# Environmental Policy Implementation: Lessons Learned II

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# Environmental Policy Implementation: Lessons Learned II

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# Acronyms

| | |
|---|---|
| AZB | Amman-Zarqa Water Basin |
| BAPEDAL | Environmental Impact Management Agency (Indonesia) |
| CBO | Community-Based Organizations |
| CDC | Commonwealth Development Corporation |
| CEE | Central and Eastern Europe |
| C4EP | Central and Eastern Europe Environmental Economics and Policy |
| CSI | Common Sense Initaitive |
| DEMO | Development of Environmental Management Organizations |
| EAPS | Environmental Action Program Support |
| EEAA | Egyptian Environmental Affairs Agency |
| EMS | Environmental Management System |
| ENRAP | Environmental and Natural Resources Accounting Project |
| EPA | United States Environmental Protection Agency |
| EPAT | Environmental and Natural Resources Policy and Training |
| EPF | Egyptian Environmental Protection Fund |
| EPIQ | Environmental Policy and Institutional Strengthening Indefinite Quantity Contract |
| ESP | Environmental Support Plans |
| EU | European Union |
| FAO | Food and Agriculture Organization (United Nations) |

| | |
|---|---|
| FSU | Former Soviet Union |
| FTPP | Forests, Trees and People Programme |
| GDP | Gross Domestic Product |
| GIS | Geographic Information Systems |
| GTZ | Deutsche Gesellschaft für Technische Zusammenarbeit |
| ICAS | Interstate Committee on Saving the Aral Sea |
| IFIs | International Financial Institutions |
| IFRI | International Forestry Resources and Institutions |
| IMF | International Monetary Fund |
| IMAZON | Institute for Man and the Environment of the Amazon |
| INEFAN | Institute of Forestry and Natural Areas |
| IPP | Independent Power Producer |
| JFM | Joint Forest Management |
| LEAP | Local Environmental Action Plan |
| MANRES | Natural Resources and Environmental Management for Sustainability |
| MoE | Ministry of Environment |
| MPWWR | Ministry of Public Works and Water Resources (Egypt) |
| MWI | Ministry of Water and Irrigation |
| NEAP | National Environmental Action Plan |
| NEPRA | National Electric Power Regulatory Authority |
| NGO | Non-Governmental Organization |

| | |
|---|---|
| NRMP | Natural Resources Management Project (Indonesia) |
| OECD | Organization for Economic Cooperation and Development |
| O&M | Operations and Management |
| PEPA | Pakistan Environmental Protection Agency |
| PFC | Power Finance Corporation |
| PVO | Private And Voluntary Organizations |
| SEB | State Electricity Boards |
| SIDA | Swedish International Development Authority |
| SIM | Sudan Interior Mission |
| WAPDA | Water and Power Development Authority (Pakistan) |
| WMA | Wildlife Management Area |
| WPT | Wildlife Policy of Tanzania |

# Executive Summary

USAID and the countries in which it works have long recognized that appropriate policy and strong institutions can have far-reaching, positive impacts on environmental quality and the sustainability of natural resource use—both prerequisites for long-lasting economic development. Accordingly, USAID has worked with cooperating countries worldwide to design and implement policies designed to improve environmental outcomes.

In concert with its mandate to provide leadership and technical support to USAID overseas missions and Washington-based regional geographic bureaus, the Global Environment Center has mobilized technical resources to meet the challenge of developing and implementing environmental policy and associated institutional support at the country, regional and, more recently, global levels. The mechanism it chose was the Environmental Policy and Institutional Strengthening Indefinite Quantity (EPIQ) contract.

At an early stage of the EPIQ contract, the Center commissioned EPIQ to prepare a series of reports documenting environmental policy lessons that have been learned, drawing on the experience of USAID and other donor organizations and development institutions. The first such document, titled *Environmental Policy Dialogue: Lessons Learned*, was published in February 1998 and has since been widely disseminated and discussed. This report updates the earlier report by incorporating additional experience and places the discussion of policy dialogue, the focus of the first document, in the context of the environmental policy process.

This report, like the earlier one, is a work in progress. It is designed as a practical guide for USAID, its partner countries, and other institutions that recognize the value of and challenges in developing well-designed, well-implemented policy. The authors hope that the lessons learned, covering all stages of the policy process with the exception of evaluation (the topic of a future report), will spark constructive dialogue that will foster greater understanding of and success in furthering the important, but still emerging, field of environmental policy formulation.

## The Scope of Environmental Policies

Various types of public policy—not only environmental policy per se—can contribute to environmental improvement, even if this is not their primary intent. ***Environmental policies*** are designed for the express purpose of directly impacting environmental quality or natural resource use. They may focus on reducing the types and levels of pollution

discharged into the environment by setting (or changing) the rules of engagement. These policies can act as powerful incentives for facilities and individuals to alter activities that generate pollution or use natural resources unsustainably. ***Sector and macroeconomic policies*** are designed to meet economic development objectives, but have environmental impacts as well. For example, policies to restructure the energy sector, improve efficiency, and reduce production costs also reduce fuel requirements and associated pollution levels. Trade policies and agreements, as well as conditions that are increasingly being placed on foreign direct investment, have raised environmental awareness beyond environmental ministries and provided inducements for better corporate environmental performance. ***Environmental components of sector policies*** are designed to minimize the negative environmental impacts associated with development. Sectors that generate large quantities of waste, air pollution, or water pollution (such as the energy and mining sectors, agriculture, transport, and ferrous and nonferrous metallurgy) are subject to the requirements of environmental policies, but may additionally adopt special environmental provisions such as requirements for environmental audits for privatization transactions or environmental impact assessments and disclosure requirements. ***Policies to increase transparency*** can be invaluable in the environmental sector, provided the instruments for democratization are extended to policymaking in the environmental sector. Potentially, these policies can lead to increased transparency in decision making, the development of mechanisms for eliciting public comments on policies and individual projects (with environmental impacts), and improved dissemination of environmental information.

## The Policy Process

The environmental policy process involves a sequence of actions undertaken for the purpose of developing and implementing policies. The process can be portrayed as a wheel (see Figure 2.1 in the report) to reflect the dynamics of policy as a continual process that does not have an obvious starting point and does not culminate with policy implementation. The four stages of the process are problem diagnosis, policy design, policy implementation, and evaluation. Although the circumstances of each situation will determine where in the process to begin, the process always revolves around policy dialogue, the hub of the wheel. The lessons learned in the policy process have been arranged according to the stage at which they seem most appropriate. In addition, overarching lessons and lessons for policy dialogue are presented at well.

## Overarching Lessons

Several lessons apply to the overall policy process rather than to individual stages of the process or to dialogue. The general theme of the four lessons is that effective assistance

to the policy process requires a thorough understanding of the process and the participants in the process, the pace of reform, the difficulty of sustaining commitment and resources to reform, the linkages between policy reform in the environment sector and other sectors, and the range of non-environmental issues that may be germane to environmental policy reform.

**Lesson 1: Commitment of Key Decision Makers Is Required Throughout the Policy Process,** recognizes the complexity and duration of the policy process and the challenges of moving the policy process from one stage to the next. Commitment of policymakers and stakeholders is a critical element in moving the process. **Lesson 2: Policy Change is Not a "One-Shot Event" But a Continuing Process,** examines the importance of sustained support for the policy process, recognizing that the process proceeds one step at a time, cannot be short-circuited or necessarily rushed, and involves attention to continued consensus building through dialogue and communications, combined with analysis tailored to the set of issues that emerge at each stage of the process. **Lesson 3: Timing Is Everything: Seize Targets of Opportunity,** focuses on those events that may create opportunities to initiate policy reforms or resuscitate a policy that has been stalled at some stage of the process. Donor organizations should be prepared to move quickly to take advantage of opportunities that may arise in response either to unforeseeable events (such as a natural or manmade disaster) or foreseeable events (such as a change in the government resulting from an election). **Lesson 4: The Policy Process Is Necessarily Multidisciplinary and Must Also Recognize Cross-Sectoral and Gender Linkages,** describes a range of factors and approaches that may be important in promoting policy change. Most of these factors relate to other sectors as well as economic, social, legal, cultural, and gender issues that need to be addressed during the analysis, design, and implementation stages, as well as in the dialogue supporting the policy process.

## Policy Dialogue

Policy dialogue can be defined as a series of interchanges that may involve policymakers, policy implementers, policy analysts, and stakeholders whose purpose is to review and discuss information, issues, analyses, and options associated with each stage of the environmental policy process. Ideally, this dialogue takes place throughout each stage of the policy process, and helps decision makers move from one stage to the next by supporting the development of a broad consensus about what is to be done.

Many of the most important lessons learned in environmental policy focus on the benefits of policy dialogue in facilitating development and implementation of effective policies. Among the benefits of policy dialogue are the following:

- Policy dialogue helps to identify and involve key stakeholders and economic/cultural interests that may be affected by the existing policy or planned reforms so that legitimate concerns can be addressed.

- Policy dialogue creates an opportunity to "ground truth" policy options and implementation modalities, fill information gaps, and provide a wider array of perspectives on problems and their solutions.

- Policy dialogue can help to foster open discussions of government policies and prepare stakeholders for later implementation activities. Stakeholders who have played a role in the policy process are more likely to understand and react positively to new incentives and disincentives than they would if policies were developed without their participation.

**Lesson 5: Involve All Key Stakeholders and Find a Policy 'Champion',** focuses on the participants in a policy dialogue, the importance of including all key stakeholders and in identifying and nurturing participants who can play a leadership role in advancing the policy process through dialogue. Dialogue has provided entree for donors to participate more proactively in promoting policy change. **Lesson 6: Policy Dialogue Must Adapt Approaches and Tools to the Wide Variety of Political, Economic, and Cultural Settings,** examines the issues of donor coordination, resolving differences between national and donor agendas, and maintaining consistency in policies across sectors. **Lesson 7: Donor Coordination Is Crucial for Consistent and Effective Policies to Emerge from Policy Dialogue,** argues that the selection of approaches and tools must be adapted to the various settings in which policy dialogue takes place and must respond to constraints imposed by the country's policy process. **Lesson 8: Policy Dialogue Requires Flexibility and Thrives on Open and Creative Interaction among Counterparts,** describes a variety of situations requiring approaches to policy dialogue that are flexible in their timing, scale, and location.

## Problem Diagnosis

Problem diagnosis is the set of activities undertaken to identify environmental problems and their underlying causes, as well as limitations of existing policies (if any) and relevant constraints to addressing the problem. Where there is a policy in place designed to address the problem, problem diagnosis may be an outcome of policy dialogue related to policy evaluation (for example, it may be determined that poor performance cannot be addressed through improved implementation but will require policy reform). In the absence of an existing policy, problem diagnosis may be initiated if there is a shared

perception among policymakers and stakeholders that the environment is being degraded and that government action is required.

Problem diagnosis consists of two related steps. The first step is to identify the environmental issues and problems. These may surface in an evaluation of an existing policy or from discussions with policymakers and stakeholders. The second step involves assessing causal linkages and barriers to addressing identified problems: why they arose and why they are not being adequately addressed. This analysis should examine the structure of stakeholder incentives and disincentives, policy and institutional barriers, and other economic, social, cultural, or political factors that contribute to the problem and define the related issues. Generally, such an analysis will then be reviewed, discussed, and refined to ensure there is consensus as to the nature and magnitude of the problem, and what is driving it.

Problem diagnosis represents a key link in the policy process that has a significant bearing on whether policymakers and stakeholders are prepared to take the critical step of policy design. If the analysis that comprises problem diagnosis does not establish a compelling case for changing policies, the policy process is likely to stall. **Lesson 9: Problem Diagnosis Depends on Solid Analytics and a Credible Analytical Process,** examines the importance of thorough analysis, combined with a process for conducting, vetting, and communicating the analytical results that is credible to policymakers and stakeholders.

## Design

Policy design is the stage at which options for addressing a diagnosed problem or problems are identified and analyzed, leading to the selection of the options to be implemented. The design stage of the policy process involves three steps. The first step is to review and assess alternative intervention points, policy tools, and approaches. The second step involves the development of supporting information on the short list of interventions, tools, and approaches. This would include an analysis of the advantages and disadvantages of each option in terms of its effectiveness in addressing the problem, attendant risks, uncertainty, resources and capacity required to implement the strategy, the magnitude and distribution of benefits and costs among the various stakeholders, and cultural preferences. The third and final step of policy design involves the selection of the best policy option for implementation.

Until the policy design stage, change is somewhat abstract; it has been discussed and analyzed, but without impacting on stakeholders. At the design stage, issues such as who are the winners and loser, impacts on incentive structures, and implications for agencies

that will be charged with implementation come to the forefront and the associated policy dialogue takes on a more serious tone.

**Lesson 10: Donor Organizations' Partners Are Not Always Receptive to "Policy" Assistance,** examines the difficulties of supporting policy design, which USAID's partners typically consider to be their domain. Suggestions are offered for gaining acceptance of external assistance in designing policy. **Lesson 11: Early Involvement of Implementers and Stakeholders Can Improve Policy Design and Build Consensus for Implementation,** illustrates the importance of involving the right set of policymakers and other stakeholders at an early stage to ensure that policies under discussion meet the needs of the parties that will subsequently implement the policies and will be impacted by them. **Lesson 12: Environmental Policy Design Should Be Linked to Economic Development and to Specific Problems That Improved Policies Can Address,** focuses on the importance of recognizing non-environmental factors, impacts, and actors in the design of policies. **Lesson 13: Donors Should Analyze the Incentive Structures of Policy Instruments,** highlights the importance of understanding incentive structures and the ramifications of design flaws at the implementation stage. **Lesson 14: Effective Design Must Anticipate Implementation Barriers,** examines the problems that may arise during implementation if issues such as human resources and associated equipment needs are not fully anticipated.

## Implementation

Policy implementation is the stage at which policy changes are formalized in laws and regulations and put into practice—usually, but not always, by government agencies at the national, regional, or local levels. It includes several pre-implementation activities to clarify, legalize, and operationalize the policy changes; clarify, formalize, and assign institutional roles; strengthen staff capacities in implementing institutions; and mobilize financial resources. Once these activities are completed, implementation focuses on actually carrying out the policy and monitoring its effectiveness.

The ultimate test of a policy is its effective implementation. Even if all participating parties believe that the policy emerging from the design phase provides optimal incentives to achieve the desired environmental or natural resource goals, many things can go wrong during implementation. In most countries, local and regional agencies play a larger role in implementing policy than in designing policy. Policies that lack local support and commitment may be derailed by local resistance. In addition, effective implementation requires resources and sustained commitment to monitor and enforce the policies.

**Lesson 15: It May Not Be Possible to Implement the Policy as Designed,** describes a common problem in which obstacles to implementation have not been anticipated or the drafters of the policy were guided by an agenda not shared by stakeholders (or, in some cases, by the implementing agencies). **Lesson 16: Donor Organizations Should Encourage Partners to Develop Implementation Strategies,** recognizes the significant challenges of mobilizing resources and provides strategies that can help agencies present their requirements to policymakers and donors. **Lesson 17: The Benefits of Policy Implementation Should Be Marketed in Terms of Local Impacts,** illustrates the importance of recognizing and catering to local beneficiaries. Without local support, implementation will be less successful or at best require more resources for enforcement. **Lesson 18: Implementation Must Be Reinforced by Commitments to Sustain Financial Support,** emphasizes the importance of sustained financing for implementing agencies. **Lesson 19: Implementation Will Be More Successful If Implemented by Those Closest to the Problem,** examines the importance of involving agencies at the local level because they are more accountable for success, understand the problems better, and are more familiar with (and may have more influence on) stakeholders. **Lesson 20: Donors May Need to Help Build the Capacity of Stakeholders,** focuses on the needs of stakeholders who must account for new policies in their production and consumption activities. They must be able to communicate new requirements and often need new skills or information to use the new policies to advantage.

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# Chapter 1: Introduction

USAID and the countries in which it works have long recognized that appropriate policy and strong institutions can have far-reaching, positive impacts on environmental quality and the sustainability of natural resource use—both prerequisites for long-lasting economic development. Accordingly, USAID has worked with cooperating countries worldwide to design and implement policies designed to improve environmental outcomes.

In concert with its mandate to provide leadership and technical support to USAID overseas missions and Washington-based regional geographic bureaus, the Global Environment Center has mobilized technical resources to meet the challenge of developing and implementing environmental policy and associated institutional support at the country, regional and, more recently, global levels. The mechanism it chose was the Environmental Policy and Institutional Strengthening Indefinite Quantity (EPIQ) contract. The need for such services is apparent from the heavy demand for assistance through the EPIQ mechanism.

The Center recognized at an early stage that the quality of the services it provides in the environmental policy area could only be sustained and improved if a conscious effort was made to discern from its experience, and that of others, how best to proceed in this emerging area. Accordingly, it commissioned EPIQ to prepare a series of reports documenting environmental policy lessons that have been learned, drawing on the experience of USAID and other donor organizations and development institutions. The first such document, titled *Environmental Policy Dialogue: Lessons Learned*, was published in February 1998 and has since been widely disseminated and discussed. This report is the second in the Lessons Learned series. It updates the earlier report by incorporating additional experience and places the discussion of policy dialogue, the focus of the first document, in the context of the environmental policy process.

The environmental policy process is here depicted as a wheel **Chapter 2** with dialogue as the hub surrounded by four discrete stages: evaluation, problem diagnosis, policy design, and policy implementation. The wheel metaphor highlights the fact that the process of developing environmental policy is ongoing, with no set starting point or end point. The Chapter posits that various types of policies impact on environmental quality and natural resource use, and that all share this common developmental framework. The remainder of the report is organized around lessons learned and cases that illustrate each lesson. The next Chapter presents lessons that are applicable to the overall policy process. The remaining chapters discuss and illustrate lessons relating to a single element of the policy

process: dialogue **Chapter 4**, problem diagnosis **Chapter 5**, policy design **Chapter 6**, and implementation **Chapter 7**. Two annexes are included at the end of the document. Annex 1 lists the contributors to the cases. Annex 2 provides a quick reference to the cases; indicating the respective region, assistance partners and type of policy reform presented in each case.

This document, like the earlier one, is a work in progress. It is designed as a practical guide for USAID, its partner countries, and other institutions that understand the considerable potential of well-designed, well-implemented policy to affect both environmental outcomes and legitimate development objectives shared by all. It is fully expected that this document will elicit comments, including strongly held views, reflecting the varied experiences of practitioners in different settings. The authors hope that these "lessons learned" will spark constructive dialogue that will foster greater understanding of and success in furthering the important, but still emerging, field of environmental policy formulation.

# Chapter 2: The Environmental Policy Process

## The Scope of Environmental Policies

Various types of public policy—not only environmental policy per se—can contribute to environmental improvement. Although this may not be their primary intent, they can have a profound effect on the environment. The types of policies that typically have environmental ramifications are described here:

- ***Environmental policies***—These policies are designed for the express purpose of impacting environmental quality or natural resource use. They may focus on reducing the types and levels of pollution discharged into the environment by setting (or changing) the rules of engagement. If properly designed and implemented, these policies can act as powerful incentives for facilities and individuals to alter activities that generate pollution or use natural resources unsustainably. Environmental policies may employ instruments such as emission and technology standards or impose costs on polluters in the form of charges based on the amount of pollution discharged or the assignment of liability for damages and clean-up of pollutants released into the environment.

- ***Sector and macroeconomic policies***—These policies are designed to meet economic development objectives, but have environmental impacts as well. For example, well-designed policies to restructure the energy sector, improve efficiency, and reduce production costs also reduce fuel requirements and associated pollution levels. Product charges on fuels, packaging material, and other goods that create environmental problems if not disposed of properly (such as used tires, waste oil, and batteries) not only generate revenue but also may reduce pollution or waste. Trade policies and agreements, as well as conditions that are increasingly being placed on foreign direct investment, have raised environmental awareness beyond environmental ministries and provided inducements for better corporate environmental performance. Since investment plays a pivotal role in achieving environmental improvements, macroeconomic policies designed to reduce inflation and promote efficient markets may also prove beneficial to the environment.

- ***Environmental components of sector policies***—Policies designed to promote the development of economic sectors may include components to minimize the negative environmental impacts associated with development. Sectors that generate large quantities of waste, air pollution, or water pollution (such as the

energy and mining sectors, agriculture, transport, and ferrous and nonferrous metallurgy) are subject to the requirements of environmental policies, but may additionally adopt special environmental provisions such as requirements for environmental audits for privatization transactions or environmental impact assessments and disclosure requirements.

