



Mainstreaming Environment and Climate for Poverty Reduction and Sustainable Development

A Handbook to Strengthen Planning and Budgeting Processes

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Mainstreaming Environment and Climate for Poverty Reduction and Sustainable Development

A Handbook to Strengthen Planning and Budgeting Processes

The Poverty-Environment Initiative (PEI) of the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) is a global UN effort that supports country-led efforts to mainstream poverty-environment linkages into national development planning. PEI provides financial and technical assistance to government partners to set up institutional and capacity-strengthening programmes and carry out activities to address the particular poverty-environment context.

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Foreword

Over the past two decades, rapid economic growth has lifted millions of people out of poverty and there has been considerable progress by countries on a number of the Millennium Development Goals (MDGs). Global poverty has been halved five years ahead of the 2015 timeframe, 90 per cent of children in developing regions now enjoy primary education, there have been significant improvements in all health indicators, and the target of halving the proportion of people who lack access to improved sources of water has been met. Yet, despite these remarkable gains, 1.2 billion people still live below the poverty line, and much more needs to be done to eradicate poverty.

In June 2012, world leaders from 192 United Nations member states came together at the Rio+20 Conference in Brazil to advance action on sustainable development. The Rio outcome document, "The Future We Want," reiterated the global commitment to the urgent matter of freeing humanity from poverty and signalled a fresh determination to deliver on the promise of sustainable development. To this end UN member states agreed to develop the Sustainable Development Goals (SDGs), which will guide global development priorities until 2030, replacing the MDGs.

The proposal of the UN's Open Working Group on the SDGs echoes the calls of citizens around the world to protect current and future development gains by advancing across the strands of sustainable development, with progress being underpinned by building more peaceful, more inclusive societies. This recognizes the important principle that it is possible to tackle poverty, lower carbon emissions, and address other environmental and development priorities at the same time. This is what the Poverty-Environment Initiative is all about.

How will poverty continue to be reduced while safeguarding the environment and tackling climate change? The solution lies in pursuing an integrated approach to development that incorporates economic, social and environmental dimensions, and a transition towards inclusive, green economies. As growing experience from around the world suggests, this economic transformation can be achieved through poverty-environment mainstreaming—by taking pro-poor, gender-responsive environment and climate issues into the heart of economic decision-making, particularly national and subnational planning and budgeting processes. Led by ministries of finance, planning and local government, and supported by ministries of environment, poverty-environment mainstreaming lets the benefits of environmental investment and the costs of environmental damage to be taken into account in mainstream economic decision-making. This is a compelling and effective approach for driving institutional change that can—and ultimately will—deliver sustainable development.

This second edition of the handbook is designed to serve as a guide for policymakers and practitioners in mainstreaming poverty and the environment into planning and budgeting processes. It is based on nearly a decade of experience from the Poverty-Environment Initiative, a joint collaboration between the

United Nations Development Programme and the United Nations Environment Programme. The handbook also draws on selected experiences from other programmes and initiatives to bring readers the best of current practices and information.

We hope that the rich experiences and lessons learned showcased in this handbook will serve as a valuable guide to practitioners in their efforts to reduce poverty, tackle climate change, and manage the environment and natural resources in a sustainable way.

Helen Clark
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United Nations Development Programme

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Executive Director
United Nations Environment Programme

Executive Summary

"In nature's economy the currency is not money, it is life."
—*Vandana Shiva,* Earth Democracy: Justice, Sustainability, and Peace

Environment and natural resources (ENR) such as water, forests, soils, minerals and fisheries form an essential economic base in many developing countries, and their use generates significant economic and social benefits for people—particularly the poor. Seventy per cent of the world's 1.2 billion people who live below the poverty line largely depend on natural resources for their livelihoods. With rapid economic growth and increasing pressure on land and water resources, ENR are being degraded at an unprecedented rate. Coupled with the impacts of climate change, ENR degradation continues to have deleterious economic and social repercussions for the poor. It also has implications for gender equality, as a significant majority of the world's estimated 1 billion rural women depend on natural resources and agriculture for their livelihoods, making them more vulnerable to negative impacts.

Increasingly, governments are working to address the challenges of unsustainable ENR use and climate change. And many are coming to recognize that the links between poverty reduction and environmental sustainability are fundamentally important for the well-being of current and future generations. But even as governments come to realize that our planetary boundaries are being reached, environmental sustainability goals are persistently underachieved in many countries, and the resilience of life-supporting ecosystems is being severely tested. As the priorities of the Post-2015 Agenda are shaped, the linkages between poverty reduction, gender and ENR sustainability must be a central endeavour of development policies. The solution lies in country-led efforts to integrate or "mainstream" poverty-environment objectives into development planning and budgeting processes at the national, subnational and sectoral levels.

This handbook is designed as guidance for policymakers and practitioners to mainstream pro-poor environment and climate concerns into planning, budgeting and monitoring. Mainstreaming is achieved by putting poverty-environment issues at the heart of government—in other words, by taking these issues into mainstream economic decision-making processes, particularly the national and subnational planning and budgeting processes led by ministries of finance, planning and local government, and supported by ministries of environment. Over the last 10 years, the Poverty-Environment Initiative (PEI), a joint programme of the United Nations Development Programme and the United Nations Environment Programme, has successfully supported the integration and implementation of pro-poor, environmental sustainability objectives into national, subnational and sectoral development policies, plans and budgets to contribute to poverty alleviation and an inclusive, green economy. The handbook provides concrete examples from PEI experience in Africa, Asia-Pacific, Europe and the Commonwealth of Independent States, and Latin America and the Caribbean, as well as from other initiatives.

Mainstreaming Opportunities and Challenges

Mainstreaming means engaging directly with ministries of finance and planning—the parts of government that determine public expenditures and the fiscal policy that incentivizes private sector investment. Many environmental and climate problems arise from what economists call "policy and market failures," which leave the environment undervalued and underpriced so that the costs of environmental damages are not included in mainstream economic decision-making. In overcoming such failures, successful mainstreaming offers potentially huge pay-offs and opportunities.

The challenges of poverty-environment mainstreaming mirror its complexity, and include consideration of the two-way linkages between poverty and ENR management, and appreciation of the diverse range of environmentally related issues that are cross-cutting and thus part of a mainstreaming agenda—e.g. climate change adaptation and mitigation, green economy, and sustainable consumption and production. Separate challenges to mainstreaming exist with respect to climate change. Notably, planners need to take into account considerable uncertainty as to future trends and impacts; also, in many cases, potential climate risks need to be addressed across programmes.

Programmatic Approach, Theory of Change and the Political Economy of Mainstreaming

Poverty-environment mainstreaming is a demanding task that requires a programmatic approach to guide the choice of activities, methodologies and tools. PEI has developed a flexible programmatic model for poverty-environment mainstreaming, which incorporates gender and a rights-based approach, and can be applied to different contexts. The model is comprised of three components, which are not necessarily conducted sequentially: (i) finding the entry points and making the case; (ii) mainstreaming in national planning and budgeting processes; (iii) mainstreaming into sector and subnational planning and budgeting, monitoring and private investment. A theory of change is a useful tool in applying a mainstreaming programmatic approach. It uses an iterative process to support critical thinking at each step of the programme cycle.

To apply a programmatic approach, practitioners need to understand the political economy of mainstreaming, including the range of stakeholders involved and the best entry points. Undertaking preliminary assessments; identifying and understanding the poor; understanding the governmental, institutional and political contexts; developing impact, vulnerability and adaptation assessments; assessing and strengthening mainstreaming capacities; enhancing coordination mechanisms for sustained mainstreaming; and raising awareness and building partnerships are all major activities in finding the entry points and making the case for mainstreaming.

Mainstreaming Poverty-Environment Objectives into National Planning Processes

To integrate poverty-environment objectives into national development planning processes successfully, practitioners have to identify and understand the government planning processes in place—including the elaboration, implementation and monitoring stages; their timelines; and the institutions and actors involved. It also requires an assessment of how effectively planning processes link national, sectoral and subnational priorities. The links between planning and budgeting need to be determined as well, since plans are only effective if they actually influence spending decisions. Gauging the effectiveness of mainstreaming at the national and subnational levels requires an assessment

of how central-level planning systems inform subnational plans and budgets, and vice versa. There has been much positive experience in including pro-poor environmental and climate issues into the text of a national plan, but their inclusion needs to be institutionalized so it continues when external support ends. Some notable achievements have been made in this regard, including setting up formal structures to continue mainstreaming over the medium term.

Mainstreaming Poverty-Environment Objectives into Budget Processes

Mainstreaming into budget processes means engaging with the key political and economic decisions of a government. This includes a government's decisions on both expenditure—what to spend on—and revenue raising—what to tax and levy charges on. These public fiscal policy decisions also incentivize private sector investments. Public expenditures can have positive effects on environmental and climate issues—e.g. when they support priorities such as sanitation, watershed and forestry management and climate-proofing infrastructure. "Negative" expenditures would include budgeting for government-funded fossil fuel power plants or state-led land clearance. Similarly, positive fiscal policy can include incentives for clean technology or private forestry plantations, while negative fiscal policy can include tax breaks for private fossil fuel investments or for private investors to clear forests. Creating the national budget is a complex political and technical exercise, providing multiple entry points for poverty-environment and climate mainstreaming. The main steps in the budget process are budget planning and formulation, budget execution and implementation, and budget monitoring and accountability. Both public expenditure and environmental fiscal reforms that influence private investment can be the target of mainstreaming within the budget process.

Mainstreaming Poverty-Environment Objectives in Sectoral and Subnational Planning Processes

To ensure that pro-poor environmental and climate issues contained in national development plans and budgets are actually implemented and lead to meaningful change for people requires that sectoral and subnational plans and annual budgets integrate the same poverty-environment objectives. In some countries, local-level structures—both local government and community-based organizations—have made progress in integrating climate adaptation and resilience into subnational plans and budgets. However, more work needs to be done to influence budget allocations and investment plans.

Mainstreaming Poverty-Environment Objectives into National Monitoring Processes

Monitoring and evaluation are part of any effective planning and budgeting process and offer another key entry point for mainstreaming. If poverty-environment issues are included in the national monitoring system, it is easier to track progress towards achieving the goals, targets and implementation strategies included in main policy documents (e.g. a national development plan or sector strategy). Inclusion of these issues in the monitoring system also helps maintain and improve understanding of poverty-environment linkages and how they can be measured. Monitoring poverty-environment including gender/equity issues allows policymakers and implementers to demonstrate the impact of policy measures put in place, share lessons learned, make adjustments in policies, and guide budget and resource allocation.

Managing Private Investment in Natural Resources

Over the past two decades, there has been a steady rise in flows of private investment and foreign direct investment (FDI) to developing countries. Evidence suggests that this can provide considerable economic, social and environmental benefits for host countries. But these benefits are not automatic: the outcomes of FDI depend heavily on government policies and the host country's institutional settings. Increased investment in primary sectors, including agriculture, forestry, fisheries and extractive industries, creates new growth opportunities for countries with natural resource potential; this is of interest to international investors and of high economic significance for many developing countries. Without adequate environmental regulation, however, FDI-induced economic growth can result in environmental degradation and a loss of natural resources, which can exacerbate poverty. The implications of FDI for host developing countries necessitate a strategic approach to managing FDI within a country's overall development framework, establishing economic and institutional settings and implementing policies to attract and successfully manage FDI, scrutinizing individual investment proposals and negotiating investment contracts, and monitoring investor compliance with relevant laws and project contracts.

The rich experience and examples shared in this handbook demonstrate how mainstreaming poverty-environment objectives into planning, budgeting, monitoring and private investment can help ensure sustainable ENR management—which in turn can reduce poverty and promote sustainable inclusive growth.

Abbreviations

CBA	cost-benefit analysis
CPEIR	climate public expenditure and institutional review
EFR	environmental fiscal reform
ENR	environment and natural resources
FDI	foreign direct investment
GDP	gross domestic product
GEF	Global Environment Facility
ICA	institutional and context analysis
MDG	Millennium Development Goal
NAP	national adaptation plan
NBSAP	national biodiversity strategy and action plan
OECD	Organisation for Economic Co-operation and Development
PEER	public environmental expenditure review
PEI	Poverty-Environment Initiative
PRSP	poverty reduction strategy paper
PSIA	poverty and social impact analysis
SDG	Sustainable Development Goal
SEEA	System of Environment and Economic Accounts
TEEB	The Economics of Ecosystems and Biodiversity
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

1 About the Handbook

This chapter provides a brief overview of the global environment and development context and introduces the concept of poverty-environment mainstreaming. It then outlines the purpose, target audience and structure of the handbook.



1.1 The Global Environment and Development Context

> "We all aspire to reach better living conditions. Yet this will not be possible by following the current growth model… We need a practical twenty-first century development model that connects the dots between the key issues of our time: poverty reduction; job generation; inequality; climate change; environmental stress; water, energy and food security."
>
> *—Ban Ki-Moon, UN Secretary General*

Despite progress made towards achievement of the Millennium Development Goals (MDGs), worldwide poverty remains unacceptably high at 1.2 billion people—70 per cent of whom depend on natural resources for all or part of their livelihoods (Green Economy Coalition 2012). The fundamental connection between poverty reduction and the environment has grown ever more apparent as poor people's lives and livelihoods continue to be threatened by environmental degradation resulting from poor management of natural resources, biodiversity loss and the effects of climate change. For example, smallholder farmers in Tanzania have been suffering smaller yields as a result of soil degradation (UNDP-UNEP PEI 2014e). And in Latin America and South-East Asia, high levels of deforestation are robbing indigenous peoples of the forest resources on which they depend for their livelihoods (UNDP-UNEP PEI 2013b).

Every year between 2000 and 2012, more than 200 million people—most of them in developing countries—were affected by natural disasters, especially floods and droughts (UNDP 2014). And from 2008 to 2012, populations in low- and lower-middle-income countries faced an estimated 97 per cent of the global mortality risk from natural disasters. These countries suffer disproportionately higher economic losses relative to the size of their economies; excluding 2010, losses over the period were estimated to exceed $262 billion (UN 2010a). Experts estimate that developing countries would bear 75–80 per cent of the cost of damages caused by the changing climate, permanently reducing gross domestic product (GDP) in Africa and South Asia by 4–5 per cent (UNDP 2011c; World Bank 2010).

Experiences with ongoing efforts to achieve the MDGs—specifically MDG 7: ensure environmental sustainability and MDG 1: reduce poverty and achieve food security—reveal the poor integration of environmental and natural resource sustainability into efforts to achieve poverty reduction (Thematic Consultation on Environmental Sustainability 2013). Similarly, efforts to achieve MDG 7 have failed to reflect links with poverty reduction.

Recognizing these challenges, the United Nations (UN) Conference on Sustainable Development held in Brazil in June 2012 (Rio+20) highlighted the need for integrated solutions to development planning and a transition to more resource-efficient, resilient forms of growth that yield multiple social, economic and environmental benefits. Implementing these solutions takes more than the involvement of ministries of environment, typically seen as the bastions of sustainable development. Rather, ministries of finance and planning also must recognize the value of natural resources; they must come to understand that sustainable development is as much about sustained growth and poverty reduction as it is about sustaining the environment. The Rio+20 outcome document, "The Future We Want," adopted by the 193 UN member states, notes that sustainable development which integrates economic, social and environmental dimensions is the only viable path for development (UNCSD 2012). Therefore, for

development to be effective, it must be sustainable. The Rio document goes on to assert the role of inclusive green economy approaches in eradicating poverty and advancing sustainable development.

As governments identify the content and priorities of their post-2015 development agendas, the relationship between poverty reduction and environmental and natural resource (ENR) sustainability must be a central objective. This cohesion is best accomplished through country-led efforts to mainstream poverty-environment objectives into development planning and budgeting processes at the national, subnational and sectoral levels.

What Is Poverty-Environment Mainstreaming?

Poverty and the environment are inextricably linked, as the poor often depend directly on natural resources and ecosystem services for their livelihoods. Poverty-environment linkages include vulnerability to environmental risks, such as floods, droughts and the impacts of climate change; livelihood strategies and food security of the poor as these directly depend on ecosystem health and the services they provide; water and sanitation–related diseases, which are one of the leading causes of under-five child mortality; and damage to women's health from indoor air pollution. To address these linkages, governments must look to incorporate the following objectives into their development planning:

- Using natural resources sustainably
- Adapting to climate change
- Focusing on poverty reduction and equity, especially for marginalized groups such as women and indigenous peoples
- Working towards inclusive green growth

The iterative procedure of integrating poverty-environment objectives into policymaking, budgeting and implementation processes at national, subnational and sector levels is known as **poverty-environment mainstreaming**. It is a multi-stakeholder effort that entails working with both state actors (e.g. planning, finance, environment and sector ministries; parliament; and local authorities) and non-state actors (e.g. civil society, academia, the private sector, the general public and the media).

Country Experiences with Mainstreaming

This handbook draws on successful experiences from countries around the world in effectively mainstreaming poverty-environment issues into development agendas. It is an updated edition of the flagship handbook *Mainstreaming Poverty-Environment Linkages in Development Planning*, which guides the work of the Poverty-Environment Initiative (PEI). PEI—a joint global programme of the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) now operating in over 25 countries—began a new phase in 2013. This revised handbook complements this phase's focus on institutionalizing mainstreaming within government planning and budgeting systems and procedures to achieve positive pro-poor and environmental outcomes in PEI countries.

This new version of the handbook reflects lessons learned and updates on the PEI programmatic approach. It also draws on experiences from other endeavours such as mainstreaming climate change issues and dealing with an inclusive green economy. The handbook thus provides a model for action and a set of widely valid and credible approaches—particularly for implementing the Rio+20 agenda and, potentially, elements of the post-2015 development agenda.

1.2 Purpose

The handbook provides guidance and tools for policymakers and practitioners to mainstream pro-poor ENR and climate objectives into development policies, plans, budgets and implementation programmes at the national, subnational and sectoral levels.

It sets out a programmatic approach to poverty-environment mainstreaming that includes a range of mutually reinforcing activities and outputs aimed at addressing causes of ENR unsustainability. This PEI-developed approach is cohesive but flexible, able to be tailored to national circumstances. It is largely based on PEI experience in supporting governments around the world to mainstream poverty-environment objectives in development planning and budgeting processes. While the handbook largely highlights PEI experience, it also acknowledges that PEI is one actor among many others elaborating and applying methodologies and tools to support national institutions in strengthening integrated planning, budgeting and monitoring processes to achieve sustainable development and poverty reduction. To this end, the handbook also features experiences from other initiatives, including the Global Environment Facility (GEF), the Partnership for Action on Green Economy (PAGE) and the Poverty Environment Partnership (PEP).

1.3 Target Audience

The target audience for the handbook consists primarily of practitioners at the national, subnational (regional, district, municipal) and sectoral levels, and champions of the mainstreaming process.

- **Practitioners** include stakeholders from the government (head of state's office; finance, planning, environment and sector ministries; local government, subnational bodies, political parties and parliament; national statistics office and judicial systems), non-governmental actors (civil society, academia, business and industry, the general public and local communities, and the media) and development actors (donors, international organizations and environment/development think tanks) in the environment, development and poverty reduction fields.
- **Champions** are practitioners who take on the role of advocating for the integration of poverty-environment considerations into development planning and budgeting at national, subnational and sectoral levels. These include high-level decision-makers and government officials who serve as advocates for poverty-environment mainstreaming.

1.4 Structure

The handbook is organized as follows.

Chapter 2: Importance of Mainstreaming Poverty-Environment Concerns examines the urgency of mainstreaming poverty-environment objectives into planning and budgeting processes, and describes key concepts for understanding poverty-environment linkages, including the contribution of ENR to human well-being and pro-poor economic growth.

Chapter 3: Political Economy of Mainstreaming introduces a programmatic approach to poverty-environment mainstreaming and a theory of change. It discusses finding the right entry points and making the case—actions which set the stage for poverty-environment mainstreaming.

Chapter 4: Mainstreaming into National Planning Processes discusses economic development planning processes and

presents guidance on how to integrate poverty-environment objectives into national planning processes. It also describes measures to facilitate implementation of mainstreamed national development plans.

Chapter 5: Mainstreaming into Budgeting Processes explains approaches for budgeting and financing for poverty-environment mainstreaming, which include engaging in the budgeting process at various levels and improving the contribution of ENR to public finances.

Chapter 6: Mainstreaming into Sector Strategies and Subnational Plans and Budgets examines an approach for incorporating pro-poor, gender-responsive environmental measures in sector strategies; it also discusses mainstreaming at the subnational level, including ecosystem-based approaches and experiences.

Chapter 7: Mainstreaming into National Monitoring Processes highlights the importance of integrating poverty-environment objectives into monitoring systems, and presents a considered approach and experience-based examples. It also explores the Beyond GDP initiative for measuring national and global progress.

Chapter 8: Managing Private Investment in Natural Resources discusses ways to support governments in managing private investment in natural resources, with a focus on primary sectors or natural resource management areas including agriculture, forestry, fisheries and extractive industries.

Chapter 9: Lessons Learned highlights lessons from PEI's experience in supporting governments to mainstream poverty-environment objectives in planning, budgeting and monitoring processes.

The handbook also contains seven annexes that delve deeper into topics discussed in the main text, as well as a list of abbreviations and acronyms, a glossary and references. The annexes are as follows:

- A: Guidance Note on Institutional and Context Analysis
- B: Guidance Note on Integrating Environment-Linked Poverty Concerns into Planning, Budgeting and Monitoring Processes
- C: Guidance Note on Integrating Natural Wealth in GDP
- D: Guidance Note on Promoting Gender Equality in Poverty-Environment Mainstreaming
- E: Guidance Note on Integrating a Human Rights-Based Approach into Poverty-Environment Mainstreaming
- F: Guidance Note on Advocacy and Strategic Communications
- G: Poverty-Environment Mainstreaming Tools

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

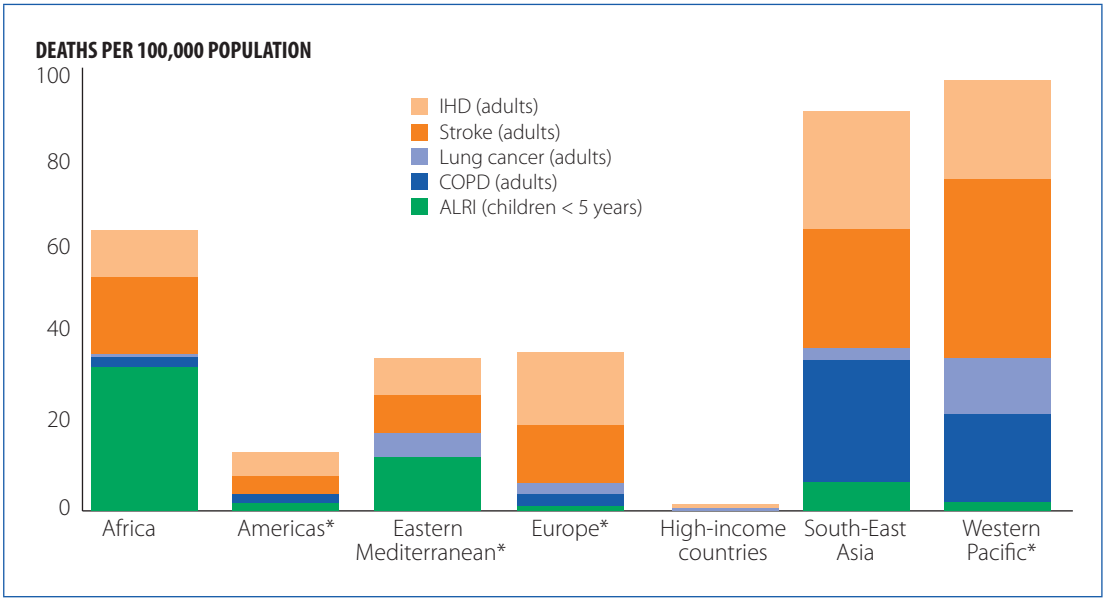
Environmental risk factors associated with unsustainable ENR use, such as indoor air pollution from household solid fuel use and occupational exposure to chemicals, have negative health implications for poor people, especially women and children. In 2012, household indoor air pollution from cooking with 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

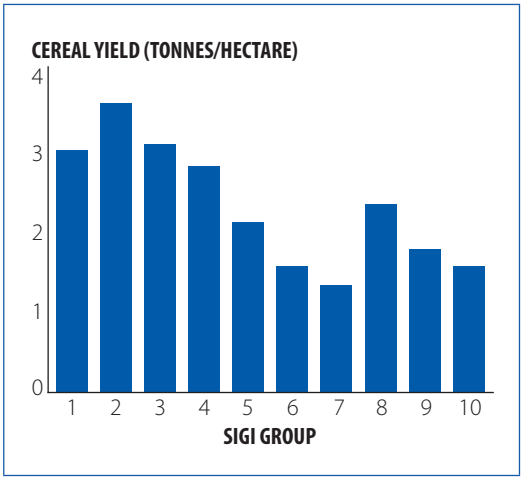
Source: Adoho and Wodon 2014.

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[1] 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).

[1] 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.

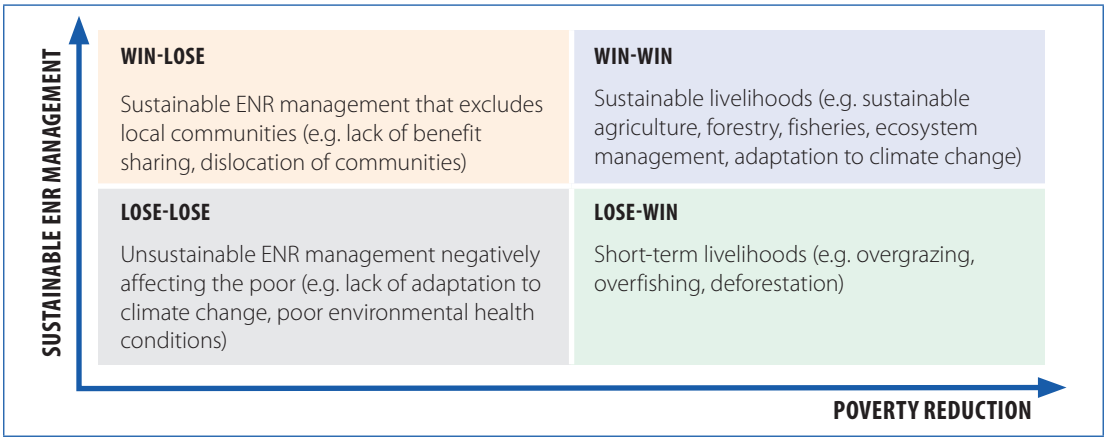
Note: 1 = least gender inequality and 10 = greatest gender inequality as determined by the Social Institutions and Gender Index (SIGI) constructed by the Development Centre of the Organisation for Economic Co-operation and Development.

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

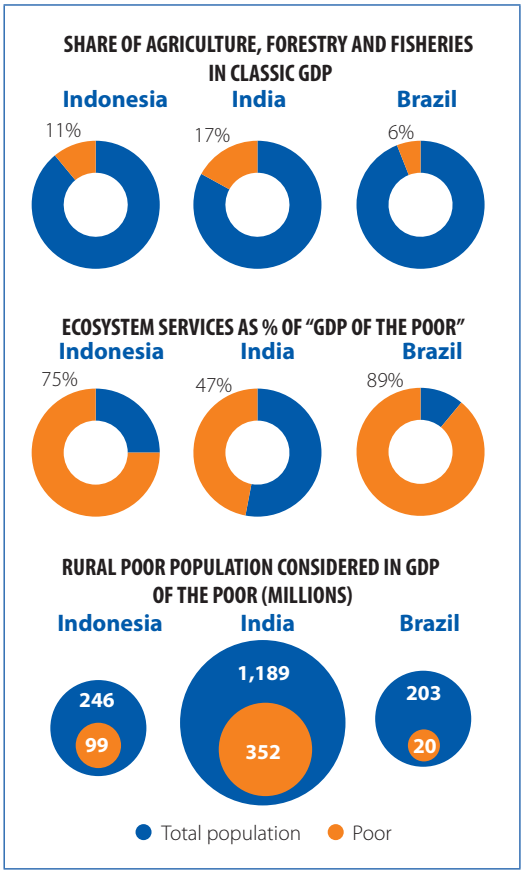


ecosystem assets and natural resources, including land, minerals and fossil fuels, solar energy, water, living organisms, and the services provided by the interactions of all these elements in ecological systems (UNEP 2014).

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).

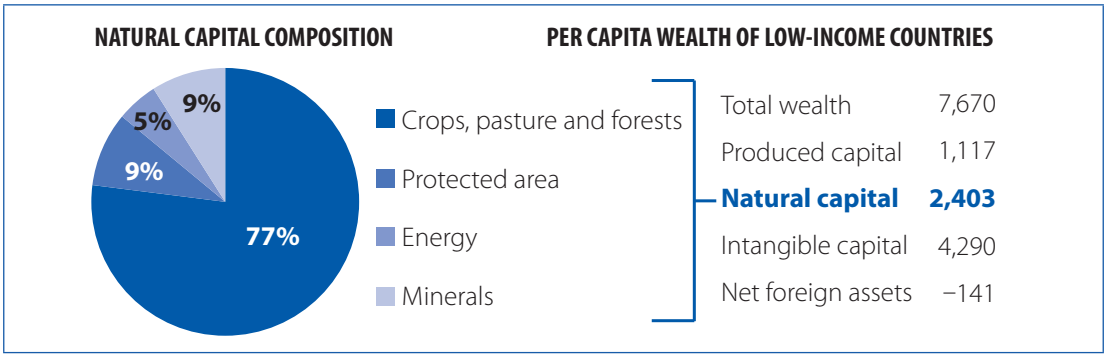
Significant percentages of the population—particularly the poor—in these low-income countries depend on forests, minerals and soil productivity for their daily existence (WAVES 2012). Natural capital in these countries is being harvested and degraded at a rate that threatens

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.

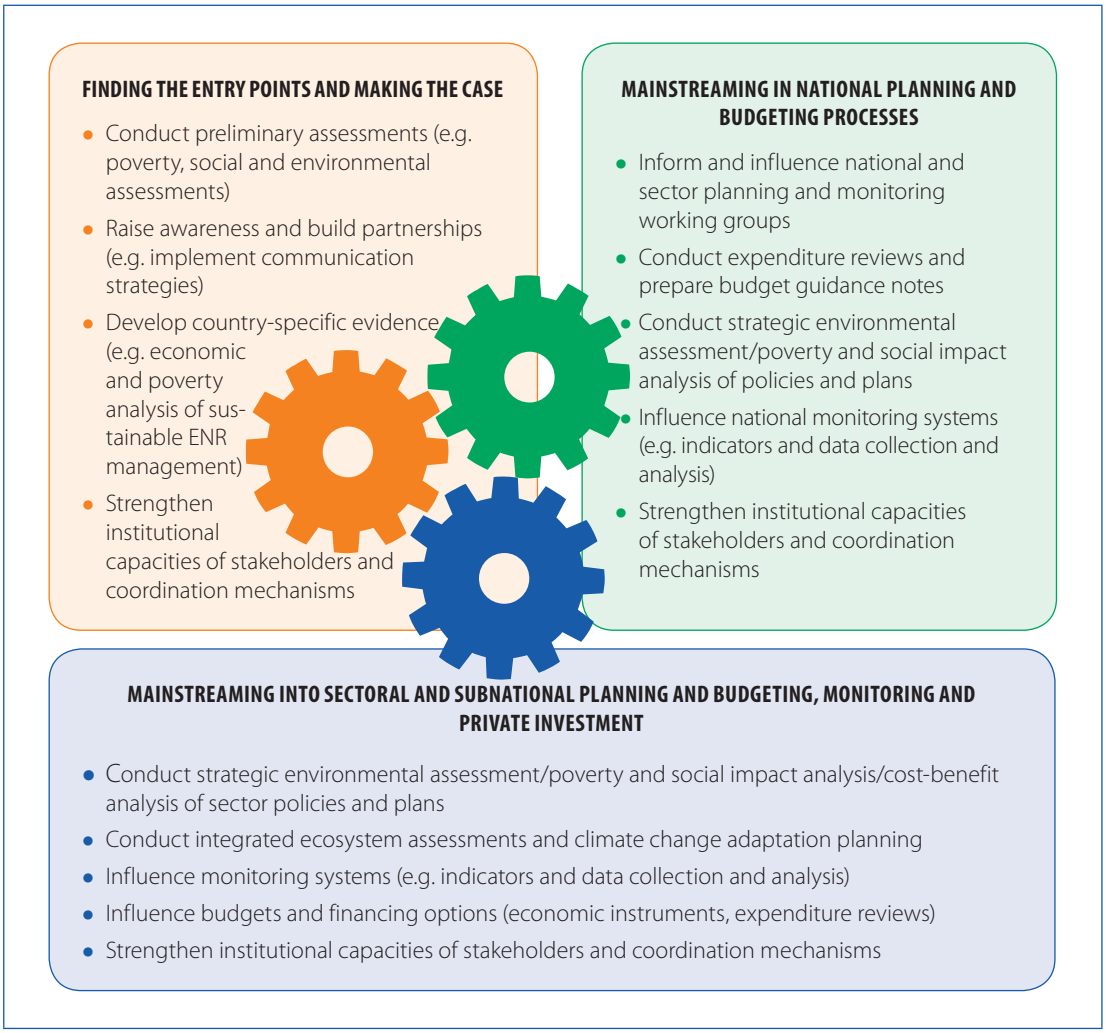
3 The Political Economy of Mainstreaming

This chapter introduces a programmatic approach to poverty-environment mainstreaming that can be implemented with participatory stakeholder engagement, along with a theory of change for applying this approach. The chapter then discusses how to set the stage for poverty-environment mainstreaming by finding the right entry points and making the case. It details the specific activities comprising this effort—namely, preliminary assessments; identifying and understanding the poor; understanding the governmental, institutional and political contexts; assessing and strengthening mainstreaming capacities; raising awareness and building partnerships; and establishing working mechanisms for sustained mainstreaming.

3.1 A Programmatic Approach for Poverty-Environment Mainstreaming

The key aim of poverty-environment mainstreaming is to reduce poverty and achieve other development goals through integrating pro-poor ENR sustainability objectives into the core policies and activities of government—in particular, into national development, sector, and subnational planning and budgeting for public and private investments. An example of such an objective would be to increase the percentage of agricultural land covered by a country's soil erosion control programmes from 20 to 50 per cent. Making this objective part of a government's development agenda is a demanding task that requires a **programmatic approach** to mainstreaming (figure 3.1). The approach developed by PEI is highly flexible, allowing practitioners a broad choice of

Figure 3.1 PEI Programmatic Approach for Poverty-Environment Mainstreaming



activities, tactics, methodologies and tools to use in a particular country situation. To apply the programmatic approach requires a thorough understanding of national development planning and budgeting processes, institutions, decision-makers, political economy and poverty-environment issues.

The programmatic approach to poverty-environment mainstreaming comprises the following components. **These components are not necessarily sequential; rather, they are implemented pragmatically and iteratively according to the national context**.

Component 1: Finding the Entry Points and Making the Case

This component sets the stage for mainstreaming across policy, planning, budgeting and monitoring processes (i.e. Components 2 and 3). It encompasses activities designed to help countries identify (i) desirable pro-poor sustainable ENR, inclusive green economy, and climate change adaptation and mitigation outcomes; and (ii) entry points into government-led processes as well as the primary institutional stakeholders who share an interest in making a strong case for the importance of poverty-environment mainstreaming. It involves gaining a good understanding of institutional and political economy contexts at the country level; and identifying drivers of change within a particular country's development policy, planning and public finance processes, including inter- and intra-sectoral coordination mechanisms. Lastly, it involves identifying and understanding the poorest segments of society and their links to and dependence on ENR. Activities include the following:

- Carrying out preliminary assessments
- Identifying and understanding the poor, taking into account the differences between women and men
- Understanding the governmental, institutional and political contexts
- Developing impact, vulnerability and adaptation assessments
- Assessing and strengthening mainstreaming capacities
- Enhancing coordination mechanisms for sustained mainstreaming and raising awareness and building partnerships

Component 1 is detailed in section 3.3.

Component 2: Mainstreaming into National Planning and Budgeting Processes

This component focuses on integrating poverty-environment objectives into national development planning and budgeting processes. This integration is based on country-specific evidence of how more sustainable ENR management, inclusive green economy, sustainable consumption and production, and climate change adaptation can help achieve national development goals. It also includes ensuring that gender-disaggregated evidence and priorities are included. Activities build on work conducted under Component 1 including, among others:

- Engaging with, and supporting the work of, planning and budgeting units in ministries of planning and finance
- Undertaking ex ante and ex post poverty, environmental and social assessments (e.g. strategic environmental assessment, poverty and social impact analysis, integrated ecosystem assessment) and economic appraisals (e.g. cost-benefit analysis) of policies and plans with a view to strengthening pro-poor environmental sustainability
- Commissioning public expenditure reviews to track and report on past and current investments for climate change and the environment, and corresponding benefits

- Formulating indicators to measure change towards pro-poor environmental sustainability, including inclusive green economy and climate change, to be included in national monitoring systems to enable reporting on national development plan outcomes

Component 2 is further discussed in chapters 4 and 5.

Component 3: Mainstreaming into Sectoral and Subnational Planning and Budgeting, Monitoring and Private Investment

This component involves operationalizing poverty-environment objectives, including a gender-sensitive focus, through implementation by relevant sectors and subnational administrations, in budget processes, monitoring and private investment processes. Increasing budget allocation and capacity in sectors relevant to poverty-environment, such as agriculture, enables government to support implementation of poverty-environment–related national development policies and plans, such as smart agriculture, value-chain addition, etc. Increased sector-based expenditure can also serve as a catalyst to generate financial and capacity support from donor, civil society and international technical partners. Lastly, national monitoring systems, whether tracking finances or progress, capture information to substantiate positive development change for intended beneficiaries as a result of policy, planning and budgetary reforms due to mainstreaming. Examples of activities conducted in this component include the following:

- Ex post environmental, social and economic assessments of sector policies and plans
- Ecosystem-based integrated assessments to inform subnational planning and budgeting
- Integrating poverty-environment indicators into national and subnational monitoring systems
- Sector and subnational gender-responsive budgeting and fiscal policies and instruments
- Strengthening institutions and capacities

Component 3 is discussed at length in chapters 6, 7 and 8.

A country poverty-environment programme incorporating these three components should be developed in a fully consultative manner, led by government institutions—likely, the ministry of finance and/or planning—working in close collaboration with the institution responsible for the environment and facilitating the participation of marginalized groups to ensure that the needs of poor men and women, boys and girls, are addressed.

Underlying the three components is the need to foster wide stakeholder engagement, strengthen institutional capacities, and build intra- and intersectoral coordination to put in place integrated approaches for achieving sustainable development.

Certain actions can help ensure the sustainability of poverty-environment mainstreaming results. For one, sustainability is more likely with replication of annual budget allocations to support implementation of national development policies and plans, as well as with periodic review and update of these policies and plans. Similar cyclic efforts should be targeted at national monitoring systems where data are regularly collected over time on poverty-environment indicators, and the data used in annual analysis and reporting on progress towards national development objectives. It is essential to put in place a longer-term national capacity-building programme to embed capacity in each mainstreaming component. This includes individual and institutional capacity building.

3.2 Using a Theory of Change to Apply a Mainstreaming Programmatic Approach

A theory of change is an outcomes-based methodology that applies critical thinking and analysis to the design, implementation and monitoring of programmes and projects that intend to support change (Vogel 2012). Captured in the form of a matrix (logical framework) or diagram, the theory of change is both a concrete tool and an iterative process to support critical thinking at each step of the programme cycle. While there is no proscribed methodology for implementing a theory of change, it is seen as a realistic, flexible analytical tool offering an alternative to logical framework analysis, which can tend to have a narrower focus. A theory of change will normally comprise the following elements:

- Analysis of the context of the planned initiative, including the social, political and environmental conditions
- Definition of the long-term change that the initiative aims to achieve
- Identification of the causal pathway/sequence of change to reach the intended long-term change
- Identification of the assumptions that underpin each step in the causal pathway/sequence of change, critical assessment of whether the proposition that is assumed remains true, and—if necessary—subsequent reassessment of the causal pathway/sequence of change
- A matrix/diagram and narrative summary capturing the theory of change

In the context of designing a poverty-environment mainstreaming programme or a more specific mainstreaming initiative related to integrating climate change adaptation in sub-national planning and budgeting processes (box 3.1), the theory of change can be a useful tool as it promotes the following:

- The context analysis fosters a participatory assessment process that can be tailored to different scales, from global to local.
- Connecting a number of linked projects and programmes into a coherent and strategic whole can enhance linkages and integration across important institutional and thematic sectors, thus contributing to breaking down sectoral silos.
- Identifying incremental and concrete steps towards achieving long-term change defines clear increments of change over time without losing sight of the long-term objective to be achieved. This consideration is particularly relevant in a mainstreaming context, since such processes can take 5–15 years of sustained institutional change.
- Continuous re-examination of assumptions that underlie a project or programme and identification of what is needed to advance along a non-linear, causal pathway are critical to programme/project success. For instance, the essential political will for mainstreaming cannot be assumed to be unfaltering. There is value in reassessing whether there is political commitment and, if not, in identifying barriers for change and actions to overcome these barriers.

