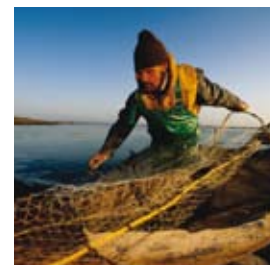




Environmental Finance Services

June 2009



UNDP Environment & Energy Group



Photography:

Cover: Fisherman ©Claudio Vasquez Rojas; Windmills ©iStockpho; UNDP Library: Family of Bangladesh ©UNDP;
UN Library: Tea Plantation in Tanzania ©B.Wolff; Solar Panel ©Tim McKulka; SR Library: Okavango Delta



Environmental Finance Services

The United Nations Development Programme

On the ground in 166 countries, the United Nations Development Programme (UNDP) is the UN's global development network, connecting countries to knowledge, experience and resources to help people build better lives. Together with its development partners, UNDP helps to coordinate and ensure the most effective use of UN and other international aid resources. Environment and sustainable development is one of UNDP's four key areas of work, together with poverty reduction, improved governance, and crisis prevention and recovery.

The world faces a number of inter-connected crises – from poverty and inequality, to food insecurity and civil unrest, battered financial markets, soaring energy costs and the threat of climate change. If left unchecked, environmental degradation is likely to result in further and more severe social and economic crises in the not-too-distant future.

UNDP disbursements on environment, 2004-2007 by source of funds (in US dollars)

Source of funds	Total	Percent
Global Environment Facility	760,735,562	48.1%
Montreal Protocol (MLF)	103,996,427	6.6%
Regular resources	181,771,066	11.5%
Programme countries	391,859,784	24.7%
Others donors	143,437,790	9.1%
Total	1,581,800,630	100.0%

UNDP believes that if environmental management is treated not as a constraint but as an opportunity, it can become part of the solution. If policies, skills and incentives are developed to encourage investments in environmentally-friendly and climate-friendly businesses such as energy efficiency, renewable energy, sustainable transportation, and

Box1: Highlights of UNDP Results in Environment (2005-2009)

- An estimated 413 million tonnes of CO₂ emissions were avoided as a result of projects being funded by GEF and active in mid-2008. This is almost equal to the total CO₂ emitted in Mexico in 2004.
- 127 new protected areas covering more than 10 million hectares were created in 50 countries through the implementation of 65 biodiversity projects funded by GEF. This is roughly equivalent to 2.5 times the total surface area of Switzerland.
- Over 100 countries and 20 international water bodies are being assisted by UNDP to ensure long-term sustainability including the Danube, Nile and Tumen rivers; the Black, Caspian and East Asian Seas; lakes Tanganyika and Baikal; and the small island developing states of the Pacific and Caribbean.
- 63,000 tonnes of ozone depleting substances (ODS) have been eliminated since 2001 in 100 countries with UNDP assistance under the Montreal Protocol, which also brought climate benefits as most ODS are also powerful greenhouse gases.

greening of commodity supply chains, not only can environmental challenges be addressed but new economic opportunities and millions of new jobs can be created.

In financial terms, UNDP is one of the largest brokers of environmental grants in the developing world, having disbursed US\$ 1.58 billion directly and leveraged over US\$ 3 billion in co-financing from public and private sources to support sustainable development during 2004-2007.

Assessing the Challenge

The demand for environmental resources – from water and food to fiber and fuel – has exploded as a result of increasing consumption and growing populations. Between 1960 and 1999 alone, the world population doubled from 3 billion to 6 billion people. In 2005, the Millennium Ecosystem Assessment concluded that our ecosystems have been altered “more rapidly and extensively” during the past 50 years than at any time in the history of our planet.

Of particular concern is climate change, which has been called “the greatest market failure the world has seen” and one of the most serious development challenges of the 21st century. The Fourth Assessment Report of the Inter-governmental Panel on Climate Change (IPCC) published in 2007 stated unequivocally that climate change is happening and that human activity is the main cause. The IPCC reported that:

- Between 75 and 250 million people in Africa could be exposed to increased water stress by 2020, and in some African countries yields from rain-fed agriculture could decrease by as much as 50%.
- More than 1 billion people in Asia could be adversely affected by glacier melt, loss of snow cover and the reduced availability of freshwater by 2050.
- Crop yields in Central and South Asia could decrease by as much as 30% by 2050; the tropical forests of eastern Amazonia in Latin America

could be replaced by savannah with significant losses to biodiversity; and sea level rise could increase inundation, storm surges and erosion in coastal areas, islands and river deltas in Asia, the Pacific and the Caribbean.

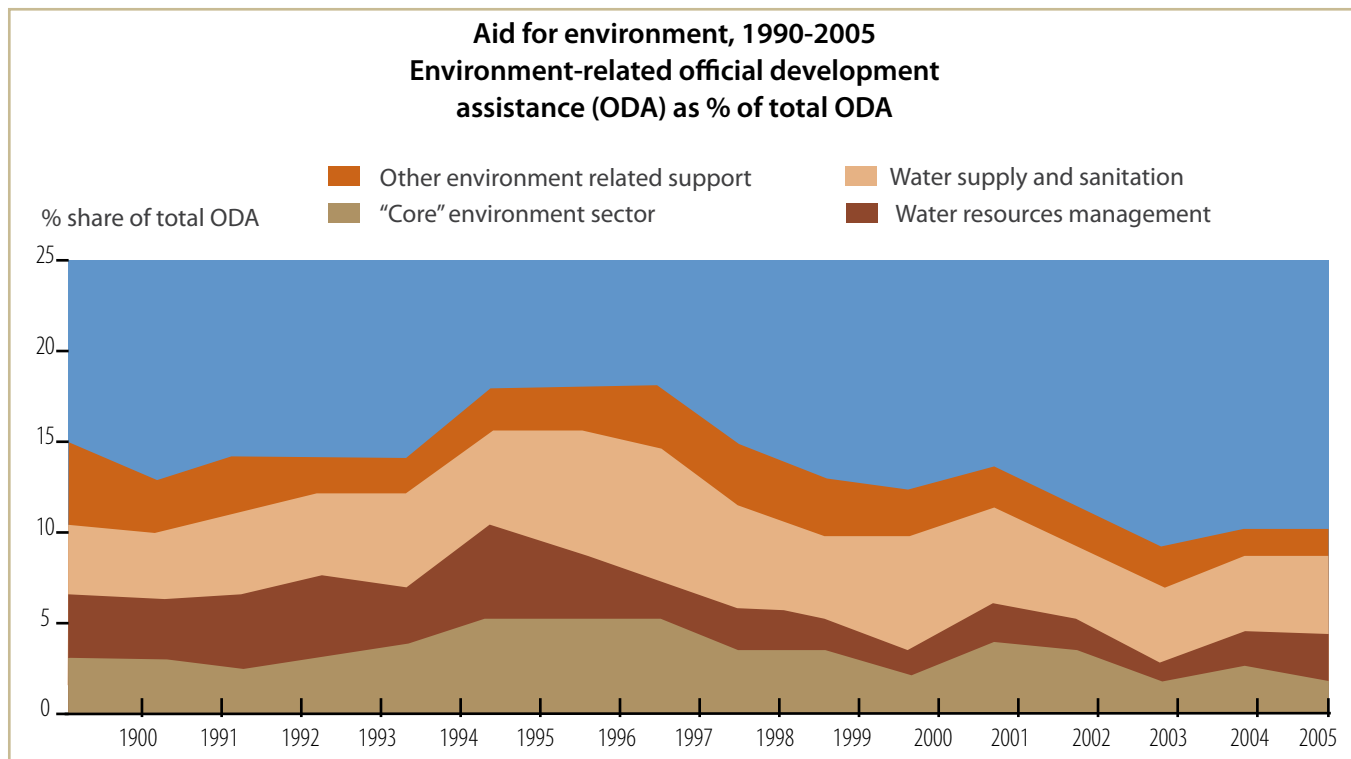
In all of this, it is often the poorest people who face the greatest risks, whether in the drylands of Africa, the river deltas of Asia, the tropical forests of Latin America, or the megacities emerging all over the developing world. These very same people provide the bulk of labor that keep economies running. Therefore environmental considerations must be part and parcel of any proposed solution for economic growth, revitalization and stability.

