

# 2

## Importance of Mainstreaming Poverty-Environment Concerns

This chapter introduces salient data on poverty-environment linkages to demonstrate the urgency and importance of the mainstreaming approach. It describes key concepts related to poverty-environment linkages and the contribution of ENR to human well-being, health and pro-poor economic growth. The chapter also explores the importance of natural capital to the wealth of low-income countries and discusses opportunities for and challenges in mainstreaming.



## 2.1 Relevance of Poverty-Environment Linkages to Achieving National Development Goals

Poverty is often defined by one-dimensional measures such as income. But poverty is multidimensional, comprising numerous aspects which constitute poor people's experience of exclusion and marginalization—such as inadequate living standards; lack of access to clean water, sanitation and sustainable energy; poor health; lack of income and access to productive resources such as land; and disempowerment.

Moreover, environmental degradation, unsustainable ENR management and climate change are major obstacles to addressing poverty. ENR constitutes a significant economic base in many countries, and its use generates economic and social benefits for people over time. Natural resources such as soils, forests, fisheries, water and minerals, among others, are the principal sources of income, social protection, employment creation and human capital development (in terms of health and education), particularly for rural families and communities living in poverty. In southern Ethiopia, for instance, forest income kept a fifth of the population above the poverty line, reducing income inequality some 15 per cent (UNDP 2011c). The degradation of ENR—the productive assets of the poor—exacerbated by lack of access to adequate infrastructure (e.g. energy, roads and markets), rights and credit creates a poverty trap, leading to a reinforcing loop of further environmental degradation and worsening poverty.

### ENR and the Health and Well-Being of the Poor

Environmental risk factors associated with unsustainable ENR use, such as indoor air pollution from household solid fuel use and occupational exposure to chemicals, have

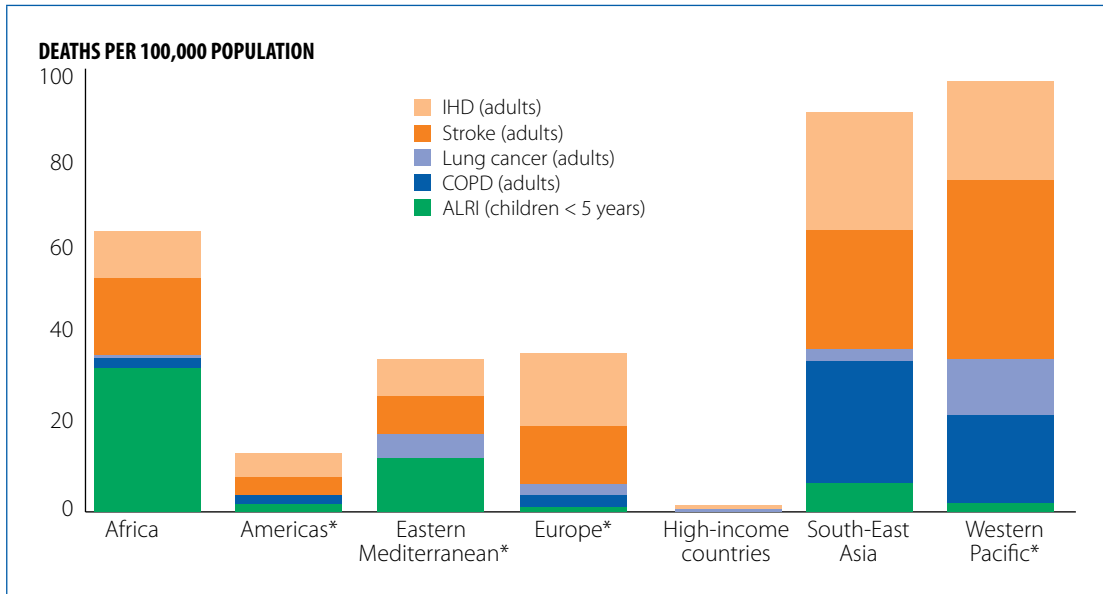
negative health implications for poor people, especially women and children. In 2012, household indoor air pollution from cooking with solid fuels was responsible for 4.3 million deaths and 7.7 per cent of global mortality, according to World Health Organization data. Almost all of these deaths occurred in low- and middle-income countries (figure 2.1). 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 livelihood, economic development and resilience to environmental risks.