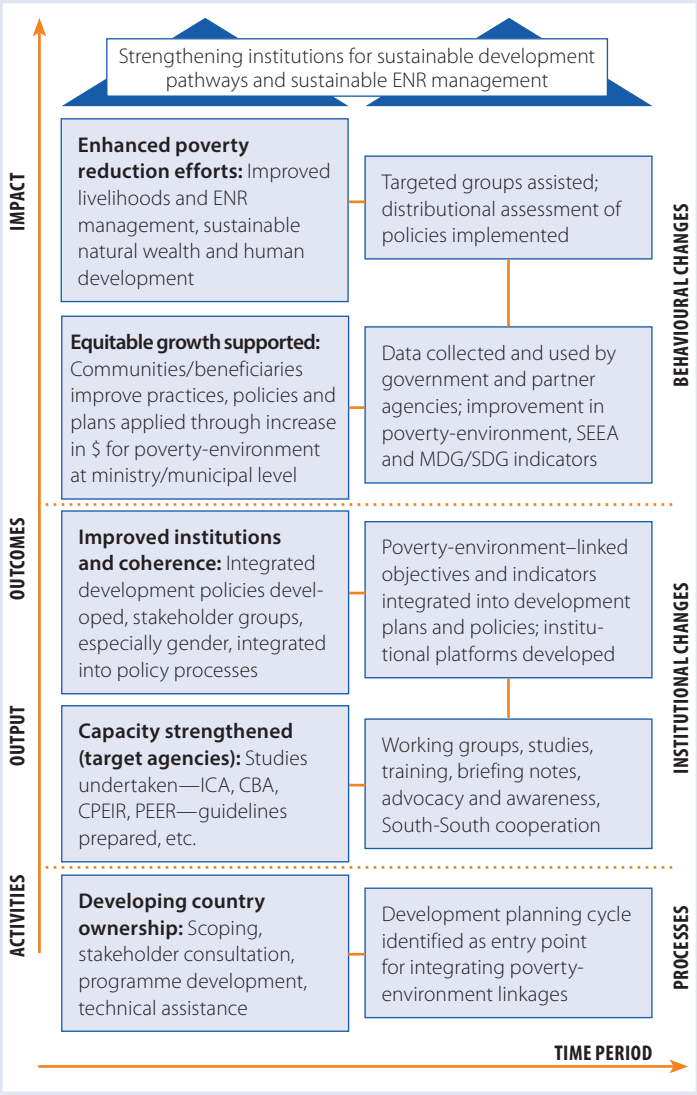
Dialogue regarding perspectives and values can result in a shared vision and strong relationships between partners and stakeholders. This dialogue can also be important in the context of reaching consensus on possible trade-offs between environmental and development aspirations, and on who benefits and who bears the costs.

Box 3.1 PEI Theory of Change

The PEI theory of change is centred on the desired impact (change) from poverty-environment mainstreaming: improved livelihoods and human development through more sustainable use, management and equitable allocation of ENR. This long-term change addresses the identified problem that, over the medium to long term, unsustainable ENR management reduces the economic and livelihood benefits produced from ENR—making it more difficult to achieve sustainable development goals such as poverty reduction and food security.

Impact in generating economic, social and environmental benefits is achieved by catalysing change in government policies, plans, budgets and financing to make them more pro-poor and environmentally sustainable. The PEI mainstreaming approach is a proven, integrated, cross-sectoral model, aligned with the approach called for in the Rio+20 outcome document to address the interlinkages between the three pillars—economic, environmental and social—of sustainable development.

The intended outcome of catalysing change is achieved over time by attaining key outputs reflecting the inclusion of pro-poor environmental sustainability into national development policies and plans, sectoral strategies and policies, national budgeting and financial management processes, and national monitoring systems, as well as supporting subnational processes to implement these reforms. Strengthening the capacity and political will of decision-makers and practitioners is critical—especially within the ministries of planning, finance and key sectors (e.g. environment, agriculture) as well as within the presidency/prime minister office, and legislative and judiciary institutions, depending on the country situation. A variety of tools are used to generate the economic, ecological and social evidence of how sustainable ENR management would help achieve development goals such as poverty reduction in order to convince key stakeholders.



3.3 Finding the Entry Points and Making the Case

This component of the PEI programmatic approach comprises the initial set-up work that must take place before a full mainstreaming initiative goes forward. Key activities of this component are discussed below. Specific entry points into national planning and budgeting processes are discussed in chapters 4 and 5, respectively.

Preliminary Assessments: Understanding the Poverty-Environment Linkages

Usually, the first step of a poverty-environment mainstreaming effort is to undertake a preliminary assessment of the country's development, ENR, climate and socio-economic situation. The objective is to determine the nature of poverty-environment linkages in the country, to define gender-sensitive pro-poor ENR priorities on which to focus the mainstreaming effort and to develop arguments to make the case for such an initiative. Preliminary assessments also help countries identify possible champions for poverty-environment mainstreaming. Through these assessments, the actors engaged in the mainstreaming initiative begin to refine their understanding—from the perspective of their own sector or subnational organization—of the country's ENR challenges, poverty-environment linkages and the relevance of these to national priorities (box 3.2). The preliminary assessments carried out should remain relatively limited in scope, depth and time frame, allowing the government to achieve in the short term the objectives of finding the entry points, raising awareness and making the case. Later in the mainstreaming effort, the preliminary assessments will be complemented by extensive analytical work aimed at influencing the policy process at stake.

An understanding of poverty-environment linkages and how to influence policy requires a strong focus on three issues in addition to the conventional assessment of the state of the environment:

- **Identification and understanding of the poor and their dependence on ENR.** It is important to capture gender differences in relationship to ENR.
- **Understanding of the political, economic and institutional landscape in which policy-makers operate.** Note that certain elements of the environment, e.g. air and water quality, may affect broader segments of the population than just the poor; therefore, it will potentially be easier to mobilize support around these.
- **Developing an understanding of climate risks and vulnerability.** This topic is discussed further below.

Preliminary assessments of poverty-environment linkages can be largely based on existing information. Typically, a significant body of information can be sourced through previously conducted surveys and reports commissioned by the government and especially by development partners, including poverty and gender assessments, state of the environment reports, economic reports, Intergovernmental Panel on Climate Change (IPCC) and regional climate models and reports, analysis on environmental costs and benefits, and Beyond GDP studies.

Identifying and Understanding the Poor

Identifying and understanding the poor and their dependence on ENR is a prerequisite for poverty-environment mainstreaming. Contextual analysis should be disaggregated to take account of and shed light on differences

Box 3.2 Economic Studies on Natural Resource Management in Rwanda and Land Degradation in Tajikistan

In 2006, the Government of Rwanda, with PEI support, conducted an economic analysis of natural resource management (Government of Rwanda and UNDP-UNEP PEI 2006). The study found that, due to environmental degradation, poverty had increased, provincial health budgets were escalating, and soil loss of 15 million tons per year was costing the country 2 per cent of its GDP annually—equivalent to a reduction in the country's capacity to feed 40,000 people a year. The cost of electricity had increased by up to 167 per cent per unit cost following the degradation of the Gishwati forest and the Rugezi wetland. Siltation from soil erosion and the reduced water levels in the lakes and hydropower reservoirs downstream decreased electricity generation and resulted in an additional cost of $65,000 per day as fossil fuel–generated electricity replaced hydro-electricity.

The economic analysis was instrumental in convincing decision-makers that sustainable ENR management could contribute to Rwanda's development goals. The Ministry of Finance and Economic Planning and the Rwanda Environmental Management Authority's capacity to mainstream poverty-environment issues in a cross-sectoral, integrated manner was strengthened. As a result, the environment was included as a cross-cutting issue in the country's Economic Development and Poverty Reduction Strategy (EDPRS) and a specific target on soil erosion control was included; a poverty-environment indicator strategy for the EDPRS was also adopted. Concurrently, environment was made a sector in its own right.

The economics of land degradation in Tajikistan's agricultural sector was explored by a PEI-commissioned study conducted in 2011 (UNDP-UNEP PEI 2011b). The study estimated the economic loss of land degradation and identified a range of associated impacts and costs. Along with the identified problems, the study looked into suggesting certain techniques tailored to Tajikistan for addressing land degradation. Specifically, it explored determining the net benefits of sustainable land management, identifying data requirements and gaps, and assessing capacities. The study found that, if based on a broader concept of cost-benefit analysis, sustainable land management approaches could often be self-sustaining—for example, funds saved from water treatment or sediment removal could be used to prevent soil loss and sedimentation. Such analyses will inform policymakers and aid in private sector decision-making by setting forth the economic arguments for investment in sustainable land management practices.

Sources: PEI Africa; PEI Europe and the Commonwealth of Independent States.

according to gender (box 3.3), age, ethnicity, urban/rural status, and other variables so that development interventions adequately address the needs of different social groups. Several methodologies can be used to identify and understand the poor, including income poverty assessments through household surveys, participatory survey techniques and assessments, gender analysis and multidimensional poverty assessments (see annex B for further details). Increasingly, household surveys conducted by national institutions have captured links between income and livelihoods regarding access to and use of natural resources.

The rights-based approach to poverty reduction underlines the multidimensional nature of poverty, describing it in terms of a range of interrelated and mutually reinforcing deprivations, and drawing attention to the stigma,

Box 3.3 Gender Analysis for Equitable and Sustainable ENR Management

Gender analysis aims to identify gender differences and draw attention to the conditions needed for equitable and sustainable ENR management. Gender analysis can be used to explore the following, ideally using participatory methodologies:

- Assessing the roles and needs of women and men, including gender-based labour division
- Understanding gender-differentiated systems for access to resources, labour, uses, rights and the distribution of benefits and products
- Focusing on gender relations, not just on women (looking at differences, inequalities, power imbalances, differential access to resources between women and men)
- Seeing how gender is a factor in influencing how people respond both individually and collectively
- Perceiving the gender dimensions of institutions at all levels in society

Source: UNDP 2003.

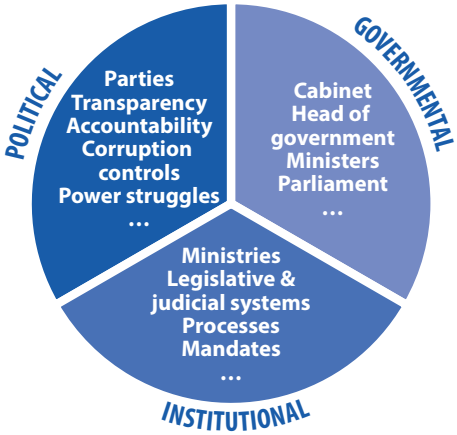
discrimination, insecurity and social exclusion associated with poverty. Unlike earlier approaches to poverty reduction, the rights-based approach is more process oriented. It emphasizes active and informed participation by the poor in the formulation, implementation and monitoring of poverty reduction and pro-environmental strategies as well as access to productive resources and participation in public life—all of which are important to overcome economic and political marginalization (annex E).

Understanding the Governmental, Institutional and Political Contexts

The preliminary assessments also entail looking at the governmental, institutional and political contexts in the country (figure 3.2); this is sometimes known as institutional and context analysis. This analysis helps develop a thorough, shared understanding of the situation, which in turn provides the basis for finding the most effective entry points for mainstreaming poverty-environment objectives in national development planning. It also enables countries to identify potential partners and champions for poverty-environment mainstreaming. Successful mainstreaming requires change: changes in the ways institutions are structured, and changes in the ways departments and ministries interact, communicate and cooperate.

The analysis begins with identifying and understanding the various processes, institutions, actors, mandates, policies and other factors that affect the poverty-environment mainstreaming effort.

Figure 3.2 Components in Governmental, Institutional and Political Contexts



- **Planning and budgeting processes.** Understanding the planning and budgeting processes that shape a country's development and environmental priorities is a vital aspect of the analysis. Relevant processes might include strategies (poverty reduction strategy papers, national sustainable development strategies, sector strategies), action plans (national environmental action plans, national adaptation plans [NAPs], disaster risk reduction plans) and budget processes (annual and medium-term expenditure framework, expenditure reviews).

- **Institutions and actors.** Also critical is identifying the various institutions and actors in government, the non-governmental sector and the broader development community. Identifying partners that can provide technical, financial and political support to the mainstreaming effort is crucial.

- **Existing policies and initiatives.** It is important to take stock of major existing national and sector (e.g. agriculture, health, trade, education, industrial development, cleaner production and environment) development policies, programmes and projects, environment and climate change–related initiatives (such as NAPs) that are relevant to the poverty-environment mainstreaming effort, and to identify possible conflicting priorities (e.g. between a country's agriculture strategy which might stress input-intensive agricultural modernization and its environmental policy which might encourage low-input agriculture).

- **Governance and political situation.** Natural resources typically are important sources of national wealth, and different institutions and actors often have conflicting priorities concerning access to or control of their use. It is critical to be aware of and understand the political factors that may affect mainstreaming either positively or negatively. Such factors include issues of corruption and rent-seeking around valuable natural resources, which may be controlled by certain political groups for their benefit with few benefits for poor people. These sensitive issues cannot be ignored if the underlying drivers of environmental change are to be understood and addressed.

The UNDP institutional and context analysis methodology can be used to better understand the governance and political context, and thereby develop a more effective mainstreaming approach. The methodology provides an insight into the incentives affecting political actors potentially involved in poverty-environment mainstreaming. See annex A and UNDP (2012) for more information.

Developing Impact, Vulnerability and Adaptation Assessments

It is important to develop climate risk and vulnerability profiles in order to understand how climate change will affect natural systems (e.g. ecosystems, natural resources) as well as human society (e.g. livelihoods and economic activities). The extent to which climate change will have an impact determines the level of risk and the adaptation measures needed to manage these risks. Additional assessments, including participatory community-level assessment and planning, are carried out to provide essential information to inform subsequent components of an adaptation process (i.e. planning, implementation, and monitoring and evaluation) (UNDP 2008).

A climate risk assessment can be created from easily accessible data on temperature and rainfall to determine past climate trends. Often, climate assessments utilize climate data for 1960–1990 as a baseline and projections for after 1990 to represent a changed climate. When assessing future trends, it is important to

combine socio-economic variables with various climate scenarios. Vulnerability assessments provide a means to understand how different groups, including women, will be affected by climate change and to identify adaptation measures based on needs and priorities (box 3.4). Several methodologies are available to assess climate risk and vulnerability at various scales and should incorporate climate data and local knowledge. For further guidance on impact, vulnerability and adaptation assessments, see the United Nations Framework Convention on Climate Change's technical guidelines for the national adaptation plan process (UNFCCC 2012), UNEP's Global Programme of Research on Climate Change (PROVIA) guidance (UNEP 2013), PEI's guidance for mainstreaming climate change adaptation into development planning (UNDP-UNEP PEI 2011c), and the Women for Climate Justice toolkit (GenderCC–Women for Climate Justice 2009). Annex B provides more information on vulnerability assessments.

Assessing and Strengthening Mainstreaming Capacities

Designing a poverty-environment mainstreaming initiative that is rooted in national and local institutional capabilities requires evaluating institutional and capacity needs. This evaluation can be done through a needs assessment that focuses on existing capabilities and their associated strengths and weaknesses in relation to poverty-environment mainstreaming. The objective is to take institutional and capacity needs into account in the mainstreaming initiative and ensure the effective involvement of all national actors.

Box 3.4 Multidimensional Vulnerability Index at the Household Level Developed to Address Climate Shocks in the Dominican Republic

Heavily affected by extreme weather events such as hurricanes, tropical storms, flooding and drought, the Dominican Republic is one of the most sensitive countries to climate risk in the world. Over the years, extreme weather events have resulted in extensive damage to agriculture and pasture land, and affected the livelihoods of the local population.

Since 2010, PEI has been working with the Dominican Republic's government to reduce the vulnerability of poor households to climate shocks through integration of poverty-environment objectives in national and subnational development planning. The specific purpose of this work has been to create tools that enable development of policies and plans that link poverty, the environment and climate change.

PEI, in close collaboration with the National Beneficiary System of the Social Policy Cabinet, facilitated the design and implementation of an environmental vulnerability index (IVAM) for the Lake Enriquillo region. The national government decided to scale-up this methodology and introduce a household-level multidimensional vulnerability index at the national level. This national IVAM was launched by the vice president of the Dominican Republic. National household socio-economic surveys are now being reviewed to incorporate environmental issues that had not previously been taken into account. This is especially relevant as the information gathered by the National Beneficiary System forms the basis to select beneficiaries of all poverty reduction programmes in the country.

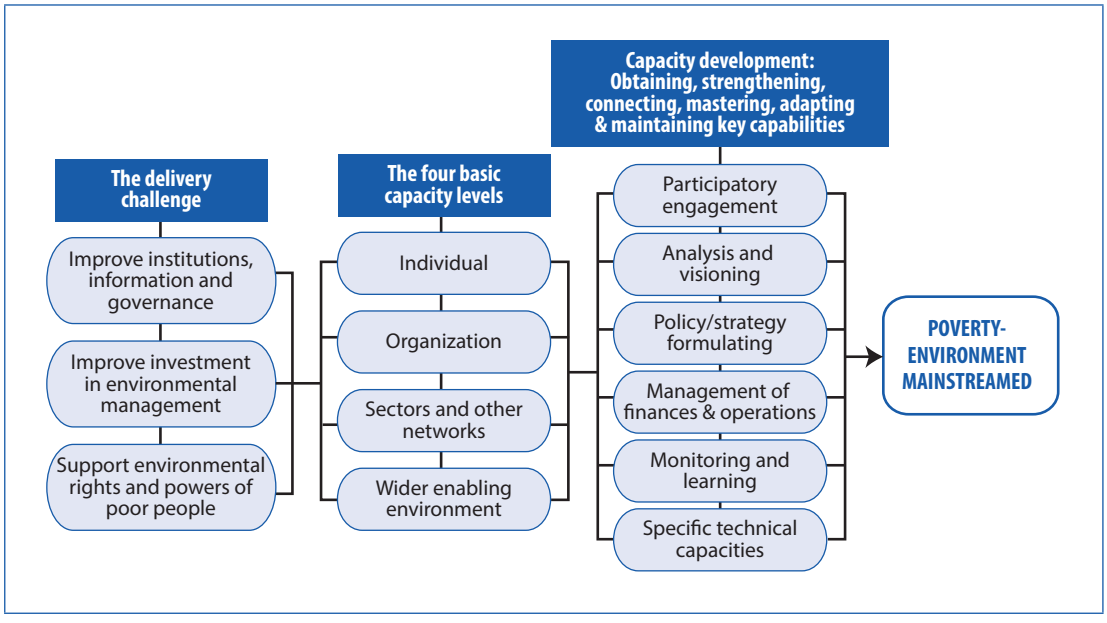
Source: PEI Latin America and the Caribbean.

The needs assessment focuses first on identifying the level of understanding among the national actors with regard to poverty-environment linkages and evaluating the extent to which there is a basic, shared understanding to help the various governmental and non-governmental institutions form—and sustain—successful working relationships for poverty-environment mainstreaming. This shared understanding should encompass gender dimensions as well as sector-specific aspects. Based on the results, the needs assessment can then highlight options to strengthen and improve understanding of poverty-environment issues in specific contexts. After assessing the levels of understanding of poverty-environment linkages, the evaluation should move on to examine capacities at all stages of the planning cycle.

The assessment should focus on both functional and technical capacities and needs within a given organization—notably the environment, planning, finance and relevant sector ministries—as well as of appropriate civil society and private entities. For example, the capacity within a country to adapt to impacts of climate change should be assessed by examining the capacities in a variety of institutions, the level of information and resources available, the political will to address the problem and the knowledge of potential risks. Institutions and capacities should also be assessed in relation to future activities of the poverty-environment mainstreaming process, including participatory engagement, analysis and visioning, policy formulation, operational management and poverty-environment monitoring. These concepts are illustrated in figure 3.3.

Initially, the needs assessment should build on the preliminary assessments of poverty-environment linkages and the governmental, institutional and political contexts. It should also rely on existing institutional and capacity needs, as well as any existing environmentally focused

Figure 3.3 Dimensions of Capacity Development



Source: Steve Bass, International Institute for Environment and Development, 2008.

institutional-strengthening programmes. Additional targeted assessments may be carried out as needed subsequently, with special attention to the environment, finance and planning bodies.

Several tools and approaches are available for assessing institutional capacity. These include UNDP's primer on capacity development (UNDP 2009a), a resource kit for national capacity self-assessments (GEF GSP 2005) and the Organisation for Economic Co-operation and Development's (OECD's) report on assessing environmental management capacity (OECD 2009). A particularly useful resource is a report on results and lessons learned from national capacity self-assessments (GEF GSP 2010), which highlights lessons learned from 119 countries.

Enhancing Coordination Mechanisms for Sustained Mainstreaming

Governments have vertical and horizontal coordination mechanisms designed to ensure, among other items, that national-level priorities and plans are implemented at subnational and sector levels. Mechanisms also exist to ensure cross-sector coordination of policy and budget prioritization, development and implementation, as well as intra-sector coordination. Because these mechanisms do not always function adequately, poverty-environment mainstreaming programmes should assess their effectiveness and support enhancements to improve them. This action will be especially helpful in sustaining the impact of poverty-environment mainstreaming programmes. See figure 4.1 for more information on how these coordination mechanisms work.

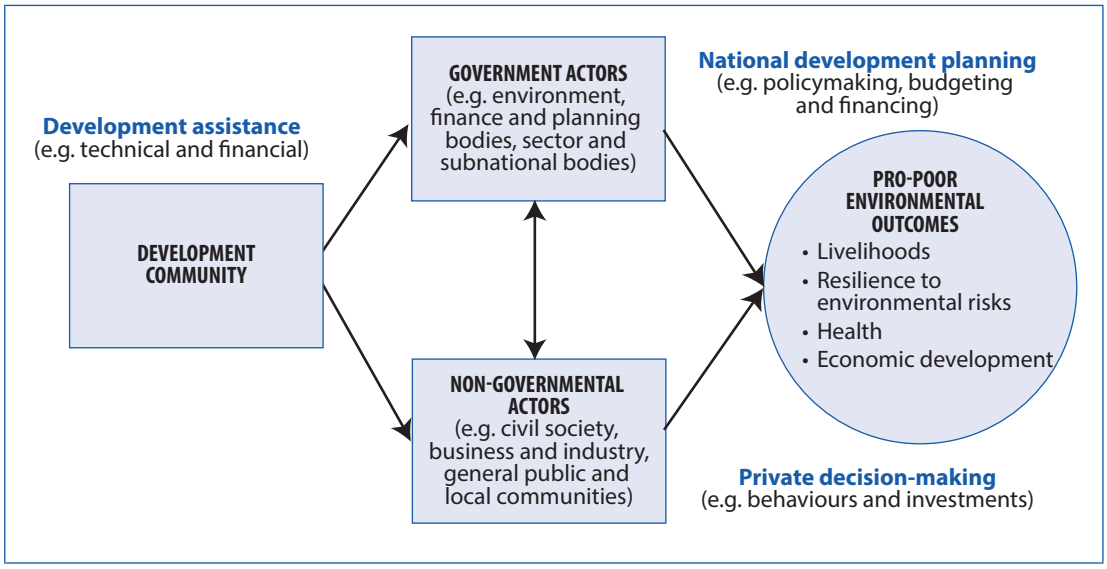
Engaging Key Stakeholders

Successful mainstreaming requires the engagement of many stakeholders, encompassing government and non-governmental actors and the broader development community operating in the country. Focusing on the pro-poor environmental outcomes to be achieved, a mainstreaming effort should be based on careful analysis and an understanding of the roles of different stakeholders in the country's development processes and how to best complement them (figure 3.4). Be aware that stakeholders have different interests and that some may not be as supportive as others of poverty-environment mainstreaming, improved ENR management and pro-poor reforms. Understand what motivates various stakeholders and determine how to craft appropriate arguments that will appeal to different interests.

The mainstreaming effort entails the cooperation of many government actors, including the head of state's office, political parties, parliament, the judicial system, finance and planning bodies, environmental institutions, sector ministries and subnational bodies, and the national statistics office—each of which raises significant challenges and opportunities throughout the process (table 3.1). Early on, determine which government agency will lead the mainstreaming effort. Because of the close relationship between poverty-environment mainstreaming and national development planning and budgeting, the ministry of planning or finance, in collaboration with the environmental institutions, will usually be a logical choice.

Non-governmental actors, including civil society organizations, academic and research institutes, business and industry, media, and the general public, can play a big part in advancing the integration of poverty-environment objectives into development planning at national, subnational and sectoral levels, and powerful advocates can be found among them. Involving these actors is an integral part of the mainstreaming process and should take place throughout the effort. There are many challenges and opportunities when engaging

Figure 3.4 Role of Stakeholders in Achieving Pro-Poor Environmental Outcomes



with non-governmental actors; these are outlined in table 3.2.

Raising Awareness and Building Partnerships

Building national consensus and commitment, as well as building partnerships for poverty-environment mainstreaming, requires raising awareness within the government and among non-governmental actors, the general public and the development community at large.

The preliminary assessments conducted should provide a solid basis on which to build messages and awareness raising on poverty-environment issues. Findings from these assessments should be disseminated broadly within the government, including to the head of state's office, political parties and the parliament, the judicial system, finance and planning bodies, environmental institutions, sector and subnational bodies, and the national statistics office. National workshops or consultations can be held to raise awareness among various audiences, including government, civil society, academia, business and industry, the media, and the general public. Exchange programmes with neighbouring countries that have experience with successful poverty-environment mainstreaming can also be useful.

Preliminary assessments also help in identifying and engaging with actors who may champion the poverty-environment effort. Champions can range from politicians to musicians, environmentalists to business persons, traditional leaders to media personalities. The champions can be partners in promoting messages around the need for sustainable use of natural resources for poverty reduction.

Involving the media requires special attention, and a specific approach should be designed to increase journalists' knowledge of poverty-environment linkages and to encourage them to report on poverty-environment issues (box 3.5). Mass media (press, television and radio) can be an effective tool in reaching out to target audiences.

Table 3.1 Challenges and Opportunities in Working with Government Actors

Actor	Challenges	Opportunities
Head of state's office	• Has many priorities to deal with • May face conflicting interests	• Turn this actor into a champion • Have it take a leading role in the mainstreaming effort
Political parties	• No direct involvement in development planning • May have limited awareness of environment-related issues • May face conflicting interests	• Use the election process to raise awareness on poverty-environment issues • Make these issues a theme of political campaigns
Parliament	• Often not involved in all stages of national development planning • May have limited awareness of environment-related issues • May face conflicting interests	• Leverage its legislative role • Foster its advocacy role, especially for budgeting • Cooperate with (or help create) committees on poverty-environment issues (e.g. access to land)
Judicial system	• May have limited awareness of environment-related issues • Enforcement of laws may be lacking • May face conflicting interests	• Develop synergies with laws related to good governance (e.g. corruption, illegal trade, tax evasion)
Finance and planning bodies	• Linkages with environmental institutions may be weak • Environment may not be seen as a priority for economic development and poverty reduction	• Turn these bodies into champions (e.g. through permanent secretaries) • Have them take a leading role in the effort (with environmental institutions) • Develop synergies with revenue collection measures (e.g. fight corruption, tax evasion)
Environ-mental institutions	• Financial, human and leadership capacities may be weak • May be focused on projects as opposed to development planning • May have an approach focused on protection rather than sustainable use of the environment	• Make use of their expertise, including in monitoring and climate change • Develop their potential to take on several roles (e.g. advocacy, coordination) • Develop synergies (e.g. with obligations related to multilateral environmental agreements)
Sector ministries and subnational bodies	• May have weak capacities with regard to the environment • Lack of funding of subnational bodies can lead to overharvesting of natural resources • Environmental units are usually not well connected to development planning	• Support them in fulfilling their roles in development planning • Make use of the fact that some of these bodies deal directly with environmental assets (e.g. fisheries, forestry) • Encourage them to integrate poverty-environment objectives into plans/budgets
National statistics office	• Data collection and management often weak • Poverty-environment data not generally captured by regular surveys • Capacity to produce policy-relevant information may be weak	• Develop poverty-environment indicators and integrate in national monitoring system • Build capacity to collect, manage and analyse data on poverty-environment linkages

Table 3.2 Challenges and Opportunities in Working with Non-Government Actors

Actor	Challenges	Opportunities
Civil society organizations	• Capacities may be weak, especially with respect to engagement in national development planning • Often not involved in all stages of national development planning	• Make use of their expertise, including in addressing gender issues related to the environment • Help reflect local realities and bring voices from the community level • Foster their role in information collection, information sharing and awareness raising (from policymakers to local communities) • Encourage them in their watchdog role (i.e. in promoting transparency and accountability) • Turn them into champions for poverty-environment mainstreaming
Academic and research institutes	• May be disconnected from national development planning processes • Capacity to produce policy-relevant information may be weak	• Make use of their expertise, particularly with respect to data collection, analysis of poverty-environment linkages and collection of country-specific evidence • Promote interdisciplinary teams • Promote South-South and North-South cooperation (twinning approaches)
Business and industry	• May perceive environmental management and legislation (e.g. environmental impact assessments) as a barrier to their activities	• Mitigate the effect of their activities that have a large impact on poverty and the environment (e.g. mining, forestry, water services) • Make use of this major source of knowledge • Make use of this major source of investment • Focus on resource efficiency and sustainable consumption and production (e.g. sustainable energy, water efficiency, integrated waste management)
General public and local communities	• Ability to make their voices heard may be weak or non-existent • Generally disconnected from national development planning processes	• Include the poorest groups of the population • Integrate the voices of the poorest when defining the outcomes of the poverty-environment mainstreaming effort • Make use of their knowledge of poverty-environment issues at the grass-roots level
Media	• May lack knowledge of and attention to poverty-environment issues • May lack freedom of expression	• Make use of their role in shaping the opinions of both decision-makers and the general public • Work with them to encourage public involvement in national development planning • Collaborate with them to reach out to the community level • Provide them with scientific and policy-related information

Box 3.5 Raising Journalist Awareness of Poverty-Environment Linkages in Kyrgyzstan and Tajikistan

UNDP's Environment and Disaster Risk Management cluster and PEI conducted an environmental training for nearly 30 journalists in Issyk-Kul, Kyrgyzstan. The training was aimed at helping journalists become effective communicators and change agents for sustainable development. Additionally, to recognize outstanding coverage of environmental issues in the Kyrgyz Republic, PEI and UNDP announced an environmental journalism contest on the following themes: climate change, climate risk management, poverty and environment nexus, and green economy and sustainable development. The contest was open to reporters and observers in print media, photojournalists, radio and TV reporters, freelance journalists, news agency reporters and web-based authors. In Tajikistan, PEI supported two-day trainings on "Effective Media Coverage of Poverty-Environment Links" for journalists and editors of ecological publications. The training enabled participants to learn about practical tools for raising awareness on environmental degradation and its impact on the population's well-being.

Source: UNDP and PEI Europe and the Commonwealth of Independent States.

In addition to traditional media, web and social media platforms can be used to reach a broad audience—especially the general public, youth, civil society and the media. These platforms are effective tools to share news and publications and to promote messages on poverty-environment issues or disseminate study findings.

Given increasing climate variability, it is important to establish links between meteorological departments and planning departments, line ministries, extension services and local communities. Current climate information, disaster warning (early warning) and future scenarios need to be collected and shared in a timely, relevant, gender-sensitive and accessible manner to enable decision-making at all scales—from women and men farmers to government offices—to be informed by climate risks and vulnerabilities. This information sharing is an essential aspect of raising awareness and integrating climate change into short-, medium- and long-term planning (box 3.6).

A well-thought-out communications strategy is critical. Framing the environment as an economic and social asset, rather than a cost, and linking poverty and environment in meaningful ways using economic language and parameters, and in accessible language, will greatly facilitate successful mainstreaming. A communications strategy should contain an initial outline of the following elements of the communications "mix":

- The overall objective of the poverty-environment mainstreaming effort
- The principal target audience
- The secondary target audience
- Key messages to convey the evidence
- Tools and products to convey the messages using national and local language and multimedia

For more information, see annex F.

Box 3.6 Government, Donors, Non-governmental Organizations and Media Advocate for Sustainable Development in Malawi

Two evidence-based reports—the 2011 "Economic Analysis of Sustainable Natural Resource Use in Malawi" (Yaron et al. 2011) and the *Malawi State of Environment and Outlook Report* (Malawi Government 2011)—continue to be disseminated and used by top decision makers, non-governmental organizations and the media to advocate for improved ENR management in Malawi. In an interview with the *Daily Times*, a national newspaper, the minister of environment and climate change, Jennifer Chilunga, highlighted how the latter report effectively demonstrated the negative impact of environmental degradation and how its findings had influenced the government to enhance public awareness through, for example, the National Climate Change and Communication Strategy. She explained, "We have started bridging the gap and promoting positive behavioural change for sustainable development." The studies have been disseminated to the Eastern, Southern, Northern and Central Region districts, which are now using the findings to advocate for improved ENR management at the local level and to develop their own district state of environment reports and socio-economic profiles. Several studies on environment and climate change management have used these analytical reports to inform the design of various projects and programmes, including African and Latin American Resilience to Climate Change, Malawi's vulnerability assessment programme funded by the U.S. Agency for International Development. To reach the public, videos on each of the state of the environment report's chapters have been produced and telecast by the Malawi Broadcasting Corporation.

Source: PEI Africa.

Quick Reference Checklist:
Political Economy of Mainstreaming

Finding the entry points and making the case

- ☐ Has a preliminary assessment been undertaken of the country's development, ENR, climate and socio-economic situation?
- ☐ Have the following three issues been taken into consideration in understanding poverty-environment linkages and how to influence policy:
  - ✓ Identification and understanding of the poor and their interdependence with ENR
  - ✓ Understanding the political, economic and institutional landscape in which policymakers operate
  - ✓ Understanding climate risks and vulnerability
- ☐ Is the analysis in identifying and understanding the poor disaggregated to take into account the following:
  - ✓ Gender
  - ✓ Age
  - ✓ Ethnicity
  - ✓ Urban/rural
  - ✓ Other variables which address the needs of different social groups
- ☐ Have the following methodologies been considered to identify and understand the poor:
  - ✓ Income poverty assessments
  - ✓ Participatory survey techniques and assessments
  - ✓ Multidimensional poverty assessments
- ☐ In understanding the governmental, institutional and political contexts, has the assessment begun by identifying the following:
  - ✓ Planning and budgeting processes which shape the country's development and environmental priorities
  - ✓ Institutions and actors in government, non-governmental sectors and the broader development community
  - ✓ Existing development policies and initiatives at the national and sector levels which are relevant to the poverty-environment mainstreaming effort
  - ✓ Governance and political situation which may affect mainstreaming
- ☐ Have gender-sensitive impact, vulnerability and adaptation assessments been undertaken to understand how climate change will affect livelihoods and development priorities?

- ☐ Have the following key steps been considered when assessing capacity development needs in the context of mainstreaming?
  - ✓ Assess the political and institutional context
  - ✓ Identify key actors and their capacity development needs
  - ✓ Identify opportunities to shape organizational incentives
  - ✓ Identify awareness and knowledge needs, and existing analytical tools
  - ✓ Identify options for policy response
- ☐ Have poverty-environment mainstreaming programmes assessed the effectiveness of vertical, horizontal and cross-sectoral coordination mechanisms and supported enhancements to improve them in order to sustain programme impact?
- ☐ Has a communications strategy been developed to disseminate and translate the results of poverty-environment tools and assessments to a wider audience and into more accessible language?
- ☐ Have the following elements been considered in developing a communications strategy:
  - ✓ The overall objective of the poverty-environment mainstreaming effort
  - ✓ The principal target audience
  - ✓ The secondary target audience
  - ✓ Key messages to convey the evidence
  - ✓ Tools and products required to convey the messages using national and local languages and multimedia

4 Mainstreaming into National Planning Processes

This chapter begins with a discussion of national development planning processes. It follows with guidance on how to integrate poverty-environment objectives into national planning processes, and concludes with a discussion of measures to facilitate implementation of mainstreamed national development plans.



4.1 Understanding National Development Planning Processes

For successful integration of poverty-environment objectives in government-led national development, practitioners need to identify and understand the various planning processes, timelines, institutions and actors involved. They also need to know the policies, plans and planning mechanisms already in place. The institutional and context analysis methodology described in chapter 3 and detailed in annex A can help in identifying and understanding these factors, including gender dynamics. Armed with this understanding, practitioners can knowledgeably and responsively integrate pro-poor environmental sustainability into national development processes. The following sections briefly describe the key components of national development policy and planning processes, and entry points for poverty-environment objectives.

National Development Plans

Governments draw up national development plans and strategies based on the perceived needs and priorities of their citizens. Typically consisting of a 5- to 25-year horizon, national development plans define desired development outcomes to be achieved, build consensus on the obstacles to and opportunities for achieving those outcomes, define the role and contribution of different sectors and stakeholders in achieving the outcomes, and provide a strategic framework within which more detailed planning and budgeting can take place at regular intervals. National development plans tend to focus on economic growth and job creation and thereby reduce poverty. Consequently, these plans incorporate targets that address GDP, rates of employment and poverty levels.

National development plans may take the form of a party political manifesto prior to an election or of a government action plan after an election. They are formalized as multiyear national development plans, typically covering a five-year or longer period. Countries usually have long-term, medium-term and annual planning processes. For example, governments can define a long-term vision of development over a 20-plus-year period that guides the economic and social development aspirations of the national society as a whole (box 4.1).

Box 4.1 Bangladesh Vision 2021

Bangladesh in 2021 shall be a country in which:

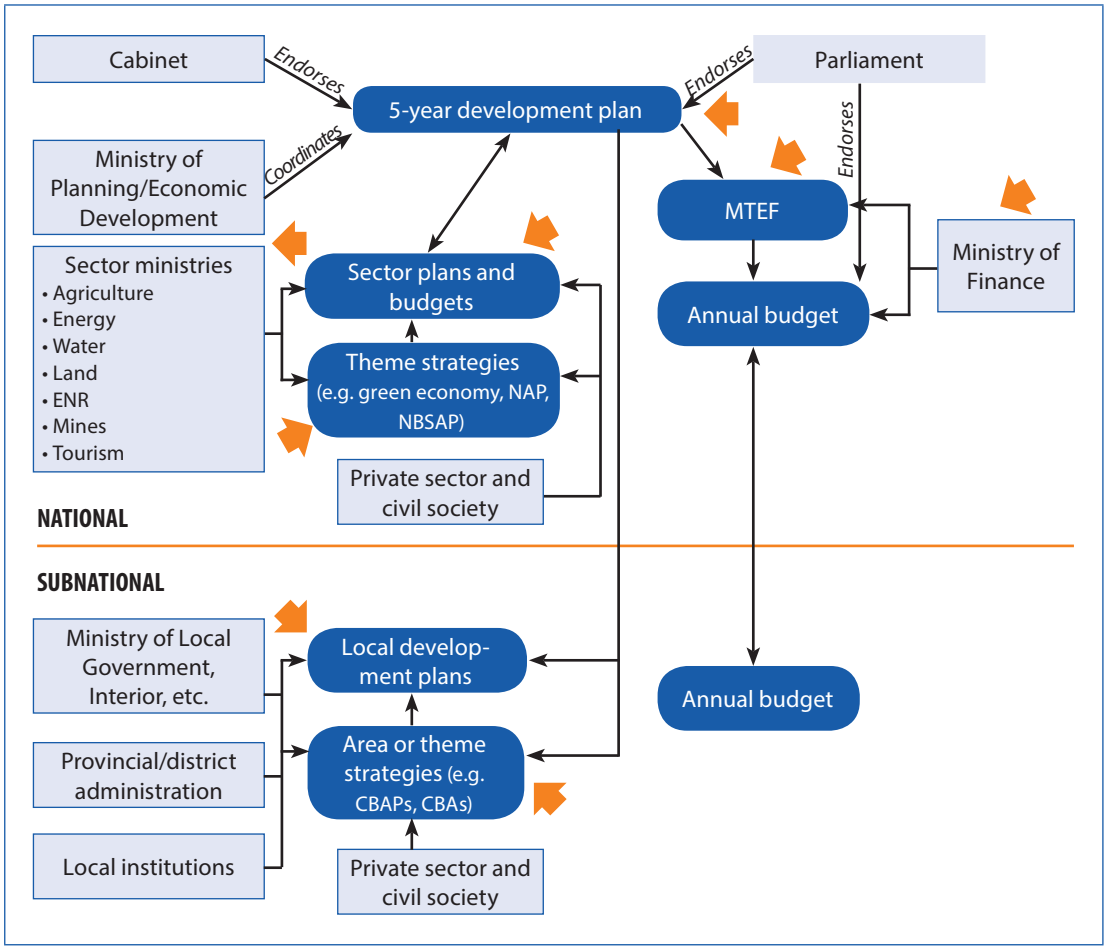
1. Every citizen has equal opportunities to achieve his/her fullest potential
2. All citizens enjoy a quality of life where basic health care and adequate nutrition are assured
3. All citizens have access to a modern, technical, and vocational education tailored to meet the human resource needs of a technologically advancing nation
4. Sustainability of development is ensured through better protection from climate change and natural disasters
5. There is respect for the principles of democracy, rule of law, and human rights
6. Gender equality is assured; so are the rights of ethnic populations and of all other disadvantaged groups including persons with disability
7. The diversity and creativity of all people are valued and nurtured

Source: Government of the People's Republic of Bangladesh 2012.

Governments, via the ministry or agency responsible for national development planning, prepare five-year economic or national development plans as a means to achieve a long-term vision. These plans articulate government's economic, social and environmental priorities, and in turn influence the areas of cooperation and support provided by government partners including donors, intergovernment institutions, UN organizations, the private sector and civil society. In least and more developed countries, national development plans tend to emphasize economic growth and poverty reduction. Normally, the poverty reduction strategy papers (PRSPs) developed during the 2000s have been assimilated into these plans, like the Rwandan Economic Development and Poverty Reduction Strategies for 2008–2012 and 2013–2018.

The five-year national development plans are implemented through three-year rolling budgets (medium-term expenditure frameworks) and the annual workplans and budgets (see chapter 5) of sectors and subnational structures (figure 4.1).

Figure 4.1 Poverty-Environment Mainstreaming Pathways into Policy, Planning and Budgeting Processes



Note: ➧ = poverty-environment entry point; CBA = cost-benefit analysis; CBAP = community-based adaptation plan; MTEF = medium-term expenditure framework; NBSAP = national biodiversity strategy and action plan.

National development plans are normally established through a cyclic process led by the national planning institution and entail the following steps:

1. Performance review of latest five-year plan against targets
2. Elaboration of next five-year plan
3. Monitoring implementation and progress towards targets
4. Periodic progress reporting and review; and then back to step 1

Every step of the cycle is an opportunity to integrate poverty-environment objectives.

Institutional Stakeholders

Many developing countries have planning ministries or commissions responsible for planning economic development priorities, including large capital expenditures such as infrastructure through a public investment programme. The ministry of finance may stress a short-term focus on managing macroeconomic indicators, not taking the longer view on economic and political trends and strategic public investment that a planning ministry provides. A planning ministry's perspective might also make it more likely to take into account the longer-term threats created by environmental and climate challenges. This is the case in China, which retains a strong planning ministry (the National Development Reform Commission) that is now leading the government's overall national response to climate change. In countries where planning is given much less prominence, mainstreaming of the environment and climate into planning processes can be less of a priority.

Sector Strategies

National development plans are often an amalgamation of sector (e.g. finance, agriculture, health, environment, education) strategies and plans, and elements of cross-cutting development issues such as HIV/AIDS, gender and human rights—and increasingly, environmental sustainability. Sector plans, such as an agricultural strategy, endorsed during the preceding five-year national development planning cycle are likely to feature predominantly in the forthcoming national development plan (figure 4.1). Similarly, environmental policies and plans—such as national climate change strategies, revised national biodiversity strategy and action plans (NBSAPs), NAPs and nationally appropriate mitigation actions—provide valuable information, analysis and guidance to argue for the strengthening of environmental resilience and sustainability parameters in national development plans so as to influence government priorities and public sector financing. Poverty reduction strategies, gender and rights-based policies, land tenure policies and other social-oriented policy reform initiatives can also serve as opportunities for strengthening links to environmental sustainability and ENR management, and to inform development planning processes (box 4.2).