A Paradigm Shift

Unfortunately, the window for action to deal with these problems is closing quickly. UNDP’s Human Development Report 2007/2008 estimated that stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent catastrophic climate change will require a 50% reduction in greenhouse gas emissions by 2050 from 1990 levels. This in turn will require radical measures in terms of climate change mitigation and adaptation. In stark contrast, another 10 years of business-as-usual could lock the world into catastrophic and irreversible climate transformations.

The International Energy Agency estimates that between now and 2030, US\$ 550 billion per year is needed for clean energy investments if we are to reduce greenhouse gas emissions by 50% by 2050. Approximately 50% of these funds will be required in developing countries. Furthermore, UNDP estimates that at least US\$ 86 billion will be required annually for adaptation to climate change by 2015.

Unfortunately, development assistance by itself can do very little to close this gap. Official development assistance (ODA), at present, provides only about US\$ 10 billion per year for climate change-related activities, a small percentage of what is required, and this is declining.



Statlink <http://dx.doi.org/10.1787/262477124883>

Facing this massive challenge with limited resources requires a paradigm shift. Traditionally ODA has been used as a source of finance for discrete projects. Today, given the limits to this funding and the huge challenges outlined above, development organizations such as UNDP have to use their limited resources as a catalyst to redirect other financial flows towards sustainable development technologies and practices.

The Opportunity

In 2008, the private sector invested nearly US\$ 150 billion of new money in clean energy technologies. Although there is some concern that the current financial crisis may freeze financing for green energy projects, or that a number of financial incentives for energy efficiency and renewable energy will be phased out by governments trying to trim budget deficits, it is expected that investments in clean energy technologies will have grown to about US\$ 450 billion by 2012 and US\$ 600 billion by 2020. However, these financial flows often remain restricted to developed countries and a small number of rapidly developing countries, barriers still

need to be removed before such financial flows will impact many other developing countries.

For example, the Kyoto Protocol created the Clean Development Mechanism (CDM) to promote both sustainable development and greenhouse gas reductions in developing countries. The CDM is a global cap-and-trade mechanism, which allows developing countries to earn credits for emission reduction projects and sell these to industrialised countries. Despite its potential, only a limited number of countries are benefiting, and CDM benefits have bypassed Africa almost entirely. Only five countries – China, India, Brazil, South Korea, and Mexico – are expected to be generating significant CDM credits by 2010, but they will capture over 80 percent of the market. Existing markets in many countries often fail to attract investments in lower-carbon technologies and sustainable land-use projects. The specific market conditions of developing countries need to be incorporated into the design of new market-based and innovative financial mechanisms. At the same time, developing countries need assistance to put into place an enabling environment (e.g. public policies, institutions, human resources) so that they are in a better position to leverage these new sources of finance.

Classification of Climate Change Mitigation Instruments	International Schemes	National and Sub-National Schemes
Public Funds	ODA (multilateral, bilateral and decentralized cooperation) Multilateral Funds	Green economic stimulus Environmental Fiscal Reforms Export Credits Rebates & Subsidies Tax credits & Tax Free Bonds Low interest loans
Private Funds	Green Equity Finance Private investment funds Foundations Non-Governmental Organizations Global Philanthropic Foundations Corporate Social Responsibility	National Philanthropic Foundations Corporate Social Responsibility (National corporations)
Market based mechanisms	Tradable Renewable Energy Certificates Carbon Cap-and Trade Mechanisms (CDM, JI, voluntary) Tradable Renewable Energy Certificates Green insurance contract	Tradable Renewable Energy Certificates Utility Demand Side Management Green mortgages Tax free climate change bonds Domestic carbon projects
Innovative instruments	Transaction Taxes (Tobin) International CC Finance Initiative Air Travel Levy Global Carbon Tax Debt-for-Efficiency Swaps International Carbon Auction Funds International non-compliance fees Efficiency Penny	Carbon Taxes Energy Taxes Auction of Emission Allowances National Non-compliance fees Green Investment Schemes Efficiency Penny

Recognizing that most of the financing for climate change and ecosystem service conservation in the coming years will have to come from private sources, the international community is currently piloting a number of new market-based instruments and innovative financial mechanisms to attract and drive direct investment towards green technologies and practices. For example, the table above lists a range of these new financing mechanisms for climate change mitigation.

Removing these barriers and creating conditions that allow markets and private investment flows to address pressing environmental problems is a key priority for UNDP. Although its resources are small, UNDP can play a critical role in laying the foundation for effective markets that in turn can leverage new sources of environmental finance from the public and private sectors.

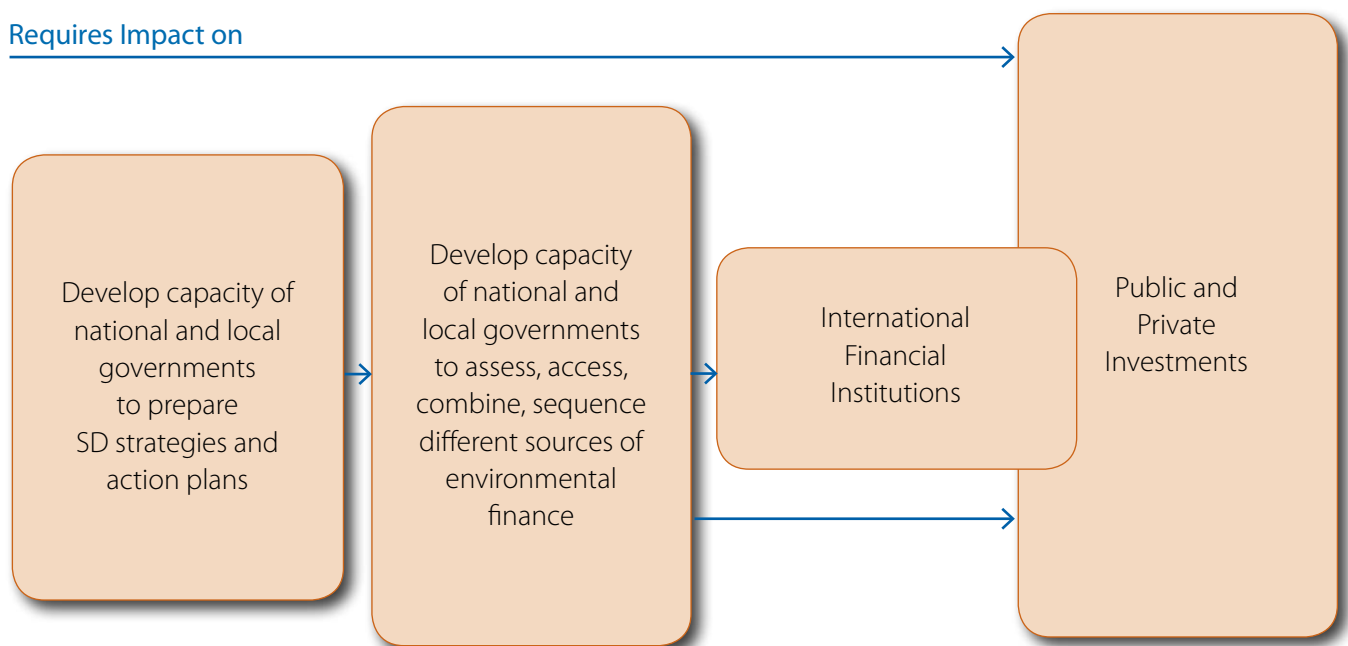
The UNDP Vision – Transforming Economies

To achieve such an economic transformation, UNDP helps national and sub-national governments prepare sustainable development action plans to identify priority measures. It then provides guidance to public authorities on how to choose and design the most appropriate policies and financing schemes to implement these priority measures, in a manner responsive to their unique national and sub-national conditions. Such financing schemes can include ODA, carbon finance, public-private partnerships, corporate social responsibility funds, index insurance schemes, green bonds and the like.