- ***Policies to increase transparency***—Policies to nurture and facilitate the introduction of democratic processes can be invaluable in the environmental sector, provided the instruments for democratization are extended to policymaking in the environmental sector. Potentially, these policies can lead to increased transparency in decision making, the development of mechanisms for eliciting public comments on policies and individual projects (with environmental impacts), and improved dissemination of environmental information.

## The Policy Process: A Developmental Framework

In addition to having the potential to promote environmental quality, these four types of policies share a common developmental framework. This framework, here referred to as the environmental policy process, involves a sequence of actions undertaken for the purpose of developing and implementing policies. The process can be portrayed as a wheel (see Figure 2.1) to reflect the dynamics of policy as a continual process that does not have an obvious starting pointing and does not culminate with policy implementation. Although the circumstances of each situation will determine where in the process to begin, the process always revolves around policy dialogue, the hub of the wheel. Moreover, each stage consists of a series of steps that should be carried out before moving to the next stage (see Table 2.1).

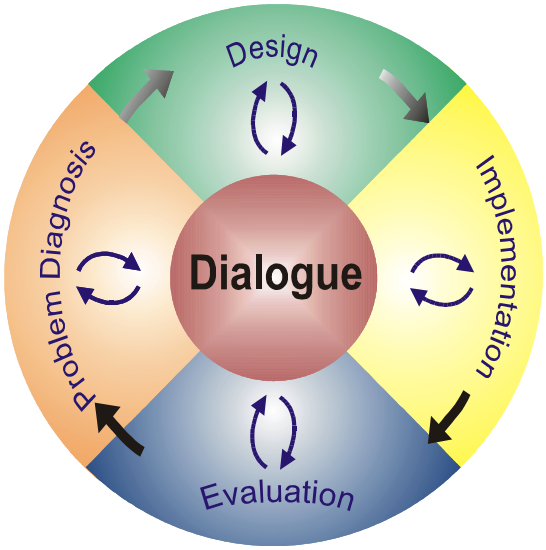


**Figure 1.**

If an existing policy appears to be well designed, but it is not being fully implemented, the implementation stage is the logical starting point. Alternatively, if the policy is being implemented, but the problem it was designed to address persists, problem diagnosis may be the first step. Problem diagnosis can help determine whether policy implementation can be improved through capacity building or increased implementation resources or whether there are deficiencies in the policy itself that require design modifications. Such a

deficiency may suggest that the problem or its underlying causes were not correctly identified at the diagnosis stage.

Thus, at any given time, actions may be undertaken at more than one stage of the process, and the policy process wheel may simultaneously characterize both the process for the current policy as well as for policy reforms.

**Table 2.1**

| Stage of Policy Process | Steps |
|---|---|
| **Problem Diagnosis** | • Identify/recognize issues<br>• Identify causes and barriers to addressing them |
| **Design** | • Assess policy choices—intervention points, tools, and approaches<br>• Formulate pros and cons, costs and benefits, and cultural preferences<br>• Select the best policy |
| **Implementation** | • Legalize the policy choice (legislation, decrees, regulations, etc.)<br>• Clarify, assign, and formalize institutional roles, responsibilities, and relationships<br>• Strengthen institutional capacity<br>• Mobilize resources for management<br>• Implement policy and monitor for effectiveness |
| **Evaluation** | • Develop national and local indicators of performance<br>• Evaluate implementation performance and capacity<br>• Evaluate environmental impacts |

In the following discussion, policy dialogue, the hub of the entire process, is discussed first. The stages of the policy process are then presented in the same order as they are depicted in Table 2.1: policy evaluation first, followed by problem diagnosis, design, and implementation. This sequence of steps works best when the goal is reform of an existing policy. When there is no policy in place, the policy process would normally begin with problem diagnosis, followed by design, implementation, and evaluation.

## Policy Dialogue

Policy dialogue can be defined as a series of interchanges that may involve policymakers, policy implementers, policy analysts, and stakeholders whose purpose is to review and discuss information, issues, analysis, and options associated with each stage of the environmental policy process. Ideally, this dialogue takes place throughout each stage of the policy process, and helps decision makers move from one stage to the next by supporting the development of a broad consensus about what is to be done.

In many countries, however, the environmental policy process does not involve free-ranging dialogue. The extent to which dialogue occurs depends in part on the development of democratic principles, governmental provisions for accountability and transparent procedures, and decentralization and sharing of responsibilities between central and local authorities. However, many of the most important lessons learned in environmental policy focus on the benefits of policy dialogue in facilitating development and implementation of effective policies. Among the benefits of policy dialogue are the following:

- Policy dialogue helps to identify and involve key stakeholders and economic/cultural interests that may be affected by the existing policy or planned reforms so that legitimate concerns can be addressed. This involvement, which may take the form of stakeholder participation in negotiations or collaboration in assessing options, serves to link participants to larger stakeholder groups.

- Policy dialogue creates an opportunity to "ground truth" policy options and implementation modalities, fill information gaps, and provide a wider array of perspectives on problems and their solutions.

- Policy dialogue can help to foster open discussions of government policies and prepare stakeholders for later implementation activities. Stakeholders who have played a role in the policy process are more likely to understand and react positively to new incentives and disincentives than they would if policies were developed without their participation.

Participants in policy dialogue may vary according to the type of activity and the stage of the process. Generally, policymakers are more actively involved in problem diagnosis and design, whereas implementing agencies are more often involved in dialogue related to implementation and evaluation. However, the lessons learned in conducting effective policy dialogue point to the advantages of broader participation involving stakeholders at

several stages (particularly problem diagnosis, design, and implementation), and earlier involvement of implementing agencies in the problem diagnosis and design stages.

The lessons learned regarding policy dialogue, and cases that illustrate these lessons, are presented in Chapter 4.

### Problem Diagnosis

Problem diagnosis is the set of activities undertaken to identify environmental problems and their underlying causes, as well as limitations of existing policies (if any) and relevant constraints to addressing the problem. Where there is a policy in place designed to address the problem, problem diagnosis may be an outcome of policy dialogue related to policy evaluation (for example, it may be determined that poor performance cannot be addressed through improved implementation but will require policy reform). In the absence of an existing policy, problem diagnosis may be initiated if there is a shared perception among policymakers and stakeholders that the environment is being degraded and that government action is required.

Problem diagnosis consists of two related steps. The first step is to identify the environmental issues and problems. These may surface in an evaluation of an existing policy or from discussions with policymakers and stakeholders. The second step involves assessing causal linkages and barriers to addressing identified problems: why they arose and why they are not being adequately addressed. This analysis should examine the structure of stakeholder incentives and disincentives, policy and institutional barriers, and other economic, social, cultural, or political factors that contribute to the problem and define the related issues. Generally, such an analysis will then be reviewed, discussed, and refined to ensure there is consensus as to the nature and magnitude of the problem, and what is driving it.

The lessons learned regarding problem diagnosis, and cases that illustrate these lessons, are presented in Chapter 5.

### Design

Policy design is the stage at which options for addressing a diagnosed problem or problems are identified and analyzed, leading to the selection of the options to be implemented. The design stage of the policy process involves three steps. The first step is to review and assess alternative intervention points, policy tools, and approaches. For example, if the problem concerns improper disposal of used batteries, this analysis could consider intervention at the point of manufacturing, retail sale, household use, or

disposal, as well as other approaches such as taxes, a system of deposits and refunds, or separation of batteries at landfills. Dialogue may serve an important function in reducing the potential number of alternatives for more detailed analysis.

The second step involves the development of supporting information on the short list of interventions, tools, and approaches. This would include an analysis of the advantages and disadvantages of each option in terms of its effectiveness in addressing the problem, attendant risks, uncertainty, resources and capacity required to implement the strategy, the magnitude and distribution of benefits and costs among the various stakeholders, and cultural preferences.

At the completion of this step, it may be useful to engage in policy dialogue to assure that all of the relevant issues have been diagnosed, the range of potential policy responses has been identified, contentious elements have been fully explored, and the costs and benefits of each option have been adequately considered. This dialogue serves to inform the third and final step of policy design, namely selection of the best policy option for implementation.

Of the four stages in the policy process, design evokes the greatest sensitivity among governments regarding their role vis-à-vis that of donors. Typically, at the policy design stage, USAID may support analysis of options, facilitate and finance workshops and other meetings in which policy choices can be vetted, or assist in funding legal experts to draft or review proposed legislation. This assistance must be carefully coordinated with government decision makers to ensure that it does not undermine the government's responsibility for and leadership in developing policy.

The lessons learned regarding policy design, and cases that illustrate these lessons, are presented in Chapter 6.

### Implementation

Policy implementation is the stage at which policy changes are formalized in laws and regulations and put into practice—usually, but not always, by government agencies at the national, regional, or local levels. It includes several preimplementation activities to clarify, legalize, and operationalize the policy changes; clarify, formalize, and assign institutional roles; strengthen staff capacities in implementing institutions; and mobilize financial resources. Once these activities are completed, implementation focuses on actually carrying out the policy and monitoring its effectiveness.

The three preimplementation steps are as follows:

- **Legalizing the policy choice and codifying it in administrative law**. Legalizing the policy choice usually entails a formal process that involves governmental agencies, parliaments, and cabinets in the development, review, refinement, and enactment process. Codifying the policy in administrative law may involve either a formal or informal process depending on the nature of the policy and the administrative structure of the country. Often, the implementing agency takes the lead in drafting procedures and regulations.

- **Clarifying, formalizing, and assigning institutional roles and responsibilities for all implementing agencies, and the relationships of these institutions to each other and to stakeholders.** The trend worldwide is for local authorities to take responsibility for activities such as permitting, inspections, reviewing monitoring data and taking enforcement actions, while national or regional authorities play an oversight role that includes reviewing appeals and supporting local agencies with training, among other things.

- **Assuring that institutions with implementation responsibilities have requisite capacity and needed financial resources**. As discussed in Chapter 7, implementation proceeds more effectively if the resource and institutional requirements for implementation have been anticipated during the design stage and funding commitments have been secured.

These preliminary steps set the stage for actually carrying out the policy. In some cases, it may be advisable to roll out a new policy first on a limited basis, geographically or sectorally, to test whether the design and implementation arrangements are feasible and whether stakeholders respond to the incentives and disincentives as anticipated. Such testing is especially useful where experience with the type of policy to be implemented is limited, where there are substantial risks involved if the policy fails to address the environmental problem it is designed to remediate, or where economically vulnerable or politically powerful stakeholders may be affected adversely. Flexibility to make adjustments and fine-tune the policy or arrangements for its implementation is critical, especially where it is felt that policy experimentation of the type discussed here is called for. This in turn calls for careful monitoring of policy performance, policy dialogue to consider the findings of the monitoring program, and flexibility to make adjustments as needed may be adversely affected. It is also necessary to determine resource needs for management and mobilize these resources, first for the pilot, and then for full implementation.

The lessons learned regarding policy implementation, and cases that illustrate these lessons, are presented in Chapter 7.

## Evaluation

Evaluation is the review and analysis of information related to the implementation of policy. It focuses on the performance of the policy and the institutions that implement it at the national, local, or sectoral level. Policy evaluation should be distinguished from compliance monitoring, which is a component of implementation focusing on the response of individual facilities to a policy.

Evaluation has been one of the weak links in environmental policy development in many developing countries. Unless and until assistance partners develop the capacity to undertake evaluations of their policies based on predetermined "outputs" and indicators of "impacts," they and their donors and the international financial institutions (IFIs) will be reduced to assessing their efforts in terms of "inputs," such as the number of agency staff trained or the amount spent on equipment, vehicles, buildings, etc.

The first step in policy evaluation is to develop a set of national and local indicators of performance. These should provide quantitative or qualitative information that allows implementing agencies to determine their level of success by comparing the indicators to a set of baseline values. For example, performance indicators for an air quality policy could be changes over time in the percentage of facilities that comply with emission standards, the total tons of a pollutant emitted into the air, the number of days that air quality does not meet the ambient standards, or the number of respiratory illnesses observed in the general population or specific subpopulations (such as infants or the elderly). Indicators may be differentiated geographically, by sector, or for specific stakeholder groups (such as small businesses). Multiple indicators may need to be developed for a given policy. In developing indicators, there will be trade-offs between the number of indicators and the costs to determine the indicator's quantitative value, and the level of analysis that can be carried out on the basis of the indicators.

One of the challenges in assessing performance is the difficulty of determining whether poor performance reflects a shortcoming of the policy itself, the implementing agency, other factors, or a combination of these. Thus, it may be necessary to augment indicators with the development and assessment of other types of information.

Once time-sequence data on performance indicators are available, the evaluators need to interpret the indicators in terms of the impacts on environmental quality or the sustainability of natural resource use. In most cases, the performance indicators in and of

themselves are not adequate to measure impacts, but can be related to impacts through established functional relationships. For example, if the performance indicator is the number of tons of a pollutant or the number of days ambient air standards are not met, this information may be used to determine the associated environmental costs (through a variety of valuation methods) or health impacts (using dose-response relationships).

Though the Policy Evaluation process is discussed only briefly here, it will be the focus of the upcoming Lessons Learned III, titled "Monitoring and Evaluating Policy and Institutional Reform."

# Chapter 3: Overarching Lessons for the Policy Process

This chapter includes lessons that apply to the overall policy process rather than to individual stages of the process or to dialogue. The general theme of the lessons is that effective assistance to the policy process requires a thorough understanding of the process and the participants in the process, the pace of reform, the difficulty of sustaining commitment and resources to reform, the linkages between policy reform in the environment sector and other sectors, and the range of nonenvironmental issues that may be germane to environmental policy reform. Four lessons that relate to the overall policy process are presented in this chapter, supported by nine cases.

## Lessons

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| **Lesson 1. Commitment of Key Decision Makers Is Required Throughout the Policy Process**<br>The policy process is complex and at times moves slowly from one stage to the next. The commitment of key decision makers at each stage of the process is pivotal in moving the process toward implementation of reforms. Donors need to assess the commitment and influence of decision makers at each stage, encourage partners to involve high-level decision makers at critical stages, and make long-term commitments to support and sustain their partners in advancing policy reforms. | |
| Case 1.1 | Environmental Management in South Korea |
| Case 1.2 | Engaging High-Level Forums to Champion Policy Change: The U.S.-Egyptian Partnership for Economic Growth and Development |
| **Lesson 2. Policy Change Is Not a "One-Shot Event" But a Continuing Process**<br>The policy process proceeds one step at a time, cannot be short-circuited or necessarily rushed, and involves attention to continued consensus building through dialogue and communications. | |
| Case 2.1 | Improved Garbage Collection in Machala, Ecuador |
| Case 2.2 | A Bite-Sized Approach to Tradable Permits in the Czech Republic |
| Case 2.3 | Building a Sustained Policy Dialogue |
| **Lesson 3. Timing Is Everything: Seize Targets of Opportunity**<br>In the course of the policy process, donors should be aware of those events that may create opportunities to initiate policy reforms or resuscitate a policy that has been stalled. Donor organizations should be prepared to move quickly to take advantage of opportunities that may arise in response either to unforeseeable events (such as a natural or manmade disaster) or foreseeable events (such as a change in the government resulting from an election). | |
| Case 3.1 | Sri Lanka: Timing is Everything for Policy and Institutional Change |
| Case 3.2 | Reforming Air Pollution in Almaty, Kazakhstan |

| **Lesson 4. The Policy Process Is Necessarily Multidisciplinary and Must Also Recognize Cross-Sectoral and Gender Linkages**<br>There is a range of factors and approaches that may be important in promoting policy change. Most of these factors relate to other sectors as well as economic, social, legal, cultural, and gender issues that need to be addressed during the analysis, design, and implementation stages, as well as in the dialogue supporting the policy process. | |
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| Case 4.1 | Multidisciplinary Policy Process in Tanzania |
| Case 4.2 | Gender and the Policy Process in Natural Resources Management |

# Lesson 1: Commitment of Key Decision Makers Is Required Throughout the Policy Process

## What Has Been Learned

The policy process is characterized by incremental changes, unanticipated delays, and sluggish implementation. To support such a process, donors must make a long-term commitment to support and sustain policy and the institutions that implement policy. Donors must develop comprehensive and integrated programs employing a range of targeted delivery mechanisms to overcome policy barriers and strengthen institutions. Periodic assessment of progress is essential to target resources and make adjustments in the assistance program.

The momentum for policy change emerging from one stage of the policy process may be difficult to sustain during the next stage. For example, no matter how thoroughly current policies have been analyzed during the stages of evaluation and problem diagnosis, the process of design brings into sharper focus issues of who wins and who loses, resource commitments, and institutional and legal barriers. Stakeholders who championed the evaluation of problems and the associated policy dialogue may be less effective in guiding policy design. It may be necessary to find new champions and affirm (or reaffirm) the commitment of key decision makers to see policy reform through the design phase to implementation.

## Key Underlying Issues

***The Pace of Reform.*** Even in countries that are members of the Organization for Economic Cooperation and Development (OECD), the process of introducing environmental regulations—beginning with the assessment of problems, through the development of legislation, and finally to implementation—has taken more than a decade. In many countries, the initial response to environmental problems involved the establishment of environmental health units in existing ministries, followed by the creation of environmental ministries or agencies and associated local and regional agencies to carry out monitoring, inspections, and enforcement. In many cases, the development of environmental management capabilities was triggered by highly publicized environmental spills or disasters (such as Love Canal in New York or the mercury contamination of fish in Japan). In developing countries, the pace of reforms has also been sluggish, as illustrated by the development of environmental management capabilities in South Korea (see Case 1.1).

***Moving the Process Along.*** While some policy assistance may be provided effectively for a limited duration, support at the national level in the environmental or natural resource sectors will require a long-term commitment, characterized by frequent assessment of the pace of reform and effectiveness of assistance efforts, changes in the delivery mechanisms, and flexibility on the part of the donor to respond to requests from partners. Some key challenges in moving the reform process along are enumerated below:

- **Assessing the level of commitment**—A first step in determining whether there will be adequate support for a particular stage of the policy process is to assess the government's motivation for leading (or at least participating in) the process and related discussions. A government may be participating because of political pressure or because an economic assistance package is contingent upon the country adopting certain reform policies. For example, the International Monetary Fund's (IMF) financial bailout in Indonesia was conditioned on that government's committing to a slate of forest sector policy reforms. While some of the agreed-upon reforms were implemented, their limited success suggests there was not a strong commitment from the government to develop or implement effective policies (see Case 10.3 in Chapter 6). In other instances, the policy process may involve representatives of government or stakeholder groups with a limited role in the policy design or implementation. For example, high-level summits or international conferences may not include the people who best understand the policy issues and the difficulties of reforming policies.

- **Matching stakeholders to the stage of the process**—Each stage of the policy process differs in terms of which policymakers or stakeholders are most likely to be effective in moving policy reform to the next stage. Thus, even if there is strong commitment from one group of stakeholders, they may be unable to steer the policy change. Consider, for example, the design stage of the policy process. For policies that require approval at the national level, the design process may be quite formalized, requiring new policies to be developed and vetted according to established procedures and protocol. Key ministries that must endorse the new policies may be able to slow or even halt their development unless the drafters address their concerns. This process of negotiation may dilute the effectiveness of the proposed policy as the drafters accommodate concerns from various ministries, or they may be able to derail the policymaking effort entirely. This means that there must be adequate commitment among national-level agencies to sustain the momentum developed in the stages of evaluation or problem diagnosis. By the same token, when policy evaluation or problem diagnosis is led

by local stakeholders, they must be capable of getting the backing of national policymakers.

- **Elevating the process to include high-level policymakers**—The stakeholders that may have been effective as champions at early stages of the policy process may be unable to remove key obstacles from the path of policy reforms once the design or implementation stages are reached. This most commonly occurs when environmental and economic policies are in conflict or significant budgetary resources must be available to support the new policies. For example, privatization agencies charged with selling off state-owned enterprises may see environmental audit requirements and liability provisions as impediments to the major agency goals of removing these companies from the public budget and generating revenue from sales. Another example is the removal of lead from gasoline, which may be difficult for an environmental agency to champion without support of the petroleum industry or the relevant sectoral ministry. In these cases, it may be necessary to elevate responsibility or ownership to a higher decision-making level to ensure that a broader perspective of benefits and costs are considered in developing the policy, as illustrated by the U.S.-Egyptian Partnership for Economic Growth and Development (see Case 1.2).