The lead ministry or agency normally establishes sector-based working groups comprised of technicians from the planning and/or strategy units of sector institutions to provide information and content for the national plan. The lead institutions typically provide directives and guidance to the sector working groups on how to conduct their work, incorporate cross-cutting issues (e.g. HIV/AIDS, gender and human rights, and environmental sustainability including climate change) and prepare and submit sector-based contributions to the national development plan. From a mainstreaming perspective, it is vital to engage with both the lead institution coordinating the planning process and the sector working groups engaged in the planning process.

Box 4.2 Mainstreaming Gender, Climate Change and Pro-Poor Environmental Sustainability into Planning Processes in Mozambique

In 2007, the Global Gender and Climate Alliance began a campaign that advanced gender equality and women's empowerment in the context of environmental policy. With support from UN Women and the International Union for Conservation of Nature (IUCN), Mozambique's Ministry for Coordination of Environmental Affairs developed the Strategy for Gender, Environment and Climate Change, and subsequently a Climate Change Gender Action Plan to enhance the strategy, in a highly participatory manner. Some lessons learned from the experience include the following:

- Strategies should be revised periodically, and there should be a gender-inclusive and gender-responsive approach to them.
- Specific implications for key sectors should be identified in taking gender and climate change from concept to action, ensuring alignment between strategies as early and as consistently as possible by communicating strategic directions on gender and climate change with other actors.
- Mainstreaming gender in the environmental sector is as important as mainstreaming environmental management in the social sector.
- Defining clear institutional arrangements, in particular those regarding monitoring and evaluation and knowledge management (including dissemination), contributes to mobilizing sectors and leaders in capturing mainstreaming achievements and in their reporting.

Complementing these efforts, PEI supported the training of more than 50 planners at the Ministry of Women and Social Affairs at the national and provincial levels on mainstreaming gender and pro-poor environmental sustainability perspectives in their planning processes. As a follow-up to the 2012 training, the ministry identified equitable distribution of natural resources for pro-poor growth with a greater focus on marginalized groups—including women—as one of its strategic objectives.

Source: Perch and Byrd 2014; and PEI Africa.

National development planning often aims to combine both top-down and bottom-up planning processes. A given country approach will often reflect a balance between these two extremes.

4.2 Integrating Poverty-Environment Objectives into National Development Planning Processes

Once practitioners understand the national development planning process as described in section 4.1, they need to map out and apply a mainstreaming strategy to inform and influence the content of national development plans. The primary activities and considerations involved in this are described below.

Select the Target Policy and Planning Process

Timing, particularly when seeking to mainstream long-range climate change issues, is important. It would be counterproductive to present evidence and justifications aimed at suggesting that national development objectives should reference climate change resilience when the central coordinating unit and sector working groups have already formulated the key development objectives of the next five-year development plan.

However, if the current five-year plan is ending within 18–24 months, this could constitute an ideal target and give sufficient time to gather evidence for arguing and demonstrating the benefits of integrating sustainable land or watershed management into the objectives of a national development plan. It also can provide enough time to support and strengthen the capacity of key stakeholders so as to generate a process of reform and strengthened planning from within national institutions rather than be solely dependent on external agents.

If the five-year development plan process is only in its first or second year, it might be worthwhile to target the budget process aimed at implementing the national plan (see chapter 5), its implementation at the subnational or sector level (see chapter 6), or its monitoring and review (see chapter 7). After gaining traction at these levels, the focus can then shift to informing the national development planning process 18–24 months before the end of the current development plan.

Select Mainstreaming Tools and Information Sources

Different types of information can be used to inform and influence the integration of pro-poor environmental sustainability into the national planning process, and eventually into the plan itself. In some cases, it might be most effective to commission a study on the economic costs and benefits of ENR to the national economy—particularly in key sectors such as agriculture—and to society in terms of jobs, livelihoods and the impact of environmental degradation. Alternatively, a study could be commissioned that determines the costs and benefits of embarking on an inclusive green economy strategy.

Because commissioning studies can be time consuming and expensive, in some cases it might be best to draw on existing studies and materials produced under other national or subnational initiatives that also aim to contribute to the mainstreaming agenda. Examples of such national sector or theme strategies that seek to inform and influence national development planning and budget processes include NBSAPs, national climate change action plans, green economy strategies and NAPs (box 4.3).

Institutionalize Mainstreaming within the Planning Process

Institutionalizing mainstreaming into national planning processes makes the effort more internalized, more replicable and more sustainable. Once institutionalized, a particular set of institutions continues to stress environmental and climate issues once external support has ended. Institutionalization also means that planning processes can be dynamic and flexible so as to best respond to new data and risks over time and address uncertainty within climate models.

In Bhutan, the UN and other development partners have supported a Mainstreaming Reference Group chaired by the country's planning commission. This group has been mandated by a prime ministerial decree to support mainstreaming into the five-year plan and related policies and programmes. In some countries—as in Rwanda—the environment ministry or agency can play this lead coordinating role; this requires an institution able and willing to be proactive once external support for mainstreaming ceases.

Determine the Modes of Communication

Successful mainstreaming in national development planning processes requires careful consideration of how to convey the essential benefits of integrating pro-poor environmental sustainability into national development

Box 4.3 The Use of the NAP Process in Mainstreaming

The main objectives of the NAP process, which was established in 2010 under the Cancun Adaptation Framework, are:

- To take a medium- and long-term approach to reducing vulnerability to the adverse effects of climate change
- To facilitate the coherent integration of climate change adaptation into relevant new and existing policies, programmes and activities—particularly development planning processes and strategies—within all relevant sectors and levels as appropriate

It is too early to draw lessons from the process's application in different countries. What is clear is that the NAP process emphasizes several aspects that reflect a mainstreaming approach, including the following:

- NAPs entail institutional capacity development and greater coordination between actors—e.g. the planning, finance, environment and local government ministries.
- The NAP process implies changes in policies, systems and capacities to support iterative planning. These changes relate to addressing climate risk in ongoing planning, annual budgets, and long-term public investment and expenditure frameworks.
- NAPs focus on identifying climate change adaptation options at the national, subnational and sector levels, which need a high degree of participatory planning.
- Reviewing and appraising climate change adaptation options requires capacity within the planning, finance, environment and sector ministries for cost-benefit analysis as it relates to climate. Among other things, this means greater capacity to use climate information and climate scenarios for planners in all sectors.
- NAPs require sustained investment and, therefore, the integration of climate change into budgeting processes.

Significant lessons have been learned from the NAP process; more channels and opportunities for knowledge sharing across countries are needed to communicate these lessons.

Source: UNDP GEF.

plan objectives, priority programmes, targets and indicators. Before beginning the consultation/negotiation process, produce and share evidence to influence key decision-makers of the need to incorporate poverty-environment priorities into national development planning documents. For instance, accompany commissioned technical reports with concise and clear briefing notes that elucidate the essential findings and recommendations. Tailor the language of these communications to the intended audience and their interests. Generally, economists and development planners have relatively little familiarity with environmental terminology and jargon. Express findings and recommendations in economic terms (e.g. number of households taken out of poverty due to improved land management, percentage increase in maize production as a result of smart climate change–resilient rain-fed agriculture) that can be more easily assimilated by those driving the national development planning process. See annex F for more guidance.

Establish Relationships and Trust

The primary individuals within institutions who are part of the national development planning processes need to be identified, along with their roles in mainstreaming. For mainstreaming to take hold in public sector processes effectively, technicians and decision-makers

need to become mainstreaming champions in the central coordination unit leading the planning process as well as in sector working groups. Individuals in civil society organizations, academia, research organizations and private sector associations (e.g. national association of manufactures) can also become effective champions for mainstreaming. High staff turnover in public sector institutions can limit mainstreaming efforts; a mitigating tactic is not to rely on any one individual to drive the process but to continuously seek to widen the group of individuals engaged in the mainstreaming process across public sector institutions and government partners in civil society, academia and think tanks, and the private sector.

Mutually beneficial relationships should be established between those directing the national planning process and those who aim to influence the process with a mainstreaming agenda. The latter need to strategize on providing inputs that will both carry the mainstreaming agenda forward while contributing to the work of the national planning process—and ideally result in an improved development plan that is well received by decision-makers, and therefore more easily endorsed by them.

Work Towards Breaking Down Sector Silos

Sector ministries are sovereign with regard to developing their sector policies in a more sustainable and coordinated way. An agricultural sector policy centred on increasing production, added value and integrating climate change adaptation will include significant cross-sectoral linkages with water resource management, infrastructure, agro-business and industry, among others. Therefore, critical to the success of implementing the agricultural sector policy is concerted coordination with other sector ministries (e.g. environment, water, industry, infrastructure and transport). To support this coordination, partners should determine how to bring evidence to all sectors and stakeholders so they can together define and agree on national priorities though a mainstreaming process (see chapter 5).

Envisage Proposed Objectives, Targets and Indicators

In general terms, national development plans consist of a set of development objectives to be achieved by the end of a five-year cycle, reflecting government and society's economic, social and environmental aspirations. These plans articulate priority themes, results or programmes to be implemented by various sectors and partners to enable achievement of the objectives. In order to integrate pro-poor environmental sustainability into one or all of these objectives, and to suggest relevant programmes and projects aimed at implementing pro-poor environmental sustainability, it is highly useful to anticipate the likely narrative and content of the plan at an early stage of its development. This helps in preparing documentation and arguments on the benefits of mainstreaming and suggesting formulations for objectives, priority themes, indicators and targets, and programmes/projects that can be more easily assimilated into the final national plan document. Revisiting past national development plans is one way to do this. Engaging with the central coordination unit leading the national development planning process, the national statistics office and key sector working groups is another useful source of information. See chapter 7 for guidance regarding national indicators and monitoring systems.

4.3 Identifying Opportunities for Implementing Mainstreamed National Development Plans

After pro-poor environmental sustainability has been integrated into national development plan objectives, priority programmes/projects, and indicators, measures and opportunities to support its successful implementation must be identified. Some general considerations in this regard are described below.

Understanding Institutional Capacity, Laws and Regulations

Institutions, laws and regulatory frameworks can support and facilitate all aspects of poverty-environment mainstreaming. At the highest level of governance, laws create rights and obligations for individuals and public, private and civil society sectors. They also promote sound policies, standards, institutions, governance and institutional systems. Laws facilitate efficiency and productivity; and enable fiscal, financial and economic instruments and other measures to be complied with and enforced. Laws protect the poor and vulnerable, create access and ownership of land and property rights to natural resources, and protect consumers and people's coping mechanisms.

The institutional settings in which laws are enacted need to be adaptive and flexible. Laws and institutions need to facilitate the implementation of new policies and support the private sector in adopting voluntary self-complying measures through partnerships. Linking laws to the goal of eliminating poverty plays an important role in promoting an inclusive green economy, as well as in the use of social protection policies to address inequality. Many countries supported by PEI have made significant progress in this regard; their experiences can be shared in relevant South-South exchanges (box 4.4).

Secure Funding to Enable Implementation

The lack of available funding, either from the public sector (i.e. national budgets prepared by the ministry of finance) and/or grants or loans from development partners, is often cited as the reason why certain priority programmes in national development plans are not achieved by the end of the five-year cycle. Indeed, for a number of least developed countries, there tend to be inadequate links between planning and budgeting processes. Consequently, it is imperative to work with ministries of finance at an early stage to influence national budget processes so as to allocate public finances in support of mainstreamed programmes contained in the national development plan (see chapter 5).

Maintain Cross-Sectoral Coordination

Sustaining cross-sectoral and integrated engagement at the planning stage and during implementation of national development plans is critical in ensuring positive economic, social and environmental benefits. The ministry of planning should be supported in continuing the efforts of engaging with sectoral working groups to coordinate national development plan implementation across sectors at the national level, and through subnational administrations and their coordination focal points.

Drive Implementation at the Subnational Level

The implementation of priority programmes contained in national development plans is essentially undertaken at subnational levels by local administrations and by lead sector ministries at national and subnational levels. The level of decentralization varies by country, and

Box 4.4 Strengthening Poverty-Environment Mainstreaming Capacity in Africa and Asia through South-South Cooperation

PEI supported a cross-regional South-South exchange in 2011, centred on Rwanda's increased emphasis on private sector development as an engine of sustainable economic development. Rwandan officials visited three Asia-Pacific countries—Lao PDR, Nepal and Thailand—to learn about their poverty-environment mainstreaming experiences and to present their own achievements. This South-South exchange introduced Rwanda to the positioning of PEI Asia-Pacific programmes within planning and investment departments—excellent entry points to subnational planning for poverty-environment outcomes.

The Lao PDR experiences were of particular interest to Rwanda. Government officials and national PEI teams exchanged expertise on local development planning, sustainably managing private and public investments, and greening budgeting processes.

Rwanda shared its experiences on how its public environmental expenditure review (PEER), environmental fiscal reform, and valuation of integrated ecosystem services and poverty-environment indicators have each helped make a case for the creation of a sustainable financing mechanism for environmental sustainability and climate resilience—i.e. FONERWA, the National Climate and Environment Fund.

The establishment of this fund provided some useful insights to Lao PDR in setting up its financial mechanisms on monitoring and evaluating the social and environmental impacts of investments—an effort that is now conducted by the Ministry of Planning and Investment and the Ministry of Natural Resources and Environment. The Rwandan experience of economic valuation of water services also informed work on the valuation of land use changes in Lao PDR's Oudomxay province.

Nepal benefited from Rwanda's PEER experience. The exchange fostered support for Nepalese government officials engaged in pioneering work on climate change expenditure reviews and climate change budgeting; this now serves as a prototype in scaling-up climate public expenditure and institutional reviews (CPEIRs) in the region. Furthermore, Rwanda's economic valuation work stimulated new ideas on mainstreaming that have since been taken up in planning processes. In 2013, the National Planning Commission of Nepal looked into access to and availability of water as one of the environmental causes of displacement and has allocated $2.5 million to address the problem in some of the districts suffering from water shortage.

Thailand learned from Rwanda's experience in advocacy and outreach, particularly in the way the PEI Rwanda team successfully secured the engagement of high-ranking government officials in its poverty-environment project.

Source: PEI Africa and PEI Asia-Pacific.

can influence the effective translation of the national development plan to district and other subnational plans and sector workplans. Also, institutional, legal and financial bottlenecks can undermine effective implementation of national and sector policies at the local level. The conversion of national sector policies into local policies requires an effective decentralization process and the active participation of all stakeholders—including civil society, the private sector and local authorities. See chapter 6 for additional guidance.

Quick Reference Checklist:
Mainstreaming into National Planning Processes

Understanding national development planning processes

- ☐ Is the national development plan connected to the budget process and likely to drive policy change in the country?
- ☐ Has the national development planning process been mapped out and analysed with a view to identifying mainstreaming opportunities?
- ☐ Have the linkages with national budgeting and monitoring processes been identified and analysed?
- ☐ Have the institutions and actors been identified, and their relationships and mandates determined?
- ☐ Have existing policies and plans been assessed to determine linkages to development policy and planning processes?

Integrating poverty-environment objectives into national development planning processes

- ☐ Has a particular policy and/or plan been selected?
  - ✓ Is the timeline realistic for influencing this policy and/or plan?
- ☐ Have mainstreaming tools and information sources been considered and selected?
- ☐ Have the institutional drivers been analysed with the aim of identifying the country institution to lead the mainstreaming agenda?
- ☐ Have modes of communication been considered in light of the messages and target audience?
- ☐ Has a strategy for establishing and building relations and trust been defined?
- ☐ Has a cross-sectoral coordination mechanism been identified and put in place?
- ☐ Have options for mainstreaming objectives, targets and indicators been formulated?

Identifying opportunities for implementing mainstreamed national development plans

- ☐ Have institutional capacity and legislative requirements for enabling implementation been identified?
- ☐ Have funding sources been identified?
  - ✓ Public finance sources
  - ✓ Loans/grants from development partners or global funds
  - ✓ Private-public sector partnerships
- ☐ Have subnational implementation arrangements been identified?

5 Mainstreaming into Budgeting Processes

This chapter describes approaches to budgeting and financing for poverty-environment mainstreaming, which includes influencing the budgeting process at various levels (e.g. revenue and expenditure) and emphasizing the contribution of ENR to public finances. The chapter also describes how budgets actually work, how poverty-environment mainstreaming has contributed to influencing public budget circulars and the assessment methodologies for selecting public investment programmes in support of pro-poor environmental sustainability.



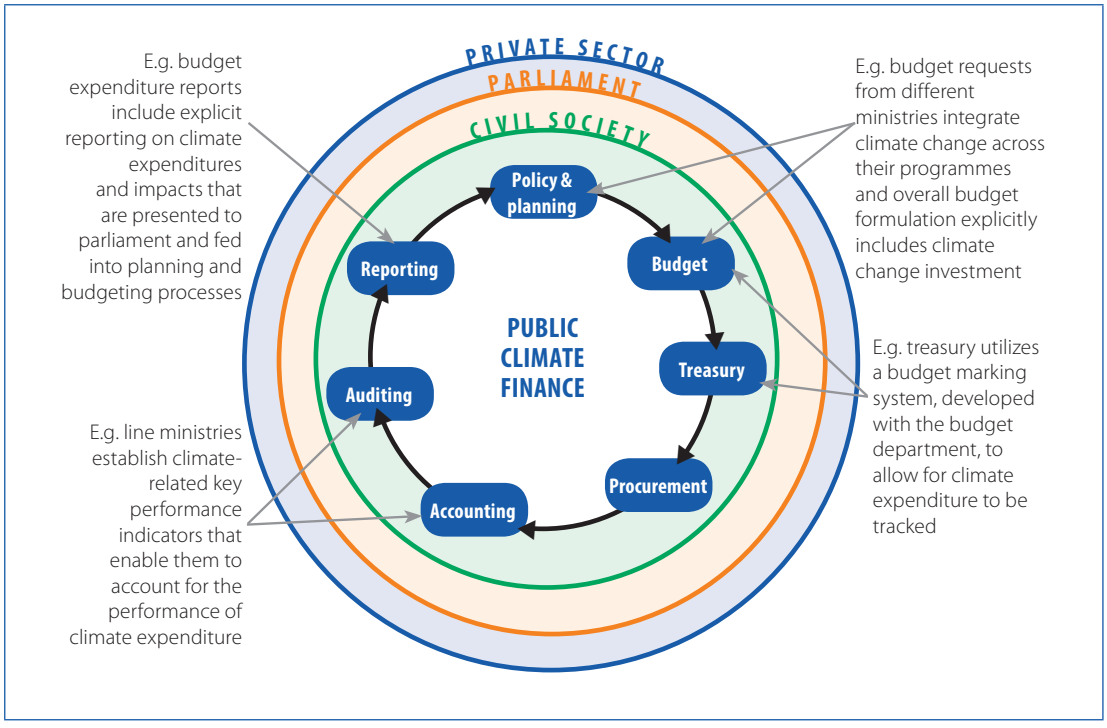
5.1 Engaging in the Budgeting Process

The budget is the primary political and economic expression of a government. It includes a government's decisions on both expenditure—what to spend on—and revenue raising—what to tax and levy charges on. These public fiscal policy decisions incentivize private sector investments.

The budget can have either positive or negative effects (or both) on climate and the environment, depending on whether it reflects "positive" expenditures and fiscal policies or "negative" expenditures and policies. Positive expenditures support environmental and climate priorities such as sanitation, watershed and forestry management, soil erosion control and climate-proofing infrastructure. Positive fiscal policy includes incentives for clean technology or private forestry plantations. Negative expenditures undermine climate and environmental objectives, such as government-funded fossil fuel power plants or state-led land clearance. Negative fiscal policy includes tax breaks for private fossil fuel investments or for private investors to clear forests, or subsidies for pesticides and fertilizers.

The budget is a complex political and technical exercise, and as such contains multiple entry points for pro-poor environmental and climate mainstreaming. The main steps in the budget process are budget planning and formulation, budget execution and implementation, and budget monitoring and accountability. Figure 5.1 shows how climate change in particular can be integrated at these different steps. This

Figure 5.1 Integrating Climate Change into the Budget Process



Source: Palmer et al. 2014.

chapter discusses each of the key entry points and explains what can be done to integrate climate and/or the environment at each point.

5.2 Mainstreaming into the Budget Formulation Process

Ministry of Finance Budget Call Circulars and Guidelines

The ministry of finance starts the budget process by sending out a budget call to line ministries with a budget ceiling. The budget may include specific criteria or priorities for public expenditure. A number of countries have included sustainability from an environmental and/or climate perspective as one of these priorities. Nepal is one such example where climate has been prioritized with UN support so that more climate-resilient projects may receive public funding. And the 2014/15 Malawi budget guidelines state that

> The contribution from prudent use of natural resources, environmental management and climate resilience is crucial in order for Malawi to achieve national sustainable development. There is need to ensure that all projects comply with environmental sustainability guidelines. This has immense potential to provide significant benefits from sustainable resource use and management and climate proofing of the economy and presents a rare opportunity for improved livelihoods of present and future generations of Malawians (Government of Malawi 2014).

The process followed in Malawi to successfully integrate poverty and the environment into budget guidelines is set out in box 5.1.

Ministry of Planning Capital Investment Project Screening

Most budgets are separated into routine operation and maintenance and one-off investment, or capital, projects. These may also

Box 5.1 How Malawi Included Poverty and the Environment in Its Budget Guidelines

Demonstrating the Benefits

The Malawi Ministry of Economic Development Planning, with PEI support, conducted an economic analysis of sustainable natural resource use in the country (Yaron et al. 2011). The analysis showed that unsustainable natural resource use is costing the country the equivalent of 5.3 per cent of its GDP. It also found that soil erosion reduces agricultural productivity by 6 per cent; recovering this yield would lift an additional 1.88 million people out of poverty between 2005 and 2015.

Providing Guidance

The results of the economic analysis focused both the Ministry of Economic Development Planning and the Ministry of Finance on the concept of environmental sustainability. PEI provided specific guidance on how to better integrate sustainable ENR management in Malawi's budget process. To this end, along with the Overseas Development Institute, it developed guidelines that were adopted in 2012, and followed up with substantive dialogue with the government.

Results

The 2013/14 budget guidelines issued by the Ministry of Finance (Malawi Government 2014) included a chapter on adherence to the sustainability guidelines; this was further strengthened in the 2014/15 guidelines, which include references on how poverty reduction and growth are linked to environmental sustainability.

Source: PEI Africa.

be managed by separate parts of government; for example, the planning ministry may have a role in approving and monitoring the capital budget. For capital investments to receive public funding (including donor funding), projects may have to undergo some form of screening to assess their costs and benefits; this can be an important entry point for mainstreaming support. Bangladesh's Planning Commission has a separate format, called a project pro forma, which it uses to appraise all capital projects. With UN support, this project pro forma now mainstreams issues of poverty, gender, climate, environment and disaster management. In Viet Nam, UN support has enabled the country to screen capital projects for their contribution to the country's green economy strategy. A range of other countries are also receiving UN support aimed at building the skills of officials in planning and line agencies so they can knowledgeably assess and prioritize climate-related capital projects.

Line Agency Costing of Required Expenditures

In order to submit their expenditure plans to the ministry of finance, line agencies need to be able to provide prioritized and costed programmes. Unfortunately, while there are many examples of environmental, climate and biodiversity strategies with extensive programme recommendations, there is no prioritization or costing information available to allow these to be presented to the finance ministry for funding. UN support has been provided to line agencies in Cambodia to develop prioritized and costed sectoral strategies for climate change. In Mozambique, the Ministry for Coordination of Environmental Affairs has successfully institutionalized cross-sector environment unit meetings prior to the submission of the sector annual economic and social plans; this has ensured the inclusion of costed environmental and climate change activities (box 5.2).

Box 5.2 Including Poverty-Environment Objectives in Sector Plans and Budgets in Mozambique

Mozambique's central and sector ministries are encouraged to have environmental focal points. Today, 15 ministries—including the Ministry of Finance—have appointed such focal points. During the preparation process of the sector annual economic and social plans which include the sector budget, the Ministry for Coordination of Environmental Affairs invites these focal points to environment unit meetings. These meetings have become a routine part of the annual planning conducted by the ministry and the sectors and have ensured the inclusion of poverty-environment–related objectives/activities in sector plans and budgets.

One tool used for reviewing sector plans and budgets is the cross-cutting mainstreaming matrix launched by the Ministry of Planning and Development in 2011. The matrix includes guidance on the mainstreaming of eight issues, including the environment and gender.

Vilela de Sousa, Deputy Director at the Department of Planning at the Ministry for Coordination of Environmental Affairs, highlighted in July 2013 how many sector ministries, including the Ministry of Defence, now recognize their own responsibility in promoting pro-poor sustainable development and why it is beneficial to sector targets.

Source: PEI Africa.

5.3 Mainstreaming into the Budget Execution Process

Influencing sector budgets as outlined above is important in having an impact on the ground, but equally important is being able to support the capacity in implementation. One of the key challenges across governments that may be linked to limited capacity and weak systems—including for procurement—is that actual expenditures are below planned expenditures, leading to ministries having low physical and financial delivery rates. Capacity constraints are particularly apparent when sectors are to spend funds on inputs in areas outside their traditional scope, such as environmental sustainability, climate and gender. It is in this context that the ongoing substantive engagement referred to in chapter 3 is crucial. Lack of capacity may also be linked to lack of awareness and/or competing demands.

Problems also arise when budgets are delivered to line ministries at different times—often later—than expected. In particular, some environmental expenditures may be very time sensitive, notably, afforestation. UN support demonstrated to Indonesia that much of its Ministry of Forestry budget for afforestation has been arriving after the rainy season, meaning that the tree survival rate has been very low. Another timing/budget consideration pertains to funding for postdisaster clean-up, which is increasingly linked to climate change. Ex ante investments before a disaster might be much more cost-effective than funds made available after the disaster. Better linking of humanitarian and ex post disaster expenditures needs much more attention.

5.4 Mainstreaming into Budget Monitoring and Oversight

Budget reporting, monitoring and oversight by the central audit institutions as well as by legislatures and civil society comprise the final step in the budget process. This is a critical step that can hold government accountable for delivering on commitments and priorities. It involves assessing spending against stated policy priorities, assessing fund allocations and expenditures, and determining corresponding benefits for target groups and beneficiaries. It also entails examining government efficiency and effectiveness in tracking and reporting on issue-specific expenditure and the effect and value added of expenditure towards achieving policy objectives.

Public environmental expenditure reviews (PEERs) and climate public expenditure and institutional reviews (CPEIRs) are tools several countries are using to assess and track expenditures. These reviews can be undertaken on a regular basis or institutionalized within the public financial management process to provide regular data to track expenditures. Some countries are moving from simply tracking quantity of expenditures to also tracking the quality of expenditures in terms of impacts and results. Generating information to track climate expenditures effectively and maintaining financial records in the system of national accounts can serve to build a robust climate financing framework. The latter can be instrumental in accessing global climate funds (see chapter 7 for further details).

PEERs and CPEIRs, combined with economic evaluations of the benefits of pro-poor environmental sustainability and the costs of environmental unsustainability, have proven to be very effective in influencing ministries of finance to attach a higher priority to ENR, as the case studies in boxes 5.3 and 5.4 highlight.

Box 5.3 Economic Analysis of Natural Resources and PEER Gives Mozambique's Ministry of Finance Scope for Action

In 2012, Mozambique's Ministry for Coordination of Environmental Affairs, with PEI support, carried out an environmental economic analysis of natural resource management and a PEER (Mozambique Ministry for the Coordination of Environmental Affairs 2012a, 2012b). The assessments found that the equivalent of 17 per cent of GDP is lost each year due to environmental degradation and the inefficient use of natural resources. Nine per cent of GDP is the estimated cost needed to remediate these damages; the average environmental expenditure for the period 2007–2010 was 1.4 per cent of GDP.

"While the expenditure level shows that Mozambique is investing in sustainability, it also shows that more effort is needed," noted Reinaldo Mendiate, the ministry's Director of Planning. "Enhanced information on environmental expenditure is a first step towards improving investments in sustainability, as it will allow for more precise analysis. We are currently working with the sectors to design a strategy to improve the level of budgeting for sustainable development in Mozambique."

Strategic dissemination of assessment findings opened a window of opportunity to enhance the role of the Ministry of Finance in mainstreaming poverty-environment in Mozambique. The ministry promptly appointed two environmental focal points. With support from PEI, the ministry and the focal points are following up on one of the PEER's key recommendations: to enhance the use of environment and climate codes in budget processes. For the 2014 budget process, the ministry established a new budget classification code related to climate change. Also, the environment ministry has decided to test the feasibility of using a wider range of the available codes—including codes related to land management and physical and environmental planning—to better facilitate measuring progress towards achievement of development goals.

Source: PEI Africa.

Box 5.4 Indonesia Issues Ministerial Decree on Budget Tagging for Climate Change

In July 2014, Indonesia's Ministry of Finance approved Decree No.136/2014 on Guidelines for Annual Planning and Budgeting of Line Ministry. The decree makes the Budget Tagging for Climate Change Mitigation system mandatory for seven line ministries (agriculture, energy, transport, industry, public works, forestry and environment) covered under the National Action Plan for Reducing Greenhouse Gas Emissions.

An online application and thematic budget coding system for tagging mitigation, adaptation and biodiversity activities and expenditures have been developed by the Directorate General of Budget, and two trainings have been conducted in its use. The first training was intended for the Ministry of Finance and to strengthen buy-in from the technical team of the Directorate General of Budget and the Fiscal Policy Agency. The second was a technical training for representatives from the seven line ministries. The training was designed to anticipate the final budget consultation of line ministries for the 2015 fiscal year, when the tagging system is expected to be applied in the budget. To ensure a higher level of buy-in, the minister of finance also held a meeting with the seven line ministries in November 2014.

Source: Andria et al. 2014.

5.5 Mainstreaming into Fiscal Policy: Environmental Fiscal Reforms and incentives for Private Investment

In addition to determining government expenditures, the budget process also sets out fiscal policy to collect government revenues. This fiscal policy sets the incentive framework within which the private sector makes its investment decisions, such as the impact of energy taxes and subsidies on renewable energy investments, or the impact of forestry taxes and subsidies on levels of afforestation and deforestation.

Fiscal policy is a crucial aspect of public policy and can be used to combine the environmental and pro-poor outcomes that are central to a green economy (OECD 2005; World Bank 2005). Environmental fiscal reform (EFR) may not always be the most effective way to raise revenues, nor is it necessarily the best approach to protecting the environment. However, the value of EFR lies in its ability to simultaneously raise revenues and protect the environment. Examples are the removal of "negative" subsidies (e.g. on extractive natural resource technologies, fossil fuels or land degradation), imposition of environmental taxes or charges (e.g. on natural resource extraction, energy use or air and water pollution) and the introduction of "positive" subsidies (e.g. on renewable energy or energy-efficient technology)—although the latter will not raise revenues (box 5.5). The first two examples—removal of negative subsidies and the introduction of environmental taxes or charges—will raise revenues and thus increase the "fiscal space" for other types of expenditure. The introduction of positive subsidies (e.g. for renewables) will require revenues, so they must be looked at carefully—and consequently are prone to reduction or removal in times of fiscal constraint, as has been seen in some OECD countries, which reduced their renewable subsidies during the recent recession.

EFR can contribute to poverty reduction by ensuring that poor households benefit from the revenues so raised (through use of higher revenue to increase service delivery of water and energy or other environmental improvements) and by environmental health gains from reduced pollution. In some cases, poor people could be affected by the price increases associated with EFR. This impact can be mitigated by ensuring that poor groups benefit from targeted subsidies or by reducing the prices of other goods and services to offset the EFR-related price increases. Box 5.6 presents a relevant example dealing with fossil fuel subsidies.

Box 5.5 EFR Results and Benefits in China and Brazil

China sets levies (taxes) on over 200 different air and water pollutants. In 2004, more than $1.2 billion was realized from these levies, and used to fund environmental protection. Because pollution has continued to worsen in many areas, the Chinese government is now taking steps to increase charges on inputs such as energy to reduce the resulting pollution. In Brazil, the government has used value-added tax (VAT) revenues to reward states for creating protected areas. It is estimated that $170 million has been generated in Parana over 14 years, increasing the number of protected areas in that state by 158 per cent. Across all of Brazil, these revenues totalled $200 billion in 2009. However, while the fiscal benefits of these schemes have been easy to quantify in both China and Brazil, their environmental benefits have not been as clear, and insufficient attention has been given to identifying the link between fiscal revenues and environmental outcomes.

Source: GIZ 2013.

Box 5.6 Safeguarding the Poor While Removing Fossil Fuel Subsidies

Global fossil fuel subsidies equalled $409 million in 2010. In the simplest form of fossil fuel subsidy, government subsidizes the cost of fuel to make it more affordable for consumers and producers of fossil fuel products. Subsidies are a very inefficient way of reducing poverty—only 8 per cent of the fossil fuel subsidies in 2010 benefited the poorest 20 per cent of the population. These subsidies are very expensive: in countries such as Indonesia and Yemen the total cost to the national budget exceeds that of the health and education budget combined. Moreover, eliminating these subsidies could reduce global fossil fuel emissions by 7 per cent. So how can reform occur?

The different types of fossil fuels are not used equally by consumer category—the poor use much more kerosene, which means that targeted subsidies can be pro-poor. Also, the savings from subsidy elimination can be invested in targeted pro-poor expenditures. Ghana used subsidy savings to reduce school fees, while Jordan introduced a direct cash transfer to poor households and increased the minimum wage. These examples show it is possible to safeguard the poor while removing fossil fuel subsidies.

Source: PEP 2012.

EFR design will depend on country context and the ability of proponents to build coalitions for reform. The fiscal reform process includes not only the underlying social and cultural context (e.g. a view that water is a "free" good), but also specific challenges and opportunities that might arise. For instance, during a fiscal crisis, a window for far-reaching wider fiscal reforms which can include EFR could be created; a significant environmental disaster could act as a spur to environmental reforms including EFR. Building coalitions during EFR design depends on assessing the primary winners and losers from any fiscal reform and managing perceptions to ensure that the losers are compensated (often by using the revenues from the fiscal measures themselves) or that public opinion clearly holds that any such losses are "fair."

Players involved in the reform process include the politicians, the government bureaucracy, the affected private sector and household consumers, especially poor households. Within these groups, there are further subdivisions, such as the different ministries within the government or different groupings within the private sector.

Using the revenues as compensation to the affected industry, consumers or poor households may be important for political acceptability but may also create trade-offs by reducing the environmental and fiscal benefits of a reform. Dialogue is important, but vested interests may resist change, making leadership critical. The exact aspects of design will vary significantly depending on the kind of fiscal instrument:

- For subsidy removal and taxes on natural resource extraction (e.g. fossil fuel mining, industrial fishing fleets, commercial timber processing), powerful industrial players might resist reforms. However, the general public can likely be persuaded that such reforms are fair.

- Subsidy removal or taxes on fossil fuel energy prices may negatively affect many middle-class consumers as well as some

poor consumers and inflation; compensatory measures will be needed.

- Positive subsidies such as for renewable energy will be less controversial, although they may face challenges during a period of fiscal restraint.

The poor have typically benefited where there has been a clear commitment to use the revenues from EFR to benefit or compensate poor households. This has particularly been the case for fossil fuel price changes where poor households have been seen as an important political constituency to achieve reform.

5.6 Bringing It All Together: Developing a Climate Fiscal Framework

As climate change is becoming a major political and economic issue, there is growing interest in using fiscal policies to generate motivating forces for investments in low-emission and climate-resilient economies while dissuading investments in and use of high-emission technologies. The implementation of a climate-responsive medium-term fiscal framework should be part of the development of the medium-term budget strategy aimed at mitigating climate change; promoting a climate-resilient economy; and incentivizing climate-compatible, low-carbon economic growth (box 5.7). Following are the main features of such a framework and the steps entailed in developing it (Palmer et al. 2014).

Revenues

On the public revenues side, the ministry of finance should develop a climate-compatible fiscal policy, as well as a domestic and international resource mobilization strategy, to feed into the medium-term fiscal framework in line with its overall fiscal discipline objectives (budget neutrality, etc.). Developing this policy requires technical support from the national revenue commission, the ministry of environment and relevant line ministries. Key steps include the following:

1. Measure the current share of domestic revenues allocated to climate relevant actions using the CPEIR expenditure analysis tool. This looks at how that share is expected to evolve according to the medium-term macroeconomic framework and/or any existing medium term climate finance targets which have been established by the government.
2. Review and reform pricing, taxation and subsidy policies to be climate compatible, and quantify their net impact on the budget.

Box 5.7 Developing a Climate Fiscal Framework in Bangladesh

Bangladesh's Ministry of Finance has expanded its role in preparing a climate-responsive budget. First the government reviewed its expenditure on climate change, which was found to be $1 billion per year, with three-quarters originating from domestic resources. While this amount was more than expected, there remains a financing gap to enable Bangladesh to be climate resilient. This motivated the Ministry of Finance to develop a climate fiscal framework that was approved by the minister of finance. The ministry has also now chosen to take the lead on government efforts to leverage international finance to meet the financing gap for climate change adaptation and mitigation. The Economic Relations Department of the finance ministry is now the national designated authority for the Green Climate Fund.

Source: PEI Asia-Pacific.

3. Estimate the amount of funding expected from dedicated global funds—e.g. the Adaptation Fund, the GEF, the Least Developed Countries Fund (LDCF), the Green Climate Fund (GCF), the Strategic Program for Climate Resilience (SPCR) and the UN's Reduced Emissions from Deforestation and Forest Degradation (UN-REDD) Programme—and private finance, and include it in the medium-term revenue framework.
4. Estimate the expected level of funding from international (official development assistance) sources by consulting donors about their future intentions; integrate this estimate into the medium-term revenue framework.
5. Review methodological options for linking domestic sources of funds to their application in climate response. It should not necessarily be assumed that sums raised from fiscally based green actions will be committed to climate response; instead, a range of technical and policy linkages between the sources and applications of funds should be considered. This could include a virtual fund comprising international and domestic sources, ring-fencing of sums raised from taxation measures, budget support or a policy-based linkage. A full range of climate finance management options should be identified, noting the pros and cons specific to the context.

Once these steps are completed, a medium-term revenue framework can be developed that identifies which revenue streams are linked to a climate response. This framework provides the basis for deriving the climate resource ceilings for each line ministry, based on climate risk assessments and past expenditure trends in a given sector.

Expenditures

On the public expenditure side, line ministries need to develop climate-responsive medium-term expenditure frameworks, within the set ceiling, to be submitted to the central agencies for approval and integration into the medium-term fiscal framework. Planning and budgeting for expenditures involves the following steps:

1. Identify programmes and expenditures that have a climate dimension (mitigation, adaptation, technology transfer and capacity building), using the CPEIR analysis but also, importantly, drawing on institutional knowledge and expertise.
2. Determine the climate relevance of programmes/expenditures, ideally using a benefits approach, or alternatively through expert judgment based on expenditure description with the provision of climate finance and public finance expertise.
3. Identify which climate-relevant programmes/expenditures need up-scaling or modification in their design (such as climate proofing) in order to optimize the benefits from the investment. The line ministry should also decide whether there is a need for new climate-dedicated programmes/expenditures.
4. Prioritize and phase programmes. This includes understanding net economic, environmental and social costs and benefits; and should take into account cross-sectoral linkages and complementarity of actions using various planning and appraisal tools, including:
   - Project appraisal including cost-benefit analysis, benefit-cost ratios
   - Marginal abatement costs and benefits for mitigation/adaptation effectiveness
   - The level of uncertainty or risk inherent in the action—a main source will be uncertainty about the severity and geographical as well as temporal extent of

climate change and what this implies for the performance of the climate actions considered

- Scoring and multicriteria analysis looking at environment, economic growth, poverty, gender and disaster co-benefits
- Participatory approaches

5. Under the leadership of the central agencies, define key performance indicators and, where possible, provide evidence of baseline values and targets for monitoring the line ministry's climate change strategic plan. This information should be based on the selection of indicators already identified for possible inclusion in the national development plan.

Quick Reference Checklist:
Mainstreaming into Budget Processes

Engaging in the budgeting process

- ☐ Has the government integrated poverty-environment objectives into the three primary steps of the budget process?
  - ✓ Budget planning and formulation
  - ✓ Budget execution and implementation
  - ✓ Budget monitoring and oversight

Mainstreaming into the budget formulation process

- ☐ Has the ministry of finance included environmental and/or climate sustainability as a priority for public expenditure in its budget call to line ministries?
- ☐ Have projects undergone some form of screening to assess their costs and benefits?
- ☐ Have line agencies provided prioritized and costed programmes on the environment and climate change in submitting their expenditure plans to the ministry of finance?

Mainstreaming into the budget execution process

- ☐ Are actual expenditures below the planned expenditures contributing to low delivery rates by the ministries? If yes:
  - ✓ Do sectors have the capacity to deliver on work in areas outside their traditional scope, such as environmental sustainability, climate change and gender?
- ☐ Have budgets been delivered to line ministries on time, as some environmental expenditures (e.g. afforestation) may be time sensitive?

Mainstreaming into budget monitoring and oversight

- ☐ Is the government tracking its expenditures on environment and climate through PEERs and CPEIRs?
- ☐ Is the government tracking the quality of expenditures in terms of impacts, in addition to tracking the quantity?

Mainstreaming into fiscal policy

- ☐ Has the government introduced EFRs to raise revenues and protect the environment through the following:
  - ✓ Removal of negative subsidies
  - ✓ Imposition of taxes or charges
  - ✓ Introduction of positive subsides
- ☐ Has the government taken into consideration the country context and the ability of proponents to build coalitions for reform in EFR design?
- ☐ Can the government be supported to develop a climate fiscal framework which takes a holistic approach to expenditure and revenue policy and its interface with climate change?

6 Mainstreaming into Sector Strategies and Subnational Plans and Budgets

For mainstreaming efforts made during the national policy, planning and budgeting processes to produce environmental sustainability and poverty reduction results, sector strategies and subnational plans must be implemented and monitored. This involves a two-way process, influenced by the national context, in which sector strategies and subnational plans inform national planning and vice versa. This chapter examines incorporating pro-poor, gender-responsive environmental measures in sector strategies, including sector-relevant tools and examples. It then focuses on issues of governance and how centralized or decentralized systems affect responses to mainstreaming from the national to the local level. The chapter points out the significance of local government and looks at its various regulatory, planning and service delivery functions with an eye to how mainstreaming at the subnational level can be undertaken. It concludes with ecosystem-based approaches and experiences to inform subnational-level development planning and budgeting.



