

Understanding Poverty-Environment Mainstreaming



Coverage

- Defines poverty-environment mainstreaming (section 2.1)
- Explains why mainstreaming poverty-environment linkages is significant for human well-being, pro-poor economic growth and achievement of the MDGs (section 2.2)
- Highlights the contribution of natural capital to the wealth of low-income countries (section 2.3) and the importance of climate change for poverty-environment mainstreaming (section 2.4)

Key Messages

- Poverty-environment mainstreaming is an iterative multi-year, multi-stakeholder process
- The environment contributes significantly to human well-being, pro-poor economic growth and achievement of the MDGs
- Natural capital represents a relatively larger share of the wealth of low-income countries
- Climate change adaptation is an integral part of poverty-environment mainstreaming

2.1 Defining Poverty-Environment Mainstreaming

Sustainable development depends in large measure on successfully integrating the environment into economic planning and decision-making, a process known as **environmental mainstreaming**. Early efforts in the 1990s to mainstream the environment into national planning—for example, through poverty reduction strategy papers (PRSPs)—aimed to ensure that economic decisions and plans took environmental priorities into account and addressed the impact of human activities on environmental services and assets.

Evidence suggests that these initial attempts to mainstream the environment into national planning had mixed success. A series of influential reviews by the World Bank showed that most of the PRSPs adopted by the world's poorest countries in the 1990s did not sufficiently address the environment's contribution to poverty reduction and economic growth (Bojö and Reddy 2003; Bojö et al. 2004).

Country governments and development actors responded by devoting greater attention to integrating the environment into PRSPs, with particular attention to **mainstreaming poverty-environment linkages** and making the case for addressing the contribution of the environment to human well-being, pro-poor economic growth and achievement of the MDGs to the ministries responsible for national development planning.

Definition: Poverty-Environment Mainstreaming

The iterative process of integrating poverty-environment linkages into policymaking, budgeting and implementation processes at national, sector and subnational levels. It is a multi-year, multi-stakeholder effort that entails working with government actors (head of state's office, environment, finance and planning bodies, sector and sub-national bodies, political parties and parliament, national statistics office and judicial system), non-governmental actors (civil society, academia, business and industry, general public and communities, and the media) and development actors.

While environmental mainstreaming and poverty-environment mainstreaming may overlap under certain circumstances, attention has focused in recent years on the key goal of reducing poverty and the pivotal contribution that better environmental management can make to improved livelihoods and income opportunities of the poor and other vulnerable groups, including women and marginalized populations.

These efforts have taken on particular urgency as development assistance increasingly takes the form of general budget and sector support, with less financial aid earmarked for specific environmental projects. The need has never been greater to demonstrate to financial and planning bodies the value of allocating scarce resources to improve environmental management as a key strategy to benefit the poor and reduce poverty.

2.2 Exploring Poverty-Environment Linkages

The well-being of poor people can be greatly improved through better management of the environment. Below are some concepts that help elucidate the nature of poverty-environment linkages by demonstrating the contribution of the environment to human well-being, pro-poor economic growth and achievement of the MDGs.

Box 2.1 presents selected facts and figures on poverty-environment linkages. Additional examples are provided throughout the handbook (see especially chapters 4 and 5). The breadth and diversity of these examples underscore the important contribution the environment makes to human well-being and poverty reduction.

Box 2.1 Facts and Figures Exemplifying Poverty-Environment Linkages

- In **Bangladesh**, more than 95 per cent of the population rely on solid fuels, such as charcoal and firewood, for their energy needs.
- In **Bolivia**, over 80 per cent of the people living in rural areas are poor, making them particularly vulnerable to the environment on which their livelihoods rely.
- In **Burkina Faso**, 92 per cent of the active workforce are employed in agriculture and fisheries, and hence depend for their well-being on the sustainable management of these resources.
- In **Latin America and South-East Asia**, 100 per cent of the poor living on less than \$1 per day are exposed to indoor air pollution.
- In central **Viet Nam**, following disastrous floods in November 1999, poor households were the slowest to recover and were unable to afford labour to clear their fields and return to agricultural production.

Source: UNDP et al. 2005.

