATHIAN CONVENTION
- * CBD
- * CITES
- * CMS
- * MSF
- * OZONE SECRETARIAT
- * ROTTERDAM CONVENTION
- * STOCKHOLM CONVENTION
- * TEHRAN CONVENTION

REGIONAL SEAS CONVENTIONS AND ACTION PLANS SECRETARIATS

- * CAR/RCU
- * COBSEA SECRETARIAT
- * EAF/RCU
- * MAP/RCU
- * NOWPAP/RCU
- * WACAF/RCU

COLLABORATING CENTRES

- * BASE
- * GRI
- * GRID
- * UCC-WATER
- * URC
- * WCMC

www.unep.org

*ALL LOCATIONS ACCURATE AS OF
SEPTEMBER 2010

ICONS



UNEP HEADQUARTERS



COUNTRY OFFICE



REGIONAL OFFICE



LIAISON OFFICE



COLLABORATING CENTRE



CONVENTION SECRETARIAT



DTIE



PROJECT OFFICE



ONE UN



REGIONAL SEAS
CONVENTIONS
AND ACTION PLAN
SECRETARIAT

CAMBRIDGE



• UNEP-WCMC

NEW YORK



• NEW YORK OFFICE

WASHINGTON DC



• REGIONAL OFFICE
FOR NORTH
AMERICA (RONA)



• LIAISON OFFICE
WITH GEF
SECRETARIAT

- STAP SECRETARIAT

SIOUX FALLS



• GRID-SIOUX FALLS

HAITI



• HAITI
ENVIRONMENTAL
RECOVERY
PROGRAMME

KINGSTON



• CAR/RCU

MEXICO CITY



• COUNTRY OFFICE

SAMOA



• PACIFIC REGIONAL
FOCAL POINT

REGIONS

AFRICA

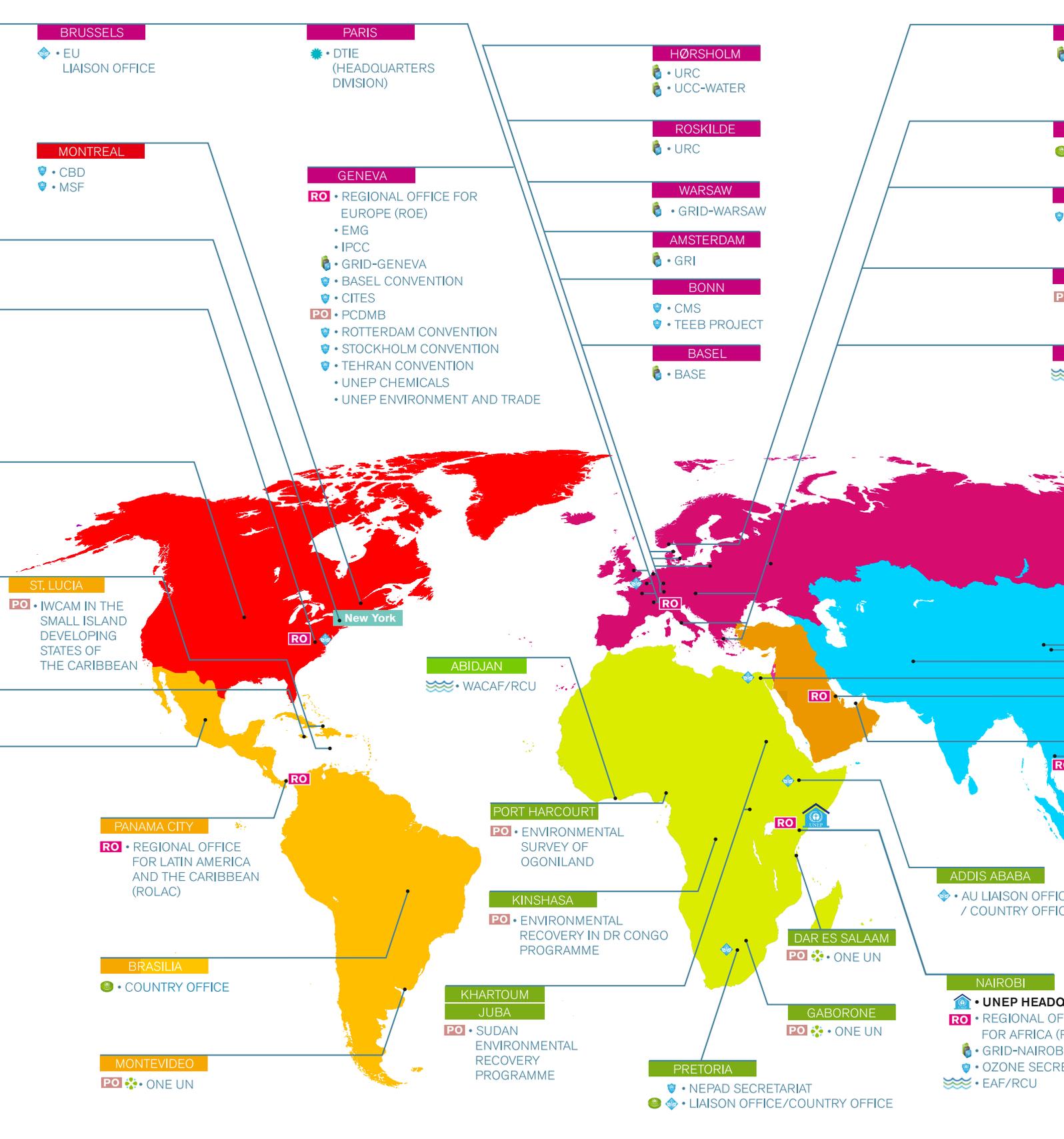
ASIA AND PACIFIC

EUROPE

LATIN AMERICA
AND THE CARIBBEAN

NORTH AMERICA

WEST ASIA



BRUSSELS

- EU LIAISON OFFICE

PARIS

- DTIE (HEADQUARTERS DIVISION)

GENEVA

- REGIONAL OFFICE FOR EUROPE (ROE)
- EMG
- IPCC
- GRID-GENEVA
- BASEL CONVENTION
- CITES
- PCDMB
- ROTTERDAM CONVENTION
- STOCKHOLM CONVENTION
- TEHRAN CONVENTION
- UNEP CHEMICALS
- UNEP ENVIRONMENT AND TRADE

HØRSKOLM

- URC
- UCC-WATER

ROSILDE

- URC

WARSAW

- GRID-WARSAW

AMSTERDAM

- GRI

BONN

- CMS
- TEEB PROJECT

BASEL

- BASE

MONTREAL

- CBD
- MSF

ST. LUCIA

- IWCAM IN THE SMALL ISLAND DEVELOPING STATES OF THE CARIBBEAN

New York

RO

ABIDJAN

- WACAF/RCU

PORT HARCOURT

- ENVIRONMENTAL SURVEY OF OGOINLAND

KINSHASA

- ENVIRONMENTAL RECOVERY IN DR CONGO PROGRAMME

KHARTOUM

- JUBA
- SUDAN ENVIRONMENTAL RECOVERY PROGRAMME

PRETORIA

- NEPAD SECRETARIAT
- LIAISON OFFICE/COUNTRY OFFICE

PANAMA CITY

- REGIONAL OFFICE FOR LATIN AMERICA AND THE CARIBBEAN (ROLAC)

BRASILIA

- COUNTRY OFFICE

MONTEVIDEO

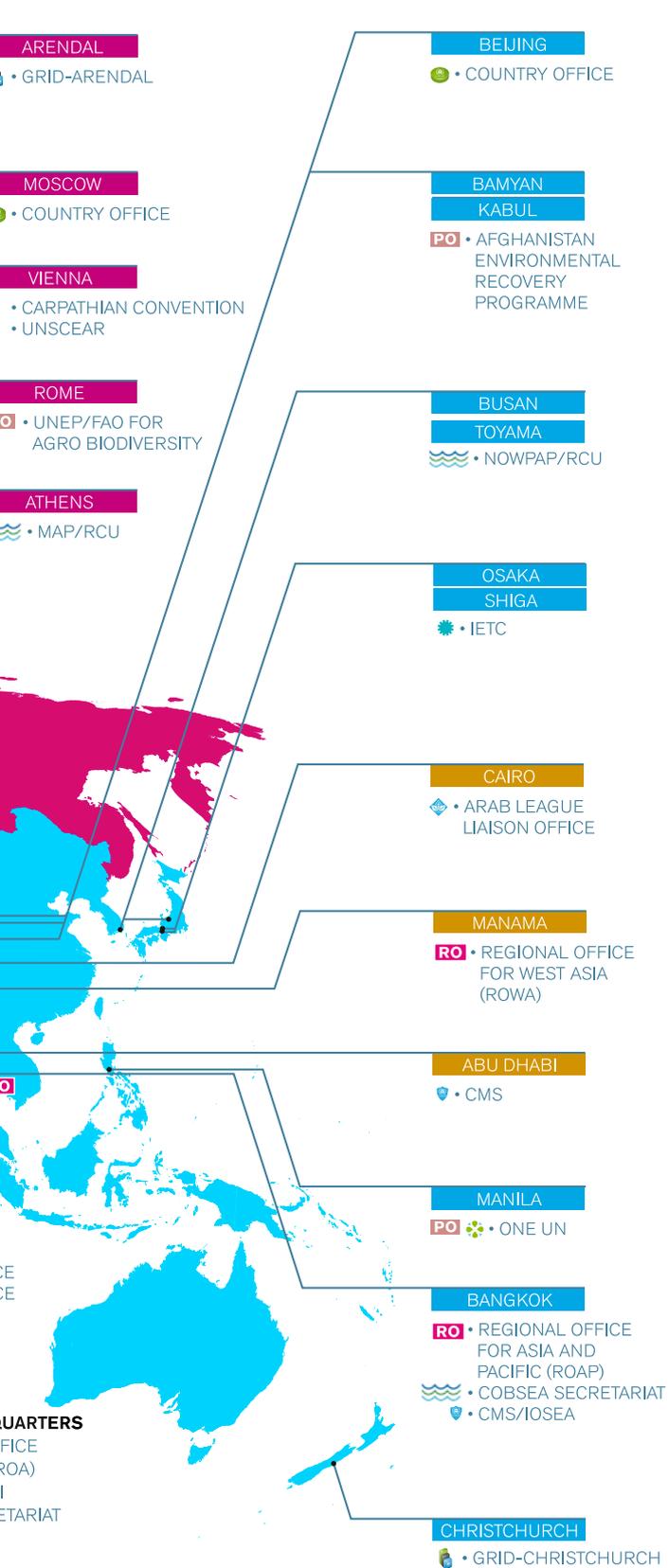
- ONE UN

ADDIS ABABA

- AU LIAISON OFFICE / COUNTRY OFFICE

NAIROBI

- UNEP HEADQUARTERS
- REGIONAL OFFICE FOR AFRICA (RO)
- GRID-NAIROBI
- OZONE SECRETARIAT
- EAF/RCU



ACRONYMS

AU	African Union
BASE	Basel Agency for Sustainable Energy
CAR/RCU	Caribbean Regional Coordinating Unit/Cartagena Convention
CBD	Convention on Biological Diversity
CEP	Caspian Environment Programme
CITES	The Convention on International Trade in Endangered Species
CMS	Convention on Migratory Species <ul style="list-style-type: none"> • AEWA: Agreement on the Conservation of African-Eurasian Migratory Waterbirds • ASCOBANS: Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas • EUROBATS: Agreement on the Conservation of Populations of European Bats • IOSEA: Indian Ocean-South East Asia Marine Turtle MoU
COBSEA	Coordinating Body on the Seas of East Asia
DEWA	Division of Early Warning and Assessment
DEPI	Division of Environmental Policy Implementation
DTIE	Division of Technology, Industry and Economics
DRC	Division of Regional Cooperation
DELC	Division of Environmental Law and Conventions
DCPI	Division of Communications and Public Information
DGEF	Division of Global Environment Facility Coordination
EAf/RCU	Eastern African Regional Coordinating Unit/Nairobi Convention
EMG	Environmental Management Group
EU	European Union
FAO	Food and Agriculture Organization of the UN
GEF	Global Environment Facility
GIWA	Global International Waters Assessment
GRI	Global Reporting Initiative
GRID	Global and Regional Integrated Data
IETC	International Environmental Technology Centre
IPCC	Intergovernmental Panel on Climate Change
IWCAM	Integrating Watershed and Coastal Area Management
MAP	Mediterranean Action Plan/Barcelona Convention
MSF	Multilateral Fund Secretariat
NEPAD	New Partnership for Africa's Development
NOWPAP	Northwest Pacific Action Plan/Regional Coordinating Unit
PCDMB	Post-Conflict and Disaster Management Branch
ROA	Regional Office for Africa
ROAP	Regional Office for Asia and Pacific
ROE	Regional Office for Europe
ROLAC	Regional Office for Latin America and the Caribbean
ROWA	Regional Office for West Asia
RCU	Regional Coordinating Unit
ROE	Regional Office for Europe
RONA	Regional Office for North America
SBC	Secretariat of the Basel Convention
STAP	Scientific and Technical Advisory Panel of the Global Environment Facility
TEEB	The Economics of Ecosystems and Biodiversity
UCC-WATER	UNEP Collaborating Centre on Water and Environment
UNSCEAR	United Nations Scientific Committee on Effects of Atomic Radiation
URC	UNEP Risøe Centre on Energy, Climate and Sustainable Development
WACAF	West and Central Africa Regional Coordinating Unit/Abidjan Convention
WCMC	World Conservation Monitoring Centre

Ecosystem services and other non-marketed natural goods account for **47% to 89%** of individual incomes in some large developing countries

Eco-tourism is the fastest-growing area of the tourism industry with an estimated increase of global spending of **20%** annually

Bio carbon/forest offsets are expected to rise from **\$21m** in 2006 to over **\$10 billion** in 2020

The global market for **eco-labeled fish products** grew by over **50%** between

In Venezuela, investment in the national protected area system is preventing sedimentation, that otherwise could reduce farm earnings by around **\$3.5 million** a year

Although covering less than **2%** of the world's continental shelves, **coral reefs** are home to an estimated **1 to 3 million species**

At least **18 violent conflicts** have been fuelled by the **exploitation of natural resources** since 1990

Conserving forests avoids greenhouse gas emissions worth **\$3.7 trillion**

Planting and protecting nearly **12,000** hectares of mangroves in **Vietnam** costs just over **\$1 million** but saved annual expenditures on dyke maintenance of well over **\$7 million**

Investing **\$45 billion** in protected areas could secure vital nature-based services worth some **\$5 trillion** a year

By 2020, the agricultural products market is expected to bring in **\$210 billion** annually; payments for water related ecosystem services **\$6 billion**; and voluntary biodiversity offsets **\$100 million** a year

At the Convention on Biological Diversity (CBD) meeting in Nagoya in October, governments agreed to increase terrestrial protected areas and national parks to **17%**

Between **\$2 to \$4.5 trillion** worth of **natural capital** is lost from **deforestation** every year – a trend that poses significant business and social risks

Investment in the protection of **Guatemala's Maya Biosphere Reserve** is generating an annual income of close to **\$50 million** a year, has generated **7,000 jobs** and boosted local family incomes

The certified agricultural products market was valued at over **\$40bn** in 2008 and may reach up to **\$210bn** by 2020

OUR WORLD IN NUMBERS

Source: All facts and figures from TEEB (The Economics of Ecosystems and Biodiversity) reports — www.teebweb.org

In the last **300** years, the global forest area has shrunk by approximately **40%**

In Bolivia, protected-area tourism generates over **20,000 jobs**, indirectly supporting over **100,000** people

Since 1900, the world has lost about **50%** of its **wetlands**

Soil-living bacteria and fungi can be used to **boost crop yields** by more than **50%** without the use of fertilizers

In the past two decades, **35%** of mangroves have disappeared

Some **20%** of the world's **coral reefs** have been destroyed

Deforestation destroys around **2 million** hectares of forest annually

1 in 40 jobs in Europe are linked with the environment and ecosystem services

Approximately **60%** of the Earth's ecosystem services have been degraded in the last **50 years**

In Uganda, an assessment of a threatened wetland revealed that the alternative, a replacement wastewater treatment plant, would cost approximately **\$2 million** annually to treat the city's effluents

Ecosystems deliver essential services worth **\$21 to \$72 trillion** a year – the global Gross National Income in 2008 was **\$58 trillion**

Biodiversity offsets, such as wetland mitigation banking in the United States or '**bio-banking**' in Australia, are predicted to rise from **\$3 billion** in 2008 to **\$10 billion** in 2020

Investing **\$8 billion** each year in rebuilding the world's **fisheries** could trigger benefits to the global economy totaling **\$1.7 trillion** over the next **40 years**

More than **50 %** of the Chief Executive Officers (CEOs) in Latin America see **declines in biodiversity** as a **challenge to business growth**

Close to **20%** of current **global greenhouse gas emissions** are linked with deforestation



GREEN ECONOMY MILESTONES IN 2010

FEBRUARY, 2010

Ministers at the Global Ministerial Environment Forum in Bali adopted the Nusa Dua Declaration in which the Green Economy was noted as a concept to operationalise sustainable development and eradicate poverty

MAY, 2010

Launch of the Green Economy Report Preview at the UN Conference on Sustainable Development (UNCSD) Prepcom1 in New York
South Africa's Green Economy Summit in Johannesburg

JUNE, 2010

African Ministers of Environment agree to take advantage of opportunities provided by a growth and development trajectory that embraces the Green Economy model as cited in the Bamako Declaration

SEPTEMBER, 2010

Green Economy – A Brief for Policymakers launched at the MDG Summit in New York
The 64th General Assembly decided that 'Green Economy' in the context of poverty eradication and sustainable development' would be one of two themes at the Rio+20 conference

OCTOBER, 2010

The 7th African Development Forum called for the operationalisation of a regional initiative on the Green Economy in Africa. The EU provides funding for Green Economy advisory services in Africa.
The World Bank, in partnership with organizations including UNEP, starts assisting an initial 10 developing countries to develop national green accounts

NOVEMBER, 2010

UNEP co-hosts a Governors' Global Climate Summit with a focus on the Green Economy
G20 Leaders agreed to support Green Growth in the closing declaration of the G20 in Seoul, Republic of Korea, confirming their commitment to carry out a 'framework for strong, sustainable and balanced growth'



UNEP Green Economy advisory services consist of policy advice that is provided to governments in support of their national and regional initiatives on Green Economy.

“ We have partnered with the United Nations Environment Programme (UNEP) to promote a transition to a Green Economy, building on Barbados' existing initiatives in the area of resource efficiency and the promotion of sustainable consumption and production. We believe that our experience in transitioning to a Green Economy will serve as a useful model for other Small Island Developing States (SIDS) and small economies and we intend to share our unique perspective with the international community in the preparatory process for the Rio+20 summit in 2012. ”

Senator Maxine McClean,
Minister Of Foreign Affairs And Foreign Trade of Barbados at the General Debate Of The 65th Session Of The UN General Assembly at United Nations Headquarters in New York.

GREENING ECONOMIES
TO ACHIEVE
SUSTAINABLE
DEVELOPMENT

*"We see the
Green Economy as an
opportunity to respond to the
notion that there is a trade-off
to be made between faster
economic growth and sustainable
development, and the preservation
of our environment."*

President Jacob Zuma, South Africa,
at the South African Green Economy
Summit, May 2010

ECONOMIES

GREENING



Global environmental and economic crises that have beset nations over the last few years have common origins. A meaningful solution must tackle both crises simultaneously. UNEP's Green Economy Initiative offers solutions to enhance human well-being, reduce inequities and help rebuild economies on a sustainable basis. The aim is to help requesting countries achieve green economies as a pathway towards sustainable development.

2010 was partly a time of transition where the effects of unsustainable consumption and growth triggered differing responses. The year saw convergent and multiple crises from extreme weather events, food shortages to ongoing financial uncertainty, whilst signs of economic recession remained present.

In parallel, increasing numbers of countries shifted towards local and national policies that reflect a more balanced way of interacting with the natural capital to rebuild their economies.

Increasing support to countries to green their economies

UNEP is responding to requests from some 20 countries for Green Economy advisory services, of which almost half emerged as new clients since the beginning of 2010.

Initial assessments confirmed that a Green Economy has equal relevance to all economies at different points in their development trajectories. It

is equally relevant to both state-led and free market economies. Its guiding principles and objectives remain consistent.

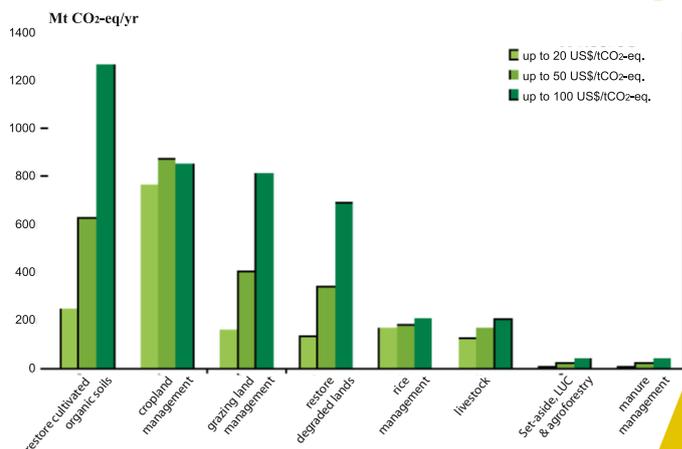
The Nusa Dua Declaration adopted by Ministers of Environment and Heads of Delegations at the UNEP Governing Council/Global Ministerial Environment Forum in 2010 agreed that advancement of the concept of a Green Economy can operationalise sustainable development and eradicate poverty. They acknowledged that greener economies can significantly deliver economic and development opportunities and bring multiple benefits for nations.

This declaration was again echoed and enforced through UNEP's Green Economy work on linkages with the Millennium Development Goals (MDGs), as ministers gathered in New York in September to review progress to date — five years before the MDG deadline of 2015.



© iStockphoto

WHAT MAKES A GREEN ECONOMY?



Organic agriculture used to boost productivity and profits

UNEP has continued to address more sustainable approaches in both mainstream and organic agriculture. With respect to the latter, UNEP released an assessment of the potential for organic agriculture in Armenia, Moldova and Ukraine following a request by the respective governments interested in being more involved in the rapidly expanding multibillion dollar market for sustainable agricultural produce.

A survey by the UN Conference on Trade and Development and UNEP of small-scale farmers in Africa who have switched from intensive to organic or near-organic agriculture, indicates that yields have climbed by 100 per cent — in part because of longer growing periods linked with more fertile soils and improvements in water availability.

Uganda, a country where 85 per cent of the working population is employed in agriculture, has turned to organic production to boost exports and incomes. Prices for organic vanilla, ginger and pineapples are higher than conventional produce. Since 2004, the number of certified organic farmers has grown from 45,000 to over 200,000 and the area of land under organic cultivation from 185,000 hectares to close to 300,000 hectares.

Subsidies transformed to alleviate poverty and increase development

Fossil fuels attract over \$700 billion a year in government subsidies — and there is abundant evidence that these subsidies rarely reach the poor, despite the best intentions of governments.

Mongolian yurt with satellite dish and solar panel © Corbis

Countries are now reviewing their subsidy structures to alleviate poverty and increase development. In 2003, Argentina's gas subsidies went to the far south of the country — home to just three per cent of Argentina's poor. In Mongolia, some 85 per cent of a recent 'life-line' heating tariff went to the 'non-poor'. Indonesia has also reviewed its energy subsidies making them more targeted to the poor.

Investing all or part of these subsidies in renewable energy technologies, such as solar and wind, could trigger new kinds of employment, faster access to electricity and greater social equity — a better overall standard of living. There would be benefits for the environment including improvements in air pollution alongside an estimated six per cent cut in annual greenhouse gas emissions.



Curitiba Brazil public transport stations © Corbis

Clean energy used to fuel development

China's energy strategy has now made it the world's second largest wind power country and the number one producer of photo-voltaic panels. Ten per cent of Chinese households now use solar water heaters for hot water. 1.5m people are employed in China's renewables sector with 300,000 jobs generated in 2009 alone.

Creative and forward-looking urban planning, allied to sustainable transport policies, have allowed the Brazilian city of Curitiba to grow more than six fold, while simultaneously improving mobility and quality of life. The average area of green space per person has risen from one square metre to around 50 square metres; 45 per cent of journeys are made by public transport; excessive fuel use due to congestion is 13 times less per person than in Saõ Paulõ and the lower levels of air pollution result in health benefits for local citizens.



Nepalese woman harvesting ginger, Nepal © thebiggerpicture

Forests managed to create employment

In Nepal, 14,000 Community Forest User Groups have reversed the deforestation rates of the 1990s through smart, community-based policies which include setting harvesting rules, product prices and the sharing of profits. Between 2000 and 2005, the annual forested area of Nepal actually rose by over 1.3 per cent; soil quality and water supplies are better managed and local employment has risen.

Some 26 per cent of Costa Rica's land area is now covered in legally protected forests. There has been a boom in eco-tourism creating employment and over \$5 million worth of park fees from visitors. Poverty and unemployment have fallen and wages have risen among those living in or near the country's national parks.



Fishing net © iStockphoto

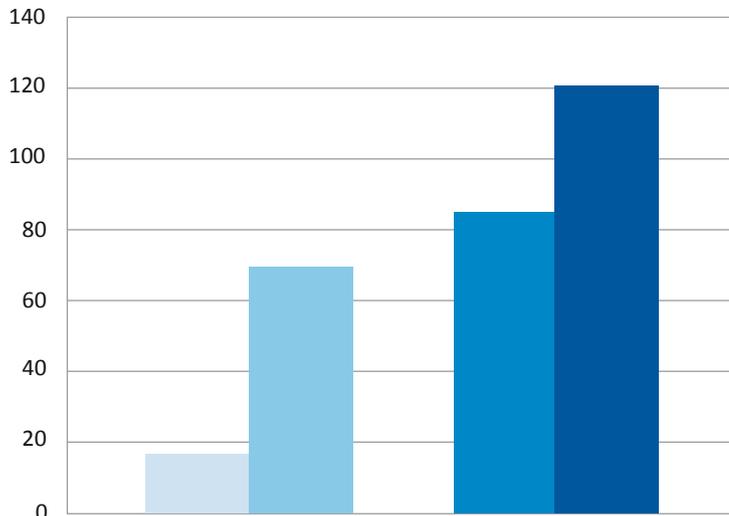
Fisheries management improved to increase stability in income

Fish is a staple source of protein for over 1 billion people — many of whom are in the developing world. Those fisheries directly and indirectly support 170 million jobs and bring in \$35 billion to fishing households annually.

However, the global fishing industry is suffering from a ‘failure of management’ that is likely to lead to the collapse of several fisheries unless unsustainable subsidies are scaled down or phased out, according to UNEP’s Green Economy work.

An \$8 billion annual investment in rebuilding and greening the world’s fisheries could have a positive and lasting impact on the fishing industry worldwide. The funding would come from scaling down or phasing out the nearly \$30 billion worth of subsidies currently in place worldwide. Researchers say this investment has the potential to both increase fish catches and generate \$1.7 trillion in long-term economic returns over the next four decades.

Some possible methods for greening fisheries highlighted in the report include providing job training in alternative industries, reducing the size of fishing fleets to limit excess harvesting capacity, and providing additional funding for fishery management to expand marine protected areas.



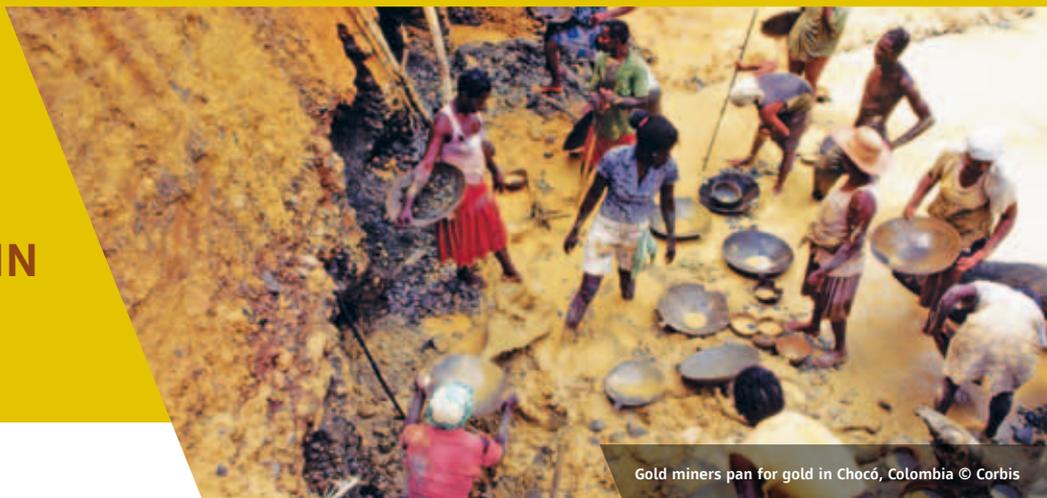
◀ Annual value added and gross revenue of marine fisheries today versus in a Green Economy scenario (\$bn)

Source: UNEP, Green Economy Report, due in February 2011

- ◻ Current total annual value added of fisheries
- ◻ Prospective total annual value added of fisheries in a Green Economy scenario
- ◻ Current annual gross revenue of marine fisheries
- ◻ Prospective annual gross revenue of marine fisheries in a Green Economy scenario

EXAMPLES OF THE GREEN ECONOMY IN PRACTICE

GREEN GOLD IN COLOMBIA



Gold miners pan for gold in Chocó, Colombia © Corbis

The process is slow and painstaking — sifting the earth, cleaning sand in a pan and then, finally perhaps, a glint in the light — tiny specs of precious gold. Deep in the Colombian jungle, a new way of mining is unearthing the world's first eco-gold.