6.1 Integrating Poverty-Environment Objectives in Sector Strategies

National development policies and plans are implemented through sector strategies and their respective budgets. Thus, it is vital that sector policies, plans and strategies include sector-specific poverty-environment objectives and allocate the necessary budgets to these. For example, if the national development plan has a target of 10 per cent of agricultural land being subject to physical and biological soil erosion control programmes, that target needs to be operationalized through the agriculture sector. Engagement in sector planning and budgeting processes is vital and time consuming; to ensure best results, priority ENR sectors should be chosen and focused upon. Targeted economic evidence will be needed to justify the inclusion of poverty-environment objectives in sector plans and budgets. It may also be necessary to review the mechanisms for coordinating sector planning processes with national planning processes, as experience demonstrates that these are sometimes inadequate. Cross-sector coordination mechanisms may also need to be reviewed. A key lesson from mainstreaming is that to sustain poverty-environment impacts, political will and appropriate institutional mechanisms need to be in place to enable integration of economic, social and environmental dimensions of sustainable development.

Poverty and social impact analysis and strategic environmental assessment—or both in combination—are useful analytic tools

Box 6.1 Poverty and Social Impact Analysis of Botswana's Integrated Support Programme for Arable Agriculture Development

In 2012, PEI Botswana commissioned a poverty and social impact analysis of the Integrated Support Programme for Arable Agriculture Development (ISPAAD). The ISPAAD aims to achieve household and national food security by supporting agricultural development and incorporating an element of social protection for farmers against agricultural risks, vulnerability and market failure. The analysis looked at programme performance, focusing on key activities and the impact on poor people, vulnerable groups and the environment. This entailed an analysis of survey data collected from a representative sample of beneficiaries and stakeholders, a cost-benefit analysis and an institutional analysis.

Findings revealed that ISPAAD packages reached marginalized beneficiaries and households with stated incomes below the poverty line, including the elderly, the uneducated and women. However, given that ISPAAD has not been able to increase grain production and yields, these individuals and households remain food insecure; thus, ISPAAD alone is not likely to lift these vulnerable groups out of poverty. Annual expenditure on ISPAAD operations exceeded annual proceeds (estimated total value of production) in all crop seasons since the programme's inception. Recommendations currently being considered by the Ministry of Agriculture seek to make the programme more clearly targeted, means-based and focused on agricultural development with packages offered on an incremental cost-sharing basis. Another recommendation is to distribute seeds (sorghum, maize, millet and cowpea) according to land suitability/agro-ecological zones and resilience to climate change.

Source: UNDP-UNEP PEI 2013c.

(box 6.1) to apply either during sector policy elaboration, policy implementation (e.g. mid-term review) or post-strategy period. These tools can be used to determine the anticipated or actual outputs and outcomes of the sector strategy to intended beneficiaries in terms of poverty reduction, livelihoods and gender, and on the environment and ecosystems. Analysis/assessment findings can lead to refinements in sector policies or programmes to mitigate against unintended negative economic, social or environmental results, and maximise expected pro-poor environmental sustainable benefits.

There are also benefits in integrating pro-poor development objectives in environment sector policies and plans. The revised 2011 guidelines from the Secretariat of the Convention on Biological Diversity for NBSAPs clearly recommend an alignment of the NBSAP with national development objectives; in this way, the NBSAP can inform priority development programmes in safeguarding biodiversity (CBD 2011). One approach is for the NBSAP to target key sectors that are part of the national development plan, and provide them with sector biodiversity strategies that are closely aligned with national sector strategies. This is very much in line with the mainstreaming approach outlined in chapter 2: namely, to identify the key stakeholders in the sector; gather evidence on the links between biodiversity and the sector (box 6.2); and identify the desired biodiversity and development outcomes—particularly, the economic and social costs and benefits. Gaining an understanding of the interactions between sectors and biodiversity and ecosystem services, and communicating this information to stakeholders and decision-makers, is essential to successful mainstreaming (IIED 2013).

NAPs can be similarly linked with poverty reduction and other development objectives of key sectors such as agriculture. And UNEP's Green Economy Initiative provides guidance on developing National Green Strategies that promote environmental sustainability as well as contribute to national economic growth across sectors. The elaboration of national or subnational state of the environment reports is yet another useful sector strategy to inform development planning processes (box 6.3).

Box 6.2 Relationship Between Agriculture and Biodiversity

- **Use of and benefits from ecosystem services**—water, soil nutrients, soil structure, airborne nutrients, crop genetic and species diversity, pollination, decomposition
- **Positive impacts on biodiversity and ecosystem services**—use of a broad range of crops and farm animals allows the conservation of agricultural biodiversity, habitats and landscapes of value to biodiversity
- **Possible negative impacts on biodiversity and ecosystem services**—nutrient pollution in runoff water; depletion of soil fertility; depletion of water; erosion of genetic diversity of crop, livestock, aquatic and forest species; deforestation; use of fossil fuels; eviction of beneficial avian and insect diversity, including pollinators; soil biodiversity
- **Elements of human well-being in direct relation to use and impacts**—food security, health, livelihoods, social relations, cultural and spiritual values, aesthetic values
- **Potential modifications to current/damaging practices**—reduce/eliminate the use of exotic species for tree plantations and aquaculture and the use of chemical inputs, reduce tillage, introduce integrated pest management, multi-crop, increase genetic diversity, on-farm conservation and management of crop diversity, use traditional varieties

Source: CBD 2011.

Box 6.3 State of the Environment Reporting and Data Inform District Planning in Malawi

In 2010, the Government of Malawi developed its first Malawi State of Environment Report with support from PEI (Malawi Government 2011). A significant challenge in developing the report was the lack of accurate district-level data. To enhance the available data and district environmental management, the government, with support from PEI Malawi, revised its Decentralized Environmental Management Guidelines in 2013. The updated guidelines address gaps and inconsistencies in earlier iterations being used by the districts. One objective was to help ensure that district councils include emerging and critical environmental issues in their preparation of district development plans and social and economic profiles such as waste management and climate change.

Based on both the new guidelines and the Malawi State of Environment Report, the Mwanza District launched its District State of Environment Report in February 2014; it includes poverty-environment references. Four other district councils—Kasungu, Nkhata-Bay, Nsanje and Zomba—included poverty-environment and climate change objectives, indicators and baselines in their district socio-economic profiles in the first half of 2014.

Yasinta Ganiza, environmental officer in the Malawi Ministry of Environment and Climate Change Management, told the *Daily Times* at the launch of the Mwanza publication that "the report provides a picture of the state and trends of the environment and natural resources in the district, thus informing the Council to make appropriate resource allocations." The District State of Environment Report is a significant resource which will help support the monitoring and review of the state of the environment and its implications for poverty reduction in order to inform policy and budget decisions. The district report and its social and economic profiles will also guide actions taken by community groups to promote the sustainable use of natural resources.

Source: PEI Africa.

6.2 Planning and Budgeting at the Subnational Level

Subnational (e.g. provincial, district and commune levels) planning, budgeting, implementation and monitoring processes offer opportunities to implement pro-poor ENR sustainability objectives that can result in concrete benefits for local populations.

Like central governments, local administrations have three main instruments with which to interface with pro-poor environmental sustainability and climate issues: public expenditure management, revenues and regulation (UNDP, UNCDF and UNEP 2010).

- Local **public expenditure management** is the means by which local governments can finance public goods and services that affect, in one way or another, climate and the environment. Public expenditure management covers planning, budgeting, implementation, monitoring and reporting. A constraint in local-level mainstreaming is access and control over sufficient funds to perform pro-poor environmental tasks and make necessary investments in these. Often, the bulk of local authority budgets are dedicated to local infrastructure. Making infrastructure pro-poor, environmentally friendly and climate resilient can present multiple challenges and opportunities (box 6.4).

Box 6.4 Environmentally Friendly Local Governance and Green Roads in Nepal

For many villages in the hills of Nepal, there are no roads to connect them to nearby towns and cities. To increase access to markets and services and reduce isolation for these rural communities, local governments spend large shares of their budgets on road construction. However, in solving one problem, a new set of issues has been raised. The bulldozers levelling the land for road construction are wreaking environmental and social damage, and villages have become more prone to landslides, shifting ground, loss of forest cover and substantial pollution and dumping of wastes. Noted Janak Sharma, planning officer in the Dhadhing District Development Committee, "Last year [2011], there were three big landslides in the northern part of Dhadhing, because of using heavy equipment while constructing roads…the economic damages are around 10 million rupees."

In 2011, the Ministry of Federal Affairs and Local Development (MoFALD) undertook an economic study in two districts, Makawanpur and Dolakha, analysing local government investments in roads. Findings from the study suggested that the use of heavy machinery in construction resulted in high environmental costs compared to labour-based technologies that were both environmentally friendly and a source of employment for surrounding communities. These technologies had about 30 per cent more marginal economic returns than roads constructed with heavy equipment–based technologies.

The study recommendations were reinforced by civil society organizations and media advocacy. As a result, several local governments banned the use of heavy machinery to construct roads, and imposed fines on violators. In addition, MoFALD encouraged a shift to labour-intensive technologies for construction, providing thousands of green jobs for villagers while reducing the environmental impact of road construction.

Building on the bedrock set by the National Adaptation Programme of Action, the Government of Nepal in 2013 passed the Environmentally Friendly Local Governance Framework as part of an umbrella public policy on local governance and community development. The framework marks a reinforced, all-encompassing approach to ingraining environmental sustainability at all levels of society, from the central government to individual households. It spans sectors such as renewable energy, sustainable farming, waste management, biodiversity conservation, and water and sanitation, among others. Following its endorsement by the Nepal Cabinet of Ministers, the policy is ready to be rolled out in all 3,915 village development committees across 75 districts.

Source: UNDP-UNEP PEI 2014a.

- Local **fiscal revenues** are raised in the form of taxes, fees and charges. Local government revenues are clearly linked to local expenditures—but, more importantly, should be seen as instruments that can provide incentives or disincentives regarding the ways in which climate and the environment are managed (or mismanaged).

- Local **regulation**, largely in the form of integrated development plans, by-laws, land reform and land use planning/zoning, can be used to enable or constrain certain types of activity, with either a direct/indirect or deliberate/unintended impact on ENR management issues. Policies that make ENR management more inclusive will usually curtail the scope of economic rents and the opportunities for rent-seeking behaviour and capture—a major source of inequitable outcomes and perverse environmental distribution. One example here is the granting

of land and inheritance rights to women in Rwanda, which has increased both agricultural productivity and environmental protection (see World Bank 2011a).

Integrating pro-poor environmental sustainability into subnational planning and budgeting processes offers a number of opportunities. Participatory planning processes involving local stakeholders and intended beneficiaries can allow for rights-based approaches and gender mainstreaming to be integral components of ENR-based initiatives featured in community, village or district development plans. Ensuring financial resources, originating from local administrations, private or other sources, to support transformative actions by beneficiaries can contribute towards achieving economic and social benefits while safeguarding ecosystem and natural resources (box 6.5).

Successful community-level initiatives led by civil society organizations centred on participatory ENR management planning, including climate change adaptation actions, can inform subnational planning processes (box 6.6). Strengthening the links between such community-based initiatives and local administrations and sector ministries can help inform subnational integrated cross-sectoral planning and budgeting processes, and provide a basis for their replication (UNDP-UNEP PEI 2011b).

6.3 Ecosystem-Based Approaches and Experience to Inform Subnational Planning and Budgeting

One of the challenges of improving environmental management is that the administrative boundaries and political entities involved in political and economic decisions differ from the natural boundaries that govern ecosystems. This disjunction can be partially addressed by undertaking integrated ecosystem assessments; these have most traction at the subnational level in terms of generating mainstreaming results.

Box 6.5 Integrating Gender Equality into Subnational Planning Results in Livelihood Improvements from Green Jobs in Tajikistan

Since 2011, the Government of Tajikistan and PEI have worked with the Regional Growth Programme in 14 districts and 65 localities of the Sughd Region, an area that generates 40 per cent of the industrial and 30 per cent of the agricultural production of Tajikistan, to explore which profitable business initiatives could improve the lives of poor people (including poor women) and ecosystems. Local communities were supported in identifying "green" products and services.

Today, more than 65 green enterprises are supported by a regional trust fund mechanism that answers both environmental and poverty reduction criteria. In the Gonchi District, for example, women's cooperatives have been established to provide green jobs for women. These cooperatives use greenhouses to grow crops year round, providing food for their families and for sale to other villages.

For the first time, women are taking an active role in local economic activity rather than having to depend on unreliable remittances from abroad. There are now 10 cooperatives like the one in Gonchi supporting jobs for women. Each greenhouse can generate up to $3,600 in six months, providing stable and independent livelihoods for women.

Source: UNDP-UNEP PEI 2013b.

Box 6.6 Up-Scaling a Community-Level Programme in Rwanda

To demonstrate the tangible benefits of investing in pro-poor environment, natural resource sustainability and climate adaptation objectives in national and subnational development processes, the Rwanda Environment Management Authority, with PEI support, established the Rubaya demonstration project. The project shows how investments in pro-poor ENR management can help reduce poverty; improve food security, health and sanitation; and empower women and vulnerable groups. Using participatory integrated and cross-sectoral approaches, the beneficiary population of 200 people (62 per cent women) have engaged in the following interlinked components:

- Installation and operation of 15 water reservoirs to control runoff and ensure that runoff is productively utilized (e.g. for crops)
- Control of soil erosion to reduce the loss of fertile top soil and retain much of the water through terracing
- Application of a one cow per family programme as a communal rather than individual effort
- Waste management and generation of biogas for all households for cooking and lighting, with the residue used as manure in the terraces
- Rainwater harvesting from all building rooftops via underground tanks from which the water is piped to different taps in the village

Community beneficiaries have benefited from the above improvements. Following visits by senior decision-makers to the pilot project, the Rubaya model is being replicated through inclusion in district development plans.

Source: UNDP-UNEP PEI 2014d.

The Millennium Ecosystem Assessment (2005) offers a framework for demonstrating connections between ecosystem services to sustain people's livelihoods and national economies, and for quantifying their value in monetary terms where possible. An ecosystem assessment provides the connection between environmental issues and people. In this context, ecosystem services are seen as:

- Provisioning services—e.g. providing food, water, timber and fibre
- Regulating services—e.g. regulation of climate, floods, disease, waste and water quality
- Cultural services—e.g. offering recreational, aesthetic and spiritual amenities
- Supporting services—e.g. soil formation, photosynthesis and nutrient cycling

As a follow-up to the Millennium Ecosystem Assessment, which drew on national and regional ecosystem assessments, a number of practitioner guidelines and manuals were produced on conducting integrated ecosystem assessments; one of the most recent of these is Ecosystems and Human Well-Being: A Manual for Assessment Practitioners (Ash 2010).

Integrated ecosystem assessments (see box 6.7 for examples informing subnational planning) are one of several mainstreaming tools that can act as a bridge between science and policy by providing scientific information on the consequences of ecosystem change for human well-being. When presented in an easily digestible form, assessment findings can respond to decision-makers' needs for credible information, highlight trade-offs between decision options and model future prospects to avoid unforeseen long-term consequences.

Box 6.7 Examples of Integrated Ecosystem Assessment Informing Subnational Planning

Thailand

Led by the National Planning Unit of the Ministry of Interior, an integrated assessment was conducted at different watershed locations (upper, middle and lower) in Nan, Khon Kaen and Samut Songhan Provinces, respectively. The assessments aimed to inform decision-makers on community and provincial development options that would bring about economic improvement with minimum negative impact on the ENR base.

An important component of the effort was to strengthen the capacity of national institutions to carry out the assessments and make use of the findings to inform decision-makers. Provincial and local administrations now make better use of area-based development planning tools (spatial planning, community-based research, and payments for ecosystem services). For example, in Nan Province, the provincial administration has been supported to better manage corn-based livestock farming through investments in watershed management and more secure land tenure.

Guatemala

An ecosystem assessment was centred on the "dry corridor" in eastern Guatemala—in particular, the watersheds emanating from the Sierra de la Minas that support agricultural subsistence and export production systems. Led by the National Planning Authority in collaboration with the Ministry of Environment and Natural Resources, the assessment aimed to inform provincial and municipal development plans through scenario analysis and response options seeking to bring about inclusive economic improvement for all peoples with minimum negative impact on the natural resource base.

Mali

An integrated ecosystem assessment was completed in eastern Mali's Mopti region in 2009. Led by the Ministry of Environment and Sanitation, the assessment highlighted the importance of ecosystem services—in particular, wetlands—for agricultural production and the effects of degradation. The report was presented to local authorities to inform local development plants, and training of trainers was undertaken. Legal arrangements for institutionalizing the use of a strategic environmental assessment approach to green policy documents are being put in place.

Albania

The Drini-Mati River Delta, a biodiversity hotspot that supports many livelihoods, was considered critically vulnerable to climate change as floods and storm surges have caused significant erosion, sea level rise, habitat destruction and loss of biodiversity. Following investigations and a local planning process initiated by local administrations, a number of actions were aimed at developing capacities to monitor and respond to climate impacts, including enhanced abilities to produce and analyse data as an evidence base for informed decisions.

The official protected areas in the Drini-Mati River Delta expanded from 4,500 hectares to 9,400 hectares. An early warning system for extreme weather events was set up, and various pilot adaptation initiatives were implemented, including restoration activities such as dune planting. Partially as a result, national authorities now require that all management plans for protected areas/habitats take climate change adaptation into consideration.

Source: UNDP-UNEP PEI 2012b, 2013a and 2014c; PEI Europe and the Commonwealth of Independent States.

Ideally, integrated ecosystem assessments should be led by cross-disciplinary teams and grounded within the context of a known need identified by decision-makers, take into consideration the subnational planning cycle, involve the best available scientists from a range of disciplines, and subject the findings to rigorous review. The generic methodological steps include the following:

1. Define clear and policy-relevant research questions to which the assessment should respond.
2. Assess conditions and trends in ecosystems and their services (according to social, economic and environmental variables).
3. Develop future scenarios as a consequence of plausible changes in driving forces, ecosystem services and human well-being.
4. Formulate response options for improved ecosystem management for human well-being and pro-poor economic growth (Booth et al. 2012).

Economic valuation of ecosystem services is becoming an important tool in the integrated assessment process to enable the monetary analysis that is often requested by economic decision-makers. Also being used are participatory processes that enable the effective participation of all stakeholders, including vulnerable groups as well as private sector operators. Experience to date has demonstrated the need for more rapid and participatory applications of ecosystem assessment in ways that do not compromise its credibility, relevance and legitimacy.

Quick Reference Checklist:
Mainstreaming into Sector Strategies and Subnational Plans and Budgets

Mainstreaming into sector strategies

- ☐ To what extent do sector strategies integrate poverty-environment objectives?
- ☐ What particular sector strategies could generate poverty reduction and environment sustainability benefits if pro-poor environment, gender and climate issues are included?
- ☐ How strong is the level of the intra- and intersectoral coordination mechanisms that are in place?
- ☐ What sector strategies or initiatives could benefit from being subjected to strategic environmental assessment or poverty and social impact analysis?
- ☐ Are there environment sector strategies (e.g. NBSAP, NAP, green economy strategies) available to inform and influence other key sectors (e.g. agriculture)?

Subnational planning and budgeting: implementation challenges and opportunities

- ☐ To what extent is local government integrating poverty and environment objectives into local planning, budgeting, fiscal and monitoring systems?
- ☐ To what extent is local government integrating poverty, environment and climate objectives into local-level infrastructure expenditure?
- ☐ What examples exist of local-level environmental and climate adaptation initiatives (e.g. by community-based or non-governmental organizations) generating economic, social and environmental benefits worthy of replication that can inform local government planning and budgeting?

Ecosystem-based approaches and experience to inform subnational planning and budgeting

- ☐ Are there local government planning processes which can benefit from integrated ecosystem assessments?
- ☐ Have clear, policy-relevant questions to inform management of ecosystems to sustain economic and social benefits been defined to guide the integrated ecosystem assessments?
- ☐ Have integrated ecosystem assessments informed scenario analysis of different policy options for consideration by decision-makers?

7 Mainstreaming into National Monitoring Processes

This chapter discusses the value and benefits of integrating poverty-environment objectives into national and subnational monitoring systems, the approach to be considered and examples of successful efforts. The utility of a public finance expenditure review exercise for tracking budgeting and spending is explored. Lastly, the chapter touches on other measurements of natural wealth and well-being which can be used to support the integration and monitoring of poverty-environment objectives.



7.1 Integrating Poverty-Environment Objectives into National Monitoring Systems

A national monitoring system tracks progress made against policy and development objectives; it can also help identify where and what kinds of corrective actions may be needed. Including poverty-environment objectives in the national monitoring system also helps maintain and improve understanding of poverty-environment linkages and how they can be measured. Monitoring enables policymakers and implementers to demonstrate the impact of policy measures put in place, share lessons learned, make adjustments in policies, and guide budget and resource allocation. To do all this means monitoring poverty-environment issues within the framework of the existing national system, developing poverty-environment indicators as part of national development plans and/or sector strategies, and working closely with the national statistics office and other institutions involved in national monitoring systems.

Goal and Major Actions

The overall aim of integrating poverty-environment objectives in the national monitoring system is to increase the likelihood that the poverty-environment elements of policies, plans and budgets are implemented effectively. This goal can be facilitated by the following actions.

- **Selecting appropriate indicators.** Relevant and operational indicators, such as those listed in box 7.1, are an important instrument for integrating poverty-environment objectives into the national monitoring system, and provide an important link connecting policy and planning with implementation and monitoring. Such indicators are usually developed through extensive research and consultations and are used to measure progress on the poverty-environment dimensions of a policy, plan and/or strategy. Within the context of broader poverty-environment issues, these should cover specific themes including gender, climate change adaptation and mitigation, inclusive green economy, and sustainable consumption and production. Practitioners should also be aware of the SDG targets and corresponding indicators, as countries will internalize these in their national monitoring processes, just as they did with MDG targets and indicators.

- **Coordinating with and strengthening the national statistics office and related institutions.** Practitioners should establish effective and mutually beneficial working relationships with the offices responsible for managing and implementing the national monitoring system. These systems are usually led by an office in the ministry of development or planning in collaboration with the national statistics office. For its part, the national statistics office is usually responsible for providing quality control in formulating indicators and for coordinating overall data collection and analysis, in response to the goals and objectives of development policies and plans and sector strategies. Sector ministries (e.g. agriculture, environment, meteorology, education, water and health) may each have a comprehensive monitoring and information system and may collect data that can serve to inform poverty-environment indicators. Practitioners should engage with all of these entities to elaborate and apply poverty-environment indicators. Coordination and cooperation can be accomplished through information sessions with, and writing manuals and guidelines for use by, cross-sectoral working groups formulating national development policies, plans and sector strategies.

Box 7.1 Examples of Poverty-Environment Indicators

Agriculture

- Hectares of agricultural land under sustainable land management—i.e. on which soil and water conservation (contour ridging), soil fertility improvement (organic manure, agro-forestry), rainwater harvesting, conservation agriculture, etc., is practiced
- Estimated total soil loss in cropped areas (tons/hectare/year)
- Number of women holding elected leadership positions in community organizations, cooperatives or decision-making councils
- Number of women and men who own agricultural lands, including homes and home gardens
- Proportion of women and men with access to credit and technical assistance

Climate Change

- Number of women owning and using energy-efficient technologies, using renewable energy and involved in sustainable forest management
- Participation of women in climate change planning institutions, processes and research (including disaster preparedness and management) at the professional and lay community levels

Forestry

- Number of women who benefit from natural resource concessions
- Female ownership or co-ownership of equipment and tools for production, processing, commercialization and other services associated with natural resources
- Number of forest management plans with gender-sensitive activities (e.g. non-timber forest products, medicinal plants, wildcrafting)

Fisheries and Aquaculture in Coastal Zones

- Number of women with access to and control over key resources (e.g. fuelwood, craft supplies, shellfish)
- Percentage of women obtaining fisheries-related business credit
- Number/percentage of women who own aquaculture ponds
- Number of women managing successful productive projects (e.g. marine farms, ponds, zoo farms, eco-shelters)
- Number of women benefiting from wetlands planning, professions and research, at all levels

Energy

- Percentage of households in rural and urban areas using alternative sources of energy to woodfuel (including charcoal) as their main source of energy for cooking
- Amount of time or money spent by women and men to obtain energy supplies (fuelwood, charcoal)
- Number/percentage of women and men adopting energy-saving technologies
- Number/percentage of women and men involved in energy-related employment and training
- Number/percentage of women and men involved in energy policy dialogue
- Number/percentage of women and children visiting clinics for respiratory or eye conditions
- Number/percentage of women trained to use alternative technologies

Urban

- Number/percentage of female-headed households receiving housing-related loans
- Number of women with voice and voting rights in community consultation process for urban planning
- Number/percentage of women in municipal institutions with environmental decision-making authority

Other

- Proportion of households whose main source of cash income is derived from natural resources
- Proportion of urban and rural population with access to piped or protected water as the main drinking water source

Sources: PEI Africa; Aguilar, n.d.

- **Strengthening monitoring and reporting mechanisms for national accountability and sustainability.** Analysis and reporting on data collected over time generate evidence of change in human well-being and the environment in accordance with intended goals, targets and corresponding indicators. Government progress reports on national development plans or sector strategies constitute an important source of evidence of progress on and achievements in poverty-environment mainstreaming. To strengthen these mechanisms, practitioners can support national institutions in generating regular, transparent and accessible reports on performance measured against agreed-upon indicators contained in national monitoring systems. Strengthening can also include building the capacity of legislative and judiciary branches of government as well as of civil society organizations and the media so they can participate as active partners in national monitoring processes.

Steps in Integration

Influencing national monitoring systems to integrate indicators linked to poverty-environment can be challenging. Given the cyclic nature of national planning, implementation, monitoring and reporting processes, it can take a number of years before results are achieved. PEI experience has identified several steps to integrate poverty-environment objectives into the national monitoring system. These steps, which need to be adapted to national circumstances, are as follows.

- **Review literature and experience in other countries.** Undertaking a literature review helps identify issues that need to be taken into account in mainstreaming poverty-environment objectives into a monitoring system. Examples from a growing number of countries are available outlining the process they have undertaken in the adoption of poverty-environment indicators.

- **Analyse national priorities and identify entry points.** National monitoring systems are subject to continuous review and data collection cycles (e.g. five-year household surveys) that are closely linked with the review and elaboration of five-year national development plans and sector strategies. Timelines and targets need to be mapped out in order to inform and influence national monitoring systems at a strategic point in the review and planning cycle.

- **Identify key institutions and establish cross-sectoral working groups.** Delineate the national, sector and subnational monitoring systems in place and the institutions charged with coordinating their application and those responsible for data collection. As noted above, the national statistics office, working in close collaboration with the ministry of planning, is typically responsible for the monitoring system; and sector ministries are responsible for collecting data over time for a cluster of thematic indicators. Establish working relationships with these institutions and make the case to them on the benefits of revisiting and/or adding poverty-environment indicators into existing systems.

- **Analyse existing monitoring and reporting systems.** National monitoring systems often ignore linkages with the environment, while environmental monitoring systems tend not to consider the poverty impacts of environmental changes. Assessing existing national monitoring systems and their associated data collection and reporting components provides essential information which can inform and influence changes to better reflect poverty-environment linkages. In addition, the availability,

quality and relevance of existing data sets and indicators (including gender disaggregation) should be analysed, along with the institutional roles and responsibilities for collecting, analysing and reporting on data.

- **Identify possible poverty-environment linkages through a consultative process.** Possible indicators should be formulated through a participatory process, drawing on sector experts and statisticians from the national statistics office. The process should be embedded in the elaboration and monitoring of national/subnational development policy and planning and/or sectoral strategy processes. It should be informed by quality criteria (box 7.2) and respond to the need to capture progress and change resulting from the implementation of priority initiatives contained in national plans and sector strategies, as funded by public and private sector funds.

  Indicator formulation could be proceeded and informed by a commissioned study that offers a range of poverty-environment indicators, complete with definitions, purpose, institutional roles and responsibilities, and data collection protocols. Another useful input is sector or thematic indicators proposed under other national and/or global initiatives. For instance, national climate change adaptation and mitigation strategies, NBSAPs and green economy strategies have formulated specific indicators that could be considered.

- **Select a core set of indicators.** Through a consultative process with policymakers from the ministries of planning, key sectors and the national statistics office, practitioners should facilitate a process in which a core set of indicators are selected from among the possible poverty-environment indicators identified in the preceding step. Keep the number of proposed new indicators

Box 7.2 Indicative Criteria for Poverty-Environment Indicators

- **Policy relevant.** Indicators should directly respond to the need to track changes against policy goals and objectives. They should be useful for policymaking.
- **Link environment and poverty goals and results.** A framework should be established for consolidating linkages between pro-poor environmental sustainability that contributes to inclusive green growth.
- **Specific, Measurable, Attributable, Relevant and Timebound (SMART).** Indicators and targets should be expressed in quantitative or qualitative terms. Their measurement should be replicable with similar results.
- **Comparable and sensitive to changes.** Indicators should facilitate assessment between different circumstances and timescales and detect variations; this underscores the necessity of regular data collection.
- **Gender sensitive.** Indicators should be sensitive to capturing women's and men's participation in planning, decision-making, implementation and benefit sharing.
- **Disaggregated data.** Indicator data should be able to be disaggregated by gender, age and location, among others, so further analysis from a gender- and rights-based perspective can be undertaken.
- **Cost-effective.** Indicators should be measured in an affordable way, including making provisions for their integration in existing data collection systems (e.g. household surveys).
- **Aggregative.** It should be possible to aggregate the measurements of indicators from different national levels (e.g. from outputs to outcomes), from the subnational level to the national level, and from the national level to the global level (e.g. national reporting against global MDG/forthcoming SDG goals and targets).

realistic, as the national statistics office will raise justified concerns related to the costs of data collection, the feasibility of regular data collection and how the data will be used for reporting.

- **Continuous review and refinement.** The adoption and application of poverty-environment indicators can take 5–10 years, owing to the cyclic planning and monitoring process. National development policies and plans and sector strategies are normally subject to five-year review and formulation cycles, and national monitoring systems are linked to these. Experience shows that an indicator can be adopted in the national monitoring system but no data be collected on it over time, either because of a lack of institutional ownership to put data collection systems in place or because it has been determined that data collection is not technically or economically feasible. Consequently, the effectiveness of proposed indicators should be reviewed periodically and indicators dropped or refined accordingly. See box 7.3 for an example of continuous review and refinement.

7.2 Tracking Budgets and Expenditures

Harnessing public resources through poverty-environment mainstreaming is fundamental for pro-poor and environmentally sustainable development. In many developing countries, public sector financing is the main source of funds for implementing development policy and plans. Increasingly, donor funds at the country level, either channelled through government institutions or civil society, are reflected in national medium-term expenditure frameworks and annual budgets. Reviewing how public funds are spent by government across sectors and nationally and/or subnationally can identify what was spent, what was achieved as a result, and whether the results achieved met pro-poor and environmentally sustainable development objectives. It can also provide an assessment of the performance and efficiency of the institutional mechanisms governing expenditure and reporting.

Box 7.3 Integrating and Refining Poverty-Environment Indicators in Tanzania

In 2005, the Government of Tanzania commissioned a study to identify poverty-environment indicators as part of the elaboration of its five-year economic and poverty reduction strategy (Tanzania Vice President's Office 2005). The study identified 34 indicators, from which 10 were selected by a cross-sectoral working group and incorporated in the "Mkukuta" Plan and its monitoring system. Subsequent annual reports produced by the Mkukuta monitoring system revealed that data were collected for only 6 of the 10 indicators. The other four were either not adopted by a sector ministry and/or deemed to be unmeasurable.

As part of the performance review of Mkukuta I and formulation of Mkukuta II (2010/11–2015/16), the monitoring system adopted the 6 indicators as well as another 15 poverty-environment indicators. The Mkukuta II monitoring system is currently being reviewed in order to assess the performance of the five-year plan that is soon ending, as reflected in changes captured by the adopted indicators. This assessment will likely contribute to further refinement of the national monitoring system, which will also be informed by any change in the development priorities contained in the next five-year national development plan. It can also be anticipated that the forthcoming plan and associated monitoring system will reflect adoption of SDG goals, targets and associated indicators.

Source: United Republic of Tanzania, UNDP and UNEP 2014.

Tools such as PEERs and CPEIRs, as well as related gender and social expenditure reviews, are effective ways to enable governments to track expenditures and allocate budgets for climate change and sustainable ENR management for pro-poor development. These tools can be used to raise awareness of the importance of a given poverty-environment issue, demonstrate its relevance to the achievement of related policy objectives, shape national and donor debates concerning policy and funding priorities, and begin a dialogue aimed at increasing levels of investment in poverty-environment outcomes.

The approach for conducting public expenditure and institutional reviews is both analytical and process oriented. Government ownership is necessary both for access to data and to increase the likelihood of results being accepted and—more significantly—acted upon. Important steps in the expenditure analysis include the following (Bird et al. 2012).

- **Define what constitutes environment or climate expenditure.** There tends to be no standardized definition as to what constitutes such expenditure. Therefore, define at the national level what is to be included in the analysis.
- **Define the total expenditure that is going to be analysed in terms of poverty-environment or climate relevance.** Depending on the time and financial resources available for the review, expenditure in key sectors (e.g. agriculture) might need to be prioritized and other sectors where expenditure is likely to be negligible (e.g. health) left out of the analysis. Decisions also need to be made on how to include donor-financed projects with prominent international support that might or might not be included in national accounts and budgets. Experience suggests there is value in keeping domestic and international sources of funding separate in the analysis as they are subject to different governance arrangements.
- **Review the data available.** The available data will ideally include electronic expenditure information, at its most disaggregated level, directly from the public financial management system (i.e. system of national accounts). Failing this, the range of spending can be pieced together with data from various sources including published sector budget documentation, extra-budgetary funds reported by donor or project annual reports, and/or a combination of public finance management systems supported by the World Bank or other development partners.
- **Filter the data.** Assess which expenditures are poverty-environment or climate relevant and gauge the level of relevance to arrive at a total expenditure, according to project/sector/budget identification and labelling. For recurrent budgets, the identification process depends on the level of disaggregation of budgetary information, informed by ministry respondents.
- **Further analyse the data.** Analyse the data according to special issues, poverty-environment concerns, climate change adaptation, etc. This secondary analysis will often inform advocacy aimed at increasing budget allocations for poverty-environment mainstreaming and other objectives.

Expenditure reviews are intended to facilitate the national response to investment needs by identifying those actions required to strengthen that response (box 7.4). As resources are always limited, some form of prioritization must be put in place to guide both donors and scarce public investments to fund the appropriate areas.

Box 7.4 CPEIR in Bangladesh Leads to New Focus on Climate Change in Budget System

The CPEIR in Bangladesh helped lead to a significant shift in government thinking, as its findings showed that the majority of the country's climate funding is embedded in multidimensional programmes across several government departments, and not limited to the environment sector (Bangladesh General Economics Division 2012). Altogether, Bangladesh currently spends $1 billion a year in public funds—about 6–7 per cent of its annual budget—on climate change adaptation. Although a substantial sum, this represents only a fifth of the World Bank's recent estimate of Bangladesh's annual expenditure needs for climate change by 2050, three-quarters of which is to come directly from public funds.

Bangladesh's minister for the environment cited the CPEIR findings in statements made to the parliament and at international climate change negotiations to support a stronger position at the global level to leverage the kinds of funds needed to fill the development gap as a result of climate change. Led by its Ministry of Finance, the government is developing a climate change–responsive budget at the national and local levels.

The recommendations of the CPEIR have enabled the government to propose the introduction of a climate budget code with indicators for use in future budgets, so it can track spending continuously across all government departments. It can thus draw a much clearer picture of how local authorities are grappling with the practical dimensions of protecting communities and livelihoods. Large-scale public investments have begun to be screened using poverty-environment and climate change criteria; consequently, such investments are being targeted to projects better addressing the concerns of the poor. All ministries that submit projects for funding must specify the percentage of poor people that will benefit, what the impact on natural resources will be and the extent of resilience of new infrastructure to climate change.

Source: UNDP-UNEP PEI 2014a.

7.3 Going Beyond GDP: Towards More Holistic Measurement of Growth and Human Well-Being

Efforts to support the integration of poverty-environment indicators and related evidence into national planning processes are closely linked to initiatives that are trying to improve the determination of natural wealth and their inclusion in economic measures. Traditional measurements of economic growth have centred on the concept of GDP, which measures the gross output of an economy and was never intended to be a measure of wider societal well-being (see annex C). GDP does not measure the state of the inputs, or natural wealth, required to produce outputs. More holistic measurements which also capture the social and environmental dimensions of human well-being—i.e. a country's natural wealth—are needed. This need is recognized in the Rio+20 outcome document and in the forthcoming SDGs. Globally, more attention is being paid to formulate indicators, measures and indexes that capture natural capital (e.g. ecosystems and biodiversity), quality of life, health (Human Development Index) and even happiness (e.g. Bhutan Gross Happiness Index).

Each country and region has different "Going Beyond GDP" challenges and opportunities depending on its context and existing poverty-environment programming. At the same

time, there is room in many countries to consider additional Beyond GDP work as part of evolving regional and country strategies. Principal mainstreaming entry points for Going Beyond GDP work include the following:

- Integrated surveys and assessments, including household living standards and measurement surveys; integrated diagnostic tools including strategic environmental assessments, poverty and social impact analyses and economic assessments (see annex B for more detail)
- Poverty-environment and green economy–related multidimensional poverty indicators, including those supported by the Multidimensional Poverty Peer Network and the International Union for Conservation of Nature (IUCN) Environment and Gender Index, the UNEP Green Economy Initiative, the World Bank's adjusted net savings measures, OECD's green growth indicators, and the Global Footprint Index
- Natural capital valuation and accounting, supported by such systems, programmes and tools as the UN Statistical Commission's System of Environment and Economic Accounts (SEEA), the World Bank's Wealth Accounting and Valuation of Ecosystem Services (WAVES), UNEP's Valuation and Accounting of Natural Capital for the Green Economy (VANTAGE) programme and TEEB initiative, GEF-supported NBSAPs, and the UNDP's Targeted Scenario Analysis (see annex C)

Quick Reference Checklist:
Mainstreaming into National Monitoring Processes

Integrating poverty-environment issues into national monitoring systems

- ☐ Has the government integrated poverty-environment objectives in the national monitoring system to facilitate the following and to what extent?
  - ✓ Regular monitoring
  - ✓ Regular reporting
  - ✓ Informing the policy process
- ☐ Has the government considered the following approaches to integrating poverty-environment issues into the national monitoring system and to what extent?
  - ✓ Monitoring poverty-environment issues within the framework of the existing national system
  - ✓ Developing poverty-environment indicators as part of national development plans and/or sector strategies
  - ✓ Coordinating and strengthening the national statistics office and related institutions involved in the national monitoring system
  - ✓ Including emerging environmental and development issues such as climate change, inclusive green economy, and sustainable production and consumption as integral components of poverty-environment indicators
- ☐ Has the government taken the following steps to ensure that poverty-environment issues are integrated into the national monitoring system and to what extent?
  - ✓ Review literature and experience in other countries
  - ✓ Analyse national priorities and identify entry points
  - ✓ Analyse existing monitoring and reporting systems
  - ✓ Identify possible poverty-environment linkages through a consultative process
  - ✓ Select a core set of indicators
  - ✓ Continuously review and refine indicators

Undertaking an expenditure review exercise for tracking spending

- ☐ Has the government taken the following steps in conducting a public expenditure and institutional analysis and to what extent?
  - ✓ Defining the body of total expenditure that is going to be analysed in terms of poverty-environment or climate change relevance
  - ✓ Review the data available
  - ✓ Filter the data by assessing which expenditures are poverty-environment or climate change relevant
  - ✓ Further analyse the data according to special issues
  - ✓ Assess the quality of expenditure

Going Beyond GDP

- ☐ Has the government considered some principal mainstreaming entry points for Going Beyond GDP work:
  - ✓ Integrated surveys and assessments, including household living standards and measurement surveys, integrated diagnostic tools
  - ✓ Poverty-environment and green economy–related multidimensional poverty indicators
  - ✓ Natural capital valuation and accounting

8 Managing Private Investment in Natural Resources

This chapter discusses support to governments to manage private investment in natural resources. The focus is on investment in the primary sector or ENR management areas, including agriculture, forestry, fisheries and extractive industries—a topic of growing interest among international investors and of high economic significance to many developing countries including much of sub-Saharan Africa and South East Asia. Mainstreaming will include adopting and implementing a strategic approach for foreign direct investment within the country's overall development strategy; establishing economic and institutional settings and implementing policies to attract and successfully manage FDI; scrutinizing individual investment proposals and negotiating investment contracts; and monitoring investor compliance with relevant laws and project contracts.

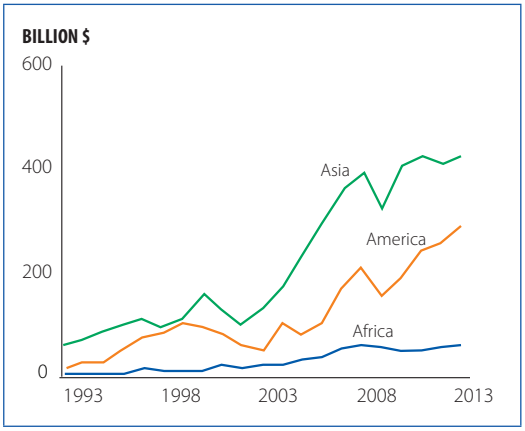


8.1 Impact and Implications of FDI on Host Countries

Flows of foreign direct investment to developing countries have risen steadily over the past two decades (figure 8.1). A large body of evidence shows that FDI can provide economic, social and environmental benefits for host countries. It can increase production capacity, employment, productivity and government revenues. It can be effective in alleviating poverty by driving economic growth, while often providing better wages, working conditions and social security than domestic firms (Dollar and Kraay 2002; OECD 2001; UNCTAD 2006).

From an environmental perspective, FDI may help foreign firms bring production techniques which translate into better environmental performance compared to domestic firms, particularly in low-income countries (Dufey and Grieg-Gran forthcoming). Foreign investors also can introduce more environmentally friendly technologies and consumption patterns (OECD 2001; UNCTAD 1999). On the other hand, without implementation of adequate environmental regulation, FDI-induced economic growth can result in loss of natural resources and environmental degradation (box 8.1), which can exacerbate poverty.