- **Tying assistance to performance**—Recognizing that the policy process may move very slowly because of changes in government and shifts in champions as the process moves from one stage to the next, it may be useful to introduce incentives for reaching mutually agreed policy milestones. These may include completion of background reports, development of draft legislation, or evidence of commitment of resources for implementation. USAID has successfully tied assistance resources to policy milestones in the Egyptian Environmental Policy Program, wherein cash transfers are based on the Egyptian partners achieving *a priori* policy measures. This program is structured around tranches defined by the amount of cash that will be transferred if all policy measures are met and by a list of policy measures that have been negotiated with the Egyptian partners prior to each tranche. Each tranche must be of no less than 12 months duration and no longer than 18 months. The policy measures have to be met by the end of the tranche to trigger the cash transfer. A simpler type of conditionality is illustrated by the use of graduation requirements to secure additional funding. For example, under USAID's DEMO project in Jamaica, environmental nongovernmental organizations (NGOs) were required to reach a prescribed level of self-generated financing before they were eligible to receive additional grant financing from USAID.

## Programmatic Implications

1. Donor organizations must analyze the level of commitment to a proposed policy or reform measure, determine whether the problems contributing to a lack of commitment can be overcome, and if so whether they can contribute to the removal of these impediments.

2. If the decision maker's interests are too narrow or limited, donors should propose processes to strengthen commitment to the policy at a more appropriate level. Partnerships between U.S. Vice President Gore and leaders in Russia, Ukraine, and Egypt illustrate the potential benefits of elevating discussions to a higher echelon of government.

3. Donors must recognize that the level of commitment to policy reform does not remain constant and that policy reforms can wither on the vine if commitment wanes. To help sustain commitment, donors can break the process of policy design into discrete steps, vigorously monitor decisions, and if appropriate, adopt a "stop-go" or graduation approach in providing assistance.

4. Donor agencies must develop partnerships among agency staff, policy analysts, and local academic institutions, and encourage their partners to lead and "champion" policy reforms.

5. Donors should diversify their partnerships in recipient countries to include a broader constituency within governments and include relationships with non-governmental organizations and institutions to ensure a broad exchange of ideas, especially where there are cross-cutting issues and both positive and negative sectoral impacts.

**Case 1.1**

***Environmental Management in South Korea***

South Korea's first environmental law, the Environmental Preservation Act, was enacted in 1977 and established a broad regulatory framework for setting standards and protecting the environment. Initially, an environmental management bureau was created in the Ministry of Public Health, but it was subsequently upgraded to a subcabinet-level Environmental Agency in 1980. Six regional environmental offices were established in 1987, but neither local authorities (until 1987) nor regional offices engaged in much inspection or enforcement activity.

With democratization and increasing public concern over the quality of the environment, a cabinet-level Ministry of Environment (MoE) was created in 1990, followed shortly by landmark environmental legislation endorsing the "polluter pays" principle and establishing joint and several liability for pollution damage. Following a serious pollution incident in the Nakdong River in 1991, additional legislation was enacted to provide for criminal sanctions for some environmental actions and to require environmental assessments.

Despite the creation of an excellent set of laws and expanded institutional capacity, implementation continued to lag behind legislative intent in the early 1990s. A second pollution incident in the Nakdong River in 1994 resulted in a strong public outcry and the resignation of the minister and a vice minister in MoE and the resignation of the chairman of the corporation responsible for the spill. Public pressure and expanded regulatory capacity (a fourfold increase in staff and more than doubling of the budget between 1980 and 1994) appear to have resulted in improved industrial environmental performance and improved ambient air quality for several criteria air pollutants ($SO_2$, $NO_2$, TSP, and CO).

**Case 1.2**

***Engaging High-Level Forums to Champion Policy Change: The U.S.-Egyptian Partnership for Economic Growth and Development***

On September 6, 1994, Egyptian President Mubarak and U.S. Vice President Gore announced a new initiative to sharpen and intensify the U.S.-Egyptian relationship. This new partnership was to consolidate and build upon past and existing collaboration between the two nations, as well as propose a new paradigm for growth and development for the 21st century.

One of four subcommittees, the Sub-Committee on Sustainable Development and Environment, was activated in early 1995 with the following objectives:

- To assist in the implementation of Egypt's Environmental Action Plan and the use of appropriate technologies and technical expertise to control pollution and protect environmental resources.
- To develop a shared understanding of the concept of sustainable development, develop specific objectives essential to sustainable development in Egypt, and identify constraints to achieving them.
- To promote improved practices to avoid environmental degradation and constraints on future development; and assist in developing greater awareness of the impact of population growth on sustainable development.
- To foster policies that will create an enabling environment for sustainable and equitable economic growth.

The subcommittee was initially co-chaired by USAID Administrator Brian Atwood and Egyptian Minister of Environment Dr. Atef Ebeid. Meetings were held in Cairo and Washington beginning in June 1995 and continuing until now. Even though the key personalities changed over time, e.g. the Minister of Environment, the meetings continue to be held. These subcommittee meetings became a forum for serious and detailed discussions on major environmental issues in Egypt. The goal was to reach defined agreements for cooperation and specific steps for action. The subcommittee quickly developed into a very high-level forum at which support for policy measures or the development of policy measures was garnered. The "Gore-Mubarak Sub-Committee III" label became an important endorsement that was respected by both sides as implementation and action steps proceeded after agreements had been concluded.

At the first meetings, agreement was reached to proceed with a comprehensive action and policy program in support of environmentally sustainable tourism on Egypt's Red Sea coast and a comprehensive program on lead abatement in the greater Cairo area. From 1995 through 1997, the subcommittee focused on these two initiatives, resulting in (1) a policy to introduce lead-free gas for use in vehicles in Cairo and its environs and (2) a series of policy steps to improve the environmental conditions for coping with the explosive growth in tourism and hotel construction on the Red Sea coast. A major strategy for private-public cooperation on tourism development in this area was developed. Because of the high-level endorsement that resulted from its association with the Gore-Mubarak Sub-Committee III, these concerns were easily transformed into a national strategy—at the behest of the Egyptian side.

When discussions on the development of the Egyptian Environmental Policy Program were initiated in 1997 and 1998, the meetings of the Gore-Mubarak subcommittee provided both a formal and informal forum for discussions between the Government of Egypt and USAID. The subcommittee itself underscored the importance of initiating a comprehensive policy program that would build on the early work that had been supported by the subcommittee with respect to lead abatement and tourism.

The Gore-Mubarak subcommittee represented for USAID the highest possible level of engagement on environmental policy issues and was instrumental in developing and moving along a broad set of policy measures aimed at improving the management of Egypt's environment.

# Lesson 2: Policy Change Is Not a "One-Shot Event" But a Continuing Process

## What Has Been Learned

Policy reform is an evolving, multistage process that requires patience and perseverance. As soon as the most obvious obstacles to efficient resource use or better environmental management is removed, other constraints appear. Obtaining results quickly does not ensure sustainability. At the same time, the absence of policy change, despite sustained actions at a particular stage complemented by policy dialogue, does not necessarily equate to failure. Policy change is a catalytic process of changing mindsets, and what appears to be inaction might actually be a slow change of attitudes and perceptions that will later be manifest in policy change and reform. Only by sustained engagement in each stage of the policy process can the undercurrents of change be detected and translated into action.

## Key Underlying Issues

***Consensus Building in the Policy Process.*** Each stage of the policy process must include stakeholders and decision makers in consensus-building exchange to determine achievable policy options, appropriate time frames, the players, and likely effects. Effective policy formalizes a social and political consensus to systematically influence day-to-day choices of individuals, households, enterprises, or communities. This requires an understanding of incentives, constraints, and technical relationships. In addition, effective policy depends on enforcement mechanisms, including markets, regulatory systems, informal social enforcement, and judicial processes. When governments view policy as a simple legislative decree independent of a broader context, they often limit policy dialogue to just a few players. Such efforts typically fail to achieve the desired impact.

***Stakeholders' Decision-Making Processes***. Environmental policy outcomes depend on the decision-making processes and resultant activities of stakeholders who face pressing production and consumption choices in which environmental considerations may play little part. At the micro level, people and enterprises face choices determined by such diverse factors as tradition, knowledge of alternatives, prices, resources, risk management, and technology availability. Policy change must succeed in altering the mix of choices and incentives if recurrent and widespread behavior change is to result.

***Web of Relationships.*** Dialogue at each stage of the policy process usually takes place for a specific purpose in the context of a specific issue or project (such as water supply,

garbage collection, environmental liabilities arising from privatization, etc.). However, the context of the policy dialogue is usually much broader, encompassing legal and institutional factors beyond the confines of the narrowly defined issue at hand. While shortcut solutions can help to avoid larger systemic problems affecting the current issue, policy change has its greatest potential for sustainable impacts when it systematically addresses the broader underlying causes of environmental problems. For example, environmentally related financial liabilities in transitional economies such as Hungary, Romania, and Poland have been dealt with in the short term through indemnification of investors and enterprise discounts. However, the policy process and dialogue continued at a higher level to introduce liability legislation, environmental assessment requirements, escrow accounts, and even reform of the privatization laws.

***Long-Term Engagement.*** Policy analysis and dialogue must be sustained throughout the policy process. Often issues emerge at one stage that were not foreseen at the previous stage. In some cases, problems that arise can be dealt with at the current stage of the process while in other cases it may be necessary to return to the previous stage. This most commonly occurs between design and implementation. USAID long-term resident policy advisors in Eastern Europe and the former Soviet Union engaged in policy dialogues with local counterparts that extended from issues identification through legislation drafting and instrument design to implementation where sustained engagement through implementation addressed practical difficulties found in forest auctions in Romania and emissions trading in Almaty, Kazakhstan. This led to critical adjustments that increased the effectiveness of the policy changes and established credibility that helped garner legal support for engagement in larger issues. The need for sustained engagement is also demonstrated by the case of garbage collection in Machala, Ecuador. The solution of the technical issues of garbage collection in crowded slums brought out more formidable legal and institutional impediments, and resulting reform in turn required more than one legislative act. Only by sustained policy dialogue with local groups on the part of USAID, GTZ (a German company), and other parties were a series of constraints—many of them unforeseen—removed and solid waste collection improved (see Case 2.1)

***One Step at a Time.*** When working in developing and transition economies, USAID should carefully evaluate the political and environmental conditions before proposing rapid or radical policy changes. Faced with dramatically different or locally inappropriate options, policymakers may dismiss the policy options and become disinterested in change. Long-standing political and cultural traditions naturally have an impact on government receptiveness to new policy proposals. Outside advisors, although prepared and well intended, cannot always assess all of these circumstances. Teaming up with qualified local professionals can certainly help this situation, but proposing radical policy

changes too early may be perceived by counterparts as a lack of understanding of local conditions. Thus, approaching policy reform in "bite-sized" pieces usually proves more successful. The "jump-right-in" approach has a track record of failure, whereas a step-by-step approach is often greeted with greater receptivity, as exhibited by the C4EP project in the Czech Republic (see Case 2.2).

***Awareness and Communications.*** Even when policies are based on sound approaches, their final impact depends on viable mechanisms for policy implementation—institutional capacity; the maturity of civil society organizations; the legitimacy of political, judicial, and administrative systems; and enforcement capacity. A broad range of stakeholders can be both directly and indirectly influenced by changes and must be both educated and engaged. This multistep, iterative process yields a workable social accommodation. While brief engagement without continuity wastes effort, sustained support for policy does not assure success, nor does the lack of concrete policy change indicate failure. Sustained policy support that occurs at the wrong level, is not based on solid analytics and good science, does not involve the shareholders, or ignores local conditions will most likely fail. On the other hand, sustained policy support based on solid principles of analysis and engagement, even when it does not result in policy change, attains success when it catalyzes shifts in attitudes, builds capacity, and generates demand for policy reform. A good example is USAID's Natural Resources and Environmental Management for Sustainability (MANRES) project in Thailand, which began producing dramatic policy changes after it was essentially concluded. Indeed, much of the MANRES success built on USAID work and institutions that had been part of the Agency's continued policy dialogue since the 1950s (see Case 2.3).

## Programmatic Implications

1. Policy programs must allow sufficient time for key constituencies to become involved, to evaluate options, and to become participants who feel they have been brought into the dialogue. While this may complicate policy dialogue, it is necessary to achieve sustainability.

2. Policy advisory programs should recognize the need for a step-by-step approach to policy dialogue and design their activities accordingly. A process based on education, analysis, discussion of options, and the involvement of relevant parties should be designed at the outset. By contrast, plans for rapid and radical policy change are often unrealistic. While the short-term results of a step-wise approach may be limited, the long-term impact is likely to be far greater. Policy proposals that are built on a firm foundation of policy analysis and dialogue have much greater chance of being widely accepted.

3. The capacity for sustained policy change must be built into technical assistance programs to increase their effectiveness, ensure their sustainability, and elevate the policy analysis and dialogue through increased credibility.

**Case 2.1**

***Improved Garbage Collection in Machala, Ecuador***

Deficient solid waste services, a major concern throughout the developing world, are often provided by unionized municipal agencies that do not collect, transport, or bury garbage efficiently. Slum dwellers often shoulder the burden of inefficiency in the form of uncollected trash left to accumulate in streets and vacant lots.

Along with the German company Gesellschaft für Technische Zusammenarbelt GmbH (GTZ), USAID has supported the improvement of solid waste services in Machala, Ecuador, a port city with a population of approximately 200,000. Technically, initiating reliable garbage collection in slum neighborhoods, where half the municipal population resides, was simple. Working with local people, GTZ and USAID advisors quickly determined that large tricycles equipped with a 1 $m^3$ box could circulate easily in areas that are impassable for motorized vehicles.

In contrast, it has taken much more effort to overcome the legal and institutional impediments to improved trash collection. In 1993, the Machala city council founded an autonomous municipal solid waste enterprise which, many hoped, could contract immediately with private service providers. However, more than a year passed before it became clear that the best way to proceed was to establish a community-based micro enterprise holding a single-service contract. Not until 1996 was the micro enterprise fully operational, with approvals from several governmental agencies and a bank loan to finance equipment purchases.

Better environmental services—garbage collection in this case—always demand more than a technical solution. Institutional reform, which is essential for lasting environmental improvement, involves much more than a single legislative act. Had USAID, GTZ, and other interested parties failed to work with local counterparts to resolve all impediments to reform as they arose (many of them unexpectedly), garbage would still be piling up in Machala's slums.

**Case 2.2**

***A Bite-Sized Approach to Tradable Permits in the Czech Republic***

Over a three-year period between 1994 and 1997, the Central and Eastern Europe Environmental Economics and Policy (C4EP) project, implemented through a cooperative agreement between USAID and the Harvard Institute for International Development, worked with the Ministry of Environment of the Czech Republic on policy development for air pollution control. Initially, C4EP evaluated various policy options for air pollution control, based on interviews with policymakers and an analysis of available air emissions data. A report was prepared which outlined the pros and cons of various options, including revisions to the charge system, trading of pollution permits, and full-cost pricing of energy and energy inputs. While reaction to the report was positive, some policymakers hesitated to adopt the recommendations despite the projected positive economic benefits.

This hesitancy reflected, at least in part, the degree to which some of the proposals represented radically different policy approaches for the Czech Republic. For example, full-cost pricing of energy and energy inputs, although efficient from an economic standpoint, were a radical, and hence controversial, departure from historically subsidized energy prices. A program of tradable air pollution emissions permits relied on the creation of a well-functioning market for the buying and selling of permits, similar to the nascent Prague stock exchange, the success of which was still being evaluated. Other potential programs required legislative changes.

Seeing some of these roadblocks, C4EP adopted a step-by-step approach. For the option of tradable emissions permits, C4EP and the Ministry of Environment established a pilot project that simulated trading in a particular area of the Czech Republic. Through computer modeling of trades using actual cost data from thirty facilities, the project demonstrated two key points: first, that a small-scale market for trading could be established by natural supply and demand among the facilities; and, second, that cost savings of at least 15 percent could be realized through trading as an alternative to all facilities meeting a specific emissions standard.

In addition to the pilot project, C4EP cooperated with the U.S. Energy Association (USEA) which, through a USAID project, sponsored a study group from the Czech Republic to observe U.S. trading programs. Czech experts also attended USAID regional conferences on tradable permits sponsored by C4EP and USEA, all of which helped to contribute to an understanding of these programs.

More recently, the Czech Ministry of Environment has expressed a willingness to consider intrafirm trading, an initial step toward possible trading of permits on a larger scale in the future. The inclusion of language allowing for tradable permits was considered in air legislation being prepared for 1998.

**Case 2.3**

***Building on Sustained Policy Dialogue: The MANRES Project in Thailand***

In the early 1960s, the USAID program in Thailand supported an extensive program in rural and local government and helped establish the District Officer's Training Academy under the local government arm of the Ministry of Interior. Thailand's seventy-plus provinces are divided into districts, and district officers are the most important formal point of government contact with local populations. These career civil servants report to the provincial governors, who are appointed by the Ministry to the Interior. Most observers of the USAID/Thailand program, which ran continuously from 1950 to 1995, consider the training academy to be a success story and an important contributor to improved local government management. A real bond of professional friendship and goodwill was developed with USAID/Thailand that continued after formal USAID assistance to the training academy was terminated in the early 1970s.

In 1986, as part of the USAID/Thailand middle-income country development strategy, USAID began the design of a comprehensive natural resources and environmental program—USAID's first-ever comprehensive engagement with broad environmental issues in Thailand. This program, known as MANRES, was launched in late 1987 and included elements for policy, awareness and education, human resources development, coastal resources management, industrial environmental management, and rural resources management.

During the design phase of the MANRES program, the rural resources management element focused on including, for the first time, a natural resources and environment chapter in the annual development plan that each province develops under the leadership of the governor. This process is usually managed by the Vice-Governor, and involves the provincial district officers. By 1986, the Thai government had upgraded the District Officer's Training Academy into the Local Government Academy that provided training sessions for governors and vice-governors, as well as a "modern" curriculum for the training of district officers—a core concern.

During one of the MANRES program design sessions at USAID/Thailand, a long-term Thai senior staff member recalled the important role that the training academy had played in the success of the local and rural development programs previously supported by USAID/Thailand. He suggested that the Local Government Academy could serve as a direct, immediate way to work with the governors on the inclusion of the new chapter on natural resources and environment in their annual provincial development plans. Following discussion, the academy agreed to the suggestion and noted with enthusiasm the reestablishment of its links with USAID/Thailand in a new era as Thailand moved toward middle-income status. The resulting immediate access to a key level of leadership (the governor) boosted the MANRES program and helped bring about the modest institutional change sought at the provincial level.

On a parallel track, and also reflecting the influence of the past, USAID/Thailand included in the MANRES program approximately $2 million of seed money for a provincial natural resources and environmental management fund. This money would be used to provide discrete funding for priority activities presented in the natural resources and environment chapters of the provincial development plans. The fund would be replenished annually from Thai government appropriations. This fund, a basic replication of the fund for decentralized development management that USAID/Thailand supported during the early 1980s, succeeded in directing resources toward decentralizing development and implementation of small-scale rural development activities.

Finally, the director of the Local Government Academy observed the environmental wisdom of USAID/Thailand in the selection of the site for the District Officer's Training Academy in the early 1960s in what was then an isolated spot well outside of Bangkok. Since then the area has become heavily urbanized except for the marshy areas within the academy that are important resting places for migrating birds.

## Lesson 3: Timing Is Everything: Seize Targets of Opportunity

### What Has Been Learned

Effective policy assistance is demand-driven, responsive to local interests, needs, and timing. Natural or manmade events can create an almost instant demand—targets of opportunity—for policy analysis and dialogue on the part of policymakers. Conversely, before policymakers and stakeholders express serious interest in policy change, attempts to engage on policy issues rarely result in success.

### Key Underlying Issues

***Unforeseen Events and Opportunities.*** Targets of opportunity dramatically increase the interest of policymakers and stakeholders in policy change and can enhance substantially the policy advisor's influence. Examples of events that may create these opportunities include changes of government or senior officials, government response to citizens' demands or demonstrations, media exposure of a high-profile environmental problem, a manmade calamity such as an oil spill, or a natural disaster such as a drought.

***Government Changes.*** Changes of government or senior personnel changes within a government—local, regional, or national—frequently provide new, and sometimes foreseeable, opportunities for policy dialogue. These changes often correlate with a shift in relationships among stakeholders that can remove previous constraints to policy changes. Newly elected governments can demonstrate urgency for swift action and quick successes, as was seen in Sri Lanka (see Case 3.1). However, where the new officials perceive the foreign advisors to have been "too close" to the previous government, such changes can have the reverse effect.

***NGO Leadership Changes.*** Targets of opportunity also occur with leaders of NGOs. Improved policy dialogue can give NGO participants increased access to government policymakers and thus boost interest in dialogue with foreign advisors, especially where strong NGO–advisor relationships already exist.