Life for traditional miners in the Chocó region was a struggle due to uncontrolled mining and aggressive and dangerous excavation techniques, including the use of mercury which led to widespread sickness and environmental destruction.

Enter *Oro Verde*, the first certification scheme for environmentally and socially responsible practices for traditional mining of gold and platinum. In 2000, life for some of the communities took a turn for the better.

Oro Verde uses traditional panning techniques to separate alluvia from the gold by using a plant mixture. It is socially responsible and careful to comply with social, economic, environmental and labour standards. Profits made from the 'green gold' are used to fund community development.

It was this combination of environmentally friendly and socially conscious attitudes that won *Oro Verde* a SEED Award in 2009 for promoting sustainable development.



The SEED Award, supported by UNEP and its partners, is provided to individuals or institutions that exemplify a strong spirit of entrepreneurship in the developing world on ways to create a Green Economy.

The *Oro Verde* scheme to date has attracted almost two hundred rural Colombian families and catalysed wider change promoting responsible and small-scale mining and it has laid the foundations for the world's first local certification scheme for precious metals.

Oro Verde has been working with Fairtrade jewellers across the world and is now looking to scale-up and extend its benefits to more rural mining communities, as well as guaranteeing a sustainable supply of gold, platinum and other precious metals. *Oro Verde* is going from strength to strength and aims to capture five per cent of the 'fair gold' jewellery market over the next 15 years.



JORDAN'S GREEN AMBITION

Construction, Amman, Jordan © Corbis

Jordan is facing the consequences of climate change, increased pressure on natural resources, widening income disparities and a burgeoning population. Scarcity of freshwater is the most serious challenge — both in quantity and quality—followed by desertification, soil degradation and deforestation. With about 10 per cent of total land under cultivation, but only 6 per cent of GDP generated from agricultural production, there is an urgent need to redesign agricultural practices and investment.

Jordan is also reliant on fossil fuel imports, but could gain energy independence through the deployment of large and small-scale renewable energy technologies and improved energy efficiency in buildings and industrial processes.

The two critical issues identified by Jordan as needing a 'Green Economy lens' are land-use management and sustainable urbanisation. Green investment and reforms will lead to the creation of green jobs, ensuring economic growth whilst preventing further resource depletion and environmental degradation.

In its 2010 Executive Programme, Jordan stated there was a need to 'launch a programme for green services and industries to meet the requirements

for adhering to environmental standards and turn Jordan into a regional centre for green services and industries'.

“ A Green Economy is characterised by substantially increased investment in green sectors, supported by enabling policy reforms. These investments, both public and private, provide the mechanism for the reconfiguration of businesses, infrastructure and institutions, and the adoption of sustainable consumption and production processes. Therefore, the signing of the Green Economy Strategy MOU with UNEP early this year came at a very important time. ”

Mr. Raouf Dabbas, Senior Advisor, Ministry of Environment, Jordan.

The Green Economy assistance by UNEP for Jordan will be delivered as a 'One UN' initiative and processed through inter-ministerial cooperation while partnering with national stakeholders, namely NGOs and business entities.

THE POWER OF A CUP OF TEA



Tea in East Africa provides jobs and livelihoods, but also uses a lot of energy.

The tea sector employs around one million people and indirectly supports approximately four million. Burundi, Kenya, Malawi, Rwanda, Tanzania, Uganda and Zimbabwe together produce 28 per cent of the world's tea. But tea is energy-intensive: it takes 8 kWh of energy to process one kilogramme of finished tea, compared with only 6.3 kWh for the same amount of processed steel. In parts of East Africa, power is not only expensive, but also unreliable, and power fluctuations can have severe consequences, so many tea factories have been forced to install standby diesel generators to meet their needs.

The tea estates' location in the hills — in areas with high annual rainfall and all-season river flows — make them ideal sites for hydropower projects. With the support of the Greening the Tea Industry project supported with Global Environment Facility (GEF) financing, feasibility studies for eight sites have been completed, and up to six small hydropower stations will be built as demonstration projects. Any surplus hydropower will be used to provide electricity for nearby villages that have no grid connection.

Over a period of 20 years, this project is expected to invest in 82 MW of small hydropower plants, as well as benefit more than a million tea farmers, their households, communities and associated enterprises.

Pre-feasibility studies for 19 projects in Kenya, Malawi, Rwanda, Tanzania and Uganda identified a need for additional investment of close to \$22 million to implement six demonstration projects. Micro-hydro plants are being developed in key tea areas of Kenya and Rwanda. Plans are being finalized for more plants in Tanzania and Malawi.

UNEP also supported preparation of feed-in tariff (a policy mechanism designed to encourage the adoption of renewable energy sources) policies for renewable energies in Kenya and Tanzania. Under these policies, national grid utilities are obliged to buy renewable energy from all eligible participants, and to promote investment in hydropower.

Is 2010 and the Green Economy a turning point for future practices that couple the pursuit of economic growth and the generation of green jobs with the benefits of energy efficiency, renewable energy investment and the efficient use of natural resources?

GREEN ECONOMY

FINANCING A GREEN ECONOMY

FROM LITTLE ACORNS, MIGHTY OAKS GROW



Mobilizing early stage investment in clean energy projects and assisting entrepreneurs © iStockphoto

The environment for entrepreneurship, particularly in the clean energy sector, is poor in many developing countries.

For new business ventures there is often a lack of enterprise development support services and financing is hard to secure, with most investors reluctant to engage too early in new business ventures. This can mean that even the most promising new technologies are deployed relatively slowly.

The two largest challenges that investors have in financing early stage projects are the transaction costs and insufficient returns offered by these small, less mature and more risky ventures. Working with the Asian Development Bank and the African Development Bank, UNEP is now running a Seed Capital Assistance Facility (SCAF) which is helping leading actors in the investment community overcome these issues.

Six commercial investment funds have been engaged to date in Asia and Africa. In China, the SCAF is helping fund manager Conduit Ventures and the Shanghai Science and Technology Investment

Corporation set up the first of a number of new clean energy ‘incubators’ that will provide entrepreneurs with business development, technology commercialisation support and seed financing. In India, work is underway with Yes Bank to create a syndicate of financial institutions that will invest seed and follow-on capital in socially and environmentally oriented small and medium-sized enterprises. In Africa, SCAF is engaged with the Evolution One Fund to provide seed financing to wind farm developments along South Africa’s Eastern Cape.

Funds engaged so far are intended to realize over \$2 billion dollars of clean energy infrastructure in the developing world, of which \$55 million will be invested at the seed funding stage.

With the support of the GEF and the UN Foundation, the SCAF is investing \$10 million in helping entrepreneurs access the support they need to prepare and move forward in realizing low carbon infrastructure in the developing world.

For more information: www.scaf-energy.org

INSURING AGAINST THE WORST FOR THE BEST

UNEP (FI) Finance Initiative members, Swiss Re. and HSBC Insurance working together

Drought is a major risk in Ethiopia where 85 per cent of the population is dependent on smallholder, rain-fed agriculture. Less than 0.5 per cent has insurance. Climate change is threatening agricultural output as rainfall becomes less predictable, and many run the risk of falling into debt or having to sell assets. The use of index-based weather insurance can significantly improve lives.

Through the Horn of Africa Risk Transfer for Adaptation project, Swiss Re. has been working with Oxfam America and Columbia University to protect the rural poor against drought risk.

The project engages farmers in community-led, locally designed climate adaptation initiatives such as reforestation and crop irrigation projects, where they earn premiums by making and using compost, constructing water-harvesting structures, planting nitrogen-rich trees and vertiver grasses. This unique risk management approach has allowed rural households, many led by women, to benefit from insurance. Since its launch in 2008, uptake has increased from 200 households in the first year to 1,300 in 2010. The project now covers five villages, two climatic zones and four crop varieties.

HSBC Insurance's Green Insurance products in Brazil are linked to investment to preserve forests. For motor insurance, HSBC commits to preserving 88m² of forest for five years; and for home insurance, 44m² for the same period. The calculations are based on the environmental



footprint of an automobile or residence during that period. HSBC has already invested nearly R\$6 million (approximately \$3.5 million) preserving 2,100 hectares of Atlantic Seaboard Rainforest, equivalent to roughly 3,400 soccer fields and about 1 per cent of remaining pristine Araucaria forest.

The work is carried out with the NGO, 'Sociedade de Pesquisa em Vida Selvagem'. Funds are disbursed to landowners, each receiving a monthly sum for areas to be preserved and a forestry management plan.

These solutions are in line with UNEP FI industry-wide initiatives. In 2010, a first-ever 'global insurance industry statement on adapting to climate change in developing countries' was produced by UNEP FI, ClimateWise, The Geneva Association and Munich Climate Insurance Initiative, calling on governments to harness risk management and insurance expertise.

UNEP FI is undertaking the Principles for Sustainable Insurance Initiative, which will establish a global best practice sustainability framework for the insurance business, and a global initiative of insurers tackling sustainability risks and opportunities. These principles will be launched in 2012 at the Rio+20 conference.

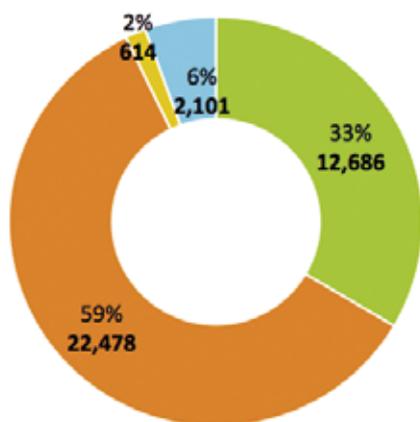


CHANGE

CLIMATE



**Total expenditure 2010
Climate Change
(\$37,879 million)**



- Environment fund expenditure
- Trust funds & earmarked contributions
- Regular budget expenditure
- Programme support

Addressing the climate change challenge

The Climate Change subprogramme focuses on strengthening the ability of countries, particularly developing countries, to integrate climate change responses into national development processes.

RESULTS TARGETED

Adapting to climate change

UNEP helps countries reduce their vulnerability and use ecosystem services to build natural resilience against the impacts of climate change.

Mitigating climate change

UNEP supports countries in making sound policy, technology and investment choices that lead to greenhouse gas emission reductions, with a focus on scaling-up clean and renewable energy sources, energy efficiency and energy conservation.

Reducing Emissions from Deforestation and Forest Degradation (REDD)

Working in partnership with United Nations Development Programme (UNDP) and Food and Agriculture Organization (FAO), UNEP supports developing countries to reduce emissions from deforestation and degradation through the development of REDD strategies, the piloting of innovative REDD initiatives including the consideration for co-benefits such as biodiversity and livelihoods and promoting sustainable forest management.

Enhancing scientific knowledge and communication

UNEP works to improve understanding of climate change science and raise awareness of climate change impacts among decision makers and other key stakeholders.

CLIMATE CHANGE: A SNAPSHOT OF 2010 RESULTS

Mitigating Climate Change

Leveraging private and public investment for clean energy under the *Carbon Finance for Agriculture, Silviculture, Conservation and Action against Deforestation (CASCADe)* project bringing to 4, the number of Clean Development Mechanism (CDM) validations undertaken in *Cameroon* and the *Democratic Republic of Congo*.

Adapting to Climate Change

Restoration work maintaining functioning of ecosystems to support livelihoods in *Mali* and *Togo*.

Mitigating Climate Change

Working with *Mexico* to prepare a comprehensive low emission development strategy (to complement similar efforts in adaptation and REDD) and establish a strategy to promote solar water heaters.

Mitigating Climate Change

Public sector finance network aiming to facilitate clean technology investment is extended to *Chile* and *Mexico*.



Reducing Emissions from Deforestation and Forest Degradation (REDD)

Maps and assessments on forest carbon overlaps with important centres of biodiversity, ecosystem services and livelihoods undertaken to inform investments in *Bolivia, China, Ecuador, Honduras* and *Nigeria*. Similar work was carried out in *Cambodia* and *Tanzania*.

Enhancing Knowledge and Communication

12 participating countries in the FIFA World Cup 2010 engaged in a carbon offset initiative to make the trips of their national teams to *South Africa* climate neutral.

Adapting to Climate Change

Comprehensive assessments initiated to map climate change hotspots in the Nile River Basin, including *Burundi, Central African Republic, the Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda.*

Enhancing Knowledge and Communication

Action-oriented recommendations for enhancing climate change communication and awareness result from Science Policy Dialogues in *Bangladesh, Bhutan and Nepal.* Similar results observed in *Burundi, Ghana, Nigeria, Rwanda, Senegal and Tanzania.*

Adapting to Climate Change

In *Bangladesh, DPR Korea, Papua New Guinea and the Philippines,* Vulnerability and Impact Assessments (VIA) have informed national development processes. Similarly VIAs have informed national processes in *Mauritius, Mozambique and Yemen.*

Reducing Emissions from Deforestation and Forest Degradation (REDD)

The Democratic Republic of Congo, Indonesia and Vietnam supported to integrate multiple benefits into REDD+ strategies and development plans.

Mitigating Climate Change

The *Africa Carbon Asset Development (ACAD)* facility supported development of clean energy initiatives with replication potential in sub-saharan Africa. Initiatives include the International Ferro-Metals Co-generation Project in *South Africa,* as well as wind farming in *Kenya* and integrated solid waste management in *Nigeria.*

KEY FACTS

The globally averaged mixing ratios of carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) reached new heights in 2009. These values are greater than those in pre-industrial times (before 1750) by 38 per cent, 158 per cent and 19 per cent, respectively.

In 2009, as other economic sectors declined around the world, existing renewable capacity continued to grow at rates close to previous years, including grid-connected solar PV (53 per cent), wind power (32 per cent), solar hot water/heating (21 per cent), geothermal power (4 per cent), and hydropower (3 per cent).

By early 2009, energy policy targets and programmes existed in at least 73 countries, and at least 64 countries had policies to promote renewable power generation, including 45 countries and 18 states, provinces, territories with feed-in tariffs. The number of countries, states, provinces with renewable portfolio standards increased to 49.

GREEN economy

Perhaps the most important determinant in making the transition to a Green Economy is clean energy and lessening dependence on fossil fuels.

HIGHLIGHTS IN 2010



The combustor 'Twence' in The Netherlands is able to process 550,000 tonnes of waste and 150,000 tonnes of biomass annually. The majority of waste is being burned in the industrial waste incineration plant AVI in order to generate electricity. Through turbines, the heat is converted into electricity and used for public energy needs of almost 150,000 households © the biggerpicture

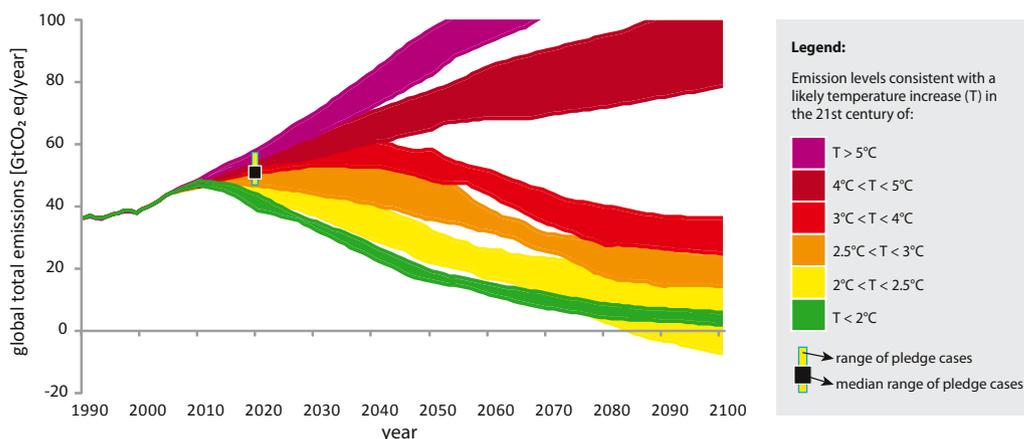
THE CANCUN ACCORD

The latest round of climate negotiations in Cancun has put the world back on track to renew international efforts to combat climate change. The decisions taken in Cancun will help the world achieve gains in a range of important areas including forestry (REDD), adaptation, technology as well as a new Green Fund to assist developing nations and the anchoring of the emission reduction pledges made last year in Copenhagen.

However, as UNEP and climate modellers made clear in the run-up to Cancun, a significant emissions gap exists between what is being promised by countries and what is needed to keep a global temperature rise below 2° C, and that gap remains firmly in place post-Cancun.

At the same time, Cancun also showcased how many countries and companies are forging ahead toward climate resilient and low emission development, signaling a determination to move to a Green Economy.

Likely avoided temperature increase of integrated assessment models (IAM) scenarios.
Bar superimposed in 2020 shows expected emissions from the pledges.



ADAPTING TO CLIMATE CHANGE

Tools to help countries adapt to climate change

UNEP's approach in supporting adaptation planning throughout 2010 focused on:

1. Building the knowledge and capacities of countries to undertake vulnerability and adaptation assessments.
2. Providing countries with policy and legal support to use these findings in their policy and decision making.
3. Carrying out pilot demonstrations so that countries can see how vulnerability to climate change can be reduced, including through ecosystem based solutions.

2010 Results

- Vulnerabilities to climate change assessed and integrated into decision making, planning and adaptation practices in several countries, including China, Mozambique, Senegal and Turkey.
- Outcomes of UNEP assessments has helped enhance capability in Panama, Ecuador and Nicaragua to engage in the Intergovernmental Panel on Climate Change (IPCC). Early warning systems have been established for two priority watersheds in Panama.



Planting a seed for climate protection © UNEP

- Increased resilience of key ecosystems vulnerable to climate change in at least four countries: Mozambique, Peru, Tanzania and Togo.
- National knowledge and capacity for undertaking integrated vulnerability and adaptation assessments strengthened in 17 countries: Bangladesh, Bahrain, Bhutan, Burundi, Democratic People's Republic of Korea, Ecuador, Ghana, Mauritius, Mozambique, Nepal, Pakistan, Peru, Papua New Guinea, Rwanda, Tanzania, Uruguay and Yemen; and three sub-regions: West Africa, Gulf Countries and the Pacific.
- Regulatory frameworks for compliance with climate change vulnerability and adaptation provisions of international treaties reviewed and amendments drafted in three countries: Cambodia, Lao PDR and Vietnam.
- A multi-sector study on the economics of adaptation completed in Africa to support countries in articulating their finance requirements and assist financing mechanisms in targeting investment.
- In June, UNEP was accredited as a Multilateral Implementing Entity (MIE) of the Adaptation Fund.

DEMONSTRATING ADAPTATION TO CLIMATE CHANGE IN ECOSYSTEMS



Bolstering defences in Mozambique © UNEP

Community efforts to bolster defences against a changing climate in Mozambique

The force of a tropical rainstorm on cities can be devastating. Houses and schools are washed away, enormous gullies appear on slopes, and roads sometimes simply disappear. This shattering impact is worsened by increased run-off caused by deforestation and consequently soil erosion inland. For coastal cities such as Xai Xai in Mozambique, which sits on the banks of the Limpopo as it meets the Indian Ocean, facing the grim aftermath of storms may become a more frequent event.

UNEP and UNDP implemented a programme to demonstrate concrete adaptation action at the community level. In the case of Xai Xai, this meant partnering with the city council, the Centre for the Sustainable Development of Coastal Zones, and with city communities to provide technical assistance. The establishment of communal committees to mitigate and prevent erosion and soil degradation was also supported.

At a cost of less than \$50,000, there has been a transformation in community and local authority understanding of the relationship between the chronic erosion problems that plague the city and climate change. The Xai Xai project has also provided socio-economic data that will help model the impacts of climate change on coastal cities elsewhere in Mozambique and across the developing world.

CLEAN TECHNOLOGY

Tools to help countries adopt clean energy technologies

Since 2008, UNEP's mitigation programme has focused on facilitating the transition to low carbon societies and green economies and promoting access to climate change finance for clean technology.

UNEP's approach has been to support countries in carrying out technical and economic assessments of renewable energy; using the findings in technology planning; providing policy analysis support, and assistance to both governments and financial institutions to create an enabling environment for investment in clean energy.

Success can be measured by the increased number of public and private sector institutions implementing energy policies and programmes to reduce the environmental impacts of the energy sector, as well as increased volume of financial support for cleaner energy investments.

2010 Results

- Fifteen countries: Argentina, Bangladesh, Cambodia, Costa Rica, Cote d'Ivoire, Georgia, Guatemala, Indonesia, Kenya, Mali, Morocco, Peru, Senegal, Thailand and Vietnam were supported with GEF funding to conduct Technology Needs Assessments (TNA) that will ultimately lead to preparation of Technology Action Plans (TAPs), introducing new technology for mitigation and adaptation.
- Two networks established to inform and support stakeholders in the reform of policies and programmes for renewable energy, energy efficiency and to reduce GHG emissions.



Solar loans for rural homes in India © UNEP

- Roadmaps for solar and wind energy prepared for Brazil and South Africa.
- Guidelines prepared by experts to support developing country efforts to develop climate plans at the macro, sectoral or project level.
- UNEP and the Risoe Centre brought over 1,000 carbon market stakeholders to the Second Africa Carbon Forum with UNDP, United Nations Framework Convention on Climate Change (UNFCCC), the International Emissions Trading Association (IETA) and the World Bank.
- A global interactive, web-based toolkit developed under the Global Fuel Economy Initiative (GFEI) to help governments develop automotive fuel economy policies. With support from the European Union and the GEF, among others, the GFEI has started implementation of four national pilot projects: Ethiopia, Indonesia, Chile and Colombia.
- Eleven projects supported in six countries: Kenya, Malawi, Mali, Nigeria, Rwanda, and South Africa under African Carbon Asset Development (ACAD) Facility. Training was provided to 150 professionals from the finance sector how to identify and appraise carbon finance opportunities.



Bioenergy - Decision Support Tool publication © UNEP

CLEAN TECHNOLOGY

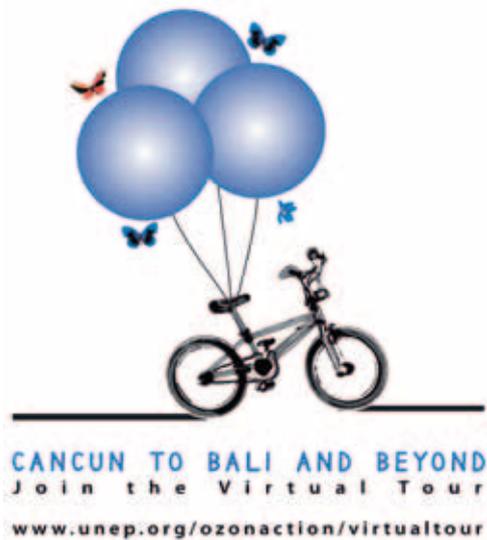
Bioenergy

Bioenergy is renewable energy made available from materials derived from biological sources. In 2010, UNEP issued a series of Issue Papers flagging emerging issues on water and bioenergy, invasive species and stakeholder engagement. With the Food and Agriculture Organization (FAO), under the framework of UN Energy, UNEP issued a 'decision making' support tool providing guidance to developing countries on bioenergy policy development, as well as bioenergy project appraisal.

UNEP continued to advance the development of sustainability indicators and criteria under the Global Bioenergy Partnership (GBEP) and the Roundtable on Sustainable Biofuels (RSB). UNEP, through its Bioenergy Policy Support Facility, and in cooperation with local partners and collaborating centres, supported mapping processes in three countries — Kenya, Uganda and Senegal — indicating areas that are suitable and available for sustainable bioenergy development.

Mapping has been identified as a prime tool to help reduce the risk of environmental and social consequences related to land use change.

Scientific assessments are also being developed with GEF funding on issues relating to bioenergy and sustainable approaches to bioenergy production and use.



OZONE

The two-way link between Ozone and Climate Change

After achieving universal ratification in 2009, the Montreal Protocol continued its successful implementation record in 2010. Between 1986 and 2010, global consumption of ozone depleting substances was reduced by 98 per cent.

Virtually all developing countries met a major compliance obligation by phasing out CFCs by the 1 January 2010 deadline. In addition, from 1990 to 2010, the Protocol's control measures reduced GHG emissions by the equivalent of 135 gigatonnes of CO₂ equivalent to 4 to 5 times the reductions targeted in the first commitment period of the Kyoto Protocol.

Montreal Protocol Parties are now examining ways to use the treaty's vigorous compliance regime to promote even greater climate change benefits through the phase out of HCFCs, widely used in air conditioning, refrigeration and foams. Through hands on support, an information clearing house and 10 Regional Networks, OzonAction is assisting 147 developing countries to meet this dual ozone-climate protection challenge. For example, OzonAction is assisting the Republic of Maldives to phase out HCFCs 10 years ahead of schedule. Compared to a business as usual scenario, the Maldives' project could prevent emissions of up to 5.7 million tonnes of CO₂ equivalent between 2013 and 2030 if low to zero global warming potential replacements are adopted.

“ Because ozone-depleting chemicals are also greenhouse gases, the Montreal Protocol has already averted greenhouse gas emissions equivalent to more than 135 billion tonnes of carbon dioxide, and will continue to play an important role. ”

BAN Ki-Moon, UN Secretary-General, message on the International Day for the Preservation of the Ozone Layer, 16 September 2010.



Replacing conventional energy with solar energy © UNEP

CLEAN TECHNOLOGY

Sometimes the best rate of interest is also in the best interest of the planet: clean technology

Despite solar powered water heaters being an obvious energy saving solution in hot and sunny countries, the cost of buying them is frequently prohibitive for many people. Banks are often unfamiliar with the costs and benefits of clean energy, so loans are often not widely available. Yet, solar hot water systems can earn the initial investment in as little as four years, offering years of 'free' hot water after that.

An average four-person household with an electric water heater is responsible for about eight tonnes of CO₂ emissions annually, almost double that generated by a typical modern car.

Enter Prosol — a joint initiative between UNEP, the Italian Ministry for Environment, Land and Sea and the National Agency for Energy Conservation — which has helped 105,000 Tunisian families get their hot water from the sun based on loans of over \$60 million — a substantial leverage on Prosol's initial \$2.5 million initial cost. The solar water heater market in Tunisia showed a dramatic increase when low-interest loans were made available to householders, with repayments collected through regular utility bills.

This reduced the risk for local banks while simultaneously showing borrowers the impact of solar heating on their electricity bills. Its success has led the Tunisian government to set an ambitious target of 750,000m² of solar water heaters for 2010-2014, making the country comparable to Spain or Italy with populations several times higher. Jobs have been created, creating a 'green jobs' workforce of over 1,000 installers. The tourism and industry sectors are also now involved, with 47 hotels engaged by late 2009, and there are plans to encourage industry to make greater use of the sun's energy.

FORESTS FOR THE FUTURE

Deforestation and forest degradation in developing countries, as a result of agricultural expansion, conversion to pastureland, infrastructure development, unsustainable logging and fires account for around 17 per cent of global greenhouse gas emissions.

Reducing Emissions from Deforestation and Forest Degradation (REDD) attempts to create financial value for the carbon stored in forests. REDD+ goes further to include the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

The UN-REDD Programme, a partnership between FAO, UNDP and UNEP assists developing countries prepare and implement national strategies for reducing emissions from deforestation and forest degradation.

UNEP is the lead in the UN-REDD partnership to ensure that countries understand the environmental benefits of forests and have the tools to assess, monitor and safeguard these assets.

- The UN-REDD partnership was launched in 2008 with nine developing countries as pilots.
- By November 2010, this had increased to 29, demonstrating more than a 300 per cent increase.

This strategy is not always easy, as the example of Paraguay, a UN-REDD partner country, illustrates. This example was developed jointly with civil society groups and indigenous groups.



Using spatial analysis for REDD+ benefits beyond carbon © UNEP

Ensuring the integrity of the forested homeland of the Ayoreo and all other Indigenous and non-Indigenous communities is one of the main challenges in developing the national strategy in Paraguay. Large swaths of native forest have been turned into pasture land in the northern part of Paraguay's semi-arid Chaco region, as cattle ranchers, including from Brazil, expand their property in this country. The Ayoreo-Totobiegosode Indians say ranchers and landowning companies are encroaching on the forest.

