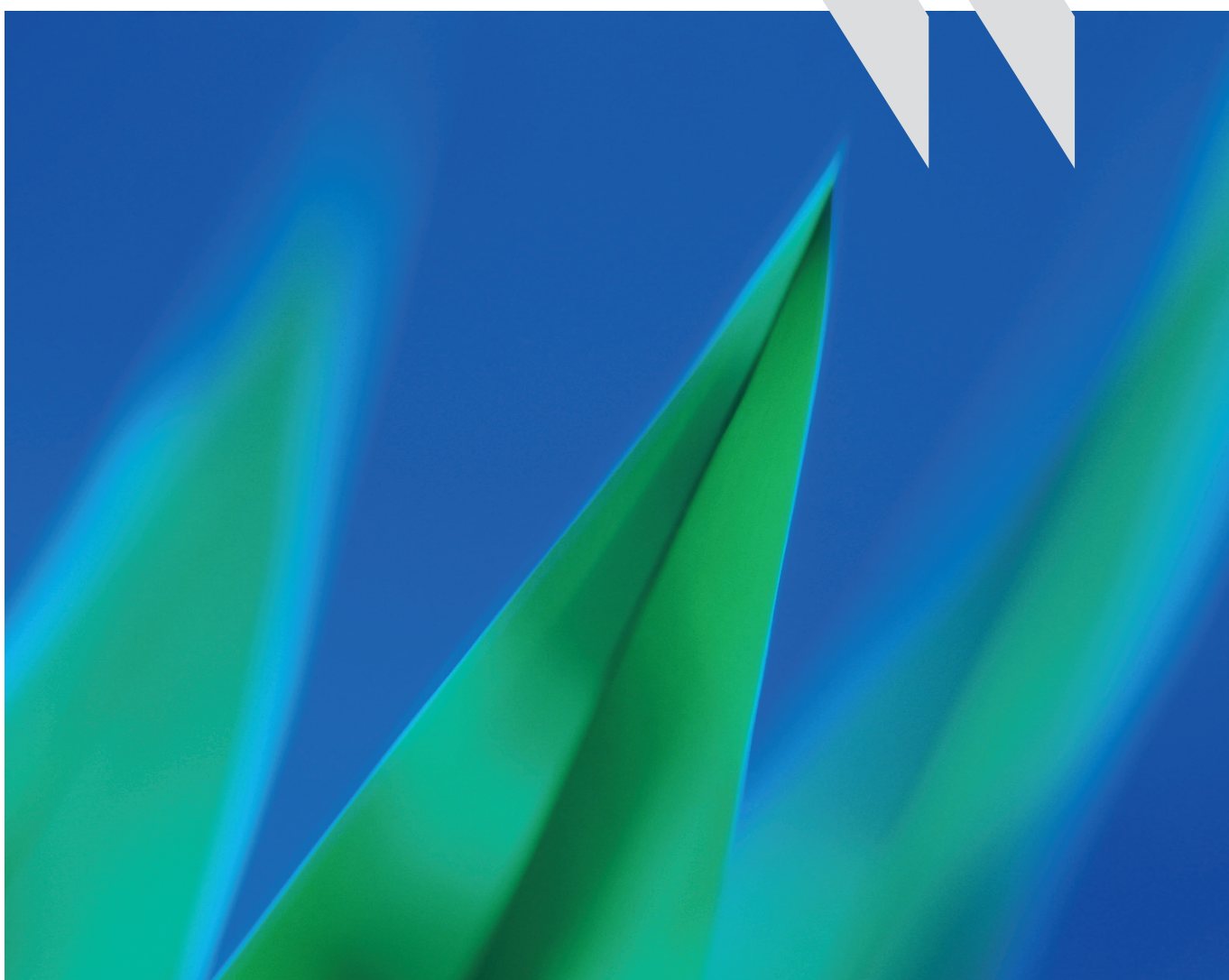


Why a Healthy Environment is Essential to Reducing Poverty



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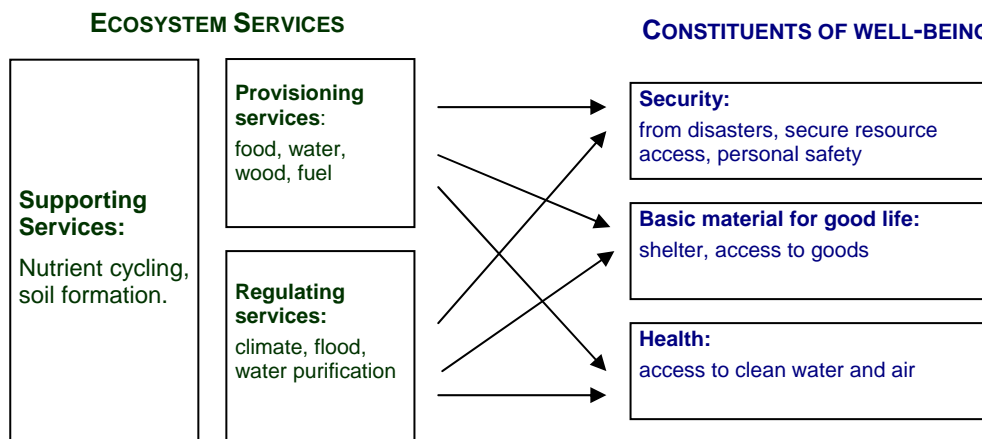
1. When so many live in poverty, why should developing countries worry about the environment?

“The environment” actually means soil - to grow food; water - to drink, wash and irrigate crops; air - to breathe; and a host of food and medicinal products (e.g. fruit, fish, wood, edible roots). Preserving “the environment” therefore means safeguarding food production, protecting air and water from contamination, sustaining livelihoods, and preserving health. A degraded environment in countries that rely heavily on natural resources for their economic prosperity (i.e. most developing countries) actually exacerbates poverty conditions.

FACT 1: World Bank studies also suggest that over 1 billion people world-wide depend, to varying degrees, on forest-based assets for their livelihoods. (P. Vedeld, A. Angelsen, E. Sjaasrad and G. Berg, *Counting on the Environment: Forest Income and the Rural Poor*, Environmental Economics Series No. 98, World Bank, 2004)

FACT 2: 15 of 24 essential services provided by ecosystems (ranging from food production, water quality and availability to disease management and climate regulation) are currently being eroded. (*Millennium Ecosystem Assessment*)

ILLUSTRATION OF LINKAGES BETWEEN ECOSYSTEM SERVICES AND HUMAN WELL-BEING



Adapted from *Living Beyond Our Means: Natural Assets and Human Well-being (Statement of the MA Board)*, Millennium Ecosystem Assessment

2. Who actually suffers from environmental degradation?