### Climate Change and the Well-Being of the Poor

Climate change has devastating impacts on communities around the world, affecting the poor in particular. Increased storm severity and frequency, changing rainfall patterns and rising sea levels exacerbate existing economic, political and humanitarian stresses. Climate change is threatening the stability and productivity of agricultural production. Long-term changes in the patterns of temperature and precipitation that are characteristic of climate change are expected to shift production seasons, alter pest and disease patterns, and modify the set of feasible crops—affecting production, prices, incomes and, ultimately, livelihoods and lives. It is estimated that up to 600 million more people in Africa could face malnutrition as agricultural systems break down due to climate change impacts. An additional 1.8 billion people could face water shortages, especially in Asia (UNDP 2011a).

The most vulnerable people to climate change are often the poorest as they have the least capacity to respond to, recover from or adapt to climate-related shocks and stresses. Lack of access to and control over livelihood resources such as agricultural and forest lands and water



**Figure 2.1** Deaths Attributable to Indoor Air Pollution from Household Solid Fuel Use

Source: WHO.

Note: \* = low- and middle-income countries. IHD = ischaemic heart disease; COPD = chronic obstructive pulmonary disease; ALRI = acute lower respiratory infection.

resources exacerbate the vulnerability of the poor and impede their ability to adapt to climate change (CARE 2011). Similarly, lack of access to basic services, including health, agricultural extension and financial services, also reduces their ability to cope with climate-related stresses. [Table 2.1](#) shows that people in lower quintiles of the income distribution often appear more exposed and vulnerable to weather shocks than the rest of the population (World Bank 2014a). The table provides the percentages of the population in five countries in the Middle East and North Africa (Algeria, Egypt, Morocco, Syria and Yemen) that report economic impacts from weather shocks; the data suggest that the bottom three quintiles are more exposed than the top two.

Poorer households also often have more limited access than the non-poor to social protection and safety nets after disasters, which

make them more vulnerable to weather shocks. Data from the World Bank's ASPIRE (Atlas of Social Protection: Indicators of Resilience and Equity) database show that the average per capita transfer received by the extreme poor from social protection after disasters is much lower than the transfer received by the richest quintile. In Malawi, for example, those in the poorest quintile receive on average \$0.05 per day, while the richest 20 per cent receive more than \$0.17. In Colombia, the poorest receive \$0.23 per day and the richest more than \$4.60.

### ENR, Climate Change and Gender Equality

Unsustainable natural resource use and the impacts of climate change have implications on gender equality, as they affect women and men differently (CARE 2011). The majority of rural women, a demographic that comprises a quarter of the total world population (FAO

**Table 2.1** Percentage Reporting Economic Impacts from Weather Shocks by Wealth Quintile, 2011

IMPACT	QUINTILE					ALL
	POOREST	Q2	Q3	Q4	RICHEST	
Lost income	46.37	44.14	43.21	29.25	20.72	36.59
Lost crops	58.12	61.96	62.13	49.42	42.10	54.62
Lost livestock or cattle	23.81	25.19	30.11	23.17	15.23	23.43
Less fish caught	9.51	10.27	8.90	9.65	4.69	8.60

Source: Adoho and Wodon 2014.