The UN-REDD Programme focuses on a variety of issues including:

- Stakeholder engagement
- Measurement, Reporting and Verification (MRV)
- The multiple environmental benefits of forests

The UNEP-World Conservation Monitoring Centre and UN-REDD, are mapping developing countries Argentina, Cambodia, China (Jiangxi Province) Ecuador, Honduras, Nigeria and Tanzania to assess where forest carbon stores overlap with important centres of biodiversity, ecosystem services and livelihoods.



Are the Copenhagen Accord Pledges Sufficient to Limit Global Warming to 2° C or 1.5° C?

A preliminary assessment

SCIENCE AND KNOWLEDGE IN THE CLIMATE ARENA

The Emission Gap report released November 2010 © UNEP

The 'emission gap'

UNEP, working with 30 leading scientists and research centres, launched a report in advance of the UN climate convention meeting in Cancun, Mexico to spotlight the size of the 'emissions gap' between where nations might be in 2020, versus where the science indicates they need to be.

The report shows that emission levels of approximately 44 Gigatonnes of carbon dioxide equivalent (GtCO₂e) in 2020 would be consistent with a 'likely' chance of limiting global warming to 2° C (compared with pre-industrial levels). Under business-as-usual projections, global emissions could reach 56 GtCO₂e in 2020. The report also concludes that it is possible to deliver almost 60 per cent of the necessary emissions reductions if pledges made in Copenhagen last year are fully met.

In turn, parallel measures are needed to spur private enterprise, encourage thriving carbon markets, local community and entrepreneurial solutions, investment in the carbon capture of ecosystems and ways to deal with non-CO₂ gases.

The knowledge gap

To assist the research community, UNEP in partnership with World Meteorological Organization (WMO), United Nations Educational, Scientific and Cultural

Organization (UNESCO) and other partners is establishing a new Joint Programme, as part of the Global Framework for Climate Services called the Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (PRO-VIA) aiming to prioritise, accelerate, harmonise, mobilize and communicate VIA research.

As part of a larger effort, UNEP has been involved in convening a series of national Science-Policy Dialogues to address the need for better communication for decision making.

UNEP also supported the development of a UN Development Group guidance note for country teams on integrating climate change in the UN country analysis and United Nations Development Assistance Frameworks (UNDAFs).

The climate change debate continued unabated throughout 2010 on a variety of issues regarding the nature, causes and consequences of climate change. UNEP supported an independent review of the IPCC by the Inter Academy Council to strengthen its processes. UNEP will continue to support the IPCC to institute transparent and stringent quality control procedures in the issuance of future climate change assessment reports. This review followed guidance provided by the UNEP Governing Council/GMEF in February 2010.



South Africa World Cup © thebiggerpicture

FROM FOOTBALL TO THE FTSE

- In perhaps the most televised event of 2010, UNEP supported FIFA to reduce the carbon footprint of the 2010 World Cup with GEF funds. Twelve participating countries were engaged in a carbon offset initiative to make the trips of national teams to South Africa climate neutral.
- The Climate Neutral Network (CN Net) is a UNEP web-based initiative to showcase strategies and initiatives to promote the global transition to low-carbon economies and societies. CN Net participants have set some of the most ambitious climate neutral strategies in the world. Membership grew during the year, from 190 in December 2009 to 240 by October 2010, including 10 countries, six regions, 18 cities, 150 companies and 51 organizations or institutions.
- UNEP's '30 Ways in 30 Days' communications initiative in the run up to the Cancun UNFCCC meeting in December showcased 30 UNEP climate stories, illustrating that across the world, in a myriad of ways, from community-based programmes to entrepreneurial endeavours, solutions are available to help confront the challenges of climate change and to help countries, communities and businesses move towards low-emission climate-resilient growth.

30WAYSIN30DAYS
UNEP: inspiring action towards a low carbon,
climate resilient future.

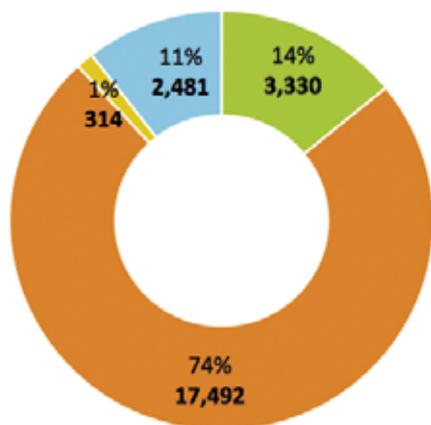
www.unep.org/unite/30ways



DISASTERS AND CONFLICTS



Total expenditure 2010
Disasters and Conflicts
(\$23,617 million)



- Environment fund expenditure
- Trust funds & earmarked contributions
- Regular budget expenditure
- Programme support

RESULTS TARGETED

Capacity of Member States for environmental management that contributes to natural and man-made disaster risk reduction is enhanced.

Rapid and reliable environmental assessments following conflicts and disasters are performed as requested.

The post-crisis assessment and recovery process contributes to improved environmental management and the sustainable use of natural resources.

Minimizing the threats and impacts of crises

UNEP's objective is to minimize threats to human well-being from the environmental causes and consequences of disasters and conflicts.

UNEP is internationally recognized for helping states address environmental degradation and the mismanagement of natural resources as underlying risk factors for conflicts and disasters. It focuses particularly on integrating environmental considerations into risk reduction policies and practices.

In the aftermath of a crisis, critical natural resources entire communities depend on are often degraded, damaged or destroyed. Assessments to gauge the risks posed by these environmental impacts on human health, livelihoods and security form the foundation of UNEP's response.

UNEP also uses the outcomes of environmental assessments to develop recovery programmes that address environmental needs and priorities and support peacebuilding strategies, as well as long-term sustainable development.

DISASTERS AND CONFLICTS: A SNAPSHOT OF 2010 RESULTS

Environmental Cooperation for Peacebuilding

UNEP provided technical support and best practice to 7 UN entities (DESA, DFS, DPA, DPKO, HABITAT, PBSO, and UNDP) as well as the EC to improve the integration of environmental considerations within their conflict prevention and peacebuilding policies and practices in vulnerable countries.

Emergency Response

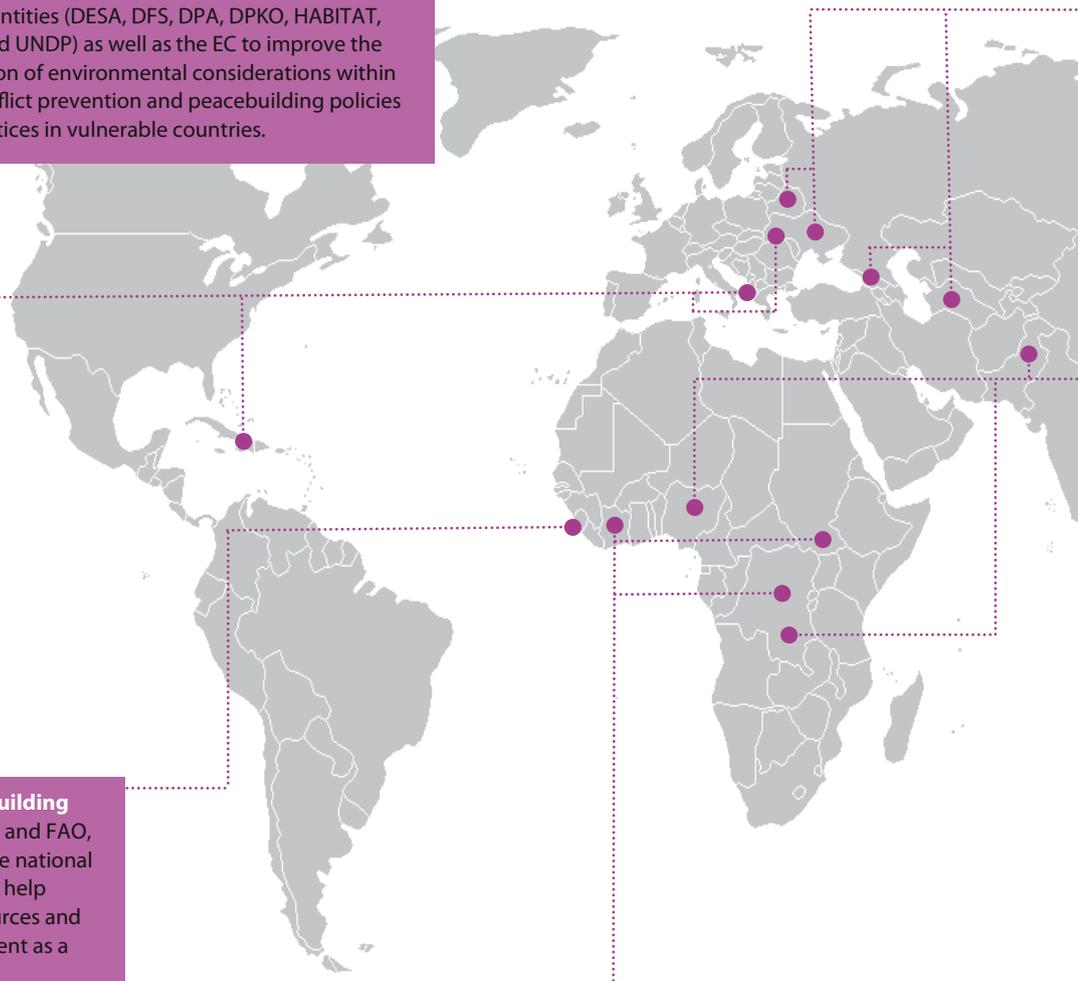
Through its Joint Environment Unit with OCHA, UNEP coordinated and mobilised environmental expertise to identify and mitigate acute environmental risks in five emergency situations in *Albania, Haiti, Nigeria (Zamfara State), Pakistan and Ukraine*.

Environmental Cooperation for Peacebuilding

In *Sierra Leone*, UNEP, together with UNDP and FAO, established a programme of support to the national Government and the UN Country Team to help address risks of conflict from natural resources and promote sound environmental management as a tool for peacebuilding.

Post-Crisis Environmental Recovery

Post-crisis environmental recovery programmes implemented in *Afghanistan, Côte d'Ivoire, the Democratic Republic of Congo, Haiti, Sierra Leone and Sudan*, with additional environmental support provided to *Nepal* and the *occupied Palestinian territory (Gaza)*. Six of these programmes were based on post-crisis assessments previously conducted by UNEP.



Environment and Security (ENVSEC) Initiative

Through the ENVSEC Initiative, early warning and risk assessments, as well as policy support to address interrelated environment and security risks were provided to *Armenia, Belarus, Turkmenistan* and *Ukraine*.

Countries where similar work was conducted include: *Albania, Kyrgyzstan, Moldova, Tajikistan* and *Uzbekistan*.

Post-Crisis Environmental Assessments

UNEP conducted field-based environmental assessments in *the Democratic Republic of Congo, Haiti, Nigeria (Ogoniland)* and *Pakistan* to identify environmental risks to human health, livelihoods and security and ensure the integration of environmental needs into relief and recovery planning.

Disaster Risk Reduction

Policy support and pilot projects to reduce disaster risk by integrating environmental concerns into DRR strategies and development planning were delivered in *Jamaica* and *Sri Lanka*.

KEY FACTS

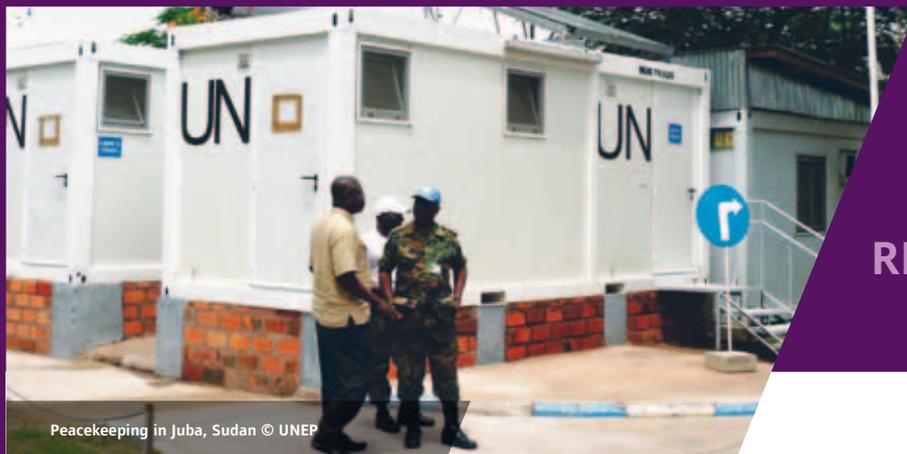
From Kosovo to Afghanistan, Sudan and Haiti, UNEP has responded to crisis situations in over 40 locations since 1999.

The earthquake that struck Haiti in January 2010 resulted in 220,000 deaths, destroyed over 250,000 buildings and affected three million people.

40 per cent of all internal conflicts over the last 60 years have had a link to natural resources.

GREEN economy

An environment-based approach to disaster risk reduction offers multiple benefits to help prevent catastrophic situations contributing to sustainable livelihoods development, poverty reduction and climate change adaptation.



Peacekeeping in Juba, Sudan © UNEP

RISK REDUCTION

Supporting improved environmental management – UN peacekeeping missions

2010 was a year of 'firsts' for UNEP's programme of environmental support to UN peacekeeping missions around the world. UNEP assisted the UN Departments of Peacekeeping Operations (DPKO) and Field Support (DFS) to conduct the first-ever environmental impact assessments and baseline studies for new base camps in Mogadishu, Somalia, and Mombasa, Kenya. The pilot study, which examined issues such as where camps are sited and resource efficiency in relation to energy, water and waste, will be used as a model for replication by other UN field missions.

UNEP also joined with the UN Institute for Training and Research (UNITAR) and the International Institute for Sustainable Development (IISD) to develop and launch the first-ever capacity-building programme for peacekeepers on natural resource management in post-conflict countries.

Some 30 peacekeeping professionals were trained during the first rendition of the course in Nairobi, and it will now be integrated into the standard UNITAR peacekeeping training programme for pre-deployed peacekeepers.

UNEP's work with UN field missions ultimately aims at helping them implement the DPKO/DFS Environmental Policy, improving health and safety conditions for UN personnel and local communities, promoting more sustainable practices by UN field mission staff and their partners, and ensuring more autonomous, secure and cost-effective camps.

Host countries of UN peacekeeping operations will also benefit from sustainable practices, technology transfer and support for the development of their 'Green Economy' markets.

RISK REDUCTION



Beach erosion, Jamaica © UNEP

New approaches to reducing disaster risk in Small Island Developing States

In 2010, UNEP successfully developed and pilot-tested a new methodology for taking environmental factors — specifically ecosystems and climate change — into account in the analysis of disaster risk and vulnerability. The initiative aimed to support national and local government decision-makers in evaluating their development and growth options more effectively.

The methodology specifically targets Small Island Development States (SIDS) and other coastal areas that are at the frontline of experiencing the decline of ecosystems, extreme weather events, and climate change impacts such as accelerated sea-level rise.

Jamaica was selected as a pilot country on the basis of its high level of vulnerability to climate change and natural hazards, as well as the importance of nature-based tourism, agriculture and fisheries for the local economy. The methodology will be further tested in other SIDS before it is adapted to other locations, such as mountainous regions.

“ For the first time, we have a tool that enables government agencies to make more informed decisions about land use and development that accounts for the role of ecosystems, such as sea grasses, in reducing risk. ”

Dr Ronald Robinson, Minister of State, Ministry of Foreign Affairs and Foreign Trade, Jamaica.



RISK REDUCTION

Reshaping of the dam front and installation of a water drainage system to avoid destabilization of the dam structure © UNEP

Enhancing transboundary cooperation in the Western Balkans

Mining and mineral processing have played a vital part in the history and economy of the Western Balkans. Richly endowed with mineral resources such as copper, chromite, lead and zinc, the region boasts some of the largest deposits in Europe. Capitalising on such mineral assets is important for local economies, as well as to attract foreign investment.

However, mining sites can have significant negative environmental impacts and represent a heightened risk for industrial accidents, as evidenced by UNEP's assessment of some 150 mining sites across the region.

In 2010, UNEP — together with its partners in the Environment and Security Initiative — organized and supported the remediation of two mining sites in Albania, which suffered from problems linked to instability, leakage and failure. Construction work also improved the structural integrity of the sites to avoid catastrophic failures caused by extreme weather events or continuous erosion of waste material.

In addition to the intervention in Albania, over 40 experts from all six countries in the Western Balkans were trained on environmental risk reduction measures, thereby strengthening regional capacity and cooperation.



Stabilization and removal of a sinkhole on the waste surface created by damaged pipes underneath the mining waste © UNEP

POST CRISIS ENVIRONMENTAL ASSESSMENT



Catalysing improved environmental management in post-earthquake Haiti

UNEP had been operating on the ground in Haiti for nearly two years, working towards long-term, large-scale environmental restoration in the country, when the earthquake struck on 12 January, 2010. The UNEP office in Port-au-Prince was destroyed in the disaster, but our six-person team was fortunate to suffer only minor injuries. They regrouped and were back in action within days, focusing on assessing immediate environmental risks and assisting humanitarian relief operations.

Already prior to the devastating earthquake, Haiti was known as the poorest, least stable and most environmentally degraded country in the Western Hemisphere. Severe poverty, food insecurity and disaster vulnerability — which are strongly interlinked with environmental issues such as deforestation and soil erosion — have had profound impacts on the population's well-being for decades. Compounding these challenges, the earthquake led to an explosion of waste, severe water and sanitation issues, and a wide range of environmental problems related to camps for the displaced.

Thanks to a sustained and active UNEP presence on the ground, the aftermath of the disaster has witnessed significant investments in environmental sustainability. The most intensive investments are proposed for the southwest of Haiti, where UNEP, together with a wide range of partners, has designed an integrated 20-year sustainable development programme including reforestation, erosion control, fisheries management and small business development, as well as improved access to water and sanitation, health and education.

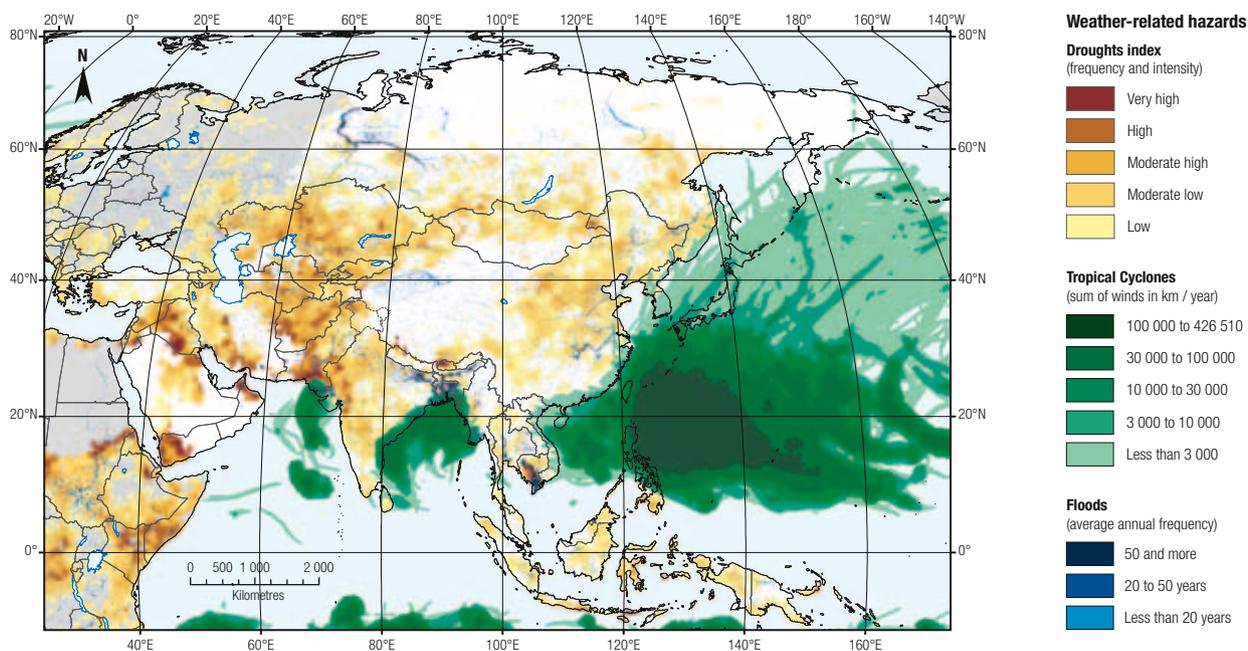
Some 15 per cent of the \$4.6 billion government recovery plan for Haiti should be allocated to investments in environmental improvements such as reforestation, improved sanitation, sustainable agriculture and urban planning.

Disasters leading to losses of more than \$10 billion, January 1975 — June 2008 (Highlighting denotes disasters within the five-year period, 2003-2008.)

Source: EMDAT; Analysis by ISDR, 2008 (data as of September 2008)

Year	Countries	Hazards	Total loss (\$billion)
2005	United States of America	Hurricane Katrina	125
1995	Japan	Kobe earthquake	100
2008	China P Rep	Sichuan earthquake	30
1998	China P Rep	Yangtze flood	30
2004	Japan	Chuetsu earthquake	28
1992	United States	Hurricane Andrew	26.5
1980	Italy	Irpinia earthquake	20
2004	United States of America	Hurricane Ivan	18
1997	Indonesia	Wild Fires	17
1994	United States	Northridge earthquake	16.5
2005	United States of America	Hurricane Charley	16

Year	Countries	Hazards	Total loss (\$billion)
2004	United States of America	Hurricane Rita	16
1995	Korea Dem P Rep	Korea floods	15
2005	United States of America	Hurricane Wilma	14.3
1999	Taiwan (China)	Chichi earthquake	14.1
1988	Soviet Union	Spitak earthquake	14
1994	China P Rep	China drought	13.755
1991	China P Rep	Eastern China floods	13.6
1996	China P Rep	Yellow River flood	12.6
2007	Japan	Nigataken Chuetsu-oki earthquake	12.5
1993	United States	Great Midwest flood	12
2002	Germany	River Elbe floods	11.7
2004	United States of America	Hurricane Frances	11
1991	Japan	Typhoon Mireille	10
1995	United States of America	Major west coast wind storm	10



Data sources:
 Floods: UNEP/GRID-Europe + observed from Dartmouth Flood Observatory and frequency from Flood PREVIEW UNEP/GRID-Europe
 Tropical cyclones: UNEP/GRID-Europe
 Droughts: International Research Institute for Climate and Society of Columbia University
Cartography: P.Peduzzi, UNEP, UN/ISDR, 2009

POST CRISIS ENVIRONMENTAL RECOVERY



Sierra Leone © UNEP

Influencing environmental recovery and development in Sudan

In 2010, UNEP was instrumental in establishing environment ministries in 16 states across Sudan, directly influencing improved environmental practices in the country.

In addition, UNEP's guidance and technical support to the aid community in Sudan on mainstreaming environmental considerations into its operations in the country resulted in nearly half of all aid projects integrating environmental activities as part of their programmes.

In Darfur, the environment became one of four main priorities in the UN recovery plan. A knowledge exchange between Sudanese and South African decision-makers and engineers, arranged by UNEP, contributed to government support for an integrated approach to managing water resources. UNEP also promoted alternative energy solutions to counter unsustainable timber demand, including brokering greater cooperation to expand the use of liquefied petroleum gas.

In Southern Sudan, a legislative framework for environmental management, embodied in the *South Sudan Environmental Policy 2010* and the *2010 South Sudan Environment Act* was established with active UNEP support. In addition, two major

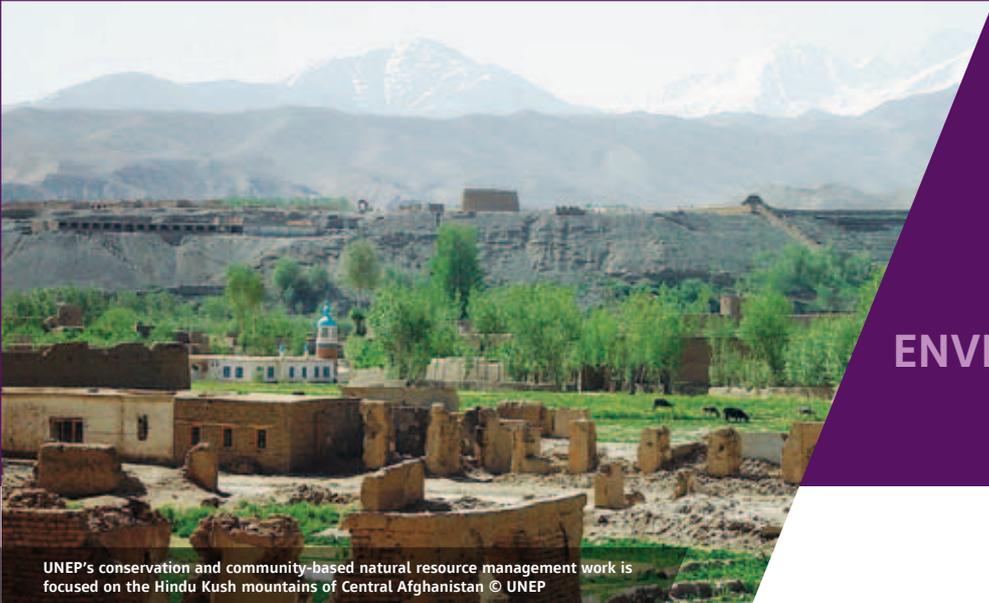
community-based campaigns — 'Keep Juba Green' and 'Keep Juba Clean' — were launched to support reforestation and improve waste management.

Working as 'one' for peace in Sierra Leone

At the request of the national government, UNEP completed a comprehensive assessment of the role of the environment in conflict and peacebuilding in Sierra Leone. The assessment found that many of the risk factors for conflict that existed in the 1980s and 1990s had not been adequately addressed today, most prominently in the environment and natural resources sector.

Based on the assessment, UNEP, together with UNDP and FAO, established a programme to build the institutional capacity of the Sierra Leone Environmental Protection Agency and other government units responsible for water management, land use and natural resource allocation.

Strengthened capacity for environmental governance will contribute to the sound and effective management of natural resources and the environment in Sierra Leone, and thereby make a vital contribution to the county's recovery and development while building the foundations for equitable and sustainable economic growth.



POST CRISIS ENVIRONMENTAL RECOVERY

UNEP's conservation and community-based natural resource management work is focused on the Hindu Kush mountains of Central Afghanistan © UNEP

Laying the foundations for sustainable development in Afghanistan

UNEP has been working in Afghanistan since 2002, and has surprised many observers by its record of success and lasting commitment in the most difficult of circumstances. With project offices in Kabul and Bamiyan, UNEP aims to create a lasting foundation for sustainable development in the country, through a comprehensive programme of support addressing institutional, legal and capacity needs.

The year 2010 was marked by the establishment of community-based natural resource management as the de facto development strategy for rural Afghanistan. Having introduced the concept to the country, *UNEP now has 26 community-based projects across three provinces*. These small-scale economic development initiatives at village level aim to demonstrate to communities the benefits they can garner from improved natural resource management. UNEP's aim is to develop the capacity, commitment, capital and coordination that will catalyse environmentally sustainable development in the post-conflict context. In addition, GEF funding was secured to assist communities to build resilience against climate change.

UNEP was also instrumental in the development of a national system for parks and conservation of nature and biodiversity in key reserves and conservation areas, and became directly involved in the management of three protected areas projects: Band-e Amir National Park, the Kole-Hashmat Khan wetlands, and the Shah Foladi Protected Area. UNEP plans to expand this to 30 other proposed areas in 2011.



Linda Norgrove © UNEP

Tribute to Linda Norgrove

The tragic death in October of Linda Norgrove shocked and deeply saddened her former colleagues at UNEP, and brought home the unpredictable dangers faced by aid and development actors on the ground.

Between 2005 and 2008, Ms Norgrove was a valued member of UNEP's Afghanistan programme team. She left to serve in Lao PDR as Head of the Environment Unit, a joint UNEP and UN Development Programme post, before returning to Afghanistan in January 2010 to work for a non-governmental organization, 'Development Alternatives.'

Ms Norgrove, 36, died in Afghanistan's Kunar province during a rescue attempt, following her kidnapping some two weeks earlier.

Linda will be remembered for making a pivotal contribution to laying the foundations for sustainable development in Afghanistan and for helping to develop a strong Poverty and Environment Initiative programme in Lao PDR. Among her achievements, she is credited with developing UNEP's community-based natural resource management and protected areas programmes in Afghanistan and leading the development of the country's first action plan for climate change adaptation. Linda was part of the UNEP Kabul team that received a UNEP Baobab Award for outstanding achievement in the team category in 2008.

Linda's premature death is also a tragedy and loss to the people of Afghanistan and Lao PDR, whom she served with selflessness and dedication.