Figure 8.1 FDI Flows to Developing Economies, 1993–2013



Source: UNCTADstat, accessed 6 March 2015.

Note: US$ at current prices and current exchange rates.

The benefits of FDI are not concomitant: ultimately, the outcomes of FDI depend heavily on the nature of the investment and the regulatory environment in the host country (UNDP-UNEP PEI 2011d). These findings have the following implications for host developing countries:

- FDI flows into developing countries are likely to continue to grow, making their management a priority for host governments. The challenge for policymakers is to ensure that FDI contributes to their development goals.
- South-South FDI flows are becoming globally significant, and their growth has a number of social and economic benefits. However, these flows also increase the regulatory responsibility of host governments, as employment conditions and corporate social and environmental responsibility practices of developing country transnational corporations may fall short of those followed by developed country firms.
- Increased investment in primary sectors, including agriculture, forestry, fisheries and extractive industries, creates new growth opportunities for countries with natural resource potential. However, positive social and economic outcomes are by no means guaranteed, and such investment is likely to put greater pressure on the quality and level of the natural resources. This pressure in turn places a greater level of responsibility on regulatory bodies to avoid or reduce negative economic, social and environmental outcomes that include forced evictions and involuntary resettlements, lack of labour standards, land grabbing, deforestation and land degradation.

Box 8.1 Case Study: Indonesian Palm Oil Industry

Indonesia's palm oil industry has been instrumental in driving socio-economic development in the country. Successfully adapted to meet the needs of smallholders, it has been a powerful force in poverty alleviation, positively affecting millions. It has delivered significant improvements in living standards, secured edible oil, and generated large levels of foreign exchange and employment.

However, the industry has been criticized for its impact on the environment. The majority of plantations have been established by converting Indonesia's rainforest and peatland, with negative effects on biodiversity and climate change. Indonesia's forest cover has decreased dramatically in the last 40 years, with conversion to oil palm plantations a contributing factor. The country's natural forest cover has been reduced from 143 million hectares in 1967 to 88.5 million in 2005. Total area for oil palm plantations was 6 million hectares in 2006.

In recent years, several incentives have emerged in Indonesia to halt or slow its conversion practices. Various **public and private sector procurement policies** are requiring that palm oil and/or palm oil products be produced in a sustainable manner. Additionally, the **UN's Reduced Emissions from Deforestation and Forest Degradation (UN-REDD)** mechanism offers developing countries financial incentives to reduce their rates of deforestation and forest degradation. The Indonesian government has been a strong REDD proponent, which has the potential to raise revenues for the country.

Sources: Casson 1999; CIFOR 2006; FAO 2009; ITTO 2009; Reuters 2009; RSPO 2007; Thoenes 2006; USDA 2007, 2009.

These implications suggest that host developing countries need a strategic approach for managing FDI. Investment decisions can have major and lasting impacts on the development goals and pathways pursued by a host country. Host governments need to identify national development priorities in terms of sectors, geographical areas and investment models, and ensure that FDI supports their achievement. Strategic vision and vigorous public debate about development goals and pathways are essential in making sound choices about what is best for the country. Foreign investment should be seen as an element of the national development strategy, and the strategic vision for FDI translated into a policy framework. This is expanded upon in the following sections.

8.2 Establishing an Economic and Institutional Environment and Implementing Policies to Attract and Manage FDI

A supportive economic and institutional context in the host country is the most important factor in attracting FDI at both the national and regional levels. This context includes the following:

- Macroeconomic stability
- Predictable and realistic exchange rates
- Availability of basic infrastructure, such as electricity, roads, transport and communication networks
- Clear division of responsibility between relevant ministries and departments at all levels of government involved in FDI management (national, provincial, district and local), and avenues for effective communication between these bodies

- Unambiguous investment legislation with clear incentives and implementing regulations that is not in conflict with other, sector-specific laws

While economic and institutional settings are essential, government policy can serve to attract FDI or address imbalances in FDI inflows between regions and sectors. The most commonly used policy tool is **fiscal incentives**. For example, in Cambodia, Costa Rica, Malaysia and Viet Nam, investment promotion agencies offer tax incentives in high-technology sectors to encourage technology transfers. Host countries can offer tax and monetary incentives for investments that generate extensive linkages with the local economy (Malaysia), promote renewable energy (Argentina, Ghana, Nicaragua) or involve training for local staff (South Africa). Because tax incentives tend to have a negative effect on public revenues, host governments need to be aware of the wider range of policy options—comprising both direct and indirect measures—available. The key is identifying the underlying causes of low FDI inflows, and pursuing the most cost-effective solutions. Some of the non-tax options available include subsidizing establishment of special economic zones in poorer regions to provide quality infrastructure and services; investing in education, skills training and transport infrastructure; training civil servants in more effective administration of investment regulations; and improving investment marketing (UNCTAD 2008).

International investment agreements aim to promote foreign investment by protecting it against certain political risks in the host country. By binding themselves to such agreements, however, host countries may limit their policy options in regulating foreign investment. International investment agreement provisions on expropriation and "fair and equitable treatment" may enable investors to challenge the adoption of more stringent environmental regulations by the host government, as these may adversely affect the economics of an investment project. Simultaneously, the prospect of having to compensate investors may discourage host governments from implementing stricter environmental regulations. To avoid investor-state disputes with regard to existing international investment agreements, signatory governments should explore policies that help achieve their development objectives without violating commitments already made. Host countries should assess the full implications of various options before signing new agreements and should actively put forward their views during negotiations. Addressing the capacity needs of government officials responsible for international investment agreement negotiation and implementation is crucial in achieving the above objectives (box 8.2).

Box 8.2 Support for Sustainable Development and International Investment Treaties in Myanmar

PEI is providing support to Myanmar government officials in the Directorate of Investment and Company Administration, the Attorney General's Office and supporting line ministries to identify an aspect of the current legal framework that needs improvement to promote sustainable development: international investment treaties. This work will result in a model investment treaty. PEI engaged with multiple stakeholders in a consultative process—including a retreat—on key sustainable development issues related to international investment treaties and their relevance for natural resource investments in Myanmar.

Source: PEI Asia-Pacific.

In addition to promoting FDI, host governments are responsible for maximizing its benefits in economic, social and environmental terms. From a policy point of view, this may require the following:

- Selecting appropriate business and contract models to be promoted from among different types of investor-government contracts (e.g. concessions, production-sharing agreements, or joint ventures) or models that include local farmers (e.g. through incentives for contract farming) (Cotula 2010)
- Strengthening policies that improve the capacity of local businesses and workers to benefit from FDI projects (e.g. capacity building for local industries, skills training for workers)
- Maximizing public revenues and optimizing their distribution over time
- Establishing robust, transparent and accountable mechanisms for the management of these revenues
- Reinvesting revenues from extraction of non-renewable resources into economically sustainable activities to ensure that alternative livelihoods and revenue sources will be available when commercial exploitation comes to an end
- Applying a gender-sensitive approach and identifying best practices to promote women's empowerment within FDI projects
- Establishing robust safeguards for social and environmental risks of FDI projects, including social and environmental impact assessments and management systems, local consultation requirements and redress mechanisms

The economic, social and environmental benefits of FDI projects can be maximized as the example from the mining sector in box 8.3 shows.

8.3 Reviewing Investment Proposals

Flawed investment approval procedures can lead to socio-economic and environmental outcomes that are detrimental to local communities, the host country and investors themselves. Following the procedures outlined below during the project approval process can promote desirable economic, social and environmental outcomes.

Proposal Assessment and Feasibility Studies

Host governments should conduct a careful assessment of investment proposals to identify costs and benefits likely to be generated by a given project. These costs and benefits include public revenues, employment creation, linkages to the local economy, infrastructure development, and social and environmental risks. Feasibility studies are key to ensuring that only economically viable projects proposed by credible investors are allocated rights over natural resources. Governments may need to invest in their own capacity to undertake these tasks.

Social and Environmental Impact Assessments

Proposed investment projects should be subject to comprehensive social and environmental impact assessments (box 8.4). Such assessments should cover all feasible project designs, allowing host governments to make informed decisions if circumstances change and to avoid unexpected environmental and social outcomes. If project circumstances encounter significant change, new feasibility studies should be conducted before deciding to proceed with the new design. Here too, governments may need to invest in their own capacity to scrutinize impact assessments prepared or commissioned by prospective investors.

Box 8.3 Revenues from Responsible Mining Practices Help Communities Lead Better Lives in the Philippines

The province of Surigao del Norte is a mineral hotbed, spanning almost 38,000 hectares. At present, the region hosts eight mining companies and extractive businesses that continue to receive large investments from both domestic and foreign sources. While the government receives revenues from the mining industry, the environmental repercussions of open-pit mining are often realized after a mining project has been completed. As recently as 2012, almost 20 million metric tons of tailings waste, left over from mining, spilled over into the Balong and Ango Rivers in the neighbouring province of Luzon. This resulted in the destruction of once-thriving ecosystems as well as of the subsistence of various fishing communities that lived by the rivers. Indigenous communities that inhabited some of these areas were forced to relocate; in many cases, local communities and villages were not consulted in advance regarding the impacts mining activities could have on their lives and livelihoods.

Since 2011, PEI has been working with the Government of the Philippines to strengthen laws and provide technical assistance in promoting responsible mining practices. One such law was 2012's Executive Order 79, which called for mining activities to follow strict compliance laws, ensure the involvement of all stakeholders, and provide for transparency and accountability on the part of both government and corporate players.

In the province of Surigao del Norte, PEI has focused on helping to put in place systems and processes that better manage and use financial resources. The Electronic Tax Revenue Assessment and Collection System is one such way. Based on studies and analysis of how revenues are estimated and funds transferred, PEI developed a computerized system for the Mines and Geoscience Bureau to document and monitor fees, taxes and royalties paid by mining companies and other stakeholders. Special emphasis was placed on public disclosure and providing citizens with access to information on how funds were reallocated among local governance units. The system represents a big step towards fostering transparency and accountability in public institutions and processes involved in ENR management.

Barangay Taganito is one village that has reaped the benefits of responsible mining activities. Over the years, almost 98 per cent of its income has come from mining company revenues. A share of this revenue has been invested in improving the village's public infrastructure. Mining companies have also been encouraged to invest in public education and have adopted and funded local schools as part of a corporate social responsibility initiative.

The largest mining company in the area, the Taganito Mining Corporation, has been working towards involving and supporting host communities in new ways. Manager Roger Cabautan explains: "We support the host communities where we operate through social development programmes in health, education and cultural development. With indigenous people, we resettled them in a resettlement area and set up a school there worth 10 million PhP. We have provided 120 housing units for 120 families, and they also have a tribal people's medical clinic."

Source: UNDP-UNEP PEI 2014a.

Box 8.4 Environmental and Social Impact Assessment Set to Promote Quality investments in Lao PDR

Lao PDR has risen from a low- to a lower-middle-income economy, with its per capita income doubling since 1990. Key to this growth has been the rapid inflow of FDI, especially in natural resource and affiliated sectors such as agricultural plantations, forestry, mining and mineral resources, hydropower and tourism. However, prospective investors were judged solely on technical and financial aspects, and their impact on environmental protection or poverty alleviation was largely overlooked. Many projects resulted in extended destruction of the environment, land grabs from local communities leading led to relocation and loss of livelihoods, and inequitable distribution of profits with very little compensation for local communities.

As the government became more aware of the negative effects of investments, the potential of such investments to reduce poverty, the duty to protect communities and their rights, the need to preserve the environment and improve local communities' technical skills came to the fore. In 2013, PEI worked with the Ministry of Natural Resource and Environment to develop new ministerial instructions that set out the procedural steps investors and central government authorities should follow in carrying out initial environmental examinations and environmental and social impact assessments for projects they wished to implement. Following up on these assessments, monitoring these investments also became an important priority PEI advocated for. In Oudomxay province, the increase in monitoring of investments has led to exposing 20 projects that were not complying with the law. Four projects were made to stop all operations, 4 more received warnings and 12 were ordered to make improvements to their current operations.

PEI worked to toughen bottom-up development measures by shining a spotlight on citizen involvement in environmental and social impact assessment procedures. The welfare of grassroots communities, which are most directly affected by mining works, hydropower dam construction and plantations, are often compromised in the push and pull between governments and private investors. Taking definitive steps to redress this, PEI, in collaboration with a non-governmental organization, trained over 200 central and provincial environment officials to better understand the importance of public involvement. Officials were sensitized on human rights issues, legal frameworks for involving people, conflict resolution and communication initiatives that could help open platforms for multiway dialogues with host communities.

One such community is the village of Phonesavath, the new home of inhabitants from 16 villages who were relocated during construction of the Nam Ngum 2 Dam on the Mekong River. Their resettlement has been a learning experience for government officials, not only in terms of addressing the resettlement process, but also in creating opportunities for regaining lost livelihoods. As Khamsone Seevongdao, the district head for the Office of Natural Resource and Environment, explains, "We prioritized public involvement in this village. For the people, their main concerns are livelihood and compensation… We are encouraging them to come and choose income-generating activities that suit them, like frog farming, chicken farming or fish farming. Then we hand over the responsibility to the village chiefs and youth unions to go out and promote these activities among the people." These participatory measures aimed at improving the situation and lives of people in a sustainable fashion make the arduous resettlement process less daunting.

The environmental and social impact assessment process in the country is a good example of efforts the government is making to drive pro-poor environmental priorities at the community level as well as at the institutional level.

Source: UNDP-UNEP PEI 2014a.

Consultations and Free, Prior and Informed Consent

Conducting formal consultations with local communities is important in gauging aspirations and priorities, and in ensuring local support for a project within the framework of free, prior and informed consent—which includes the right to veto a project. Lack of effective consultation is likely to lead to investor-community disputes and implementation difficulties, possibly resulting in failed projects. Consultation requirements may also exist outside the framework of impact assessments; in Mozambique, for example, they are built into land and forestry legislation. The effectiveness of consultation can be undermined by poor information flows to communities and by local elites capturing the process.

Policies and institutional mechanisms should hold businesses and local governments accountable to recognize, protect and fulfil the requirement for free, prior and informed consent from indigenous peoples and local communities for the governance, restriction, conservation, and management of common land and resources. This includes allocation of concessions or rights for resource exploitation on community land.

8.4 Negotiating Investment Contracts

Like flawed investment approval procedures, poor negotiations can result in poor outcomes. Host governments can enter into investment contracts with individual investors. The extent to which negotiation of these contracts can shape the investment project varies between countries and sectors. In some countries, national legislation provides detailed rules as well as model contracts to be used as a starting point for negotiation; in these cases, negotiations tend to focus on fiscal matters. At the other end of the spectrum, some contracts are wholly negotiated between the parties and provide much of the legal regime governing the investment.

Host governments need to ensure that project agreements with private investors are structured to maximize benefits for the host countries. Issues that should be addressed include clearly defined and enforceable financial commitments, creation of direct and indirect employment, technology transfer, provision of infrastructure for local communities, revenue generation, local procurement of inputs, environmental protection and dispute settlement mechanisms. At the same time, host governments should be aware of the investor's concerns, in order to avoid a breakdown of negotiations. They should also ensure that provisions of investment contracts are not in conflict with international trade rules, and environmental, labour and international investment agreements to which the country is party.[1]

A clear negotiating strategy by the host government can make a significant difference to the outcome. This strategy should include the following:

- Identification of the key sustainable development objectives to be pursued
- Identification of likely expectations of the other party
- Identification of areas where concessions and compromises are possible

[1] These aspects are covered in a 2010 International Institute for Environment and Development guide on negotiating investment contracts to maximize sustainable development outcomes (Cotula 2010).

- A plan for the flow of negotiations and negotiation tactics (Cotula 2010)

In order to negotiate a successful contract with private investors, officials need sound legal expertise and negotiation skills (box 8.5).

Transparency in project approval and contract negotiation, along with public disclosure of government contracts, can increase accountability and reduce the likelihood of future disputes. Sierra Leone has established transparency as a core principle for the development of its extractive sector. A centrepiece of this effort is a state-of-the-art online mining cadastre that provides information on natural resources that are held in public trust. In addition, compelling companies to compete openly through contract bidding processes can result in fairer pricing and more beneficial terms for the state. This consideration is especially critical in the forestry, mining, oil and gas sectors, where poor contract terms can get locked in for decades. Legally protected public access to government-held information is essential.

Transparency in contracting and in multi-stakeholder dialogue can be improved by industry-specific schemes. For example, the global Extractive Industry Transparency Initiative (EITI) requires member companies and governments to publish figures on revenues generated by extractive industry projects.[2] From a host country perspective, joining initiatives like this one can improve the investment climate by sending a clear signal to investors and international donors about its commitment to transparency. It can also strengthen accountability and good governance, and promote greater economic and political stability.

Box 8.5 Contract Negotiation in Liberia

The 2006 renegotiation of a number of mining and agricultural concessions in Liberia illustrates the advantage that investing in the government's capacity to negotiate can confer. An independent evaluation of this renegotiation noted significant improvements in the terms of the contracts over the originals—namely, an increase in public revenues; requirements to source labour, goods and services locally; and the relocation of certain processing activities to Liberia. Determined political will at the highest level, a clear negotiating strategy, a strong negotiating team within an influential government institution, and world-class external legal and other advice contributed to this outcome.

Source: Kaul, Heuty and Norman 2009.

8.5 Monitoring Investor Compliance with Relevant Laws and Contracts

Investment projects can have negative economic, social and environmental outcomes if relevant laws and regulations are not enforced and monitoring is neglected by host countries. Outcomes can include forgone government revenue, inadequate benefits to local communities, high incidence of disputes between local communities and investors, and undue negative impact on ENR.

A number of factors can cause shortcomings in project monitoring and law enforcement. These factors include ineffective coordination between different agencies responsible for law enforcement and monitoring, high levels of government corruption, lack of resources and technical capacity of government departments,

[2] www.eiti.org, accessed 18 October 2014.

lack of clear laws and regulations, and non-application of sanctions for non-compliance.

Measures to address these various factors are context specific; some options are presented below.

Improving Regulatory Structures

Establishing dedicated host government units is one option for improving project monitoring and law enforcement. These units must have strong expertise and high-level political backing for managing investment contracts, collecting revenues, monitoring implementation and penalizing non-compliance. Improving the performance of existing regulatory agencies is another option. For example, a national environmental protection agency can monitor compliance with environmental legislation, but only if it has a clear mandate to do so, as well as adequate resources to access required information and sanction violations (Cotula 2010). Establishing a clear division of responsibilities between monitoring authorities and improving information sharing (particularly between different levels of government) is important. It is also important to protect monitoring agencies from regulatory capture. For instance, if a national oil company has both regulatory functions and commercial duties (e.g. as an equity holder in an oil project), it might not scrutinize the project as thoroughly as it should. Separating its commercial and regulatory functions may be a useful way of addressing this problem (Cotula 2010).

Addressing Lack of Resources and Human Capacity

Monitoring authorities need technical skills to review the content of environmental and social assessments prepared by investors. They also need financial, physical and human resources to conduct on-site audits and handle disputes. Measures to address any shortage in these resources include increasing the budgets of the relevant authorities and improving the performance of domestic educational institutions.

Ensuring Application of Sanctions for Non-Compliance

National laws commonly enable the host government to impose sanctions if the investor does not comply with investment plans. Sanctions can include fines and suspension or withdrawal of land or resource rights. For example, under Mozambique's Land Act of 1997, land allocations are subject to compliance with the investment plan within two years (for foreign investors) or five years (for domestic investors); non-compliance entails termination of the land lease, while compliance guarantees a definitive—and renewable—title for 50 years. And in fact, Mozambique did cancel a land lease for a 30,000-hectare biofuel project for failing to deliver on its promises (Nhantumbo and Salomão 2010). Such an action is all the more remarkable because provisions of this kind are rarely enforced. There are many reasons for non-enforcement, including the host government's lack of capacity to monitor investor compliance, lack of a clear mandate for any particular agency to enforce sanctions, or fear of discouraging other investors or facilitating investment withdrawal (Pommier 2009).

Since the 1990s, voluntary third-party certification has emerged in several primary industries as an alternative to government monitoring. Well-known international initiatives in this regard include the Forestry Stewardship Council and the Programme for Endorsement of Forest Certification Schemes, the Roundtable on Sustainable Palm Oil, and the Marine Stewardship Council certifying fisheries. This effort has primarily been driven by non-governmental organizations and consumers in developed countries, in response to what they perceive

to be inadequate labour and environmental regulation in producer countries. In addition, certification has been embraced by certain transnational corporations seeking to ensure desirable characteristics of their products (including quality, environmental friendliness, safety, reliability and efficiency). Compliance with social and environmental standards stipulated by certification schemes has a number of potential costs and benefits for producers.

- Depending on the certification standard in question, producer benefits may include securing market segments by targeting environmentally and socially conscientious consumers, rationalization of production, increased productivity and reduced input cost, improved management of the supply chain, improved corporate image, improved management of natural resources, and improved relations with the local community and worker unions.

- Costs depend on the certification requirements and the initial mode of production. These may include increased labour input and lower yields (if switching to organic farming); increased overhead costs in developing internal control systems, undertaking record keeping, and employing extra accounting and management staff (Liu 2009); increased overhead costs in complying with additional environmental requirements such as non-conversion of primary forests and integrated pest management and waste management; and the cost of the certification process (including of audits by the certification body).

Host governments need to consider these factors as they apply to the industry in question before taking any steps in promoting certification. Furthermore, the voluntary nature of third-party certification means that it should not replace government efforts to improve the quality and enforcement of its environmental and labour laws.

Ensuring Equitable Benefit-Sharing

Countries have a higher risk of violent conflict when the benefits of resource exploitation are not equitably distributed across different groups or regions. Winner-takes-all politics increase horizontal inequalities and ethnic tensions—a premise that applies not only to direct revenues but also to access to the employment and basic services that result from resource extraction. When benefits are distributed in a manner that appears inequitable, tensions can emerge among stakeholders who feel unfairly treated. This tension can be exacerbated by human rights violations, substandard employment practices or low salaries. The government should therefore ensure that benefits are shared horizontally across the country, in particular among different ethnic groups as well as within producing regions and host communities. The government should also aim to reduce vertical inequalities by providing direct benefits to the population through its participation in the extraction or value-added industry. Côte d'Ivoire, for example, is taking important steps to maximize the benefits from its natural resources by promoting local sourcing and adopting local content provisions to increase local processing and transformation of its raw materials.

Quick Reference Checklist:
Managing Private Investment in Natural Resources

Establishing an economic and institutional environment and implementing policies to attract and manage FDI

- ☐ Does the host government have the ability to provide a supportive economic and institutional environment, which is the most important factor in attracting FDI? This includes the following:
  - ✓ Macroeconomic stability
  - ✓ Basic infrastructure
  - ✓ Clear and well-enforced regulatory framework
- ☐ Have the most cost-effective policy measures been pursued by the host government to address the imbalance in FDI inflows between regions and sectors, and to what extent? Measures may include the following:
  - ✓ Subsidizing the establishment of special economic zones in poorer regions
  - ✓ Investing in education, skills training and transport infrastructure
  - ✓ Training civil servants in more effective administration of investment regulations
  - ✓ Improving investment marketing
- ☐ Has the host government considered the risks and opportunities before engaging in the international investment agreement process?
- ☐ Does the host government have the capacity to successfully negotiate and implement international investment agreements?
- ☐ Is the host government pursuing measures to maximize the benefits of FDI in economic, social and environmental terms, and to what extent? Measures may include the following:
  - ✓ Promoting appropriate business and contract models
  - ✓ Improving the capacity of local businesses and workers to benefit from FDI projects
  - ✓ Maximizing public revenues and optimizing their distribution over time
  - ✓ Establishing robust, transparent and accountable mechanisms for the management of these revenues
  - ✓ Re-investing natural resource revenues into economically sustainable activities that benefit men and women equally
  - ✓ Establishing robust safeguards for social and environmental risks of FDI projects

Reviewing investment proposals

- ☐ Has the host government undertaken the following procedures during the project approval process to promote economic, social and environmental outcomes?
  - ✓ Proposal assessment and feasibility studies
  - ✓ Social and environmental impact assessments
  - ✓ Formal consultations with local and affected communities with equal participation of women and men

Negotiating investment contracts

- ☐ Has the host government taken the following into consideration to ensure that project agreements with private investors are structured to maximize benefits for the host country?
  - ✓ Well-defined and enforceable financial commitments
  - ✓ Creation of direct and indirect employment
  - ✓ Technology transfer
  - ✓ Provision of infrastructure for local communities that also addresses the needs of marginalized groups
  - ✓ Revenue generation
  - ✓ Local procurement of inputs
  - ✓ Environmental protection and dispute settlement mechanisms
- ☐ Has the host government taken the following into consideration in developing a negotiating strategy?
  - ✓ Identification of the key sustainable development objectives to be pursued
  - ✓ Identification of likely expectations of the other party
  - ✓ Identification of areas where concessions and compromises are possible
  - ✓ A plan for the flow of negotiations and negotiation tactics

Monitoring investor compliance with relevant laws and contracts

- ☐ Have factors contributing to shortcomings in project monitoring and law enforcement been identified? Factors may include the following:
  - ✓ Ineffective coordination between different agencies responsible for law enforcement and monitoring
  - ✓ High levels of government corruption
  - ✓ Lack of resources and technical capacity of government departments
  - ✓ Lack of clear laws and regulations
  - ✓ Non-application of sanctions for non-compliance
- ☐ Has the host government considered measures to address the lack of law enforcement and monitoring? Measures may include the following:
  - ✓ Improving regulatory structures
  - ✓ Addressing lack of resources and human capacity
  - ✓ Ensuring application of sanctions for non-compliance
  - ✓ Ensuring equitable benefit sharing

9 Lessons Learned

This chapter highlights significant lessons learned from PEI's experience in supporting governments to mainstream poverty-environment objectives into planning, budgeting and monitoring processes. The lessons learned have important implications for policymakers and practitioners in advancing their work at the country level.



The Rio+20 outcome document, "The Future We Want," reaffirmed commitment by UN member states towards sustainable development and the establishment of the next-generation SDGs. The SDGs will reflect a global consensus on a new development paradigm that includes the following, among others:

- National institutional frameworks that enable effective integrated, cross-sectoral, development planning that addresses the connections between the economic, social and environmental strands of sustainable development
- Going beyond GDP to include the environmental costs and benefits associated with growth and the full economic value of ecological services and biodiversity
- Transitioning towards more resource-efficient, low-carbon economies
- Government-led national development planning which integrates local governance and community-led development

The approach to mainstreaming pro-poor, gender-responsive environmental and climate issues outlined in this handbook and drawn from PEI experience can contribute to this new development paradigm and the realization of the SDGs. The lessons learned from PEI and its focus on promoting integrated approaches to sustainable development have important implications for policymakers and practitioners in advancing this work at the country level. These key lessons are discussed below.

9.1 Making the Case for Poverty-Environment Mainstreaming and a Transition to Inclusive Green Economies

PEI experience suggests that **linking poverty-environment issues to high-priority policy areas** such as economic growth, job creation or poverty reduction is the preferred strategy in making the case for poverty-environment mainstreaming. These higher-level policy objectives are mostly anchored in national development plans and the sectoral policy sphere. It is typically in sectors such as agriculture and energy where the strongest links between poverty-environment mainstreaming and economic growth exist. These linkages also exist with regard to climate change and ENR management.

PEI has recognized the need to devote greater attention to the political economy. Institutional analyses do not sufficiently encompass **political economy issues**—e.g. the identification of winners and losers in the current state or attitudes to reform. Understanding these can help improve poverty-environment programme focus and activities. Because these issues are often sensitive, practitioners should proceed with caution.

To identify and understand the **target populations** for mainstreaming efforts, some form of poverty and vulnerability assessment should be carried out—e.g. gender-disaggregated assessment, poverty and social impact analysis or poverty impact assessment. Efforts should be made to ensure the empowerment and inclusion of the poor—including women, minorities and indigenous peoples—in the development process. Mainstreaming gender along with poverty-environment helps improve the efficiency, efficacy and long-term sustainability of poverty-environment objectives.

Mainstreaming requires the **cooperation of many government actors**, each of whom represents significant opportunities and challenges throughout the process. An early and crucial decision is determining which government agency will lead the mainstreaming effort. Because of the close relationship between poverty-environment mainstreaming and national development planning and budgeting, it is recommended that the ministry responsible for national development planning or finance should take the lead. Country experience demonstrates that the ministry of finance or planning is an especially effective host institution to promote poverty-environment mainstreaming activities, while ensuring close links with the ministry of environment and other relevant line ministries such as agriculture, energy and transport.

Economic evidence on the costs and benefits of unsustainable and sustainable ENR management is vital in making the case for poverty-environment mainstreaming and justifying budget/investment allocations. Public climate and/or environmental expenditure reviews help highlight the gap between the economic benefits of sustainable ENR management and the amount currently spent, thereby informing policy, planning and budgeting processes. The tools for poverty-environment mainstreaming can be adapted to country needs, and it is recommended that the government fully participate in each phase of the work. It is also important that the choice of tools not be supply driven and that government counterparts be well informed of the pros and cons of the various tools available. Economic arguments are useful, and the chances of having a short-term influence are greatest if tools that resonate with current thinking and language are used—e.g. cost-benefit analysis.

The proactive use of economic evidence (and other outputs) is critical to generating change. Findings of economic assessments should be disseminated broadly among government, civil society, academia, business and industry, the media and the general public. Key messages should be prepared and targeted to different audiences (e.g. decision-makers, practitioners, parliamentarians, the media) to ensure that the evidence generates change. In this regard, identify those individuals with requisite power and interest to promote poverty-environment mainstreaming. Although having such champions at the highest political level is critical, little progress can be made without the support of dedicated people at the director level who can, in turn, motivate others to adopt new ideas. Donor representatives, parliamentarians, academics or civil society organization leaders may also be influential; they should be consulted with and kept informed about ongoing studies, findings and activities.

Weak **organizational capacity** constrains opportunities for poverty-environment mainstreaming. The capacity of relevant ministries to influence economic decision-makers should be built through sharing of analytical results, policy briefs, on-the-job learning and more formal types of training.

9.2 Mainstreaming Poverty-Environment Objectives in Planning and Budgeting Processes

To successfully influence development planning processes to include pro-poor sustainable poverty-environment objectives takes **ongoing substantive engagement** with these processes. Poverty-environment mainstreaming staff face a significant amount of work, including attendance at regular working group meetings, preparation of working papers and submission of detailed justifications for why poverty-environment objectives should be included in development plans. Subsequently, they must continue to engage plus prepare additional

evidence to support the implementation of poverty-environment objectives through plans, programmes and budget allocations. To make change happen, staff must be proactive in generating and using outputs. For example, they could support the government in undertaking economic studies on ENR management, the results from which can then be used to influence policy.

Governments often lack **effective horizontal and vertical coordination mechanisms**, making it difficult to implement cross-sectoral priorities and plans, particularly at subnational levels. To sustain the impact of poverty-environment mainstreaming, these mechanisms must be assessed and enhancements to improve intra- and intersectoral coordination supported at national and subnational levels. As with gender or HIV/AIDS mainstreaming, successful poverty-environment mainstreaming means that cross-cutting issues such as pro-poor environmental sustainability must be integrated in the policies, plans and budgetary priorities of more than one ministry or sector.

Influencing budgets and financing arrangements is another important—and demanding—process. Engaging in both annual and medium-term budget processes is required as well as in regulatory frameworks on investment and revenue generation (e.g. fiscal investments). Because poverty-environment mainstreaming in budgets is a new task for finance ministries, capacity-building support is needed. Climate change poses additional challenges. CPEIRs, for example, will need targeted support.

In some countries, PEI has supported governments in increasing the budget envelope for poverty-environment expenditures across sectors other than the environment. In general, several related factors are in play when allocations are decided. Having a strategy for increasing understanding of the linkages between poverty-environment outcomes, inclusive green economic growth, etc., among decision-makers can increase the likelihood of higher expenditures being allocated. But note that establishing new procedures and having them replicated takes time, capacity, incentives, demand and political will.

9.3 Addressing the Implementation Challenge: Mainstreaming into Sector and Subnational Planning, and Monitoring

Experience shows that the inclusion of poverty-environment objectives at the national level does not guarantee implementation at the sector and/or subnational level—making it critical to engage with sector and subnational planning processes. Influencing sector and subnational processes is a very substantive, time-consuming effort; for this reason, **priority ENR sectors should be selected and focused on**. Because cross-sector coordination is sometimes inadequate and breaking down silos can be a challenge, these issues should be reviewed and ways to address them supported.

To ensure poverty-environment issues are monitored within the framework of a national monitoring system, **long-term engagement with the entire monitoring and reporting cycle** is needed, including institutional capacity development involving the national statistics office and delegated agencies responsible for data provision. Providing relatively long-term access to a global network of experts on poverty-environment mainstreaming has been an important element in strengthening the capacity of coordinating ministries.

The lessons learned from the PEI experience as discussed above and in the examples presented in earlier chapters of this handbook can inform and contribute to the implementation of the upcoming new development paradigm reflected in the SDGs. As this handbook shows, mainstreaming pro-poor, gender-responsive environmental and climate concerns into national, subnational and sectoral planning and budgeting processes can help ensure that ENR management reduces poverty and promotes sustainable and inclusive growth.

Annexes

Annex A
Guidance Note on Institutional and Context Analysis

A.1 Background

Political processes, informal institutions and power relations all play vital roles in the success or failure of development interventions. A development programme succeeds when key players have an incentive to make it succeed. When a society's principal actors are threatened by a development programme, they have an incentive to oppose it. Understanding how different actors in society have differing incentives to enable or oppose development interventions is critical to successful programming. Illuminating this mixture of incentives and constraints is the aim of institutional and context analysis at the country level.

ICA refers to **analyses that focus on political and institutional factors, as well as processes concerning the use of national and external resources in a given setting and how these have an impact on the implementation of programmes and policy advice**. ICA can help development practitioners become more strategic in their engagement with different actors and sectors.[1]

[1] This annex includes excerpts from the UNDP *Institutional and Context Analysis Guidance Note*, which contains detailed guidance on carrying out an ICA.

A.2 Key ICA Assumptions and Questions

ICA is conceptually grounded in a set of assumptions of how development works, from which we derive distinctive questions. These can be summarized as follows:

1. **Human development often requires a change in power relations and/or incentive systems.** Groups establish systems that protect their privileges. Expect actors to support changes in the socio-economic and political order only when it does not threaten their own privileges. Many development interventions seek exactly such change. Ask:
   - What past conditions have led to historic pro-development or pro-poor policies in the country, such as laws relating to universal primary schooling, the enfranchisement of women, or the loosening of restrictions on the media?
   - Did these advances occur following major social movements or a post-conflict settlement, as a result of major electoral changes or for some other reason?

2. **The powerful reward their supporters before anyone else.** ICA focuses on the logic of political survival. Those in power must reward those who put them there before they can reward anyone else. Ask:

- On whom do the powerful depend to keep them in power? How are supporters rewarded?
- What is the ability of those out of power, and those they represent, to protect their rights and have their voices heard? What other fault lines exist among those out of power?

3. **All actors in society have interests and incentives.** Rather than assume that everyone in society wants development, ICA assumes that some actors face incentives that potentially create conflict between their private and public interests. Broad groups (such as civil society or industrialists) often have opposing interests, as do groups within those categories. Some interests will be more easily discernible and will make more sense to outsiders than others. These include interests such as perpetuating the gender status quo, which may appear irrational or even harmful, but reflects deeply held views and emotions. Ask:
   - What incentives exist for major actors to put public interests over their private interests?
   - What incentives could make actors put public interests before private interests? Can these private interests be leveraged for public gain?

4. **Resources shape incentives.** Sources of revenue shape the incentives of power holders to be more responsive to some groups than others. Ask:
   - On what sources of revenue do power holders depend, and how does that dependence shape their incentives in responding to claim makers?
   - How does a development agency's presence affect the relationship between power holders and claim makers?

5. **All stakeholders in society have constraints.** The mere presence of an incentive does not mean an ability to act on that incentive. Traditions and institutions, both formal and informal, shape actors' ability to act on their incentives. Ask:
   - Are major actors constrained by formal rules, or do informal rules seem to matter more? How do gender relations influence the choices that individuals and institutions make?
   - If a group or organization has an interest in an issue, is there evidence of their ability to act collectively? Do they have a history of effective activism?

   The assumptions may not always be correct, but they can be useful in providing guidance.

A.3 Conducting an ICA

An ICA should be tailored to the specific area the project seeks to address, such as poverty-environment mainstreaming or gender mainstreaming. The analysis could draw on the findings of a country context analysis, which identifies the historical trajectory of the country and what has led it to where it is in broader terms. A well-designed country analysis focuses attention on incentives, relationships, and the distribution of and competition for power between groups and individual women and men, and includes data and information that are disaggregated by sex, age and other important variables. An understanding of a patriarchal political system, for example, may help make sense of gender inequalities in the economy; understanding corruption may require an appreciation of how it is fed by outside forces (e.g. in extractive industries). A country analysis can provide a good understanding of why certain reforms are difficult in the local context, which is useful in designing a project-level ICA. It can also improve the chances that the inclusion of a

pro-poor or gender-mainstreaming orientation is successful by pre-empting possible negative responses and addressing the best ways to work towards buy-in and cooperation from those who perceive their situation to be adversely affected, or their interests badly served, by such a project.

Before any analysis is carried out, decide on who will do the analysis, when it will be done and which methods will be used for data collection. Interview questions should be drawn up for different stakeholders and an ICA team set up. It is important at this stage to decide whether to involve partners and how to communicate findings. Detailed practical guidance on these steps can be found in UNDP's ICA guidance note (UNDP 2012).

The steps for carrying out an ICA are:

1. Defining the scope of the analysis
2. Institutional analysis
3. Stakeholder and engagement analysis:
   - Mapping the key actors, their incentives and the rules that constrain them, including gender relations
   - Identifying how to engage with different sets of stakeholders
4. Identifying entry points and risks:
   - Given the findings from Steps 2 and 3, what are the most promising entry points?
   - What are the risks, and how can they be mitigated?
5. Potential for change and areas to be prioritized

Step 1: Defining the Scope of the Analysis

The scope of the ICA should be determined based on project goals and available resources. Define the scope of the ICA in terms of the specific development problem to be addressed. An ICA is intended to shed light on the causes of problems, so it is important that the motivating question asks why rather than who or what, because the latter call for descriptions rather than explanations. When the scope of the ICA has been determined, the terms of reference for a research team can be drawn up. See the template in the UNDP ICA guidance note.

Step 2: Institutional Analysis

An institutional analysis is used to identify the roles, responsibilities and structure of relevant institutions responsible for implementing the project. It helps identify constraints within an institution that may undermine policy implementation.[2] Such constraints may exist at the level of internal processes, relationships among institutions or system-wide. Institutional analysis evaluates formal institutions, such as rules, resource allocation and authorization procedures. It also evaluates "soft" institutions, such as informal rules of the game, power relations and incentive structures that underlie current practices. In the latter sense, it identifies organizational stakeholders likely to support or obstruct a given reform.

To understand the enabling (or disabling) environment in a certain area, it is important to map and analyse the formal and informal rules and institutions that influence the issue. This can be done through desk reviews, focus group interviews, stakeholder analyses and validation workshops. An ICA asks, "what are the rules, and who are the actors?" Rules refer to institutions, which can be formal or informal. Formal institutions include, for example, constitutions, which describe the division of governing power between the executive, legislative and judicial

[2] World Bank, "Institutional Analysis," http://go.worldbank.org/ZMWHGHR2V0, accessed 26 January 2015.

branches; the electoral system; local government units; and citizenship laws. Like formal institutions, informal institutions are also rule systems. They differ in that they are usually unwritten, although widely known. Examples include household and family structures, and kinship and patronage systems. All are heavily influenced by gender, which is expressed through social norms and attitudes.

In the context of poverty-environment mainstreaming, an institutional analysis helps:

- Provide an assessment of the local context in terms of economic and environmental issues, policy and planning frameworks, political drivers, key institutions, governance processes and actors.
- Provide an understanding of the "machinery of government"—i.e. how the government makes its decisions—relevant to poverty-environment objectives (e.g. government development policy and planning processes at the national and sectoral levels related to ENR, including identification of links or lack thereof between institutions).
- Identify and analyse institutional incentives, opportunities and obstacles that influence reform in ENR management, taking into account the range of relevant institutions, legislation, policies and plans, and key stakeholders.
- Identify potential government, civil society, private sector, media and donor champions for improved integration of sustainable ENR management.

The main institutions relevant to poverty-environment mainstreaming include:

- Finance and planning ministries
- Environmental ministries
- Sector ministries and subnational bodies
- Office of the head of state
- Parliament
- National statistics office
- Media
- Civil society organizations

The ICA should include the following in poverty assessments:

- Poverty levels, degree of inequality, trends, geographical spread
- How poverty is measured
  - Household survey (frequency, contents)
  - Poverty indicators
  - Single or multidimensional
  - Level of disaggregation
- Identification of poverty drivers
- Identification of poverty impact
- Identification of poverty-environment linkages
- Assessment of poverty awareness e.g. number of articles in principal newspapers

In terms of assessing how poverty reduction is included in policies, plans and programmes, the focus should be guided by the question, "What is actually being done to reduce poverty?"

- Macrolevel poverty reduction targets (e.g. as in a PRSP or national development plan)
- Inclusion and application of poverty indicators and poverty-environment indicators in national monitoring frameworks
- Identification of specific poverty reduction policies, strategies, plans, etc., and overview of effectiveness (based on existing data)
- Degree of inclusion of national-level poverty reduction targets in other relevant policies, plans, programmes and projects (e.g. does the agriculture sector plan include a focus

on rural poverty reduction? Do women have equal rights over access to land? If not, is the government going to introduce land rights for women?)

- Degree of inclusion of poverty-environment objectives in policies, plans, etc., at different levels
- Determination if sufficient budgets are being allocated to poverty reduction efforts
- Determination of whether donors prioritize support for poverty reduction and if so how

The tools used to incorporate poverty reduction in national planning, policy, programme and project decision-making should be identified. For example:

- What poverty assessment tools are applied in the design and monitoring of policies, plans, programmes and projects?
- Are tools to measure sustainability-poverty linkages applied?
- Do the standard government manuals for programme and project design, including cost-benefit analysis, require distributional analysis?
- Is distributional weighting in favour of poorer or more vulnerable groups applied?