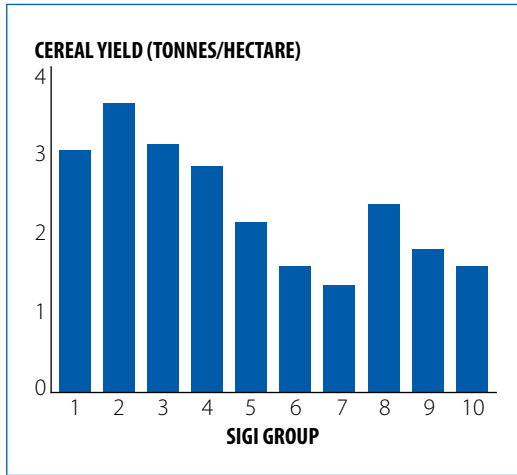
2000), depend on natural resources and agriculture for their livelihoods (World Bank and IFPRI 2010). Their traditional responsibilities as food growers, water and fuel gatherers, and caregivers connect them intimately to available natural resources and the climate, making them especially vulnerable to environmental hardships. For instance, many women and girls must walk miles to access clean water, reducing the time available to them for other productive activities such as education and employment—and in turn reducing the potential for healthier and more productive households. Women in sub-Saharan Africa, for example, spend 40 billion hours per year collecting water (UNDP 2009b). Without a basic education or the ability to get a formal wage-earning job, many women become locked in a vicious cycle of poverty. And rural women face serious obstacles more regularly than men, since traditional structures and perceptions tend to prevent them from obtaining the necessary tools to reach their full potential in the ENR sector. In fact, despite their major involvement in and contribution to ENR management, women tend to have limited access to resources, including financial services, and less participation in decision-making compared to their male counterparts.

Poor women's intensive relationship with the environment leads to their increased vulnerability to environmental hardships, but it also means that they possess the knowledge and

skills critical to finding sustainable solutions to environmental problems (CARE 2011). Across developing countries, women's leadership in sustainable ENR management is well recognized (UNDP 2009b). Taking gender and rights-based considerations into account in ENR management, along with expanded public and private investment to improve poor women's access to ENR, can significantly contribute to poverty reduction and national development goals. As shown in [figure 2.2](#), countries with lower levels of gender inequality tend to achieve higher average cereal yields than countries with higher levels of inequality. If gender yield gaps<sup>1</sup> of 20–30 per cent were closed and domestic production increased by 2.5–4.0 per cent, the number of undernourished people in 34 countries surveyed could decline by 12–17 per cent (FAO 2011b). An estimated 925 million people in the world were undernourished in 2010, of whom 906 million were in developing countries. Gains of this magnitude could therefore equate to 100–150 million fewer people living in hunger (FAO 2010).

<sup>1</sup> Women farmers typically achieve yields 20–30 per cent lower than men. However, the vast majority of studies suggest that women are just as efficient as men and would achieve the same yields if they had equal access to productive resources and services. Bridging this gender yield gap would boost food and nutrition security globally. Source: FAO.

**Figure 2.2** Correlation of Cereal Yield and Gender Inequality



Source: FAO 2011b.

**Note:** 1 = least gender inequality and 10 = greatest gender inequality as determined by the Social Institutions and Gender Index (SIGI) constructed by the Development Centre of the Organisation for Economic Co-operation and Development.

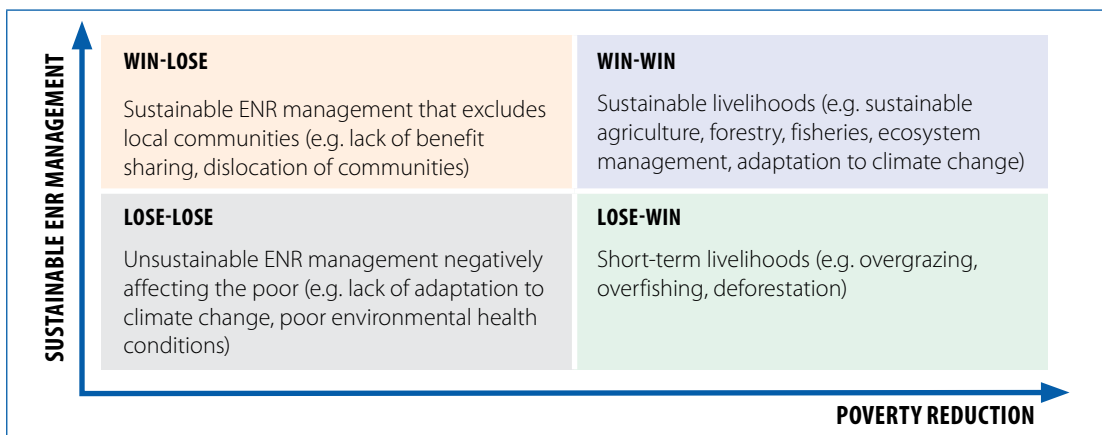
As this chapter highlights, poverty-environment linkages reflect how the use of ENR and the impacts of climate change affect the achievement of poverty reduction and other development goals. It will be more difficult to