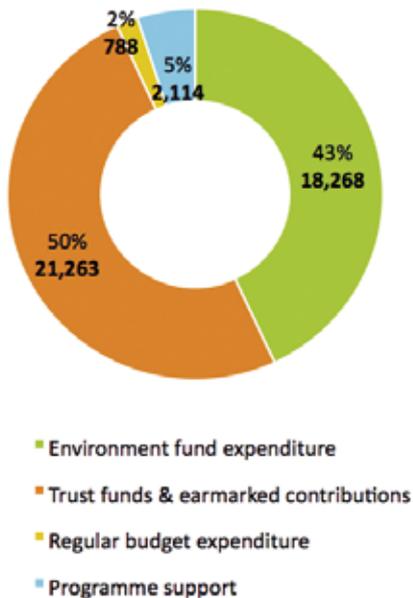


ENVIRONMENTAL



GOVERNANCE

Total expenditure 2010
Environmental Governance
(\$42,433 million)



RESULTS TARGETED

The United Nations system, respecting the mandates of other entities, progressively achieves synergies and demonstrates increasing coherence in international decision-making processes related to the environment, including those under multilateral environmental agreements.

The capacity of States to implement their environmental obligations and achieve their environmental priority goals, targets and objectives through strengthened laws and institutions is enhanced.

National development processes and United Nations common country programming processes increasingly mainstream environmental sustainability in the implementation of their programmes of work.

Access by national and international stakeholders to sound science and policy advice for decision-making is improved.

Strengthening governance

UNEP supports coherent international decision-making processes for environmental governance.

UNEP catalyses international efforts to implement internationally agreed objectives.

UNEP helps governments further develop and strengthen their national, sub-regional and regional policies, laws and institutions underpinning environmental governance, and develop tools and methods for environmental management.

UNEP helps governments and regional institutions place environmental sustainability at the heart of their development policies, making full use of the UN Development Group platform. UNEP also helps governments to understand and manage environmental data and information, providing a sound basis for environmental governance.

ENVIRONMENTAL GOVERNANCE: A SNAPSHOT OF 2010 RESULTS

International Cooperation

Policy dialogue through Regional Ministerial forums held in *Africa, Asia, Latin America and the Caribbean* and *The Pacific*.

Sound Science for Decision Making

Technical support to the Ministry of Environment in moving towards online environmental data and indicators database provided to the *Dominican Republic*.

Sound Science for Decision Making

GEO Haiti and *State of the Environment Report 2010* launched and used in making environmental decisions during *Haiti* reconstruction phase.

National Development Planning

Technical assistance for implementation of UN Development Assistance Frameworks provided to *Brazil, Ecuador* and *Panama*. Technical backstopping provided to 9 other countries: *Bhutan, Botswana, Brazil, Cape Verde, Guatemala, Panama, Rwanda, Tanzania* and *Vietnam*.

International Cooperation

Revised comprehensive framework of African climate change programmes during the 13th session of AMCEN in *Mali*.

Strengthening Law

Support provided to the *Russian Federation* in developing a low carbon version of national Energy Efficiency Plan.

National Development Planning

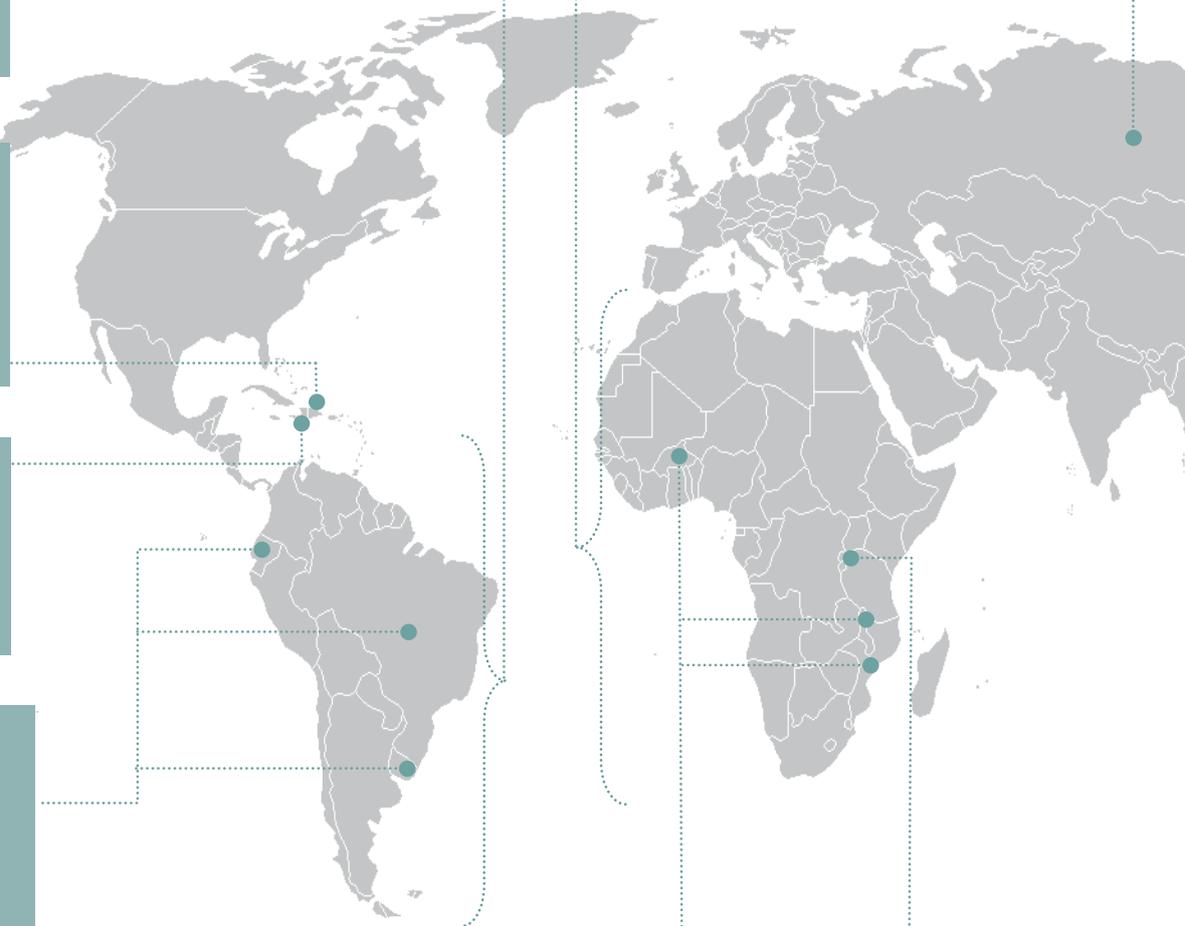
In *Burkina Faso, Malawi* and *Mozambique* UN Country Teams trained on integrating environmental sustainability into UN Development Assistance Frameworks. Similar work carried out in *Montenegro* and *Syria*.

International Cooperation

World Environment Day held in *Rwanda, June 5th*.

Strengthening Law

In *Lao PDR*, laws reviewed towards reducing vulnerability to the impacts of climate change. Similar work undertaken in *Cambodia* and *Vietnam*.



Fostering Coherence in Governance

The Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions, at their simultaneous extraordinary meetings, in *Bali*, agreed on arrangements for joint activities, management and administrative services.

International Policy Setting

Nusa Dua Declaration adopted during the 11th special session of the UNEP Governing Council/Global Ministerial Environment Forum, in *Bali* – a first by world environment ministers since the Malmö Ministerial Declaration in 2000.

Fostering Coherence in Governance

The International Environmental Governance agenda advanced through: (i) implementation of incremental reforms and (ii) further consultations on broader reforms in Nairobi and Helsinki.

International Policy Setting

Parties reached agreement on the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, as well as a new Strategic Plan and post-2010 biodiversity targets.

International Policy Setting

Two protocols finalised to the 'Framework Convention for the Protection of the Marine Environment of the Caspian Sea' on oil spill prevention and response; the other on environmental impact assessment in a transboundary context.

International Policy Setting

In partnership with the Ministry of Foreign Affairs, organized capacity building activities on MEA negotiations for approximately 250 diplomats from the South-East Asia region.

Fostering Coherence in Governance

Twelve MEAs and five organizations are participating in MEA knowledge management initiative – *Switzerland*.

Strengthening Law

In the *Philippines* UNEP has partnered with the Asian Development Bank (ADB) in developing capacity of judges on environmental issues.

KEY FACTS

The global environmental governance architecture includes more than 500 Multilateral Environmental Agreements (MEAs). A recent study shows that between the years 1992-2007 the parties of eighteen major MEAs were called for 540 meetings at which 5,084 decisions were taken.

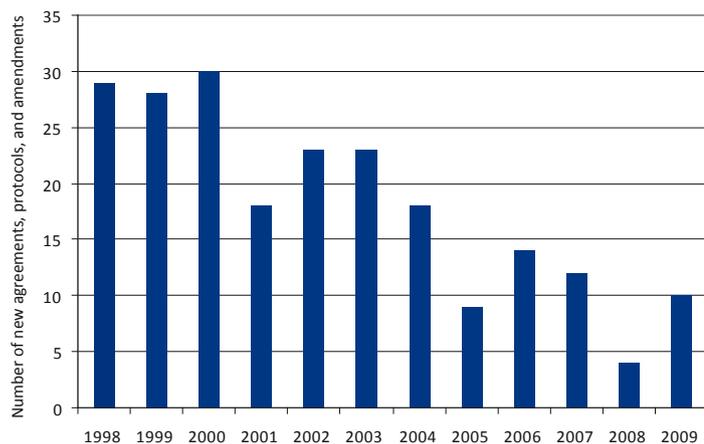
With policy action to improve freshwater supplies for drinking, sanitation, and hygiene purposes, as many as 135 million deaths could be prevented by 2020.

Improving the global environmental governance structure of the Earth's natural resources is a practical imperative, as almost half the jobs worldwide depend on fisheries, forests or agriculture.

GREEN economy

The Green Economy holds great promise for developed and developing countries alike to promote sustainable development. A holistic and integrated approach towards the environment as part of a nation's development and governance pathway will assist with resource stabilisation and promote economic and environmental security.

HIGHLIGHTS IN 2010



Number of new multilateral environmental agreements, protocols, and amendments 1998-2009

Source: Mitchell, R.B. 2009. *International Environmental Agreements Database Project (Version 2009.1)*. In: *UNEP Year Book 2010*

INTERNATIONAL ENVIRONMENTAL GOVERNANCE

At the 11th special session of the UNEP Governing Council / Global Ministerial Environment Forum (GC/GMEF), the world's environment ministers adopted the Nusa Dua Declaration recognizing that the international environmental architecture has become complex and fragmented and consequently not as efficient or as effective as it could be.

In the Declaration, Environment Ministers recognized the opportunity presented by the 2012 Conference on Sustainable Development to make headway in addressing the shortcomings of the current environmental governance system. In this regard, the Global Environment Ministers Forum established a consultative group of ministers or high-level representatives to develop options for the reform of the current architecture and called for increased synergy among the Multilateral Environmental Agreements (MEAs).

Since its establishment, the Consultative Group held two meetings in Nairobi and Helsinki and developed nine options for strengthening a broad range of governance issues from enhancing the interface between environmental science and policy, to the development of financial and technical assistance architecture to support the national implementation of MEAs. The Consultative Group has also developed options for the institutional framework that will be required to implement the proposed reforms.

Alongside the development of options for reforming the International Environmental Governance architecture, synergies among the chemical related MEAs also reached a significant milestone. For the first time, the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions held simultaneous extraordinary meetings in February 2010. The Parties agreed on the arrangements for joint activities, joint management, including the establishment of the position of Joint Executive Secretary and joint administrative services.

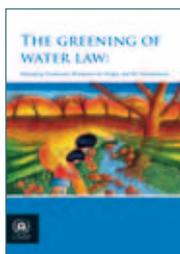
Acknowledging the advances made in improving coherence in the governance of the international chemicals agenda, the Nusa Dua Declaration called upon the Conferences of the Parties to the biodiversity-related MEAs to strengthen their efforts in achieving synergies among the biodiversity-related conventions. 2010, being the International Year of Biodiversity, the 65th session of the General Assembly held a high-level meeting on biodiversity, which noted the substantial benefits to be gained from the coherent implementation of the biodiversity-related conventions.

The inclusion of civil society in the global environmental governance discourse was strengthened through the establishment of a Civil Society Advisory Group in October 2010.

STRENGTHENING LAW



Young Nepali schoolgirl drinking from city fountain on Durbar Square, Nepal © iStockphoto



Promoting development and implementation of international law

The UNEP GC/GMEF adopted guidelines for national legislation on access to information, public participation and justice in environmental matters. It also adopted guidelines on liability, response action and compensation for damage caused by activities dangerous to the environment.

UNEP's Greening Water Law report warned that in the face of declining fresh water resources, governments and law-makers urgently need to integrate environmental concerns into water-use legislation. Without action to improve freshwater supplies for drinking, sanitation, and hygiene purposes, as many as 135 million preventable deaths could occur by 2020.

UNEP has prepared a number of tools for policymakers to better understand the issues involved in integrating environmental concerns into national legislation. For example, the Russian Federation was supported in developing a low carbon version of their national Energy Efficiency Plan.

With UNEP's assistance, this year 10 countries: Bangladesh, Cambodia, India, Indonesia, Lao PDR, Maldives, Mongolia, Timor Leste, Uganda and Vietnam, have taken initiatives to develop and strengthen their environmental laws, and integrate environmental considerations into national sectoral laws.

MAINSTREAMING ENVIRONMENT IN DEVELOPMENT

Mainstreaming environment in development: the joint UNDP-UNEP Poverty-Environment Initiative

The Poverty-Environment Initiative (PEI) is a joint effort led by UNDP and UNEP to assist countries to improve the livelihoods of the poor dependent on natural resources and reduce their vulnerability to climate change by integrating pro-poor environment and climate change concerns into national and sub-national economic decision making and planning processes.

The PEI consists of 21 country programmes and also provides targeted technical support to another five countries in Africa, Asia-Pacific, Europe and the Commonwealth of Independent States, and Latin America and the Caribbean.

ASIA PACIFIC — PEI Asia Pacific in partnership with GTZ introduced the Environmental Fiscal Reform measures to the Ministries of Finance, Planning and Agriculture and Forestry of Bhutan, Lao PDR, Nepal and Thailand and identified the potential for possible Environmental Fiscal Reform measures in these countries.

BURKINA FASO — A PEI supported study on the role of the environment within the economy helped integrate poverty-environment in the new Poverty Reduction Strategy Paper.

BHUTAN — Poverty Environment Mainstreaming Guidelines were effectively embedded in planning processes in Bhutan. PEI Bhutan assisted the Gross National Happiness Commission of Bhutan in applying the Poverty-Environment Mainstreaming Guideline (PEMG) in sectoral development plans of 10 central ministries as well as local government bodies and selected civil society organizations. As a result, policy gaps and capacity needs in integrating pro-poor environment issues in the current five year plan were identified with a set of poverty-environment indicators proposed for the monitoring and evaluation system.

AFRICA — PEI capacity building on environmental fiscal reform in collaboration with German Technical Cooperation (GTZ) in Mali, Burkina Faso and Mauritania increased their ability to integrate sustainability into development planning processes.

LAO PDR — Results from PEI national and provincial consultations, an economic valuation of ecosystem services and baseline assessments of social and environmental impacts of private investment are feeding into National and Provincial Investment Strategies.

MALAWI — PEI supported the government to produce a study on the contribution of natural resources to poverty reduction and economic growth. It is influencing the next Malawi Growth and Development Strategy.

MALI — Support from PEI was key to a decision by the Government of Mali to green its upcoming Poverty Reduction Strategy Paper.

NEPAL — PEI supported the Ministry of Local Development to produce economic evidence for promoting pro-poor environment friendly rural infrastructure development and for sustainable natural resource use and extraction practices by local governments.

SOUTH EAST AND EAST ASIA — UNEP and the World Health Organization facilitated the establishment of a Regional Forum on Environment and Health in South East and East Asian Countries.

TANZANIA — PEI tracked environment expenditure at local government level in Tanzania to influence budget allocation and evaluated the economic value of the Ihefu Wetlands, a key national resource for growth and improved livelihoods of the rural poor.

URUGUAY — There has been a three-fold and six-fold budget increase, for 2011 and 2012 respectively, in allocations to PEI work on waste management, poverty and environment.

MAINSTREAMING ENVIRONMENT IN DEVELOPMENT



1. Soil degradation in Rwanda 2. Monitoring of water quality in the water basin of the Catari River, Bolivia © UNEP

Promoting sustainable national development: soil and toil in Rwanda

In 2010, Rwanda allocated increased financial resources towards soil erosion control programmes. An earlier PEI analysis which made the economic case for poverty and environment mainstreaming played a key role in this decision by the Government of Rwanda.

The study demonstrated that soil erosion is a primary cause of decline of agricultural productivity and poverty had increased as rural incomes and livelihood opportunities declined. It also demonstrated that the combined impact of wetland conversion and siltation cause significant declines in hydro-electricity production. An additional \$65,000 per day was being spent on generators and fuel, due to aggravated environmental degradation.

This economic evidence convinced senior decision-makers in Rwanda that environmental sustainability made economic sense. The Rwandan Poverty Reduction Strategy Paper included an objective to substantively reduce soil erosion which will work through the agriculture sector plan and associated budget. In practical terms, this means that small holder farmers will be able to grow more food and increase income.

A UNEP pilot project that demonstrated the concrete benefits of soil erosion control programmes, rainwater harvesting and crop diversification also helped to convince decision-makers.

In 2009, Rwanda also produced its first *State of the Environment* report. The Government of Rwanda has now set aside resources to address some of the key issues identified such as strengthening the National Forest Authority to improve governance of forest resources and the restoration of the Gishwati forest.

Catalysing transboundary cooperation: Lake Titicaca – strangled by pollution

The uncontrolled dumping of sewage waste and debris produced by some 30,000 small-scale miners is causing widespread environmental damage in Lake Titicaca, the largest lake in South America and the highest commercially navigable lake in the world.

UNEP is helping to assess and recover this critical lake straddling Bolivia and Peru. Contaminated water, pollution and alien invasive species are choking the lake and causing widespread sickness and low work productivity within local communities. UNEP is working with partners to assess and improve the lake's water quality by identifying and rehabilitating water treatment facilities and considering the best ways to recycle wastewater.

Part of this work entails running national training workshops and renovating and funding new laboratories. Eleven local water quality laboratories in Bolivia and Peru have been assisted through modernisation of existing equipment.



MAINSTREAMING ENVIRONMENT IN DEVELOPMENT

Market in Thailand © thebiggerpicture

Promoting sustainable national development: Thailand's green shoots in a hungry world

Thailand's Ministry of Interior and local government plays a key role in managing public and private investments that directly affect how rural people live. In the northern, mountainous province of Nan in Thailand, 87 per cent of the total land (11,472 square kilometres) is heavily forested. Nan is of national importance in part because the Nan River forms the catchment for over 40 per cent of the Chao Praya River which runs down to Bangkok.

National and local policies and investments have had a dramatic impact on this landscape — with the rapid spread of maize farming replacing much of the dense forest. In the past four years, due to strong market incentives together with the government's price guarantee scheme, maize farming has been responsible for clearing about 400,000 rai (about 153,846 acres) of forestland. Farmers are attracted to growing maize as it is an annual crop, and provides flexibility in terms of how and where to use land.

At a local level, PEI is supporting communities to engage with the planning and budgeting process through ecosystem assessments within Nan Province. This ecosystem assessment is being used as evidence to support the government to create a watershed management fund for conservation farming investments and reduce perverse incentives that promote maize growing.

These lessons from Nan in linking local people into the planning and investment decisions that affect their lives will be shared with other provinces.

In addition, the Thai National Environmental Health Strategic Plan has been integrated into the Tenth National Economic and Social Development Plan 2007-2011.

MAINSTREAMING ENVIRONMENT IN DEVELOPMENT

During 2010, UNEP increased its engagement in the UN common country programming processes. UNEP has worked to mainstream environmental sustainability and climate change in 'One UN' programmes.

2010 also saw increased capacity in Regional Offices to improve UNEP's ability to deliver at the regional and country level. The United Nations Development Assistance Framework (UNDAF) is the strategic programme framework that describes the collective response of the UN system to national development priorities.

It addresses the national capacity gaps in achieving the Millennium Development Goals (MDGs) and other internationally agreed development goals and treaty obligations, including the multilateral environmental agreements.

Results 2010

- Preparation of national environmental summaries to support the UN country analysis which constitutes the basis of the UNDAF preparation for eight countries: Barbados, El Salvador, Ghana, Guyana, Mali, Mozambique, Peru and Yemen.
- Support to UNDAF preparation or implementation in Barbados, Bhutan, Botswana, Brazil, Cape Verde, Egypt, El Salvador, Haiti, Indonesia, Lao PDR, Malawi, Maldives, Mongolia, Myanmar, Peru, Philippines, Rwanda, Syria, Tanzania, Thailand, Uganda, Uruguay, Vietnam, and Yemen, leading to stronger environmental components.



Local traders in Sudan © UNEP

- UNEP has supported the UN Country Teams (UNCTs) in mainstreaming environmental sustainability in 43 UN common country programming processes. Through the support UNEP has responded to national capacity gaps to achieve MDG 7 (Environmental Sustainability).
- UNEP is also participating in 14 joint programmes out of 17 under the environment and climate change aspect of the Millennium Development Goals Achievement Fund (MDG-F).
- In partnership with UNDP and the International Strategy for Disaster Reduction, UNEP delivered training on mainstreaming Climate Change and Disaster Risk Reduction to 15 African UNCTs.
- Mongolia established a Coordinating Committee on Toxic Chemicals and Hazardous Substances and developed a National Strategy on Healthcare and Waste Management.
- In Indonesia, the Ministry of Environment and Ministry of Health signed an agreement on Environmental Management for Health in June 2010 to enhance cooperation and coordination on work on environment and health.
- In Thailand, the National Environmental Health Strategic Plan was integrated into the Tenth National Economic and Social Development Plan.



SCIENCE FOR DECISION-MAKING

© Corbis

Bringing the latest science to the governance process

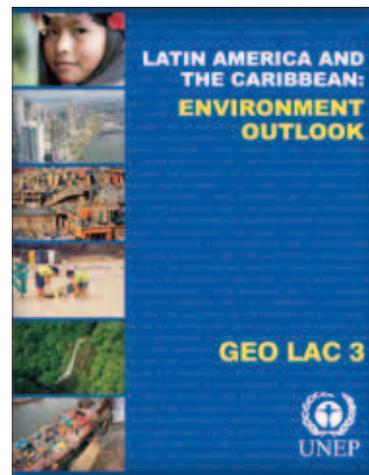
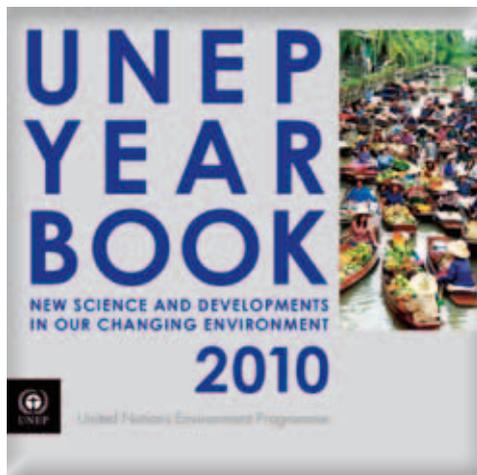
The role of UNEP to broker knowledge and provide a platform for scientists and policymakers to review the science of emerging global environmental threats and solutions was further strengthened in 2010.

The evolution of UNEP's scientific assessments, and their role in keeping the global environment under review, is perhaps best captured in the *Global Environment Outlook (GEO)* and *Year Book Series*, both of which inform environmental governance and responsible decision-making.

GEO is a complex and comprehensive global undertaking, involving a multi-disciplinary partnership of hundreds of policy experts, researchers, UN agencies and regional and global collaborating centres.

The *GEO-5* assessment process began in earnest in April and has been re-tooled with two advisory bodies (a High-Level Intergovernmental Advisory Panel and a Science and Policy Advisory Board).

The assessment report aims to focus on providing solutions to environmental challenges so that it can be of greater relevance for decision-making by governments and other relevant stakeholders. *GEO-5* will provide policy options that could help regions speed up the realization of internationally agreed goals such as the Millennium Development Goals, or those agreed through Multilateral Environmental Agreements. (www.unep.org/geo).



The *UNEP Year Book 2010* highlighted the latest science and developments in our changing environment. The seventh edition in this series looked at progress in environmental governance; the effects of continuing degradation of the world's ecosystems; impacts of climate change and the nexus with biodiversity; effects of harmful substances and hazardous waste on human health and the environment; disasters and conflicts related to the environment; and the unsustainable use of resources. It brought to the fore the latest science surrounding UNEP's six priority areas. In preparing of the *UNEP Year Book (UYB) Series*, UNEP leverages significant support from the science community by providing a platform for experts to review emerging environmental issues and select topics. The 2011 edition will highlight emerging environmental issues of plastic debris in the ocean, phosphorus use and food production and pressures on forest biodiversity.

UNEP conducts regional integrated assessments such as the *GEO Latin America and the Caribbean*, the *Environment Outlook for the Arab Region* and has analysed Africa's water issues in the *Africa Water Atlas*. It also published a national assessment — the *GEO Haiti 2010 State of the Environment Report*. The third series of the *Africa Environment Outlook* is underway and includes a supplementary manual and training for authors.

UNEP was a force in setting up the first worldwide umbrella organization for climate impact and adaptation research and it strengthened its reporting of emerging issues by launching a Global Environmental Alert Service.

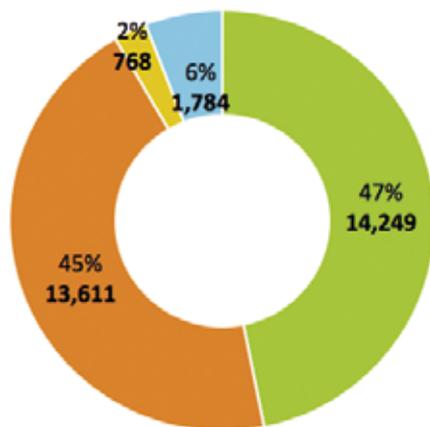


MANAGEMENT

ECOSYSTEM



Total expenditure 2010
Ecosystem Management
(\$30,412 million)



- Environment fund expenditure
- Trust funds & earmarked contributions
- Regular budget expenditure
- Programme support

RESULTS TARGETED

The capacity of countries and regions to increasingly integrate an ecosystem management approach into development and planning processes, is enhanced.

Countries and regions have capacity to utilize ecosystem management tools.

The capacity of countries and regions to realign their environmental programmes and financing to address degradation of selected priority ecosystem services, is strengthened.

Maintaining ecosystem services for development

UNEP's objective is to ensure that countries utilize the ecosystem approach to enhance human well-being. UNEP provides three core services to governments:

- Builds capacity of governments on the critical role of sustainably managed ecosystems in supporting social and economic development.
- Assists national governments and regions to determine which ecosystem services to prioritise based on their economic and development needs — and how to maintain these services.
- Enables governments to incorporate the ecosystem approach into their national development planning and investment strategies.

ECOSYSTEM MANAGEMENT: A SNAPSHOT OF 2010 RESULTS

Incorporating Ecosystem Services into Development Planning and Investment Decisions

In *Senegal*, economic valuation of ecosystem services provided by forests is being conducted to inform investment and resource allocation decisions. This work is similarly being done in *Brazil* and *Kenya*. In addition, ecosystem assessments are being conducted in *Guatemala*, *Lao PDR*, *Sudan*, and *Thailand*.

