

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

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.

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 6.3 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, provid-

ing 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

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.

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 6.6 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 inter-linked 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 gen-

eration 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 plans, 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?