By and large, the poorest people and the poorest countries are the most affected by environmental degradation. They have to eke a living from marginal lands, forests, coastal waters or the peripheries of urban centres. The urban poor are the most exposed to severe air and water pollution and cannot escape the negative impacts of urbanization. Women and children, who are often responsible for tasks related to water and fuel collection, are disproportionately affected.

This problem is well-recognised by donors. The *DAC Guidelines on Poverty Reduction* asks bilateral agencies to work to reduce poverty by integrating “*sustainable development, including environmental concerns, into strategic frameworks for reducing poverty.*”

FACT 3: In developing countries, 20 per cent of the total loss of life expectancy is attributable to environmental causes. In OECD countries, it is around 4 percent. (*Sustaining the Environment to Fight Poverty*, UNDP et. al, 2005)

FACT 4: Unsafe water, due to poor access to water supply, sanitation facilities and hygiene, is responsible for 3.1 % of all deaths worldwide. Over 99 % of this burden occurs in developing countries. (*The World Health Report 2002*, WHO)

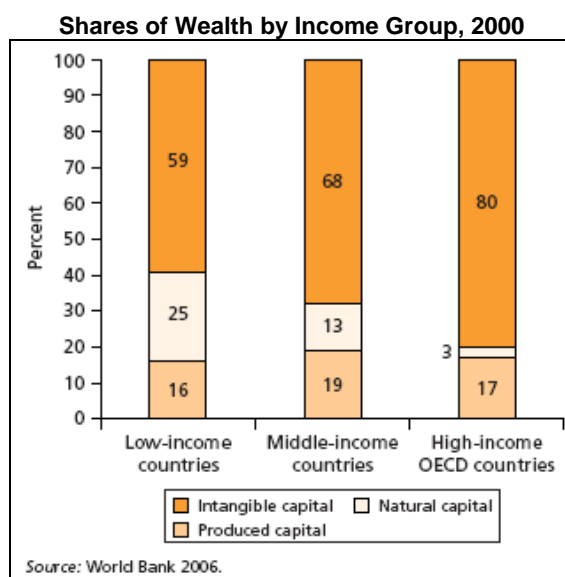
FACT 5: In the world’s cities, outdoor air pollution results in approximately 800.000 deaths annually, due to cardiopulmonary disease, lung cancer and acute respiratory infections. This is the equivalent of 6.4 million years of life lost to premature mortality. The greatest burden of disease caused by outdoor air pollution occurs in cities of developing countries in the Western Pacific Region (44 % of all deaths), which includes China, and in the South East Asian Region (17 % of all deaths), which includes India. (*Urban air pollution*, WHO, 2004)