***Role of Foreign Advisors.*** Foreign advisors can take best advantage of targets of opportunity when they have already established relationships of trust with their counterparts—even if significant, observable results in policy development and reform have not yet emerged. Advisors who appear to be "at the right place at the right time" often have quietly been in the region for some time, building relationships that bear fruit most visibly at times of crisis or change. Sometimes, however, a change in government or

of senior officials can accelerate interest in swift action, leading to rapid acquaintance with a foreign advisor.

***Establishing a Track Record.*** Providing useful advice through policy assistance at crucial times can also create opportunities for future policy analysis, facilitation, and dialogue. Advisors who support the policy process during stressful and challenging times are more likely to be called upon again on matters both routine and extraordinary.

***Linking Environmental and Market Reforms.*** Other windows of opportunity can result from a confluence of changes. For example, market reforms in Almaty, Kazakhstan, and the efforts of this city's municipal administration to control industrial pollution, in combination with the Soviet-era legacy of a pollution-permitting system, created the opportunity to introduce a pilot emissions trading program (see Case 3.2).

***Challenges of Maintaining Flexibility.*** Workloads and resource requirements can increase dramatically when targets of opportunity lie outside the parameters of an existing work plan or challenge previously planned activities. This can make rapid redeployment and reallocation of USAID or implementor resources necessary, placing a premium on swift and flexible administrative actions that facilitate effective response. Administrative challenges may also require agreement from counterparts to disengage from activities that suddenly have a lower priority.

## Programmatic Implications

1. USAID and its program implementors should recognize "targets of opportunity" as occasions to begin a new policy support or move a stalled stage of policy forward.

2. Certain foreseeable events, such as elections, create predictable targets of opportunity for change that should be anticipated.

3. Advisors who have established good relationships and track records are best able to take advantage of targets of opportunity.

4. USAID should recognize that taking advantage of targets of opportunity might mean deviating from accepted work plans and reallocating resources—sometimes on short notice.

**Case 3.1**

***Sri Lanka: Timing Is Everything for Policy and Institutional Change***

Sri Lanka's organizational structures for environmental and natural resources management have long frustrated those working in this field. When an Environment Ministry was created in 1990, it was placed under the cabinet minister for Environment and Parliamentary Affairs. Although a Central Environmental Authority responsible for pollution control and environmental impact assessment was placed under its oversight, it formed no clear links with broader natural resources agencies such as the Department of Forestry, the Department of Wildlife Conservation, or the Coast Conservation Department.

Election of a new government in 1994 offered an opportunity to rearrange environmental and natural resources management responsibilities so that similar functions could be clustered. Institutional analyses conducted by USAID-supported policy advisors prior to the announcement of the new cabinet-level ministries proposed either that key natural resources agencies be grouped (the "green" model) or that the pollution control and urban development authorities be linked (the "brown" model).

However, despite considerable behind-the-scenes lobbying by government insiders and their consultants as well as NGOs, the functional agencies actually became further disassociated. A Ministry of Transport, Housing, Environment and Women's Affairs was created, and the Departments of Wildlife Conservation and Forestry were placed in other separate ministries. The new government had come to power after a seventeen-year hiatus, and political considerations in the grouping of functions far outweighed organizational arguments.

When Sri Lanka's cabinet was reshuffled again in June 1997, the same organizational arguments and background studies were again considered. No longer so burdened by disparate political interests, the Government significantly improved the way environment and natural resources management is handled. While the Department of Wildlife Conservation remains in the Ministry of Plantations and cut off from other environmental agencies, the new Ministry of Forestry and Environment—which also governs the Central Environmental Authority covering pollution control—considerably elevates the profile of environmental concerns in the country. For the first time in Sri Lankan history, guardianship of a major portion of the nation's protected lands combines broader policy and program responsibilities for managing the environment.

**Case 3.2**

***Reforming Air Pollution Policies in Almaty, Kazakhstan***

In late 1994, USAID-funded environmental policy advisors began a dialogue with their Kazakh counterparts about ways to reduce air pollution without unduly burdening the country's struggling industrial sector. Air pollution is particularly acute during the winter months in Almaty, the country's capital city and its largest urban and industrial center, when the Tien Shan mountains trap emissions from industrial facilities and inefficient, coal-fired heating plants. Solving this problem requires substantial investments in both improved processing technologies and pollution control equipment, with costs and emissions impacts varying greatly across different investment options. Kazakhstan's economic difficulties require cost-effective pollution regulations that create incentives for investment funds to flow to the options that achieve air pollution reductions at the least cost.

The cost-effectiveness of environmental regulations depends greatly on flexibility, with command-and-control regulations usually less cost-effective than market-based approaches such as pollution charges and tradable pollution permits. One of the ironies of the centrally planned Soviet Union was that its environmental regulatory system, though obviously deficient in many respects (particularly with regard to enforcement), was less command-and-control oriented than that of the United States. The Kazakh system relied less on technology standards, which dictate the pollution technologies that industrial facilities must use, and more on performance standards, which specify target levels of pollution control but not the means used to obtain them. It granted polluting facilities permits that gave them the right to discharge pollution up to a specified maximum load. The permit system was coupled with a pollution charge system: the right to pollute was not granted free of charge, even for pollution loads within the permitted amount.

Parties on both sides of the policy dialogue in Kazakhstan recognized that the existing environmental regulatory system provided a promising opportunity to strengthen the role of market forces in achieving cost-effective reductions in air pollution. The dialogue, therefore, centered on ways to enhance the system's market-related features. Principal recommendations included raising pollution charges to levels that more closely approximated the environmental damage costs of pollution and introducing tradability into the permitting system so that high-cost abaters can in effect pay low-cost abaters to abate for them. Although the recommendation to raise pollution charges has not yet been fully adopted, a pilot emissions trading program was established in 1996. This program is the first functioning stationary-source air emissions trading program outside the OECD.

One lesson that can be learned from this experience is that policy dialogue can often take advantage of "windows of opportunity." The introduction of market principles would have been more difficult if Kazakhstan's environmental regulations had more of a command-and-control nature. A second lesson is that policy dialogue must be at the appropriate level, which does not necessarily mean the highest level. Government counterparts involved in the dialogue about the emissions trading program were primarily from the Almaty municipal administration. Indeed, municipal policymakers , not their central government counterparts, provided the main impetus for the program. Counterparts from the central government did participate in the dialogue, however, since the central government had to authorize the program.

# Lesson 4: The Policy Process Is Necessarily Multidisciplinary and Must Also Recognize Cross-Sectoral and Gender Linkages

## What Has Been Learned

Donors, policymakers, technicians, and communities need to work together through seminars, workshops, research, and program monitoring to support the policy process. A comprehensive understanding of opportunities for (and constraints to) better natural resource and environmental management is necessary to build the broad-based support that policy changes demand. Multiple complex issues override conventional sector boundaries, and diverse information must be integrated and made easily accessible to inform policy and planning decisions. Adopting interdisciplinary perspectives can be challenging and demands a continual review of both the environmental and socioeconomic effects of policy change. Strong consideration of gender and other equity issues throughout this process enhances the prospects for successful environmental policy reform.

## Key Underlying Issues

***Narrow Thinking/Hard Learned Lessons.*** Small farmers in developing countries typically have few options; they usually manage very limited natural resources to support themselves and their families. Technicians, planners, and specialists who come with preconceived projects and agendas tend to think in sectorally bounded ways. In the early days of community forestry, small-scale projects were based on accepted forestry practices; for example, plantations were turned into woodlots of fast-growing trees. However, these projects often ignored agricultural land needs, local property rights customs, and even locally preferred tree species. Energy programs focused on stoves with the highest possible wood efficiency—forgetting that the people who used the stoves had specific needs regarding cooking temperature; wood flavors for food; changes in cooking location for different seasons and times of day; available space, size, and shape of pans; and smoke management. Water projects provided wells without fully considering that cattle coming to drink would also have to eat, and soon the areas around the wells became denuded. Technical project planners widely forgot that without social and institutional understanding, benefits could be co-opted by those not paying the costs.

***Developing an Understanding of Cross-Sectoral Linkages.*** In 1978, the Swedish International Development Authority (SIDA) announced a policy change. SIDA forestry efforts would include cross-sector linkages and multidisciplinary perspectives, and SIDA told forestry officials of the United Nations' Food and Agriculture Organization (FAO)

that it would not fund community forestry programs designed and implemented solely by foresters. SIDA identified the need for community development, communications and social science skills, and participation of women on design teams. Consequently, an FAO Advisory Task Force, formed to discuss community forestry in a cross-sectoral forum, included specialists from forestry and all the other technical departments. To improve the prospects for policy change, a new international Expert Consultation Group of forestry department policymakers visited and analyzed forestry activities in various countries, annually reviewed and advised on the FAO/SIDA program, and discussed policies to support community forestry in their countries. The challenges of developing effective wildlife management policies in Tanzania have necessitated multidisciplinary analysis involving a variety of experts from the fields of economics, finance, law, wildlife management, game ranching, and farming (see Case 4.1).

***Community-Based Resources Management.*** First, the FAO/SIDA program learned how to assess and plan with local men and women, who identified perceived opportunities and problems. Local technical knowledge and organization became the basis for activity design and implementation. Issues such as forestry and food security, women's specific issues and needs, tenure and communal management surfaced as community concerns. Newly developed team-building techniques helped communities set priorities and manage local activities. Communications specialists established approaches to present local perspectives to state and regional policymakers through locally made and edited videos. Institutional and legal disincentives for natural resource management were identified, and policy and technical aspects of conflict management were explored. All of these efforts required the collaboration of nutritionists, lawyers, foresters, marketing specialists, farming systems experts, political scientists, anthropologists, and others working in cooperation with local stakeholders—including government agents and policy makers.

***Adaptive Management.*** Without intersectoral, multidisciplinary teamwork, implementation of the FAO/SIDA program would have been impossible. However, using participatory design methods is not easy and demands continual review of the primary and secondary impacts of policy change as activities develop. For example, a new and widely supported program in India is Joint Forest Management (JFM). It rewards communities with some tenure rights and shared economic benefits for improving degraded forestlands and protecting and managing regenerating or planted trees. At first this seemed like a wonderful breakthrough for the forests, foresters, and village communities. However, additional issues now call for fine-tuning the JFM approach. For example, communities that already successfully manage their forests (and therefore have good-quality, nondegraded forest land) do not qualify for local management, while others

may lose access to their forest areas because they are not yet degraded. Another problem is that functioning management groups may be undermined by projects that establish totally new organizations with management authority.

***Gender and Equity Issues.*** Gender and other equity issues may also arise. In the JFM program, men usually oversee protecting the forest area, but women often find that collecting fodder and fuelwood becomes more difficult. They must compete with women of other communities for products from unprotected forestland or from land outside their own community's protection. Spatial issues as well as temporal issues arise. For example, even when women can obtain fodder and bedding from pruning and other management practices in young plantations, as the trees grow taller, the women have less access to these byproducts. New access arrangements then must be made to obtain these resources (see Case 4.2).

***Cross-Disciplinary Communications Challenges.*** Working with technical specialists in other disciplines and from other sectors can be challenging and requires a long-term commitment. In 1986, FAO nutritionists were asked to help develop tools for analyzing nutrition and food security problems in forestry activity areas. Since nutritionists had not been trained to see relationships between forestry, land use, natural resource access, and nutrition, they had not focused on famine foods and perennials as a food source during droughts or local snack foods from wild plants and animals. Nor had they considered traditional medicines from forest plants that affect food absorption and nutrition. If programs and activities are to improve the lives of the rural poor, food security issues must be basic to long-term resource management goals. Eventually, FAO nutritionists considered locally defined food security, nutritional problems, and health records, and new tools increased awareness of the potential for improving local nutrition and health through forestry activities. Later, workshops with forestry policymakers, nutritionists, and project managers were held in Asia. Currently, forest services in Bolivia and in Mali are using results of these studies and are adapting them to their own situations. Further, the FAO Nutrition Division has a nutritionist who works solely with forestry and fisheries projects.

***Integrated Information Management Tools.*** Information must be organized and easily accessible if it is to inform policy decisions. For example, in some Bolivian communities, the International Forestry Resources and Institutions (IFRI) network is used to integrate information on the history, local use rules, the socioeconomic and political environment, and an inventory of biomass and biological diversity. The communities use this information to draw up management plans and expect to use the reports in the new national land adjudication policy, which is based on historic territory and current use and

management practices. In Uganda, IFRI helps provide early warning of forest degradation or changes in biological diversity. When changes occur in the resource base, this information tool can show relationships to changing market pressures, makeup of local populations, tenure, or rules of use. The linkages highlighted by this relational database can help indicate directions for policy and planning changes.

## Programmatic Implications

1. Unless cross-sector and gender issues are fully incorporated into the environmental policy dialogue process, useful perspectives will be lost and the relevance of policy change placed in jeopardy.

2. Adaptive management methods that have proven successful in policy dialogue require a heavy emphasis on information feedback and open communication among all stakeholders.

3. Specific measures—such as the use of workshops, seminars, and other approaches for bringing together policymakers, technical specialists, and local people—must be built into the design of environmental policy dialogue efforts.

**Case 4.1**

***Multidisciplinary Policy Process in Tanzania***

Tanzania's wildlife migrates freely within and outside of protected areas. However, outside of the protected areas development and sustainable management of wildlife is constrained by loss of habitat to human settlement, domestic livestock grazing, mining, unsustainable exploitation, and especially expansion of agricultural lands (both for large commercial and small, low-input operations). Without secure tenure over land and use rights to wildlife and other incentives for protecting and using wildlife sustainably, lands critical to wildlife are being converted to incompatible uses.

The Tanzanian government responded by promulgating the Wildlife Policy of Tanzania (WPT) in 1998, which proposed to address the problem mainly by "devolving management responsibility of the areas outside unsettled protected areas to rural people and the private sector." The implied hypothesis underlying the WPT is that by involving rural communities and other stakeholders in the sustainable management of wildlife, by establishing a supportive environment for establishment of wildlife management areas (WMAs) and community-based conservation (CBC) within those areas, and by conferring secure user rights to wildlife resources to communities that form WMAs, nonconsumptive or sustainable consumptive uses of wildlife resources will be able to compete with alternative land uses that are not compatible with wildlife.

Implementation of the WPT requires a thorough reorientation of legislation, regulations, guidelines, and public sector management perspectives, all of which were developed and honed over time in support of a more directive, top-down approach to managing wildlife. USAID/Tanzania is supporting this reorientation through EPIQ and other partners.

EPIQ's role has been to provide facilitation services for preparation and review of WMA guidelines and to undertake a series of analytical studies to better define and assess both opportunities emerging as a result of WMA designation and impediments to the realization of these opportunities. Given that the WPT represents a fundamental policy reorientation, it is not surprising that a proper assessment of opportunities and constraints required EPIQ to consider the issues from a variety of perspectives. For instance, to determine whether promising new economic opportunities were both remunerative and sustainable it was necessary to examine such opportunities from an economic and wildlife management perspective. It was also necessary to determine:

- whether there were institutional or legal impediments to the financing of needed investments in WMAs;
- how to assure that communities in areas designated as WMAs—many of which were not familiar with normal commercial practice—could avail themselves of the services they need to enter into contracts with hunting and photographic safari operators, hoteliers, wildlife ranchers, and providers of transport and other ancillary services that meet their legitimate expectations;
- how to apportion revenue likely to be generated as a result of new activity in WMAs in a way that covers the cost of services provided by the public sector (such as infrastructure and technical assistance) without destroying the economic incentives for the private sector—including the communities themselves; and
- how to assure that designation of WMAs, and new activities begun in areas so designated, would not run afoul of legislation, policy, and practice developed over the years to support an approach to wildlife conservation that was effectively gutted by the new WPT.

For these purposes, EPIQ has fielded multidisciplinary teams consisting of expatriate and Tanzanian economists, finance specialists, lawyers, wildlife management specialists, and experts in taxation, venture finance, and game ranching and farming, among others. The process is ongoing at the time of this writing.

**Case 4.2**

**Gender and the Policy Process in Natural Resource Management**

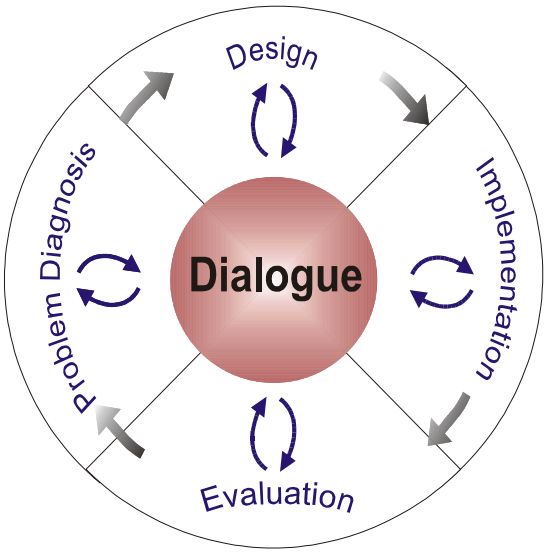
The early 1980s brought extensive focus on women and forestry with the realization that women had different needs and requirements for natural resources than men had and that men and women had complementary roles within their families and communities. To develop means for general analysis, the FAO undertook a program in Asia to promote dialogue with and stimulate input from policymakers, training institutions, and projects.

The FAO selected eight forestry projects from six Asian countries; all contained local participation components and cooperative project managers. Each study team included a member from a local social science group who had worked with gender issues, a member from a training institution, and a technical advisor who was a high-ranking policy-level person from the forestry sector. The following steps were taken in each of the countries:

- Gender and training specialists with representatives from FAO Rome made a field visit to each project and established dialogue with project staff.
- Gender and training specialists from each country attended a workshop on writing participatory case studies, drafted an analysis framework, and designed project studies. The framework included questions in four areas: (1) the development context—what is getting better and what is getting worse? (2) women's and men's activities and roles—who does what? (3) women's and men's access to and control over resources—who has what and who needs what? and (4) forestry actions needed—what should be done to close the gaps between what women and men need and what development delivers?
- Frequent meetings for each national team identified activities that failed because of lack of understanding of gender differences. For example, a man discussed his community's tree needs with project staff and the staff produced a large number of seedlings. However, the women (who were responsible for planting and watering seedlings) had not been notified in advance of the seedling delivery and were unable to change their daily chores to accommodate the added work, so the seedlings died. The next attempt included both women and men in the discussion, and the new seedlings had a high survival rate.
- At a second workshop, gender and training specialists evaluated their research and developed a plan. The case studies differed greatly, showing that project effectiveness necessitated factoring in the sociopolitical environment. For example, a politically sensitive area in Nepal resulted in a project that was especially disadvantageous to women. In Thailand, three different ethnic groups in one project area each had very different roles for men and women. In Bhutan, the issue was to keep the traditional gender equality in the face of projects that appeared to introduce inequality. The studies showed that misconceptions about men's and women's roles could be disastrous to project outcomes.
- Further workshops established ways to incorporate this information in future training, in participating projects, and in the ministries. Videos, case studies, training materials, and policy discussion papers were developed.

The FAO's substantial investment in this activity resulted in related training institutions helping to train local ministries, international agencies, and NGOs and assisting with other projects. Forestry officials have been focal points for support of gender analysis. The materials produced have been translated into Spanish and French for use at international meetings.

# Chapter 4: Policy Dialogue




Policy dialogue is shown as the hub of the policy wheel (Figure 2.1) in recognition of its importance in all stages of the policy process. Dialogue may take place in a variety of forums, employing different means for facilitating the exchange of ideas, information, analytical results, and policy options, approaches, and tools. At each stage of the policy process, the participants in the dialogue as well as the form of the dialogue may vary. In addition to facilitating the policy process, dialogue contributes to the transparency and effectiveness of decision making in the environmental policy arena. In this chapter, the lessons learned with respect to policy dialogue are presented, along with fourteen illustrative case studies drawn principally from USAID-funded assistance programs.