Once the policy measures have been identified, UNDP helps client countries translate these into individual projects that implement these policy changes, strengthen institutions and secure investments. Through a number of environmental finance facilities, UNDP can then help countries to access new sources of environmental finance to implement these projects. Such facilities include the Global Environment Facility (GEF), MDG Carbon Facility, the joint UN programme on reducing emissions from deforestation and land degradation (UN-REDD), and Climate Resilient Territories. As an illustration of the services provided by these environmental facilities, Box 2 summarizes how MDG Carbon operates.

A Big Vision - Transforming Economies

Requires Impact on



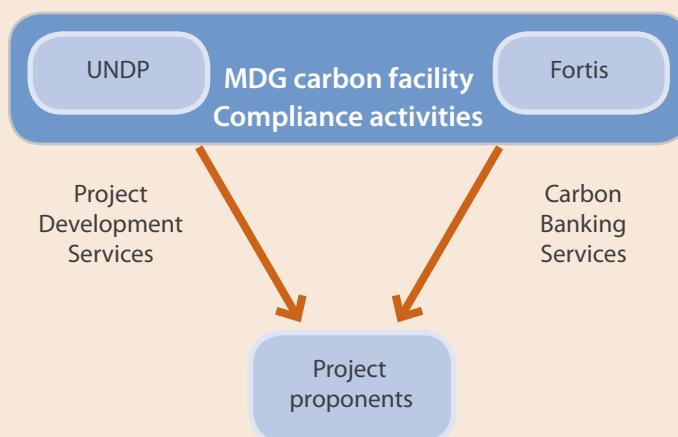
Box2: The UNDP MDG Carbon Facility - Leveraging Carbon Finance for Sustainable Development

UNDP's MDG Carbon Facility is an innovative financing mechanism designed to direct increased financial flows from the growing international market in carbon credits toward projects in developing countries that contribute directly to meeting the Millennium Development Goals (MDGs). The MDG Carbon Facility's compliance activities represent collaboration between UNDP and an international financial services provider, Fortis Bank, offering a "one-stop-shop" package of development and commercialisation services to emission reduction projects.

MDG Carbon Facility's services to Project Proponents

- Performing in-depth due diligence to assess the carbon, technical, legal and financial viability of proposed carbon projects.
- Assistance with preparing key project-related documentation, including the Project Design Document (PDD), financial models and legal contracts.
- Guidance to navigate each stage of the CDM / JI project cycle.
- Arranging project validation, project registration and preliminary verification of emission reductions.
- Preparation and oversight of a monitoring plan to track project emission reductions.
- Providing direct access to Fortis Bank's carbon trading desk, including purchase and marketing of the project's credits.

DP and Fortis' roles in the MDG Carbon Facility



Delivering the Vision

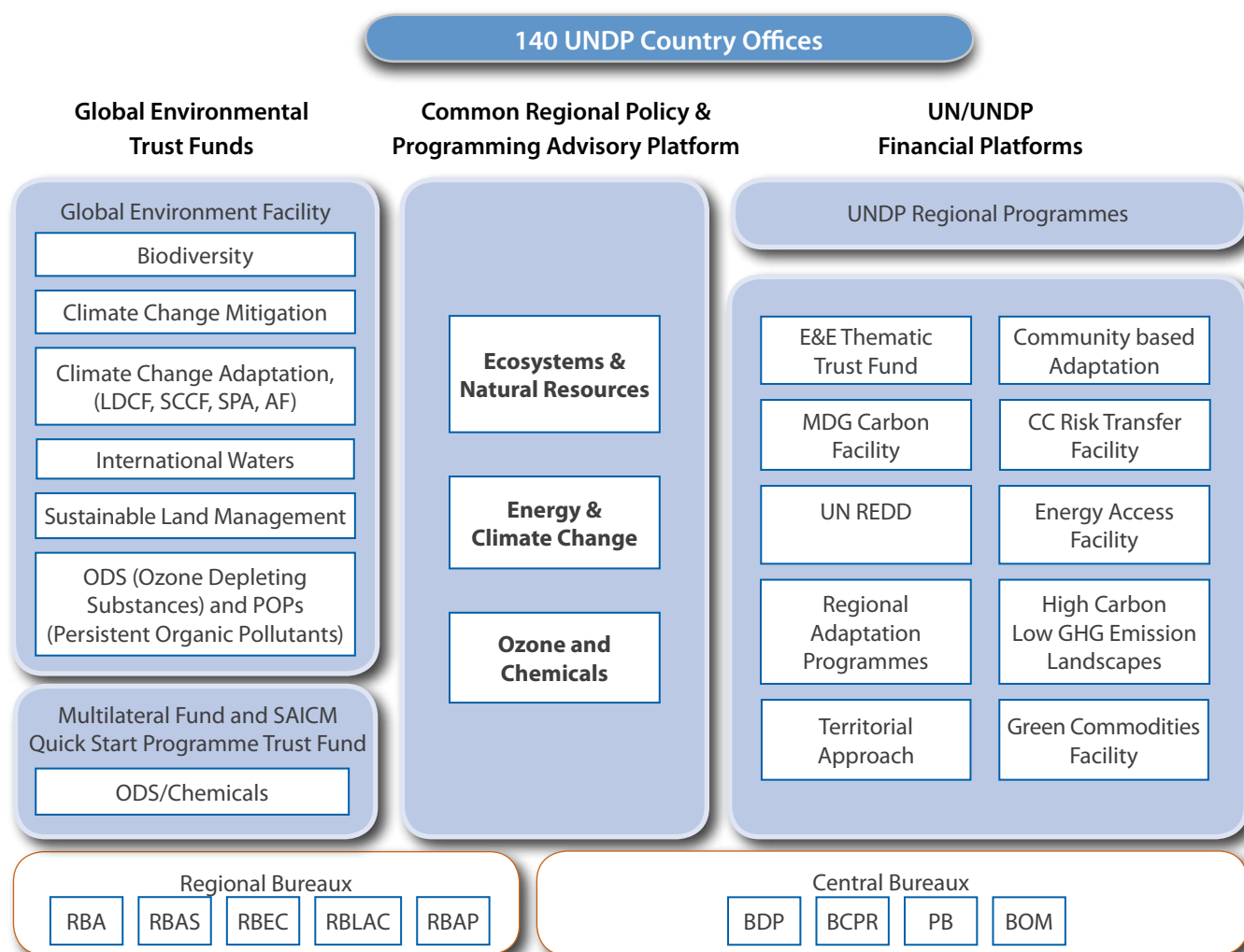
To deliver these environmental finance services, UNDP is mobilizing its more than 150 environment and energy experts located in headquarters and six Regional Service Centers, in addition to its more than five thousand staff distributed across more than 160 countries. Expertise is grouped into three advisory platforms: ecosystems and natural resources; climate change adaptation/mitigation and energy; and ozone depleting substances and chemicals.

Each UNDP regional technical expert can advise client countries on a variety of financial instruments and on how to combine and sequence them to implement priority development initiatives. For example, staff in the energy and climate change cluster can help countries combine and sequence resources from the

Multilateral Fund for the Montreal Protocol, the GEF, and CDM and voluntary carbon markets to phase out energy-inefficient, ozone depleting substance consuming appliances.

Helping governments attract and drive private investment towards sustainable solutions by combining and sequencing various financial instruments to effect policy change provides a more complete, robust and sustainable approach than relying purely on ODA. Environmental sustainability in turn is, and will always be, an essential component in achieving UNDP's primary mission of helping reduce poverty, promoting sustainable development, and ensuring social and economic stability in the world.