FACT 6: Indoor air pollution, caused by smoke from stoves and fires, causes around 1.6 million deaths per year in developing countries (*WHO/UNDP Statement on Indoor Air Pollution*, 2004)

3. Does this mean that the environment is more important for poor than for rich countries?

In many cases yes. Environmental assets make a far larger relative contribution to national wealth in developing countries than in high income countries. In many poor countries, environmental resources provide a safety net which can prove to be vital during crises. At the same time, much economic activity in the developed countries also depends on a healthy environment.

FACT 7: Environment-based wealth accounts for 25% of the total wealth in low-income countries, 13% in middle-income countries, and only 3% in OECD countries. (*Ensuring Environmental Sustainability: Measuring Progress*. World Bank, 2005)



A study of the Mt. Elgon National Park in Uganda shows that environmental resources have played a safety net function during periods of natural and social disaster. Environmental income constitutes 19% for peasants living near the park, and poor households depend more on environmental incomes than wealthier households. (Sustainable livelihoods and environmental income dependence around Mt. Elgon National Park, Uganda, SIU, 2002)

4. So better environmental management mostly benefits the very poorest?

Not quite. The very poorest *do* suffer the most from bad environmental management. But the environment (and the related productivity of natural resources) also affect the pace and pattern of overall economic growth. In many developing countries, natural resources provide a stepping stone for moving to more sophisticated, higher-valued, industries. Sound forest management, for example, can open the door to a range of industries linked to wood processing, which can generate considerable employment opportunities, including for skilled and semi-skilled labour. Similarly, many countries with rich fisheries resources move from fishing to canning, and more advanced agro-processing industries. Reversing land degradation implies moving toward advanced cropping techniques, improved seeds, and making full use of available information technologies to anticipate climatic and market-related shifts. Ecotourism, which depends on sound environmental management, is often a profitable activity which employs skills workers.

Improving environmental management thus goes hand in hand with economic modernization and diversification of income opportunities. This, in turn, goes in tandem with improved literacy and education, better access to communications and enhanced participation in global markets.

In Madagascar, a shrimp processing company established in a remote part of the Island created 1200 permanent jobs for rural people, many of whom had never had a wage-paying job. The company's long term prosperity is clearly dependent on continuing shrimp supply. The interests of the company and its workers and the sustainability of shrimp harvesting are therefore clearly linked. (World Resources Institute, 2005).

A study for the Kruger National Park in South Africa suggests that, thanks to ecotourism, wildlife conservation is 18 times more profitable than options such as using the land for livestock and crops. Reasons for this include the poor potential of this particular area for agriculture. While ecotourism remains a "niche" market, it can pay off handsomely in suitable circumstances. (Sustaining the Environment to Fight Poverty, UNDP et. al, 2005)

In Nam Pheng, Laos, villagers got together in 1996 to expand the market for edible bitter bamboo and cardamom - two high-value traditional products. Through sustainable management of the resources and improved harvest technology, they were able to increase sales and obtain higher prices. By 2002, a day's harvest of bitter bamboo brought ten times the wages of slash-and-burn cultivation, which had previously been the villagers' main livelihood activity. (World Resources: The Wealth of the Poor, WRI, 2005)

5. So environmental management and development are actually linked?

Yes. Poverty reduction, economic growth, and the maintenance of life-supporting “environmental resources” are closely linked. This is why reversing environmental degradation is one of the “Millennium Development Goals”. Most of these goals have strong links with the environment.

Environment linkages to the Millennium Development Goals

1: Eradicate extreme poverty and hunger: Livelihood strategies and food security of the poor often depend directly on healthy ecosystems and the diversity of goods and ecological services they provide.

2: Achieve universal primary education: Time spent by children, especially girls, who walk long distances collecting scarce water and fuel-wood, can reduce time in school.