## Lessons

| **Lessons 5. Involve All Key Stakeholders and Find a Policy "Champion"**<br>It is important to include all key stakeholders in policy dialogue and to identify and nurture participants who can play a leadership role in advancing the policy process through dialogue. Dialogue has provided entree for donors to participate more proactively in promoting policy change. | |
|---|---|
| Case 5.1 | Private Sector Project in Pakistan |
| Case 5.2 | Policy Dialogue and Environmental Policy Change in Indonesia |
| Case 5.3 | Involving Key Stakeholders in Policy Dialogue: USAID's Natural Resources Project in Indonesia |
| Case 5.4 | The Importance of Building Consensus for Policy Change: Ecuador's Agrarian Development Law of 1994 |
| Case 5.5 | Being Prepared to Face Down the Opposition: Air Pollution Control in Quito, Ecuador |
| Case 5.6 | Energy-Efficiency Projects in Eastern and Central Europe |
| **Lesson 6. Policy Dialogue Must Adapt Approaches and Tools to the Wide Variety of Political, Economic, and Cultural Settings**<br>The approaches and tools of policy dialogue must be tailored to the various settings in which policy dialogue takes place and must respond to constraints imposed by the country's policy process. | |
| Case 6.1 | Forest Policy Dialogue in a Variety of Forms and Settings |

| | |
|---|---|
| Case 6.2 | Conversation with Robert Schneider, World Bank, Brasilia, June 1996 |
| **Lesson 7. Donor Coordination is Crucial for Consistent and Effective Policies to Emerge from Policy Dialogue**<br>Effective coordination among donors is necessary to ensure that partners receive consistent signals and direction on policy reforms in policy dialogue. Issues such as differences in donor objectives, conflicts between donor and partner goals and strategies,and inconsistencies across sectors may need to be discussed and resolved among donors to present a unified donor position in policy dialogue. | |
| Case 12.1 | Donor Coordination in the Clean Rivers Program in Indonesia |
| Case 12.2 | Donor Coordination in Central and Eastern Europe |
| **Lesson 8. Policy Dialogue Requires Flexibility and Thrives on Open and Creative Interaction among Counterparts**<br>Policy dialogue must adjust to changes in the pace of reform and be flexible enough to reconcile ambitious environemntal goals with actual practice, tailor laws and regulations to particular situations and minimize economic, social, and political impacts without compromising the goals of policy reform. | |
| Case 8.1 | Regulatory Flexibility: Cautionary Lessons from the U.S. EPA |
| Case 8.2 | Flexible Policy Dialogue: Capitalizing on New Opportunities in Niger. |
| Case 8.3 | Interactive Policy Dialogue Leads to Improved Water Management in Romania |
| Case 8.4 | Interactive Water Policy Dialogue in Egypt |

# Lesson 5: Involve All Key Stakeholders and Find a Policy "Champion"

## What Has Been Learned

Successful policy is locally made and owned, and the policymaking process is essentially political. Consequently, policy dialogue must have at least one effective champion who can become a significant national player. Effective policy championship begins early in policy development and continues well into implementation so that competing interest groups cannot derail policy reform, divert its original intent, or allow it to languish. However, the policy champion is only one important stakeholder. As many countries experience democratic consolidation, traditional political elites are learning to consult *all* key stakeholders when formulating policy changes. USAID and other development agencies now understand that simply engaging a traditional elite no longer suffices; meaningful dialogue with all significantly affected parties is a prerequisite for lasting policy reform.

## Key Underlying Issues

***Local Champion.*** The goal of policy dialogue is policy change and requires a local champion to serve as initiator, articulator, facilitator and consensus builder. The absence of such a champion—whether at the national or local levels—has hindered reform efforts in many countries (see Case 5.1). Champions are more difficult to recruit for environmental policy projects than for economic reform projects, especially in the poorest countries and in transition economies. In some situations, champions must be developed by supporting environmental capacity-building efforts (which provide incipient champions with needed skills, knowledge, and technical support) and by promoting participatory decision-making processes (that is, by forming an effective political constituency to back the champion's efforts).

***Constituencies and Stakeholder Analysis.*** Building a political constituency for reform takes time, especially in the environmental sector. Identifying and engaging a champion early in the process raises the chances of success. Supporting short-term consultancies on specific, well-defined environmental policy issues before embarking on a major policy project can provide an opportunity to identify effective counterparts and stakeholders. A good example is provided by Indonesia's public disclosure program for water pollution (PROPER), which from the inception of the idea through its implementation benefited from the leadership provided by senior Indonesian environmental officials (see Case 5.2).

***Participatory Decision Making.*** Few parts of the world have a deeply rooted, truly participatory and democratic approach to policymaking. Memories of totalitarianism are fresh in many places where USAID and other development agencies are active. Even where reasonably free and open elections are held regularly, democratic consolidation is not far advanced, and top-down decision making by a political elite may continue. While working with such an elite can produce direct and immediate impact on public policy, experience shows that these results are largely superficial. Many governments prefer to keep their constituents quiescent with low energy prices and subsidies for inefficient, polluting parastatal industries. Even if a regime puts good policies in place, key constituencies may not approve, resulting in policy reversals when the government changes. As participatory decision making becomes a fact of life around the world, efforts to alter public policy have greater potential for success when key stakeholders are consulted. In many areas, engaging only a small elite in environmental policy dialogue is no longer viable (see Case 5.3).

***Stakeholder Identification and Participation.*** As traditional political elites in many countries are learning (often the hard way), formulating policy change necessitates consulting all key stakeholders. From Ecuador comes an example of the pitfalls of a nonparticipatory approach to policymaking. Heeding the advice of international consultants and conscious of recent property law reform elsewhere in Latin America, the Ecuadorian government in 1994 legislated major changes in communal property arrangements. However, indigenous leaders contended that they had been ignored and demonstrated their dissatisfaction by organizing a national strike. In response, the president withdrew the law pending review by a special commission that included the indigenous leaders. The commission then engaged in the sort of dialogue that should have occurred in the first place, and all concerned came to accept marked changes in Ecuadorian property law that many of these participants had vociferously criticized just a few months before (see Case 5.4).

***Role of the Private Sector.*** In most countries, the private sector plays a vital role in informing and influencing policy dialogue, often through trade organizations. These private entities may be able to influence governments to adopt flexible and cost-saving environmental policies, rather than relying solely on command-and-control approaches. Also, under democratic governments, elected representatives often join with industries in their area to support sound policies that have economic benefits. Private sector groups should be encouraged to participate in the policy dialogue and, in some cases, may be candidates for cosponsorship of policy analysis and action. These groups can be accessed in formal settings, such as trade conferences, but also through informal channels such as newsletters and small group meetings.

***Special Interests, Consensus Building, and Coalitions.*** While meaningful consultation with all key stakeholders is integral to successful policy dialogue, unanimous support is not required for all reform and limited accommodations can be made for affected groups. Decision makers must be prepared to override special interests bent on impeding an initiative that would yield sizable net benefits for the society at large. A case in point is the firmness with which Quito's municipal government and its mayor implemented controls on vehicular pollution (see Case 5.5).

***Policy Awareness and Education.*** A high-level representative of a development bank who is stationed in Latin America emphasizes the distinction between direct dialogue and *policy influence*. He asserts that any particular agenda is advanced most effectively in an indirect manner by funding national institutions to carry out studies that bear on policy issues and communicating findings to policymakers and key stakeholders. The degree of influence depends greatly on research quality, with findings by national researchers and institutions more likely to be accepted than those by foreigners. Research findings of short-termers, in particular, are often not taken as seriously. The development bank's representative has concluded that policy reform cannot be pushed—only sold—and that its most effective advocates are the country's own citizens. As democratic institutions, including civil society, grow more articulated in the developing world, any international organization favoring policy change through dialogue will find that the best option is to cultivate and support local institutional partners.

## Programmatic Implications

1. Initiating successful policy dialogue often depends on whether a local champion exists who is committed to leading the policy reform process and has the political stature to do so effectively.

2. By supporting consultancies on specific environmental policy issues, USAID can identify effective champions and stakeholders or help develop champions by supporting environmental capacity-building efforts and by promoting participatory decision-making processes.

3. As countries become more democratic, engaging traditional elites in dialogue no longer guarantees policy reform. Instead, all key stakeholders must be take part, and indirect influence through providing support to local organizations often offers the most promise.

**Case 5.1**

***Private Sector Power Project in Pakistan***

During the early 1990s, USAID was involved in a major effort to introduce private power into Pakistan. The country's growing shortage of electric power, with attendant shortfalls in industrial and agricultural production and acute concern over the impact of rising oil import bills, demonstrated the need to develop indigenous energy resources and expand the power sector.

To execute the project, USAID contracted with a private firm to place four long-term resident advisors in the country—a Chief of Party; an advisor to the Water and Power Development Authority (WAPDA), Pakistan's national utility; an environmental advisor; and a coal advisor. The project successfully attracted private power into the country and created institutions in both the Ministry of Water and Power and WAPDA that were capable of evaluating complex independent power producer (IPP) projects. However, the goals for the coal sector were not met, environmental assessments were not well-integrated into the approval process for IPP projects, and an effective regulatory regime was never developed.

In the coal sector, serious design flaws dogged the project. Pakistan's constitution gives the provinces control of coal resources. When USAID proposed creating a coal advisor in the Ministry of Petroleum and Natural Resources, the provinces saw it as an attempt by the federal government to assert control over provincial resources. The project design also paid little attention to the financial and technical capacity of the coal industry and to its antiquated labor practices. In short, policy dialogue was never successful.

Similarly, the project design called for an environmental advisor to help create institutional capacity in the Government of Pakistan to assess the environmental impacts of all IPP projects. Although a fledgling environmental agency, the Pakistan Environmental Protection Agency (PEPA) already existed, the environmental advisor was placed in the Private Power Cell of the Ministry of Water and Power even though no high-level support and no real environmental champion existed there. The GOP accepted this position only because the World Bank made this a precondition for funding IPP projects and USAID made the acceptance of World Bank environmental guidelines a condition for providing technical assistance.

Despite many obstacles, extensive policy dialogue with the requisite federal institutions and detailed meetings with provincial authorities made the creation of the National Electric Power Regulatory Authority (NEPRA) a great success. Nevertheless, following USAID's withdrawal from Pakistan in late 1994, NEPRA was bypassed by powerful ministries and never exercised its full authority on which an earlier consensus had been reached. Thus, policy work is never finished and requires real champions and real benefits for all stakeholders.

**Case 5.2**

***Policy Dialogue and Environmental Policy Change in Indonesia***

Environmental agencies in developing countries are frequently new, understaffed, and underfinanced, making it difficult to sustain Western-style command-and-control monitoring and enforcement programs. One environmental agency, Indonesia's BAPEDAL, responded to this challenge with several carefully crafted, innovative, regulatory programs. Two of those programs—the Clean Rivers program, or PROKASIH, and an environmental business rating program known as PROPER—economized on scarce monitoring and enforcement resources, mobilized support for better environmental performance from other agencies, and relied on community and market pressures to significantly increase compliance.

What made PROKASIH and PROPER work? Key elements contributing to their success were effective learning by doing, substantial advocacy and commitment of senior officials in BAPEDAL, judicious use of technical assistance, and keen cultural and political sensitivity on the part of those charged with designing and implementing the new programs.

To begin with, senior managers in BAPEDAL considered how to turn a disadvantage (the lack of sufficient resources to develop and sustain a command-and-control monitoring and enforcement program) into an advantage. First, using social marketing concepts, the program built support for a cleaner environment among the Indonesian public. This was followed with a highly targeted semivoluntary Clean Rivers program (PROKASIH). Small interagency teams, which included local and provincial officials, identified the dirtiest portions of particular rivers and focused their attention on the 20 percent of polluters polluters that were responsible for 75 percent of the biological oxygen demand (BOD) load. By focusing monitoring and enforcement on the few polluters that were responsible for the bulk of pollution and encouraging voluntary pollution reduction agreements with these large polluters, the median reduction in BOD load under the program was 59 percent, while the BOD discharge per unit of output fell by about 55 percent.

The experiences of PROKASIH were critical to the success of PROPER, a program that relies on public disclosure of environmental performance to improve compliance. Like PROKASIH, PROPER focused on significant water polluters. But PROPER went one step further. It developed a color-coded system to rank and publicize the environmental performance of monitored polluters. Because politically powerful industrialists owned some of the factories that would be rated, PROPER's success depended on designing and implementing a simple but highly credible environmental rating program.

The elements that were critical to the success of this program included a combination of targeted, short-term technical assistance from the donor community, wise use of social marketing concepts, the designing of a color coding system that was meaningful to the public, and initially rewarding good performers with positive publicity rather than punishing poor performers with bad publicity. Targeted, short-term technical assistance helped develop a transparent, computer-based monitoring and coding system that minimized the risk of rating errors and abuse of the ranking system. The user-friendly computer model was demonstrated to high-ranking government officials, the press, environmental NGOs, and the business community. This proved critical to gaining support for the program. Two other elements were equally important. First, the color codes chosen—gold for superior performance, green for beyond compliance, blue for compliance, red for being out of compliance, and black for egregious violators of standards—had meanings that the public could readily identify with. Second, political opposition from the business community was overcome by demonstrating the coding system to businessmen in advance and giving plants with poor ratings six months to improve their ratings before results were released to the public. Both of these approaches worked. As a result, the number of black ratings fell by 50 percent between initial and final ratings, and there was a 20 percent increase in the number of plants in compliance (blue ratings). More importantly, both the press and the business community saw the rating program as fair and credible.

There is no doubt that the combination of commitment to learning by doing in BAPEDAL, judicious use of technical assistance, and keen cultural and political sensitivities made a difference. But equally clearly, the leadership, ownership, commitment, and creativity of senior officials within BAPEDAL made PROKASIH and PROPER successful. The importance of this leadership factor

became evident when one of Indonesia's neighbors unsuccessfully attempted to adopt an environmental rating program based on PROPER. Without strong commitment (leadership was vested with a consultant in the donor community), senior officials of that country's environmental agency never felt program ownership, which resulted in weak implementation.

**Case 5.3**

***Involving Key Stakeholders in Policy Dialogue: USAID's Natural Resources Project in Indonesia***

Adopting a multi-stakeholder policy process may be the most fundamental requirement to achieving sound policy decisions. Further decisions located at the right scale and jurisdictional level ensure relevant information on environmental problems and policy consequences, and incentives for encouraging appropriate behaviors. Multi-stakeholder processes also enable other considerations—such as the distribution of policy benefits and costs—to be better factored into decision making.

During implementation of the Indonesian Natural Resources Management Project (NRMP), USAID learned a number of lessons concerning participation in the policy process. Nevertheless, a poor understanding exists as to what public involvement and participation actually entail. For most practitioners, participation means some form of consultation. But the real benefits of participation come from power sharing. A truly participatory process includes the authority to make decisions and take responsibility for the consequences of decisions. Unless direct stakeholders have decision-making authority, participation is illusory and participants only weakly appreciate the implications of policy change.

NRMP's work on improved park management and its attempts to develop broader policy processes in the forestry sector confirmed the need to establish who the real stakeholders are in any policy process. For example, community meetings on alternative park management strategies created a vehicle for consultation. Those who came were prepared to listen. However, poachers or illegal loggers whose behavior most needed changing did not take part in such meetings. The real stakeholders—those most affected by or affecting policy outcomes—must become involved. Depending on institutional arrangements in a particular location, an entire village community may not even be equivalent to a stakeholder group.

In natural resources policy processes, the sectoral nature of government administration complicates the process of engaging the full range of stakeholders. To be effective, policies must consider the range of incentives created across sectors and agencies; without strong cross-organizational dialogues, policy outcomes will remain unpredictable.

After starting with a top-down, weak forestry policy analysis and dialogue process, NRMP changed its approach by forming small policy groups within the Forestry Ministry to address sensitive policy issues. Attention to the interests of this key sectoral agency led to a far greater sense of ownership, and policy measures were consequently passed and implemented.

NRMP also helped develop the Indonesian Regional Science Association, a professional group where institutional interests could be put aside while participants deliberated objectively on policy options and consequences. This allowed for new collaborative policy dialogue on a range of issues associated with decentralization of authority for natural resources management. Such forums are increasingly needed in Indonesia, where current trends aim to decentralize authority to the provincial level. To avoid the risk of national policy errors being repeated at lower levels of governance, policy dialogue must transfer lessons learned from the national experience to all key stakeholders.

**Case 5.4**

***The Importance of Building a Consensus for Policy Change: Ecuador's Agrarian Development Law of 1994***

In recent years, the shortcomings of group tenure arrangements have come under increased scrutiny in Latin America. A bewildering array of laws and regulations prevented *comunas* and *ejidos* from dividing assets among members and engaging in normal real estate transactions. Since communal land could not be bought or sold, and therefore could not be used as collateral for a loan, access to formal financial markets was precluded as well.

Following Mexico's lead and heeding the advice of international consultants, the Ecuadorian government made major changes in its communal property arrangements in 1994. Those changes were incorporated in the *Ley de Desarrollo Agrario* (Agrarian Development Law), which the national legislature adopted.

As has been the norm throughout Latin America, policymaking in Ecuador has not been characterized by heavy consultation with stakeholders. In this case, leaders of some well-organized indigenous groups argued that their voices had not been heard. They responded by organizing a national strike, which brought normal business to a standstill for several days.

Ecuador's head of state, Sixto Durán-Ballén, decided that the best course of action was to suspend new the law pending review by a special presidential commission. The commission, which included indigenous leaders, promptly engaged in the sort of discussion that should have preceded passage of the law. As a result, the new law, which allowed private parcels to be created out of communal holdings, remained largely intact. What was initially regarded as a radical policy change was accepted virtually without dissent as soon as all affected parties were included in policy discussions.

**Case 5.5**

***Being Prepared To Face Down the Opposition: Air Pollution Control in Quito, Ecuador***

Air quality is poor in Quito, as it is in most large urban areas in the developing world. Quito has more than 600 factories and other fixed sources of pollution, and the number of cars, trucks, and buses has burgeoned in recent years. Atmospheric concentrations of suspended particulates, lead, and other pollutants exceed international standards, in some cases by a wide margin.

The municipal government, in pursuing several clean-air initiatives, is paying special attention to diesel-burning vehicles as well as to industrial establishments. Teams of policemen and technicians from Quito's environment department patrol major thoroughfares and detain buses and trucks that emit too much smoke. The owner of any vehicle found to be in violation must pay a fine equal to about $150 and must post a bond of three times the fine. The bond is returned after the vehicle is brought into compliance, generally with a proper tune-up. In early 1996, Quito's mayor announced that emissions controls would be further enhanced by purchasing all buses and trucks that were more than twenty-five years old (for $2,700 to $4,000 each), thereby retiring them permanently from use.

Although well-received by the general public, bus and truck owners have been sharply critical of these means. In March 1996, they organized a strike and used their vehicles to block Quito's major intersections and all roads and highways leading into the city. In the past, actions of this sort that paralyzed commerce had caused government leaders to accommodate strikers' demands. But this time, the mayor held firm. Within hours of being put in place, the blockades were removed and traffic quickly returned to normal.

The mayor's political fortunes benefited enormously from this incident; he ran for reelection largely on the basis of his environmental accomplishments and captured three-fifths of the vote. His victory shows a substantial electoral premium for those who deliver on promises to raise air and water quality—and who are willing to take on special interests in order to deliver on those promises.

# Lesson 6: Policy Dialogue Must Adapt Approaches and Tools to the Wide Variety of Political, Economic, and Cultural Settings

## What Has Been Learned

Policy advisors need to approach the policy development process in various settings with diverse parties, not only in formal meetings with senior government policymakers. Advisors should seize opportunities to work one-on-one or in small groups with a variety of individuals and organizations that could influence the policy process, including private-sector representatives, local think tanks, and NGOs. A country's policy formulation processes can be difficult to understand and to influence, and foreign advisors working on short-term assignments are particularly likely to be at a disadvantage. Therefore, advisors must draw on local institutional capacity to carry out policy analysis, disseminate findings, and assist in policy implementation.

## Key Underlying Issues

***Understanding the Local Political Process.*** Diverse factors—including government platforms, private-sector interests, specific political agendas, and grassroots concerns—drive the political process, particularly in many developing and transitional economies. For this reason, advisors should reach out to many different groups and seek a variety of opportunities to inform and advise on policy issues. The potential for turnover in political power also makes it prudent to foster diverse support for policy change. Many of the countries where USAID and other development agencies are active are large, resourceful, and nationalistic. Virtually any advice that an outsider might offer can be—and usually has been—obtained from a domestic source. Also, complex policymaking processes make it difficult for an outsider, especially a short-termer, to determine who is making decisions and how. Furthermore, the resources that foreign development agencies offer are small relative to total capital flows; accordingly, host-country governments may regard them as inconsequential.

***Informal Information Exchange.*** In addition to customary channels of accessing government officials, other avenues of policy dialogue have had great impact. Round-table discussions that bring together officials from various government ministries can effectively build consensus on the elements of a legislative proposal before the laws are drafted. This technique was effective for development of the Romania water law in 1996. Exchange programs among countries have had great success allowing policymakers to view a proposed policy in action. In recent years, several forestry exchange programs

involving India, China, Nepal, and Kenya, among others, resulted in increased policy dialogue and publications that influenced policymakers in other countries as well.