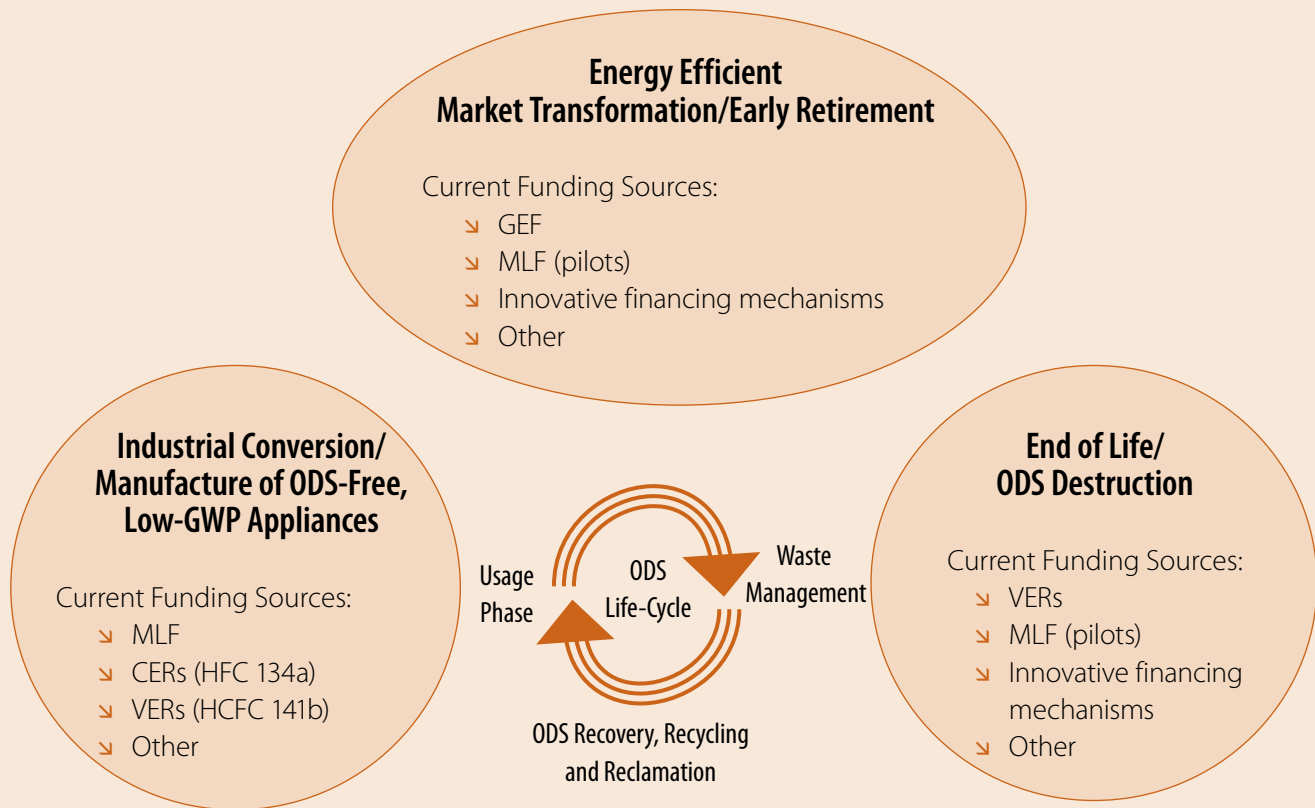
Delivering UNDP Environmental Finance Services



Box3: Combining and Sequencing Funding for Environment and Development Benefits

Due to the existing gap between the Montreal Protocol, which governs ozone-depleting substances (ODS), and the Kyoto Protocol governing GreenHouse Gas emissions (GHGs), over 30 Gt CO₂ equivalents of GHGs could be emitted from ODS stockpiles over the next two to three decades. By comparison, the Kyoto Protocol is targeted to reduce emissions of 5 Gt CO₂ equivalents for the 2008-2012 period.

The diagram below presents a possible approach to leverage voluntary carbon finance to address the existing gap between the Montreal Protocol and the Kyoto Protocol and promote energy efficiency, decrease the dependency of the country on imported fossil fuels, eliminate ozone depleting substances and reduce poverty in developing countries.





For Further Information:

Veerle Vandeweerd

Director
UNDP Environment & Energy Group
304 East 45th Street
Room FF-982
New York, NY 10017
E-mail: veerle.vandeweerd@undp.org
Phone: +1 212 906 5020

Yannick Glemarec

UNDP GEF Executive Coordinator &
Director, Environmental Finance
UNDP Environment & Energy Group
304 East 45th Street, FF-9th Floor
New York, NY 10017
E-mail: efs@undp.org
Phone: +1 212 906 5026



Multilateral Fund for the Implementation of the Montreal Protocol (MLF)



WHAT IT DOES

The Multilateral Fund for the Implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer (MLF) is a financial mechanism established in 1991 to assist developing countries to meet Montreal Protocol compliance targets. The Fund facilitates the transfer of ozone friendly technologies and financial assistance to developing countries so that they can phase out ozone-depleting substances (ODS).

The Montreal Protocol, adopted in 1987, has contributed to reversing the damage done to the ozone layer and is recognized as a global success story of global environmental protection. This is demonstrated by the massive reductions in the use of ODS worldwide since it came into force. By the 20th anniversary of its ratification, in September 2007, the Montreal Protocol had helped phase out over 95 percent of the ozone depleting substances it set out to control.

This is a story of cooperation, speedy action, equity between contributing and recipient countries, the

importance of country-driven approaches and the development of an innovative, accountable and transparent financing structure. By empowering governments and promoting national advocacy for ozone protection in developing countries, the Multilateral Fund has built capacity in all developing countries eligible for assistance from the Multilateral Fund. This capacity provides a vehicle for the management of these ozone depleting chemicals by national governments encouraging cooperation at the national, regional and global levels.

HOW IT WORKS

The work on the ground in developing countries is carried out by four implementing agencies: the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP), the United Nations Industrial Development Organization (UNIDO) and the World Bank. Between 1991 and 1995, the Multilateral



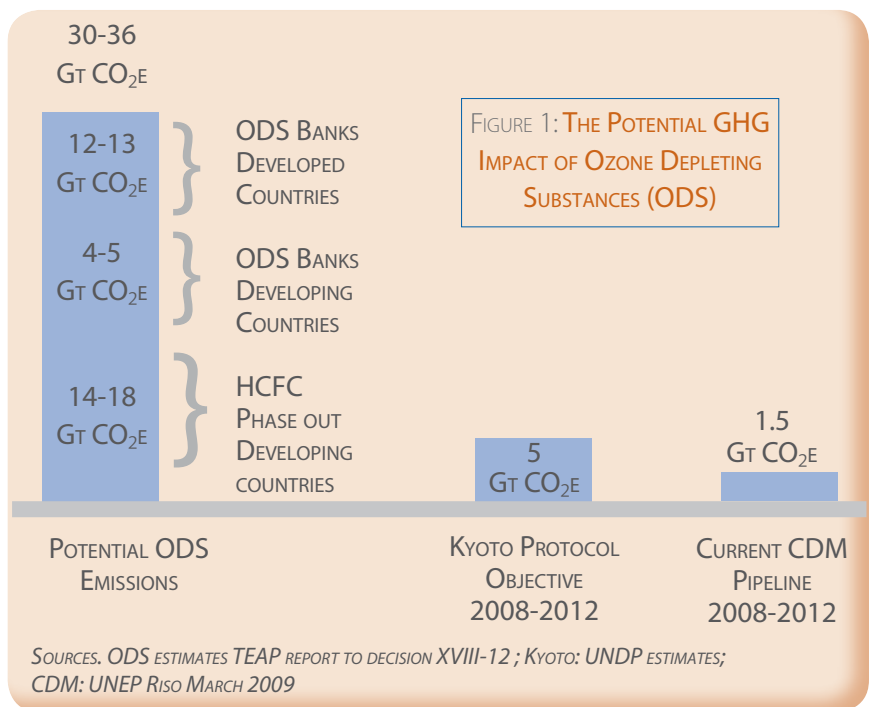
Fund built the capacity to deliver a US\$ 200 million programme annually.

With financial support from the Multilateral Fund and bilateral donors, UNDP works with a broad range of partners to assist developing countries to adopt and implement strategies that preserve the ozone layer while safeguarding the global climate. These partners include governments, industry, technical associations, agricultural institutes, academia and civil society. To date UNDP has been managing a global programme of US\$ 500 million to provide assistance to more than 100 countries.