PEI experience in a number of countries suggests that the ICA will probably find weaknesses in national efforts to assess poverty and that efforts to reduce poverty require substantive strengthening. It is necessary to identify both why these weaknesses exist and steps to strengthen efforts to measure and address poverty. This will most likely require a specific focus in a related study—e.g. a study identifying the economic cost of unsustainable ENR could include a specific focus on poverty. Such a study should achieve the following:

- Identify the main methodological, institutional, legal and budgetary barriers to the adequate measurement of poverty and to the design and implementation of actions to reduce poverty, particularly ENR-related poverty.
  - **Methodological.** Are the tools used by government, donors and other development decision-makers, planners, economists, etc., appropriate for assessing the multidimensional nature of poverty in a disaggregated manner? Are appropriate tools used for poverty reduction in the design, implementation and monitoring of policies, plans, programmes and projects?
  - **Institutional.** This includes development planning and implementation institutional structures, design, mandates and processes, as well as how effectively these operate in general and specifically how effectively these integrate include poverty assessments and reduction. For example, if poverty reduction is a national priority, how is this reflected in sector policies and plans? What are the mechanisms for cross-ministry and cross-sector coordination with respect to poverty reduction? Are there capacity constraints that create bottlenecks?
  - **Legal.** For example, do laws governing forestry include provisions designed to contribute to poverty reduction? Do land tenure laws discriminate against women?
  - **Budgetary.** Do annual and medium-term budgets include adequate allocations to support poverty reduction efforts? If not, identify the reasons: e.g. is there inadequate coherence between national poverty reduction targets and budgetary allocations? What causes this incoherence?

- Recommend actions (methodological, institutional, legal and budgetary) to remove those barriers, and improve national capacities to implement and sustain the actions. These recommendations should be results based and realistic.

Step 3: Stakeholder and Engagement Analysis

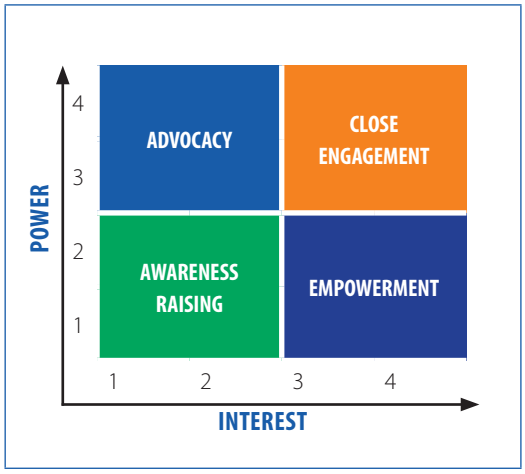
Stakeholder analysis is related to institutional analysis, but places far more emphasis on individual motivation and/or collective interest than on structures and procedures. It is used to identify actors or stakeholders within the rule systems or institutions (both formal and informal) that can influence a particular process and to understand their interests, constraints and ability to influence the outcome of a project. Stakeholders can be individuals, organizations or other groups and can include international actors (e.g. donors), government officials, civil society or faith-based organizations, interest groups and citizens in general. Gender relations play an important role both in identifying actors (for instance, by specifying groups of men or women within a larger group) and determining the relative position of these actors within a given context.

A stakeholder and engagement analysis provides information about different types of actors, how project staff should engage with them and what types of interactions can be promoted. It has three parts: (i) stakeholder mapping, (ii) understanding stakeholder incentives and constraints and (iii) identifying the best way to engage with different types of stakeholders and foster coalitions for change.

- **Stakeholder mapping.** This mapping can cover a description of actors who can influence the project focus area. This can be followed by a more detailed analysis of their power, interest in achieving the objectives stated in the project proposed, incentives and constraints.
- **Understanding stakeholder incentives and constraints.** Once key actors are mapped to their roles, a more detailed assessment can be made of their interests and the degree of influence they have on the project.
- **Identifying the best way to engage with different types of stakeholders and foster coalitions for change.** Completion of the first two steps enables a good understanding of the individuals or groups that are potential allies of the project objectives and those that can block the project. Additionally, enough information will be gathered to identify which stakeholders may find an alliance mutually beneficial, and to foster dialogue and coalition building towards change.

It can be useful to draw a diagram (figure A.1) to help visualize the types of stakeholders that may affect the project and the best way to engage with them. This technique is particularly useful in validating the findings of the analysis with others who may or may not have been part of the ICA exercise. To do this, list all key stakeholders and answer these questions:

Figure A.1 Power/Interest Matrix for Determining Methods of Stakeholder Engagement



- How much formal or informal power does each stakeholder have (i.e. to what extent can they influence the outcome of the project concerned) on a scale from 1 to 4?
- How much interest does each stakeholder have in the success of the proposed project on a scale from 1 to 4?

Based on the answers, determine how project staff should engage with different sets of stakeholders:

- Those who have a high degree of power will require more engagement on the part of senior project staff, albeit of a different kind. Stakeholders with **high power and high interest** in the success of the project are potential champions, and senior project staff should engage closely with them. Those who have **low power but high interest** are potential allies of the champions identified. Project staff can work to empower them through project activities and, at the same time, facilitate dialogue and coalition building among like-minded stakeholders in order to foster coalitions for change.
- Stakeholders with a low degree of interest in the success of the project will require a different type of engagement. Those with **high power and low interest** have the potential to block or slow the project, and project staff should therefore engage with them through advocacy whenever possible. In some situations, there will be no change in the behaviour or attitude of these stakeholders, as the project may not be of interest to them or may go against their interests. In such cases, the analysis is still useful, because it will reveal realistic paths that can be pursued with different sets of stakeholders and thus help project staff make informed decisions when prioritizing actions and allocating resources. Finally, stakeholders with **low power and low interest** may simply be unaware of the project's potential benefits. Engaging with this set of stakeholders can primarily entail raising awareness.

Step 4: Identifying Entry Points and Risks

Identifying entry points and risks are key goals of an ICA at the project level, so that the knowledge gained from the exercise can add value to development effectiveness. When considering entry points, it is useful to consider a human rights–based approach to programming and develop strategies to support both claim holders and duty bearers. Circumstances affecting entry points and stakeholders may change during project implementation, so it is important to consider risk mitigation strategies. Stakeholder groups may be affected by informal rules that privilege some group members over others and result in layers of different interests (for instance, women farmers will often have more gender equality concerns than their male counterparts, whose agenda may be confined to agricultural or land issues). When stakeholder interests and incentives are identified through stakeholder analysis, it becomes easier to monitor issues that may have an impact on these interests and change them over time.

Step 5: Potential for Change and Areas to Be Prioritized

Based on the information collected in the previous steps, an ICA can help identify the potential for change as well as actions to prioritize adequate responses and ways forward. This is the ultimate objective of the ICA and can help reveal unintended but potentially harmful effects which should be considered when formulating a project. It is particularly relevant in the context of promoting gender equality, as projects may unintentionally have negative effects on women (or men) if no proper analysis of gender relations was done at the start or if the conclusions from such an analysis were ignored. When project

interventions touch on power differentials, such as gender inequalities or deeply ingrained traditions, project success is more likely if an ICA includes such questions from the outset and aims to identify and implement practical win-win solutions.

A.4 Practical Considerations

A key challenge in a project-level ICA is operationalizing the findings. For this reason, it is important to take a practical rather than academic approach when working on the analysis so that recommendations can focus on specific issues. These may include identifying the most promising entry points for programming, national partners (from government, civil society, the private sector) with whom development agencies can engage, as well as areas where change may not be realistic in the short- to medium term.

Planning the design and execution of an ICA raises a number of practical questions. Who will conduct the analysis? How long will it take? What will it cost? Should the analysis be treated as an internal document or should it be shared with partners? The answers to these questions will vary according to resources, context and the type of analysis in question.

Annex B
Guidance Note on Integrating Environment-Linked Poverty Concerns into Planning, Budgeting and Monitoring Processes

B.1 Background

The contribution of ENR to the wealth of nations and to human well-being, particularly in low-income countries, plays a vital role in promoting pro-poor economic growth. In 43 countries classified as low-income, natural capital makes up 36 per cent of total wealth (WAVES 2012). In lower-middle-income countries, natural capital makes up 25 per cent of total wealth (Canuto and Cavallari 2012). Significant percentages of the population, particularly the poor, in these low- and lower-middle-income countries depend on ENR for their livelihoods and income (WAVES 2012). With rapid economic growth over the past two decades, increasing pressure on ENR is eroding the natural asset base of the poor. The vulnerability of the poor is further magnified by the high and increasing incidence of natural disasters such as droughts and floods, and the impacts of climate change. If these trends continue, the significant development gains made by countries over the past two decades will be reversed.

To address these challenges, governments need to invest in more sustainable ENR use that contributes to achieving poverty reduction and other development goals. Poverty-environment mainstreaming efforts should thus:

- Assess and measure the links between ENR use and poverty
- Demonstrate how more sustainable use of ENR can help reduce poverty
- Identify and implement actions to improve ENR sustainability such that it contributes to the reduction of poverty and the achievement of related development goals such as food security

The purpose of this note is to provide development practitioners and policymakers with guidance to meet these three requirements. This guidance is based on PEI experience in supporting countries to quantify identified ENR-poverty links in terms of the impact on poverty and to identify policy options to accelerate poverty reduction through more sustainable use of ENR. More detailed guidance is available on the PEI website.

B.2 The Concept and Measurement of Poverty

Poverty is not a self-defining concept. A wide range of poverty literature includes a number of definitions of poverty. For example, Lipton and Ravallion (1995) state that

> …poverty exists when one or more persons fall short of a level of economic welfare deemed to constitute a reasonable minimum, either in some absolute sense or by the standards of a specific society.

The World Bank defines poverty as deprivation in well-being, where well-being can be measured by an individual's possession of income, health, nutrition, education, assets, housing and certain rights in a society such as freedom of speech (Haughton and Khandker 2009). Frankenberger (1996) defines absolute poverty as when one is unable to meet basic needs requirements such as adequate food, safe water, health care, shelter, primary education and community participation.

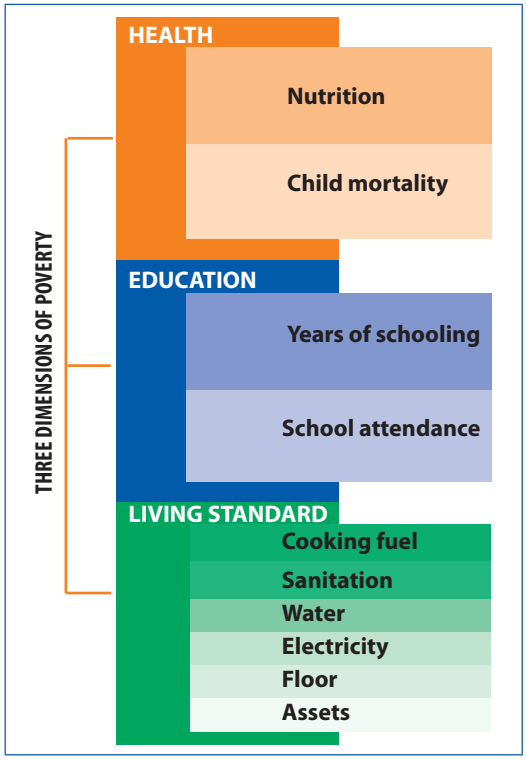
Despite universal acknowledgement of the multidimensional nature of poverty, there has been a tendency by policymakers and development practitioners to focus primarily on income or consumption levels when defining poverty. While one-dimensional measurements of poverty have their uses, no single indicator alone can capture the multiple aspects that constitute poverty—such as poor health, lack of education, inadequate standard of living, lack of income, lack of access to clean water and sanitation, disempowerment, poor quality of work and threat from violence. For instance, earning $1.25 per day is unlikely to mean the end of the many overlapping deprivations faced by poor people, including malnutrition, poor sanitation, a lack of electricity or inadequate schools (Alkire and Sumner 2013).

A multidimensional measure can incorporate a range of well-being, social and economic indicators to capture the complexity of poverty and better inform policies to address it. The Multidimensional Poverty Index (MPI) methodology developed by the Oxford Poverty & Human Development Initiative is an example of a multidimensional measure of poverty. It identifies multiple deprivations at the household and individual level in health, education and standard of living. It can be broken down by indicator to show how the composition of multidimensional poverty changes for different regions, ethnic groups and so on, with useful implications for policy (figure B.1).

The MPI reflects both the prevalence and intensity of multidimensional deprivation—how many deprivations people experience at the same time. It can be used to create a comprehensive picture of people living in poverty. MPI indicators can be adapted to the country level, where the multidimensional poverty approach to assessing deprivations at the household level can be tailored using country-specific data and indicators to provide a fuller picture of poverty at the country level.

Whether one-dimensional or multidimensional, poverty or relative poverty can be measured in terms of income, consumption and assets.

Figure B.1 Multidimensional Poverty Index



Source: OPHI, http://www.ophi.org.uk/multidimensional-poverty-index/, accessed 21 March 2015.

Consumption measures of poverty are not ideal but have substantive advantages over income measures. For example, income measurement may be substantively inaccurate if informal markets, bartering and non-paid work are involved: people may be unwilling to reveal income data. Consumption provides a more accurate indication of actual well-being, although consumption figures collected in one year may not provide an accurate indication of long-term well-being. Assets, however—either outright ownership or access rights—are a key indicator of longer-term well-being and also reduce vulnerability to economic and other shocks.

There are quantitative and qualitative measures of poverty, which include monetary and non-monetary measures. Income and expenditure in dollars are quantitative monetary measures; caloric intake is a non-monetary quantitative measure. Distance to water and time taken to collect water and firewood are other non-monetary quantitative measures. Qualitative measures rely on both visual and anecdotal information to describe poverty as it is experienced by individuals and groups. Qualitative methods include a focus on how poor people identify their deprivations and provide greater depth and understanding of dimensions of poverty and how they interact. For example, a PEI Rwanda study on the economic consequences of unsustainable ENR use that included discussions with poor people identified how the lack of alternatives to fuelwood was leading to deforestation and worsened child health indicators (Government of Rwanda and UNDP-UNEP PEI 2014). The link between these two points was that to save on fuelwood, caregivers were reducing the time they spent on boiling water and cooking food—resulting in increased rates of water-borne diseases and decreased nutritional absorption by very young children.

Another aspect of measuring poverty is the unit of observation chosen. Many surveys focus on the household level, but focusing on individuals is necessary to obtain disaggregated data. Gender-disaggregated data are important, for example, since well-being can vary widely between men and women in a household.

B.3 An Approach to Poverty-Environment Mainstreaming

While the links between poverty and ENR have been explored in many PEI and other poverty-environment–related studies,[1] those linkages need to be quantified more systematically in terms of impact on poverty and other development goals. Further, proactive and comprehensive efforts to identify policy options need to be undertaken to accelerate poverty reduction through more sustainable use of ENR.

The PEI programmatic approach to poverty-environment mainstreaming detailed in chapter 3 answers to these needs, enabling improved inclusion of poverty elements in successful poverty-environment mainstreaming, as described below.

Finding the entry points and making the case. This component sets the stage for focusing on the poverty dimension of poverty-environment mainstreaming. Preliminary assessments should provide an overview of national poverty levels and drivers, including poverty-ENR linkages. This includes identifying the poor and understanding their priority needs. These findings can then be used to raise awareness, highlighting how more sustainable ENR use could help reduce poverty.

[1] E.g. in Burkina Faso, Malawi and Mozambique; see http://www.unpei.org/economic-valuation-and-analysis-%E2%80%93-a-building-block-towards-inclusive-green-economy.

With respect to poverty elements, quantifying the linkages involve an analysis of how unsustainable natural resource use and environmental degradation affect poverty levels—e.g. how soil erosion contributes to poverty. A multidimensional approach should be taken into account in this analysis of linkages, including indicators such as income and access to assets such as land, health, food security, water, energy and education. The quantification should be disaggregated by gender to identify, for example, differences in incomes, the time women spend on water and firewood collection, children's access to education, etc.

It may be advisable and more practical to first prepare a general economic assessment of economic-ENR linkages which includes some poverty-ENR linkages and then to carry out a detailed disaggregated assessment that quantifies poverty-ENR linkages. In this manner, an overall picture of economic-ENR linkages is obtained to generate support across a range of ministries, departments, agencies and other stakeholders in poverty-environment mainstreaming.

Mainstreaming into national planning and budgeting processes. This component focuses on integrating poverty-environment objectives into a policy, national development planning or budget process. While most developing country governments state that poverty reduction is a top priority, this may not be adequately reflected in the design and implementation of policies, strategies and programmes. Government may not include an assessment of the poverty reduction impacts of different policy, strategy and programme options. This may reflect an implicit assumption that economic growth will reduce poverty and/or a lack of tools and capacity to adequately include poverty reduction objectives in policies, strategies and programmes. Thus, the degree to which poverty reduction is focused on, as well as the capacity to use poverty reduction tools and analysis, should be assessed. Relevant tools, such as poverty and social impact analysis, are outlined below. The results of the assessments should then be used to identify specific actions to improve the inclusion of poverty reduction in government policies, strategies and tools relevant to poverty-environment mainstreaming.

Mainstreaming into sectoral and subnational planning and budgeting, monitoring and private investment. This component focuses on (i) operationalizing poverty-environment objectives in national policies and plans through engagement in key sector and subnational planning and budget processes; (ii) integrating and applying poverty-environment indicators in associated monitoring processes to ensure that intended outcomes are achieved and that the well-being of targeted beneficiaries improves; and (iii) integrating poverty-environment objectives in mechanisms to guide private sector investment.

Activities include assessments of how well sector and subnational policies and plans include pro-poor ENR sustainability. Influencing and assessing sector policies require substantive engagement with sector working groups; the collection of more sector-specific, detailed evidence of poverty-ENR linkages; and inputs to sector policy and strategy drafts that include actions to improve ENR sustainability and reduce poverty. At the subnational level, it includes working with ministries of local government to better include pro-poor sustainability in district and provincial planning and budgeting mechanisms. For example, in Nepal, the government has developed an environmentally friendly local governance framework to mainstream sustainable ENR management into local development planning to achieve multiple benefits, including poverty reduction. With PEI support, the change needed to implement this framework has been

identified and will be rolled out to national, district and village governments down to the household level.

Increasing budget, donor and other financial allocations for pro-poor sustainable ENR investments, such as sustainable agriculture or strengthening resilience to climate change, is a key focus under this component. This includes supporting the preparation of sector and subnational budgets for pro-poor ENR sustainability investments. To do so may require more specific economic evidence, and it is critical that such evidence identifies the poverty-reduction benefits of sustainable ENR use. Influencing budgets will also require substantive engagement in budget processes—both annual and medium-term budget frameworks.

It is also important to highlight the potential for increasing government revenues through more investment in sustainable ENR—e.g. through improved royalties from sustainable forestry—which could be coupled with analysis of pro-poor revenue-sharing mechanisms. In this regard, PEI Mozambique has supported the government in reviewing benefit-sharing mechanisms for the forestry, gas and mining sector.[2] Similarly, in the Philippines, PEI has supported the government in managing assets and revenues from environmental and mineral resources for local development and poverty reduction through improving national systems and regulatory frameworks, and building the capacity of local government to collect and utilize natural resource revenue. As with the previous component, monitoring of delivery and results is important, as is integrating poverty-environment indicators into sectoral and subnational monitoring systems

[2] http://www.unpei.org/latest-news/mozambique-reviews-benefit-sharing-mechanisms-for-the-forestry-gas-and-mining-sector.

B.4 Methodologies and Tools

There are a number of tools to assess ENR-poverty linkages at the macro, sector, local and household levels. These include general equilibrium modelling at the macro level which can measure the impact on GDP, adjusted net savings, institutional and context analysis, mapping of ENR-poverty linkages, vulnerability assessments, and household surveys. Poverty impact assessment, PSIA, the Multidimensional Poverty Assessment Tool (MPAT), and cost-benefit analysis are methodologies and tools to support the integration and operationalization of poverty assessments and environment-linked poverty reduction concerns into the design, revision and implementation of policies, plans, programmes and projects. These are briefly discussed below. For further guidance on the use of these tools, see the Guidance Note on Poverty available on the PEI website.

General equilibrium modelling is a quantitative method to estimate the impact of policy, budgetary and other changes, including external shocks, on the economy as a whole. It is used if an economic or other policy change is expected to have significant impacts throughout the economy and is the best option in analysing the static/dynamic, direct/indirect and short-/long-term effects of a change or proposed change. For example, it is used to estimate the impact of fiscal policy, trade policy, climate change shocks and changes in international prices. In the ENR context, it was used in Malawi to estimate the economic impacts of unsustainable natural resource use on GDP and the impact of soil erosion on poverty (Yaron et al. 2011).

Adjusted net savings, or genuine savings, measures the true rate of savings in an economy after taking into account investment in human capital, depletion of natural resources

and damage caused by pollution.[3] It seeks to provide national-level decision-makers with a relatively simple, clear indicator of how sustainable their country's investment policies are. In standard national accounting, only the formation of fixed produced capital is counted as an investment in the future and thus as an increase in the value of the assets available to society. Similarly, standard calculation of net savings rates only includes depreciation in the value of human-made capital as a decrease in the value of a nation's assets. The adjusted net savings framework takes the broader view that natural and human capital are assets upon which the productivity and therefore the well-being of a nation rest. Since depletion of a non-renewable resource (or overexploitation of a renewable one) decreases the value of that resource stock as an asset, such activity represents a disinvestment in future productivity and well-being. In Malawi, the World Bank estimated adjusted net savings for 2006 to be 12.24 per cent of gross national income, indicating that national wealth was increasing (Yaron et al. 2011). However, this estimate excluded the latest evidence on deforestation from woodfuel use, the cost of soil nutrient losses, estimates of the costs of indoor air pollution or any estimates for the fisheries or wildlife subsectors. By including these items in a PEI-supported economic study, the Government of Malawi found that its adjusted net savings for 2006 falls to 7.14 per cent of gross national income (Yaron et al. 2011).

Institutional and context analysis focuses on political and institutional factors, as well as processes concerning the use of national and external resources in a given setting and how these have an impact on the implementation of programmes and policy advice (UNDP 2012). It can help development practitioners become more strategic in their engagement with different actors and sectors. When carrying out an ICA or its equivalent at the start of the poverty-environment mainstreaming process, an assessment of how the country assesses poverty and what it is actually doing to reduce poverty should be carried out, including on whether poverty-ENR links are reflected. With PEI support, the Government of Botswana undertook an institutional analysis to better understand the dynamics of environmental and development issues (UNDP-UNEP PEI 2009). Further guidance on ICAs can be found in annex A.

Mapping ENR-poverty linkages is a way to move beyond the aggregate, national-level indicators that can mask important differences between regions or areas. To analyse poverty, its determinants and poverty-reducing interventions requires a focus on poverty information that is geographically disaggregated and—further—enables examination of its many dimensions and multiple determinants (e.g. geographic and agro-climatic factors, services, etc.). Poverty mapping—the plotting of such information on maps—is a useful way to display information on the spatial distribution of welfare and its determinants. It is also useful to simultaneously display different dimensions of poverty and/or its determinants. Mapping can help pinpoint areas where development lags and highlight the location and condition of infrastructure and natural resource assets that are critical to poverty reduction programmes. Poverty-environment mapping has been undertaken in Rwanda and Tanzania, with PEI support, and has proved to be a useful tool not only for analysis and presentation of poverty-environment concerns but also as an advocacy tool to raise awareness on key poverty-environment issues.

Vulnerability assessments are essential for shaping climate change adaptation decisions.

[3] Source: World Bank, http://data.worldbank.org/data-catalog/environmental-accounting.

They help define the nature and extent of the threat that may harm a given human or ecological system, providing a basis for devising measures that will minimize or avoid this harm. They provide a means to understand how different groups—including women—will be affected by climate change and to identify adaptation measures based on needs and priorities. There are various methodologies available to assess climate risk and vulnerability at various scales; these should incorporate climate data and local knowledge. For local vulnerability assessments, local communities should be involved in a participatory manner—especially the poor, as they may provide access to a broader knowledge base, which in turn can improve problem definition and strengthen the analysis.

Household surveys are a significant source of socio-economic data. Important indicators to inform and monitor development policies are often derived from such surveys. The surveys are administered at the household level and collect information related to a household's consumption of goods and services as well as about the individuals living in those households. They are a rich source of pertinent information such as size and structure of households, education levels, health status, livelihood and income sources and levels, consumption, access to natural resources, access to public services, and so on. These surveys sample carefully selected households, and are designed to yield results that are representative at national and selected subnational (provincial or rural/urban) levels. Based on household survey data, poverty can be measured through income or consumption. In developing countries, where it is often not possible to accurately measure income, measuring consumption is the preferred alternative, as it provides accurate information on how well households are actually able to meet their basic needs. Household survey data can include consumption from both own production and common property resources, which can be a significant component of the consumption of rural households. Furthermore, the survey data can provide important insights in understanding the poor. For example, the dependence of the poor on ENR can be measured quantitatively, and thus a measure of benefits determined. Such analyses could be done to compare the dependence of non-poor with poor households on natural resources, and ascertain the type and level of uses important to different income groups, and better targeting of the poor.

Poverty impact assessment helps decision-makers determine strategic choices for public actions so as to have the greatest impact on reducing poverty and achieving pro-poor growth (OECD 2007). It aims at informing operations at the project and programme level, and provides decision-makers with a better understanding about potential winners and losers of an intervention, thus supporting a results-oriented approach. Poverty impact assessment is best used prior to assessing the impacts that can be expected from planned reforms and programmes. It can thus leave room for different options, identify mitigating measures and needed modifications, and support decision-makers in choosing appropriate solutions. Poverty impact assessment can also be applied to adjust and fine-tune implementation and, after implementation, to support evaluations and identify lessons learned.

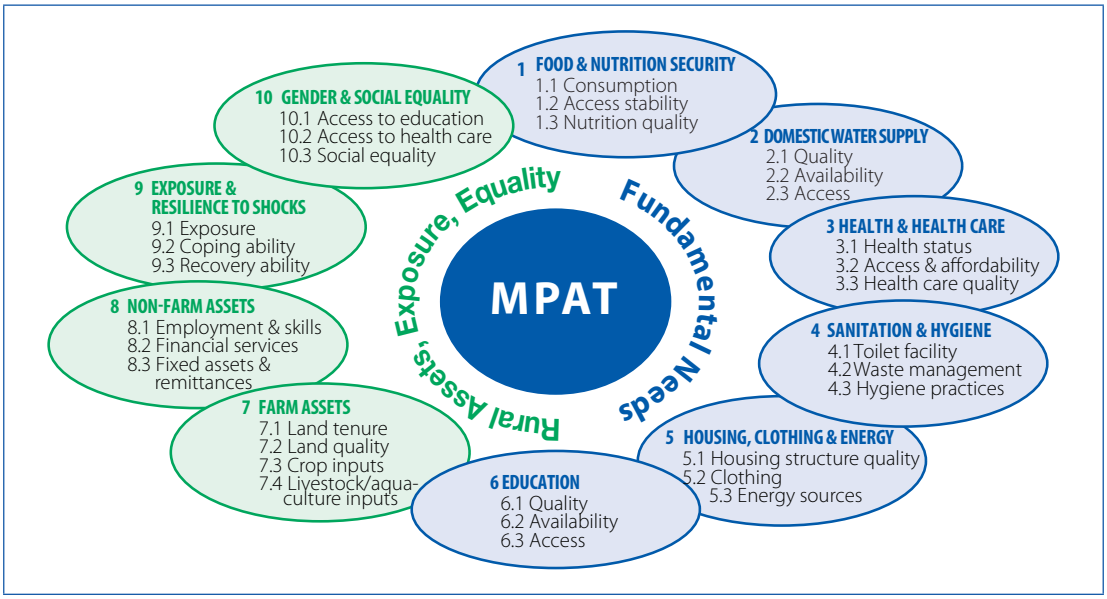
Poverty and social impact analysis is an analytical approach used to assess the distributional and social impacts of policy reforms on different groups (World Bank 2013). PSIA can be carried out ex ante or ex post policy reform. If conducted before or during the reform process, it can provide a sound empirical basis to inform the design and sequencing of alternative policy options. If conducted after the reform, PSIA can help assess the actual impacts of the policy;

this can suggest ways to mitigate any adverse effects and help decision-makers understand the likely impacts of future reforms. While PSIA and poverty impact assessment are tools for analysing the distributional impacts of policies, programmes and projects on the well-being of poor women and men, the main difference between these tools is the level of intervention; this has implications for the scope of the analysis and for the required time and resources. PSIA often requires a considerable effort of specific data collection for thorough social, political and economic analysis, comprising a whole range of quantitative and qualitative tools including micro- and macroeconomic modelling. As a less resource-intensive version, poverty impact assessment draws predominantly on existing data and analyses. It provides an estimation of effects and a quick overview.

Gender is a relevant dimension of policy reform impacts, as different groups of women and men have different needs and roles in society; each group is affected differently by economic, social and political processes. PSIA that recognizes the gender dimensions of reforms can inform policy interventions, so they can take these gender differences into account. This in turn has the potential to improve policy effectiveness and impact. In Botswana, PEI supported the government in undertaking a PSIA of the Integrated Support Programme for Arable Agriculture Development. It aimed to analyse programme performance, with a particular focus on key programme activities and their impact on poor people, vulnerable groups and the environment. Based on the results of the analysis, the government is working to modify the programme to enhance its overall arable productivity and effectiveness and to further contribute to rural poverty alleviation and food security.

IFAD's **MPAT** presents data that can inform all levels of decision-making by providing a clearer understanding of rural poverty at

Figure B.2 Multidimensional Poverty Assessment Tool

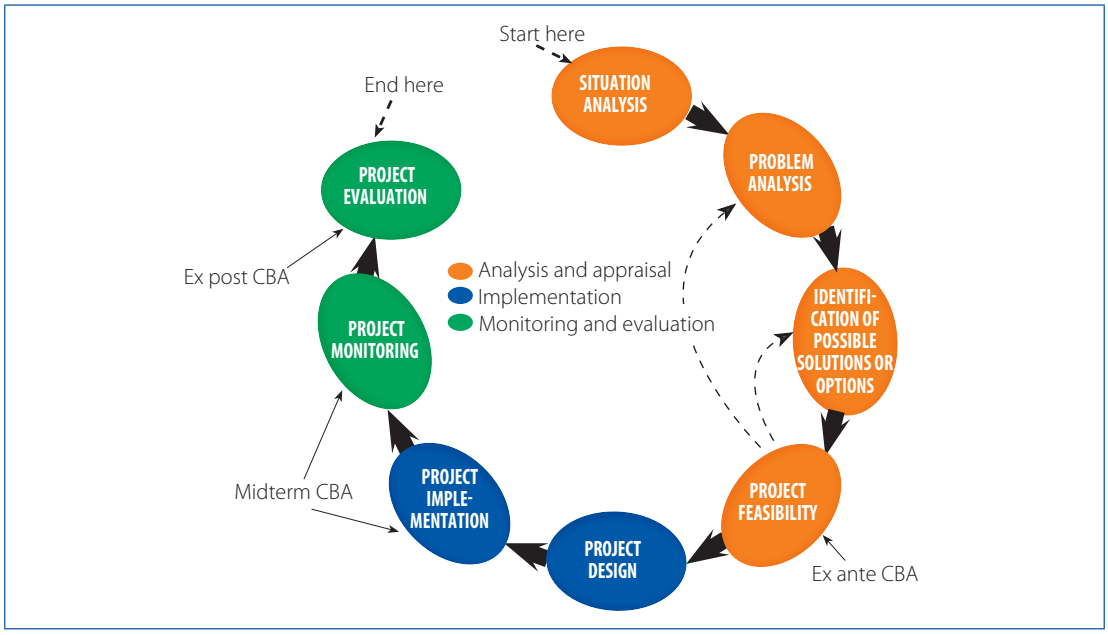


Source: IFAD 2014.

the household and village levels (figure B.2). It uses purpose-built surveys to gather data on people's perceptions about fundamental and interconnected aspects of their lives, livelihoods and environments. The data are then combined, distilled and presented in an accessible way through standardized indicators, developed through a comprehensive participatory process. The tool collects a variety of data through household and village surveys, which are then organized along 10 MPAT dimensions, or components: food and nutrition security; domestic water supply; health and health care; sanitation and hygiene; housing, clothing and energy; education; farm assets; non-farm assets; exposure and resilience to shocks; and gender and social equality. An important contribution of MPAT is that the values and weights assigned to each response and subcomponent have been standardized across countries and contexts, resulting in scores that permit cross-situation analysis and comparisons across projects, places and time (IFAD 2014). MPAT can be employed at various points in the project cycle: at the beginning, for baseline poverty studies, situation analysis and project design; during project implementation, to support mid-course correction; and at project end, to track long-term community outcomes and poverty alleviation.

Cost-benefit analysis is a systematic process for identifying, valuing and comparing the costs and benefits of a given project (Buncle et al. 2013). CBA helps determine whether the benefits of a project outweigh its costs, and by how much relative to other alternatives (figure B.3). The objective is to determine whether the proposed project is (or was) a sound decision or investment; and/or compare alternative project options and make a decision on the preferred option. Ultimately, a CBA helps inform decisions about whether to proceed with a project, and to choose which project

Figure B.3 Cost-Benefit Analysis



Source: Buncle et al. 2013, as adapted from Lal and Holland 2010.

option to implement where there are several options. The key features of a CBA are:

- All related costs (losses) and benefits (gains) of a project are considered, including potential impacts on human lives and the environment.
- Costs and benefits are assessed from a whole-of-society perspective, rather than from the perspective of one particular individual or interest group (i.e. a public and not a private perspective is taken).
- Costs and benefits are expressed to the extent possible in monetary terms as the basis for comparison.[4]
- Costs and benefits that are realized in different time periods in the future are aggregated to a single time dimension (discounting) (Buncle et al. 2013).

CBA may be used at a number of points during the project cycle. These are ex ante (before project implementation), mid-term and ex post (after project implementation). Applied at different stages, CBA can serve slightly different functions. The "ideal" time to undertake a CBA depends on what analysts want from the findings. For example, a CBA will be most informative about project design if it is carried out before implementation, but the values estimated will only be projections. For certainty about actual achievements, an ex post CBA would be needed. However, this would be too late to influence the design of the finished work, although it could inform future work. With PEI support, a CBA drawing on valuation of ecosystem services has been used to assess various land-use options in northern Lao PDR.

[4] Costs and benefits that cannot be quantified in monetary terms are still considered during decision-making.

Annex C
Guidance Note on Integrating Natural Wealth in GDP

C.1 Background

Since the Bretton Woods Conference in 1944, the globally accepted measurement of a country's economy has been based on gross domestic product.[1] GDP measures the gross output of an economy, and trends over time give an indication of whether an economy is growing or shrinking. Thus, it is also used to assess the effectiveness of current economic policies. However, GDP was neither established as a measure of wider societal well-being nor of the state of a country's natural wealth. Natural wealth, together with human and manufactured capital, provides the inputs necessary for the production of a country's outputs (figure C.1). When a country exploits its forest or mineral resources, it is depleting its assets and forgoing future use—a circumstance not reflected in GDP. GDP does not capture the loss of natural areas that provide ecosystem services (e.g. regulatory, provisioning services), or the depletion of renewable natural resources (forests, fisheries, etc.) and mineral resources; nor does it capture future losses that might arise from climate change and pollution.

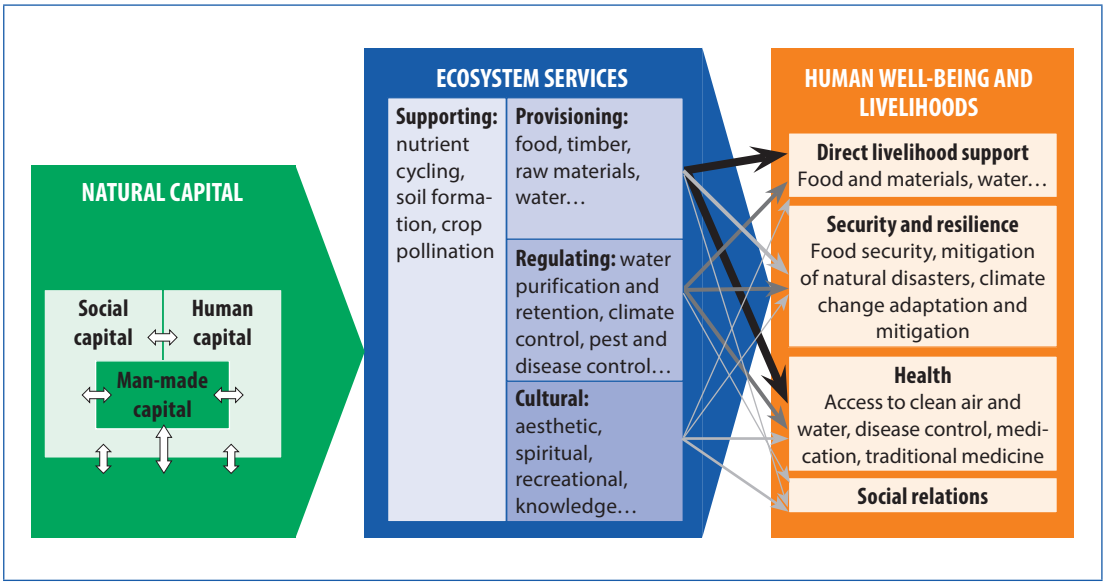
[1] GDP as defined by the OECD as "an aggregate measure of production equal to the sum of the gross values added of all resident institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs" (http://stats.oecd.org/glossary/detail.asp?ID=1163).

Since the 1980s, there has been a growing body of research and global efforts to value natural capital in monetary and economic terms and to integrate it into economic theory and decision-making (e.g. Pearce and Turner 1989). This guidance note aims to provide an overview of key concepts and recent developments in this regard, along with references for additional information.

C.2 Importance of Natural Capital Valuation and Accounting

Natural capital includes the major contributions to society and the economy of forests, wetlands, agricultural land, etc., that are not fully captured in traditional systems of national accounts. Natural capital matters: it makes up 36 per cent of the wealth of low-income countries (WAVES 2012). For example, globally more than 250 million people depend on ocean fisheries and aquaculture for their livelihood; in Madagascar, 75 per cent of the population depends on terrestrial and coastal ecosystems (WAVES 2012). Often, the full economic value of an ecosystem is not recognized in economic theory and decision-making. The timber value of forests, for example, can account for less than a third of the actual total economic value of all forest ecosystems. This is because forests' non-market goods (e.g. non-timber forest products, woodfuel, etc.) and regulating services (water and climate regulation, pollination, etc.) are not sufficiently valued and are largely absent from economic analysis and national accounts.

Figure C.1 Relationship of Natural Capital, Ecosystem Services and Human Well-Being



Source: TEEB 2013.

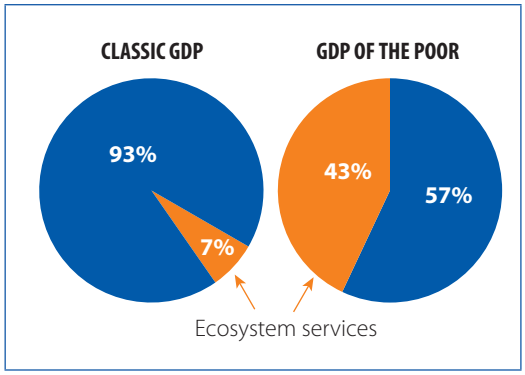
Note: Arrow colour indicates potential for mediation by socio-economic factors; the lighter the arrow, the lower the opportunity. Arrow width indicates intensity of linkages between ecosystem services and human well-being.

There is growing recognition of the need for more holistic measurements that help determine the full extent of a country's natural assets such as water, forests and ecosystems which underpin a country's economy and people's livelihoods. By fully accounting for these assets, countries can provide more accurate information to their policymakers—which in turn can result in better economic decisions about development priorities and investments.

Poor and vulnerable groups are disproportionally dependent on ecosystem services for their livelihoods, and therefore can be most affected by ENR degradation and ecological shocks. A determination of a "GDP of the poor" that draws on the contribution of ecosystem services to livelihoods shows that such services constitute a substantially larger component of GDP compared to classic national GDP calculations (figure C.2).

Integration of ecosystem services into economic theory represents an increasingly important area of work directed at ensuring environmental sustainability. It also involves the statistical community in consultation with scientific and policymaking communities to

Figure C.2 Ecosystems and Poverty in India



Source: Sukhdev 2009.

pursue broader measurement frameworks for environmental assets that provide goods and services. These include services not fully recognized by markets, such as carbon sequestration and water regulation, and their links to other areas influencing the well-being of families and communities.

This work entails building institutional capacities and strengthening evidence-based policy processes that draw on quantitative and qualitative data from integrated social, environmental, and economic assessments and surveys; valuation of ecosystem services; elaboration of indicators and indexes; and inclusion of ecosystem accounting in a system of national accounts. It also involves building effective collaborations and communication channels between a range of institutions—including ministries of finance and planning, national statistics offices, ministries of environment and natural resource-related ministries (e.g. land, water, agriculture), and national research institutions and civil society organizations. Getting the work done requires multidisciplinary teams of practitioners and researchers in economic, social and environmental disciplines.

C.3 Efforts Towards Integration of National Wealth in Economic Decision-Making

The Rio+20 outcome document and the discussion on the post-2015 SDGs are furthering the push for ecosystem valuation and integration of natural wealth into economic decision-making and systems of national accounts. Numerous global and national initiatives are engaged in this work; several of these are highlighted below, along with sources and links for further information.

The Inclusive Wealth Index: Moving Beyond GDP

The Inclusive Wealth Index was launched at Rio+20 by UNEP and the United Nations University International Human Dimensions Programme as a means to measure progress more holistically. The index incorporates changes in human capital (as measured by the Human Development Index) and natural capital alongside existing measures of produced capital (GDP). Under the overarching premise of sustainable development, the Inclusive Wealth Index seeks to complement existing measures of national-level development by taking into account these two integral components of inclusive well-being and progress—components that have so far been ignored in human and economic development measurements. The index can thus be used to address the major policy gaps in growth and development that exist when issues of sustainability, natural resource depletion and human well-being are not taken into account. The December 2014 Inclusive Wealth Report, based on index data, showcases the changes in produced capital, human capital and natural capital in 140 countries from 1990 to 2010. The aggregate data indicate that, while GDP and the Human Development Index have made significant strides, natural capital has declined in 127 countries. The analysis available from the Inclusive Wealth Index enables countries to be aware of their holistic capital pool and thus push for greater action and accountability in moving towards sustainable development.

