

# Environment and Poverty Reduction

This key sheet is part of a series of awareness raising tools developed by Irish Aid to accompany its Environment Policy for Sustainable Development.



# 1. Introduction

This key sheet is part of a series of awareness raising tools developed by Irish Aid to accompany its Environment Policy for Sustainable Development. Key strategies for implementing the policy are:

- i) mainstreaming, where the environment is recognised as a critical part of sustainable development and is taken into account in all policies, programmes, activities and funding decisions; and
- ii) partnership, where Irish Aid works with national governments, multilateral organisations, international agencies and civil society organisations to contribute to sustainable development.

The first step in environment mainstreaming is to understand how the environment is linked to the development challenge or sector YOU are responsible for. In this key sheet, we explain why understanding climate change is crucial in the context of poverty reduction, and suggest sources of additional information. More detailed guidelines on mainstreaming environment and climate change will be produced at a later date.





Teshoma Abera standing in his barren, stony field outside Bilak village, Ethiopia.

## 2. Linking the environment and poverty reduction

One in five people in the world live in poverty. At the same time the planet's capacity to sustain the 6 billion people living on it and to provide them with the resources they need to survive is diminishing. The Johannesburg Summit in 2002 reminded the world that sustainable development is the key to poverty reduction. Only with a balance between the social, economic and environmental aspects of development can a long-term solution to poverty be achieved.

The Millennium Development Goals recognise the importance of the environment in eradicating poverty. Without sound environmental management it will be impossible to produce the food needed to wipe out hunger, to reduce the numbers of children dying of waterborne diseases or to remove malaria from its position as the number one killer in sub-Saharan Africa (see table).

For this reason Irish Aid is part of a Poverty-Environment Partnership (PEP)<sup>1</sup> initiative to raise awareness of the importance of the Environment for the MDGs. The PEP held high-level events at the 2005 World Summit to call for a major scaling up of worldwide investment in environmental management as a central component of efforts to eradicate poverty and reach all of the Millennium Development Goals (MDGs). The message sent to leaders at the Summit was that investment in sound and equitable environmental management makes real economic sense, and is critical to expanding opportunities for people in developing countries to lift themselves out of poverty.

The environment and environmental change affect poor men, women and children in three key dimensions of human poverty<sup>2</sup>:

- > **Livelihoods:** Poor people tend to be most dependant on their environment and natural resources and are therefore most affected when the environment is degraded or they lose access to resources.

<sup>1</sup> The PEP is a coalition of donor agencies, multilateral organisations and NGOs working on poverty environment linkages.

<sup>2</sup> From the Poverty Environment Partnership publication 'Linking Poverty Reduction and Environmental Management', DFID, European Commission, UNDP, World Bank. July 2002.

### ↘ Millennium Development Goal

### Links to the environment

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|---|--|
| 1 Eradicate extreme poverty and hunger      | > The livelihoods and food security strategies of the poor often depend directly on the natural resources available to them (farming, livestock rearing, fishing etc.)   |
| 2. Achieve universal primary education      | > As resources become depleted children spend more time gathering firewood and water or looking for grazing for the family livestock meaning they have less time for school.   |
| 3 Promote gender equality and empower women | > Poor women are susceptible to respiratory diseases caused by indoor air pollution and they tend to have unequal access to land and natural resources even though they are often responsible for collecting firewood and water and for tending fields.  |
| 4 Reduce child mortality                    | > Water related diseases affect children under 5 in particular. Children are also susceptible to malnutrition as yields decline due to soil degradation and erosion.   |
| 5 Improve maternal health                   | > Indoor pollution and carrying heavy loads of water and firewood over increasingly long distances have adverse affects on women's health and can lead to complications in pregnancy and childbirth.   |
| 6 Combat major diseases                     | > One fifth of the total disease burden in developing countries may be attributed to environmental risk. Poor urban planning and land use management contributes to the spread of malaria. Declining natural resources force people to migrate and find new ways of earning a living which can contribute to the spread of HIV/AIDS. |
| 7 Ensure environmental sustainability       | > Unless the current trends in environmental degradation and global threats such as climate change are reversed it will not be possible to meet the Millennium Development Goals.  |

- > **Health:** Poor people suffer most when land, water and the air they breathe are polluted. Environment risk is a major cause of ill health in developing countries.
- > **Vulnerability:** Poor people are most exposed to environmental hazards and environment-related conflict. They also have low capacity to cope and adapt when calamities and conflicts occur.