THE WAY FORWARD

Many chemicals regulated under the Montreal Protocol also have high Global Warming Potential and contribute to climate change. Technical and scientific assessment panels under the ozone protection and climate change regimes have noted that the global decline in ODS emissions, as a result of activities undertaken in support of the Montreal Protocol, have also resulted in greenhouse gas reductions equivalent to several billion tonnes of CO₂ equivalent. These significant reductions make the Montreal Protocol a key contributor to the global fight against climate change. This moved the parties to the Montreal Protocol to make important decisions in September 2007 to accelerate the phase out of hydrochlorofluorocarbons (HCFCs), chemicals that have high Global Warming Potential. The phase out of HCFCs could result in the mitigation of 14-18 billion tonnes of CO₂ equivalent (see Figure 1). The opportunity also exists to prevent emissions of significant quantities of ODS from existing stockpiles ("banks"), and from products that are being discarded because they are no longer useful or are being replaced in connection with energy efficiency programmes. Preventing these emissions could result in the mitigation of 16-18 billion tonnes of CO₂ equivalent (see Figure 1). To this end the Montreal Protocol Parties agreed in 2008 to instruct the MLF to finance pilot projects in developing countries for the destruction of ODS Banks.

One of the areas in which UNDP's MDG Carbon Facility is seeking to expand its activities is the rapidly increasing voluntary emissions reduction market. An expansion of its scope is foreseen with respect to non-Kyoto gases, in particular the funding of suitable projects that aim to phase out ozone depleting substances, an area in which UNDP has long-standing expertise. UNDP's current role as Lead Agency for a significant number of countries seeking to phase out HCFCs puts it in a unique position to help countries identify and develop appropriate greenhouse gas emission reduction projects while building market credibility and managing risks appropriately. UNDP believes that a central requirement for any successful entry into carbon finance, whether voluntary, compliance or fund-based is the establishment of a robust oversight framework. UNDP is working with the Montreal Protocol bodies to secure funding for climate benefits under the Montreal Protocol, as well as providing financing solutions to a large number of countries that UNDP assists.



FOR FURTHER INFORMATION

Suely Carvalho
 Chief, Montreal Protocol and Chemicals Unit
 UNDP Environment and Energy Group
suely.carvalho@undp.org





HOW IT WORKS

The Environment and Energy Thematic Trust Fund (EE TTF) gives seed money to innovative and catalytic initiatives. This allows UNDP to quickly deploy resources into new business areas, thereby responding to new global or partner country demands. The EE TTF is a flexible co-financing mechanism which allows UNDP to receive targeted resources. It supports the work within the four Key Result Areas of the UNDP Strategic Plan that guides UNDP's work in the area of environment and sustainable development. These are: 1) environmental mainstreaming, 2) environmental finance, 3) climate change, and 4) local capacity for service delivery. Without the EE TTF a number of UNDP's most successful and visible initiatives would not have been possible. These flagship programmes in turn have helped UNDP to raise the profile of environmental issues in development programming.

Since 2001, approximately US\$ 49.8 million in funding have been channelled through the Thematic Trust Fund. The EE TTF complements UNDP's regular work funded core resources and from other trust funds such as the Global Environment Facility (GEF) and the Multilateral Fund for the Implementation of the Montreal Protocol (MLF).

Example from Key Result Area 1: The Water Governance Programme

The Water Governance Programme aims to integrate human rights as well as climate change adaptation considerations into water policies, strengthening water governance in general. The UNDP Water Governance Strategy comprises the following areas: 1) developing capacities for Integrated Water Resources Management (IWRM) to reduce poverty and vulnerability; 2) helping countries to achieve or exceed the water supply and

sanitation Millennium Development Goals (MDGs) through adaptive water governance; and 3) strengthening regional and global cooperation in the water and sanitation sectors through adaptive governance of shared water resources.

Key results include: the launch of the GoAL WaSH (Governance, Advocacy and Leadership for Water, Sanitation and Hygiene) Initiative with country assessments that have been carried out in 11 countries and the formulation or development of support programs; a significant contribution to the UN-Water Task Force on Sanitation and its work on the preparation for and implementation of the International Year of Sanitation in 2008; the support to the publication of the World Water Development Report III; and the codification of water practitioners' knowledge and promoting cross-agency collaboration through an interactive internet platform: Waterwiki.net.

Example from Key Result Area 2: Regional Clean Development Mechanism (CDM) Capacity Building Project for Sub-Saharan Africa

The UNDP-UNEP (United Nations Environment Programme) cooperation project "Regional CDM Capacity Building Project for Sub-Saharan Africa", a component of UNDP's broader MDG Carbon Programme, aims to assist participating countries in creating an operational CDM market framework. This includes the creation of an environment in which functioning public institutions are able to effectively interact with the private sector to jointly develop CDM projects. UNDP works with the private sector on CDM project development and UNEP works with the public sector on the framework conditions.

The expected outputs are: 1) Sector and project scoping studies; 2) national and regional capacity-building workshops and networking for Designated National Authorities, the central agencies for CDM projects in a country; 3) CDM project seminars/workshops for the private sector; 4) south-south technical exchanges; and 5) specific technical assistance activities. In 2008, CDM capacities of six African countries have been strengthened. This initiative is the first on-the-ground implementation and concrete outcome of the Nairobi Framework, which aims to assist developing countries, especially those in Sub-Sahara Africa, to improve their level of participation in the CDM.

Example from Key Result Area 3: **Capacity Development for Policy Makers to Address Climate Change**

The pilot initiative “Capacity Development for Policy Makers to Address Climate Change” builds national capacity to coordinate ministerial views, participates in the United Nations Framework Convention on Climate Change (UNFCCC) process, negotiates positions under the 2-year timeframe of the Bali Action Plan, and assesses investment and financial flows to address climate change for up to three key sectors and/or economic activities. The project works closely with UNEP and the UNFCCC Secretariat, as they are undertaking a complementary regional project for climate negotiators. Key results include: a global investment and financial flows assessment workshop, gathering national and international expertise, including different UN and scientific organisations; three National Inter-Ministerial Dialogue Workshops; and the creation or consolidation of 10 national networks of stakeholders and policy makers.

Example from Key Result Area 4: **The Equator Initiative**

UNDP continues to support the Equator Initiative, a partnership that brings together the UN, governments, civil society, businesses, and grassroots organisations to help develop the capacity and raise the profile of local efforts to reduce poverty through the conservation and sustainable use of biodiversity. The Equator Initiative focuses on three areas of action: the Equator Prize, which rewards outstanding community efforts in biodiversity conservation and poverty reduction; Equator Knowledge,



which supports knowledge management and research at the nexus of biodiversity and poverty; and Equator Dialogues, which creates platforms at international conferences and fora for local and indigenous communities to share best practice, inform policy, and build lasting partnerships. The Equator Initiative among others held the Equator Prize 2008 and hosted community dialogue spaces at numerous international conferences.

THE WAY FORWARD

UNDP has launched key environment and sustainable development initiatives that respond to today’s demands. UNDP will continue to address climate change adaptation and mitigation as outlined in its Climate Change Strategy. As the UN agencies find joint ways to work together to mainstream environment and energy into national agendas and to catalyse finance to implement national actions to achieve the MDGs, the EE TTF is an excellent mechanism to up-scale such consolidated actions.

FOR FURTHER INFORMATION

Gordon Johnson
Practice Manager
UNDP Environment and Energy Group
gordon.johnson@undp.org





WHAT IT DOES

The Global Environment Facility (GEF) provides grants and concessional financing to assist countries to meet the costs of achieving their commitments under the global environmental conventions in biodiversity, climate change, and desertification, as well as supporting action on international waters and the phase out of persistent organic pollutants (POPs).

As a partnership between three Implementing Agencies - UNDP, UNEP and the World Bank, and seven Executing Agencies¹, the GEF works to integrate action to generate global environmental benefits into the mainstream of country led development. UNDP currently delivers approximately US\$250 million per year of GEF funds to countries to support the strengthening of national, sub-national, and regional institutional and financial capacities.

As of February 2009, UNDP's GEF-supported portfolio stood at over US\$ 8.7 billion (including US\$ 2.7 billion in GEF grants) representing more than 570 projects of over US\$ 1 million each, and a further 370 projects of less than US\$ 1 million. In addition, UNDP provides over US\$ 37 million per year to more than 1,000 community level projects in 119 countries through the Small Grants Programme (SGP).