3: Promote gender equality and empower women: Poor women are especially exposed to indoor air pollution and the burden of collecting water and fuel-wood. They also have unequal access to land and other natural resources.

4. Reduce child mortality: Water-related diseases such as diarrhea and cholera kill an estimated 3 million people a year in developing countries, the majority of which are children under the age of five.

5: Improve maternal health: Indoor air pollution and carrying heavy loads of water and fuel-wood adversely affect women's health, making them less fit for childbirth and at greater risk of complications during pregnancy.

6: Combat HIV/AIDS, malaria and other diseases: Up to one-fifth of the total burden of disease in developing countries may be associated with environmental risk factors and preventing diseases is more effective, and cheaper, than treating them.

7: Ensure environmental sustainability: Current trends in environmental degradation must be reversed in order to sustain the health and productivity of the world's ecosystems.

(Sustaining the Environment to Fight Poverty: The Economic Case and Priorities for Action. Environment for the MDGs. UNDP et. al, 2005).

FACT 8: It has been estimated that every dollar invested toward meeting the Millennium Development Goal to reduce by half the proportion of those without access to safe drinking water and adequate sanitation by 2015 will save USD 9.96-12.54 in African regions, USD 10.21-12.72 in the Americas, and USD 25.36-34.85 in Eastern Mediterranean regions. (Evaluation of the costs and benefits of water and sanitation improvements at the global level. WHO, 2004)

Improving access to energy is a precondition for reaching the MDGs

While the MDGs contain no explicit target for energy, it is impossible to imagine major progress in reducing poverty without expanding access to modern energy by the poor, who still rely on dangerous and highly polluting traditional fuels, such as cow dung and wood residues. The International Energy Agency estimates that investments of about USD 17 billion per year over 12 years will be needed to provide an additional 500 million people with access to electricity by 2015, in support of MDG 1. (Sustaining the Environment to Fight Poverty, UNDP et. al, 2005)

6. But if the environment is really that important, why aren't countries doing more?

There are three main reasons. First, many environmental goods and services do not pass through formal markets, and therefore do not carry a quantifiable price. This includes not only "public goods" such as clean air, but also things like fuel wood, fruits and "bush meat" collected from the wild. In poor countries, these goods and services make up a large share of personal incomes and livelihood, but go unrecorded in economic statistics and are therefore often ignored by economic policy makers and planners (as well as tax collectors, who do not claim a share).

The second reason has to do with the fact that the poor, who rely most heavily on natural resources, also have the lowest capacity to influence political processes and decision-making at all levels. The poor - women in particular - also suffer from weak or insecure rights of access to the resources they depend on.

Finally, it can be difficult for governments to justify the more immediate costs of environmental protection when the benefits of responding to environmental problems accrue over longer periods of time.

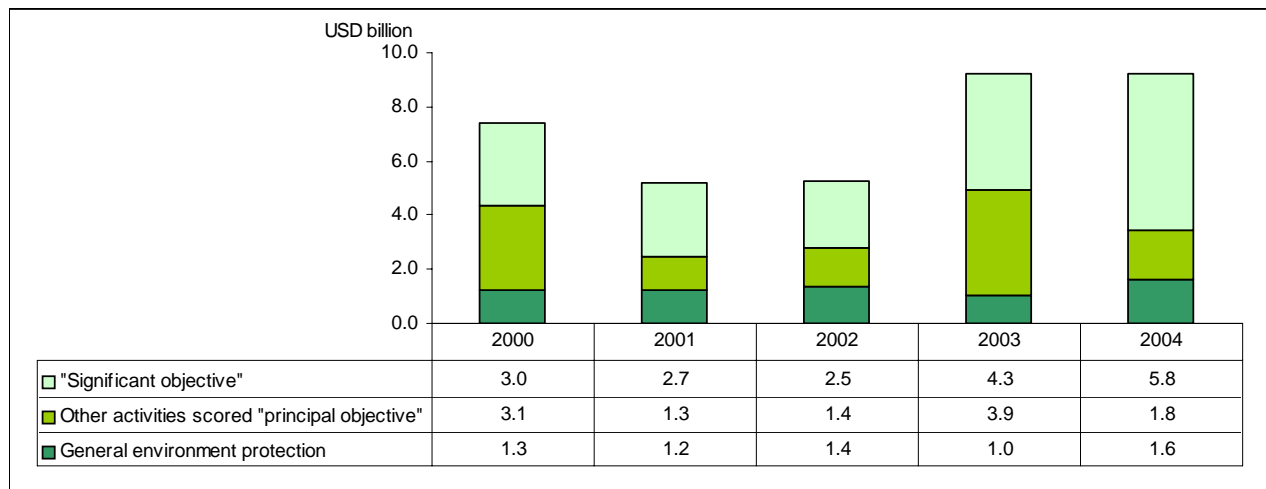
Participatory Poverty Assessments (PPA) confirm the importance of the environment for the poor
A review of 23 PPAs concluded that environment was in all cases considered a crucial component of well-being, especially when the environment was being depleted or degraded. (Sustaining the Environment to Fight Poverty, UNDP et. al, 2005)