Incorporating Ecosystem Services into Development Planning and Investment Decisions

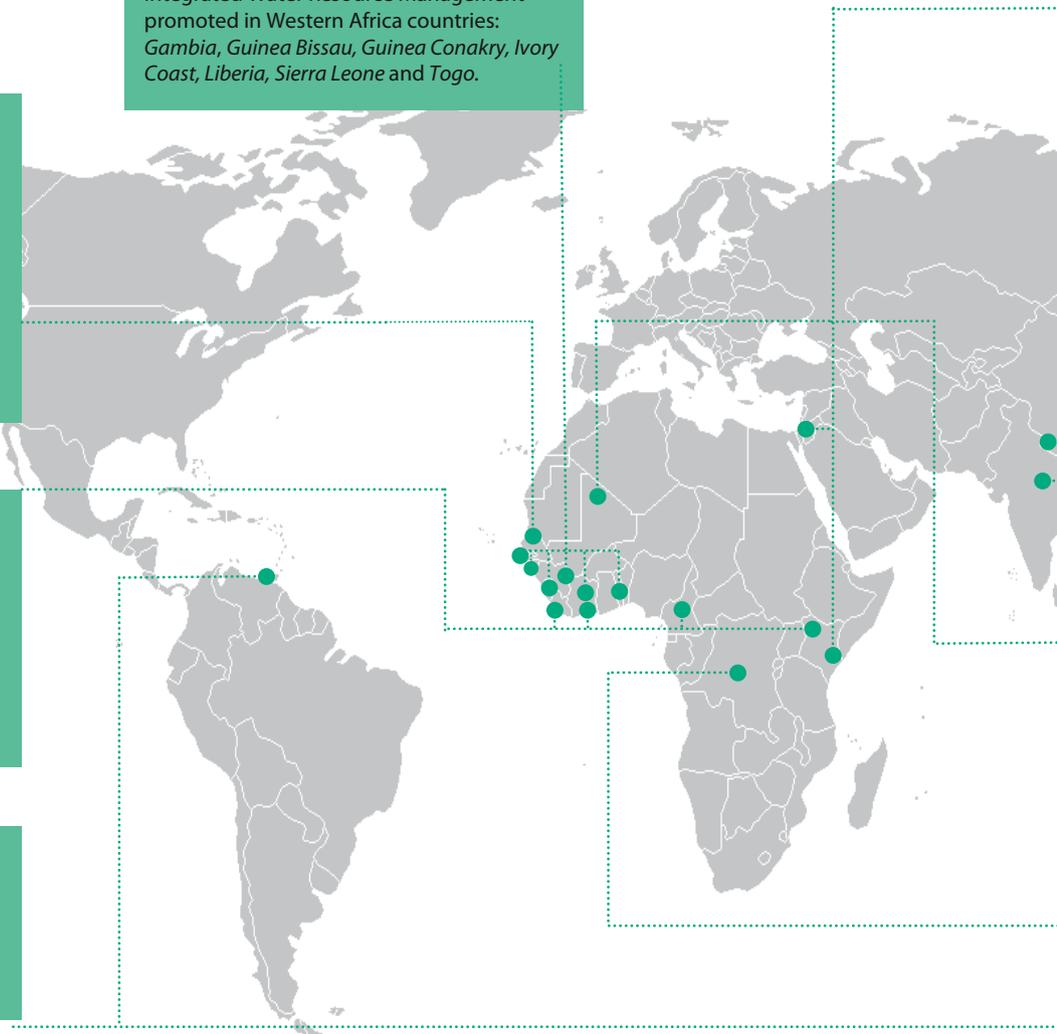
Work is underway on development of Payments for Ecosystem services (carbon credit and ecotourism) in *Cameroon*, *Ivory Coast*, *Kenya*, and *Liberia*, and with GEF funding in *Chile*, *Lesotho*, *South Africa*, *Trinidad and Tobago* and *Vietnam*.

Incorporating Ecosystem Services into Development Planning and Investment Decisions

Marine spatial planning tools developed, tested and applied in *Papua New Guinea* and *Trinidad and Tobago*.

Restoring and Managing Ecosystems and Biodiversity

Integrated Water Resource Management promoted in Western Africa countries: *Gambia*, *Guinea Bissau*, *Guinea Conakry*, *Ivory Coast*, *Liberia*, *Sierra Leone* and *Togo*.



Incorporating Ecosystem Services into Development Planning and Investment Decisions — ‘Busan Outcome’

The culmination of a two year negotiation supported by UNEP to establish the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) to strengthen the interface between science and policy.

Restoring and Managing Ecosystems and Biodiversity

Tools for ecosystem assessment and management for forest management, land rehabilitation and sustainability of water regulation and purification being tested in *Indonesia, Kenya, Lebanon and Mali*.

Restoring and Managing Ecosystems and Biodiversity

During the CBD COP10 in Nagoya, an agreement was reached by parties to establish the Protocol on Access and Benefit Sharing of Genetic Resources and their Fair and Equitable Sharing of Benefits (ABS).

Restoring and Managing Ecosystems and Biodiversity

Transboundary cooperation agreement established in a transboundary mountain ecosystem covering *China, India and Nepal*, and also in a forest ecosystem shared by *Angola and the Democratic Republic of Congo*.

Restoring and Managing Ecosystems and Biodiversity

Spain-UNEP partnership for Protected Areas 'LifeWeb' project implemented in *Cameroon, Cape Verde, the Democratic Republic of Congo, Guinea-Bissau, Indonesia, Mauritania, Senegal, Sierra Leone and Wider Caribbean region*.

Restoring and Managing Ecosystems and Biodiversity

During the United Nations General Assembly (UNGA) 65th session, the resolution on oceans and law of the sea related to the 'Regular Process for Global Reporting and Assessment of the State of the Marine Environment (GRAME)' was adopted. The first integrated assessment is to be completed by 2014.

Restoring and Managing Ecosystems and Biodiversity

A UNEP FAO project with GEF funding to conserve, sustainably use and manage pollinators for biodiversity conservation in *Brazil, Ghana, India, Kenya, Nepal, Pakistan and South Africa*.

KEY FACTS

More than half of the world's hospital beds are filled by people suffering from water-related illnesses affecting human well-being and countries' further development and economic growth.

In 2010, governments agreed to increase land-based protected areas to 17 per cent of the Earth's surface, from around 12.5 per cent now, and to extend marine protected areas to 10 per cent.

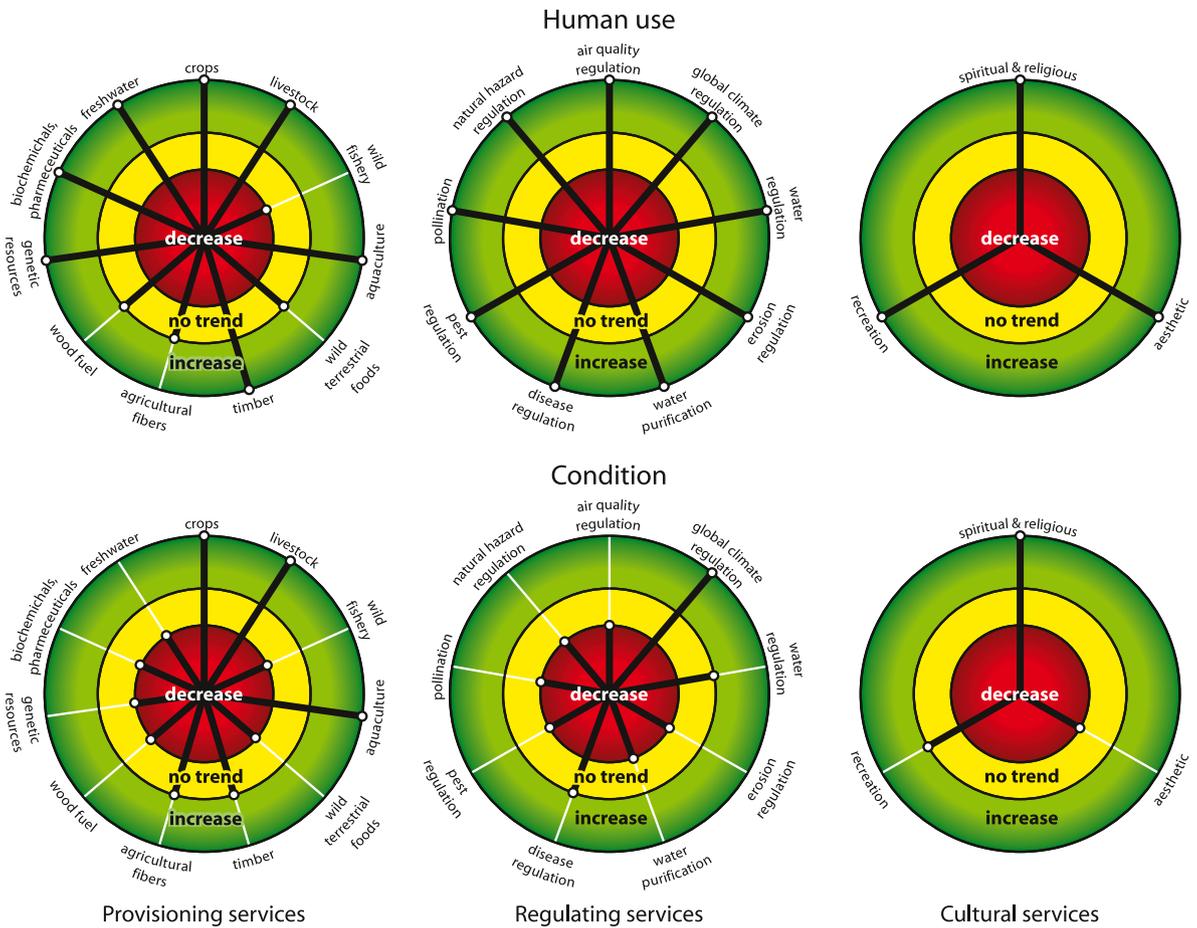
Ecosystem services and other non-marketed natural goods account for 47 to 89 per cent of the so-called 'Gross Domestic Product of the Poor'.

GREEN economy
The sound management of ecosystems and biodiversity, along with the inclusion of natural capital in governmental and business accounting can start to redress inaction and reduce the cost of future losses.



Trends in human use vs. condition of ecosystem services. The length of the black lines indicate the degree of change in human use or condition of the service.

Source: Carpenter and others 2009. *Science for managing ecosystem services: Beyond the Millennium Ecosystem Assessment*. Proceedings of the National Academy of Sciences, 106, 1305-1312. In: *UNEP Year Book 2010*



HIGHLIGHTS IN 2010

Ecosystems were in the spotlight in 2010; the UN declared International Year of Biodiversity. From UNEP assessments, detailing the intrinsic and economic value of the natural world, to new science underscoring the current and emerging threats to the environment, there was a wealth of disturbing and compelling evidence demanding urgent global action.

Simultaneously, there were also significant achievements and successes: a growing shift towards valuing the services provided by nature to support countries' development priorities and human well-being, as well as international consensus defining global policy which will potentially change the way we use and value biodiversity and ecosystem services.

UNEP also worked with different partners and governments to help them understand how their countries' ecosystems can help achieve development goals and enable countries' transition to greener economies.

IPBES

June 2010 witnessed the successful culmination of a two year negotiation supported by UNEP to establish the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), an independent panel that will strengthen the interface between science and policy.

The purpose of IPBES is to enhance the credibility, legitimacy and relevance of scientific findings relating to biodiversity and ecosystem services, to ensure that policy is informed by the best available science.

Access and benefit sharing of genetic resources

After close to 20 years of discussion and debate, governments from across the globe agreed to a new protocol to manage the world's genetic resources in a fairer and more systematic way. The Nagoya Protocol on Access and Benefit Sharing of Genetic Resources and their Fair and Equitable Sharing of Benefits (ABS) was established by the 10th meeting of the Conference of the Parties (COP 10) of the Convention on Biological Diversity in Nagoya, for which UNEP provides secretariat support.

This protocol sets basic ground rules on how nations cooperate in obtaining genetic resources from animals to plants and fungi. It also outlines how the benefits, arising for example when a plant's genetics are turned into a commercial product such as a pharmaceutical, are shared with the countries and communities who have conserved and managed that resource.

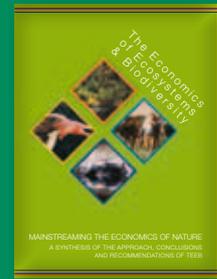


Two red-eyed tree frogs © Corbis

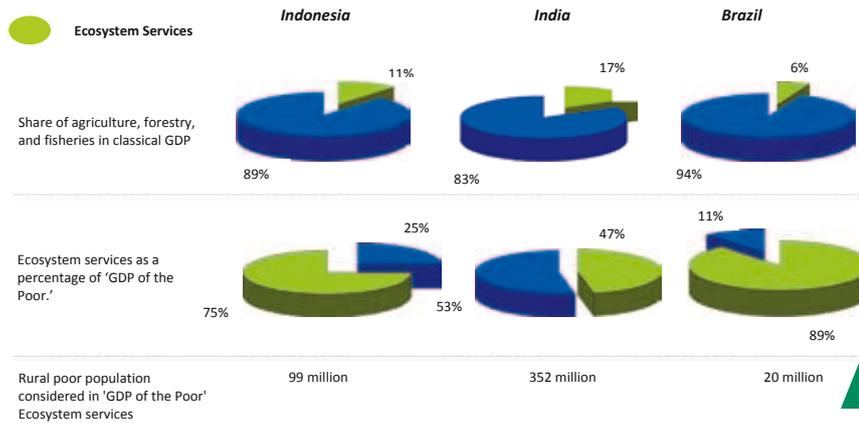
A new plan for biodiversity

During the CBD COP 10 in Nagoya, governments adopted a new strategic plan including targets for addressing biodiversity loss to be met by 2020. Governments agreed to increase the extent of protected areas to 17 per cent of the Earth's terrestrial surface — up from under 13 per cent currently — and achieve 10 percent coverage of coastal and marine protected areas. Other elements of the plan include, by 2020, reducing the extinction risk of threatened species.

The meeting also agreed on a strategy for resource mobilization to assist developing countries to meet the new targets in the plan based on a methodology that relates support given to needs and gaps. Other decisions included taking a 'precautionary approach' to issues such as geo-engineering in order to combat climate change and on the development of synthetic biofuels.



ECOSYSTEMS AND DEVELOPMENT



GDP of the Poor: estimates for ecosystem service dependence ▲
Source: TEEB for National Policy, Chapter 3

Using ecosystems to achieve development

The Economics of Ecosystems and Biodiversity (TEEB) initiative hosted by UNEP released a number of studies throughout 2010 calling on policy-makers, business, national and local governments to accelerate, scale-up and embed investments in the management and restoration of ecosystems.

Businesses and policy-makers need to recognize the tremendous economic value of ecosystems such as forests, watersheds, soils and coral reefs, as well as the social and economic costs of losing the services these ecosystems provide such as food, energy, water, flood attenuation, water purification, groundwater recharge.

It has been estimated that ecosystem services and other non-marketed natural goods account for 47 to 89 per cent of the so-called 'Gross Domestic Product of the Poor.'

In October, the World Bank launched a new, global partnership to assess the economic value of ecosystems. India and Colombia are the first countries to participate.

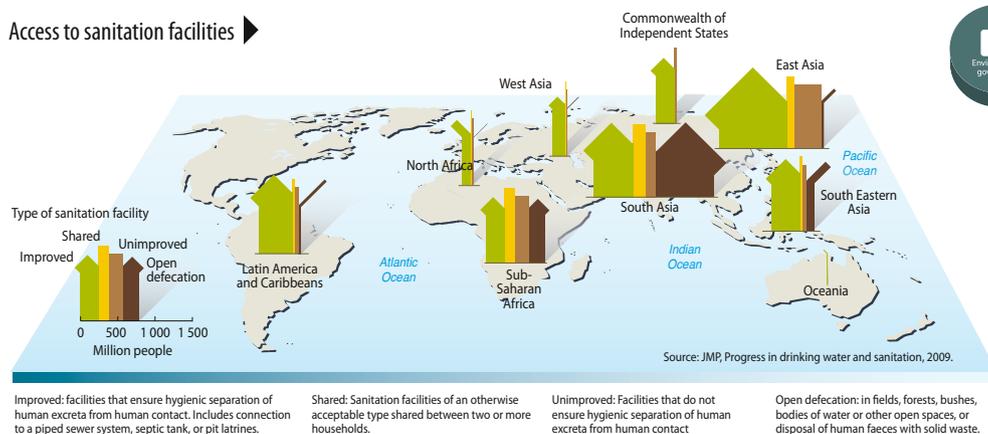
TEEB for Business makes the business case and highlights new business models that deliver benefits from ecosystem services and biodiversity, providing an agenda for action.

The publication of the UNEP-hosted TEEB study has resulted in Brazil, India, Germany and the European Commission committing to undertake national and regional ecosystem and biodiversity valuation studies.

The TEEB approach of incorporating the value of nature in policy and business decision-making has been supported and recognized in a number of government statements and decisions, including the G20 Leaders Statement from the Seoul Summit, the G8 *Carta di Siracusa* (a political document agreed at the G8 Environmental Ministers Meeting, held in Sicily in 2009) and a series of CBD COP 10 decisions.

As next steps, TEEB will be implementing a series of outreach events in Africa, Asia and Latin America until March 2011 to engage directly with stakeholders and build capacity for implementation of TEEB recommendations.

Access to sanitation facilities ▶



THE STATE OF THE WORLD'S FISHERIES AND WATER

Ignored fisheries

An assessment of the often ignored value of inland waters in terms of fish catches and the role of fish in the health of river and lake ecosystems was launched by UNEP in partnership with the WorldFish Center in November. The *Blue Harvest* report, focused on Africa and Asia and to some extent, Latin America and the Caribbean. It is estimated the unofficial global inland catch is close to 30 million tonnes, comparable to official marine catches, and employs 60 million people — 13 million more than in equivalent marine fisheries.

The report succeeded in raising the profile of freshwater fisheries and awareness of their contribution to livelihoods alongside the pressures they are facing. The UNEP website recorded 4,221 downloads of the report within eight days of its launch.

Sick water

More than half of the world's hospital beds are filled by people suffering from water-related illnesses affecting human well-being and countries' development and economic growth.

More people die from drinking polluted water every year than from all forms of violence, including war, warned UNEP in March on World Water Day. A series of reports

and policy briefs highlighted the need for clean drinking water, helping UN Water establish a Priority Area on Water Quality.

Balancing agricultural needs and fisheries

Since growing populations, expanding economies and changing patterns of production and consumption will require increased food production, fertilizer consumption is projected to increase 40 per cent between now and 2030. The majority of this increase will occur in developing countries.

However, the improper use of agrochemicals coupled with other key problems such as untreated sewage has led to a rapidly growing environmental crisis in freshwater and marine systems worldwide.

More than 90 per cent of the world's fisheries depend in one way or another on estuarine and near-shore habitats. However, many of these habitats are vulnerable to the harmful effects of eutrophication (nutrient over-enrichment) and toxic algal blooms.

To respond to this global challenge, UNEP with the support of the Government of Norway, launched 'The Global Partnership for Nutrient Management' (GPNM) to bring together governments, scientists, policymakers, the private sector, NGOs and international organizations to catalyse emerging global consensus on the need to take action on nutrient management.



APPLYING ECOSYSTEM MANAGEMENT TOOLS



Meeting with the Ogiek community © UNEP

Restoring and managing ecosystems and biodiversity: Restoring Kenya's water towers

The Mau Forest Complex is one of the most important 'water towers' of Kenya and East Africa's largest closed-canopy high altitude montane forest. Its forest provides critical ecological services to Kenya and the global community in terms of water storage, carbon storage, river flow, flood mitigation, recharge of groundwater, reduced soil erosion, water purification, biodiversity value and micro-climate regulation.

The Mau Forest Complex supports key economic sectors in the Rift Valley and Western Kenya, including energy, tourism, agriculture, industry and contributes to the River Nile Basin water resources. Assessments indicate that the Mau may be worth up to \$1.5 billion a year to the Kenyan economy in terms of river flows for hydro, agriculture, tourism sites and drinking water alongside moisture for the tea industry and carbon sequestration.

As showcased in the *Africa and Kenya Atlas of our Changing Environment* using satellite imagery, 25 per cent of the 400,000 hectare Mau Forest Complex has been lost to ecosystem encroachments, threatening ecological stability, economic development and human well-being in the region.

Beginning in 2007, and throughout 2010, UNEP has been engaged with the conservation efforts in a specific area of the complex, the Maasai Mau forest. In

May 2010, UNEP convened donors and they pledged \$10 million in support of the Kenyan government's efforts to save the vital Mau Forest complex.

Indigenous communities like the Ogiek are important partners in the government's revitalization of the Mau. These groups have traditionally relied on the forest for food, medicine and shelter and their cultural knowledge is invaluable in the ongoing effort to restore the Mau to its former glory.

“ We shall offer our traditional knowledge and conservation skills. We shall help in zoning where to plant exotic trees and areas for indigenous trees. We shall ensure that our wetland and water points are fully rehabilitated so that we and the majority of Kenyans get water and other environmental services. ”

Statement by the Ogiek People to the Prime Minister of Kenya, Rt. Hon Raila Odinga, 22 April 2010.

A comprehensive Management Plan for the Maasai Mau forest ecosystem has been developed with input from stakeholders. It will guide the development of the area for the next 10 years. Beginning in 2011, UNEP will be implementing activities outlined in the Management Plan.

APPLYING ECOSYSTEM MANAGEMENT TOOLS

Restoring and managing ecosystems and biodiversity: Restoring a lifeline – Lake Faguibine

For Kouna Mohammed and her family, life is starting to fall into place. This year is the second in a row that her family has managed to harvest sorghum from the green fields around Lake Tele, part of the Lake Faguibine System in Mali. Like many families, Kouna and her sons had abandoned the lake years ago as many people died because of drought. “Without water, there is no world,” says neighbour, Medel Al Houseini.

Siltation has played a large role in the destruction of the river. A crucial component of restoration is digging out silt from riverbeds to open up river channels. The UNEP project coordinator Ms Birguy Lamizana-Diallo says that “Nomadic groups lost most of their livestock and became sedentary in order to benefit from emergency relief programmes or migrated into cities. But the past two years have seen a dramatic improvement.”

To support the Mali Government in this effort, UNEP is leading a project that builds on the commitment of the local community to revitalize their ecosystems and protect them. With funding from the Government of Norway, the UNEP project focuses on strengthening civil society groups and engaging people across society in the restoration of the Lake Faguibine ecosystem.

Communities are scouring silted river beds and flood-water channels to allow water to flow and fill



Lake Faguibine © UNEP

the lake basin. Additionally, dunes and riverbanks are being stabilised and reforestation is promoted to ensure a sustainable and lasting impact.

Nepal, China, India to jointly conserve Hindu Kush-Himalaya Kailash sacred landscape

Mount Kailash soars over 22,000 feet in a Himalayan landscape shared by China, India and Nepal. It is one of the most culturally and ecologically diverse and fragile areas in the world. In September 2010, fourteen months since its inception, representatives from China, India and Nepal gathered to monitor progress of this unique transboundary project in the Hindu-Kush Himalayas, brought together by UNEP and the International Centre for Integrated Mountain Development (ICIMOD).

The meeting further crystallised the process towards completion of a transboundary Regional Cooperation Framework (RCF) based on the principles of participatory management, equity, sustainability, partnerships and ecosystem approach, and will lay the foundation for development intervention in the region. Mount Kailash is the source of the Indus, the Brahmaputra, the Karnali and the Sutlej rivers, providing vitally important resources for the greater Hindu Kush-Himalayan region, and beyond.



APPLYING ECOSYSTEM MANAGEMENT TOOLS

Gorilla © Andy Rouse, Wildlife Photography

Promoting transboundary collaboration for management of ecosystems: biodiversity corridor between Côte d'Ivoire and Liberia

Along the Cavally River that divides South-western Côte d'Ivoire and South-eastern Liberia are remaining fragments of one of the most important ecosystems within the upper Guinea Forest Region (UGFR) of West Africa. These lowland tropical forests are home to many endangered animals, provide habitat for more than a quarter of Africa's mammals, including over 20 species of primates, the dwindling West African Chimpanzee populations and rare endemic species such as the pygmy hippopotamus and the forest elephant. By creating landscape corridors between the Tai National Park, the Classified Forests of Goin-Debe, Cavally in Côte d'Ivoire, the Sapo National Park and Grebo National Forest in Liberia, the high levels of biodiversity and the livelihoods of the local communities that depend on these forest ecosystem services can be maintained.

The initiative, led by UNEP's Great Ape Survival Partnership (GRASP), aims to undertake comprehensive field-level technical studies to stimulate on-going national debates and political negotiations to address important questions concerning land title, legal harmonisation and implementation, sustainable forest management and wildlife population levels. The establishment of the landscape corridor based on currently available data would protect and consolidate over 13,000 square kilometres of remaining forest cover, while contributing to community development and peace-building efforts within the two post-conflict states of Côte d'Ivoire and Liberia.

APPLYING ECOSYSTEM MANAGEMENT TOOLS



Innovative approaches in boosting protected areas: Spain-UNEP partnership for Lifeweb

More than fifteen protected areas totaling over 15 million hectares, including one that is home to monk seals off Mauritania and another in Sumatra that is a haven for orangutans, tigers and elephants, are receiving a \$6.8 million conservation boost. At the 10th Conference of the Parties to the Convention on Biological Diversity in Nagoya, Japan, the Government of Spain and UNEP announced a new partnership for protected areas, supporting mainly low income and developing countries.

In the Garamba National Park in the Democratic Republic of the Congo, some of the funds will support improved health services for local people. In Senegal, Guinea-Bissau, Côte d'Ivoire, and Guinea-Conakry, work is being initiated to create marine protected areas for sea turtles.

Enhancing biodiversity and ecosystem functioning: underground biodiversity

In May, complementing UNEP's Programme of Work, the results of an eight-year, newly-completed UNEP-Global Environment Facility project, focusing on the benefits of soil-living worms, beetles and other 'below ground biodiversity', was announced. The project has coordinated a partnership between governments including Brazil, India, Indonesia and Kenya and research institutes and universities including the Tropical Soil Biology and Fertility Institute of CIAT (TSBF-CIAT). Soil-living bacteria and fungi can be used to boost crop yields by more than 50 per cent without the use of fertilizers. Other soil-living organisms have been found that can assist in fighting crop diseases, also reducing the need for pesticides.

A follow up to the project, 'Carbon Benefits Measurements' is working with scientific institutions with GEF financing to develop standard and cost effective tools for measuring total terrestrial carbon above and below ground.



Harmful substances
and hazardous waste

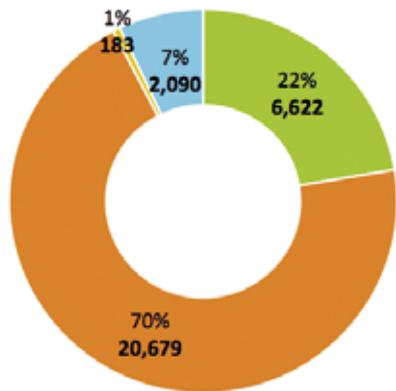


WASTE

HARMFUL
SUBSTANCES
AND
HAZARDOUS



Total expenditure 2010
Harmful Substances and
Hazardous Waste
(\$29,574 million)



- Environment fund expenditure
- Trust funds & earmarked contributions
- Regular budget expenditure
- Programme support

RESULTS TARGETED

The capacities and financing of States and other stakeholders to assess, manage and reduce risks to human health and the environment posed by chemicals and hazardous waste are increased.

Coherent international policy and technical advice is provided to States and other stakeholders for managing harmful chemicals and hazardous waste in a more environmentally sound manner, including through better technology and best practices.

Appropriate policy and control systems for harmful substances of global concern are developed and in line with international obligations and the mandates of relevant entities.

Sound management of chemicals and hazardous waste

UNEP's objective is to minimize the impact of harmful substances and hazardous waste on the environment and people. UNEP achieves this through four core services:

- UNEP assesses trends in the use, release and disposal of harmful substances around the world to inform policymakers and raise awareness on the need for action.
- UNEP helps governments use data and information from these global assessments to make informed decisions.
- UNEP uses scientific assessments and legal instruments as a basis for technical assistance and capacity building for States, helping them design and implement national programmes supporting sound management of harmful substances and hazardous waste.
- UNEP helps governments monitor, evaluate and report on the impacts and progress of their systems for managing harmful substances and hazardous waste.

HARMFUL SUBSTANCES AND HAZARDOUS WASTE (HS & HW): A SNAPSHOT OF 2010 RESULTS

Supporting Multilateral Policy and Control Systems

UNEP supports *China, South Africa and the Russian Federation* to understand mercury emissions from coal combustion and the means to reduce them.

Sound Science Guides the Agenda

UNEP supports analytical capacity building for Persistent Organic Pollutants (POPs) and global monitoring with GEF funding. POPs laboratories in 32 developing countries use UNEP's guidelines for sampling and analysis of relevant matrices; their capacities are strengthened through hands-on training to generate high quality data for the Stockholm Convention and SAICM.

Antigua & Barbuda, Bahamas, Barbados, Brazil, Chile, Cuba, the Democratic Republic of Congo, Ecuador, Egypt, Ethiopia, Fiji, Ghana, Haiti, Jamaica, Kenya, Kiribati, Mali, Marshall Islands, Mauritius, Mexico, Nigeria, Niue, Palau, Peru, Samoa, Senegal, Solomon Islands, Togo, Tuvalu, Uganda, Uruguay, Zambia. Germany, Netherlands, Spain, Sweden and Switzerland to provide training.

Sound Management of HS & HW at the National Level

Tools and methodologies developed for country Situation Analysis and Needs Assessments (SANA), leading to development of national plans of joint action in *Angola, Cameroon, the Democratic Republic of Congo, Ethiopia, Gabon, Lesotho, Madagascar, Mali, Mozambique and Tanzania*. Similar tools and methodologies developed in *Congo Brazzaville, Ghana and Kenya*.

Supporting Multilateral Policy and Control Systems

UNEP has supported national activities towards the reduction of mercury use and its release from artisanal and small-scale gold mining activities in *Bolivia and Peru*, and similarly in *Cambodia and the Philippines*.

Sound Science Guides the Agenda

UNEP with OECD and WHO is developing the Global Chemicals Outlook (GCO) to assess the status of health, environmental, economic and institutional factors related to the production, use, and disposal of chemicals, with a focus on issues relevant to developing and transition countries.