The Contribution of the Environment to Livelihoods, Resilience, Health and Economic Development

Poverty-environment linkages can be conceptualized in many ways, notably in terms of their relationship to livelihoods, resilience to environmental risks, health and economic development.

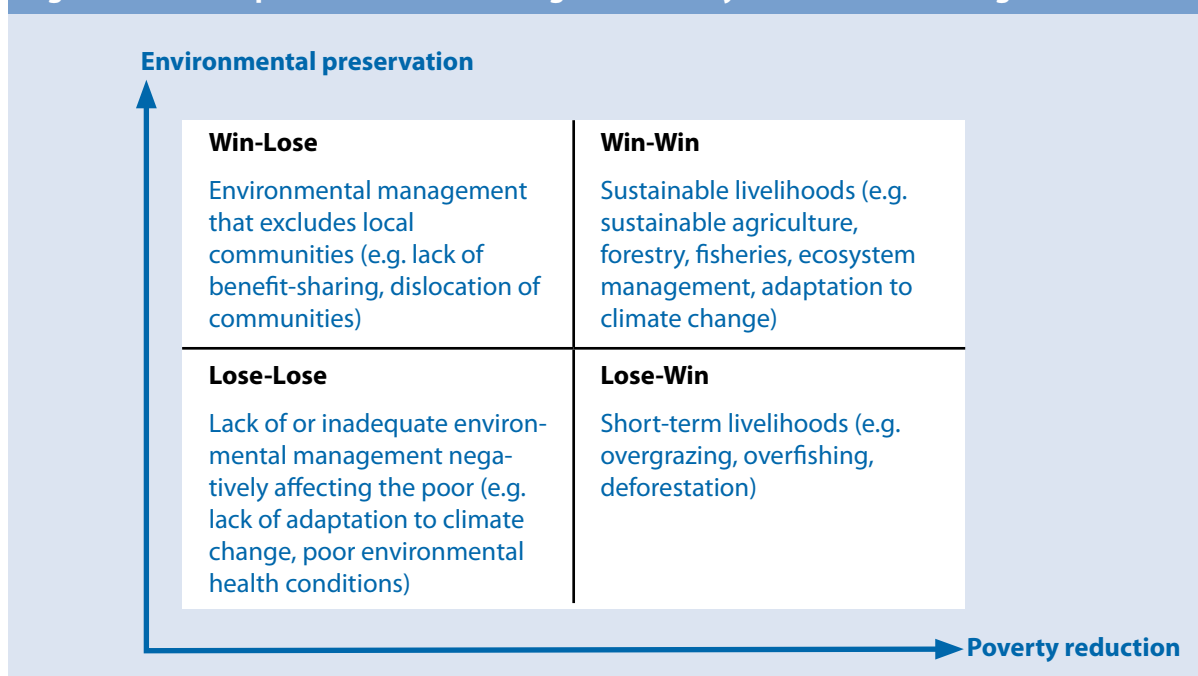
- **Livelihoods.** Ecosystems provide services (including provisioning services such as food and freshwater, regulating services such as the regulation of climate and water and air quality, cultural services such as recreation and aesthetic enjoyment, and supporting services needed to produce all other ecosystem services such as soil formation) on which poor people rely disproportionately for their well-being and basic needs. Populations also depend on the environment to earn incomes in sectors such as agriculture, fishing, forestry and tourism, through both formal and informal markets. Livelihoods can be sustainable or not, depending on the way the environment is managed.
- **Resilience to environmental risks.** Poor people are more vulnerable to natural disasters such as floods and droughts, the effects of climate change and other environmental shocks that threaten their livelihoods and undermine food security. Improving the ways in which environmental resources, such as forests, are managed increases the resilience of poor people and their livelihoods to environmental risks.

- **Health.** Environmental conditions account for a significant portion of health risks to poor people. Environmental risk factors, such as occupational exposures to chemicals and indoor air pollution from household solid fuel use, play a role in more than 80 per cent of the diseases regularly reported on by the World Health Organization. Globally, nearly a quarter of all deaths and of the world's total disease burden can be attributed to the environment. As many as 13 million deaths could be prevented every year by making the environment healthier (Prüss-Üstün and Corvalan 2006). Improved health from better environmental conditions would also contribute to improvements in livelihoods, economic development and resilience to environmental risks.
- **Economic development.** Environmental quality contributes directly and indirectly to economic development and employment. These contributions are particularly important in developing countries in such sectors as agriculture, energy, forestry, fisheries and tourism.