The strategic focus of UNDP's support is to help countries put in place the policy, institutional and financial frameworks that will help drive private investment flows towards environmentally sustainable solutions.

For example, in climate change mitigation UNDP helps countries put in place instruments such as smart wind tariffs, power purchase agreements, and capitalization of pilot financial instruments. In biodiversity, the emphasis is on unleashing the economic potential of protected areas

and incorporating ecological resilience into commodity production, distribution and purchasing through the greening of supply chains and ensuring the availability of private capital to biodiversity friendly or biodiversity based small and medium sized enterprises.

In waters and land, the emphasis is on putting in place governance and regulatory arrangements that enable users to bring to market a full range of products and services, including carbon storage, reduced greenhouse gas emissions, and water supply, alongside their primary agricultural, forestry or fisheries products, and so have clear financial incentives for sustainable practices. In POPs UNDP's focus is on combining and sequencing different sources of environment financing to generate financial incentives for phase out.

RESULTS

Some impacts of UNDP GEF supported work include:

- Avoidance of an estimated 410 million tonnes of CO₂ emissions through activities to transform markets towards sustainability in energy efficiency, particularly in buildings, renewable energies and transport.
- 127 new Protected Areas (PAs) covering 10.02 million hectares have been created in 50 countries. 163 new PAs covering 8.6 million hectares are in the process of being established, and the management of 398 existing PAs covering 73.9 million hectares has been strengthened. Biodiversity objectives are being incorporated into production practices on over 257 million hectares in 33 countries.

¹ Currently the 7 GEF executing agencies include the Asian, African, and Inter-American Development Banks, the European Bank for Reconstruction and Development, FAO, IFAD, and UNIDO.

- 32 countries are making substantial progress in developing the legal, policy and institutional frameworks necessary to ensure the long term sustainability of international water bodies of vital environmental and strategic importance in their country and/or region. Many other countries continue to strengthen their frameworks. Most recently, the Ministers of Niger, Chad and those of the countries in the Guinea Current adopted Strategic Action Programmes committing countries to governance reforms targeting their agreed priority transboundary environmental and water resource issues.



HOW IT WORKS

The GEF Implementing and Executing Agencies are responsible for project identification and supervision including programming, project formulation, project financing, and then supporting implementation, including monitoring, oversight and evaluation. UNDP GEF supported programmes and projects are typically developed and executed by national governments, though on occasion international agencies and NGO's can execute the project. A wide range of public and private sector agencies and institutions, including local communities, are involved in project implementation.

UNDP GEF activities are mainstreamed into overall UNDP operations and are primarily managed by the organization's network of over 140 country offices. These are supported by regional technical specialists located in Bangkok, Bratislava, Dakar, Panama, and Pretoria, and coordinated and supported by a central UNDP environment team in New York.



FOR FURTHER INFORMATION
UNDP GEF
Email: gefinfo@undp.org





WHAT IT DOES

The UNDP Green Commodities Facility (GCF) is working to scale up UNDP's existing initiatives with companies, governments and others intended to help shift markets to drive the production and sale of green commodities. Green commodities are those produced and supplied in a manner which minimizes negative environmental impacts, and includes bulk traded products as well as more specialized niche varieties. For example, in West Africa UNDP is working with Cadbury, who has invested US\$70 million over ten years to shift cocoa production

across West Africa towards more environmentally sustainable and socially beneficial methods. While currently focused on cocoa, coffee, cotton, and tuna, the range of commodities addressed is being expanded to include other agricultural, forestry and fisheries products including rice, soy, palm oil, lobster, shrimp, beef, and timber, as well as other important fruits and vegetables.

HOW IT WORKS

The GCF operates at global and national levels to address issues across the supply chain at different scales as required. At a global level the GCF undertakes research, baseline reviews, prepares guidance documents and develops partnerships and policy. This includes engagement with companies on sustainability policy, programmes and procurement down the supply chain.

At the country level, support services for a commodity include:

- i. Delivery of technical assistance and training for farmers and businesses in both business management and sound environmental practices including:
 - . Support to existing related service providers – from fertilizer production to commodity trading, marketing, and product sales to make them more environmentally friendly.
 - . Support for the creation of new types of local enterprises providing services to support green commodity production.
 - . Research and Development for eco-production of commodities.
- ii. Ensuring the availability of credit through partnerships with financial institutions so that

Global Importance of Coffee

Coffee is the world's largest commodity crop and, after petroleum, the second largest globally traded commodity. Coffee production covers over 10 million hectares, generates US\$70 Billion in annual retail sales and employs 25 million people. Virtually all coffee is grown in, or in place of, tropical forests. So the way it is produced has huge impacts on rural development and environmental sustainability of regions.



UNDP's Partnership with Cadbury for Sustainable Cocoa quoted directly from Cadbury website.

Cadbury, the world's leading confectionery company, has launched the Cadbury Cocoa Partnership to secure the economic, social and environmental sustainability of around a million cocoa farmers and their communities in Ghana, India, Indonesia and the Caribbean. This is done through a long-term commitment to improving farmer livelihoods and farming communities and direct farmer involvement alongside NGO partners and governments.

This ground-breaking initiative, which will be carried out in partnership with the United Nations Development Programme (UNDP) and other partners, marks 100 years since the Cadbury brothers first began trading in Ghana and aims to holistically support the development of sustainable cocoa growing communities.

The Cadbury Cocoa Partnership programme aims to address some of the root causes of these issues by improving farmer productivity and helping to attract the next generation into cocoa farming. The Partnership will focus on:

- Improving cocoa farmer incomes by helping farmers increase their yields and produce top quality beans.
- Introducing new sources of rural income through microfinance and business support to kick start new rural businesses and introduce additional income streams such as growing other crops.
- Investing in community led development.
- Improve life in cocoa communities e.g. supporting education through schools and libraries, supporting the environment through biodiversity projects, and building wells for clean, safe water
- Working in partnership and developing a pioneering model which will be led from the grass roots.

Farmers, governments, NGOs and international agencies will work together to decide how the funding is spent and work with local organizations to turn plans into action.

- financial services are available to green commodity businesses, including at the micro-finance level.
- iii. Analyzing and assisting government reform of policies and regulations to create better economic conditions for sustainable agriculture businesses.
- iv. Assisting governments in land use planning for agricultural commodities, including forestry.
- v. Putting in place long-term support through sustainable government extension services or alternative private sector means to support green commodity producers.
- vi. Piloting and replicating innovative financing mechanisms by governments and companies to increase funding to support sustainable production practices. This will include both new indirect revenue generation through charges and taxes as well as direct payments for ecosystem services.
- vii. Verification of achievement of environmental practices through monitoring, scorecards and reporting on indicators for ecosystem health.
- viii. Increasing access to markets for green commodity producers through the development of national and global platforms.

WORK IN PROGRESS

The GCF will develop and expand operations over the next ten years. The Facility is currently in Phase I and strategies are being finalized, partnerships solidified, commodities prioritized, countries selected, pilots initiated and the Facility capitalized. Phase II will focus on further developing in-country programmes leading to a phase where programmes will be fully institutionalized into national government policy and market dynamics.

FOR FURTHER INFORMATION

Andrew Bovarnick
Lead Natural Resource Economist
UNDP Environment and Energy Group
andrew.bovarnick@undp.org





Territorial Approach



WHAT IT DOES

The implementation of the mitigation and adaptation policies necessary to successfully address the climate change challenge will only be achieved, and sustained, through involvement and commitment at all levels of decision-making. This includes, in particular, sub-national authorities (regions, provinces, states or municipalities) who have a key role to play in actively incorporating climate change considerations in day-to-day business and in introducing climate-friendly policies, regulations and investment decisions. Adaptation to climate change is very site-dependent and local planning decisions will be critical to tailoring adaptation action to the conditions in which it will take place. This is particularly relevant as 50% to 80% of GHG emissions are influenced by local behavior and investment choices.