***Utilizing Local Institutions.*** The cooperation of local universities and other policy analysis institutions can benefit any policy advisory program. This interaction often takes place through informal brainstorming sessions; for example, a classroom can become an informal forum for policy dialogue when a training course involves various players in the policy process. An academic setting can provide a less intimidating and more open environment for the exchange of ideas, as evidenced by a newly developed postgraduate course in environmental economics at Warsaw University that brings together professionals from the national environmental funds and Poland's Ministry of Environmental Protection, Natural Resources, and Forestry, among others.

***Innovation in Community Involvement.*** Local communities and NGOs can contribute greatly to policy dialogue, and the work it takes to design innovative ways of involving the public is well worth the effort. A variety of communications techniques can be used to overcome literacy barriers or bring together stakeholders whose interests are normally in conflict (see Case 6.1).

***Using Local Expertise and Institutions.*** Local institutions can exercise substantial policy influence. Where those institutions are weak, the task of strengthening them may fall to donor agencies. Typically, this requires several years of support consisting of training, technical assistance, and financing. Once established, local institutions can be highly effective agents of policy change. For example, national institutions with established credibility can carry out studies that bear on policy issues, and policymakers and key stakeholders will trust their findings. In Belém, Brazil, the *Instituto do Homem e Meio Ambiente da Amazonia* (Institute for Man and the Environment of the Amazon, or IMAZON), has carried out high-quality research for a number of years and provided technical assistance to the wood-products industry. The institute has acquired a solid local and national reputation, and the World Bank has found it advantageous to cooperate with IMAZON on policy initiatives of mutual interest (see Case 6.2).

## Programmatic Implications

1. Policy advisors should interact with a broad range of players in the policy dialogue process.

2. Appropriate structures are required for different political and economic environments, but policy advisors should be flexible enough to work with different groups and policy dialogue situations.

3. Advisors should both create and seek out opportunities to stimulate policy dialogue in a variety of settings.

4. Where local institutional capacity for policy analysis and dialogue does not exist, it needs to be developed.

5. Where local capacity is available, it should be fully utilized.

**Case 6.1**

**Forest Policy Dialogue in a Variety of Forms and Settings**

Building mutual understanding of terms and concepts, strengthening communications, and basing options on adequate information are crucial to policy dialogue. A variety of creative examples appear in a number of countries at both formal and informal levels.

In 1986, the United Nations Food and Agriculture Organization (FAO) funded an **India–China** exchange of forestry policy makers to explore one another's community forestry efforts. With previous exchanges between these two neighbors almost non-existent, this relatively new area for policy dialogue generated numerous articles by the internationally recognized participants. Some of these documents reached policy makers in other countries, and participants reported that the experience raised the level and quality of professional dialogue and widely validated the importance of the topic.

In 1994, professional community forestry workers in **East Africa**, horrified by the strong-arm tactics used to remove residents from recently expanded parks and reserves, designed an exchange. Having been in the Forests, Trees and People Programme (FTPP) network and aware of people involved in Indian Joint Forest Management, they used their budget and contacts to take policymakers from their countries to India. Later the Kenyans also visited Nepal projects. According to East African FTPP reports, this experience opened both national and regional dialogue on the topic and stimulated local forest management efforts in Tanzania, Uganda, and Kenya.

**Nepal** offers an example of opening dialogue between community representatives and local foresters. A representative of the government of Nepal who was on the evaluation team of a community forestry project concluded that perhaps the most important activity had been the community visits. Teams made up of local forestry officers and village leaders traveled together for several days studying the activities in other villages. One village leader remarked that he had never seen the forester before and had been afraid to enter his office. Now he would know to whom to go for help in getting the community forest land registered, and the foresters would now understand their problems better.

A similar event was organized in **Mali** where local communities reported feeling afraid of foresters and of being in the forests. The government of Mali organized a festival in the forest with food, games, and entertainment. After several such events, villagers reported that they enjoyed getting to know the foresters and forestry officers reported it was thereafter much easier to learn about the local situation and collaborate with villagers.

Obtaining adequate understanding of local situations to initiate effective policy dialogue requires particular effort. In **Laos**, an FAO policy support team, concerned over suggested policies on immediate settling of shifting cultivators, funded a Rapid Rural Appraisal. Policymakers on the team went to the communities to see field realities firsthand before writing policy. In developing tools for studying gender issues in relation to forestry projects in Asia, high-level forestry officials were hired as technical advisors. The teams reported that having these officials involved in analyzing the information created positive support at the policy level for future gender-sensitive activities.

From **Tanzania** comes another example of supporting policymakers with relevant information on

local situations and perceptions. Since the Masai people are largely illiterate, they needed a tool other than the written word with which to communicate with policymakers. A community forestry project taught the participants how to make and edit their own videos, and one Masai community decided to record its resource management strategies. On the day scheduled for video making, the community was confronted with a new document describing policy changes regarding land ownership. The Masai, who neither understood the document nor felt it upheld their interests, expressed this to policymakers through the video. While misunderstandings existed on both sides of the issue, the video helped the Masai present their perceptions to the government, resulting in a more equitable dialogue.

Relevant data is often missing when designing or carrying out policies. The **International Forestry Resources and Institutions (IFRI) network** (based at Indiana University and supported by the Ford Foundation, FAO, and a number of institutions) has linked technical plot and species information with the social, historical, economic, and governance context. This relational data base has been used in **Uganda** as an early warning system of changing forest quality and quantity. Because of the complexity of forest use, IFRI offers policymakers data on resource status and information to help them understand causes and potential solutions to problems. In **Nepal**, IFRI helped officials monitor how a new type of project affected both participants and nonparticipants. In **Bolivia**, community members and professionals work together using IFRI to organize and analyze information, both historic and current, on forest products and local rules of use. The participating communities and the foresters count on the resultant documents to help implement the new laws of land adjudication.

**Case 6.2**

**The Importance of Local Institutions: The Case of IMAZON**

The Brazilian-based organization IMAZON offers an excellent example of the contribution that local institutional development makes to environmental policy reform. Over the years, IMAZON has received support from USAID, various other donor agencies, and private foundations. The institute has acquired a solid reputation for research in a number of fields, including the recovery of deforested lands and other disturbed environments as well as the microeconomics of logging, ranching, and other activities in the eastern Amazon region. This success in large part reflects the efforts of Christopher Uhl, an ecology professor at Pennsylvania State University who worked at IMAZON for several years beginning in the late 1980s. He mentored more than a dozen young staff members, most of whom have completed postgraduate studies in the United States.

IMAZON does not confine itself to research. As a result of field studies, staff members have gained credibility with the private sector, local government, and other key actors in the eastern Amazon. In addition to being disseminated in scholarly journals, findings form the basis for local technical assistance initiatives. For example, IMAZON personnel work with loggers to diminish the resource waste and adverse environmental impacts that can result from timber harvesting.

IMAZON has also begun to have an impact on policy formulation. Under a contract from the Pilot Project to Save the Brazilian Rainforest (administered by the World Bank and funded by the G-7 industrial nations to assess forestry activity in the Brazilian Amazon), the institute completed the first comprehensive view of the wood-products industry in the region. IMAZON also has prepared a short document—in cooperation with the Ministry of the Environment, the national Congress's environmental committee, and other agencies—in which anticipated courses of development in the Brazilian Amazon are plotted out for various policy scenarios, including the current policy vacuum.

# Lesson 7: Donor Coordination Is Crucial for Consistent and Effective Policies to Emerge from Policy Dialogue

## What Has Been Learned

Donor-sponsored environmental policy interventions can result in parallel activities built on differing assumptions, goals, and approaches since projects are often developed through bilateral dialogue. Policy initiatives, by their very nature, must send consistent signals that systematically influence local decision making and incentives. Multilateral policy dialogue requires greater donor coordination than do other types of assistance activities.

## Key Underlying Issues

***National Versus Donor Strategies.*** Since local leadership and champions are essential for successful policy work, donors must coalesce around a single national strategy, rather than having line ministries buy into isolated donor agendas. Yet the policy and organizational imperatives of donor agencies often make such an approach difficult.

First, a donor's willingness to fund policy change may be tied to the adoption of specific reforms—limiting openness and national leadership. Second, because each donor may have a different vision of appropriate policy direction, donors frequently exert competing pressures on host-country policymakers. In Nepal during the late 1980s, a European-funded forestry master plan initially promoted institutional strengthening of the inefficient timber and fuel-wood corporations, while USAID policy dialogue with the government of Nepal focused on abolishing both parastatals as part of a broader market deregulation. The in-country presence of highly motivated individuals representing the different donors facilitated communications and coordinated policy approaches. This caliber of donor representation is the exception, however, rather than the rule.

***Cross-Sectoral Consistency.*** The need for donor coordination is further heightened by the importance of policy consistency across sectors. For reasons of efficiency and national priorities, donor agencies sometimes allocate priority sectors among themselves, with one taking the lead in health, another in the environment, and so on. However, policy measures across all sectors must be linked by the underlying principles on which the policies are based. For example, market-based approaches for private enterprise development are undercut if the government simultaneously resorts to price controls or rationing in the energy or water sectors.

***Proactive Donor Coordination.*** Major policy change in any sector (including the environment) often coincides with broader policy and institutional changes across sectors

and involving multiple donors. In such circumstances, donor coordination creates opportunities for more deep-seated and lasting policy reform. In the 1980s, representatives of the World Bank, France, and the United States worked together closely for three years to help the government of Mali develop major agricultural reforms, phasing out crop marketing boards, providing transitional commodity price supports, and taking associated steps to increase food security. Without proactive donor coordination, no single donor could have engaged the government in a dialogue about the full set of changes needed to make reform workable; moreover, the government of Mali would have been hard pressed to identify and analyze the linked reforms needed to make successful policy change. Cases 7.1 and 7.2 demonstrate how donor coordination has advanced policy dialogue and achieved concrete and holistic results that would have been unobtainable through individual donor efforts.

***Breaking Bad Habits.*** Both donors and host governments have well-established habits that undercut donor coordination. Long-standing, project-driven habits of donors have seriously downplayed collaborative relationships with other donors, and governments sometimes prefer to deal with each donor separately. Nevertheless, a number of important changes in the last five to ten years have increased the prospects for effective donor coordination as part of the policy dialogue process:

- the structural adjustment process—driven by fiscal and economic crisis in host countries—places a greater premium on program and project consistency;

- tight donor budgets have forced many donors to tie program pieces to a coordinated whole funded by multiple organizations;

- the increasingly results orientation of donor programs—part of the reengineering process in USAID, but also present in virtually all other donor programs—forces explicit consideration of who else is doing what; and

- the increasing emphasis on policy change—of getting the basics in order—has itself improved dialogue among donors and with host governments.

## Programmatic Implications

1. USAID should explicitly include other donor programs in its results frameworks for environmental policy actions.

2. Donor organizations should establish long-term mechanisms for coordinating their efforts, and donor coordination should be an explicit element of USAID's design and implementation efforts.

3. USAID should make its own staff and its contractors responsible for learning about relevant programs by other donors and for establishing working relationships with other donor representatives.

| **Case 7.1**<br>**Donor Coordination in the Clean Rivers Program in Indonesia** |
|---|
| In the late 1980s, the Indonesian Ministry of Population and Environment realized the enormity of the water pollution problems in many heavily developed river basins of the country—particularly on the densely populated island of Java. A Clean Rivers, or PROKASIH, program was devised to draw public attention to the problem and target industrial polluters. Initially, the Environment Minister made highly publicized trips to particularly dirty spots along the riverbank or took boat trips along polluted river stretches. The program quickly became more formalized and PROKASIH teams were established in eight provinces. The teams selected the river stretches deserving greatest attention as well as the specific factories deemed to be the largest contributors to water pollution. Provincial teams also began monitoring river pollution levels and drawing up pollution-reduction agreements with industries to encourage them to find ways voluntarily to cut their effluents.<br><br>The Ministry formed a new Environmental Impact Management Agency (BAPEDAL) in 1990 as its operational arm, and PROKASIH was a flagship program. All major international donor agencies were invited to a series of retreats to discuss the program's directions with senior officials and encouraged to choose a river basin which they could help to clean up. Though the consultative process was clearly aimed at increasing financial resources for the program, most donors found that the approach—which also included a comprehensive matrix showing how each donor was contributing—improved their understanding of national environmental priorities and aided their programming. A substantial increase in funding greatly enhanced the credibility of the new BAPEDAL agency, and PROKASIH succeeded. A World Bank review of PROKASIH in 1994 found that the BOD load discharged by participating industries across 24 river basins had fallen by 59 percent. |

**Case 7.2**

***Donor Coordination in Central and Eastern Europe***

Cooperation and coordination among USAID and other donors avoids duplication of effort and ensures that local policy makers will not be given competing or contradictory advice, which may tend to decrease confidence in the benefit of outside advisors.

Between 1993 and 1997, the Central and Eastern Europe Environmental Economics and Policy (C4EP)—a cooperative agreement between USAID and the Harvard Institute for International Development—worked collaboratively with several international donor organizations that provided assistance to Poland during a period of economic transition. C4EP also worked with the EU PHARE program, providing environmental policy advice to the Polish Ministry of Environmental Protection, Natural Resources and Forestry. In the Opole region, C4EP environmental economists served on the steering committee for a PHARE tradable permits pilot project for air emissions. Their economics expertise and specialized knowledge of tradable permits aided project design and final review of the analytical work.

A coordinated effort to support national and regional environmental funds in Poland included design of operating procedures that incorporated cost-effectiveness principles, environmental priorities, and transparent project selection. Efforts aimed to foster the discipline and decision-making skills necessary for the emergence of private capital markets, while also financing interim environmental investments. The Environment Directorate, Non-Members Country Branch of the OECD, which was well-positioned to host international conferences, has brought together donor organizations with Central and Eastern Europe (CEE) and NIS countries to strengthen environmental funds. C4EP, by participation in the OECD regional network, has disseminated information derived from its in-country advising experiences in (CEE) and NIS. Now, many of the more developed CEE funds are teaming directly with newer CEE funds to offer technical assistance in priority areas identified through the network.

The dynamic benefit of coordination appears not only between USAID and other donors, but also among USAID program implementors. For example, in Poland, the USAID C4EP and Environmental Action Program Support (EAPS) projects worked jointly on two aspects of environmental finance: policy development and project packaging. This collaboration's success was highlighted in a recent USAID review of the EAPS project. One outcome was an Environmental Financing Sourcebook that was prepared for Polish industry and municipalities seeking financing for environmental projects. The book provides detailed information on a variety of funding sources, including project selection criteria and funding levels. Praised as the first compendium of its kind, the publication has been widely distributed in Poland.

# Lesson 8: Policy Dialogue Requires Flexibility and Thrives on Open and Creative Interaction among Counterparts

## What Has Been Learned

Policy dialogue is a dynamic process that requires continuous adjustment and flexibility in light of changing economic, legal, political, and social circumstances. Flexibility in space and time applies both to the process and content of policy dialogue. The dialogue process can range from the most intense engagement to a virtual hiatus while the participants reassess and readjust. In between, the speed and intensity of dialogue depend in part on windows of opportunity and emerging constraints. Changing circumstances also dictate the level of dialogue. In terms of dialogue content, flexibility is key to: (1) reconciling ambitious environmental objectives with actual practice; (2) adapting general laws and regulations to particular situations; and (3) minimizing the economic, social, and political costs of a policy without compromising its objectives. Open, two-way communications between key players (often advisors and their counterparts) must be maintained to ensure continuous adjustment. Flexibility in the dialogue process may help relieve constraints on the dialogue's content imposed by legal requirements or traditions that must be respected—even as the policy dialogue aims to alter them.

## Key Underlying Issues

***Adapting Policy Tools.*** Cost effectiveness and minimal disruption of the development process, both critical to reconciling environmental concerns with economic objectives, require flexible instruments and compliance schedules. Tools and instruments that have a successful track record in one place may require significant tailoring and adjustment in another legal and cultural environment. Players must understand how local conditions differ from those where the experience was gained and must be willing to adjust in midstream. (Case 8.1)

***Flexibility in Policy Dialogue.*** The U.S. Environmental Protection Agency (EPA) has sought in some cases to have industry find its own cost-minimizing solutions to environmental problems through enforcement discretion. Taking this approach, EPA pledged not to pursue particular violations in facilities in exchange for agreed-upon good faith efforts to improve their environmental performance. However, these experiments were obstructed by EPA's inability to offer sufficient legal protection to the companies against specific violations. EPA's Common Sense Initiative, which initially appeared to be a straightforward initiative in the policy dialogue between the regulators and the regulated, became quite complex. The idea was to substitute the flexibility of policy dialogue for the inflexibility of the legal system. However, the practical difficulty of the

discretionary enforcement approach caused EPA to turn to other alternatives, such as expedited rule making, to exempt participating projects from controlling regulatory requirements (see Case 8.2).

The value of flexibility in policy dialogue to capitalize on new natural resources management opportunities is aptly demonstrated by the dramatic shift of USAID and World Bank assistance to Niger from subsistence production to production for export (see Case 8.3).

***Fully Engaging Local Counterparts.*** Too often, policy "dialogue" degenerates into a unidirectional flow of prepackaged solutions, with little adjustment to local conditions or new information from host-country counterparts. When knowledgeable local analysts, officials, and other stakeholders receive new ideas from policy advisors, practical solutions may emerge for seemingly intractable problems. Failure to foster a genuine policy dialogue from the start turns a living process into a mechanistic one that quickly loses momentum as the interest of local counterparts wanes.

***Adapting to the Local Context.*** Unlike solutions with universal application, policy solutions to environmental management concerns are context-specific. Environmental policies of developed countries assume enforcement capability, well-functioning court systems, and efficient markets—all tenuous assumptions in developing and transitional economies. Cultural factors such as a low propensity to litigate, tribal land rights, communal management systems, and more tolerance of corruption necessitate the development of local solutions. Yet analytical input and international experience filtered through local perspective are critical to the formation of successful policy instruments and institutions. Donor-agency policies may be flawed or based on erroneous assumptions, but these are more easily remedied in an interactive process than in a unidirectional delivery of policy advice. Genuine, creative interaction among participants in policy dialogue supplies another essential catalyst: ownership of outcomes. Local counterparts and area stakeholders must have a sense of ownership over proposed changes; otherwise, implementation will be problematic and the sustainability of reforms will remain in question.

***Creative Interaction.*** The new water law in Romania illustrates creative interaction among participants. Through a long process of exchange and interaction by U.S., U.K., and French experts with Romanian decision makers and stakeholders, new concepts and institutions—such as "beneficiary pays," full-cost pricing, and river basin commissions—were established in Romania to improve water management and increase cost recovery (see Case 8.3). In Egypt, teams made up of Egyptians and Americans collaboratively

designed and carried out research to ascertain cost-effective water conservation measures. Without a technical approach to on-farm water conservation, which combined U.S. experience with local knowledge of farm practices along the Nile, water savings would have been overestimated and would have proven illusory (see Case 8.5).

## Programmatic Implications

1. Successful environmental policy dialogue requires a flexible approach to environmental policy instruments and compliance schedules in order to reconcile ambitious environmental concerns with economic and other realities and development objectives. Likewise, policy dialogue itself requires significant flexibility to effectively transfer policy tools from one context to another.

2. Rapidly changing conditions in developing and transitional economies means that the effectiveness and sustainability of policy dialogue depend on flexibility in the mode, pace, and level of dialogue reflecting local circumstances and lessons learned.

3. Flexibility embedded in technical assistance programs, both in process and in content, ensures relevance and effectiveness.

4. USAID policy assistance must ensure that policy dialogue remains a creative, interactive process; it must not degenerate into a one-way transfer of prepackaged solutions unfiltered by local perspectives.

5. To ensure a genuine policy dialogue, broad-based support from senior officials must be developed and policy interlocutors must have strong analytical, communications, and interpersonal skills.

**Case 8.1**

***Energy-Efficiency Projects in Eastern and Central Europe, Kazakhstan, and Kyrgyzstan***

In 1991, under the Emergency Energy Program for Eastern and Central Europe, USAID embarked on a series of energy efficiency initiatives in Poland, Hungary, Bulgaria, Romania, and Czechoslovakia. In each country, six to eight industrial and large commercial facilities conducted energy-efficiency audits and made recommendations on "low cost or no cost" options. Then, with a budget of roughly $40,000 per plant to procure equipment and work with local counterparts, equipment was installed and results were measured. The program aimed to: (1) demonstrate the cost effectiveness of energy-efficiency programs to serve as a catalyst for further investments; (2) build a host-country constituency for the programs; (3) teach host-country nationals how to calculate the pay back period and internal rate of return; and (4) open up market opportunities for U.S. firms selling energy-efficiency services.