The Inclusive Green Economy

The inclusive green economy approach focuses on getting the macroeconomics "right" so as to enable sustainable and inclusive growth and development. Through active intervention aimed at reforming existing market structures, institutions, production and consumer

behaviours, and incentives architecture, the approach advocates for a greater integration of economics for better environmental and social outcomes. Several initiatives and partnerships have been mobilized to implement the inclusive green economy approach. Among others, the Partnership for Action on Green Economy (PAGE) has a mandate to support 30 countries in building national green economy strategies by 2020; and the Green Economy Coalition of non-governmental organizations, research institutes, UN organizations, corporations and trade unions is providing multidimensional strategies towards greening economies. The approach recognizes that both developed and developing countries should do their part in greening their economies. Developed countries should take the lead in changing their own production and consumer practices while providing finance, technology transfer and other mechanisms to support greening in developing countries. Developing countries, for their part, should continue to pursue their development goals while adopting greener and more sustainable practices in so doing.

The Economics of Ecosystems and Biodiversity (TEEB)

Through numerous reports issued since 2010, UNEP's TEEB initiative has greatly increased decision-makers' understanding and awareness of the values of biodiversity and ecosystem services to economies and human well-being, as well as of the growing costs of biodiversity loss and ecosystem degradation (TEEB 2010, 2011). While acknowledging the challenges of estimating the total value of ecosystem services in monetary and non-monetary terms, the TEEB approach assesses the consequences of changes resulting from alternative management options affecting ecosystems and biodiversity, in particular the benefits of taking action to reduce loss and degradation. It also demonstrates the importance of assessing ecosystem and biodiversity values and applying these in economic analysis as an aid to achieving more efficient use of natural resources by determining the trade-offs of various options.

Through its publications and support, the TEEB initiative aims to integrate ecosystem services and biodiversity into policymaking. At the country level, it highlights ways to work with nature to meet specific policy priorities. It thus provides an example of a focused approach to integrating pro-poor environmental sustainability in development policy, planning, budgeting and monitoring processes. The TEEB initiative supports countries, at their request, in undertaking TEEB country studies; in 2013, it issued a guidance manual which supports these studies by providing the following (TEEB 2013):

- Definition of TEEB and how it integrates into the policy landscape
- Explanation of how to determine the scope and objectives of the TEEB country study and set up the process
- Delineation of a six-step main study phase
- Information on how to use the study findings and recommendations

The guidance manual includes examples of country studies and how findings and recommendations can support the integration of ecosystem services and biodiversity values into economic decision-making. More guidance on TEEB and its application at the country level can be obtained from the following websites: http://www.teeb4me.com/ and http://www.teebweb.org/.

System of Environment and Economic Accounts (SEEA)

The SEEA is an internationally agreed upon framework of the UN Statistical Commission

for producing comparable statistics on a country's environment and its relationship with the economy. It builds on the system of national accounts framework that has been in place since 1953 as an international standard for measuring national income and savings. The SEEA provides a framework to account for material natural resources including minerals, timber and fisheries. It consists of the following:

- The Central Framework, the first international standard for environmental-economic accounting
- Experimental Ecosystem Accounting
- Applications and extensions of the SEEA

The SEEA looks at such sectors as energy, water, fisheries, land and ecosystems, and agriculture. In conducting their accounting, countries can focus on one or more SEEA sectors.

SEEA accounts are also relevant to poverty, since the accounts can include data on household costs for energy, water, etc. Integrated data, including social, economic and environmental accounts based on agreed-upon classifications and methods, are central to efforts to help countries design more inclusive, equitable, low-emission, climate-resilient development strategies. Comparable data over time and across countries are needed to track performance across the MDGs, SDGs, and related goals and objectives. Without such data, the development community cannot be as effective in supporting countries in moving towards greener, more inclusive economies that reduce poverty, advance social well-being and support sustainable development.

The SEEA can be expanded to include additional environmental and social information needed to better inform sustainable development policies that seek gains across the social, economic and environmental strands of sustainable development—so-called triple wins—while considering trade-offs. More information on the SEEA can be found at http://unstats.un.org/unsd/envaccounting.

Natural Capital Accounting and Valuation

Natural capital accounting and valuation is closely related to and an essential component of the SEEA and integrating environmental sustainability in the system of national accounts. Following are descriptions of major initiatives in this area.

Wealth Accounting and the Valuation of Ecosystem Services (WAVES). The World Bank–led WAVES partnership aims to promote sustainable development by ensuring that natural resources are mainstreamed into development planning and the system of national accounts. The partnership brings together a coalition of UN agencies, governments, international institutes, non-governmental organizations and academics to implement national capital accounts where there are internationally agreed-upon standards, and develop approaches and tools for ecosystem service accounts. Its work is centred on ecosystem services and natural resources that are not traded or marketed and are therefore difficult to measure. Examples of such services and resources include forest services such as pollination and water resource management, wetland services in reducing the impact of floods, and mangroves in coastal protection.

In Botswana, WAVES supports efforts by the government and stakeholders to update relevant sectoral accounts to better capture these ecosystem services and resources. Since 2012, efforts have addressed the national water sector accounts, with an emphasis on water use efficiency (water supply to be complemented by demand management and integrated water resource management;

wastewater strategies to improve reuse and recycling within sectors; rethinking of water subsidies) and water allocation (provide water to sectors and users that add most value, social protection to secure basic water needs and keep water bills affordable; environmental protection to secure ecological water requirements). More recent efforts are addressing national accounts for minerals, energy, land, ecosystems and tourism. WAVES is providing similar sector-based account updating support in Colombia, Costa Rica, Guatemala, Indonesia, Madagascar, the Philippines and Rwanda. More information on WAVES can be found at https://www.wavespartnership.org/.

Valuation and Accounting for Natural Capital for Green Economy (VANTAGE). This UNEP initiative supports valuation of natural capital and inclusion in SEEA implementation at the regional and country levels. In particular, VANTAGE focuses on the following:

- Economic valuation of ecosystem services
- Natural capital accounting
- Macroeconomic policy and ecosystem linkages
- Economic instruments and incentives
- Capacity development in valuation and accounting
- Advisory services

Country-based pilot studies on ecosystem service assessment are carried out by applying valuation and accounting methodologies. The assessment findings aim to inform and influence development planning and policies, so policies such as food security and poverty alleviation are aligned with the goals of environmental sustainability. To build and develop capacity, especially in developing countries, the VANTAGE programme engages with scientists, scientific communities and academic fora, universities and international non-governmental organizations. By so doing, it aims to fill the gap between science and policy in the application of economic approaches to management of ecosystem services for enhanced human well-being. For more information, see http://www.ese-valuation.org/index.php/ese-unit/vantage.

The Natural Capital Project (NatCap). A partnership involving Stanford University, the University of Minnesota, The Nature Conservancy and the World Wildlife Fund, NatCap aims to integrate the values of nature into decision-making affecting the environment and human well-being. NatCap develops simple, use-driven approaches to valuing nature; works closely with decision-makers; and provides free, open-source ecosystem service software tools to a broad community of users. One of the tools is INvest (Integrated Valuation of Ecosystem Services and Trade-offs), a free, open-source software suite that enables users to quantify natural capital in biophysical, socio-economic and other dimensions; visualize the benefits delivered today and in the future; assess the trade-offs associated with alternative choices; and integrate conservation and human development aims. For more information, see http://www.naturalcapitalproject.org/.

Annex D
Guidance Note on Promoting Gender Equality

D.1 Background

Environment and gender are cross-cutting issues that need to be addressed jointly to advance environmental sustainability and address existing inequalities. Mainstreaming gender in the ENR sector is important, as men and women have differential opportunities in accessing natural resources and related technology and information. Thus women and men have different skills, experiences and knowledge that can help inform environmental and climate change policies for poverty reduction. Studies have shown that increasing women's access to and control over natural resources in development planning and budgeting can have a positive impact on sustainability, economic growth and poverty reduction (FAO 2011b).

Women's empowerment is critical in helping to achieve successful poverty-environment mainstreaming and gender equality. The majority of the world's poorest people are women; they account for two-thirds of the 1.2 billion people currently living in extreme poverty (UN 2013). Poor women are further disproportionately affected by environmental degradation and climate-related natural disasters that reduce the rate of economic growth as they tend to depend on natural resources for their livelihoods. Women are not only victims, but also agents of change in development and addressing environmental concerns. However, the links between gender equality, poverty reduction and environmental sustainability, in terms of access to natural resources, credit, information and technology, still lack a common framework of tools and knowledge to influence related policies.

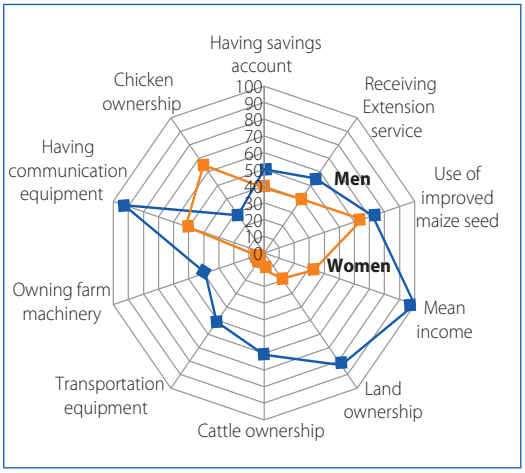
The information presented here draws on existing practices and tools that can easily be adapted in line with the poverty-environment mainstreaming approach to effectively promote gender equality and women's empowerment. For more detailed information, see the Guidance Note on Mainstreaming Gender Equality in the Work of the PEI available on the PEI website.

D.2 Why Promote Gender Equality in Poverty-Environment Mainstreaming?

The case for promoting gender equality is generally predicated on two arguments. The first is a rights-based, or normative, approach, which posits that gender equality concerns ought to be mainstreamed because gender equality rights are human rights. Yet, despite long-standing conventions and other instruments of international human rights law, gender inequality still prevails, including in access to and control over ENR (figure D.1).

The second argument, and the one espoused here, is that integrating gender into poverty-environment mainstreaming efforts can help improve the efficiency, efficacy and long-term sustainability of ENR policies. Environmental and climate policies cannot be considered in isolation from poverty and equity considerations. In fact, strong evidence demonstrates

Figure D.1 Access to Resources of Rural Women and Men in Kenya



Source: World Bank 2012a.

that promoting gender equality and investing in resources to increase the opportunities for and participation of women and girls has resulted in progress across all the MDGs (UNDP 2010). As this handbook illustrates, climate and the environment are no longer the exclusive concern of environment ministries but of government as a whole, including ministries of finance, economy and development, which are responsible for identifying and addressing the differentiated opportunities and challenges of their male and female populations (World Bank 2012b).

D.3 How to Integrate Gender into Poverty-Environment Mainstreaming

There are myriad guidelines and checklists for gender mainstreaming in development planning and budgeting, but case studies specific to gender and ENR management for poverty alleviation are more limited.

The programmatic approach to poverty-environment mainstreaming described in chapter 3 can be used as an approach to integrate gender in ENR policies and development plans at different levels. Basic principles of gender mainstreaming must be integrated into the approach to help bring the voices and priorities of both women and men into the incorporation and implementation of poverty-environment objectives in development planning and budgeting. This supports the application of gender analysis in poverty-environment assessments, gender-responsive budgeting, and the integration of gender-environment–related indicators in monitoring frameworks for sustainable development.

Component 1: Priority Setting, Finding the Entry Points and Making the Case

In finding the right entry points, it is critical to understand the different needs and strategies of women and men at the household level with regard to livelihoods and ENR management. Gender analysis is integral to understanding the social relations and decision-making processes that govern access to and management of natural resources. These factors must then be placed within the broader political, socio-economic and environmental context.[1] Descriptions of Component 1 activities for integrating gender equality principles follow.

- **Identify and determine the poor and their gender-differentiated impacts of environmental change on human well-being.** Understanding and changing natural resource tenure and governance, as well as unequal patterns of access to and control over natural resources, are crucial to addressing gender inequalities in

[1] The Global Gender Office of the International Union for Conservation of Nature (IUCN) provides a range of tool and methodologies; these are available at http://genderandenvironment.org/work/developing-tools-and-methodologies/.

ENR management. Gender analysis must involve men and women, young and old, rich and poor, in urban and rural settings, as producers and consumers of the planet's resources and as drivers and recipients of environmental change to fully understand gender-poverty-environment linkages to maximize policy effectiveness.

For example, PEI Nepal found that men were prioritizing local investments in capital and heavy machinery–intensive road construction. It was only once Nepalese women in poor rural communities were invited to participate in the development of local development plans that the Ministry of Federal Affairs and Local Development realized that water source conservation to ensure sustainable access of irrigation facilities for the poor, women and indigenous communities was their priority; local plans were revised accordingly.

Different frameworks can be used to undertake a gender analysis in the context of this component. Among these are the Harvard Analytical Framework (http://go.worldbank.org/T6TMWPLVN0), the Moser Framework, the Women's Empowerment Framework, and the International Union for Conservation of Nature's (IUCN's) gender analysis framework (http://cmsdata.iucn.org/downloads/framework_gender_analysis.pdf). The World Bank provides details and checklists on how these frameworks can be applied; this information is available at http://info.worldbank.org/etools/docs/library/192862/annexes/Annex6.pdf.

- **Analyse current and potential impacts of policies, processes and institutions on women's and men's livelihood strategies and outcomes.** This analysis should be in line with policies, legislation (land and intellectual property rights), incentives, institutions and culture (i.e. the norms and practices that influence access rights, participation and decision-making) and should ideally be part of a broader institutional context analysis as discussed in annex A. Tools to use include the Gender and Land Rights Database from the Food and Agriculture Organization of the United Nations (FAO).[2] Also useful is the Global Land Tool Network's training package *Improving Gender Equality and Grassroots Participation through Good Land Governance* (UN-Habitat 2010). Box D.1 describes how Malawi and Mali used the findings from such preliminary analyses of policies and systems to identify needs and entry points.

- **Identify and cost the gender gap.** Gender gap analysis can be used to identify gaps between men and women—e.g. in terms of earnings; productivity; and access to resources, information and technology in various sectors—as well as the underlying reasons for these gaps. When making the economic case, studying the cost of the gender gap to the relevant sector is an effective way to promote gender equality. For example, a study by PEI, UN Women and the World Bank is examining the implications of the gender gap in agriculture productivity on GDP and poverty reduction efforts in three countries in East and Southern Africa.

- **Raise awareness and build partnerships.** Ensure that the relevant gender focal point/ministry is included in any government coordination mechanisms and is in regular and ongoing communication with the environment and finance ministries. Equally important is to ensure that staff members of the ministries of finance and environment

[2] This resource generates up-to-date information on gender and land rights and is available at http://www.fao.org/gender/landrights/en/.

Box D.1 Key Findings of Preliminary Assessments on Gender and Environment in Mali and Malawi

Mali and Malawi have taken steps to advance integration of gender in their poverty-environment mainstreaming efforts. A study on the integration of gender into work concerning the poverty-environment nexus was undertaken in Mali in 2013. The study found that, unlike in other sectors such as health and education, the natural resource sector in Mali does not have targeted objectives and budgets allocated to gender. This is partly due to the low level of understanding of gender and human rights issues among natural resource development officials.

A rapid assessment of gender-ENR relevant data and indicators were concluded in Malawi in 2014. The assessment found that data and indicators on women's roles and access to ENR are not comprehensively collected and reported. The assessment highlights that there is a need to enhance awareness about the importance of gender-environment–linked statistics for policy-making and strengthen national capacity through partnerships with relevant institutions for the collection of both qualitative and quantitative gender-environment data.

Sources: UNDP-UNEP PEI 2014b; UNDP-UNEP PEI, n.d. ("Evaluation environnementale stratégique").

understand the links between environment, gender and development. National and subnational steering groups should also promote equal participation of male and female representatives of vulnerable groups in line with findings and recommendations from the assessments conducted earlier.

Component 2: Mainstreaming into National Planning and Budgeting Processes

This component focuses on integrating poverty-environment objectives into a previously identified and ongoing policy, national development planning and budget process. Gender-sensitive activities build on previous work and include the following.

- **Promote gender mainstreaming in institutions dealing with the environment and sustainable development.** Several resources are available to help in this promotion effort. The Global Gender and Economic Policy Management Initiative provides a capacity-building package for policymakers, available at http://www.undp.org/content/undp/en/home/ourwork/povertyreduction/focus_areas/focus_gender_and_poverty/gepmi.html. Chapter VI, "Towards Gender Mainstreaming in Environmental Policies," of UNEP's *Women and the Environment* (UNEP 2004b) provides a strategic model to promote gender in environmental institutions. The Global Gender and Climate Alliance works to ensure that climate change policies, decision-making and initiatives at the global, regional and national levels are gender responsive—an approach that is critical in successfully addressing the climate crisis. Tools and experiences are available at http://gender-climate.org/. Box D.2 discusses promoting gender in institutions dealing with ENR.
- **Support gender-responsive budgeting (GRB).** GRB is a methodology that analyses the impact of actual government expenditures and revenues on women and girls as compared to men and boys.[3] The five-step

[3] The Gender-Responsive Budgeting web portal features articles, research papers and training tools

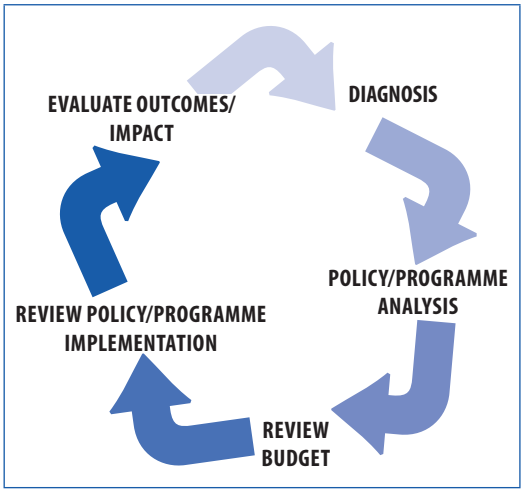
Box D.2 A Practical Approach to Integrate Gender in Cross-Sector Coordination Mechanisms

Promoting sector environmental focal points and cross-sector environment unit planning meetings under the joint leadership of the ministries of gender and environment could be an effective way to ensure the integration of both issues in development planning and budgeting. Mozambique and Rwanda have successfully promoted such an approach in the framework of their respective PEI country programmes. As a result, 16 sectors in Rwanda and 9 in Mozambique—among them, agriculture, private sector, development, transport, energy, information, communication, environment and natural resources, health and state administration—include poverty-environment–related objectives in their 2015 annual and social economic plans. A similar approach can be used for gender mainstreaming in this context.

methodology consists of the following (figure D.2):

1. **Diagnosis:** Identify needs/interests of men and women (diversity, intersectionality, age)
2. **Policy/programme analysis:** Identify gaps, strategies, etc.
3. **Review budget:** Study budget coherence to respond to gaps and strategies analysed.
4. **Review policy/programme implementation:** Review against objectives, targets and budgets.

Figure D.2 Gender-Responsive Budgeting



5. **Evaluate outcomes/impact:** Determine to what extent identified needs have been addressed and which have emerged. These findings will inform the development of the next budget beginning again at Step 1.

A government's budget guidelines, in most cases issued by the ministry of finance, can be used as an avenue for promoting GRB. For example, Malawi's 2014/15 budget guidelines include a GRB chapter (Malawi Government 2014). Capacity building on gender-responsive budgeting should be supported in environmental ministries and departments. Gender could be explored as an aspect to be included when undertaking CPEIRs and PEERs (see chapter 5) since these are effective ways of supporting government in tracking and allocating budgets for climate change and sustainable ENR management.

Ensure that access to climate change funds is equal for men and women, girls and boys. Climate change finance mechanisms often have complex application processes and

for specific areas of work and countries , and offers resources in Arabic, French, Portuguese and Spanish; go to http://gender-financing.unwomen.org/en/resources.

significant upfront costs, making benefit sharing and access by women's, grassroots and civil society organizations difficult. To implement a gender-responsive approach in climate change financing (see UNDP 2011b for further guidance and tools), special efforts should be made to facilitate and support women's and small-scale initiatives. For example, streamline fund processes such as application, registration, approval, implementation, evaluation and monitoring; earmark reserve funds for women and marginalized groups; and establish gender-based criteria in fund allocations (see box 6.5 for an example from Tajikistan). Additionally, UNDP has developed specific resources for the Africa and Asia-Pacific regions; These are accessible from http://www.undp.org/content/undp/en/home/librarypage/womens-empowerment/gender_and_environmentenergy.html.

- **Ensure gender integration in ex ante and ex post poverty, environmental and social assessments.** Tools to be used in these assessments include Socio-economic and Gender Analysis (SEAGA; available at http://www.fao.org/gender/seaga/seaga-home/en/), poverty and social impact analysis, strategic environmental assessment and economic appraisals (e.g. cost-benefit analysis) of policies and plans with a view towards strengthening pro-poor environmental sustainability. Since these tools do not automatically use a gender approach, gender integration must be ensured. Gender-disaggregated baseline data are essential to this work. (See annex B.)

- **Enhance gender equality through a coherent strategy of gender mainstreaming in the environment.** In this process, the use of gender analysis (including gender gap analysis), gender assessment tools and gender indicators (table D.1) should be promoted among environmental actors across ministries and departments.[4] To this end, the national monitoring system should collect and disaggregate data by gender. Unpaid care work and opportunities for women to engage in income-generating activities should be taken into account. A useful resource in this regard is the previously mentioned Global Gender and Economic Policy Management Initiative that provides specific training modules for gender mainstreaming in monitoring processes.

Component 3: Mainstreaming into Sectoral and Subnational Planning and Budgeting, Monitoring and Private Investment

This component focuses on operationalizing poverty-environment objectives through engagement in key sectors, subnational planning and budgeting processes, associated monitoring processes, and private investment. Related activities can contribute more effectively to gender equality by highlighting the positive effects of inclusive/gender-sensitive planning and budgeting.

- **Conduct ex ante assessments.** Utilizing previously mentioned gender analytical tools (e.g. gender analysis, gender indicators, sex-differentiated data sets, costing the gender gap in relevant sectors, gender monitoring, GRB and gender auditing) when conducting environmental, social and economic assessments of sector policies and plans will help highlight gender gaps to be addressed to ensure that both women's and men's needs, concerns and perspectives are incorporated into programme and policy frameworks. These efforts will facilitate equity in the delivery of programme and policy benefits.

[4] For sources of gender indicators related to ENR and climate change, see the gender guidance note available on the PEI website.

Table D.1 Monitoring and Evaluation Indicators for Gender and ENR Management

Indicator	Sources of verification and tools
Percentage of women and men actively participating in ENR management committees	• Committee meeting minutes • Interviews with stakeholders • Local traditional authorities (e.g. chief, local council) • Programme or project records
Number of women and men actively participating in local-level planning and policy-setting processes	• Citizen scorecards • Community meeting minutes • Participatory monitoring records
Percentage of women and men actively involved in committees writing national development plans, national policies, etc.	• Government minutes • National development plan records
Use or otherwise of gender-disaggregated monitoring in national development plans, national budgets, project logical frameworks, government socioeconomic development plans, etc.	• Documents: national development plans, budgets, etc. • Gender analysis of budgets • Public expenditure reviews
Average number of hectares of land owned by women- and men-headed households	• Land registration department records
Percentage of women and men actively participating in land allocation committees	• Committee meeting minutes • Interviews with stakeholders • Programme or project records
Community satisfaction (disaggregated by gender) with changes in ENR management	• Interviews, before and after • Group interviews or focus groups
Number of women and men receiving training in ENR management	• Programme and project records • Training records
Percentage of time spent daily in household on paid and non-paid activities, disaggregated by gender and age	• Gender analysis • Time use studies
Satisfaction of entrepreneurs with access to government services (e.g. land titles and business registration), training, information and infrastructure, disaggregated by gender	• Average time taken by government offices to issue certificates • Focus groups • Stakeholder interviews
Satisfaction of women and men entrepreneurs with access to agricultural inputs, training, credit and markets, measured annually	• Focus groups • Stakeholder interviews
Among surveyed women and men in target group, percentage that rate their access to land, and land titling and dispute resolution procedures, as having improved during the period covered by the programme or project	• Interviews with women in target groups (e.g. a sample of women in the defined area); ideally, the interviews should be conducted before and after any programme/project activities
Number of training sessions provided to relevant authorities for gender-sensitive land mapping and titling and for dispute resolution processes	• Land registration authority records • Programme and project records

Source: World Bank, FAO and IFAD 2009.

- **Integrate poverty-environment indicators into the national and subnational monitoring systems.** By measuring changes in the status of women and men over a period of time, gender-sensitive indicators assess progress towards achieving gender equality in line with government commitments. Progress has been made in recent years in the area of gender-sensitive indicators with regard to the ENR management, see, e.g. IUCN's Gender and Environment Index at http://genderandenvironment.org/egi/ and PEI's rapid assessment of gender-environment indicators in Malawi; more work in this regard is needed. To select an appropriate indicator, the cost of collecting and analysing data must be weighed against the quality and utility of the information to decision-making (Aguilar, n.d.). The indicator should be relevant to user needs, clearly defined, gender disaggregated, and easy to understand and use. Depending on the country or region, it might also be relevant to consider ethnicity and caste alongside gender (both as comparative indicators and when collecting data). See table D.1 for examples of useful indicators; also see FAO (n.d.) and World Bank, FAO and IFAD (2009).
- **Integrate gender equality measures in management of private investment in natural resources to promote good governance.** A useful tool to this end is "Extracting Equality—A Guide" (UN Women 2014), the first-ever extractive value chain guide to combine gender with good governance. Also useful is Publish What You Pay (http://www.publishwhatyoupay.org/), a global network of more than 800 civil society organizations united to campaign for an open and accountable extractive sector, so that citizens can benefit from their natural resources.

D.4 Summary

A country poverty-environment programme that applies gender mainstreaming tools and approaches such as those discussed here helps advance gender equality in sectors critical to the livelihoods of the poorest women and girls—hence reducing inequalities and contributing to the achievement of the SDGs. The interventions described here should be developed in a fully consultative manner, led by government institutions—in particular, the ministries of finance and/or planning—working in close collaboration with the institutions responsible for gender and the environment, respectively. In this context, strengthening the gender focal point system—both for ENR and for gender—is an effective way to promote change. Special efforts need to be made to facilitate meaningful participation of marginalized groups to ensure that the needs of poor men and women, and boys and girls, are addressed.

Successful strategies to transform discriminatory practices should be based on targeted policy interventions using evidence collected from the local to the global levels. The use of evidence in policy reform and implementation is a political process. Its success depends on the capacity to provide quality and trustworthy experience on the one hand with the willingness and capacity of policymakers to use it on the other. This guidance note thus strongly advocates for effective partnerships between policymakers and other partners to support the availability, utility and understanding of gender-disaggregated data and gender indicators.

Annex E
Guidance Note on Integrating a Human Rights-Based Approach into Poverty-Environment Mainstreaming

E.1 Background

Since 1997, the United Nations has emphasized the link between human rights and development, and in 2003, the UN agencies adopted a "Statement of Common Understanding on Human Rights-Based Approaches to Development Cooperation and Programming." The human rights principles guiding development programming as identified in the UN Common Understanding are as follows:

- Universality and inalienability
- Indivisibility, interdependence and interrelatedness
- Equality and non-discrimination
- Participation and inclusion
- Accountability and rule of law

All of these principles are highly relevant to poverty-environment mainstreaming.

A human rights–based approach to poverty reduction underlines the multidimensional nature of poverty. It understands poverty in terms of a range of interrelated and mutually reinforcing deprivations, and draws attention to the stigma, discrimination, insecurity, social exclusion and other dimensions of poverty that may result in special vulnerabilities and multiple discriminations—e.g. of poor women.

Unlike earlier approaches to poverty reduction, a human rights–based approach attaches great importance to the processes enabling achievement of development goals. It emphasizes active and informed participation by the poor and marginalized in the formulation, implementation and monitoring of poverty reduction and pro-environmental strategies. It also promotes access to productive and environmental resources and participation in public life, all of which are important in overcoming economic, social and political marginalization.

Considering and integrating a human rights–based approach into poverty-environment mainstreaming offers the opportunity to develop the following:

- Improved understanding of who the poor are, where they live, what their specific situation is, including subgroups of the poor especially rural/urban women, the landless, youth and indigenous peoples
- Better formulation of vision, objectives and target setting in poverty-environment programming through acknowledging the rights and aspirations of the poor and their required capacities to claim their rights, as well as the capacities duty bearers require to fulfil those rights, and the necessary institutional/policy framework; and by integrating both the rights holder and duty bearer dimensions into policies, plans, programmes and budgets

- Heightened transparency and accountability in poverty-environment and sectoral programming
- More effective and sustainable programming related to poverty and the environment (through having better access to information and fuller participation of the poor in programme design, etc.)
- Better monitoring and evaluation of progress (through measurement against a more robust baseline relating to the poor and their actual needs, and to duty bearers in terms of their capacity and commitment to respond)
- Greater credibility and sustainability of poverty-environment mainstreaming

E.2 Integrating a Rights-Based Approach into Poverty-Environment Mainstreaming

Making the Case

The essential idea underlying the adoption of a human rights–based approach to poverty-environment mainstreaming is that policies and institutions for poverty reduction should be based explicitly on the norms and values set out in international human rights and environmental law. Whether explicit or implicit, norms and values shape policies and institutions. A human rights–based approach offers an explicit normative framework—that of international human rights standards—and environmental governance and can make the case for poverty-environment mainstreaming in several ways:

- By urging the adoption of poverty-environment strategies underpinned by human rights and environmental standards
- By addressing the discrimination/exclusion that generates and sustains poverty and unsustainable use of natural resources and inhibits access of the poor to ecosystem services and productive resources such as water, land and energy
- By including the right to information, public participation and justice into development programmes and adding legitimacy to the demand of meaningful participation of the poor in decision-making
- By strengthening accountability measures and social and environmental safeguards
- By strengthening advocacy for poverty-environment mainstreaming and the right to a clean environment in public debates and the media

Mainstreaming into National Planning and Budgeting Processes

Identifying the poor. Any strategy for poverty reduction begins with an identification of the poor, ideally disaggregated to include data on special groups such as women, the rural/urban poor, indigenous peoples, and internally displaced and other marginalized entities. A person's or group's poverty level should not be measured only in terms of available income, whether set at one or two dollars a day. From a human rights perspective, poverty exists for those who lack the capability to claim for themselves an adequate standard of living, especially including access to adequate food and housing. Extreme poverty exists for those who suffer from outright hunger and/or homelessness and who have no access to productive resources including water, land and energy. Equality measurements, such as the Gini coefficient, should also be included.

Expanding participation of the poor. The 1998 Aarhus Convention on Access to Information, Public Participation in Decision-making and

Access to Justice in Environmental Matters states that these elements of access and participation are essential to assert every person's right to live in an environment adequate to his or her health and well-being and that of present and future generations (UNECE 1998). There are four stages in expanding participation of the poor: revelation of preferences; policy choice; implementation; and monitoring, assessment and accountability.

Preference revelation is the initial stage of any policy formulation and involves people being given the opportunity to express what objectives they want to achieve. Consultations with stakeholders and participatory planning workshops through existing national civil society platforms of the UN Country Team advisory group or as part of stakeholder and inception meetings are an important first step. PEI Uruguay has been successful in empowering poor waste collectors to become organized and formalize their sector through health and social insurance and cooperatives, see the PEI website for more information.

The right of people to participate in decision-making that affects them needs to be secured by governments creating a legal-institutional framework in which people living in poverty can participate effectively, including in the process of setting priorities and benchmarks that guide the process. In practice, this means that when poverty-environment policy options are being explored by experts, the implications of the various options for the interests of the poor should be made transparent and presented in an understandable manner and in consultation with those concerned. Stakeholder representatives should be invited as experts or trainers to national and regional workshops. Although policy implementation is the responsibility of government as the main duty bearer, opportunities can also be created to enable the poor to exercise their right to participate actively and meaningfully, especially where implementation occurs at the community level and when decentralized models of local government are used.

Monitoring and Evaluation Leading to Accountability and Transparency

Monitoring and evaluation of poverty-environment programmes are closely linked to accountability and transparency. From a rights-based approach perspective, the objective of monitoring is twofold: (i) to help identify, on an ongoing basis, the areas in which state actors may need to concentrate in order to attain their targets for the realization of human rights and environmental standards; and (ii) to enable the rights holder to hold authorities accountable for their possible failure to do so. Enhanced monitoring and evaluation with a pro-poor focus is likely to improve programme performance and better assess development impacts on poverty.

Poverty-environment mainstreaming efforts can work to build accountability mechanisms that are nationally appropriate, accessible, transparent and effective in strengthening overall monitoring and evaluation systems and capacities for poverty-environment mainstreaming—and thus also contribute to longer-term sustainability of the poverty-environment mainstreaming approach. These mechanisms might include stronger partnerships with parliament, civil society and the media to monitor government performance; and the addition of strategic human rights champions to complement the creative and effective contributions made by poverty-environment champions in many countries. Guidelines and model contracts for foreign direct investment developed by PEI Lao PDR (outlined in box 8.4) and the PEI advocacy for the Philippines to sign onto the Extractive Industries Transparency Initiative (EITI) are good examples of accountability and

transparency initiatives. The EITI increases transparency of payments by companies from the oil and mining industries to governments and government-linked entities, as well as of revenues by those host country governments. A number of PEI countries have adhered to EITI and disclose their revenues from extractive industries; see http://eiti.org for more detail.

E.3 Engaging with Stakeholders

Civil society actors at the national and global levels have developed substantive capacity and influence in a range of development issues and have an important monitoring role with regard to the delivery of public commitments and policies. Partnering with these actors can contribute to the effectiveness of development interventions, especially with respect to marginalized and vulnerable groups. Transparent budgets; accountable public expenditures; and long-term, systematized participatory monitoring and evaluation of poverty-environment issues and programme sustainability will be greatly aided by the advocacy and support of poverty-environment stakeholders including parliaments. Chapter 3 describes the opportunities and challenges of working with major stakeholders for poverty-environment mainstreaming. Media, another potential partner in poverty-environment mainstreaming efforts, is not discussed here; see annex F for more information on working with the media.

Civil Society Organizations

Many civil society organizations have a proven capacity for both broad-based mobilization and creating bottom-up demand that fosters responsive governance. Civil society is generally seen as the full range of formal and informal organizations that are outside the state and market. This definition encompasses social movements; volunteer, indigenous peoples', mass-based membership, non-governmental and community-based organizations; as well as communities and citizens acting individually and collectively. Civil society participation contributes to three critical objectives:

- Enhancing accountability and transparency
- Expanding equity and cohesion
- Generating public legitimacy and social enforcement for new policies

Engagement with civil society actors should take place through existing national or local platforms, where possible, including their serving as representatives on national steering committees or as experts and resource persons for capacity-building activities. Indigenous peoples and their traditional knowledge are especially important for poverty-environment mainstreaming; they are also often negatively affected by mining and other extractive activities on their lands and territories.

Parliaments

Human rights and environmental standards can guide national development and should be adhered to and utilized by parliaments and legislators in their day-to-day work. This includes ensuring that these standards are applied nationally, particularly in relation to marginalized groups. It also includes addressing the human rights of women, internally displaced persons, minorities, indigenous peoples, the disabled and the aged. Parliaments are critical to monitoring service delivery and efforts to reduce poverty and to ensuring the sustainable use of natural resources. They can be most effectively engaged through the various parliamentarian groups on the environment, human rights, etc.

National Human Rights Institutions

These institutions are state bodies with a constitutional and/or legislative mandate to protect and promote human rights. Although part of the state apparatus and funded by the state, national human rights institutions operate and function independently of the government. While their specific mandates may vary, their general role is to address discrimination in all its forms, as well as promote the protection of all human rights—including the right to a safe environment. Core functions of national human rights institutions include handling complaints, providing human rights education and making recommendations on legal reform.

The Private Sector

It is recommended to engage strategically with representative umbrella organizations or with carefully selected sectors or companies (using criteria outlined in the UNEP Partnership Policy and Procedures as a guide, and with provisions made for due diligence processes). Small and medium-size enterprises at the local level can have high potential for poverty reduction. As outlined in chapter 8, poverty-environment mainstreaming can be highly relevant in the regulation of both public and private investment—including in the use of international guidelines on human rights, environmental standards and private business such as the following:

- **United Nations guiding principles on business and human rights** set out clear expectations of what governments and enterprises should do to ensure that human rights are not harmed by business activities.
- **OECD guidelines for multinational companies** include far-reaching recommendations addressed by governments to multinational enterprises operating in or from adhering countries. They provide voluntary principles and standards for responsible business conduct in areas such as employment and industrial relations, human rights, the environment, information disclosure, combating bribery, consumer interests, science and technology, competition and taxation.
- **The OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas** provides management recommendations for globally responsible supply chains of minerals to help companies respect human rights and avoid contributing to conflict through their mineral or metal purchasing decisions and practices.
- **National and regional laws and regulations on responsible supply chains and the fight against illegal exploitation of natural resources**, examples of which include the Dodd-Frank Wall Street Reform and Consumer Protection Act (United States) and the Protocol on the Fight against the Illegal Exploitation of Natural Resources which forms part of the 2006 Pact on Security, Stability and Development in the Great Lakes Region (Africa).

Annex F
Guidance Note on Advocacy and Strategic Communications

For poverty-environment advocacy, communication is aimed at contributing to evidence-based policy and building a shared understanding that can lead to change in favour of the poor and environmental sustainability. It is about creating space for the voices of the poor to be heard. Targeted communication helps broaden the impacts of new poverty-environment policies and attracts and fosters strong partnerships with important stakeholders. Routine and strategically executed communications ensure the visibility of poverty-environment mainstreaming among critical sources of support: government officials, donors, development practitioners, national stakeholders, poverty-environment champions, international organizations and the private sector.

Methods and media must be carefully selected for effective advocacy. Communications need to be adapted to the country context using facts and figures from relevant country studies and appropriate channels of communication.

This brief guidance introduces key objectives and main messages of poverty-environment mainstreaming, as well as tools that are commonly used at the country level for effective advocacy.

F.1 Objectives and Main Messages

The Five Interlinked Key Objectives of Poverty-Environment Mainstreaming

The story of mainstreaming poverty and environment is one of finding integrated solutions to development planning and transitioning to more resource-efficient, resilient forms of growth that help bring multiple social, economic and environmental benefits. The close interaction between poverty and environment is reflected through five interlinked key objectives:

- Sustainable use of natural resources
- Adaptation to climate change
- Poverty reduction
- Equity, especially for marginalized groups (including women and indigenous peoples)
- Inclusive green growth

Seven Strategic Communication Objectives

To achieve the key objectives, we need to communicate smartly. Seven strategic communication objectives guide how to deliver our vision and main messages to decision-makers and other stakeholders, the target audiences:

- To **promote a strategic vision for poverty-environment mainstreaming** based on national development objectives—economic growth, sustainable development,

poverty reduction, social inclusion and equity, and increased investment in environmental services—by using scientific and economic evidence to drive political decisions and promote policy, institutional and behavioural change that addresses the needs of poor and marginalized communities

- To **raise awareness among decision-makers** to enable them to influence and make changes at the policy level and promote issues related to poverty-environment mainstreaming
- To **identify key stakeholders and high-profile champions** of poverty-environment mainstreaming who can influence policy, institutional and behavioural change regarding the importance of poverty-environment objectives for economic and social development
- To **ensure effective participation by all stakeholders** (including non-state actors and the private sector) in poverty-environment mainstreaming processes including studies, policy-level dialogues and social debates of national importance
- To **develop and maintain partnerships** with the scientific community, non-state actors and the private sector; support capacity strengthening; and create synergies
- To **facilitate information sharing and lessons learned on good practices** on poverty-environment mainstreaming both at the local government level and upwards to national decision-making
- To **raise awareness among the general public** to support decisions that effectively address poverty-environment challenges

Main Messages on Poverty-Environment Mainstreaming

Once you understand your target audience(s), you should have a clearer idea of what you can say to convince them to support poverty-environment key objectives. Different ways of conveying the same information may be needed for different audiences. Simple, clear and concise messages can be effective everywhere.

To maximize impact, it can be useful to extract two or three main messages. Repetition of a few messages not only extends the number of people you can reach, but makes what you say more convincing for those who hear it multiple times (UNDP Office of Communications, n.d.). Here are four main messages you can use to tell the story of poverty-environment mainstreaming:

1. Eradicating poverty is an indispensable requirement for sustainable development.

- Although the MDG 1 target of halving extreme poverty has been met, more than 1 billion people still live in dire poverty.
- In "The Future We Want," the UN Conference on Sustainable Development (Rio+20) recognized that "Eradicating poverty is the greatest global challenge facing the world today and an indispensable requirement for sustainable development" (UNCSD 2012).

2. Economic growth alone will not eradicate poverty.

- Twentieth-century development strategies failed to lift the world's poorest communities out of poverty. About one in five people in developing regions lives on less than $1.25 per day.
- The sustainability of the environment, once mistakenly thought to compete with economic development, is now understood to be complementary and

necessary to "end poverty in all its forms everywhere."[1]

3. Inequality harms growth and poverty reduction.

- Income inequality increased by 11 per cent in developing countries between 1990 and 2010; inequality hurts growth and poverty reduction.
- Poverty falls disproportionately on women. Of the 1.2 billion people across the world who live in hunger, 7 out of 10 are women and girls.

4. Poverty-environment mainstreaming helps eradicate poverty, reduce inequality and combat environmental degradation.

- Economic development and poverty reduction strongly depend on improving management of the environment and natural resources, the "natural capital" of the poor.
- New tools of economic analysis and transparency that reveal the true value of natural capital and sustainable ENR management mobilize support for poverty-environment mainstreaming within government.
- To ensure that the benefits gained through poverty-environment mainstreaming initiatives are sustained, international, regional and national institutions should embrace poverty-environment mainstreaming within their own organizations and practices.

[1] Goal 1, Open Working Group Proposal for Sustainable Development Goals, Sustainable Development Knowledge Platform, https://sustainabledevelopment.un.org/focussdgs.html, accessed 26 February 2015.

F.2 Communication Tools

The choice of an appropriate communication tool depends on understanding how your target audience receives and understands information. Some may prefer more technical messages packaged in a report or policy brief, while simple slogans or stories that convey your core objectives may be more appropriate for others. This section provides good practices to follow once you have selected the right tool or medium for your audience, and summarizes do's and don'ts for writing in various formats.

A **fact sheet** (box F.1) is a short summary, generally a page or two, that quickly and easily answers questions about an issue or set of activities. Fact sheets provide useful background information; help officials focus on key points; and may serve as a summary of a briefing or presentation, helping listeners retain the information that has been presented.