The Territorial Approach initiative is a response to the increasing demand from sub-national authorities for assistance in assessing and managing the physical and socio-economic impacts of climate change. One of the main objectives of this initiative is to enhance the capacity of regional and local government to enact regulatory measures, as well as to take advantage of new sources of environmental finance in order to implement their climate change responses.

HOW IT WORKS

The Territorial Approach helps regional and local governments prepare integrated climate change action plans to identify priority mitigation and adaptation measures (negative costs/no-regrets/urgent initiatives). It then provides guidance to public authorities on how to choose and design the most appropriate policies and financing schemes (carbon finance, UN-REDD, ODA, public-private partnerships, corporate social

responsibility, index insurance, green bonds, etc.) to implement these priority measures, in a manner responsive to their unique territorial conditions.

A key strategy of the Territorial Approach is to establish robust partnerships between and amongst regions in industrial and developing countries, NGOs, academia, bilateral aid organizations, UN agencies, and the private sector. The focus of these partnerships is to foster knowledge transfer and direct investment to address climate change. Under the collaborative “One UN” approach, experts from various UN departments help in brokering these partnerships.

The results – greater capacity at the regional level to confront the double challenge of mitigation and adaptation

WORK IN PROGRESS

The Territorial Approach was launched at the first World Summit of Regional Governments on Climate Change in Saint-Malo (France) in October 2008. Some 100 regions from 65 countries attended.

The first 5-year programme of the Territorial Approach involves:

Phase 1: Training workshops by peers for 500 sub-national authorities in 22 regional groupings. Information about climate change involves exchanges of good practices, methods for assessment, potential solutions, and financial instruments available from the UN, national governments, regions, and private sector.

Phase 2: Preparation of Integrated Territorial Climate Plans (ICTPs) for 50 regions, including assessment of carbon emissions, present and future vulnerability, mitigation and adaptation strategies. Once the framework is in place, regulatory and financial instruments are identified.

Phase 3: Implementation of priority projects identified in the ICTPs leveraging public and private financial resources, including new sources of environmental finance.

Phases 1 and 2 require a total budget of US\$ 70 million funded through resources mobilized from national public institutions, the UN system, the regions, bilateral aid agencies and the private sector. Phase 3 is expected to channel about US\$ 2.5 billion in direct investment for climate change management in client regions.



FOR FURTHER INFORMATION

Yannick Glemarec
UNDP Executive Coordinator for the GEF,
and Director of Environmental Finance
UNDP
yannick.glemarec@undp.org

Christophe Nuttall
Director, Hub for Innovative Partnerships,
UNDP
christophe.nuttall@undp.org

Olivier Deleuze,
Chief, Major Groups and Stakeholders Branch,
Division of Regional Cooperation,
UNEP
olivier.deleuze@unep.org

Christophe Bouvier,
Director, Regional Office for Europe,
UNEP
christophe.bouvier@unep.ch





CLIMATE CHANGE AND NATIONAL ECONOMIES

Climate change will transform patterns of human settlement and challenge the viability of national economies. While developed countries are preparing to adapt to climate change, it is developing countries that will be faced with the greatest and earliest burden in terms of adverse impacts on living standards, livelihoods, economic growth, and human vulnerability. These countries are least equipped to respond to its impacts and therefore most vulnerable to its rising risk. As in the developed world, it is the people themselves who will have to deal with the consequences of a changing climate.

Solutions must be locally specific!

COMMUNITY-BASED ADAPTATION

Climate change is global, but impacts are regional and local. Local communities depend upon climate sensitive resources for their livelihoods. Hands-on adaptation measures are needed at community levels to strengthen resilience and to increase their ability to manage the risks and negative impacts of climate change.

A community with a diversity of options to respond to climate change risks has higher adaptive capacity and reduced vulnerability

While communities have responded successfully over time to the challenges presented by climate variability and change, the magnitude, intensity and frequency of changes have reduced their capacity to cope or respond effectively. Vulnerable local communities have an urgent need to raise their capacity to be able to effectively adapt to climate change. A vital approach is Community-Based Adaptation (CBA), which can be viewed as an additional

layer to community-driven priorities, thereby addressing climate change risks.

THE WAY FORWARD

As a response to the critical need to support community adaptation initiatives, the United Nations Development Programme (UNDP) with the assistance of the UNDP-GEF Small Grants Programme (GEF-SGP), the United Nations Volunteers Programme (UNV) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) have joined efforts in the UN-Collaborative Programme on Community Based-Adaptation to Climate Change in Developing Countries (UN-CBA).

The UN-CBA supports developing countries' efforts to increase capacity for community-based adaptation to address long-term climate change impacts. UN-CBA is encouraging systemic change in national adaptation-related policy through evidence based results from a portfolio of community-driven climate change risk management projects. UN-CBA promotes global learning related to community adaptation by sharing lessons from a range of initiatives focusing on natural resource management.

WHAT IT DOES

The UN-CBA supports the following areas:

- Vulnerability assessment and mapping.
- Climate-related natural disaster reduction and adaptation.
- Conflict resolution and prevention.
- Creation of innovative financing mechanisms.

- Promotion of volunteerism.
- Knowledge management and policy development.

EXPECTED OUTCOMES

- Capacity strengthened among Non-Governmental Organizations (NGOs) and Community Based Organizations (CBOs) for designing and implementing community-based adaptation measures.
- Climate Change adaptation mainstreamed at the community level.
- Linkages between climate change adaptation and sustainable development policies reinforced.
- Relevant national and sub-national policies and development programmes revised based on lessons from the UN-CBA.
- Lessons based upon effective approaches for implementing community adaptation measures documented and disseminated.

HOW IT WORKS

To implement the UN-CBA, UNDP, UNV and UNESCO have established the Multi-Donor Trust Fund (MDTF) for generating and managing resources to implement the programme.

UN-CBA is a partnership that synergistically brings together the capacities of the three participating organizations to build the capacity of local actors to implement the programme at the community level.

Resources will be mobilized from national public institutions, philanthropic foundations, the UN system, governments of member states of the United Nations, inter-governmental or non-governmental organizations, and from private sources.



FOR FURTHER INFORMATION

Pradeep Kurukulasuriya
 Technical Advisor, Adaptation to Climate Change
 UNDP Environment and Energy Group
pradeep.kurukulasuriya@undp.org



FAST FACTS

United Nations
Development Programme



The UN-REDD Programme

Reducing Emissions from Deforestation and Forest Degradation in Developing Countries

Tropical deforestation and forest degradation – through destructive logging, agricultural expansion, fires, etc. -- accounts for nearly 20% of global greenhouse gas emissions – larger than the entire global transportation sector¹. It is now clear that the stabilization of global temperatures within 2 degrees Celsius cannot be achieved without reducing emissions from the forest sector, along with other mitigation actions². REDD (Reducing Emissions from Deforestation and Forest Degradation) is an effort to value the carbon stored in standing forests as a way to create incentives for developing countries to protect forests. Financial flows resulting from REDD will not only significantly reduce carbon emissions, but it can also benefit developing countries, support poverty reduction and help preserve biodiversity, as well as other vital ecosystem services. Further, maintaining resilient forest ecosystems can contribute to adaptation to climate change.

In September 2008, in response to the Bali UNFCCC COP-13 Decision 2/CP.13 on REDD, FAO, UNDP, and UNEP launched the UN-REDD Programme (United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries). Together, the three participating agencies offer a diverse package of expertise and services. The Programme supports governments to establish the institutional structures and the capacity to implement REDD, and to increase international confidence and understanding about the feasibility and options for including a REDD mechanism in a post-2012 regime.