Supporting Multilateral Policy and Control Systems

Partnership for Clean Fuels and Vehicles (PCFV) succeeded in the phase out of leaded gasoline in two more countries: *Tajikistan and Uzbekistan.*

Sound Science Guides the Agenda

First Worldwide UNEP Laboratory Intercalibration Study on Persistent Organic Pollutants concluded. Included 24 labs from Asian developing countries and 14 labs from OECD countries including: *Australia, Canada, China, Czech Republic, Fiji, Germany, Greece, India, Italy, Japan, Korea, Malaysia, Norway, Spain, Sweden, Vietnam.*

Sound Management of HS & HW at the National Level

UNEP supported national mercury waste management planning in *Pakistan and the Philippines.* Similar work also supported in *Burkina Faso, Cambodia and Chile.*

Sound Management of HS & HW at the National Level

The Chemical Information and Exchange Network (CIEN) extended to seven countries and training carried out to facilitate chemical information access and exchange. Countries covered include: *Bolivia, Burundi, Cambodia, Peru, Philippines, Uruguay and Vietnam.*

KEY FACTS

An estimated 18 to 22 million people are at risk from lead poisoning, 15 to 19 million from mercury, 13 to 17 million from chromium and 5 to 8 million from pesticides.

Twenty-one of the most Persistent Organic Pollutants (POPs) are now strictly controlled by the Stockholm Convention agreed in 2001 which now has 172 Parties.

The Secretariat of the Basel Convention estimated that about 318 and 338 million tonnes of municipal solid waste were generated in 2000 and 2001 respectively.

As much as 80 per cent of the pollution load in coastal waters and the deep oceans comes from land-based activities.

GREEN economy

In order to ensure sustainable development in fast-growing economies that are experiencing rapid industrialisation, countries must seek to maximise the benefits of chemicals and minimize their negative impacts through safer production and improved management.

HIGHLIGHTS IN 2010

Chemicals play an essential role in our daily lives. They are used in every economic sector and in many of the common products we buy. Many chemicals are critical to human well-being and sustainable development; yet they can also endanger health and the environment if not manufactured, used and managed properly. There are over 100,000 different chemical substances in use today.

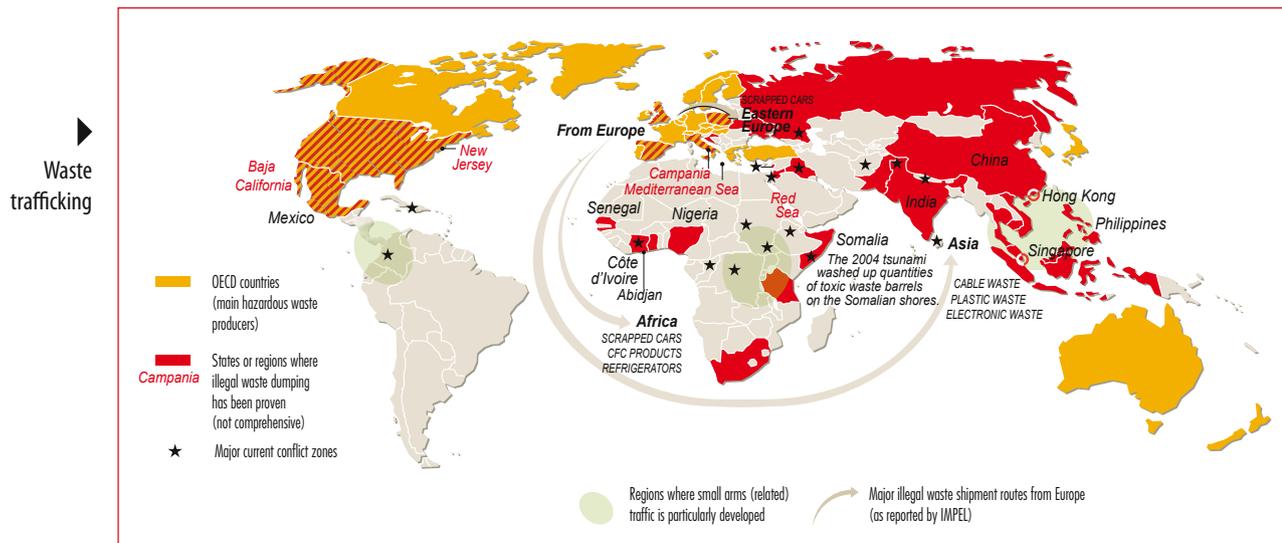
MANAGEMENT OF CHEMICALS

Strategic partnerships in chemicals management: avoiding the worst by encouraging the best—China

The Awareness and Preparedness for Emergencies at a Local Level (APELL) programme was launched by UNEP in 1986 against a background of major technological accidents, which took place around the world during the 1980s. These included Bhopal in India, Sandoz in Switzerland, and San Juanico in Mexico.

UNEP has built an extensive network of APELL and safer production practitioners over the years. As part of this, a joint project between UNEP's China Ministry of Environmental Protection (MEP) and the Dow Chemical Company, was developed over 2010 to promote safer operations and emergency preparedness of the chemical sector in China.

The project presents a first-of-its-kind example of private sector engagement with UNEP to promote safer production in partnership with government and local authorities in China.



Source: compiled from multiple sources in *Vital Waste Graphics Update*. UNEP, Nairobi and Arendal (www.vitalgraphics.net/waste2/download/pdf/VWG2_p36and37.pdf). In: *Global Environment Outlook 4. Environment for Development, 2007*

MANAGEMENT OF CHEMICALS

Exchanging information

National officers with responsibilities for the control and registration of chemicals neither have the time nor resources to find the information they need on the many chemicals that may be imported. To help find and exchange information, UNEP established the system of Chemical Information Exchange Networks (CIEN) which brings together national chemicals information from various stakeholders and provides access to international information resources.

During 2010, seven more countries: Cambodia, the Philippines, Vietnam, Bolivia, Peru, Uruguay, and Burundi were added to over 50 countries in Africa, Asia and Latin America already using CIEN. More than 1,600 national officials have been trained.

Catalysing chemical management through a global plan of action on chemicals

The Strategic Approach to International Chemical Management (SAICM) provides an overarching strategy and a Global Plan of Action to address problems of chemical management and safety, nationally and globally. To facilitate the implementation of SAICM's Global Plan of Action, the Quick Start Programme and its Trust Fund have been established to build initial capacities for the sound management of chemicals in developing countries and countries with economies in transition.

The Fund has now received donations of over \$30 million for projects and supported 117 projects, which are currently being undertaken by 97 governments and



Scientist checking seedlings in plant experiment © Corbis

12 civil society organizations involving activities in 95 countries, including 46 least developed countries and/or Small Islands Developing States.

UNEP supports a number of government-led projects funded from the SAICM Quick Start Programme. The UNEP-UNDP partnership on mainstreaming sound chemicals management into national development policies and programmes is gathering momentum. *More than 12 countries are now being assisted.*

The new five-year development plan of Uganda, one of the first countries to join the programme, recognizes the important benefits that come from good practices and the avoidance of chemicals-related impacts on human health and the environment.

In a similar fashion, the 'UNEP-World Health Organization (WHO) Health and Environment Initiative' brings together national officers to examine inter-linkages between pollution, environmental degradation and health impacts.

More than 17 countries are now preparing inter-ministerial situation analyses and needs assessment (SANA) reports to help to identify critical issues for inclusion in planning for sustainable development.



As part of its hazardous waste management capacity-building programme in Côte d'Ivoire, UNEP provided sixteen laboratory staff with 80 days of intensive training over two years © UNEP

ASSESSMENT AND MANAGEMENT OF RISKS

UNEP analysis contributes to prevention of hazardous waste-related disasters: Côte d'Ivoire

In 2006, when thousands of Abidjan residents in Côte d'Ivoire reported health problems after large quantities of toxic sludge was discharged from the vessel *'Probo Koala'* and dumped on open landfills and in local waterways, the world's attention turned to the ability of many African countries to detect and manage hazardous waste. Four years later, in a bid to prevent a repeat of the Côte d'Ivoire incident and as part of a systematic strengthening of the country's capacity to manage hazardous waste, a modern laboratory was established in Abidjan with the help of UNEP and its Basel Convention Secretariat.

The laboratory is able to test for hazardous waste from ships entering the West African port as well as test for potential contamination in soil and water samples. Sixteen laboratory staff also received intensive training on sampling and analysis so that the laboratory can provide the analytical services necessary to advise the government and protect those communities whose livelihoods are dependent on healthy waterways. The Côte d'Ivoire model is now to be introduced by the Basel Convention Secretariat in Gabon, Morocco and Madagascar.

“ I am impressed not only by the quality of the equipment procured by UNEP, but also by the quality of the staff that was trained by UNEP's experts. My Ministry can now count on an effective tool and well-trained staff to detect and analyse any type of pollution, including of course the type dumped by the *Probo Koala* vessel, which is still present in our minds. This is very reassuring to the people of Côte d'Ivoire. ”

Mr. Karim Fadiga, Minister of Environment, Water and Forests of Côte d'Ivoire having toured the new laboratory.

ASSESSMENT AND MANAGEMENT OF RISKS



Toxic smoke © iStockphoto

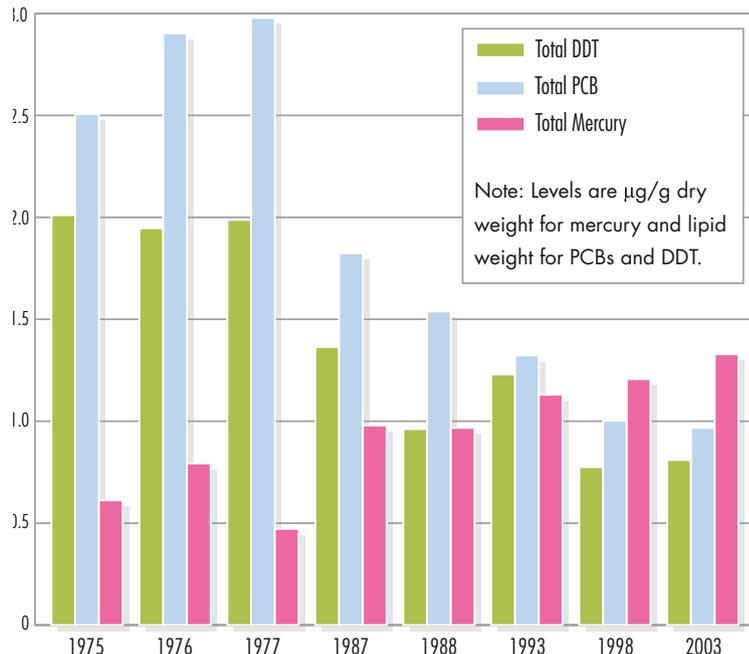
Piloting innovative approaches through global study on Persistent Organic Pollutants: Asia Region

While the Stockholm Convention on POPs seeks the global elimination of many of the most hazardous chemicals, work at national level to implement the control measures in the treaty needs to be based on a clear understanding of local problems. Until recently, few developing countries had the ability to analyse POPs and the laboratories that existed struggled to be recognized as providing reliable results that country Parties could use for reporting under the Convention.

In 2010, and as part of long-term efforts to build laboratory capacity, *UNEP concluded the first Worldwide Intercalibration Study on POPs in the Asia region, with 24 laboratories from Asian developing countries and 14 laboratories from OECD countries.* The study tested the ability of all the laboratories to analyse standard samples

and demonstrated the competence and reliability of participating laboratories in Asia.

level Trends in POPs and mercury in eggs of Thick-billed murre



◀ Trends in POPs and mercury in eggs of thick-billed murre

Source: Indian and Northern Affairs Canada 2003 *Canadian Arctic Contaminants Assessment Report II.* and Braune and others 2005 *Persistent organic pollutants and mercury in marine biota of the Canadian Arctic: an overview of spatial and temporal trends.* In: *Global Environment Outlook 4. Environment for Development, 2007* Photo by M. Mallory

Twenty-one of the most persistent organic pollutants (POPs) are now strictly controlled by the Stockholm Convention agreed in 2001, which has 172 Parties. Fourteen of the POPs are pesticides. Others are industrial chemicals including some brominated flame retardants; the remainder include dioxins and furans, which are found in small amounts in the environment, including air, water and soil.



Gold mining in French Guiana © Corbis

CONTROL OF TARGETED CHEMICALS

Reducing risks from mercury

An important step forward towards eliminating the use of one of the world's most toxic heavy metals, mercury, was taken in June 2010. UNEP, serving as the Secretariat, convened the first session of the Intergovernmental Negotiating Committee to prepare a global legally binding instrument on Mercury (INC1). UNEP recognizes that it will be some time before a legally-binding instrument comes into force.

In the interim, the Global Mercury Partnership has been formed to take immediate action wherever possible on mercury use and release. Since 2009, membership has trebled to almost 70; including 14 governments, four intergovernmental organizations, 31 non-governmental organizations and 19 other groups, organizations or individuals.

Probably the largest intentional use of mercury is by artisanal and small-scale gold miners who add mercury to their crushed ore and 'concentrate' to help separate the gold, producing 20 to 30 per cent of total world gold production. Few miners use any equipment to trap the mercury vapours so these evaporate and are breathed in by the miners, their families and neighbours — causing them long-term, severe and sometimes irreversible medical problems.

During 2010, UNEP helped countries develop an understanding of their mercury problems; to develop national plans for tackling mercury waste and to examine options to store unwanted mercury, as well as examine the socio-economic influences driving the growth in artisanal and small-scale gold mining.

The partnership helped countries with many coal-fired power plants to understand and quantify their unintentional mercury releases. Good practices for pollution control to restrict mercury emissions have been developed for coal-fired power plants and for waste incinerators.

CONTROL OF TARGETED CHEMICALS



Barrel containing harmful substances washed up on a beach © iStockphoto

Taking the lead on lead

During 2010, the number of countries still using leaded vehicle fuels was reduced and today only six countries use small amounts of leaded gasoline. The UNEP-led Partnership for Clean Fuels and Vehicles is working with all of these to help develop plans to phase out those fuels and 'beat the lead habit'.

However, breathing in the exhaust fumes from vehicles using leaded fuels is not the only way in which children and adults become poisoned by lead. Paint and the dust created during building work is also an important exposure route.

In 2009, at the second International Conference on Chemicals Management, the world was reminded that paints containing lead compounds are easily available for domestic use in many countries. UNEP and WHO were asked to initiate a partnership to work towards the elimination of lead paints.

An inaugural meeting of the Global Alliance to Eliminate Lead Paint was held during 2010 and attracted 35 participants from governments, intergovernmental organizations, civil society organizations, industry and academia. This resulted in endorsing the establishment of a global partnership to promote the phase-out of the use of lead in paint.

The overall goal is to prevent children's exposure to lead paints and to minimize occupational exposures to lead in paint. A broad objective is to phase out the manufacture and sale of paints containing lead and eventually to eliminate the risks from such paint.

Coherence in actions to prevent further degradation of the marine environment from land-based activities

During 2006, the global annual total amount of Municipal Solid Waste (MSW) reached 2.02 billion tonnes, representing a 7 per cent annual increase since 2003 (*Global Waste Management Market Report, 2007*). This trend is predicted to continue. For hazardous waste, the Secretariat of the Basel Convention estimated that about 318 and 338 million tonnes were generated in 2000 and 2001 respectively.

As much as 80 per cent of the pollution load in coastal waters and the deep oceans come from land-based activities. The pollutants include heavy metals and POPs, litter, radioactive waste, hydrocarbons and chemicals — including nutrients. Excess use and inefficient practices leads to nutrient over-enrichment, causing soil acidification, groundwater pollution, and the undermining of marine and coastal ecosystems and the services and livelihoods they support.

For more on UNEP's work on nutrients, see page 71.



Water pollution © iStockphoto

CONTROL OF TARGETED CHEMICALS

Chemicals at sea

Harmful substances and waste generated on land find their way into waterways and are transferred to marine and coastal environments. The Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA-Marine) is the only global intergovernmental initiative directly addressing the link between watersheds, coastal waters and the open ocean.

The Regional Seas Programme, launched in 1974, is one of UNEP's most significant achievements over the past 35 years. The Regional Seas conventions and action plans contribute to the sustainable management and protection of the coastal and marine environment by preventing further degradation of the marine environment from pollution derived from land based activities.

There are currently 18 Regional Seas conventions and action plans across the world, involving 184 countries.



In March 2010, Ministers and officials from ten countries and territories in East Africa endorsed or signed a potentially far-reaching protocol to protect East Africa's coastal and marine environment. Ten countries of the Western Indian Ocean region signed the Final Act of the Land-based Sources and Activities (LBSA) Protocol and eight countries signed it during the Sixth Conference of Parties to the Nairobi Convention organized by UNEP. This regional LBSA protocol is expected to bind governments towards a common objective of managing pollution from land-based sources and activities in order to protect and sustain the marine and coastal environment in the Western Indian Ocean.

During 2010-11, the programme will link to on-land activities to strengthen the mainstreaming of sound chemicals management.

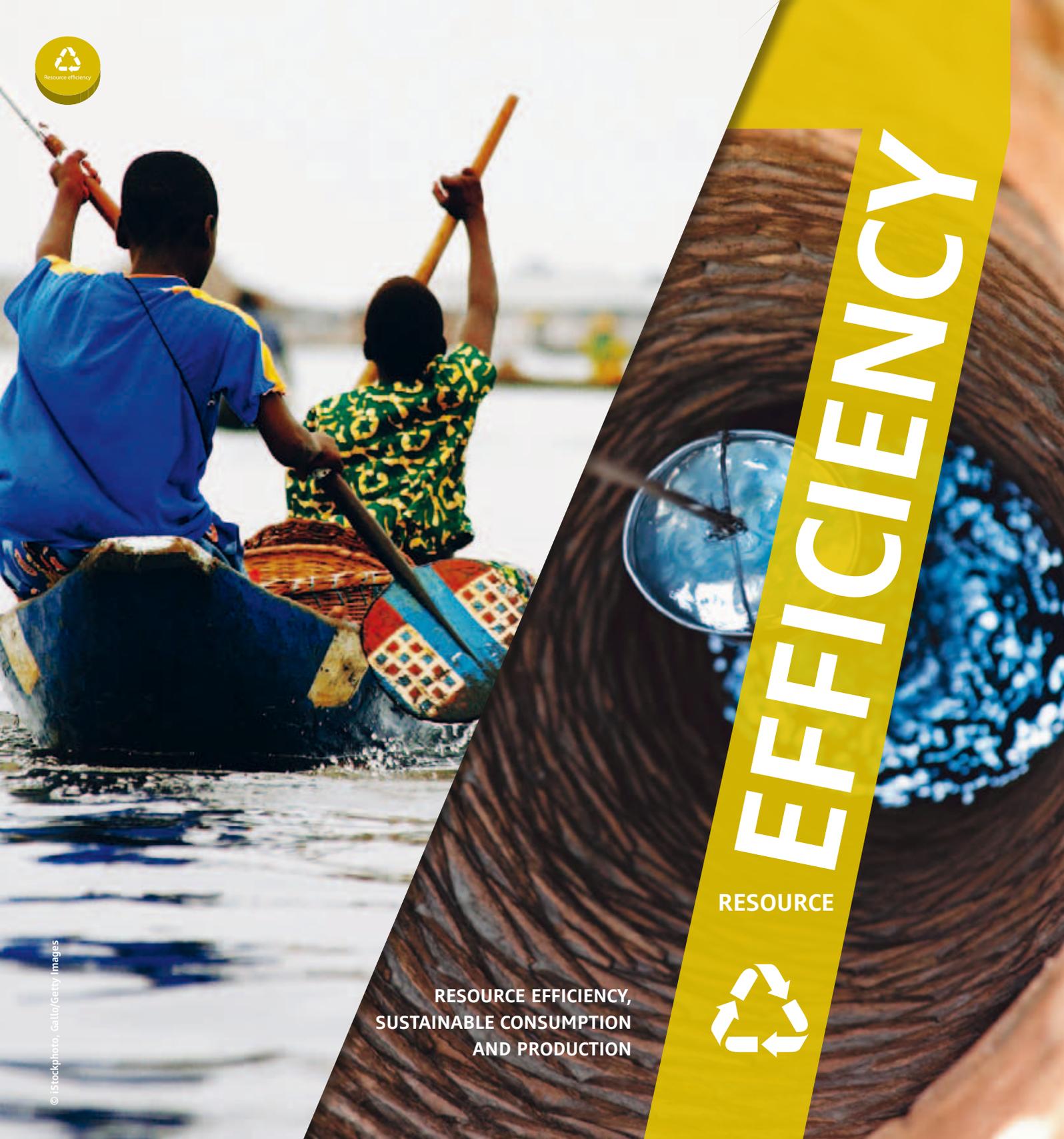
COHERENCE IN ACTION



Strengthening the chemicals and waste Multilateral Environmental Agreements

In February 2010, governments agreed to merge the administrations of the Basel, Rotterdam and Stockholm Conventions on chemicals and hazardous wastes — an unprecedented historical model where three Conferences of the Parties met simultaneously and undertook simultaneous decision-making in a wave of cooperative action towards boosting delivery in country. This was the outcome of extended intergovernmental discussions supported by UNEP, which administers the Secretariats for these Conventions.





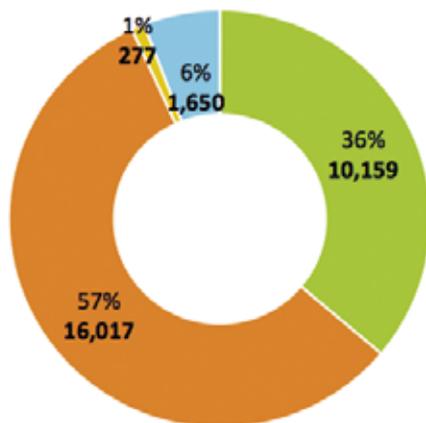
EFFICIENCY

RESOURCE



RESOURCE EFFICIENCY,
SUSTAINABLE CONSUMPTION
AND PRODUCTION

Total expenditure 2010
Resource Efficiency
(\$28,103 million)



- Environment fund expenditure
- Trust funds & earmarked contributions
- Regular budget expenditure
- Programme support

RESULTS TARGETED

Resource efficiency is increased and pollution is reduced over product life cycles and along supply chains.

Investment in efficient, clean and safe industrial production methods through public policies and private sector action is increased.

Consumer choice favours more resource efficient and environmentally friendly products.

Accelerating the transition to resource efficient societies

UNEP's objective is to ensure natural resources are produced, processed and consumed in a more environmentally sustainable way. UNEP's work focuses on four core areas:

- UNEP conducts assessments of trends in the way resources are extracted and used throughout the global economy.
- Governments look to UNEP for support in developing national policies and implementing national solutions by use of regulatory and economic instruments, as well as new policy and management approaches such as 3R (reduce, re-use, recycle).
- UNEP builds on the insights gathered from scientific and macroeconomic assessments to identify investment opportunities for alternative business models and improvements in some of the most resource intensive industries.
- UNEP works with media and communication experts to raise awareness, helping individual and institutional consumers purchase and use resource efficient technologies, products and services.

RESOURCE EFFICIENCY: A SNAPSHOT OF 2010 RESULTS

Seizing Investment Opportunities

First finance sector members from *Greece* and *Turkey* join the UNEP Finance Initiative (FI).

Assessments to Strengthen the Scientific Knowledge Base

Two resource inefficient and unsustainable agri-food supply chains selected, studied to provide robust knowledge platform on resource inefficiencies in the supply chain. One in *Brazil* and the other in *Thailand*.

Stimulating Demand

Training provided on sustainable public procurement in *Colombia* and *Uruguay*.

Building Capacity for Policy Action

Collaboration initiated with new countries expressing interest formally in green economy advice. The new participants include: *Barbados*, *Indonesia*, *Jordan* and *South Africa*.



Stimulating Demand

Economic studies of Agricultural Sector in three EECCA (Eastern Europe, Caucasus and Central Asia) countries paves way for work on economic pricing, complementing the macro-economic Green Economy Initiative work, studies undertaken in *Armenia, Moldova and Ukraine*.

Seizing Investment Opportunities

20 Small and Medium Size Enterprises and Sustainable Consumption and Production providers trained in Resource Efficient Cleaner Production; subsequently 16 industrial improvement plans under implementation in both *Ethiopia and Vietnam*.

Stimulating Demand

National level support provided in introduction of eco-labeling schemes related to textiles and electronic goods in *India and South Africa*.

Stimulating Demand

Green sporting events improve youth education through the Green Passport Campaign, raising awareness to 100,000 visitors during the 2010 FIFA World Cup in *South Africa*.

KEY FACTS

The building sector is responsible for more than a third of global resource consumption annually, including 12 per cent of all fresh water use, and produces 40 per cent of solid waste.

The International Energy Agency has estimated that fuel consumption and CO₂ emissions from the world's cars will roughly double between 2000 and 2050.

It is estimated that around 140 billion tonnes of agricultural biomass is produced annually.

A global Green Economy requires much higher recycling rates of specialty metals such as lithium, neodymium and gallium — yet only about 1 per cent of them are recycled.

One aspect of the Green Economy is a vision of a sustainable world in which people everywhere can enjoy a high quality of life within the productive capacity of the planet.

GREEN economy



1. Recycling plastic containers at a market in Addis Ababa 2. South Africa soccerball made from reused post consumer plastics project © Corbis

Scientific research shows that we are rapidly spiralling into ecological debt, overshooting the planet's carrying capacity, yet a large proportion of the world's population is still struggling to meet basic needs.

UNEP recognizes that investment in a new generation of environmentally sound technologies, cleaner industrial processes and greener cities has the power to positively transform economies and societies. UNEP's vision is based on delivering improved productivity and less waste, cleaner investment and more sustainable lifestyles.

“ Decoupling growth from environmental degradation is the number one challenge facing governments in a world of rising numbers of people, rising incomes, rising consumption demands and the persistent challenge of poverty alleviation. ”

Achim Steiner, Executive Director of the United Nations Environment Programme.

ASSESSING CRITICAL TRENDS

The impact of resource use on economies

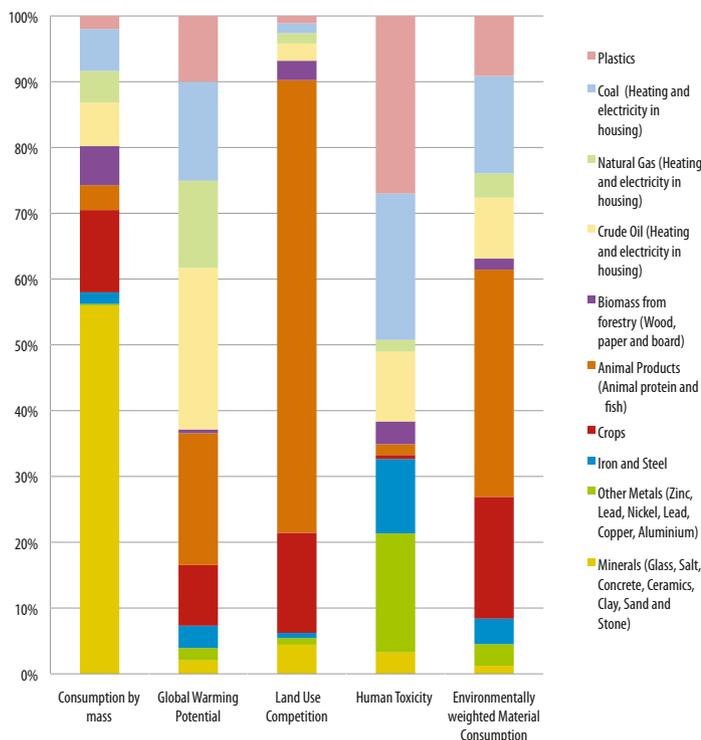
One of the principal challenges facing nations today is how to ensure that both people and the natural environment have adequate freshwater. UNEP worked with companies to improve methodologies in the use of water footprinting, which is critical for water intensive industries.

UNEP also oversaw the development of Corporate Water Accounting with the Chief Executive Officer Water Mandate of the United Nations Global Compact. This report examines corporate water accounting that considers the social, political and environmental conditions of the watersheds in which participant companies operate.

UNEP's Resource Panel released key assessments with policy-relevant conclusions on alarming trends in the use and disposal of key resources and consumer goods.

The metals report analysed recycling rates of specialty metals, showing that a Green Economy will require much higher recycling rates of specialty metals such as lithium, neodymium and gallium. These metals, needed to make wind turbines, solar panels and hybrid car batteries, are scarce in nature and expensive — yet only about 1 per cent of them are recycled.

▼ Adapted from van der Voet et al (2005) — Relative contribution of groups of finished materials to total environmental problems



“ Specialty and rare earth metals could become essentially unavailable for use in modern technology. ”

Another assessment report examined the environmental impacts of consumption and production, highlighting priority products and materials for policy-makers. The assessment concluded that dramatically reforming, re-thinking and redesigning two areas — fossil fuel use and agrifood — could generate significant environmental, social and economic returns.

A report on electronic waste, a partnership of UNEP with the United Nations University in the StEP initiative (Solving the e-Waste Problem) predicted that sales of electronic products in countries such as China and India and across continents such as Africa and Latin America are set to rise sharply in the next 10 years. Unless action is stepped up to properly collect and recycle materials, many developing countries face the spectre of hazardous e-waste mountains, with serious consequences for the environment and public health.