7. So aid agencies should pay more attention to the environment?

Aid agencies have long been paying attention to the environment in the projects they support. For example, OECD countries have been working to mainstream environment in to development co-operation programmes and institutions. In addition, the Environmental Impact Assessment procedures agreed within the OECD are part of the standard tool kit for aid agencies. Significant donors' funds also support environmental improvement.

Over the years 2000-2004, aid from DAC members for environmental objectives¹ was on average USD 7.2 billion.

Aid targeting environmental sustainability by DAC members 2000-2004 commitments



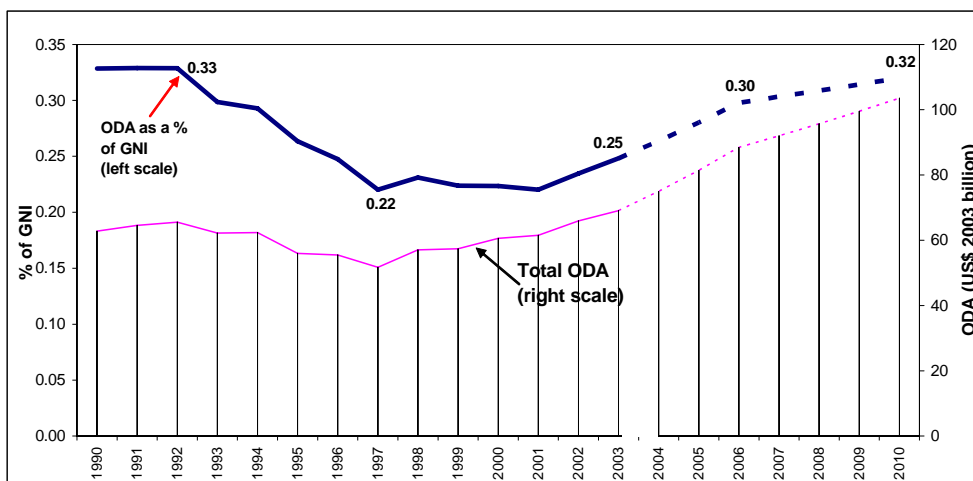
Source: OECD

¹ 'Aid to environment' includes support for activities specifically aimed at environmental protection (e.g. capacity development for pollution monitoring and control), as well as support to activities outside the environmental sector as such but where environmental protection is a significant objective (e.g. a project in the energy sector may have energy efficiency and greenhouse gas reduction as a major objective). For technical reasons, statistical information on aid to environment must be considered as approximations rather than exact figures.

8. Does this mean more aid is needed?

Aid flows have grown in recent years, and are projected to do so even more in the future (see graph below) in line with the recent international commitments made by OECD Members. Much of this aid will support development initiatives which have strong environmental benefits, such as improving access to modern energy sources for the poor, while some will directly support environmental objectives.