UN Secretary General and Prime Minister of Norway launch the UN-REDD Programme. Photo: UN Department of Communications and Public Information

1 IPCC Fourth Assessment Report: Climate Change 2007 (2007)

2 REDD- Option Assessment Report – Government of Norway (2009)

It does so by helping countries to build capacity to

THE UN-REDD PROGRAMME AT A GLANCE

- Launched in **September 2008**
- Collaborative initiative between **three** UN agencies: FAO, UNDP, UNEP
- **Two** objectives:
 - Assisting developing countries prepare and implement national REDD strategies and mechanisms
 - Supporting the development of normative solutions and standardized approaches based on sound science for a REDD instrument linked with the UNFCCC.
- **Nine** UN-REDD Programme pilot countries :
 - Africa: Democratic Republic of Congo, Tanzania and Zambia
 - Asia and the Pacific: Indonesia, Papua New Guinea and Viet Nam
 - Latin America and the Caribbean: Bolivia, Panama and Paraguay
- An initial commitment by the Government of Norway of **US \$ 52 million**
- **\$ 18 million** already approved by the UN-REDD Programme Policy Board towards REDD-readiness in five countries

reduce emissions from deforestation and forest degradation and strengthen institutions, governance and ability to establish reference emission levels, payment structures, stakeholder processes, and measurements, reporting and verification systems.

Nine countries are participating in the first phase of the UN-REDD Programme: Bolivia, the Democratic Republic of Congo, Indonesia, Panama, Papua New Guinea, Paraguay, Tanzania, Vietnam and Zambia.

UNDP's Role and Responsibilities

UNDP contributes its **expertise on governance, poverty reduction and indigenous issues** to the partnership to improve the analytical and technical framework of social

and environmental benefits of REDD and provide support to REDD decision-makers.

Recognizing that the causes of deforestation are complex and unique to national context, the UN-REDD Programme supports the development of **nationally-led, nationally-owned REDD strategies**, aided in this by UNDP's presence on the ground in country offices and regional centers. UNDP participates in the initial scoping and alliance-building missions and supports the formulation of National Joint Programmes (NJPs), using convening power to commit and engage a range of stakeholders from within government agencies, the donor community, civil society and the private sector. The first five NJPs presented to the Policy Board – the governing body of the UN-REDD Programme - were approved in March 2009, a budget allocation of US\$ 18 million. In a second phase, UNDP's responsibility is to analyze country programme progress and results for lessons learned and to disseminate examples of good practices.

Committed to finding ways for **REDD mechanisms to benefit the poor**, UNDP's support to countries "REDD-Readiness" includes an assessment of payment distribution and benefit-sharing options that links to pro-poor and livelihood outcomes. Within the framework of the UN-REDD Programme, UNDP is responsible for the provision of case studies on best practice in equitable revenue distribution ; for studying the options to build on REDD payments to include other or bundled payment mechanisms and incentives, at both international and local scales ; and for developing pro-poor benefit indicators for REDD interventions. UNDP is also undertaking background analyses and reviews of national legislative frameworks for REDD, institutional and policy reform issues, forest governance and land tenure issues, and transparency and disclosure mechanisms. Stakeholder participation in the establishment of REDD payment distribution structures - especially at the indigenous peoples and local community level - is a particularly crucial condition to the success of REDD processes. UNDP has developed standard terms of reference for scoping and formulation missions and an operational guidance for NJP Implementation. In addition to hosting consultative workshops to contribute to programme formulation, NJPs include activities and budget allocations that ensure the ongoing participation of Indigenous Peoples and forest-dependent communities.

To be successful, any REDD mechanism must **respect the rights of Indigenous Peoples and other forest-dependent communities**. Towards this objective, UNDP is undertaking global and national consultations. In partnership with the United Nations University, Tebtebba and the Secretariat to the Convention on Biological Diversity, UNDP hosted the Global Indigenous Peoples Consultation on REDD in Baguio City, Philippines, in

November 2008. The overarching principles and recommendations developed during this consultation – which included the call for engagement, information and reliance on free, prior and informed consent – provided the basis for an *Operational Guidance for the Engagement of Indigenous Peoples and Other Forest-Dependent Communities*. This Guidance is being distributed to UN-REDD Programme staff, UN Country Team staff, and national government and civil society counterparts involved in any UN-REDD Programme activities that may impact upon the rights and livelihoods of Indigenous Peoples or other forest dependent communities.

UNDP is responsible for facilitating the self-selection of the Indigenous Peoples representatives to the Policy Board - a process initiated during the Indigenous Peoples' Global Summit on Climate Change in Anchorage, Alaska - as well as civil society representatives self-selection. It also facilitates the input from the independent Civil Society Advisory Group to the UN-REDD Programme through the Policy Board.

The UN-REDD Programme is administered through **UNDP's Multi-Donor Trust Fund Office**, which allows donors to pool resources and provide funding to activities towards this program. Currently, the Government of Norway has allocated USD \$ 52 million for global and national activities; discussions are underway with other donors.

Working Together

The UN-REDD Programme offers a "Delivering as One-UN" support mechanism for country-driven REDD strategies. UNDP supports the mechanisms of inter-agency coordination and the active sharing of information between pilot countries and all stakeholders.

The UN-REDD Programme works closely with the World Bank's Forest Carbon Partnership Facility to ensure complementarity and synergy and avoid the duplication of efforts by participating countries. Coordination is underway at the global scale to align consultation and participation guidelines in countries where both programmes are active.

Working with other REDD actors such as the UNFCCC Secretariat, the GEF, regional development banks, bilateral donors, research institutions, NGOs and CSOs, the UN-REDD Programme maximizes efficiency and the effectiveness of the organizations' collective input.

For more information please visit <http://www.un-redd.net>





MDG Carbon Facility

UNDP Approach to Leverage Carbon Finance for Sustainable Development



The Facility forms part of UNDP’s comprehensive, three-step approach to capacity development for the Clean Development Mechanism (CDM) and Joint Implementation (JI). On a country by country basis, this approach commences with barrier removal, then addresses the establishment of efficient host-country procedures, and finally culminates in the development of emission reduction projects by the Facility.

The Facility is active in both the compliance and voluntary sectors. In the compliance markets, the Facility operates within the existing CDM and JI regulatory infrastructure generating emission reductions that can be used by entities to meet their Kyoto commitments. In the voluntary markets, the Facility is working to develop and establish new technologies not currently addressed by compliance regimes.

What is the MDG Carbon Facility?

The MDG Carbon Facility offers a comprehensive package of project development services for developing emission reduction projects and bringing them to market.

UNDP’s role in the Facility is to provide project development services along the entire project cycle, from project identification to the first issuance of emission reductions. UNDP’s services include performing due diligence, providing technical assistance on project documentation and project approval, and establishing a monitoring system for the project’s emission reductions.

For Further Information

www.mdgcarbonfacility.org
mdgcarbonfacility@undp.org

Millennium Development Goals



Goal 1:
Eradicate
extreme
poverty
and hunger



Goal 2:
Achieve
universal
primary
education



Goal 3:
Promote
gender equality
and empower
women



Goal 4:
Reduce
child
mortality



Goal 5:
Improve
maternal
health



Goal 6:
Combat
HIV/AIDS,
malaria and
other diseases



Goal 7:
Ensure
environmental
sustainability



Goal 8:
Develop
a Global
Partnership for
Development



MDG Carbon Facility

Climate change threatens to seriously undermine efforts to eliminate poverty and reach the Millennium Development Goals (MDGs), particularly in the least developed countries. At greatest risk are the rural poor in these countries, who depend on the natural environment for their livelihoods. Above and beyond current levels of official development assistance, major new investments and innovative financing mechanisms are needed to help developing countries with their efforts to cope with the impacts of climate change, and create more sustainable, less greenhouse-intensive development paths. Emerging market mechanisms have the potential to augment the financial resources available to developing countries, but thus far the rapidly expanding international market in carbon offsets has focused on relatively few countries, with emission reduction projects that, for the most part, have generated little in the way of broad-based sustainable development or poverty reduction benefits.

The MDG Carbon Facility’s Mission

To help leverage the potentially significant benefits of carbon finance for the developing world, UNDP has established the MDG Carbon Facility (the “Facility”), an innovative mechanism for the development of emission reduction projects. The core objectives of the Facility are:

- Broadening access to carbon finance by enabling a wider range of developing countries to participate
- Promoting emission reduction projects which contribute to the MDGs, yielding additional sustainable development and poverty reduction benefits

The Facility aims to bring about market transformation with respect to carbon finance in developing countries—assisting the transition from a pre-market to a fully market-enabled environment that supports MDG-grade carbon projects and attracts substantial direct investment from the private sector.

Objectives for the MDG Carbon Facility