Following the breakup of the USSR, similar programs were implemented in Central Asia, the Caucasus, and Russia under the Emergency Energy Program for the Newly Independent States. Most overwhelmingly demonstrated the economic benefits of energy efficiency in large-scale industrial and commercial enterprises. For example, the simple installation of meters on boilers led to reductions in coal consumption of 20 to 40 percent, and the installation of steam traps, the use of infrared cameras to zero in on heat losses, and other measures had huge returns and pay-back periods of only one to three months.

These USAID-sponsored activities also served as catalysts for the creation of local stakeholders that were firmly behind these programs. In Kazakhstan and Kyrgyzstan, the enthusiasm generated was so intense that plant managers embarked on their own energy audits and helped sponsor forums for other plant managers as to the benefits of energy-efficiency audits and ongoing programs. In Almaty and Bishkek, more than 200 plant managers in each country attended these training forums.

Despite the success of these projects in demonstrating the efficacy of energy efficiency and in building local stakeholder support, the programs lacked staying power because a host of problems were overlooked at the project design state.

After USAID funding ended, the highly subsidized energy prices in all the countries offered minimal incentive for factory managers to make large capital investments. Almost unbelievably, when USAID-financed consultants first went into Kazakhstan, the price of a barrel of oil used in district heating plants and large industrial enterprises was less than $.01. Two U.S. firms—Johnson Controls and Honeywell—participated in the demonstration seminars in Bishkek and Almaty and proposed sizable projects where the host country would invest no up-front capital but would pay the U.S. companies based on the savings obtained from their investments. However, their offer was rejected; because of the enormous fuel subsidies, the economics of the program simply did not work.

In other countries, some national governments wanted to make their own investments. However, no financing mechanisms were available either in-country or from outside sources, providing almost a textbook example that policy dialogue must adjust and respond to changing requirements.

Sometimes, USAID's policy of lending to countries, rather than to institutions or individuals, actually worked against local entrepreneurs who were already in the energy-efficiency business. Moreover, in the rush to demonstrate the efficacy of energy efficiency for these formerly socialist economies, USAID often failed to analyze whether the industrial enterprises receiving assistance were strong enough to survive the wrenching changes sweeping their economies. Consequently, a number of plants that received assistance in Eastern and Central Europe subsequently went bankrupt, obliterating the benefits of their low-cost or no-cost energy programs. The lesson learned here is that energy efficiency is not an absolute value in and of itself, but is only as good as the total context in which the investment is made.

**Case 8.2**

**Regulatory Flexibility: Cautionary Lessons from the U.S. EPA**

The United States is currently engaged in several experiments to examine alternatives to traditional environmental regulatory requirements. Although it is too early to draw final conclusions, a preliminary lesson has emerged that could help in gauging efforts to stimulate environmental experimentation internationally—namely, that ignoring or avoiding existing legal requirements is costly in terms of program credibility and may cause significant delays. While existing legal requirements may seem counterproductive, particularly in societies that appear to be lawless or where the existing laws have no discernible impact on the environment, the costs of this approach may be considerable.

EPA's Project XL and Common Sense Initiative (CSI) are two efforts to encourage industry to take the lead in finding better solutions to environmental problems. Under XL, facilities are invited to demonstrate superior environmental results in exchange for EPA's waiver of certain regulatory requirements. To this end, EPA suggested it would adopt a principle of "enforcement discretion," pledging not to pursue particular violations at participating facilities in recognition of the facility's good faith efforts under the XL program. CSI seeks to move the focus of the EPA away from media-specific management toward an approach that understands the functional characteristics of industrial production. Its stated goals are to remove barriers to innovation and promote strategic environmental protection.

Both efforts assume that sufficient opportunities exist within the current system of environmental laws to allow industry to seek cleaner, more cost-effective environmental management methods. Unfortunately, both are largely stalled for lack of basic legal authority. For CSI, EPA lacks the legal mechanisms to make multi-media experiments operational. In the XL program, experimentation with new approaches to environmental protection could be carried out only by violating existing legal requirements. EPA's agreement not to enforce a regulation does not offer sufficient protection to potential industry participants in the XL program, since citizens are allowed to initiate lawsuits to rectify regulatory violations in the face of government inaction. Also, enforcement officials worry about the precedent set by deliberately inviting and ignoring violations of the law.

The practical difficulty of the enforcement discretion approach has caused EPA to consider other legal alternatives to the XL program, including expedited rule making to exempt the XL projects from controlling regulatory requirements. The ability of other countries to experiment with more flexible regulatory approaches obviously depends on their particular circumstances. However, difficulties confronted in this country, when coupled with similar problems elsewhere (such as establishing a legal basis for emissions trading in Poland), indicate the need for congruence between regulatory reforms and legal foundations.

**Case 8.3**

**Flexible Policy Dialogue: Capitalizing on New Opportunities in Niger**

Over the past decade, USAID and the World Bank have engaged in a policy dialogue on sustainable natural resources management with the Government of Niger. Through such programs as the Agricultural Sector Development Grant I, the dialogue stressed process reforms regarding community resource management rights, legislation (including resource tenure), and public versus private rights and responsibilities. Specific issues have included the right to form local cooperatives to manage and market forest products; the establishment of secure resource tenure as an incentive to long-term investments to ensure sustainability; change in the role of forestry agents, from repression to extension; and changes in the forestry code, moving away from pure state ownership of the commons (with enforcement by paramilitary armed forestry agents) toward defined community management rights over the "*terroir villageois*" (village commons). This policy dialogue focused on internal reform, stressing sustainability of subsistence production and was geared more toward self-sufficiency than commercial production and exchange.

Changing circumstances have necessitated changes in the ongoing policy dialogue to capitalize on new opportunities. The necessary internal reforms were insufficient, and two sets of adjustments in the broader economic and demographic environment addressed new issues.

First, parallel programs supported by USAID and the World Bank (including the Forestry and Land Use Planning project at Guesselbodi and its subsequent extensions) showed new potential for trade in forest products (primarily firewood and fodder) to create financial incentives for sustainable forest management. Concurrently, NGOs such as the Sudan Interior Mission (SIM), CARE, and AFRICARE were experimenting with agroforestry programs that yielded both commercial forestry and *agricultural* benefits. Added to this mix was the growing success of the USAID-supported Majjia Valley windbreak program, which showed slow but steady gains over 25 years before it began to take off with widespread and measurable impact. The sum of these experiments provided new insights as to what rural producers wanted and what policy initiatives were needed in Niger.

Second, core economic and governance equations changed. In March 1993, Niger moved from 33 years of authoritarian and single-party rule to its first democratically elected government. In January 1994, the overvalued CFA franc, long cited as an insurmountable obstacle to economic development, was devalued by 50 percent. The process to clarify and formalize resource tenure moved into full swing after 1991, changing the stakes for rural resource access and altering economic options for resource management. Under conditionality agreements with USAID and other donors, Niger committed itself to major structural reforms in agricultural marketing, natural resources, health delivery systems, enterprise development, and other areas.

Policy dialogue that focused solely on subsistence producers no longer related to the structural transformations in rural production systems, while narrow focus on the small governance issues (such as the role of the forestry agent) would miss the much larger governance changes taking place. Ignoring the impact of devaluation and opportunities for trade with Nigeria and other coastal countries would not meet the needs of producers at the cutting edge of change. In second-generation programs, such as USAID's Agricultural Sector Development Grant II program and the Bank's *Programme de Gestion des Resources Naturelles*, dialogue has shifted dramatically to capitalize on what has changed and what has been learned. While Niger's coup d'état in July 1994 caused a setback, overall the trend remains positive and impressive, with strong evidence of some 400,000 rural producers adopting improved natural resources management techniques within the last five years.

**Case 8.4**

**Interactive Policy Dialogue Leads to Improved Water Management in Romania**

In the Communist era, piped water in Central and Eastern Europe was unpriced or underpriced, unmetered, and sometimes unavailable from suppliers who were not accountable and not responsive to household preferences or local conditions. With decreasing central budget allocations and inadequate revenue generation, suppliers had no funds for repair or expansion of water supply and distribution systems. Subsidized prices and unmetered systems also resulted in excessive water use and waste, and the deterioration of overall water service.

In Romania, the C4EP project (implemented by the Harvard Institute for International Development under a cooperative agreement with USAID) worked closely with local counterparts to develop a national Water Law to remedy existing problems by encouraging improvements that incorporate the “beneficiary pays” principle. The law was approved by Parliament in 1996.

A series of policy dialogue events organized by C4EP helped to examine policy options, develop the law, promote its passage, and support its implementation. To initiate the policy dialogue, a round table featured foreign experts who presented water management models from the United States, the United Kingdom, and France. The Romanians then considered which aspects of the various models would be most appropriate for their situation and used this information to draft the new legislation. The round-table process also facilitated the development of internal consensus among stakeholders and decision makers.

The new law deals with finance, accountability, and decentralization. The beneficiary-pays principle is the explicit operating principle of the law, and the goal is to move to full-cost pricing as soon as feasible. Accountability and decentralization will be enhanced by community-level river basin committees that have the power to prioritize and approve all water projects in their area. The basin committees include locally elected officials and water consumers and producers. Public participation is mandated and protected under the law, as is freedom of information. A series of public debates held around the country reviewed the draft charter for the river basin committees, and public comments were incorporated during a three-day internal round table to finalize the regulations.

**Case 8.5**

**Interactive Water Policy Dialogue in Egypt**

Significant policy change often requires thinking about old problems in new ways, as experience in the Ministry of Public Works and Water Resources (MPWWR) in Egypt shows. Until recently, development strategy in Egypt focused on increasing the productivity of irrigated agriculture to close the food gap, make the desert bloom, and provide employment for a rapidly growing population.

As Egypt approached full development of its share of Nile waters, meeting these objectives required a move away from extensive development of an increasingly scarce water resource to conservation and more efficient water use. Using a technical approach, the government sought to improve on-farm water efficiency and expand irrigated areas. However, research and experience in the western United States had shown that improving the efficiency of on-farm water management might conserve water at the farm level without conserving any freshwater at the river basin level. If this happened, real water savings would be illusory.

This insight presented researchers and policy analysts in the MPWWR with two important issues: first, to determine which improved on-farm water efficiency measures actually saved freshwater in Egypt; and, second, to make policy changes based on these findings. Unless both of these areas were successfully addressed, substantial resources might be wasted trying futilely to save water.

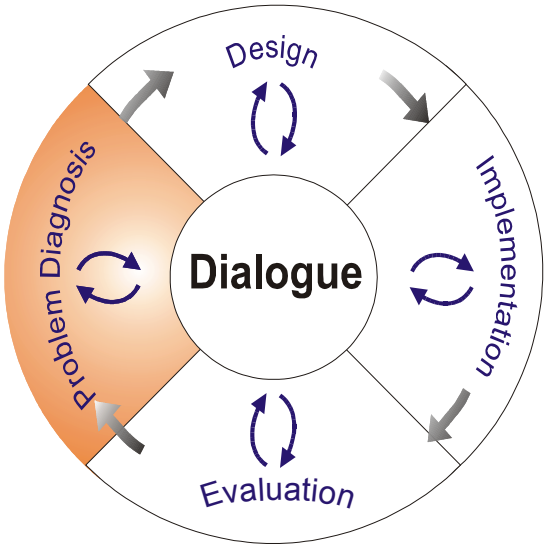
To address these issues, a substantial collaborative Egyptian–American research program on the Egyptian Nile designed and carried out a large number of studies to identify (1) the remaining conservation potential of the Egyptian Nile, (2) where along the Nile water could be saved, and (3) how water could be saved most effectively. Study results showed that potential savings were much smaller than previously estimated; however, they identified which on-farm water efficiency improvements actually saved water and determined that the MPWWR's nascent drainage reuse program was highly cost-effective.

Effective communication and acceptance of these findings within the irrigation and water policy community in Egypt depended on the following:

- the development of broad-based political and technical support from senior officials within the MPWWR and in the rest of the government;
- a joint Egyptian–American team with strong analytical skills, extremely effective interpersonal skills, and the ability to communicate ideas and their policy relevance to nontechnical audiences;
- numerous workshops, seminars, and briefings to report on progress, findings, and policy implications of the highly targeted applied research program in order to build consensus for policy change; and
- high-level support within the ministry to sustain a highly targeted applied policy research program.

# Chapter 5: Problem Diagnosis

Problem diagnosis represents a key link in the policy process that has a significant bearing on whether policymakers and stakeholders are prepared to take the critical step of policy design. If the analysis that comprises problem diagnosis does not establish a compelling case for changing policies, the policy process is likely to stall. Both the content and the process of problem diagnosis contribute to developing the consensus necessary to design policies. This chapter includes one lesson learned, with four cases provided to illustrate the importance of good analytics.




## Lessons

| **Lesson 9: Problem Diagnosis Depends on Solid Analytics and a Credible Analytical Process**<br>Thorough analysis of the political, economic, and social shortcomings of current policies provides the foundation for constructive discussions of policy options. While good analysis doesn't guarantee good policies, the converse is seldom true. Problem diagnosis involves effective planning to ensure that analytical approaches are credible, and the analysis is conducted in a timely manner within resource constraints, drawing on local expertise to the greatest extent possible | |
|---|---|
| Case 9.1 | Use of Analytical Approaches in the Philippines Environmental and Natural Resources Accounting Project |
| Case 9.2 | Solid Analysis Furthers Policy Diagnosis in Romsilva, Romania |
| Case 9.3 | Problem Diagnosis in Novokuznetsk, Russia |
| Case 9.4 | Development of a Comprehensive Forest Policy in El Salvador |

# Lesson 9: Problem Diagnosis Depends on Solid Analytics and a Credible Analytical Process

## What Has Been Learned

Problem diagnosis is pivotal in developing the necessary consensus that the problems need to be addressed and in engendering sufficient commitment from policymakers and stakeholders to move the policy process to the design stage. Problem diagnosis must make the case that current policies are not desirable from a political, economic, and social perspective, taking into account the policy's impacts on a broad array of stakeholders. Ideally, problem diagnosis will also identify and assess a range of policy options since a more compelling case for policy change can be made if there are options that potentially could address the weaknesses of the current policy. The analysis should not only be of the highest quality given resource limitations, but the process of conducting the analysis, vetting the results, and communicating the results in appropriate public forums is important in establishing the credibility of the analysis.

## Key Underlying Issues

***Having Strong Analytics.*** The value of solid analytics in diagnosing problems with current policies is obvious; discussions and subsequent decisions based on good information surpass those based on flawed or incomplete information. While good analysis does not always lead to good policy, constructive policy is a rarity in the absence of reliable information.

***Choosing Analytical Approaches.*** The selection of analytical approaches can be important in gaining the support of local agencies and staff for the analysis. The use of analytical models that are widely accepted or that can be provided to counterparts to carry out additional or follow-up analysis can increase credibility. In addition, willingness to share tools and provide training will be much appreciated. Illustratively, analysis of demand and supply of environmental financing has been systematized into a computer program by a Danish consulting firm, enabling staff in environmental ministries to update the consulting firm's initial analysis, adding new information and introducing parametric and policy changes into the demand/supply simulations. In another example, a system of natural resource accounts was developed for the Philippines that enables agencies to better track environmental and natural resource quality on a sustained basis and use these accounts in analytical reports (see Case 9.1).

***Drawing Upon Local Expertise.*** Involving local experts in the analytical work often contributes to greater usefulness, acceptance, and impact of a policy. These experts can

help donor-supported advisors identify and gather information that is not easily collected by foreigners. The intensive involvement of local experts serves as an important capacity-building technique and offers important long-term results. Further, having local experts as integral members of the analytical team can help persuade stakeholders and policymakers of the validity and usefulness of the analysis and induce positive policy change (see Case 9.2). Similarly, local stakeholders and policymakers that can assist with analytical work should be consulted in the study design. They can participate in seminars and conferences at which goals and objectives are discussed, preliminary findings are described, and final results are presented. Maximizing the involvement of key local stakeholders in as many facets of the work as possible usually results in greater acceptance of the results and contributes to a more open dialogue on new policies.

***Conventional Wisdom.*** Local decision makers and stakeholders may have previously reached conclusions based on anecdotal or incomplete information on the causes and impacts of an environmental problem. In this situation, the advisor must overcome initial resistance to the idea that more information is needed and may subsequently face skepticism if new findings question the conventional wisdom. Technical assistance to the Siberian city of Novokuznetsk to help find solutions to environmental problems necessitated revising the basic analysis of the economic situation because of the changes that had occurred in markets following the dissolution of the Soviet Union (see Case 9.3). In cases where highly visible problems create pressures to find quick solutions, stakeholders and policymakers might need convincing that analysis is valid and necessary.

***Time and Resources Commitments.*** Undertaking solid analysis takes time and resources. Although "quick and dirty" studies may be possible, such an approach can lead to misleading conclusions when the issues are complex and dynamic. Advisors must commit the time and money needed to discover and document the central issues and must be able to gain the support of in-country counterparts for this endeavor. The value of comprehensive problem diagnosis is demonstrated in the development of a National Forestry Policy in El Salvador (see Case 9.4).

***Multidisciplinary Perspectives***. Solid analysis is needed to identify and include all of the relevant facets of environmental problems and the likely impacts of possible solutions. Frequently multidisciplinary analysis is required. Physical and biological sciences describe environmental systems' response to pollution; engineering identifies technical problems related to the generation of pollutants; economics can analyze and quantify investments of various stakeholders; institutional analysis helps determine the roles and

responsibilities of government and NGOs; and the social sciences examine human behavior patterns and interaction as they relate to environmental challenges.

***Information Dissemination.*** Effectively communicating the results of analysis is as important as the analysis itself. If results are poorly communicated and not understood by other policy dialogue participants, the probability of its acceptance and impact are greatly diminished. Foreign advisors serving as policy analysts must find effective ways to communicate both methodology and results.

## Programmatic Implications

1. Donor organizations must include solid analysis in the policy dialogue process with the support of key participants, including USAID, local stakeholders, and local policymakers. This step should not be omitted even when there is intense pressure for rapid solutions or where a local consensus on causes and impacts already exists.

2. Beneficial local involvement can take many forms, from participation in the determination of goals and objectives by policymakers to the performance of key analytical tasks by local experts.

3. A collaborative applied research program that tests new concepts and instruments in the local context (such as through surveys and pilot projects) combined with frequent briefing of policymakers and workshops for stakeholders is often indispensable to effective policy dialogue and to human and institutional capacity building.

**Case 9.1**

***Use of Analytical Approaches in the Phillipines Environmental and Natural Resources Accounting Project***

From early 1991 through early 2000, the International Resources Group was the prime contractor in the implementation of the USAID-funded Environmental and Natural Resources Accounting Project (ENRAP) in the Philippines. This effort went through four successive phases. Phase I estimated adjustments to the national income accounts as related to forest resources. Phase II concentrated on quantifying the loss of natural capital and valuing environmental services and damages. Phase III continued to refine data collection from Phases I and II and conducted environmental policy studies in priority sectors and locations. Finally, under Phase IV, all processes were institutionalized in accordance with an executive order, and analytical efforts continued at local levels and in priority sectors.

In a general sense, environmental and natural resources accounting consists of augmenting the national economic accounts to include values for environmental services and assets. ENRAP is one of the most comprehensive systems of augmented national accounts. The basic principle of the ENRAP framework is that the services of valuable environmental assets should be treated in an accounting system just like the services of man-made assets. Additionally, natural assets should be subject to economic depreciation just as man-made assets are.

A unique feature of the ENRAP framework is that it allows for two values to be placed on pollution: one from the point of view of the polluter (the cost of waste disposal services), and one from the point of view of the injured party (damages to the environment). Another important feature of the ENRAP framework is that it accounts for the unmarketed production of fuelwood and food by rural households. While not all unmarketed household production is covered, household fuelwood and food production in the uplands were considered because of their possible links to deforestation.

The application of the ENRAP accounting framework has been particularly useful to the Government of the Philippines in identifying major trade-offs between economic development and environmental protection. Various applications to national policy and sector-specific concerns arose from the data bases generated by ENRAP. These concerns were investigated as a response to the needs expressed by policymakers and interest groups, and as a result of interactions between ENRAP and other users of the data. The data generated by the successive iterations of the ENRAP accounts led to a number of policy studies on problems confronting the Philippine economy. These studies covered themes such as economic growth and pollution, trade liberalization and pollution, declining fisheries resources, and reduction of lead in gasoline, among others.

Based on an executive order issued in early 1997, methods and procedures developed by ENRAP were institutionalized within Philippine government agencies during the project's fourth phase (1998-2000).