Resource efficiency



Recycling metals © Corbis

BUILDING CAPACITY FOR POLICY ACTION

Catalysing resource efficiency

In most countries, small and medium enterprises (SMEs) are the backbone of economic and industrial activity. In 2010, UNEP further developed its partnership with the United Nations Industrial Development Organization (UNIDO) in providing capacity building support to SMEs in developing countries and transition economies.

National Resource Efficient and Cleaner Production (RECP) programmes were initiated in four developing and transition economies and centres are being developed for a further two. Four regional training-the-trainer workshops were carried out in Panama, Cairo, Colombo and Vienna. An assessment for a National Cleaner Production Programme (NCPP) was completed in Albania, Rwanda and Mauritius and initiated in Uruguay, Senegal, Azerbaijan and Saudi Arabia. NCPPs for Albania and Rwanda have been developed jointly with UNIDO through One-UN funding.

Worldwide phase out of leaded gasoline

The Partnership for Clean Fuels and Vehicles (PCFV) has achieved great success in the global elimination of leaded gasoline since its launch at the World Summit on Sustainable Development in 2002. Today, only six countries are still using small amounts of leaded gasoline and a complete global elimination is within reach in the next biennium.

In 2010 an additional six countries went unleaded: Egypt, Tajikistan, Uzbekistan, Serbia, Montenegro and Bosnia-Herzegovina. The Partnership, with its Clearing-House based at UNEP Headquarters, has on-going or planned activities in all the remaining six countries. These are Myanmar, North Korea, Yemen, Algeria, Afghanistan and Iraq.

A recent global study by the California State University shows that societal benefits are major — much larger than thus far believed. The global elimination is estimated to save over 1.2 million premature deaths per year. Financial benefits are also significant — close to \$100 billion per year for Africa alone.

Follow up on the Rio and Johannesburg legacy

Changing consumption and production patterns was recognized as a key goal in the Johannesburg Plan of Implementation (JPOI) agreed at the World Summit on Sustainable Development in 2002. The Marrakech Process on Sustainable Consumption and Production (SCP), led by UNEP and United Nations Department of Economic and Social Affairs, has been developing and piloting innovative policies and capacity building initiatives to support the shift to sustainable consumption and production.

Governments at the 18th session of the United Nations Commission on Sustainable Development (CSD) in May 2010 recognized the value of these building blocks for a Ten Year Framework of Programmes (10 YFP) on SCP. Governments also recognized the 10 YFP as an important input to Rio+20 discussions on the Green Economy.

SEIZING INVESTMENT OPPORTUNITIES



Diver and spiny lobster © UNEP

Pests and lobster battles – threats to future food security

Ask any rice farmer in Thailand about the ‘brown hopper plant’ and they are likely to shudder. The brown hopper plant may be small, but is deadly to rice crops and consequently, farmers’ incomes, and in the long-term, Thailand’s food security. The excessive use of insecticides and urea as nitrogenous fertilizer has led to multiple outbreaks of brown hoppers in part by reducing their natural enemies. The brown plant hopper pest is now proving to be a ‘call to arms’ for the industry to promote a more integrated holistic approach to farming rice, in which water, fertilizer and pesticides can be used more efficiently.

In Brazil, a prized resource, the lobster, has become a source of conflict between legal artisanal fishers and illegal deep sea divers. Around 3,000 mostly artisanal boats make a living from small-scale lobster fisheries. Most of the traditional sail boats are around three metres in length. They are the mainstay of communities dotted along the coast in the north-east of Brazil. Although this fleet is licensed, it is forced to compete with illegal boats with untrained divers that steer them. These divers use illegal, unregulated and dangerous equipment to poach lobster from the legal deep-sea traps. Consequently, the artisanal fleet and the illegal fleet are often caught in combat. The navy is unable to consistently police the area, the lobster stock is dwindling and the competition for catch intensifying. Most of this catch goes almost exclusively to the USA and the European Union.

UNEP is working with two pilot supply chain projects in Brazil and Thailand to secure the livelihoods for future generations of fishers and farmers. UNEP has brought together all the supply chain actors to develop sustainability recommendations from provenance to plate. These recommendations will be taken forward and tested in 2011, developing new standards of behaviour that can be replicated throughout the industries involved world-wide.



Ethanol plant © iStockphoto

SEIZING INVESTMENT OPPORTUNITIES

The alchemy of transforming waste

It's estimated that around 140 billion tonnes of biomass is produced annually. However, in Sri Lanka and Nepal, UNEP's International Environmental Technology Centre (IETC) is pilot testing new approaches and helping to convert waste agricultural biomass including rice husks, grass and fruit and vegetable waste into energy.

This conversion provides a decentralized energy source in rural areas, simultaneously offering a cost-effective solution to waste disposal and reducing greenhouse gas emissions from rotting or burning waste agricultural biomass and from the substitution of fossil fuels.

Working with two principal partners, the National Cleaner Production Centre in Sri Lanka and the Society for Environment and Economic Development in Nepal, UNEP has trained communities, and helped local partners to procure and install technologies to treat some 2,000 tonnes per annum of rotten vegetables in Nepal and 1,000 tonnes per annum of mixed dry agricultural waste in Sri Lanka across two pilot areas. The biomass is turned into compost as well as heat and used to dry limes and other fruit, enhancing livelihoods in one of Sri Lanka's poorest areas.

The IETC is working to extend the initiative to Pakistan and the Philippines and has plans to start work with a fifth country in Asia.

STIMULATING DEMAND FOR RESOURCE EFFICIENCY

Efficiency in construction and procurement practices

UNEP's Sustainable Buildings and Climate Initiative (SBCI) initiated the development of a green building index and launched a standard methodology for building energy efficiency metrics and accounting. Over 30 companies and national green building councils are participating.

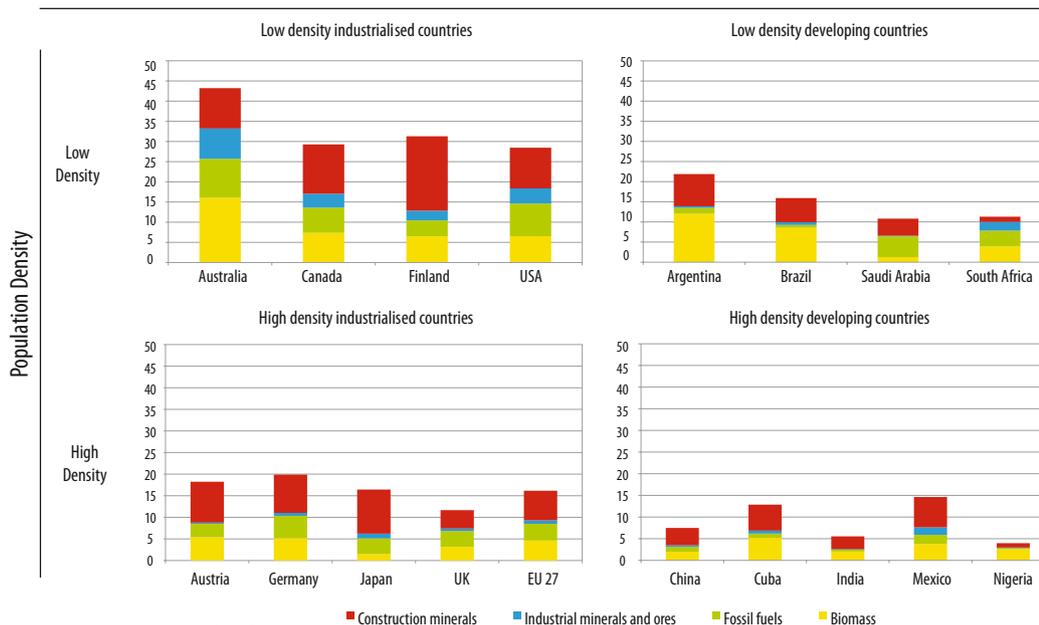
UNEP also supported eight countries in the implementation of sustainable public procurement: Argentina, Colombia, Costa Rica, Chile, Uruguay, Tunisia, Lebanon and Mauritius. Some 120 experts from 48 countries in Asia, Africa, Latin America and Europe have acquired and upgraded their skills and knowledge in the area. The aim is to help these countries change their public procurement practices in ways that send market signals in favour of the use of more resource efficient products and services.

Catalysing the use of voluntary measures in consumer choice

UNEP, through its project Enabling Developing Countries to Seize Eco-labelling opportunities, promotes the production of goods and services that are compliant with recognized voluntary standards. In 2010, UNEP organized national and regional training workshops in seven selected countries, attended by participants from private sector and government. The European Union eco-label was used as a case study to encourage companies to apply for certification for eventual export of eco-labelled products to the European market.

UNEP has collaborative agreements with the International Organisation for Standardisation and the Global Reporting Initiative, which have been used to align activities in building capacity in the convergence and application of new standards. Supporting Governments with advice in this area, UNEP co-published 'Carrots and Sticks' with an overview analysis of voluntary and mandatory reporting requirements in OECD countries and emerging markets.

Industrialisation



Source: Krausmann et al (2008)

◀ Domestic Material Consumption (tonnes per capita) in industrial and developing countries in the year 2000



"There can be no human development in an environment that does not support life.

We must feel inspired.

We must feel encouraged.

We must take responsibility.

Because if people living in the world's poorest communities can throw themselves

so fully into protecting

our shared environment,

so can we all. So must we all."

Gisele Bündchen, Supermodel
and UNEP Goodwill Ambassador

MESSAGE

THE
GREEN





David de Rothschild – nearing Fiji © Plastiki Crew

THE GREEN MESSAGE: INSPIRING ACTION AND CHANGE

From trees to tweeting, sports to sustainability or forests to Facebook, successfully communicating both the challenges and solutions which address the current state of the planet is vital to change mindsets and behaviour.

Engaging environmental ambassadors, rewarding champions, bringing environmental best practices to popular sporting events and working with global and local partners all play a key role.



Don Cheadle and WED celebrations in Rwanda 2010 © UNEP



MANY SPECIES - ONE PLANET - ONE FUTURE
WORLD ENVIRONMENT DAY - 5 JUNE 2010



www.unep.org/wed

People around the world celebrated WED 2010 with tens of thousands of activities in 109 countries. It was the largest and most successful ever celebration of World Environment Day, 5 June, which celebrated the UN International Year of Biodiversity, heralding a global call to take stock of our impact upon and relationship with the planet. Twenty-five UN agencies organized WED celebrations worldwide with some 3.3 million visits to the WED website.

Activities ranged from individual actions such as street clean-ups and parades, gardening and collecting rubbish to private sector and commercial enterprise commitments. 2,920 articles referenced WED 2010 on mainstream and web-based media; and 183 per cent increase from 2009.

2010 also saw the launch of the WED Legacy Project. For every registered activity, UNEP pledged \$10 to support a project in the WED host country. Rwanda received over \$100,000 in cash and in-kind contributions both to support gorilla protection and provide solar power to a village. The proliferation of WED activities and its messages have been enhanced through mobile and digital technologies and platforms, all of which allow easier and faster communication than ever before.

World Environment Day 2011 will celebrate the UN Year of Forests.

When else do we get to mobilize hundreds of thousands of people from across the globe for positive action on the planet in one day? On World Environment Day (WED) of course!

“ I would love it if we were able to live in a world, which is in harmony with its environment. We need to educate people on the environment and draw clear connections now — it is not disparate pieces, it really is a chain of life. We have to connect the dots. I am surprised the environment is not at the top of the agenda. What is more important than clean air and a healthy planet? ”

Don Cheadle,
UNEP Goodwill Ambassador, actor and
environmentalist on World Environment Day 2010.



Plastiki © Patrick Riviere

**A green message in a bottle —
Would you sail across the ocean on a bed
of plastic bottles held together by cashew nut and sugar glue?**

It has been estimated that over 13,000 pieces of plastic litter are floating on every square kilometre of ocean and it takes 450 years for a single plastic beverage bottle to degrade in the marine environment. Three years ago, a UNEP report entitled *'Ecosystems and Biodiversity in Deep Waters and High Seas'* charted the way fisheries, pollution and other stresses impact and affect the marine world.

The Plastiki, a 60-foot catamaran made from 12,500 reclaimed plastic bottles and fully recycled plastic, set sail at the end of March from San Francisco to Australia. Led by David de Rothschild, UNEP Climate Hero and British adventurer and environmentalist, the Plastiki's mission was to beat waste by drawing attention to the large amount of plastic debris in the world's oceans and to re-think how waste can be a resource. After sailing more than 8,000 nautical miles and taking 128 days to cross the Pacific, the world's largest ocean, the Plastiki expedition and her crew arrived safely at Sydney in July.

“This is truly a message on a bottle”, said Mr. de Rothschild. “We have this addiction to single-use, throwaway plastic, which is choking up the ecosystem. With Plastiki, we want to enlighten, inform and inspire people and show that there are solutions and not just problems.”



Peru district of Tumbán, Lambayeque enter the Guinness Book of Records by planting 27,166 trees simultaneously in five minutes, 20 seconds and 37 hundredths © AgroRural



www.unep.org/billiontreecampaign

Plant for the planet

It is rare that a simple action can be so infectious and effective, yet the act of planting a tree as part of UNEP's Billion Tree Campaign has catalysed a collective, powerful response among citizens, communities and governments around the world.

In June, LG Display signed an agreement to participate in the 'Plant for the Planet: Billion Tree Campaign' and decided to build a \$1 million green fund in connection with the campaign. LG Display wanted to be part of the Billion Tree Campaign to convey the message that products made with eco-friendly parts contribute greatly to protecting the environment.

The Billion Tree Campaign has inspired the involvement of all 192 United Nations Member States, and numerous governments have registered data on afforestation.

UNEP's Plant for the Planet: Billion Tree Campaign is a worldwide initiative that encourages governments, organizations of all kinds, and individuals, to plant trees. Since its inception in 2006, the Billion Tree Campaign has recorded the planting of more than 10 billion trees, which — according to estimates based on Intergovernmental Panel on Climate Change guidelines — have the potential to absorb 164 million tonnes of CO₂ per year over their lifespan.

UNEP's prize winners and ambassadors: their gifts to the world

UNEP takes pride in recognizing outstanding individuals, organizations and entrepreneurship in service of the planet and the promotion of sustainable development. 2010 saw an increase of close to 100 per cent in entries across the board for its flagship prizes — Champions of the Earth and the UNEP Sasakawa Prize.

2010 Champion of the Earth laureates included presidents, scientists, actors and businessmen. The UNEP Sasakawa Prize winners were chosen for work on bringing clean, affordable lighting solutions to rural communities in Rwanda, Kenya and India, and efforts to promote and distribute fuel-efficient cook stoves which burn 70 per cent less wood, saving families \$1 — \$5/day, and decreasing harmful carbon emissions by 1 tonne CO₂ equivalent/year per stove for domestic users.



UNEP SASAKAWA PRIZE

www.unep.org/champions
www.unep.org/sasakawa



2010 winners of the UNEP Sasakawa Prize © UNEP

In 2010, UNEP added three new Goodwill Ambassadors, to its roster. In March, to mark the launch of UNEP's Batting for the Environment Initiative with the Indian Premier League, cricket legend Sachin Tendulkar was designated Goodwill Ambassador. A few months later on World Environment Day, Academy Award nominee Don Cheadle was named Goodwill Ambassador in a traditional gorilla-naming ceremony in Rwanda. In July, Chinese actress Li Bing-bing joined the ranks of celebrity environment crusaders when she was named UNEP's Goodwill ambassador to China. All are active in promoting sustainable lifestyles.





Shanghai © Shutterstock

Exhibits to email

**3,247,709
visits in six
months**

UNEP, in coordination with UN Habitat, led the 'Green Expo' on the 'Nature of Cities' illustrating how cities can exist in harmony with the natural world at the 2010 Shanghai Expo.

The Chinese version of the famous environmental film HOME was launched at the United Nations Pavilion. Taking 15 years to shoot in 54 countries, the film has been dubbed the largest environmental film in history. Film director Yann Arthus-Bertrand is also a UNEP Goodwill Ambassador.

Activity on www.unep.org continues to rise. From January to December 2010, www.unep.org registered 16,022,801 visits, 308,834,092 hits, and 87,596,595 page views. This denotes an increase of 19.6 per cent, 27.8 per cent and 24.3 per cent respectively compared to 2009. The most popular sites in 2010 were the UNEP News Centre, World Environment Day and GEO.

UNEP-followers on social media number around 560,000 individuals. The vast majority derives from the Chinese social media platform RenRen, established in early 2009. UNEP also launched a

Facebook page in March 2010. 12,379 bloggers wrote about WED 2010 and the UNEP twitter account has been recognized by the Guardian newspaper as one of the top environmental accounts to follow.

Green learning



Online Access to Research in the Environment (OARE) offers access to scientific research in 109 developing countries and is a partnership led by UNEP with the World Health Organization, the Food and Agricultural Organization and Yale University.

OARE now offers more than 3,000 scientific peer reviewed journals from over 200 publishers. As of November 2010, more than 2,200 institutions have registered for access. UNEP's Mainstreaming Environment and Sustainability Programme in African Universities (MESA) is now operational in 90 universities across 42 countries in Africa.

UNEP's e-Publishing Policy came into effect in 2010 with the aim of making the dissemination of our publications less expensive, more environmentally friendly and more simple.

95 per cent of UNEP's publications are available online in portable document format (PDF). The aim is to make the entire publications library available for free online: www.unep.org/publications



Sports, music and environmental sustainability

What was the most watched TV event of 2010? It's thought that over 3 billion people watched the opening of the World Cup.

Major sporting events such as the FIFA World Cup have the potential to build global awareness of environmental issues and promote a reduced ecological footprint. UNEP, with support from the Global Environment Facility (GEF), assisted South Africa in the run up to the 2010 FIFA World Cup with \$1,000,000. Street lights, billboards and traffic lights at the six host cities were retrofitted with solar power.

UNEP is currently conducting an independent environmental assessment on the greening of the 2010 FIFA World Cup. The report will be released at the Governing Council in February 2011.

UNEP also worked with 12 teams of the competition to offset emissions linked with the event, including seven under a new partnership with PUMA, the sportswear company.

In another sporting partnership with the Indian Premier League (IPL), it is calculating its carbon footprint and examining ways of reducing the overall environmental impact of its operations, from waste management to energy efficiency and water. Estimates of fans watching IPL matches stand at over 2 billion. Each match started with a UNEP 'Green Environmental Tip'.

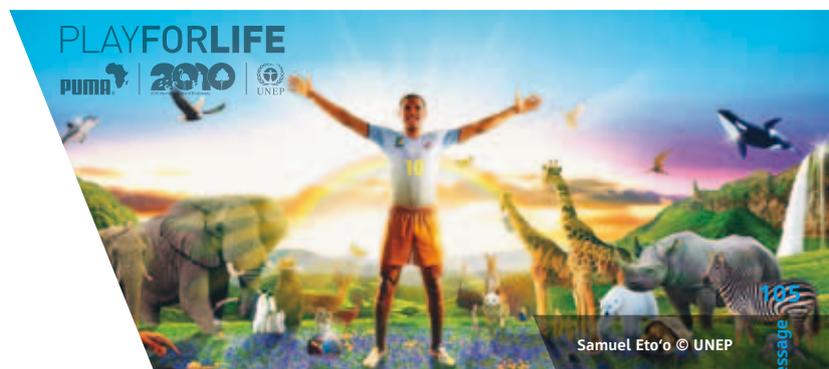
In March 2010, UNEP/GRID-Arendal hosted the first music industry stakeholder meeting. Twenty-four music representatives pledged their commitment towards making the industry more sustainable in the form of a communique.

The youth of today, the adults of tomorrow

The annual children's painting competition organized by UNEP, the Japan-based Foundation for Global Peace and Environment (FGPE), Bayer and Nikon received 594,032 entries on biodiversity from 95 countries. The competition, in its initial outreach stage, engaged over 2 million children and their teachers in schools around the world.

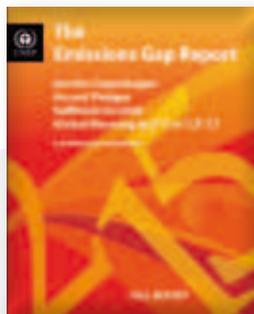
Young people from over 100 countries participated in the celebration of major UN days and activities. Millions of young people from the Scout Movements, the Girl Guides and community children and youth organizations carried out activities.

The first Youth Olympic Games in Singapore in August 2010 brought UNEP and 3,500 young athletes together to work through how to live more sustainable lifestyles.



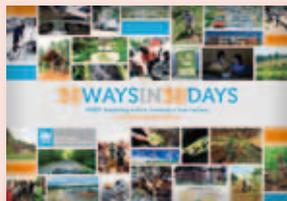
The PUMA/UNEP 'Play for Life' initiative netted \$800,000 for three biodiversity conservation projects in Africa. Football stars such as Samuel Eto'o of Cameroon worked alongside UNEP to promote biodiversity and sustainable development messaging in 2010, reaching out to potentially millions of fans across the globe.

www.unep.org/Sport_env/Puma_PlayforLife.asp



Emissions Gap Report

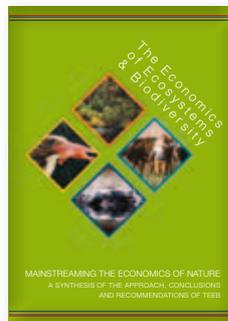
Launched in advance of the UNFCCC Mexico meeting, this report concludes that a significant emissions gap exists between national commitments and what is needed to keep the global temperature rise below 2° C. UNEP has been asked to look at how to close the gap.



30 Ways in 30 Days

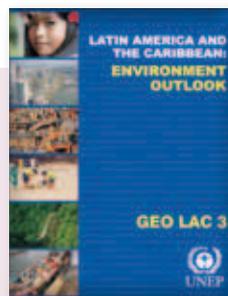
From creating mass markets for solar water heaters to planting trees and protecting forests, UNEP released 30 case studies in the run-up to the UN climate convention in Mexico to prove that solutions to combat climate change are available, accessible and replicable.

A SNAPSHOT OF PUBLICATIONS 2010



The TEEB Synthesis Report – Mainstreaming the Economics of Nature

Launched in October at the CBD COP10 in Nagoya, Japan, this report illustrates how TEEB economic concepts and tools can help equip society with the means to incorporate the values of nature into decision-making. Following the report, the World Bank launched a global partnership on “green accounting.”



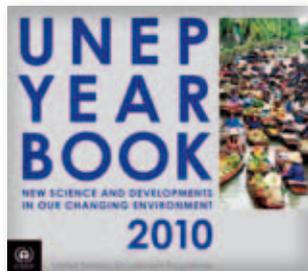
GEO Latin America

GEO LAC 3 warns that the region needs to take a step forward to sustainably manage its natural resources and effectively counteract the forces that are leading to environmental degradation.



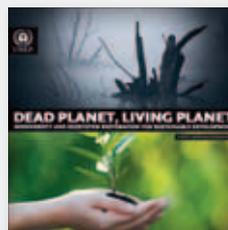
Ocean Acidification

Released at the UNFCCC meeting in Mexico, this report shows the effects of rising concentrations of CO₂ on the marine environment and their potential devastating consequences on species and ecosystems.



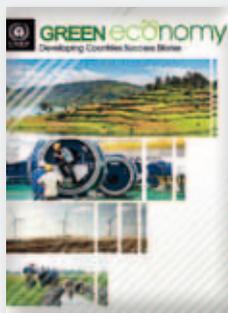
The UNEP Year Book 2010

highlighted the latest science and developments and progress in environmental governance; the effects of degradation of the world's ecosystems; impacts of climate change; effects of harmful substances and hazardous waste on human health and the environment; disasters and conflicts related to the environment; and the unsustainable use of resources.



Dead Planet, Living Planet

Launched on the eve of World Environment Day, 2010 the report draws on thousands of ecosystem restoration projects world-wide and showcases over 30 initiatives that are transforming the lives of communities and countries across the globe.



Green Economy – Developing Countries Success Stories

This collection of eight Green Economy initiatives from developing countries illustrates the benefits from specific green investment policies which if scaled up could offer a pro-growth, pro-jobs development path.



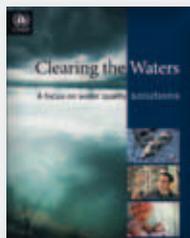
The Last Stand of the Gorilla

Released at the 15th CITES meeting in Qatar, this report underscores that myriad threats from poaching to the illegal timber trade are hitting Great Ape populations and habitats faster than first thought.



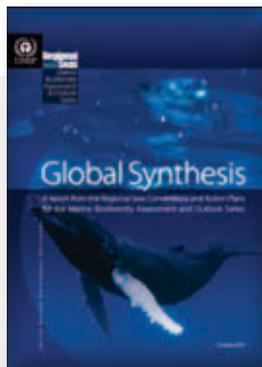
Sick Water

Released on World Water Day, this report addresses the challenges posed by illegal and unregulated wastewater, which present a global threat to health and well-being.



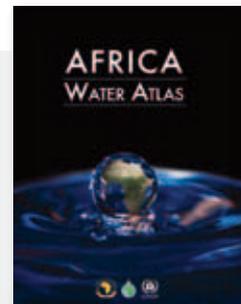
Clearing the Waters

The challenge of water is one of both quantity and quality. This publication highlights the links between clean water and public health and the health of the wider environment.



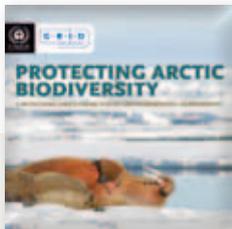
Marine Biodiversity Outlook – Global Synthesis

Launched in October at the CBD COP10 in Nagoya, Japan, this report draws on supporting data from all 18 Regional Seas and is the first systematic assessment of marine biodiversity at a sub-global scale.



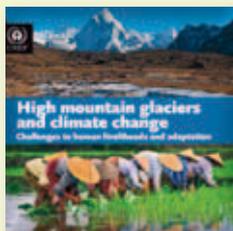
Africa Water Atlas

Launched at Africa Water Week in Addis Ababa, Ethiopia, the new atlas shows Africa's vulnerable water resources in striking detail as well as solutions and success stories from across the continent.



Protecting Arctic Biodiversity

Launched in October at the CBD COP10 in Nagoya, Japan, the report urges action to save Arctic biodiversity which requires addressing a number of threats, whose root causes originate outside the region.



High Mountain Glaciers and Climate Change

Released at the UNFCCC meeting in Mexico, this report shows that glaciers in South America and Alaska are melting faster than those in Europe and that many low-lying ones vital for dry land communities may disappear over coming decades.



Blue Harvest

Launched in October at the CBD COP10 in Nagoya, Japan and published in collaboration with the WorldFish Centre, this book spotlights the significant contribution of inland fisheries to diet, health and the economy.



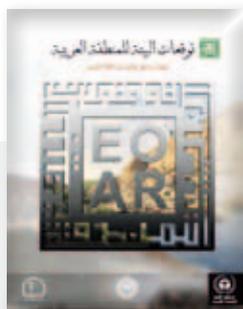
Climate Action 4

The fourth edition of Climate Action launched at UNFCCC in Mexico contains articles and features by esteemed authors from governments, intergovernmental organizations, civil society and the private sector.



Framing the Flow

This publication highlights the linkages between coastal ecosystems (mangroves, coral reefs, seagrasses, estuaries, and lagoons) and how to better understand, protect and value ecosystem-services across habitats.



Environment Outlook for the Arab Region

The Environment Outlook for the Arab region is the first official, comprehensive and integrated assessment of the state of the environment in the region.



Nutrient Management

Nutrients are key for food security and sustainable development. However, excess use and inefficient practice leads to nutrient over-enrichment, causing soil acidification, groundwater pollution, harmful algal blooms and marine dead zones.



THE UN



THE UN:
LEADING BY
EXAMPLE

UNEP SUPPORTING SUSTAINABILITY EFFORTS IN THE UN AND LEADING BY EXAMPLE



The United Nations plays a critical role in encouraging businesses and governments to improve their sustainability performance, and now the UN, with 90,000 staff and another 110,000 in peacekeeping operations, is greening its own operations as well.

The UN Climate Neutral Strategy, which commits the UN to measure and reduce its greenhouse gas emissions and investigate the option of purchasing offsets, was approved in 2007.