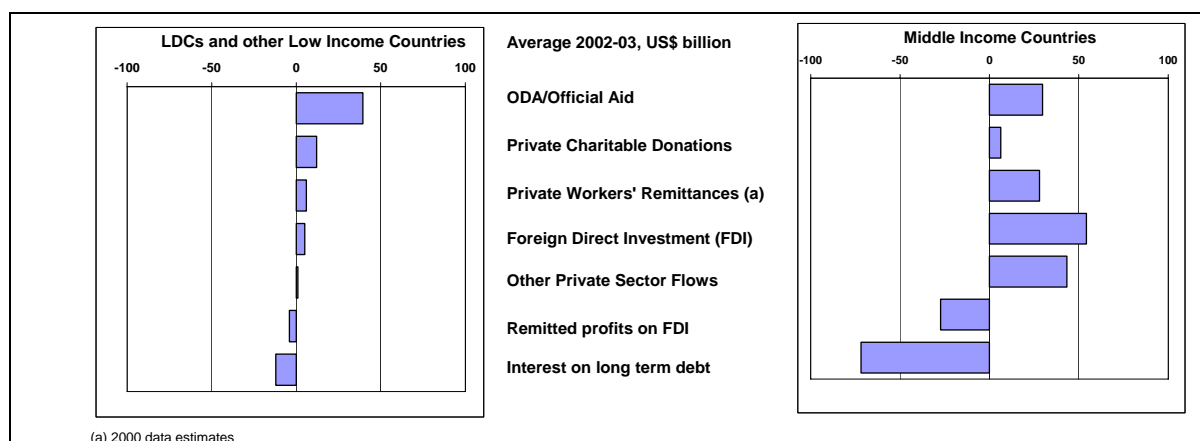
DAC members' Official Development Assistance (ODA): 1990-2003 and simulations to 2006 and 2010



Source: OECD

The private sector's role in financing environmentally-friendly development will also be very important. Removing barriers to private sector contributions to sound development is one of the objectives of aid. Private sector-based flows of finance (especially Foreign Direct Investment) are relatively more important than ODA in middle-income countries, whereas the reverse is true for the least developed and low-income countries (see graph below).

Sources of external resources



(a) 2000 data estimates

Source: OECD.

9. What are the main challenges for the future?

The world is changing, and so is the way aid works. Donors now increasingly provide their assistance for programmes, sectors, or poverty reduction and long-term development plans, rather than for specific projects. This opens new opportunities for dialogue and reform on environmental issues where it really matters - at the level of policies (such as pricing, taxation, licensing laws, land tenure laws, and privatisation). New approaches (notably Strategic Environmental Assessment and Environmental Fiscal Reform), and new financing instruments (such as the Clean Development Mechanism under the Kyoto Protocol) provide new opportunities for supporting poor countries' efforts toward environmentally-friendly development. Donors are already making efforts to apply these tools when implementing aid (see examples below).

A Strategic Environmental Assessment helped improve forest policies in Ghana

A Strategic Environmental Assessment of the Ghana Poverty Reduction Strategy identified potential conflicts between the objectives of the forest policy and protection of bank-side ecosystems. The forest policy was modified, notably to encourage the establishment of bamboo and rattan plants. As a result, pressure on primary forests and fragile river ecosystems was reduced. (Guidance on applying Strategic Environmental Assessment (SEA) in Development Cooperation, OECD, Forthcoming)

Policy reform in the water and sanitation sectors in Colombia

A Strategic Environmental Assessment (SEA) was integrated when reviewing the water and sanitation sector in Colombia. As a result, recommendations were developed and implemented relating to the environmental obligations of local authorities and utility operators, wastewater discharge standards, and capacity building for environmental management (Ibid.)

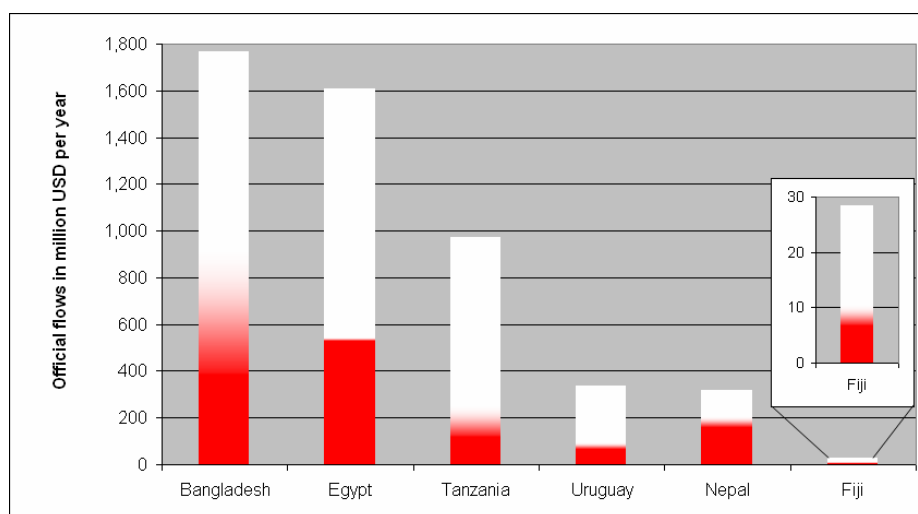
Mauritania employs market-based policies to improve fisheries management