reach poverty reduction targets if unsustainable ENR use and climate change vulnerability are not addressed. The causal pathways between these linkages will be variable and based on country contexts and conditions; therefore, developing a good understanding of the linkages is critical to successful mainstreaming. While trade-offs may be necessary, poverty-environment mainstreaming aims at achieving the best balance between sustainable ENR management and poverty reduction for the benefit of the poor and long-term environmental sustainability (figure 2.3).

## 2.2 The Importance of Natural Capital to the Wealth of Low-Income Countries

The contribution of natural capital to the wealth of nations and to human well-being is vital in promoting pro-poor economic growth, particularly in low-income countries. Natural capital is defined as the stock of natural assets that provide society with renewable and non-renewable resources and a flow of ecosystem services, the latter being the benefits that ecosystems provide to people (Russi and ten Brink 2013). Natural capital comprises both

**Figure 2.3** Examples of Positive and Negative Poverty-Environment Linkages

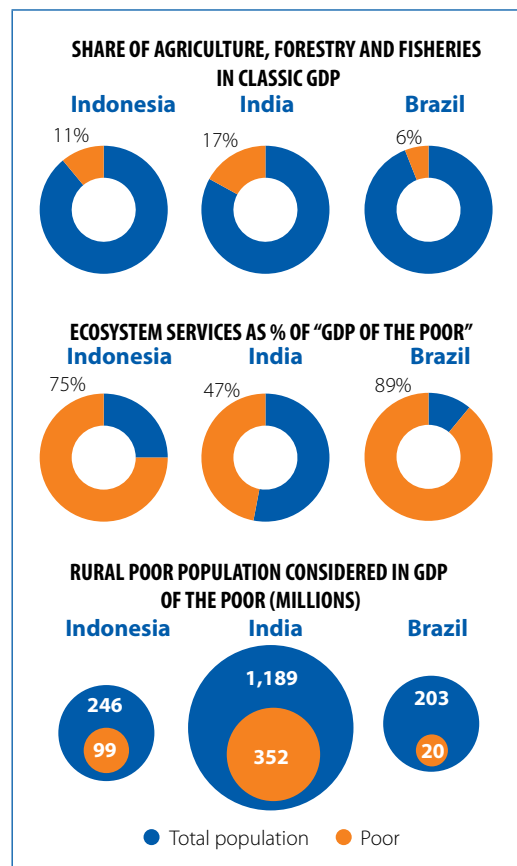


ecosystem assets and natural resources, including land, minerals and fossil fuels, solar energy, water, living organisms, and the services provided by the interactions of all these elements in ecological systems (UNEP 2014).

Natural capital makes up a relatively larger share of the national wealth in less developed countries. Research from the World Bank (WAVES 2012) has found that in 43 countries classified as low-income, natural capital accounts for up to 36 per cent of total wealth (figure 2.4). And The Economics of Ecosystems and Biodiversity (TEEB) estimates that ecosystem services and other non-market goods make up between 50 and 90 per cent of the total source of livelihoods among poor rural and forest-dwelling households worldwide—the so-called “GDP of the poor” (TEEB 2010). In contrast, agriculture, forestry and fisheries account for between 6 and 17 per cent of overall national GDP (figure 2.5).

