## **Environment and Sustainable Development:** Harnessing the green economy

AS DEVELOPING COUNTRIES and donors focus on finding immediate solutions to pressing economic challenges, environmental sustainability is again taking a secondary position. Environmental concerns are more urgent now than ever since poverty reduction and long-term prosperity cannot be achieved without an unwavering focus on sustainable development. As the UN's global development network UNDP recognizes that climate change calls for a new development paradigm, one that mainstreams climate change into development planning at all levels, links development policies with the financing of solutions and helps countries move towards less carbon intensive, yet sustainable economies. In 2008, UNDP endorsed a new climate change strategy, which supports the capacity of developing



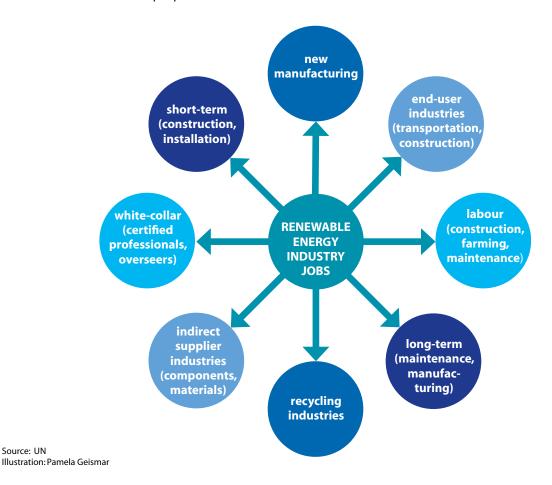
A UNDP partnership to rehabilitate water wells in Uzbekistan's Mingulak district has led to better drinking water and, consequently, decreased rates of infectious diseases.

countries to make informed policy and investment decisions to help reduce greenhouse gas emissions, reduce poverty and accelerate the achievement of the MDGs. The strategy also sets out how UNDP works with UN agencies, the Global Environment Facility (GEF) – consisting of UNDP, the UN Environment Programme (UNEP) and the World Bank – civil society and the private sector.

UNDP promotes both climate change mitigation and adaptation efforts since both are essential to meet the climate change challenge. On mitigation, UNDP's efforts include promoting greater energy efficiency in all sectors and uses, increased utilization of a wide range of renewable energies, increased energy access for the poor, policy reform and capacity development. On the adaptation side, UNDP supports countries as they work to integrate climate risks into national development policy and plans, develop financing options to meet national adaptation costs and share adaptation knowledge and experiences.UNDP's value-added in preventing and mitigating the effects of climate change lies in its strong presence on the ground in 166 countries in terms of both operational capacity and expertise, including both experts on climate change policy and professionals in project development, a combination that allows UNDP to effectively implement projects at the country level. For example, once the final agreement on the new Kyoto Protocol is made, UNDP will help member countries to apply for and manage funds and technology as they work to fulfill their part in a new global deal on carbon emissions. In fact, UNDP has launched a groundbreaking capacity development initiative that is working with 13 African, Asian and Latin American and Caribbean developing countries to choose three key sectors – for example, energy, agriculture and tourism - in preparation for a national inter-ministerial workshop on national climate actions and the Bali Action Plan. Once these sectors are identified, UNDP will support countries in assessing the magnitude and intensity of national efforts needed to tackle climate change, as well as provide more accurate estimates for the funds needed to implement mitigation and adaptation actions.

## RENEWABLE ENERGY CREATES MANY TYPES OF JOBS IN MANY SECTORS:

UNDP is developing new partnerships, planning tools, public policies and financial instruments that help transform and create markets that work for people and the environment.



As the effects of climate change are increasingly felt in tandem with the effects of the economic crisis, opportunities are arising for real development change. UNDP is developing new partnerships, planning tools, public policies and financial instruments that help transform and create markets that work for people and the environment. In 2008, UNDP mobilized more than \$500 million in grant resources and more than \$1 billion in related co-financing through the GEF, the Multilateral Fund of the Montreal Protocol and other major initiatives. By helping to protect forests around the world, UNDP both protects community livelihoods and helps to drive down carbon emissions. The Intergovernmental Panel on Climate Change estimates that the cutting down of forests is now contributing close to 20 percent of the overall greenhouse gases that are entering the atmosphere, making the goal of reducing deforestation

Source: UN

an urgent and immediate one. UNDP, in partnership with FAO and UNEP, is leading global efforts to make this happen. In July 2008, the three agencies partnered with the Government of Norway to finance the first phase of the UN Reduced Emissions from Deforestation and Forest Degradation Programme (UN REDD) with \$35 million. UN REDD is assisting developing countries in the creation of national REDD strategies, the monitoring of forest cover and carbon stocks and the implementation of pilot projects on forest management that maintain ecosystems and maximize carbon stocks while delivering community and livelihood benefits.