The Mauritania Poverty Reduction Strategy states that "The primary objective (of the growth and macro-economic stability policy) will be to ensure full mobilization of domestic revenue... non-tax revenue will increase largely as a result of fishing fees and fines." (Mauritania PRS)

Increased aid flows make it even more important to ensure that the money is well spent. Amongst other things, “better aid” means support for projects that can cope with natural disasters and climate change. Donors are supporting basic infrastructure like dams, bridges, roads, water supply and irrigation networks that will still be around in 50 years’ time, when the climatic conditions are projected to be significantly different. Projects must be designed to cope with these changes.

An OECD analysis of the composition of Official Development Assistance flows to six developing countries (Bangladesh, Egypt, Tanzania, Uruguay, Nepal, and Fiji) indicates that a significant portion of aid is directed at activities potentially affected by climate change and other climate risks.

Annual official flows and share of activities potentially affected by climate change



Source: *Bridge Over Troubled Waters: Linking Climate Change and Development* (Paris, OECD, 2005).

In addition to climate change, emerging global issues such as desertification and loss of biodiversity are future challenges which development initiatives need to address. This is acknowledged in the *Paris Declaration on Aid Effectiveness*, endorsed by development officials and ministers from 91 countries at the High Level Forum on Aid Effectiveness, on 2 March 2005.

THE PARIS DECLARATION ON AID EFFECTIVENESS

- Ownership, Harmonisation, Alignment, Results and Mutual Accountability -

Paragraph 40. Donors have achieved considerable progress in harmonisation around environmental impact assessment (EIA) including relevant health and social issues at the project level. This progress needs to be deepened, including on addressing implications of global environmental issues such as climate change, desertification and loss of biodiversity.

Paragraph 41. Donors and partner countries jointly commit to:

- Strengthen the application of EIAs and deepen common procedures for projects, including consultations with stakeholders; and develop and apply common approaches for “strategic environmental assessment” at the sector and national levels.
- Continue to develop the specialised technical and policy capacity necessary for environmental analysis and for enforcement of legislation.

Additional reading from the OECD

Paris Declaration on Aid Effectiveness (2005)

DAC Guidelines and Reference Series: Environment Fiscal Reform for Poverty Reduction (2005)

Bridge Over Troubled Waters: Linking Climate Change and Development (2005)

Applying Strategic Environmental Assessment to development co-operation (2006)

Good Practice Guidance on applying Strategic Environmental Assessment (SEA) in development co-operation (Forthcoming)

Poverty- Environment-Gender Linkages (DAC Journal 2002)

DAC Guidelines on Integrating the Rio Conventions into Development Co-operation (2002)

Good Practices for Public Environmental Expenditure Management (2003)

Performance Measurement Guidance for Environmental Compliance and Enforcement Practitioners (2005)

Toolkit for Benchmarking Water Utility Performance (2001)

A Toolkit for Building Better Environmental Inspectorates in Eastern Europe, Caucasus and Central Asia (2004)

FEASIBLE Computer Model to Develop Financing Strategies for Environmental Infrastructures (2005)

Other sources

Ensuring Environmental Sustainability: Measuring Progress. Toward the 7th Millennium Development Goal, World Bank, 2005

Sustaining the Environment to Fight Poverty: The Economic Case and Priorities for Action. Environment for the MDGs. A Message to the 2005 World Summit, UNDP et. al, 2005

Living Beyond Our Means: Natural Assets and Human Well-being (Statement of the MA Board), Millennium Ecosystem Assessment, 2005

World Resource - The Wealth of the Poor, World Resources Institute, 2005

Joint WHO/UNDP Statement on Indoor Air Pollution, World Rural Women's Day, 2004

Cohen, J.A. et al. *Urban air pollution. In: Comparative quantification of health risks. Global and regional burden of disease attributable to selected major risk factors*. World Health Organisation, 2004.

Hutton, G. & Haller, L. *Evaluation of the costs and benefits of water and sanitation improvements at the global level. Water, Sanitation and Health. Protection of the Human Environment*, World Health Organization, 2004

P. Vedeld, A. Angelsen, E. Sjaasrad and G. Berg, *Counting on the Environment: Forest Income and the Rural Poor*, Environmental Economics Series No. 98, Washington DC, World Bank, 2004