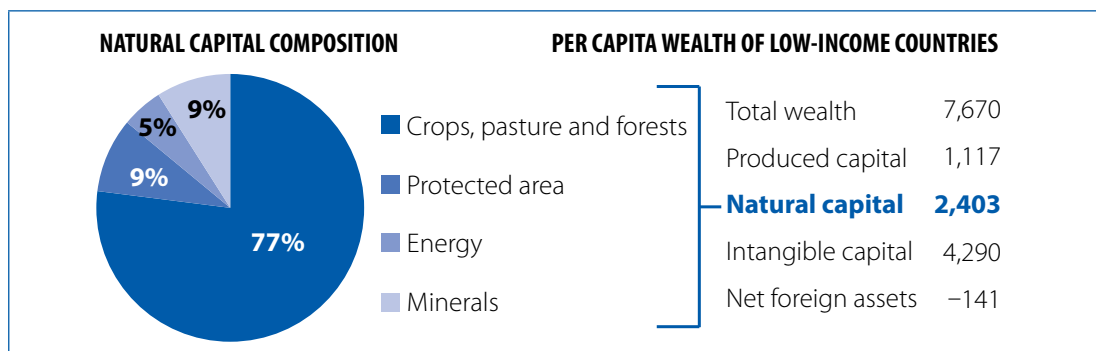
Significant percentages of the population—particularly the poor—in these low-income countries depend on forests, minerals and soil productivity for their daily existence (WAVES 2012). Natural capital in these countries is being harvested and degraded at a rate that threatens

**Figure 2.5** GDP of the Poor: Estimates of Ecosystem Service Dependence



Source: TEEB 2010.

**Figure 2.4** Wealth of Low-Income Countries by Type of Capital



Source: WAVES 2012.

Note: Wealth of low-income countries is in 2008 US\$.

to undermine the well-being of the population and future economic growth—which in turn makes these countries less able to cope with degradation and the loss of the ecosystems that are a lifeline for many communities.

While natural capital plays a vital role in promoting pro-poor economic growth, decision-makers have largely ignored the importance of natural resources as a capital asset. Natural resources consequently have been undervalued, and the notion that they are a stock of capital to be sustainably maintained or enhanced has also been ignored. By optimizing the management and use of environmental assets in national development planning and budgeting, pro-poor economic growth can take root and expand.

The central importance of natural capital in most developing economies points to the challenging nature of mainstreaming poverty-environment objectives, given the high economic and political stakes and the often conflicting priorities of various stakeholders concerning access, use and control of ENR assets. The distribution of ownership or control of natural capital in many countries is a significant determinant of the overall distribution of wealth. The poor tend to have much less ownership or control of productive land and high-value natural assets (e.g. mineral resources), and therefore tend to draw less benefit from the use of the natural environment than the better-off, even though they derive a higher percentage of their income from natural capital. In short, poverty often occurs—or is exacerbated—when links between natural capital and human well-being have been damaged or broken.

## 2.3 Opportunities and Challenges

The goal of poverty-environment mainstreaming is to contribute to poverty eradication and the achievement of other national development goals through the sustainable use of ENR while taking climate risks into account. This is done by integrating poverty-environment objectives into “mainstream” economic decision-making processes, particularly national and subnational planning and budgeting processes led by ministries of finance and planning, relevant sectors and local government.

Mainstreaming presents great opportunities for sustainable development in terms of engaging the central parts of government that determine public expenditures along with other elements of fiscal policy that provide incentives for private sector investment.

In an economic sense, ENR sustainability and climate problems stem from policy and market failures where the benefits of environmental investment and the costs of environmental externalities and degradation are not included in mainstream economic decision-making. By reducing environmental externalities and ensuring more sustainable use of natural resources, developing countries can achieve priority development planning goals.

As evidenced by the work of PEI and its partners as presented in this handbook, mainstreaming provides a channel for development priorities to be achieved in a sustainable, efficient and cost-effective manner. While there are challenges to mainstreaming (Dalal-Clayton and Bass 2009), PEI’s experience over the last decade has demonstrated that there are practical and operationally proven approaches to meeting those challenges. Following is a summary of the most pervasive of these challenges and how they are being met.



## Multifaceted Nature of Mainstreaming

The process of mainstreaming is complex, demanding and multifaceted as this handbook details and delineates. However, the application of the PEI programmatic approach has proven that, when sustained over a number of years with a range of tools introduced at various entry points, this challenge can be addressed.