Poverty-environment linkages are dynamic and context specific, reflecting geographic location, scale and the economic, social and cultural characteristics of individuals, households and social groups. In particular, the sex and age of the head of household (male or female, adult or young person) are key factors influencing poverty-environment linkages.

Poverty-environment linkages can be positive or negative, creating virtuous or vicious circles for environmental preservation and poverty reduction (figure 2.1). While trade-offs may be necessary, poverty-environment mainstreaming aims at achieving the best balance between environmental preservation and poverty reduction for the benefit of the poor and long-term environmental sustainability.

Figure 2.1 Examples of Positive and Negative Poverty-Environment Linkages



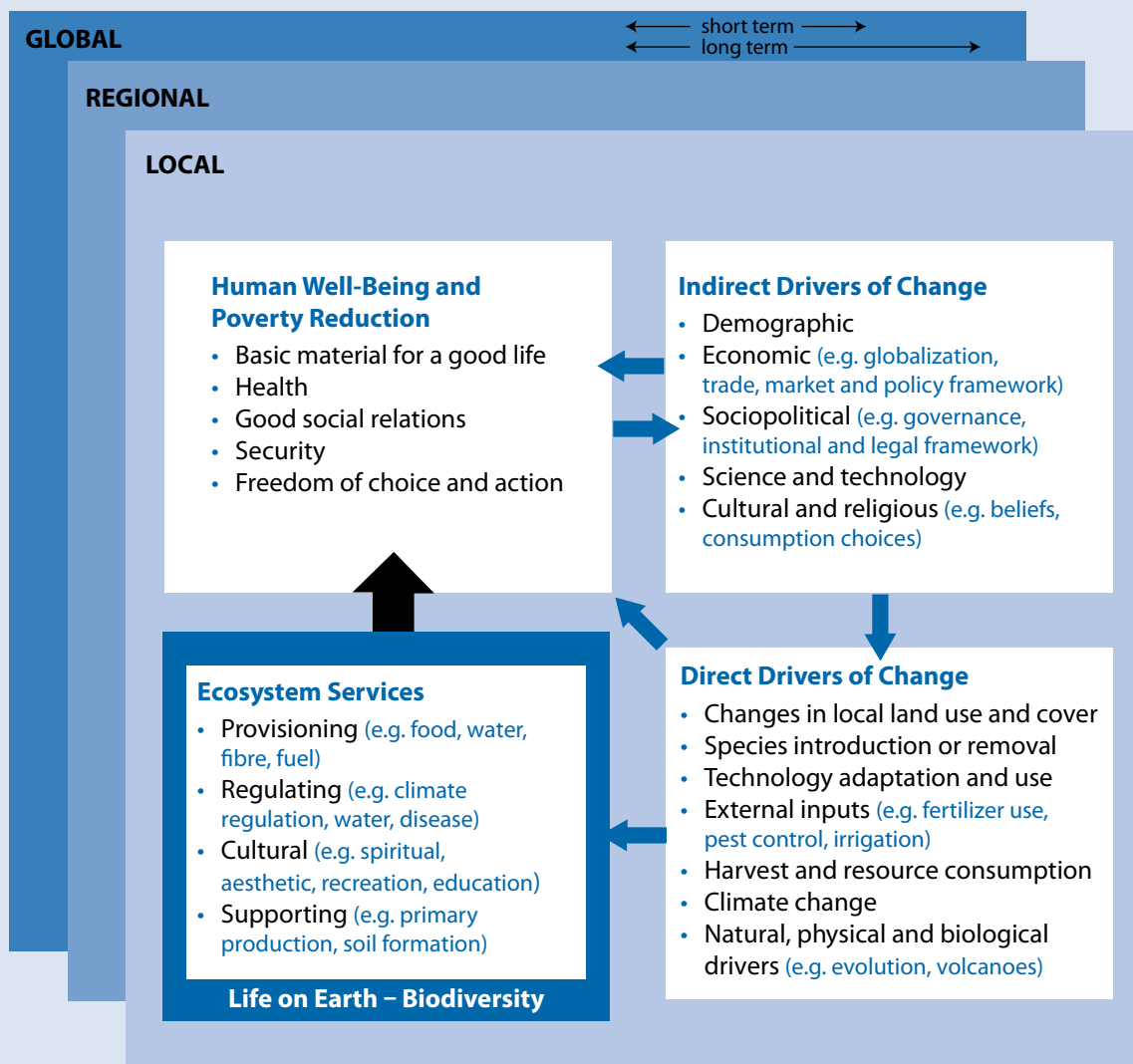
Ecosystem Services and Human Well-Being

As noted in the context of livelihoods (discussed above), humans depend on ecosystems for a wide variety of services. A useful tool for examining poverty-environment linkages is the Millennium Ecosystem Assessment, a state-of-the-art scientific appraisal conducted by more than 1,300 experts worldwide from 2001 to 2005 of the condition

of and trends in the world's ecosystems and the services they provide. The assessment examined the consequences of ecosystem change for human well-being, and its findings provide a scientific basis for action to conserve ecosystems and ensure that their services are used in a sustainable manner.

Figure 2.2, taken from the Millennium Ecosystem Assessment, depicts the relationship between environmental management and poverty reduction. As shown in the figure, shifts in indirect drivers of ecosystem change (upper right corner), such as population, technology and lifestyle, act on direct drivers of change (lower right corner), such as fish catch or fertilizer use. The resulting changes in ecosystems and the services they provide (lower left corner) affect human well-being (upper left corner). These interactions take place across scales of time and space. For instance, a rise in demand for timber in one region can lead to a loss of forest cover in another region, which in turn can produce greater frequency or intensity of flooding along a local stretch of river. At the global scale, production and consumption patterns and the greenhouse gas emissions from one country contribute to climate change and indirectly affect countries and people across

Figure 2.2 Linkages between Ecosystem Services, Human Well-Being and Poverty Reduction



➡ Strategies and interventions.

Source: MA 2005.

the world, in particular the poorest ones. Different strategies and interventions can be applied at many points in this framework to enhance human well-being and conserve ecosystems (MA 2005).

The Relevance of Poverty-Environment Linkages to Achieving the MDGs

The contribution of the environment to poverty reduction and human well-being can also be expressed through the lens of the MDGs, as shown in table 2.1.

| Goal | Poverty-environment linkages |
|--|---|