Box F.1 Fact Sheet

Characteristics

- Contains 1–3 key points
- Points are supported with simple, striking data
- May include 1–3 policy or programme implications

Tips

- Avoid technical terms
- Include full contact information for those seeking further details

Examples

- Tanzania fact sheet (UNDP-UNEP PEI, n.d.)
- "Revisão da Despesa Pública do Sector Ambiental, Moçambique, 2005–2010" (UNDP-UNEP PEI, n.d.)

A **policy brief** (box F.2) is a concise summary of a particular issue, the policy options to deal with it and some recommendations on the best option. It is aimed at government policymakers and others who are interested in formulating or influencing policy. Typically, policy briefs are about two pages long (about 700 words); longer briefs can be up to 8 pages, or 3,000 words. If possible, policy briefs should be attractively designed and include one or more photographs (FAO 2011a).

Working papers (box F.3) are research reports, technical papers, discussion papers and

Box F.2 Policy Brief

Characteristics

- Short and to the point
- Focused on a particular problem or issue with enough detail for readers to make a decision and sufficient urgency to compel them to do so
- Based on firm data/evidence from various sources—preferably from several areas/organizations

Tips

- Provide information on alternatives
- Focus on meanings, not methods
- Relate context-specific findings to the big picture; draw conclusions that are generally applicable

Examples

- "Support to smallholder arable farmers in Botswana: agricultural development or social protection?" (UNDP-UNEP PEI 2013c)
- "Ecosystem services and poverty alleviation: A case study of land use in Oudomxay province" (UNDP-UNEP PEI 2012a)

Box F.3 Working Paper

Contents

- Title summarizing the paper in 10 words or less
- Abstract covering contributions, approach and results
- Introduction including background, overview and contributions
- Disclaimer
- Summary of research approach
- Body of the report
- Results and conclusions, including broader implications

Tips

- Organize the paper with a logical flow
- Compare with relevant existing methods
- Use footnotes or endnotes, and include a reference list of works cited in the paper
- Include tables, graphs or annexes presenting data from the research or giving further details about the research method
- Use plain English and technical language as appropriate; jargon is permissible as necessary

Examples

- "Poverty and Social Impact Analysis of the Integrated Support Programme for Arable Agriculture Development in Botswana" (Marumo et al. 2014)
- "Reducing Climate-Sensitive Disease Risks" (World Bank 2014b)
- "Local Governance and Climate Change" (UNDP, UNCDF and UNEP 2010)

occasional papers covering original research. A working paper is a useful vehicle for publishing research results quickly and to explore ideas through discussion with practitioners in the field, eliciting their feedback on new findings or methods (Scandlyn 2003).

Press releases (box F.4) are written communications directed at members of the news media in order to publicize something newsworthy.

Box F.4 Press Release Tips

- Confirm the basic facts of the story
- Write a catchy headline
- Summarize what is newsworthy in a lead sentence
- Provide background and human interest
- Get the name of and other relevant facts about people cited (e.g. current occupation, role in mainstreaming poverty-environment)
- Include quotes from relevant people to add authenticity to the story; include their short titles and agency names
- Use a picture, video or sound bite if possible to accompany your written piece
- Be sure to include numbers (of people assisted, money provided, etc.)
- Write in the active rather than passive voice
- Present the most relevant data, especially if the data are new or unusual
- Stick to concrete details to define problems and illustrate solutions
- Let the facts tell the story
- Write simply and plainly; avoid jargon and florid or unusual language
- Avoid unfamiliar or unnecessary acronyms (e.g. spell out "Poverty-Environment Initiative" rather than "PEI")
- Give credit where credit is due—name partners and donors
- Put yourself in the shoes of the reader: Would you want to read this story?

A **media advisory** (box F.5) announces an upcoming newsworthy event or activity. Advisories are usually issued several days before an event. Press releases may be issued at the start of major actions—e.g. report launches, global meetings, country delegation visits—as appropriate. Press conferences may be organized in cooperation with donor agencies on relevant occasions and major events.

Box F.5 Media Advisory Tips

- Keep it short
- List the event, its participants, date and location
- Include the name and phone number of a contact person for the press
- Spell out the purpose of the event
- Write a strong headline and lead sentence, but do not reveal the news you will be releasing
- Follow up with journalists you believe will cover the event or story

Tweets (box F.6) are increasingly used by organizations to report breaking news or attract a dedicated following.

Box F.6 Tweet Tips

- Stick to essentials: messages are limited to 140 characters including spaces
- Include a hash tag to categorize Tweets by keyword to help them show more easily in a Twitter search (e.g. #povertyenvironment)
- Include quotes to boost audience and media interest
- Use a personal tone or give a first-person perspective where possible/appropriate
- Illustrate the story whenever possible with a photo or video clip

Table F.1 summarizes the major aspects of strategic communications on poverty-environment mainstreaming, including details on and examples of target groups, messages, results, actions, and methods and tools. For further guidance on communication tools, see the PEI website (click on the Knowledge Resources and Services tab).

Table F.1 Strategic Communications Summary: Target Groups, Messages, Results, Actions, Tools

	Target group: MINISTERS, HIGH-RANKING GOVERNMENT OFFICIALS AND PARLIAMENTARIANS
Key messages/ content	• The impact of poverty-environment on: — The national economy — Environment and natural resources — Biodiversity — Poverty eradication — Gender equity and equality — Climate change adaptation • The relationships between poverty, ecosystem services and ENR management • The cost of action/inaction • The current and potential added value of poverty-environment mainstreaming to meet SDGs and national sustainable development goals and targets
Expected results	• Increased knowledge by policymakers of the relationship between environment and ENR management and other development challenges leads to a higher priority for poverty-environment objectives in national budgets and development planning • Decision-makers increase awareness and technical understanding of poverty-environment issues and their various implications • Increased knowledge of poverty-environment through interministerial collaboration • Decision-makers address heightened awareness of the global benefits of integrating poverty-environment

Strategic actions	• Tailor messages:
	— Produce arguments for finance and planning ministers:
	  • Respective investment yields in environment and natural resources versus other areas
	  • Cost of action/inaction
	  • Specific contribution of poverty-environment to solving single issues such as threats to biodiversity, climate change, deforestation, extractive industries, food insecurity, gender equality, health, sanitation, sustainable energy, water and poverty eradication with clear costs for each case
	— Share arguments with other line ministers (agriculture, environment, technology, etc.) and heads of government
	— Tailor documents on the same themes for parliamentarians and present them to parliamentary committees
	• Meet one-on-one with government ministers and high-level officials on the above subjects
	• In selected cases, poverty-environment champions visit high-level political decision-makers, symposia, project sites
	• In affected developing countries, request the UN Resident Coordinator/UNDP Country Team open a dialogue with the government, and consider the inclusion or strengthening of poverty-environment objectives in UNDAFs, PRSPs and other planning documents
	• Organize regional and national seminars on economic, social and environmental benefits of poverty-environment mainstreaming

(continued)

Table F.1 Strategic Communications Summary: Target Groups, Messages, Results, Actions, Tools

Methods/ tools	• Policy briefs, fact sheets, workshops • International, regional and country-level meetings, events, exhibitions and campaigns (e.g. climate summits, other multilateral environmental agreement conferences, SDG conferences, UN Environment Assembly, World Environment Day) • Websites, social media, newsletters, communities of practice • One-on-one meetings
Target group: TECHNICAL STAFF IN MINISTRIES CONCERNED WITH PLANNING, BUDGETING, SECTORAL DEVELOPMENT, CLIMATE CHANGE, ETC.; CIVIL SOCIETY AND THINK TANKS	
Key messages/ content	• Relevant scientific and technical knowledge which must be taken into account in policy formulation and disseminated to end users • Multiple relationships between poverty-environment and the economic potential of ENR (returns on investment) • Potential roles of local and regional authorities • Case studies on poverty-environment practice involving local and/or regional authorities • Instructive and good practices (shared with and among policymakers and end users)
Expected results	• National reports indicate improved assessment of the natural resource and human rights drivers of poverty • Increased knowledge of poverty-environment among government officials facilitates sound and knowledge-based policies in affected developing countries • Poverty-environment mainstreaming is raised in briefings for international negotiations and resource mobilization drives • National administrations increasingly equipped to undertake advocacy and communication initiatives at the national and local levels
Strategic actions	• Produce similar messages as for high-level officials, sometimes with more technical detail (e.g. policy briefs, fact sheets, working papers), for the civil servants who prepare dossiers and do the groundwork
Methods/ tools	• Poverty-environment economic studies, working papers, policy briefs, fact sheets, guidance notes, handbook, workshops • International, regional and country-level meetings, events, exhibitions and campaigns (e.g. climate summits, other multilateral environmental agreement conferences, SDG conferences, UN Environment Assembly, World Environment Day) • Communities of practice, websites, social media, newsletters

(continued)

Table F.1 Strategic Communications Summary: Target Groups, Messages, Results, Actions, Tools

Target group: UN SYSTEM , INTERGOVERNMENTAL ORGANIZATIONS AND BILATERAL DONORS	
Key messages/ content	• The impact of poverty-environment on: — The economy — The environment and natural resources — Biodiversity — Poverty eradication — Gender mainstreaming — Climate change • The cost of action/inaction • The benefits for all concerned — Stakeholders in building communication — Partnerships and a clearing-house mechanism for promoting poverty-environment mainstreaming • Press material • Poverty-environment–related scientific findings
Expected results	• UN system and international institutions that address SDGs refer prominently to poverty-environment mainstreaming • Opportunities increased for substantive dialogue on poverty-environment with national authorities in affected developing countries • Increased technical support provided to governments in addressing poverty-environment • Other stakeholders receive increased support for poverty-environment from UN institutions • Increased advocacy for poverty-environment incorporated into UNDAFs and PRSPs • Poverty-environment taken into account in UN activities, whether operational or normative, pertaining to major global challenges and SDGs • Enhanced and more coherent UN system-wide communications on poverty-environment
Strategic actions	• Establish an agreement/memorandum of understanding at the highest level among concerned UN agencies and other partners to jointly promote poverty-environment • A joint mailing of a letter by heads of agencies to their respective staff members, giving poverty-environment promotion due priority and weight • Disseminate appropriate poverty-environment information to UN staff on the ground through UN web portals and emails • Discuss with the UN Staff College in Turin and other relevant training institutions the introduction of poverty-environment among the topics taught, e.g. at the Partnership for Action on Green Economy (PAGE) Academy, and prepare training material accordingly • Build ad hoc partnerships linking the communication officers of the respective institutions
Methods/ tools	• Poverty-environment economic studies, working papers, policy briefs, fact sheets, guidance notes, handbook, workshops • International, regional and country-level meetings, events, exhibitions and campaigns (e.g. climate summits, other multilateral environmental agreement conferences, SDG conferences, UN Environment Assembly, World Environment Day) • Communities of practice, websites, social media, newsletters, emails • One-on-one meetings

(continued)

Table F.1 Strategic Communications Summary: Target Groups, Messages, Results, Actions, Tools

Target group: MEDIA, ADVOCACY GROUPS AND PUBLIC CAMPAIGNS, POVERTY-ENVIRONMENT CHAMPIONS	
Key messages/ content	• Quarterly press information on substantive poverty-environment issues • Reports illustrating the relationship between ENR and the major poverty challenges • Cutting-edge economic analysis and scientific findings specially "digested" and packaged for wide dissemination to non-specialist personnel • Technical information (including digests of scientific findings) for use by community media • Statements/declarations to the media in relation to ongoing debates on burning issues affected by or having a bearing on poverty-environment • "Stories of change" on poverty-environment experience and practices
Expected results	• Increased reporting of poverty-environment–related issues by the media in association with relevant major global challenges • Increased media articles on poverty-environment and its effect on major global challenges • Public opinion and decision-makers better informed on poverty-environment and ENR issues • Media reports increase public opinion and support for investing in poverty-environment mainstreaming • Influential journalists report on poverty-environment issues more frequently and provide in-depth analyses • Mainstream and alternative media with a strong outreach ability to end users (pastoralists, farmers, local cooperatives, etc.) are better equipped to address poverty-environment • Partnerships with media at the local level established (through regional and country offices, UN presence in situ and/or non-governmental or community-based organizations) to disseminate hands-on information to end users
Strategic actions	• Target a core group of influential international print and broadcast media and journalists; update the database regularly • Distinguish mainstream media and alternative influential sources of information such as much-visited websites, specialized references, web-based data banks, or sources of scientific or economic information • Establish and maintain a roster of experts and officials (including from countries) with their areas of competence for media interviews • Identify and recruit high-profile champions to provide a face and voice to present poverty-environment issues to the media and the general public; keep champions well briefed on single issues and communication opportunities • Engage in communication partnerships, share responsibilities for the production of press material and media outreach • Prepare press material: — The "story of the month" — Ad hoc documents, piggy-backing on debates around current hot issues (keep a calendar of forthcoming events) • Specific material for community media outlets • Dispatch monthly information • Provide access to situations and people particularly for broadcast media

(continued)

Table F.1 Strategic Communications Summary: Target Groups, Messages, Results, Actions, Tools

Strategic actions (cont'd)	• Conduct training sessions for journalists in partnership with specialized organizations • Involve leading environment and economic journalists as resource persons in some of the main events • Regularly provide UNEP Regional Officers and UNDP Country Teams with information they can relay to local media outlets • Share social media (blogs, images, FAQs, testimonials, thunderclaps, videos) with journalists, champions and across poverty-environment networks
Methods/ tools	• International, regional and country-level meetings, events, exhibitions and campaigns (e.g. climate summits, other multilateral environmental agreement conferences, SDG conferences, UN Environment Assembly, World Environment Day) • Media/journalist trainings on the poverty-environment dimension of major global challenges • On-site visits with journalists showing poverty-environment in action • Press releases, op-eds by leaders and experts, interviews, speeches • Television/radio broadcasts, video productions, film festival screenings • Social media (microblogs, images, FAQs, cartoons, testimonials, thunderclaps, videos) • Champion briefings/trainings (policy briefs, fact sheets, exhibitions, talking points, speechwriting) • Special content for community-based/local media • One-on-one meetings

Note: UNDAF = United Nations Development Action Framework.

Annex G
Poverty-Environment Mainstreaming Tools

Poverty-environment mainstreaming tools are critical to supporting the integration of poverty-environment objectives in development planning, budgeting and monitoring. The principal tools applied in the mainstreaming process are summarized below.

Institutional and context analysis. An ICA helps identify the most effective entry points for poverty-environment mainstreaming. It focuses on political and institutional factors, as well as on processes concerning the use of national and external resources in a given setting and how these have an impact on the implementation of poverty-environment objectives. More information can be found in annex A of this handbook and in UNDP's Institutional and Context Analysis Guidance Note.

Economic assessments of the value of inclusive natural resource sustainability. Providing economic evidence of how environmental sustainability contributes to poverty reduction and other national development goals such as gender equality is an important component of the poverty-environment mainstreaming process. Economic-based analysis and argumentation for pro-poor sustainable environmental investments can be most effective in convincing decision-makers of the importance of environmental sustainability in achieving development goals. A communication strategy can help in clearly conveying the results of the analysis. More information can be found in the PEI publication *Making the Economic Case: A Primer on the Economic Arguments for Mainstreaming Poverty-Environment Linkages into Development Planning* (UNDP-UNEP PEI 2008) and the economic valuation and analysis section of the PEI website.

Cost-benefit analysis. A CBA is a systematic process for identifying, valuing and comparing costs and benefits of a project (Buncle et al. 2013). It helps determine whether the benefits of a project outweigh its costs, and by how much relative to other alternatives. The objective is to determine whether the proposed project is (or was) a sound decision or investment, and/or compare alternative project options and make a decision on the preferred option. Ultimately, a CBA helps inform decisions about whether to proceed with a project or not, and to choose which project option to implement where there are several options. A CBA can include a gender lens and examine the costs and benefits of closing the gender gap in a certain sector (e.g. agriculture). In the context of poverty-environment mainstreaming, a CBA can help build an argument for more pro-poor and environmentally sustainable investments. For more information on this tool, see the Guidance Note on Poverty available on the PEI website.

Poverty and social impact analysis. A PSIA is an analytical approach used to assess the distributional and social impacts of policy reforms on different groups, e.g. men, women, youth, poor or minority groups (World Bank 2013). It can be carried out ex ante or ex post policy reform. If conducted before or during the reform process, the analysis can provide a sound empirical basis to inform the design and sequencing of

alternative policy options. If conducted after the reform, the PSIA can help assess the actual impacts of the policy, which can suggest ways to mitigate any adverse effects and help decision-makers understand the likely impacts of future reforms. For more information on this tool, see the Guidance Note on Poverty available on the PEI website.

Environmental fiscal reform. EFR refers to a range of taxation and pricing measures that can raise fiscal revenues while promoting environmental goals. EFR includes taxes on natural resource use, pollution charges, fees charged for environmentally damaging practices, and reducing and/or restructuring environmentally harmful subsidies. EFR can also help ensure that benefit-sharing mechanisms exist between state or private sector resource extractors and local communities that live in the vicinity of, or benefit from the use of, the resource. In designing EFR measures, their impact on different groups, including women, should be kept in mind. For more information on this tool, see the OECD Guidelines on Environmental Fiscal Reform for Poverty Reduction (OECD 2005) and a training manual based on the guidelines (Cottrell and Schlegelmilch, n.d.) available on the PEI website.

Public expenditure reviews. Review of how public funds are spent by government across sectors and nationally and/or subnationally can help identify what was spent, what was achieved as a result and whether the results achieved meet pro-poor and environmentally sustainable development objectives. It also provides an assessment of the performance and efficiency of the institutional mechanisms governing expenditure and reporting. **Public environmental expenditure reviews** help point out to decision-makers the level of public sector financing in support of environmental management across sectors, the benefits arising from these investments, and the potential for strengthening social and economic benefits and institutional efficiencies by making changes in public budgeting and expenditure frameworks. **Climate public expenditure and institutional reviews** examine climate adaptation and mitigation–related expenditures across budgets. This includes looking at recurrent and capital development spending; institutional frameworks related to climate financing, including between central and subnational levels; and the results from climate-related expenditure against pro-poor and environmental sustainability development objectives. PEERs and CPEIRs have been useful in making the case for increased expenditure to pro-poor environmental management and climate change adaptation. For more information, see the public expenditure reviews section of the PEI website.

Environmental impact analysis. Environment impact analysis provides information not only on the overall extent of expenditure and the costs and benefits of certain investments, but also the effects of these public and private investments on the environment and to the people. When undertaking such an analysis, the impacts of public and private investments on different groups (women, indigenous peoples, etc.) should be taken into account. An **environmental impact assessment** is used to identify the environmental, social and economic impacts of a project prior to decision-making. It aims to predict environmental impacts at an early stage in project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment, and present the predictions and options to decision-makers. Both environmental and economic benefits can be achieved through an environmental impact assessment, such as reduced cost and time of project implementation and design, avoided treatment/clean-up costs and impacts of laws and regulations. A **strategic environmental assessment**

enables the integration of environmental considerations—alongside social and economic aspects—into policies, plans and programmes. It provides the environmental evidence to support more informed decision-making, and to identify new opportunities by encouraging systematic and thorough examination of development options. A strategic environmental assessment might be applied to an entire sector (e.g. a national policy on energy) or to a geographical area (e.g. in the context of a regional development scheme). It does not replace or reduce the need for a project-level environmental impact assessment (although in some cases it might), but it can help streamline and focus the incorporation of environmental concerns into the decision-making process. For more information, see OECD's "Good Practices for Environmental Impact Assessment of Development Projects" and Applying Strategic Environmental Assessment: Good Practice Guidance for Development Co-Operation (OECD 1992, 2006).

Ecosystem assessment. An ecosystem assessment looks at the interlinkages between the natural environment and human well-being within a particular ecosystem. Such an assessment should consider both the ecosystems from which services are derived and the people who depend on and are affected by changes in the supply of services, thereby connecting environmental and development sectors. When considering impact on people, it is important to disaggregate the population by gender, ethnicity, etc., as appropriate to the particular context. Ecosystem assessment plays an important role in the decision-making process by responding to decision-makers' need for information, highlighting trade-offs between decision options, and modelling future prospects to avoid unforeseen long-term consequences. For more information, see Ecosystems and Human Well-Being: A Manual for Assessment Practitioners, available on the UNEP website, and the integrated ecosystem assessments section of the PEI website.

Vulnerability assessment. A vulnerability assessment is essential in responding to future climate risks. It helps define the nature and extent of the threat that may harm a given human or ecological system, providing a basis for developing measures that will minimize or avoid harm. Vulnerability assessment provides a means to understand how different groups, including women, will be affected by climate change and to identify adaptation measures based on needs and priorities. There are various methodologies available to assess climate risk and vulnerability at various scales (local, national, regional). For more information on this tool, see the Guidance Note on Poverty available on the PEI website.

Glossary

Budgeting. The process of deciding how much public spending should be committed in the future year(s) and how it should be spent. The budgeting process differs enormously from one country to another and entails budget review, preparation, submission, allocation, approval, execution, and monitoring and reporting (Economist 2009). See also Medium-term expenditure framework.

Capacity assessment. An analysis of current capacities against desired future capacities, which generates an understanding of capacity assets and needs, which in turn leads to the formulation of capacity development strategies (UNDP 2007). See also Institutional and capacity strengthening or development.

Champion (poverty-environment). Practitioner who takes on the role of advocating the integration of poverty-environment considerations into development planning at national, sector and subnational levels. Champions include high-level decision-makers and government officials who serve as ambassadors for poverty-environment mainstreaming.

Civil society. The voluntary civic and social components of society. In 1992, at the United Nations Conference on Environment and Development, governments agreed on the following definition of major civil society groups: farmers, women, the scientific and technological community, children and youth, indigenous peoples and their communities, workers and trade unions, business and industry, non-governmental organizations and local authorities. Since then, the concept of civil society has continued to evolve, with different views of how it should be defined. In relation to the environmental field, civil society can be categorized under the following groups: service delivery, representation, advocacy and policy inputs, capacity-building and social functions (UNEP 2004a). See also Non-governmental actor and Stakeholder.

Climate change. A statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer). The United Nations Framework Convention on Climate Change, in Article 1, defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods." The convention thus makes a distinction between climate change attributable to human activities altering the atmospheric composition and climate variability attributable to natural causes (IPCC 2009).

Climate change adaptation. Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. Various types of adaptation can be distinguished, including anticipatory, autonomous and planned adaptation (IPCC 2009).

Climate change mitigation. Any anthropogenic intervention to reduce the sources or enhance the sinks of greenhouse gases (IPCC 2009).

Climate public expenditure and institutional review (CPEIR). A CPEIR is a methodology that

allows an analysis to be made of how climate change–related expenditure is being integrated into national budgetary processes and helps ensure that money spent for climate change is allocated more effectively. This analysis has to be set within the context of the national policy and institutional arrangements that exist to manage the response to climate change. Three key steps in the methodology include (i) policy development, (ii) institutional structures, and (iii) expenditures and public financial management.

Concession. Investment arrangement whereby land is transferred to investors, who are then responsible for all production activities (contrast with *Contract farming*).

Contract farming. Agricultural production carried out according to an agreement between the investor and farmers. Typically, the farmers agree to provide specified quantities of a specific agricultural product, in accordance with quality standards and timelines determined by the investor. In return the investor commits to purchase the product and, in some cases, to support production through the supply of farm inputs, land preparation and provision of technical advice (FAO 2010).

Cost-benefit analysis (CBA). A comparative analysis of the present value of the stream of economic benefits and costs of an activity, project, programme or policy measure over some defined period of time (the time horizon). A boundary of the analysis is also defined in order to indicate what effects are included in the analysis. The results of the cost-benefit analysis are usually presented in terms of a net present value, a benefit-cost ratio or an internal rate of return, which is the discount rate at which the present value of benefits exactly equals the present value of costs. If the internal rate of return is higher than the cost of capital or a predetermined rate of interest, the project, programme or policy measure is profitable (Dixon 2008; Dixon and Sherman 1991). See also Economic analysis.

Costing. The process of evaluating, through estimates, mathematical models and prediction of future needs, how much the implementation of a specific policy measure or the achievement of a goal or target through a set of policy measures will cost.

Economic analysis. The broad process of studying and understanding trends, phenomena and information that are economic in nature. Economic analysis can quantify the contribution of the environment to a country's economy, through revenues, job creation, and direct and indirect use of the resources by the population. By demonstrating the multiple values of the environment, expressed both in monetary and broader non-monetary terms, economic analysis can help persuade key decision-makers that sustainable management of the environment will help them achieve development goals such as poverty reduction, food security, adaptation to climate change and other measures of human well-being. See also Cost-benefit analysis and Environmental valuation.

Economic development. Qualitative change and restructuring in a country's economy in connection with technological and social progress. The main indicator of economic development is increasing GDP per capita (or gross national product per capita), reflecting an increase in the economic productivity and average material well-being of a country's population. Economic development is closely linked with economic growth (World Bank 2004).

Ecosystem. A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit (MA 2005). Ecosystems have no fixed boundaries; instead, their parameters are

set according to the scientific, management or policy question being examined. Depending on the purpose of the analysis, a single lake, catchment area or entire region could be an ecosystem (Seymour, Maurer and Quiroga 2005).

Ecosystem services. The benefits people obtain from ecosystems. These include:

- **Provisioning services**—the products obtained from ecosystems, including, e.g. genetic resources, food and fibre, and freshwater
- **Regulating services**—the benefits obtained from the regulation of ecosystem processes, including, e.g. the regulation of climate, water and some human diseases
- **Cultural services**—the non-material benefits people obtain from ecosystems through spiritual enrichment, reflection, recreation and aesthetic experience, including, e.g. knowledge systems, social relations and aesthetic values
- **Supporting services**—the services necessary for the production of all other ecosystem services, including, e.g. biomass production, production of atmospheric oxygen, soil formation and retention, nutrient cycling, water cycling and provision of habitat

The human species, while buffered against environmental changes by culture and technology, is fundamentally dependent on the flow of ecosystem services (MA 2005). See also Environment and Natural resources.

Entry point. An opportunity for influencing decision-makers to consider poverty-environment issues in the process at stake. Possible entry points include the formation or revision of a PRSP, a national development plan, a national development strategy based on the MDGs or 104 related implementation processes. The development and revision of sector strategies or plans, such as an agricultural sector plan, constitute another opportunity. Similarly, the start of the national budget allocation process or review (e.g. medium-term expenditure review) or the launch of relevant national consultation processes can prove to be excellent entry points for poverty-environment mainstreaming.

Environment. The living (biodiversity) and non-living components of the natural world, and the interactions between them, that together support life on Earth. The environment provides goods (see also *Natural resources*) and services (see also *Ecosystem services*) used for food production, the harvesting of wild products, energy and raw materials. The environment is also a recipient and partial recycler of waste products from the economy and an important source of recreation, beauty, spiritual values and other amenities (DFID et al. 2002). On the other hand, the environment is subject to environmental hazards such as natural disasters, floods and droughts and environmental degradation (e.g. soil erosion, deforestation).

Environmental fiscal reform (EFR). Taxation and pricing instruments aimed at improving environmental management, including taxes on the exploitation of natural resources (e.g. forests, minerals, fisheries), user charges and fees (e.g. water charges, street parking fees, permits or licenses on ENR), taxes or charges on polluting emissions (e.g. air pollution) and reforms to subsidies (e.g. on pesticides, water, energy).

Environmental impact assessment (EIA). An assessment of the intended and unintended environmental consequences of a proposed investment project. The purpose of an EIA is to ensure that environmental impacts are taken into account during project approval.

Environmental mainstreaming. The integration of environmental considerations into policies, programmes and operations to ensure their sustainability and to enhance harmonization of environmental, economic and social concerns (EC 2007).

Environmental sustainability. The longer-term ability of natural and environmental resources and ecosystem services to support continued human well-being. Environmental sustainability encompasses not just recognition of environmental spillovers today, but also the need to maintain sufficient natural capital to meet future human needs (Seymour, Maurer and Quiroga 2005).

Environmental valuation. The process of placing monetary value on environmental goods or services that do not have accepted prices or where market prices are distorted. A wide range of valuation techniques exist and are suited to address different issues (e.g. survey-based techniques, changes in production, hedonic approaches and surrogate markets) (Dixon 2008; Dixon and Sherman 1991). See also Economic analysis.

Expropriation. The seizure of private property by the state for public use or benefit.

Extractive industries. Primary activities involved in the extraction of non-renewable resources, such as mining, quarrying, dredging, and oil and gas extraction.

Fair and equitable treatment. A standard of treatment in international investment agreements that requires host governments to accord full or constant protection and security to foreign investments and not to impair the management, maintenance, use, enjoyment or disposal of foreign investments by unreasonable or discriminatory measures (UNCTAD 2009).

Foreign direct investment (FDI). Investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate) (UNCTAD 2010a).

Gender responsive budgeting (GRB). Government planning, programming and budgeting that contributes to the advancement of gender equality and the fulfilment of women's rights. It entails identifying and reflecting needed interventions to address gender gaps in sector and local government policies, plans and budgets (UN Women, n.d.).

Green economy. One that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities (UNEP 2008a). In its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive.

Green growth. Fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies. It provides a practical and flexible approach for achieving concrete, measurable progress across its economic and environmental pillars, while taking full account of the social consequences of greening the growth dynamic of economies (OECD 2011).

Gross domestic product (GDP). The total final output of goods and services produced within a country's borders, regardless of whether ownership is by domestic or foreign claimants (Dixon and Sherman 1991).

Household poverty assessment. Collection and analysis of data on the determinants of

poverty. Increasingly, this includes environmental factors such as access to water and energy (Brocklesby and Hinshelwood 2001).

Institutional and capacity strengthening or development. The process through which the abilities of individuals, organizations and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner are obtained, strengthened, adapted and maintained over time. It entails building relationships and values that will enable individuals, organizations and societies to improve their performance and achieve their development objectives. This includes change within a state, civil society or the private sector; and change in processes that enhance cooperation between different groups of society. Capacity development is a concept broader than organizational development as it includes an emphasis on the overall system, environment or context within which individuals, organizations and societies operate and interact. See also Capacity assessment.

Integrated ecosystem assessment. An assessment of the condition and trends in an ecosystem; the services it provides (e.g. clean water, food, forest products and flood control); and the options to restore, conserve or enhance the sustainable use of that ecosystem through integrated natural science and social science research methods (MA 2005).

International investment agreement. A treaty between two or more countries that addresses protection, promotion and liberalization of cross-border investment (including FDI). International investment agreements include bilateral investment treaties, regional economic agreements with provisions on foreign investment and multilateral agreements with direct implications for FDI.

Investment contract. A written agreement between a foreign investor and the host government or a local community that (i) grants rights with respect to natural resources or other assets controlled by the host government or a local community; and (ii) is relied upon by the foreign investor in establishing or acquiring a covered investment (UNCTAD 2004).

Investment promotion agency. A government agency responsible for attracting investment to a specific country, region or city.

Joint venture. A business entity having the following characteristics: (i) the entity was established by a contractual arrangement, with two or more parties contributing resources towards the business undertaking; (ii) the parties have joint control over activities carried out according to the terms of the arrangements (UNCTAD 2010b).

Land tenure. Rules, whether legally or customarily defined, among individuals or groups with respect to land. Rules of tenure define how rights to use, control and transfer land are to be allocated within a given society (FAO 2002).

Least developed country (LDC). The name given to a country which, according to the United Nations, exhibits the lowest indicators of socio-economic development of all countries in the world.

Livelihood. The assets and activities required for a means of living. The assets might consist of individual skills and abilities (human capital), land, savings and equipment (natural, financial and physical capital, respectively) and formal support groups or informal networks that assist in the activities being undertaken (social capital). A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (DFID 2001).

Local procurement. The process of obtaining personnel, services, supplies and equipment from local (host country) sources.

Low-income economy. An economy with 2013 per capita gross national income of $1,045 or less (World Bank 2015).

Mainstreaming. The process of systematically integrating a selected value, idea or theme into all domains of an area of work or system. Mainstreaming involves an iterative process of change in the culture and practices of institutions (DFID et al. 2002).

Medium-term expenditure framework. A budgeting system comprising a top-down estimate of aggregate resources available for public expenditure in the medium term consistent with macroeconomic stability; bottom-up estimates of the cost of carrying out policies, both existing and new; and a framework that reconciles these costs with aggregate resources. It is called "medium-term" because it provides data on a prospective basis for the budget year (*n*+1) and for following years (*n*+2 and *n*+3). The framework is a rolling process repeated every year and aims at reducing the imbalance between what is affordable and what is demanded by line ministries. The term used differs by country; besides "medium-term expenditure framework," other terms that may be applied include multi-year expenditure framework, multi-year budget, forward budget, multi-year estimates and forward estimates (Petkova and Bird 2008). See also Budgeting.

Millennium Development Goals (MDGs). Eight international development goals to be achieved by 2015, as agreed to by all 192 United Nations member states. Goals include eradicating extreme poverty and hunger; achieving universal primary education; promoting gender equality and empowerment of women; reducing child mortality rate; improving maternal health; combating HIV/AIDS, malaria and other diseases; ensuring environmental sustainability; and developing a global partnership for development (UN 2010a).

National development planning. A comprehensive process from elaboration of a plan until implementation, by which economic development is organized around a coherent framework of objectives and means. In the context of poverty-environment mainstreaming, planning encompasses preparatory work (e.g. carrying out assessments and setting up working mechanisms); policymaking (including public and policy reforms); and budgeting, implementation and monitoring, at various levels: national, sector and subnational.

Natural resources. Resources occurring naturally within, and derived from, the environment. These can be divided further into renewable resources (those that can be replenished or reproduced easily, such as water and forests) and non-renewable resources (those that exist in fixed amounts, or are consumed much faster than nature can recreate them, such as metals, coal, oil and gas).

Non-governmental actor. Any actor that is not part of the government, in the broadest sense, including representatives of civil society, academia, business and industry, the general public and local communities, and the media. See also Civil society and Stakeholder.

Non-renewable resources. See Natural resources.

Organic farming. A form of agricultural production that excludes or strictly limits the use of manufactured fertilizers and pesticides, plant growth regulators such as hormones, livestock antibiotics, food additives and genetically modified organisms. Techniques used include crop rotation, compost and biological pest control.

Payment for ecosystem/environmental services. Any of a variety of arrangements through which the beneficiary of ecosystem services compensates the providers of those services. Payment schemes may be a market arrangement between willing buyers and sellers, intermediated by a large private or public entity or government driven (WWF 2015).

Policy. A high-level strategic plan embracing general goals, targets and implementation.

Policy measure. An intervention supporting new policies or changes to existing policies, as well as broader sector (e.g. agriculture policy) and public reforms (e.g. participation in the decision-making process) aimed at improving environmental management for the benefit of the poor. Policy measures can take place at the national, sector or subnational level.

Poverty. A multidimensional concept of deprivation including lack of income and other material means; lack of access to basic social services such as education, health and safe water; lack of personal security; lack of empowerment to participate in the political process and in life-affecting decisions; and extreme vulnerability to external shocks (DFID et al. 2002).

Poverty and social impact analysis (PSIA). Involves the analysis of the distributional impact, intended and unintended, of policy reforms on the well-being of different stakeholder groups, with a particular focus on the poor and vulnerable (World Bank 2003). The analysis can be conducted on a proposed policy reform or ex post to assess the actual impact arising from implementation of a policy reform.

Poverty-environment indicator. A measure of poverty-environment linkages, whether these linkages represent causal relationships between poverty and the environment or describe how environmental conditions affect the livelihoods, health and resilience of the poor to environmental risks or broader economic development.

Poverty-environment linkage. The close relationship that exists between poverty and environmental factors, as reflected through sustainable use of natural resources, adapting to climate change, a focus on poverty reduction and equity especially for marginalized groups (including women and indigenous peoples), and working towards inclusive green growth. 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.

Poverty-environment mainstreaming. The iterative process of integrating poverty-environment objectives into policymaking, budgeting and implementation processes at national, sector and subnational levels. It is a multi-stakeholder effort that entails working with state actors (such as ministries of planning, finance, environment, sector ministries, parliaments and local authorities) and non-state actors (such as civil society, academia, the private sector, the general public and communities, and the media).

Poverty-environment monitoring. The continuous or frequent standardized measurement and observation of poverty-environment linkages, e.g. for warning and control (OECD 1997).

Poverty-environment objectives. Objectives that governments must look to incorporate into their development planning to address poverty-environment linkages—e.g. using natural resources sustainably; adapting to climate change; focusing on poverty reduction and equity, especially for marginalized groups such as women and indigenous peoples; and working towards inclusive green growth.

Poverty reduction strategy paper (PRSP). Country-led, country-written document that provides the basis for assistance from the World Bank and the International Monetary Fund, and debt relief under the Heavily Indebted Poor Countries Debt Initiative. A PRSP describes a country's macroeconomic, structural, and social policies and programmes to promote growth, and the country's objectives, policies, interventions and programmes for poverty reduction (UNEP 2007). Country-led PRSPs describing national objectives, policies, interventions and programmes are considered to be policy documents.

Practitioner. Any stakeholder, government or non-government, actively engaged in the environment, development and poverty reduction fields.

Primary sector. A sector of the economy concerned with obtaining or providing natural raw materials for conversion into commodities. Industries in this sector include agriculture, agribusiness, fishing, forestry and extractive industries.

Production-sharing agreement. A contract between a host government and an investor (usually a resource extraction company) concerning what percentage of the extracted resource each party will receive. The investor usually bears all exploration risks, development and production costs.

Programmatic approach. A medium- or long-term approach that includes a set of activities building on each other and contributing to the aim of achieving synergies and longer-term outcomes.

Pro-poor economic growth. Growth that benefits poor people in absolute terms, taking into account the rate of growth and its distributional pattern (Kraay 2003; World Bank 2007). Ignoring the quality of growth and particularly the erosion of the environmental assets of the poor undermines growth itself and its effectiveness in reducing poverty, even if it may enhance short-term economic gains (DFID et al. 2002).

Public environmental expenditure review (PEER). A way of systematically assessing the equity, efficiency and effectiveness of public environmental spending. The data and insights it yields can be valuable for the design of government budgets, policy reforms and investment projects (World Bank 2006).

Public expenditure review. A key diagnostics instrument used to evaluate the effectiveness of public finances. A public expenditure review typically analyses government expenditures over a period of years to assess their consistency with policy priorities, and what results were achieved. It may analyse government-wide expenditures or may focus on a particular sector (agriculture, education, infrastructure). Public expenditure reviews help countries establish effective and transparent mechanisms to allocate and use available public resources in a way that promotes economic growth and helps reduce poverty (World Bank 2011b).

Regulatory capture. A form of government failure, where a state regulatory agency created to act in the public interest instead acts in the commercial or special interests of the industry it is charged with regulating.

Renewable resources. See Natural resources.

Resilience. The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, capacity for self-organization and capacity to adapt to stress and change (IPCC 2007).

Risk. The result of the interaction of physically defined hazards with the properties of the

exposed systems—i.e. their sensitivity or social vulnerability. Risk can also be considered as the combination of an event, its likelihood and its consequences—i.e. risk equals the probability of climate hazard multiplied by a given system's vulnerability (UNDP 2004).

South-South. A term historically used by policymakers and academics to describe interaction between developing countries.

Special economic zone. A geographic region with economic regulations which are more free market oriented (and hence more conducive to FDI) than a country's national laws and regulations. Special economic zones cover a broad range of zone types, including free trade zones, export processing zones, free zones, industrial estates, free ports, urban enterprise zones and others.

Stakeholder. Any party involved in a particular process, including any group or individual who has something at stake in the process. Stakeholders include government actors (head of state's office, environment, finance and planning bodies, sector and subnational bodies, political parties and parliament, national statistics office and judicial system), non-governmental actors (civil society, academia, business and industry, the general public and local communities, and the media); and the development community. See also Civil society and Non-governmental actor.

Strategic environmental assessment. Any of a range of analytical and participatory approaches that aim to integrate environmental considerations into policies, plans and programmes and evaluate the interlinkages with economic and social considerations. This family of approaches uses a variety of tools adapted and tailored to the context or policy process to which they are applied (OECD 2006). Used in the context of poverty-environment mainstreaming, a strategic environmental assessment can also be useful in systematic review of a policy process or document to identify poverty-environment contributions and refine priorities accordingly.

Strategies. Examples of policy documents include PRSPs, MDG strategies, and sector and subnational strategies and plans.

Sustainable consumption and production. The production and use of goods and services that respond to basic needs and provide a better quality of life while minimizing the use of natural resources, toxic materials, and emissions of waste and pollutants over the life cycle so as not to jeopardize the environment's ability to meet the needs of future generations (Norwegian Ministry of Environment 1994).

Sustainable development. Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland 1987). Sustainable development includes economic, environmental and social sustainability, which can be achieved by rationally managing physical, natural and human capital (UN 2010b).

Sustainable Development Goals (SDGs). New universal set of goals, targets and indicators that UN member states will be expected to use to frame their agendas and political policies from 2016–2030. The SDGs follow, and expand on, the MDGs, which were agreed upon by governments in 2000, and are due to expire at the end of 2015.

Technology transfer. The process whereby systematic knowledge for the manufacture of a product, the application of a process or the rendering of a service is disseminated (UNCTAD 2004).

Third-party certification. A system of standards and conformance which aims to provide

consumers with assurance that products were produced in compliance with specified environmental or social standards. Third-party certification includes audits of company's operations by independent certification bodies.

Transnational corporation. Incorporated or unincorporated enterprise comprising a parent enterprise and its foreign affiliates. A parent enterprise is defined as an enterprise that controls assets of other entities in countries other than its home country, usually by owning a certain equity capital stake. An equity capital stake of 10 percent or more of the ordinary shares or voting power for an incorporated enterprise, or its equivalent for an unincorporated enterprise, is normally considered the threshold for control of assets (UNCTAD 2009).

Twinning. A framework through which organizations can work with their counterparts in a different country or region for mutual benefit through a direct exchange of national experiences of best practice. Twinning is normally used as a mechanism for institutional and capacity strengthening to develop the administrative structures, human resources and management skills needed to manage or implement a specific action or project. Twinning can involve study visits and the exchange of experts, but it can also be conducted in the form of "eTwinning"—a web-based exchange of national experiences (EC 2008).

Vulnerability. The degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate change and variation to which a system is exposed; its sensitivity; and its adaptive capacity. Vulnerability increases with the magnitude of climate change or sensitivity; it decreases as adaptive capacity increases. Reducing vulnerability can happen through any combination of reduced magnitude of climate change, reduced exposure or increased adaptive capacity (IPCC 2001, 2007).

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