## Mainstreaming Fatigue

In some countries, a sense of mainstreaming fatigue has set in, given the proliferation and range of issues clamouring for programming attention such as climate change, environmental sustainability, disaster risk reduction, gender equality, poverty reduction and social inclusion, good governance and human rights. This fatigue can be overcome by identifying high-profile issues for “targeted mainstreaming” to galvanize government support. To do so takes a shrewd understanding of the political economy of mainstreaming and an appreciation of the need to engage with the media and the general public. The focus on high-profile public policy issues can instil motivation to understand mainstreaming. Examples include mining in Mongolia and the Philippines, climate vulnerability and disaster risk reduction in Bangladesh and Nepal, and food security in some African countries.

There are also ways to connect with other issues seeking to be mainstreamed for joint success. For example, Bhutan’s Mainstreaming Reference Group under its Gross National Happiness Commission (i.e. its planning commission) seeks joint mainstreaming of poverty, gender, environment, climate and disaster risk reduction in its regular review of new public policies. In Bangladesh, revisions to approval processes for public investment projects have been introduced simultaneously for several

mainstreaming issues including poverty reduction, gender equality, climate and disaster risk reduction and environmental sustainability.

## Considering the Environment as a Cross-Cutting Issue

Focusing on the environment as a cross-cutting issue can render it invisible compared to pursuing a more sector-specific approach whereby stand-alone environmental policies, plans and programmes can be developed. On the other hand, past stand-alone environmental policies and planning have had little impact on the important policy and spending decisions that drive environmental change and that remain outside the control of environmental agencies. Most issues that affect the environment are caused by development sectors (e.g. agriculture and infrastructure); thus, addressing these sectors through mainstreaming drives sustainability incentives. In addition, it is possible to complement environmental mainstreaming as a cross-cutting issue with a focus on the environment as a sector within the planning and budgeting process. This is further explored in chapters 4 and 5 with country-level examples.

## Political Economy of Mainstreaming

The thrust of mainstreaming is to move the issue at hand—in this case, the environment and climate change—from being seen as a marginal issue to being perceived as integral to development and hence of core importance to the ministries of finance and planning, local government, and sector and subnational agencies. In this changed paradigm, the role of the environment ministry is to provide technical and scientific support to the economic ministries to influence their planning and budgeting. Further, the environment ministry will need to sustain poverty-environment mainstreaming into other ministries once external support has ended. While some environment



ministries have welcomed this role and set of responsibilities, others find these challenging. Mainstreaming can be hard work without the seemingly more direct, quicker pay-offs from implementation through stand-alone environmental plans and projects. If mainstreaming can be done effectively, the pay-offs will be greater than through a stand-alone approach. However, having a stronger policy and institutional focus can be harder to quantify and monitor for results. Overcoming this challenge requires making ministries of environment partners in the mainstreaming effort, demonstrating their value added in terms of technical and scientific support.

Political economy challenges also include governance structures that lack transparency and accountability and that are dominated by economic and political elites; social, political and economic marginalization of certain groups, which can lead to grievances, social unrest and even violent conflict; and economies that are heavily exposed to the volatility of commodity prices. Undertaking a political economy analysis helps provide a good understanding of the governance and political context, which can aid in developing more effective poverty-environment mainstreaming interventions. This is discussed in chapter 3.

## Managing Risk and Unknowns Related to Climate Change

Addressing climate change entails managing risk and unknowns. Thus, integral to effective mainstreaming of climate change is improved information on climate scenarios and impacts. While there is growing climate science at the global level, this is only now being translated into regional and disaggregated national and local-level impacts. Sophisticated modelling capabilities and the collection of basic meteorological data are needed—the subject of increasing attention and continued under-funding. However, like climate change, all public policy decision-making is based on the management of uncertainty. There is, for example, considerable uncertainty about future economic booms and busts; yet decision-makers manage to factor this into their responses and projections. Against this backdrop of increasing focus on improved, disaggregated data and existing decision-making systems for handling (economic) uncertainty, climate change should not present insurmountable challenges to effective decision-making.

As this chapter demonstrates, mainstreaming has clear benefits, but it is not without challenges. These challenges can be overcome through careful design and application of an effective mainstreaming approach.