A GEF-funded Coal Bed Methane Recovery and Commercial Utilization programme in India demonstrates that recovering methane during and after the extraction of coal is commercially feasible and, once captured, can be used as a clean fuel for



UNDP is supporting a project in Haiti that collects garbage from a slum and recycles it into briquettes used to cook food.

generating electricity and as fuel for trucks. Roughly 180,000 tons of CO<sub>2</sub> emissions annually are being eliminated because of the ongoing nine-year programme, equivalent to the emissions of 180,000 cars. The technology has shown that capturing methane, a greenhouse gas with high potency, makes both environmental and economic sense. The programme's practices are now included as part of the curricula in the Indian School of Mines in the eastern city of Dhanbad, in Jharkhand, and the programme is influencing methane recovery policy in India, including a mention of the technology in the Government's latest five-year plan. Greenhouse gas emissions in the Russian Federation have been growing steadily since 1999, along with the economy. A GEF energyefficiency programme – in partnership with the Government - begun in 2002 has already demonstrated a number of successful solutions for the building sector. For instance, in 2008, the programme expanded to cover efficient lighting for public and residential buildings in several provinces. It has secured an additional \$100 million commitment

from the Government and other partners that will significantly scale up activities.

As anxieties over recent volatile food prices intersect with a very real concern about the degradation of the environment and climate change, UNDP has programmes in place that support governments in addressing both these problems. In Rwanda, one of Africa's poorest and most densely populated countries, an environmental programme that began in 2006 has already restored 1,300 hectares through agro-forestry plants such as reeds and fruit-producing plants along Lake Kivu shores. By the end of 2008, more than 1,100 households have benefited from the programme, which was jointly supported by UNDP and a grant from the Government of the Netherlands. The restoration of this vital ecosystem prevents further soil erosion and thus increases food security in Rwanda by giving people the ability to once again use degraded land for vital crops. Beneficiaries can also collect the mature reeds and sell them at markets as fencing and roofing materials. In addition, these reeds will help mitigate further

damage to soil from the onslaught of violent downpours that have become increasingly common in Rwanda as the climate changes.

The financial and economic crises' impact on livelihoods and incomes in the developing world has stressed the absolute importance of taking a propoor approach to biodiversity and ecosystem rehabilitation and protection. Indeed, the environment provides the poor with food security, fuel, shelter and medicines, along with livelihoods and is an integral part of ensuring human welfare and economic development. In Benin, a high dependence on wood for energy is threatening the forestry ecosystem; compounding the problem is the lack of access to the harnessing of alternative energies like biogas and solar power. GEF supports several women's groups to promote the use of traditional ovens made of soil. As a result of these efforts, the use of wood has decreased by 50 percent with a fifth of households in targeted villages using these ovens. In Iran, through a GEF-funded programme, UNDP is working with the Government and local communities to costeffectively reclaim, through large-scale replanting and community-devised and led initiatives, rangeland lost to desertification. As a direct result of the project's efforts, one-third of leadership positions in local resource management committees are held by women while women made up two-thirds of the trainees participating in vocational training courses including sustainable poultry production, wheat cultivation, livestock vaccination, carpet weaving and tapestry making.

UNDP is supporting the establishment of ecotourism industries in fragile ecosystems in Cambodia, Morocco, Uzbekistan and Yemen. The Archipelago of Socotra, off the coast of Yemen, is one of the 10 most biologically diverse islands in the world and also one of the poorest and most disadvantaged areas in the country. UNDP has been working with the Government in partnership with donors to promote ecotourism and sustainable fishing practices as well as enhancing the capacities of local communities in sustainable livelihood development to address their basic urgent needs. By the end of 2008, four protected areas had been established in Socotra,

the Archipelago had been listed as a World Heritage Site by the UN Educational, Scientific and Cultural Organization, the monitoring of lobster harvesting practices had been established and training in ecotourism had begun.

In a time of global crisis, it is important not to forget how dirty water and lack of adequate sanitation damages development. UNDP is developing the skills and capacities of professionals across a range of developing countries in order to better manage waste and water. And as climate change threatens to increase water scarcity - already almost two million children die each year for want of clean water and adequate sanitation - it is more vital than ever to manage our resources with the utmost care while ensuring that the knowledge of what works in one city can be adapted and put to use in others. Solid waste management is a major issue in Sri Lanka, where municipalities and local authorities are illequipped to cater to increasing urbanization and commercialization and at the same time meet the demand for sanitary and effective disposal of solid waste. Waste is often dumped in open areas, marshlands and river banks. Collection is irregular and slow, leaving piles of rotting garbage by roadsides and creating a health and environmental hazard to residents. As part of a post-tsunami environmental restoration initiative, funded by the Government of New Zealand, UNDP contributed to a communityled clean energy initiative in 2008, which worked with local people to convert biodegradable waste into biofuels and fertilizer through microfinance projects. Eight urban low-income communities received financing to establish biogas units; some households benefited by using the biogas as cooking fuel or by using the fertilizer for vegetable gardens while others benefited from the financing model built around the fees collected from the sale of gas and waste collection. Most importantly, the neighbourhood in general benefited from a drastic reduction in haphazardly discarded solid waste and resulting epidemics like dengue fever.