



MDG INSIGHTS

Issue 01
October 2008

Sustaining natural infrastructure

Maintaining a robust and diverse natural environment is vital for meeting all the MDG goals, but particularly Goal 1 - eradicating extreme poverty and hunger – because the rural poor rely heavily on natural resources to sustain their livelihoods.

Most governments broadly recognize the value of the natural environment for human development and achieving the MDGS. But often they have failed to provide sufficient long-term investment, not acknowledging that healthy ecosystems are vital components of national infrastructure: facilities, services and equipment that are essential for a properly functioning economy and society.

Forests, for example, help protect and assure water quality and supplies. Wetlands, help purify and treat wastewater. Coral reefs and mangroves provide front-line defences against floods, storms and tidal surges. Indeed, like any form of infrastructure, ecosystems enable and support economic production and consumption. Unfortunately, while governments and international donors have invested extensively in roads, buildings, bridges, ports, and water supplies they have paid much less attention to the environment – a short-sighted perspective that may ultimately undermine the prospects for cost-effective, equitable and sustainable development.

One of the most persistent problems is deforestation. There has been some progress, as countries have planted more trees and made effort to restore landscapes and allowed forests to expand naturally. This has slowed the rate of deforestation. Nevertheless, over the period 2000-2005 the world suffered a net loss of forest area of 7.3 million hectares per year.

Another serious issue is the loss of wetlands. In Uganda, for example, much of Kampala's industrial and domestic wastewaters pass through the Nakivubo Swamp where they are cleaned before

discharging into Lake Victoria, the city's main source of piped water. The worth of this treatment has been estimated at around \$2.5 million a year – underlining the value of the wetland and the need to curtail drainage and further land reclamation while investing in sustainable ecosystem management. This and other wetlands are ostensibly protected – the 1994 Kampala Structural Plan designates most of the city's swamps as green corridors – nevertheless many have been drained and reclaimed and have been zoned for urban expansion and development.

The following projects in Malaysia, Russia and Niger also present good practices on the investment in eco-system, which contributed to sustaining livelihoods and poverty reduction.

Regenerating mangroves in Malaysia

Following the December 2004 tsunami, which destroyed many valuable mangrove forests on the west coast of Peninsular Malaysia, the Government embarked on a major scheme for regeneration. Although initially focusing on environmental conservation this is now also seen as a poverty reduction project – especially by people in the local community whose livelihoods depend on mangrove forest products.

A joint undertaking of the Terengganu State Government, the College of Science and Technology Malaysia, and the oil and gas company Petra Perdana, the project aims to replant mangrove forests and develop a conservation management plan, while strengthening the capacity of local communities and government officials to protect the forests. At the same time the project will build sustainable livelihoods from fishing and mangrove forest products, as well as from ecotourism since local people can work with tour operators to create specialised tours on mangrove regeneration and preservation, and view a 'living laboratory' which is being created by the College of Science and Technology.

MDG INSIGHTS is a joint publication of the MDG Network and the UNDG MDG Policy Network. The findings, interpretations and conclusions expressed in this publication are those of the author(s) and do not reflect official policies of the UN agencies or governments they represent.

The text and data in this publication may be quoted or reproduced as long as the source is cited. Reproductions for commercial purposes are forbidden.



This project depends on interlocking partnerships between the local community, institutions and government, along with the state and federal governments which have provided additional funding, especially for infrastructure. It also enables a major private-sector enterprise to fulfil some of its environmental responsibilities.

Protecting the Volga delta

The Volga delta in the south of the Russian Federation is a fairly pristine ecosystem that has been established as a zapovednik – strict nature reserve – and is part of the World Network of Biosphere Reserves. However, it will always be at risk as long as many people, even water managers, continue to regard water as a limitless resource and fail to understand the need to protect wetlands.

It is vital therefore to ensure that local authorities and communities appreciate the importance of the Lower Volga water and wetlands ecosystems and understand the principles of sustainable development. With financial support from Coca-Cola, UNESCO has therefore initiated a programme on environmental awareness – to be executed by EcoCenter Zapovedniks and the Astrakhan State Biosphere Reserve. The programme has carried out training activities and produced information materials which have benefited around half a million people.

The project has also resulted in the establishment of a working group, the Union for Conservation of the Lower Volga Heritage which brings together a wide range of state and local institutions and includes academics, tour companies, non-governmental organizations and others. The Union has developed its first action plan which it will disseminate to regional decision-makers.

This issue was contributed by Lucy Emerton, former Head of the Global Economic Programme, IUCN; Usman Iftikhar, Policy Specialist on Environment, Poverty Group, Bureau for Development Policy, UNDP; Hari Ramalu Ragavan, Senior Programme Manager, UNDP Malaysia Office; Marie Prchalova, Programme Specialist for Science, UNESCO Moscow Office; and Aissa Ouahido, Dioffo Ibrahim, and Rabaha Bolho from the UNDP Niger Office.

Increasing soil fertility in Niger

Drought and desertification are persistent threats to development in the arid Sahel region of West Africa. In the 1970s and 1980s, a combination of severe drought, destructive farming and livestock processes, along with a rapidly increasing population, denuded vast areas of land. To combat this in Niger, poor farmers, with support from local authorities, have taken decisive steps to regenerate the land. Since 1980 this has resulted in over 7.4 million new tree-covered acres.

The farmers have also changed their agricultural methods. In the past, they would entirely clear each field of its trees and other vegetation, and as productivity declined, would simply move on. Today, more farmers are leaving trees on the land and carefully sowing crops around them. In this way they not only get higher crop yields but can also diversify their incomes by taking advantage of other natural products such as leaves, wood, fodder and fruit.

This project has shown that with appropriate information, training, tools – and better access to markets – farmers can become more self-reliant while protecting their land for future generations.

In conclusion, evidences from those field examples suggest that the protection of eco-system brings a long-term benefits and economic return to local populations. These also highlight the value of building the capacity and knowledge of local NGOs and service providers, along with the close partnerships between the governments and civil society at both national and local levels.

This issue was edited by Peter Stalker, Oxford, UK. To contribute an article to the MDG INSIGHTS or your opinions/reactions to this piece, please contact the MDG Network and the UNDG MDG Policy Network Facilitation Team at the United Nations Development Programme, Bureau for Development and Policy, Poverty Group, 304 East 45th Street, 10th floor. This publication will become available at: www.mdg-gateway.org

To receive this publication and participate on e-discussions on MDGs, register to the MDG Network at: mdg-net@groups.undp.org