## 2.1 Livelihoods and the environment

Poor men and women rely most heavily on natural resources for their livelihoods. Developing countries generate most of their GDP through farming, livestock rearing, fishing, forestry and mining, all of which are becoming increasingly depleted.

Soil erosion reduces the productivity of the soil leading to reduced yields and food shortages. Over-fishing by large commercial fleets has depleted the fish stocks wiping out the livelihoods of small-scale subsistence fishermen and women. Deforestation removes more than just trees; it destroys people's livelihoods. The full range of ecosystem services associated with forests is removed leaving people without water, food, medicinal plants and shelter.

### Example: Protecting livelihoods and the environment in Tanzania

Livelihoods were being lost in the coastal villages of Tanga region in Tanzania due to unsustainable fishing practices, declining fish catches, poor government policy and ineffective enforcement of regulations. Irish Aid and the World Conservation Union (IUCN) worked with local communities and the regional and district authorities for more than 10 years to empower local people and institutions to restore and protect their coastal resources. Collaborative fisheries and coastal resource management resulted in:

- > a significant reduction in destructive fishing practices
- > improved reef health and fish numbers
- > the introduction of alternative livelihood activities (e.g. seaweed farming)
- > districts putting in place measures to finance the continuation of coastal resource management activities
- > environmental education in schools for the next generation of fisher men and women
- > improved government policy in collaborative fisheries management.

To compound these problems most of the world's poor live in marginal environments, which also tend to be fragile habitats and areas of high ecological vulnerability. This often leads to the poorest members of society being blamed for habitat destruction and loss of biodiversity, when in fact the same communities have been guardians of these areas for millennia. People living from day to day from their natural resources are very aware of their value and the need to conserve them. Only poverty can drive them to misuse their resources when they are forced to live for today without the option of thinking about the future. The environment is vulnerable to the impacts of poverty, but it is also key to reducing poverty through wise management of the earth's resources.

Access to natural resources is an issue which brings together aspects of **governance** and environmental management. Local communities need secure access to the natural resources on which they rely (forests, arable land, pastures, coastline) in order to maintain their livelihoods. In many developing countries the context in which customary land tenure arrangements operate has changed due to population growth and development. As a result of the breakdown of rules and regulations, over exploitation of natural resources leads to degradation with negative impacts on livelihoods. Renewing security of tenure and empowering local institutions to manage natural resources is a critical part of environmental management.

## 2.2 Health and the environment

Up to one fifth of the total burden of disease in the developing world – and up to 30 percent in sub-saharan Africa - may be associated with environmental risk factors. Malnutrition which often stems from food shortages due to declining soil fertility and changing climatic conditions adds another fifth of the disease burden. It is clear that the environment in which we live is directly related to our health and well-being. World leaders have become so concerned about the effects of over-consumption and poor environmental management on human well-being that the Secretary General of the UN, Kofi Annan, commissioned the Millennium Ecosystem Assessment in 2000. The Assessment, published in 2005, clearly illustrates the links between the earth's ability to provide ecosystem services (such as water supply and clean air) and human health. As the earth's ability to provide these services decreases due to pollution, over exploitation and climate change, human health declines, with those living in developing countries faring worst.

### Key environmental factors influencing health are:

- Poor indoor and outdoor air quality leads to respiratory diseases** – indoor air pollution caused by the burning of traditional biomass fuels (wood, dung, crop

residues) for cooking and heating affects 1 billion people, resulting in premature death for 2 million women and children each year<sup>3</sup>.

- b) Lack of sanitation or poor sanitation and impacts on water quality lead to water related diseases** – water-related diseases such as diarrhoea and cholera kill an estimated 3 million people a year in developing countries, the majority of whom are under five<sup>4</sup>.
- c) Poor environmental and land management** - vector borne diseases such as malaria account for up to 2.5 million deaths a year and are linked to a range of environmental conditions and factors related to water contamination, sanitation and rural and urban land management<sup>5</sup>. Climate change is likely to worsen the situation as parts of the developing world become wetter and more humid increasing the likelihood of malaria, while other areas will become drier with water and food shortages.
- d) Over exploitation and degradation of natural resources** – degraded environments are less productive, resulting in malnutrition and food shortages. The World Health Organisation estimates that hunger affects one in seven people in the world and that malnutrition is a key factor in at least 5 million deaths each year.

There is a key sheet in this series devoted to establishing the links between the environment and health.