| Poverty 1. Eradicate extreme poverty and hunger | <ul style="list-style-type: none"> • Livelihood strategies and food security of poor households typically depend directly on ecosystem health and productivity and the diversity of services they provide • Poor households often have insecure rights to land, water and natural resources, and inadequate access to information, markets and rights to participate in decisions that affect their resource access and use, thus limiting their capability to use environmental resources sustainably to improve their livelihoods and well-being • Vulnerability to environmental risks—such as floods, droughts and the impacts of climate change—undermines people’s livelihood opportunities and coping strategies, thus limiting their ability to lift themselves out of poverty or avoid falling into poverty |
| Gender and education 2. Achieve universal primary education 3. Promote gender equality and empower women | <ul style="list-style-type: none"> • Environmental degradation contributes to an increased burden on women and children (especially girls) in terms of the time required to collect water and fuelwood, thus reducing the time they have available for education or income-generating activities • Including the environment within the primary school curriculum can influence the behaviour of young people and their parents, thereby supporting sustainable livelihoods • Women often have limited roles in decision-making, from the community level to national policymaking, which prevents their voices from being effectively heard, particularly with respect to their environmental concerns • Women often have unequal rights and insecure access to land and natural resources, limiting their opportunities and ability to access productive assets |
| Health 4. Reduce child mortality 5. Improve maternal health 6. Combat HIV/AIDS, malaria and major diseases | <ul style="list-style-type: none"> • Water- and sanitation-related diseases (such as diarrhoea) and acute respiratory infections (primarily from indoor air pollution) are two of the leading causes of under-five child mortality • Damage to women’s health from indoor air pollution or from carrying heavy loads of water and fuelwood can make women less fit for childbirth and at greater risk of complications during pregnancy • Malaria, annual killer of an estimated 1 million children under age five, may be exacerbated as a result of deforestation, loss of biodiversity and poor water management • Up to a quarter of the burden of disease worldwide is linked to environmental factors—primarily polluted air and water, lack of sanitation and vector-borne diseases; measures to prevent damage to health from environmental causes are as important, and often more cost-effective, than treatment of the resulting illnesses • Environmental risks, such as natural disasters, floods, droughts and the effects of ongoing climate change, affect people’s health and can be life threatening |
| Development partnership 8. Develop a global partnership for development | <ul style="list-style-type: none"> • Natural resources and sustainable environmental management contribute to economic development, public revenues, the creation of decent and productive work and poverty reduction • Developing countries, especially small island States, have special needs for development assistance, including increased capacity to adapt to climate change and to address other environmental challenges, such as water and waste management |