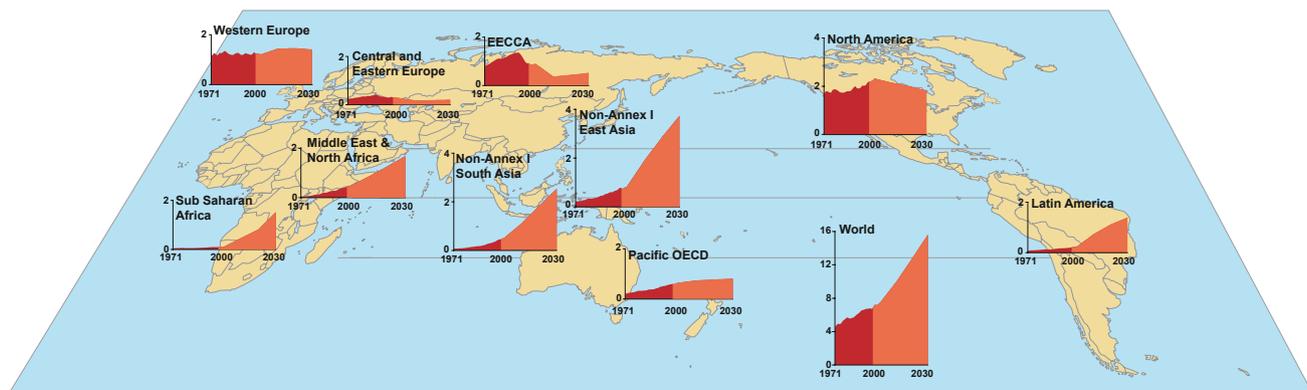
KEY FACTS

The emission reduction potential of the building sector (at a carbon cost of \$20 per tonne CO₂ equivalent) is larger than the combined potential of industry, transport and forestry.

Up to 26 per cent in energy consumption and 42 per cent in water inputs could be reduced, and 61 per cent of current solid waste could be diverted from landfill in UN facilities.

RESULTS TARGETED

With emissions of more than 1.7 million tonnes of CO₂ a year, the UN is aiming to reduce its greenhouse gas emissions, focusing its reduction efforts on buildings, travel and procurement.



CO₂ emissions from buildings (including through the use of electricity) – IPCC High Growth Scenario. Note: Dark red: historic emissions. Light red: projections 2001 – 2030. 2000 – 2010 data adjusted to actual 2000 carbon dioxide emissions. EECCA= Countries of Eastern Europe, the Caucasus and Central Asia. Source: Levine et al, 2007.



1. Environment house planning © iStockphoto 2. Brisbane's new environmentally friendly eco unit building complex, view showing shades of green angled panels © Shutterstock

Building a sustainable future

How and where we live not only shapes our daily experience, but defines the global urban landscape. Many of us do not consider the impact of our homes and offices on the environment — either positive or negative — but buildings are responsible for more than one-third of global energy use and in most countries are the largest source of greenhouse gas emissions.

Available technologies could cut energy consumption in new and old buildings by 30 to 50 per cent without significantly increasing investment costs. A prevailing frustration is that these technologies are under-utilized owing to relatively short investment perspectives. The challenge is therefore to mainstream sustainability and resource efficiency, encouraging a life-cycle approach to building design, construction, refurbishment and use.

Greening the Blue



United Nations peacekeeping mission © Corbis

UNEP coordinated efforts across 49 UN entities to prepare the first generation of greenhouse gas inventories. By end of 2010, 15 UN organizations submitted emission-reduction action plans.

The interagency Environmental Management Group (EMG) provided a vehicle to support such UN-wide collective action. UNEP chaired the EMG, which coordinates several initiatives through issue management groups and cooperates with the UN Development Group (UNDG) and the UN's coordination mechanisms of the Chief Executives Board (CEB).

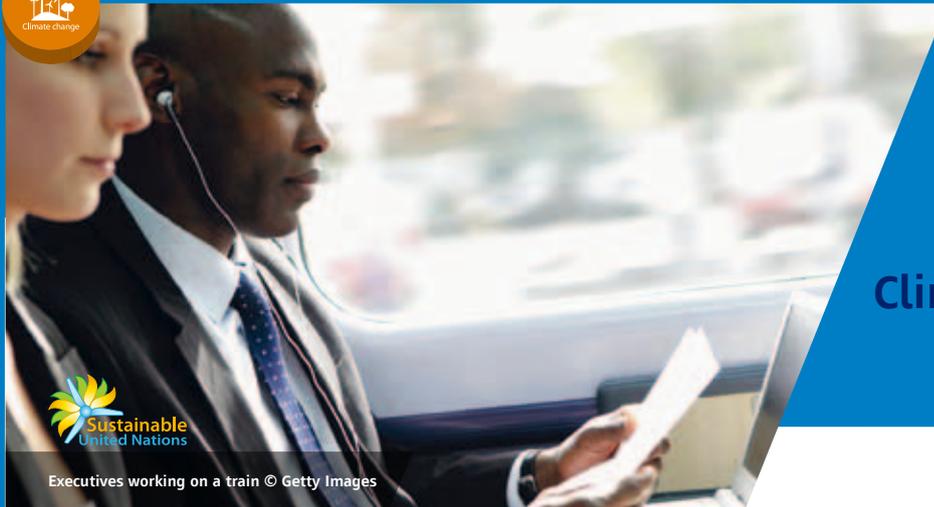
The EMG also launched its Biodiversity Report in October at the CBD, in which UN Agencies committed to contribute individually and collectively to the international biodiversity agenda, in particular by identifying opportunities for cooperation within the respective mandates of different organizations.

Commitments included work on TEEB (The Economics of Ecosystems and Biodiversity) and IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services).

UNEP launched an UN-wide campaign on in-house sustainability — Greening the Blue — to highlight ways staff can contribute to resource efficiency; www.greeningtheblue.org. In September 2010, Greening the Blue won the international 'IVCA Clarion not for profit award' for Best Website.

Initial Results

- The World Food Programme has set in place a standard for the sustainable procurement of air-conditioning.
- UN peacekeeping missions have pledged to plant 169,000 trees, half of which have already been planted helping to reforest the world's trouble-spots.
- Staff at UNAIDS can travel no more than 21 days a year.
- Videoconferencing has become a key tool at the UN Conference on Trade and Development, which has pledged to cut emissions by 20 per cent by 2020.
- UNEP assisted the UN Departments of Field Support (DFS) to conduct the first ever environmental impact assessments for new base camp sites in Mogadishu, Somalia, and Mombasa, Kenya.
- UNEP also supported baseline studies on energy, water and waste reduction options for peacekeeping camps, recommending a series of simple, practical measures that could lead to cuts of more than 25 per cent in energy consumption and 40 per cent in water use, as well as less solid waste reaching landfills.



Executives working on a train © Getty Images

UNEP's Climate Neutral Strategy

UNEP is committed to reducing its own greenhouse gas emissions by 3 per cent each year between 2010 and 2012, from 2009 levels. A key area for emission reductions is work-related travel by UNEP employees. At present, air travel is responsible for over 85 per cent of UNEP's carbon emissions.

More journeys will be undertaken by train where possible and there will be greater investment in e-conference technology. UNEP will establish an e-communication plan where all UNEP employees are provided with access to online communication tools and online meeting rooms.

UNEP has been climate neutral since 2008, but the new efficiency measures in the UNEP Climate Neutral Strategy will enable UNEP to lead by example in promoting sustainability. Greenhouse gas emissions from UNEP's offices — due primarily to electricity use — make up around 15 per cent of the organization's carbon footprint.

To reduce workplace emissions, all UNEP offices with 10 or more staff members will undertake in-house greenhouse gas emission reduction audits based on the Sustainable United Nations (SUN) Guide to Climate Friendly Buildings and Offices. In addition to putting emission reduction plans in place, the SUN is helping UNEP offices and other UN agencies to consider broader resource use challenges such as office paper and e-waste. UNEP's goal is:

- Continuous improvement in sustainability performance and development of an environmental management system to support this.
- Monitor, manage and report on its climate and sustainability performance on an annual basis.
- 'Lead by example' and provide a basis for raising awareness of similar organizations, governments, and the public as a whole. UNEP will share methods that can be used by other organizations to reduce their own environmental and climate footprint.
- To download the UNEP Climate Neutral Strategy, please visit: www.unep.org/sustainability

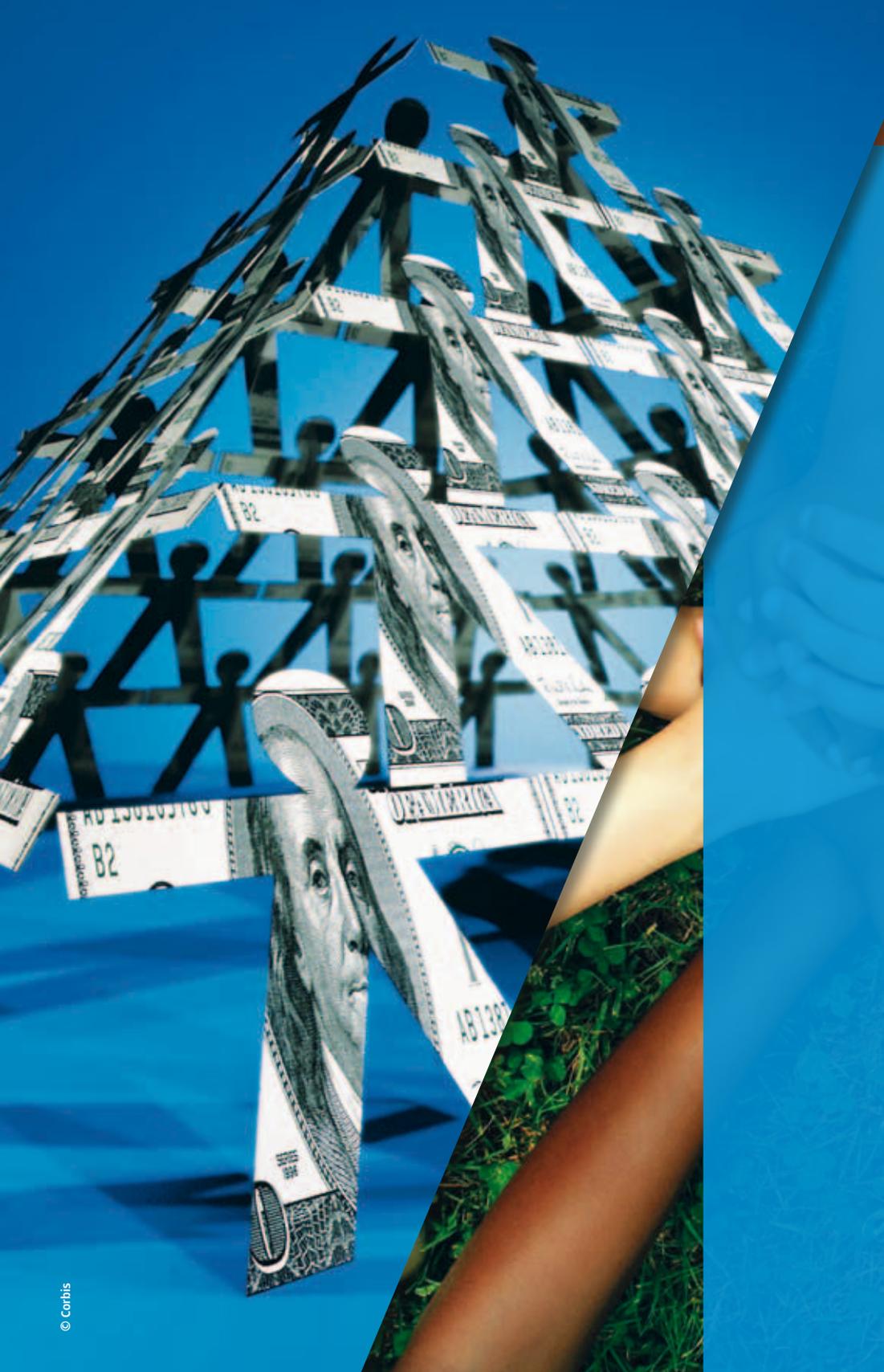


No place like home

UNEP's new home in Nairobi is designed to be energy neutral through the combination of solar power generation, intelligent building design (which maximizes natural lighting and cooling), a state-of-the-art lighting system and the latest in IT solutions and technology. It is the first of its kind in Africa and will be an international showcase for sustainable buildings.

The new building incorporates many other sustainable building features such as rainwater harvesting, water recycling and a modern water treatment system, improved waste management, and the use of environmentally friendly building materials.





FINANCE

ORGANIZATIONAL
STRUCTURE
AND



UNEP



1. Finance © Corbis 2. Business and economy © iStockphoto

UNEP's mandate and focus are determined by its Governing Council, comprising 58 Member States. Member States to the Governing Council are elected by the UN General Assembly, for four-year terms, taking into account the principle of equitable regional representation.

There are 16 seats for African states, 13 seats for Asian states, six seats for Eastern European states, 10 seats for Latin American and Caribbean states, and 13 seats for Western European and other states.

The Committee of Permanent Representatives (CPR), which is made up of government delegates who are assigned to monitor UNEP's work, is a subsidiary of the Governing Council. The mandate of the CPR includes reviewing, monitoring and assessing the implementation of Governing Council decisions, reviewing the UNEP Programme of Work and budget and its subsequent implementation, and preparing draft decisions for consideration by the Governing Council.

Full information on the composition, functions and responsibilities of the UNEP Governing Council and the Committee of Permanent Representatives is available at www.unep.org/resources/gov

UNEP FUNDING IN 2010

Estimated requirements for the approved Programme of Work and budget for the biennium 2010-2011 total \$446.5 million: \$180 million from the Environment Fund, \$228.2 million in Trust and Earmarked Funds and \$38.3 million in other funds (including programme support costs and the UN regular budget). This translates into an estimated requirement of \$218.2 million for 2010.

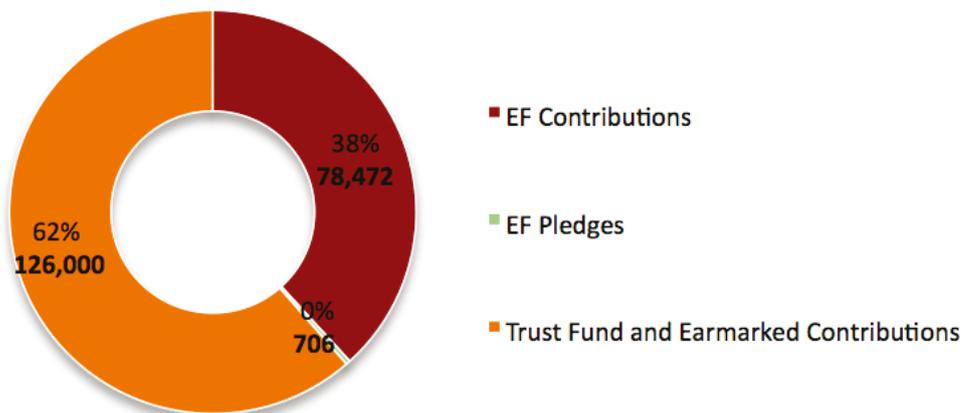
In 2010, 86 countries made their contributions to the Environment Fund; about 70 per cent of them paid close to, or above, the Voluntary indicative scale of contributions (VISC). Over 72 per cent paid during the first quarter of the biennium. Other Member States were invited to make their contributions as early as possible for timely and more efficient delivery of UNEP's Programme of Work. The highest contributors include the Netherlands (\$12.9 million), followed by Germany, UK, USA, France, Sweden and Belgium.

Austerity measures adopted by some European countries, as well as the fluctuation in the exchange rate and non-payments by two major

donors, affected the total amount of funds mobilized through the Environment Fund. As of 31 December 2010, Environment Fund income totaled \$79.2 million. If this income performance is repeated in 2011, Environment Fund income will fall short of the \$180 million required for the Programme of Work and budget for 2010-2011 by \$21.6 million (or 12 per cent).

Actual 2011 Environment Fund income performance may be more positive. A number of donors customarily pay contributions due in the first year of the biennium, early in the second year, together with that year's contribution. In this regard, UNEP will continue to work on the basis that we may experience a 10 per cent shortfall in Environment Fund income (as a contingency scenario) while actively seeking to ensure full funding of the approved budget. It must be noted that 2010 Environment Fund expenditures totaled \$77 million. This rate of expenditure was the result of two factors: the initiation and acceleration natural to the first months of the first year of a new programme (i.e. programme expenditure does not

2010 Contributions and pledges (\$ '000)



follow a straight-line trajectory) and a precautionary approach to expenditures, particularly the filling of vacant positions, until such time as more income is secured.

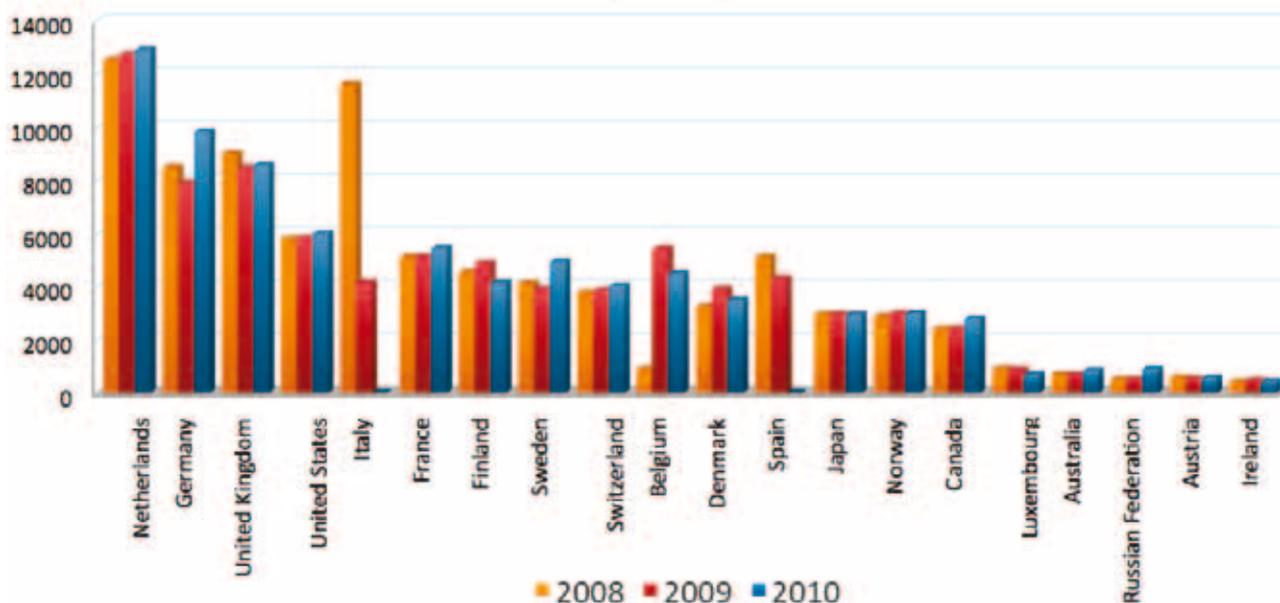
Income and expenditure performance in 2010 for Trust and Earmarked Funds exceeded the estimates reflected in the 2010-2011 budget. Income totaled \$126 million which if repeated in 2011 will exceed estimates by \$23.8 million (or approximately 10 per cent). Expenditure totaled \$117.7 million — \$3.6 million (or 3 per cent) above initial estimates. An accelerated rate of expenditure for Trust and Earmarked Funds in 2011 should go some way towards ensuring full delivery of the 2010-2011 Programme of Work.

The highest Trust and Earmarked Funds contribution was provided by the Government of

Norway. The Programme Cooperation Agreement for NOK 200 million is the second programmatic agreement between Norway and UNEP which earmarks funds at the subprogramme level. Similar arrangements have been established with the Swedish International Development Cooperation Agency (Sida), resulting in a commitment of SEK 95 million in support of four subprogrammes during the period 2010-2013. Negotiations are ongoing with other major donors for the set-up of similar partnerships.

Additional earmarked contributions were leveraged through increased collaboration with UN agencies. \$16.6 million were received through the United Nations Development Programme in the framework of joint cooperation programmes implemented by UNEP and UNDP. Additional funds were raised, for example, in collaboration with UN-HABITAT,

Environment Fund — Trend in Contributions in 2008-2010
Top 20 donors
 (\$ '000)



the UN Department of Political Affairs (DPA), the UN Peacebuilding Support Office (PBSO) and the UN Department of Economic and Social Affairs (UNDESA) to support countries to improve natural resource management for conflict prevention and peacebuilding.

In addition to resources made available by donors for multilateral aid, UNEP has been exploring opportunities to access aid funds provided at the bilateral level by Member States and to further broaden its funding base by engaging with private sector and other non-State entities including foundations.

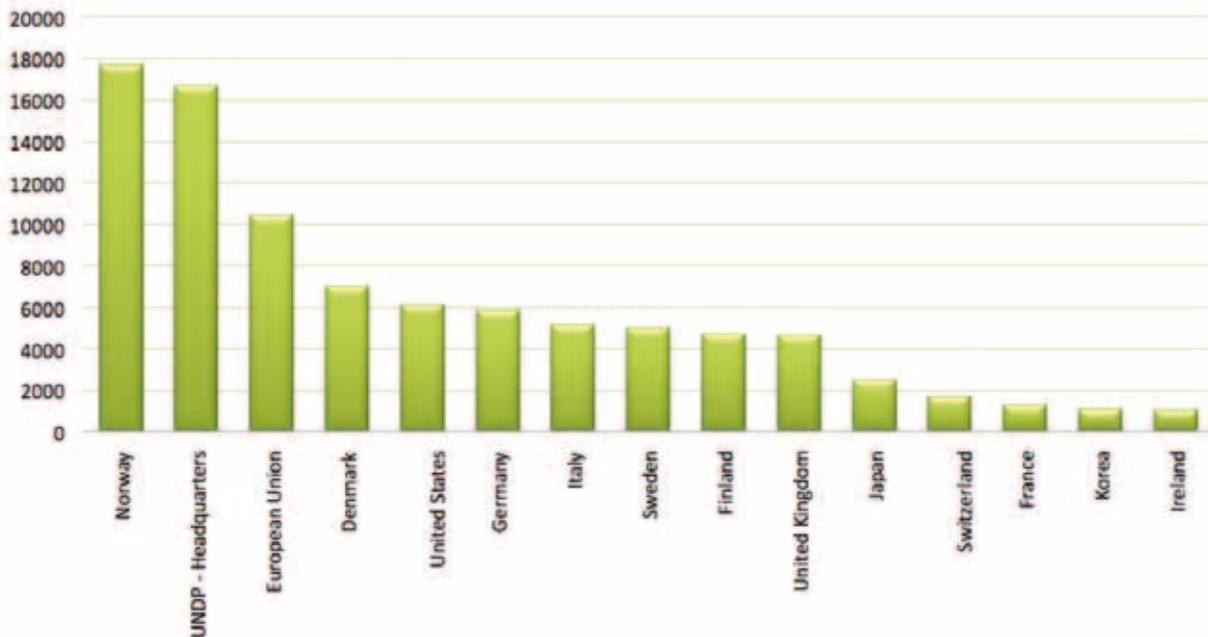
As an example, two projects that have been funded through the bilateral aid channel by the Government of Denmark are the Kenya National State of Environment Report 2009 and Kenya Renewable Energy, for \$710,000. Over 190

institutions, including banks and insurance companies, supported UNEP Finance Initiative to analyse the impacts of environmental and social considerations on financial performance. Their contributions in 2010 totaled over \$2 million.

While encouraging Member States to move towards contributions to the Environment Fund in preference to extra-budgetary funds in line with UNEP Governing Council's Decision 25/1 (IV), UNEP is working to leverage further extra-budgetary funds through new partnerships to catalyse wider change and achieve the results targeted for 2010-2011.

Note: Figure on contributions received is indicative; 2010 accounts will be closed in March 2011.

**Earmarked Contributions and Trust Funds
Top 15 donors in 2010
(\$ '000)**



ENVIRONMENT FUND — CONTRIBUTIONS IN 2010

	COUNTRY	2010 PLEDGE/ PAYMENT
1	Albania	1,728
2	Algeria	10,000
3	Andorra	36,582
4	Argentina	54,475
5	Armenia	1,500
6	Australia	839,971
7	Austria	570,000
8	Bangladesh*	653
9	Barbados	2,500
10	Belarus	12,500
11	Belgium	4,488,538
12	Bhutan	1,450
13	Botswana	6,000
14	Brazil*	280,000
15	Bulgaria	8,712
16	Cameroon	2,257
17	Canada	2,800,000
18	Chile	20,000
19	China	500,000
20	Colombia	40,000
21	Costa Rica	10,000
22	Croatia	33,000
23	Cyprus	40,000
24	Denmark	3,508,772
25	Ecuador	3,800
26	El Salvador*	3,200
27	Eritrea*	900
28	Ethiopia	1,000
29	Fiji	4,500
30	Finland	4,161,600
31	France	5,440,000
32	Germany	9,819,747
33	Greece	250,000
34	Guyana	1,000
35	Honduras	1,000
36	Hungary	50,000
37	India*	100,000
38	Ireland	422,973
39	Israel	20,000
40	Japan	2,963,807
41	Kazakhstan	17,469
42	Kenya*	30,000
43	Korea Rep.	201,325
44	Kuwait*	200,000

	COUNTRY	2010 PLEDGE/ PAYMENT
45	Lesotho	9,975
46	Liechtenstein	9,000
47	Lithuania	23,000
48	Luxembourg	700,280
49	Malawi*	900
50	Malaysia	40,000
51	Mauritania*	7,336
52	Mauritius	5,000
53	Micronesia*	760
54	Moldova	900
55	Monaco	26,749
56	Morocco	12,079
57	Netherlands	12,901,000
58	New Zealand	230,000
59	Niger	814
60	Norway	3,000,000
61	Oman	10,000
62	Pakistan	10,968
63	Panama	10,000
64	Peru	15,000
65	Philippines*	18,000
66	Poland	150,000
67	Romania*	60,000
68	Russian Federation	900,000
69	Rwanda	1,800
70	Senegal	2,000
71	Serbia	14,000
72	Singapore	30,000
73	Slovak Republic	55,000
74	Slovenia	86,000
75	Sri Lanka	2,550
76	Suriname*	900
77	Sweden	4,928,295
78	Switzerland	4,035,719
79	Thailand	23,045
80	Trinidad & Tobago	444
81	Tunisia	17,400
82	Turkey	300,000
83	Turkmenistan*	3,300
84	Uganda	1,850
85	United Kingdom	8,572,758
86	USA	6,000,000
	TOTAL	79,177,781

* Pledge

DRC

DTIE

DELIC

DEWA

DEPI

DCPI

DGEF*

UNEP DIVISIONS

DIVISION OF REGIONAL COOPERATION (DRC)

Major Groups & Stakeholders

REGIONAL OFFICES

Regional Office for Africa

(ROA):
Nairobi

Regional Office for Asia & Pacific

(ROAP):
Bangkok

Regional Office for Europe

(ROE):
Geneva

Regional Office for Latin America & the Caribbean

(ROLAC):
Panama City

Regional Office for North America

(RONA):
Washington DC

Regional Office for West Asia

(ROWA):
Bahrain

UN Liaison office
New York

DIVISION OF EARLY WARNING AND ASSESSMENT (DEWA)

Scientific Assessment

Early Warning

Capacity Development

UNEP – World Conservation Monitoring Centre (WCMC)

United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR)

UNEP-IPCC

DIVISION OF ENVIRONMENTAL LAW AND CONVENTIONS (DELIC)

Policy and Inter-linkages

Chemicals and Waste Law and Governance

Climate and Energy Law and Governance

Biodiversity and

Land Law and Governance

Freshwater and

Marine Law and Governance

LEAD FOR ENVIRONMENTAL GOVERNANCE

DIVISION OF TRADE, INDUSTRY AND ECONOMICS (DTIE)

Chemicals (Geneva)

Economics and Trade (Geneva)

Energy (Paris and Nairobi)

International Environmental Technology Centre (Osaka and Shiga)

OzonAction (Paris)

Sustainable Consumption and Production (Paris)

LEAD FOR CLIMATE CHANGE, RESOURCE EFFICIENCY, HAZARDOUS WASTE

DIVISION OF ENVIRONMENTAL POLICY IMPLEMENTATION (DEPI)

UNEP–UNDP Poverty and Environment Facility

Marine and Coastal Ecosystems

Freshwater and Terrestrial Ecosystems

Post-Conflict and Disaster Management Branch

Climate Change Adaptation

Ecosystem Services

Environmental Education Training

Programme Planning and Project Services

LEAD FOR DISASTERS AND CONFLICTS ECOSYSTEM MANAGEMENT

DIVISION OF COMMUNICATIONS AND PUBLIC INFORMATION (DCPI)

Audio-Visual
Billion Tree Campaign
Children, Youth, Sports and Environment

Internet

Library

Newsdesk and Internal comms

OARE

Publishing

Speech-writing

Special Events

DIVISION OF GEF COORDINATION (DGEF)

Biodiversity/Land Degradation

Climate Change Mitigation and Adaptation

International Waters

POPs and Ozone

STAP (Scientific and Technical Advisory Panel of the GEF)

* Operations to be integrated across divisions with the GEF coordination office reporting to the Executive Office

UNEP ADMINISTERED CONVENTIONS

Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES)

Secretariat of the Convention on Biological Diversity
(CBD)

Secretariat of the Basel Convention
(SBC)

Secretariat of the Convention on Migratory Species
(CMS)

Secretariat of the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer

Secretariat of the Multilateral Fund for the Implementation of Montreal Protocol
(MFS)

Secretariat to the Rotterdam Convention on PIC, together with FAO

Secretariat to the Stockholm Convention on Persistent Organic Pollutants

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WORLD ENVIRONMENT DAY



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