## 2.3 Vulnerability and the environment

Poverty is a key factor contributing to vulnerability. The rural and urban poor are most at risk from environmental hazards and environment related conflict. Poverty puts communities in a weak position to cope with environmental hazards and adapt to environmental change. Environmental stresses and shocks such as drought, floods, tsunami, locust attacks, earthquakes and landslides claim over 100,000 lives each year and inflict billions of dollars in damage. 2004/05 has rewritten many of the statistics with an unprecedented number of natural disasters affecting developing countries in particular (e.g. the Indian Ocean Tsunami, Hurricanes Katrina and Wilma, the Pakistan earthquake). 97% of deaths due to natural disasters occur in developing countries with an estimated 256 million people affected in 2000<sup>6</sup>.

3 Smith, K.R. (1999). Pollution Management in Focus. Indoor Air Pollution Discussion Paper No. 4, Environment Department, World bank.

4 Murray, C. & Lopez, A. 1996. The Global Burden of Disease. Harvard University press, Cambridge, MA.

5 World Resources Institute, 1998. World resources 1996-1997. The Urban Environment. Oxford University press.

6 ICRC, 2001. World Disasters Report 2000. Focus on recovery. International Federation of Red Cross and Red Crescent Societies, Geneva.

Climate change due to increased emissions of Greenhouse Gases (largely CO<sub>2</sub>) means that extreme weather events are expected to become more severe and more frequent<sup>7</sup>. Although the causes of climate change originate in the developed world, those living in developing countries will be most severely affected due to their low adaptive capacity. Poverty, a lack of human capacity and poor access to technology all reduce the ability of developing countries to adapt to climate change. The large numbers of poor men and women living in marginal and vulnerable environments are most at risk (e.g. desert fringes, low lying floodplains, deforested hillsides).

The incidence of emergencies is increasing<sup>8</sup>. In addition to natural disasters, conflict contributes to instability and puts the livelihoods of the poorest men and women at risk. Conflict over natural resources such as water, oil, gold, diamonds and even grazing land is on the increase. The crisis in Darfur was heightened due to conflict over land and oil, and in Sierra Leone conflict over the control of diamonds was a one of the factors that led to civil war. Better management of natural resources and improved environmental governance are vital to reduce the incidence of environment related conflict.

### ↳ Lessons from the Tsunami

The South East Asian tsunami has taught us lessons about vulnerability and the role of the environment in reducing risk. Assessments made after the tsunami by the UN and others showed that in areas with healthy coral reefs and mangroves, the devastating impacts of the massive wave were significantly reduced.

"We learned in graphic and horrific detail that the ecosystems, such as coral reefs, mangroves and sea grasses which we so casually destroyed are not a luxury. They are life savers capable of helping to defend our homes, our loved ones and our livelihoods from some of nature's more aggressive acts". Klaus Toepfer, Executive Director, United Nations Environment Programme (UNEP).

The realisation of the value of these ecosystems is informing recovery efforts. The environmental damage caused by the tsunami and the need to protect the local population from future extreme events means that NGOs are replanting trees to stabilise and protect the coastline.

On the other hand, NGOs are having difficulties accessing the wood, sand and water needed for reconstruction without causing negative effects on the environment. There are risks of illegal logging to meet demand and aid agencies need to impose stringent controls to ensure supplies come from renewable sources.

7 IPCC 2001. IPCC Third Assessment Report – Climate Change 2001

8 UNEP, 2005. Environmental Management and Disaster Reduction. World Conference on Disaster Reduction, Kobe, Japan, January 2005.

### 3. Exploding the myths

There are many excuses for not addressing environmental issues as part of humanitarian relief and development assistance. Protecting the environment is seen as a luxury to be addressed after economic growth has been achieved. Limited interpretations of 'environment' focusing on recycling and pollution control lead people to believe that the environment is not a major concern of poor people and not a factor contributing to poverty reduction. Recent studies by the Poverty Environment Partnership have revealed a very different reality<sup>9</sup>.

- 1 The environmental quality of economic growth matters to poor people. The poor depend more immediately on clean water, fertile soils and natural vegetation for food and construction materials than other groups. Ignoring the environmental sustainability of growth – even if it reaps short-run gains – can undermine development and exacerbate poverty.
- 2 Environmental management cannot be treated separately from other development concerns. Improving environmental management in ways that benefit poor people requires policy and institutional changes that cut across sectors. These lie mostly outside the control of environmental institutions, meaning that environment needs to become a priority for key decision makers.
3. Poor people must be seen as part of the solution rather than as part of the problem. If environmental management is to contribute to sustainable growth and poverty reduction, it should reflect the priorities of the poor. Poor men and women are often guardians of the world's more endangered resources and their caretaker role should be acknowledged and supported.