Sources: Adapted from DFID et al. 2002 and WHO 2008.

2.3 Importance of Natural Capital to the Wealth of Low-Income Countries

Another significant aspect of the contribution of the environment to human well-being and pro-poor economic growth centres on the role of natural capital in the wealth of nations, especially in low-income countries. Natural resources, particularly agricultural land, subsoil minerals and timber and other forest resources, make up a relatively larger share of the national wealth in less developed economies (World Bank 2006). Low-income countries are consequently more dependent on their natural resources for their well-being (table 2.2).

Table 2.2 Distribution of National Wealth by Type of Capital and Income Group

| Income group | Natural capital | | Produced capital | | Intangible capital | | Total |
|----------------------------|-----------------|---------|------------------|---------|--------------------|---------|---------|
| | \$ per capita | % share | \$ per capita | % share | \$ per capita | % share | |
| Low-income countries | 1,925 | 26 | 1,174 | 16 | 4,434 | 59 | 7,532 |
| Middle-income countries | 3,496 | 13 | 5,347 | 19 | 18,773 | 68 | 27,616 |
| High-income OECD countries | 9,531 | 2 | 76,193 | 17 | 353,339 | 80 | 439,063 |
| World | 4,011 | 4 | 16,850 | 18 | 74,998 | 78 | 95,860 |

Source: World Bank 2006.

Notes: All dollars are at nominal exchange rates. Oil States are excluded. OECD: Organisation for Economic Co-operation and Development.

Decision-makers should bear in mind the importance of environmental quality and natural resources as capital assets that can be maintained or enhanced through sound management or depleted through mismanagement. Thus, considering ways to optimize the management and use of environmental assets needs to be an integral part of national development planning. The central importance of natural capital in most developing economies points to the challenging nature of mainstreaming poverty-environment linkages, given the high economic and political stakes and the often conflicting priorities of various stakeholders concerning access, use and control of environmental assets.

2.4 Importance of Climate Change for Poverty-Environment Mainstreaming

Many of the countries that are experiencing the greatest shocks due to climatic changes are low-income countries. In these countries, improved environmental management can reduce the impact of and improve recovery from extreme weather events (McGuigan, Reynolds and Wiedmer 2002). Box 2.2 outlines some key aspects of mainstreaming the linkages between poverty reduction and climate change adaptation into national development planning.

Box 2.2 Integrating Climate Change Adaptation into National Development Planning

Examining a country's vulnerability to the impacts of climate change is a key aspect of mainstreaming poverty-environment linkages into national development planning. Among the issues decision-makers need to consider are the effects of climate change on poverty and growth and potential strategies for adaptation to climate change impacts in the immediate and longer terms.

The types of possible effects of climate change and their severity will vary by country and region. Effective poverty-environment mainstreaming should, at a minimum, do the following:

- Identify the population groups, regions and sectors currently at greatest risk (for example, due to poverty, lack of development or existing degradation of natural resources)
- Consider the degree to which current development strategies and sector programmes are vulnerable to climate variability and examine options to enhance their resilience
- Explore ways to factor the impacts of projected climate change into development planning decisions to minimize risk and build resilience

The challenge for poverty-environment mainstreaming is to increase decision-makers' awareness of climate change, identify the aspects of national economies that are most sensitive to current risks and vulnerabilities, and build national capacity for ongoing analysis of future risks and potential adaptation strategies.