Research has also shown that environmental degradation is neither the inevitable price of, nor a desirable path for, economic development. In fact there is evidence to suggest that pursuing a development path which accepts environmental degradation as a price for progress, can lead to situations where increased wealth is outweighed by economic losses due to damage to ecosystem services critical to human life such as clean water, clean air and fertile soil on which to produce food<sup>10</sup>.

The Millennium Ecosystem Assessment found that most (15 out of 24) of the essential services provided by ecosystems – ranging from food production and availability, disease management and climate regulation – are being used

<sup>9</sup> See PEP publications at <http://www.povertyenvironment.net/pep>

<sup>10</sup> Sustaining the Environment to Fight Poverty and Achieve the MDGs. The Economic Case and Priorities for Action. Poverty Environment Partnership, 2005.

unsustainably and that the capacity for continued delivery of these services is constantly being eroded<sup>11</sup>.

### 4. Priority actions to address the environment in development cooperation

Mainstreaming is a key strategy identified in the **Irish Aid Environment Policy for Sustainable Development**. This means that steps should be taken to recognise links between development activities and the environment and to maximise opportunities for positive outcomes while minimising negative impacts.

Actions to mainstream the environment into development cooperation are best identified at country and local level, based on local conditions and priorities. However, there are some general areas where action is needed to:

- 1) Mainstream environmental issues into MDG-based poverty reduction strategies and other national and local development plans. Indicators and targets with clear monitoring frameworks can help to measure progress and build on experience.
- 2) Strengthen environmental governance – this involves strengthening local institutions and involving them in decisions on rights and access to natural resources and on natural resource management.
- 3) Strengthen government capacity to manage, legislate and regulate environmental goods and services.
- 4) Develop instruments that encourage pro-poor investment in public goods. This includes incentives for business to invest in the protection of natural resources and measures to encourage fair access to resources such as water and forest products.
- 5) Assist developing countries to collect information on their environmental assets and to monitor environmental quality and its impacts on poverty reduction.
- 6) Make more resources available for development cooperation and ensure that a proportion of these are invested in environmental management for poverty reduction.
- 7) Build and engage with networks and coalitions to highlight and address the links between the environment and poverty reduction. Partners should include development agencies, academic institutions, NGOs and Community organisations in both developed and developing countries.

<sup>11</sup> Millennium Ecosystem Assessment – A synthesis report. World Resources Institute, 2005.

# References

Linking Poverty Reduction and Environmental Management', DFID, European Commission, UNDP, World Bank. July 2002.

Sustaining the Environment to Fight Poverty and Achieve the MDGs. The Economic Case and Priorities for Action. Poverty Environment Partnership, 2005.

Investing in Environmental Wealth for Poverty Reduction, Poverty Environment Partnership, 2005

Assessing Environment's Role in Poverty Reduction. Poverty Environment Partnership, 2005.

Millennium Ecosystem Assessment – A synthesis report. World Resources Institute, 2005.

For more information and publications from the Millennium Ecosystem Assessment see: [www.millenniumassessment.org/en/index.aspx](http://www.millenniumassessment.org/en/index.aspx)

World Resources 2005, World Resources Institute.

See this publication and others at [www.wri.org](http://www.wri.org)

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UNEP Poverty Environment Unit

[www.unep.org/dpdl/poverty\\_environment/About/index.asp](http://www.unep.org/dpdl/poverty_environment/About/index.asp)

UNEP, 2005. Environmental Management and Disaster Reduction. Worlds Conference on Disaster Reduction, Kobe, Japan, January 2005. Available at [www.unep.or.jp/ietc/wcdr/unep-bg-paper.pdf](http://www.unep.or.jp/ietc/wcdr/unep-bg-paper.pdf)

# Useful Websites

→ World Disasters Report 2005 [www.ifrc.org/publicat/wdr2005/index.asp](http://www.ifrc.org/publicat/wdr2005/index.asp)

→ Poverty Environment Partnership Publications. See PEP website at: [www.povertyenvironment.net/pep](http://www.povertyenvironment.net/pep)

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