**Case 9.2**

***Solid Analysis Furthers Policy Diagnosis in Romsilva, Romania***

The Harvard Institute for International Development already had a well-established, USAID-funded resident environmental policy program in Romania when, in 1995, the Ministry of Environment (MoE) requested assistance on issues related to financing forest management and protection. As in most transition economies, state support for natural resource management and environmental protection had been cut. The MoE was actively considering new ways to finance these activities.

In late 1992, the Romanian Government introduced an auction system for timber tracts that generated more revenue than the previous system of administered prices. However, the advisory team found that correcting defects in the auction system could potentially generate additional revenue. The MoE was skeptical, but it agreed to cooperate with HIID on an auction system study.

To assess the situation accurately and to develop reliable policy recommendations, the study needed to be sound, but equally important, it needed to be credible to Romanian counterparts who were not convinced that the auction system needed fixing. Romsilva, the parastatal responsible for administering the auction system, was even more skeptical than the MoE.

To establish credibility, members of the advisory team visited field offices of Romsilva, attended auctions, interviewed people in the government and industry, and conducted a statistical analysis of more than 2,000 auctioned timber tracts. They also held several rounds of discussion of preliminary findings with the MoE and Romsilva. Through this intensive, eight-month interaction, the MoE and Romsilva gained confidence in the team's knowledge of the Romanian forest sector and the validity of the study. Consequently, they accepted the advisory team's final report with few objections and have subsequently taken steps to implement its main recommendations.

**Case 9.3**

***Problem Diagnosis in Novokuznetsk, Russia***

Novokuznetsk, a city of some 600,000 in Western Siberia, is representative of many "Soviet era" cities. That is to say, it has for generations turned out intermediate industrial goods—mainly metallurgical products, pharmaceuticals, and coal—for a centrally planned economic structure that guaranteed the financial viability of all producing enterprises. Use of old and inefficient industrial technologies, combined with the city's location in a basin that traps emissions, resulted in severe pollution. In 1991, a Russian Government report estimated air emissions at approximately 1 million tons per year. Discharges of industrial wastewater, at best partially treated for organics and heavy metals, were estimated to exceed 600,000 cubic meters per day. And over 500 million tons of solid industrial waste had accumulated.

In the late 1980s, concern about pollution led to a decision by city authorities to prepare a local environmental action plan (LEAP). The plan, a cooperative venture of the city administration, Novokuznetsk-based industrial enterprises, scientific and technical institutions, public interest groups, and representatives of the national Ministry of Ecology and Natural Resources, was approved in 1992 following thorough vetting. While technically adequate, city leaders understood that full implementation of the LEAP would be impeded by a profound change that had occurred during its preparation, namely the breakup of the Soviet Union. In this context, they sought assistance from various quarters, including the city of Pittsburgh, with which a sister city program was established with partial support from USAID, and the World Bank, which at the time was preparing to appraise an environmental technical assistance loan for selected Russian cities. Consultation between the Bank and USAID led to a decision that USAID would field a team to assess the situation in Novokuznetsk and design a component of the proposed Bank loan for that city. The team, composed of USAID staff and consultants provided under USAID Global Environment Bureau's Environmental and Natural Resources Policy and Training (EPAT) project, visited Russia in September 1993.

The team concluded that there were serious questions regarding the feasibility and desirability of implementing the LEAP, which carried an estimated price tag of $1.2 billion, in its existing form. The primary implementation issue centered on the economic viability under current market conditions of major investment projects called for in the LEAP and of the enterprises slated to make the investments. Because the plan had been formulated before privatization of state enterprises that followed the demise of the Soviet Union, it did not reflect a number of new realities, namely: (1) a marked decline in the demand for the heavy industrial products that Novokuznetsk-based enterprises produced, (2) increased costs of production, and (3) limited capacity to raise the huge sums required both to make the industrial enterprises competitive and to reduce pollution (reflecting the Russian government's inability to provide capital combined with reduced capacity of the enterprises themselves to self-finance investments).

While the team understood that investments would be required to achieve the joint objectives of restoring Novokuznetsk's economic viability in the face of new circumstances and remediating serious pollution problems, the program it designed included technical assistance elements only. The objective of the proposed assistance was to strengthen local capacity, especially for problem diagnosis, program design, and implementation. The team concluded that modest investments to put these elements of sound environmental management in place would put the city in a position to obtain assistance with the hardware required to implement a revised environmental plan.

In preparing the LEAP, the city had failed to diagnose some fundamental problems, namely how to finance needed investments, the lack of economic viability of the enterprises under new circumstance and deficient local capacity. The effect of failure to correctly diagnose was to make implementation infeasible."

**Case 9.4**

***Development of a Comprehensive Forest Policy in El Salvador***

In 1996, USAID financed technical assistance (referred as the Green Project) to support the development of a National Forestry Policy. At that time, El Salvador had approximately 2 percent of its natural forest cover remaining, and a major effort to preserve remaining cover while expanding plantation and commercial forestry was crucial. Past efforts at reforestation and natural forest management were largely ineffective because the programs did not consider the demand for forest products, technical aspects of forest management, markets, and community participation. Additionally, these efforts were characterized by a lack of legal and policy frameworks and weak institutional structures in support of these programs.

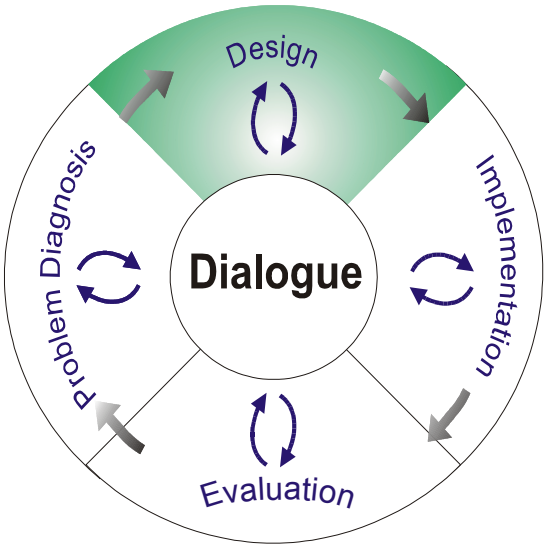
At the inception of the Green Project, it was clear that there was political will in various sectors to propose a solution to the critical forestry situation. NGOs, government officials, the productive cooperative sector, and the private sector were ready to participate in discussions. The process was launched with the presentation of a stakeholder analysis that identified all possible actors. An ad hoc forestry sector commission, composed of key stakeholders, was created to develop a draft forestry policy to be submitted to the Ministry of Agriculture, which would then present it to the economic and social cabinets and the President for approval.

Early in its deliberations, the commission decided that a coherent forestry policy should address the basic forest management principles of conservation and production. It soon became apparent that there was little current data and information on the technical, social, and economic aspects of forestry on which to base any recommendations for the forestry policy. The commission members divided into a number of working groups to develop specific analyses required to draft the policy. Over a fourteen-month period, eight policy working papers were produced on topics such as credits and financial incentives for forestry, institutional and organizational structures, internal and international markets, shade coffee as a means for increasing forest cover, community forestry, and protected areas management. Each analysis was presented and discussed in a public forum (hearings, presentations to special interests and the economic cabinet, and technical workshops) where further input was given to policy recommendations.

The development of these working papers served several purposes. Principally, the papers provided concrete data and verifiable information on the nature of the problems in this politically charged and sensitive sector. The process of vetting these papers brought together political factions that just four years earlier had been at war with each other. Out of the analysis came several innovative forestry incentive programs (including proposals for forestry bonds, forest taxes, tax exemptions, credit lines, and market information) that had not been tried or considered viable in El Salvador previously. In the process of preparing the working papers, sectors of Salvadoran society that had not previously been involved in policy formulation became involved and took ownership of the recommended policy, eventually serving as advocates in obtaining approval at the national level. In early 1997, the National Forestry Policy and its implementing strategy were approved by the national government.

# Chapter 6: Policy Design

Policy design is the stage at which options for addressing a diagnosed problem or problems are identified and analyzed, leading to the selection of the options to be implemented. The design stage of the policy process involves three steps: (1) the review and assessment of alternative intervention points, policy tools, and approaches; (2) the development of supporting information on the short list of interventions, tools, and approaches; and (3) selection of the best policy option for implementation.




## Lessons

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| **Lesson 10. Donor Organizations' Partners Will Not Always Be Receptive to "Policy" Assistance**<br>Our partners may resist donor assistance that is perceived to compromise their sovereignty in developing policy, necessitating adjustments in assistance efforts (including expanded financial support and nurturing of local NGOs to participate in policy process) to gain our partners' confidence. | |
| Case 10.1 | Jordan Water Policy – Diagnosing Problems and Designing an Implementation Program: A Good Effort That Did Not Work |
| Case 10.2 | Cash Transfer Programs in Egypt |
| Case 10.3 | The IMF Bailout in Indonesia |
| **Lesson 11. Early Involvement of Implementers and Stakeholders Can Improve Policy Design and Build Consensus for Implementation**<br>The involvement of the right set of policymakers and other stakeholders during the stage of design is necessary to ensure that policies under discussion will meet the needs of the parties that will subsequently implement the policies and will be impacted by them. | |
| Case 11.1 | Environmental Management in the 10th of Ramadan City, Egypt |
| Case 11.2 | Building Consensus on Regional initiatives: Improving Water Quality in Central Asia |
| **Lesson 12. Environmental Policy Design Should Be Linked to Economic Development and to Specific Problems That Improved Policies Can Address**<br>The importance of nonenvironmental factors, impacts, and actors needs to appropriately accounted for in the design of policies. In particular, consideration should be given to linkages between environment and macroeconomics and development and the challenges of crafting transboundary policies in light of differing national agendas. | |
| Case 12.1 | Conserving Madagascar's Unique Biological Diversity Through Rural Development |
| Case 12.2 | Winning Agreement for Higher Tourism Operator Fees in the Galápagos Islands |

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| Case 12.3 | Regional Policy Design to Preserve Wildlife Habitats in Botswana |
| Case 12.4 | U.S.-Central Asian Cooperation in response to the Aral Sea Disaster: Setting an Appropriate Spatial Scale for Policy Design |
| **Lesson 13. Donors Should Analyze the Incentive Structures of Policy Instruments**<br>A thorough understanding of incentive structures of implementers and stakeholders ccan improve policy design by anticipating subsequent impediments to effective implementation. | |
| Case 13.1 | Environmental Investment in Central and Eastern European Countries and the Former Soviet Union |
| Case 13.2 | Conflicting Forestry Policies. |
| Case 13.3 | Community Forestry in Zambia |
| Case 13.4 | Charcoal Production in Zambia |
| Case 13.5 | Agricultural Land Policies in Thailand |
| Case 13.6 | Poorly Designed Incentives in Niger |
| **Lesson 14. Effective Design Must Anticipate Implementation Barriers**<br>Policy design must anticipate and examine the potential implementation problems that could undermine the success of reforms. Design must anticipate issues such as the financial and technical capacity of agencies and institutions to implement reforms and stakeholders' access to information and training needed to respond to reforms in the desired way. | |
| Case 14.1 | Monitoring and Enforcement in Indonesia |
| Case 14.2 | Marine Damages in Egypt: prosecution Constraints to Implementation of a System of Fines |
| Case 14.3 | Regulatory Reform in India |

# Lesson 10: Donor Organizations' Partners Are Not Always Receptive to "Policy" Assistance

## What Has Been Learned

USAID's assistance partners are often protective of their role in policymaking. While they welcome "project" assistance, they may resist assistance in shaping or implementing policy. Helping with policy design may be perceived as too intrusive a role for donor organizations, signifying the recipient's weakness and diminishing the credibility of the government's policymakers. Donors must break down barriers to policy support and seize opportunities for intervention.

## Key Underlying Issues

***Sovereignty***. As steward of the public's environmental and natural resources trust, government is accountable for decisions that contribute to the quality and value of these resources. Policymaking is a core management function of government. By their nature, policies establish rights of access to resources, condition resource use, and determine the benefits that may be obtained by holders of these rights. USAID's partners are often concerned about compromising their sovereignty if they permit foreign intervention in setting policy, even when a compelling case can be made that the country will benefit from the proposed policy changes. Policymakers must establish their credibility both within the government and among stakeholders affected by their policies. This credibility is easily undermined if donors are perceived to be "leading" rather than "supporting" policy reform and implementation.

***Resistance to Change.*** Donor organizations often encounter bureaucratic resistance to rapid change. Protocols for revising legislation and regulations must be followed, even if the process is slow and uncertain. In some cases, elected officials may try to avoid introducing controversial policy reforms just before elections if the reforms could have a bearing on the outcome of the elections. And if the benefits of the policy reforms are not perceived to be large enough or if the reform effort would pull resources away from other agendas, agencies may be reluctant to champion policy reforms (see Case 10.1). In other situations, government officials may want to slow down reforms because of opposition within the government or among staff in the agency that will be responsible for implementation. For example, in Tanzania, career wildlife officials opposed the devolution of wildlife management responsibility to local people because many of the new managers had been fined in the past for poaching.

***Projects vs. Programs.*** "Brick and mortar" projects yield tangible, visible, and immediate benefits and may be preferred by donors' partners to policy assistance. Governments can readily translate project results into political credibility and leverage. Policy is a far slower, more uncertain process that often creates losers as well as winners and yields benefits that may only be realized over a period of several years.

*Breaking Down Barriers to Policy Assistance.* USAID can help "sell" its intervention in policy in a number of ways. Most importantly, current policies must be carefully evaluated and alternatives identified and assessed. Partners will be more receptive to outside involvement if the proposed changes yield significant net benefits relative to current policies. In addition, partners may be swayed by the nature of USAID's commitment both in terms of the duration and scope of assistance being offered. It is important for USAID staff to view the assistance as a partnership. One mechanism that has been effective in breaking down barriers to policy assistance has been USAID's cash transfer programs (see Case 10.2). Sometimes the opportunity to promote policy reforms will arise because USAID's counterparts want other forms of assistance. For example, the IMF financial bailout in Indonesia created an opportunity to introduce reforms in the forest industry (see Case 10.3). While this case illustrates how IFIs may be able to tie their financial support to targeted policy reforms, it also shows that one-shot interventions may not be effective if the normal process of policy reform is circumvented or the government's commitment to policy reforms is not strong.

## Programmatic Implications

1. Donors must establish their credentials and make a commitment early in the policy process, if possible. They can get involved in policy dialogue by supporting analyses of existing policies and by participating with other donors in workshops and roundtables.

2. Donor organizations should avoid "pushing" the policy process. The partner's leadership role in setting the schedule and the agenda should be respected; donors should expect to play a supporting role.

3. Where policy reform assistance is bundled with other support outside and within the environmental sector, USAID should emphasize—to the extent possible—the "win-win" nature of the assistance effort.

4. Donor organizations can help the partner "sell" outside assistance to local constituencies. For example, identifying key "sweeteners" may help close the deal.

**Case 10.1**

***Jordan Water Policy—Diagnosing Problems and Designing an Implementation Program: A Good Effort That Did Not Work***

Jordan is one of the most water-scarce countries in the world. Until recently it was able to meet demands for fresh water by developing renewable supplies and mining groundwater. However, as the country faces rapidly increasing costs of supply expansion, it is becoming harder to manage the imbalance between the limited renewable supply and the increasing demand for fresh water. In this context, USAID commissioned EPIQ to undertake diagnostic work to determine the nature of the problem and its underlying causes, to set the parameters for detailed design work needed to develop and implement effective policy and program responses, and to build on past USAID-sponsored capacity building programs to further strengthen in-country capability to design and implement such responses.

A mixed Jordanian-U.S. team recommended a water basin approach because basins are logical water management units. The team recommended that USAID initially support a two- to three-year effort to design and begin implementing a program focused on the Amman-Zarqa Water Basin (AZB). This area was selected because of its size, population, and large consumption of water, and because a policy program focused on the AZB would require attention to two major problems that also affect other basins in Jordan: (1) overabstraction of groundwater, and (2) the need to increase reliance on treated wastewater for irrigated agriculture.

Based on interviews with water users and analysts and a review of secondary sources, the team concluded that water was being misallocated to relatively low-valued agricultural uses in upland parts of the basin because there were few incentives to use it more efficiently. At the same time, it realized that more in-depth studies would be required to design more appropriate alternatives. Accordingly, the team recommended that one element of a USAID-supported policy program should be an effort to design and implement a water allocation program for upland agriculture in the AZB. The proposed program included a socioeconomic survey to assess possible incentive structures to reduce upland agricultural consumption of water, freeing the water for higher-valued uses elsewhere in the basin. Other elements of the proposed water allocation program included: (1) development of an irrigation information service for farmers that would focus on on-farm water efficiency programs, (2) installation of functioning water meters on all wells and linking them to a proposed integrated water quality/quantity monitoring program for the AZB, and (3) development of a verification plan that would make it possible to track the impact of policy interventions on groundwater use, on the socioeconomic status of groundwater users in upland irrigated agriculture, and on aquifers.

A second element of the team's proposed program was to design and implement a comprehensive wastewater reuse plan for the AZB and north Jordan Valley. The team understood that such a plan needed to be based on a detailed analysis of the area that would be receiving the treated wastewater, including the nature of the demand for water and the associated water quality requirements. These in turn would need to be integrated with the characteristics of the expected influent, and the wastewater treatment facility designed accordingly. A number of technical and policy-related issues were identified by the team for consideration as part of program design. These included: (1) possibilities for altering water demand in the recipient area through crop substitution, (2) options for blending treated wastewater with water from other sources (and implications for water treatment requirements), and (3) opportunities for conjunctive use of wastewater that could minimize its negative effects or reduce treatment cost.

While the team's work was well received, the program it recommended was never implemented. Although the reasons have not been fully articulated, it appears that this case not only illustrates the reluctance of some assistance partners to accept policy assistance but the need for a policy champion (see Lesson 5). The proposed program was designed to build on years of USAID technical capacity-building assistance in the water sector, especially in the areas of data gathering, information management, data analysis, and model building. Organizational structures had been developed for these functions in the Ministry of Water and Irrigation (MWI),

and each had dedicated constituencies. While the program as designed was expected to utilize the expertise and integrate the work of these and other water sector institutions around an integrated program to manage and remediate a major, national environmental problem, no champion for such a program emerged. Rather, the various units within the MWI that had received USAID support seemed to feel that the proposed program would divert resources to other purposes.

**Case 10.2**

***Cash Transfer Programs in Egypt***

For several years, USAID has supported macroeconomic and agricultural policy reforms in Egypt. Recently, a similar program was initiated in the environmental sector. These programs provide technical assistance to the Egyptian counterpart ministries and agencies to facilitate the adoption of significant and sustained policy reforms.

An important component of these sector reform programs has been the cash transfer mechanism. With its Egyptian partners, USAID has negotiated tranches of policy measures that, if achieved during the prescribed timeframe, lead to the transfer of millions of dollars to Egypt. This mechanism serves two functions. First, it provides resources for agencies and ministries outside of the normal budget cycle, enabling the recipients to finance unmet mandates. Second, it enables Egyptian counterparts to demonstrate leadership on policy reforms since they help determine the policy measures to be included in each tranche and mobilize technical assistance focused on adopting and implementing policy reforms.

To be successful, these sector reform programs must meet two challenges. First, the slate of policy reforms must result in real and sustainable benefits to Egypt. Current policies and options for reform must be carefully analyzed based on international experience; they must also be discussed thoroughly with policymakers and stakeholders to ensure that (1) they are grounded in Egyptian political, economic, social, and cultural realities and (2) potential obstacles to reform can be addressed. The outcome of this process is a set of realistic policy measures that can be endorsed by the Egyptian counterparts in negotiation of each tranche. Second, the cash transfer must benefit the counterparts that are responsible for achieving the policy measures. Although cash transfers are often effective, this mechanism also has some weaknesses. First, there is a time lag between the time that the cash transfer is made and the time that resources become available to the counterparts. When U.S currency is transferred to an account controlled by the Ministry of Finance, these dollars can be used to retire offical U.S. debt (up to 25 percent) or to purchase U.S. commodities. When commodities are purchased, the U.S. vendor is paid out of the “dollar” account and the equivalent amount in local currency is then transferred to the counterpart agency or ministry. Thus, only a portion of the initial cash transfer is received by the counterpart and only several months or even years after the policy measure has been achieved. Even after the local currency is received by the counterpart, there is no assurance that individual departments which had achieved the measures will gain access to these financial resources. Because of the uncertainty surrounding the timing and receipt of local currency associated with cash transfers, counterparts at the departmental level may value brick and mortar projects more highly than policy assistance.

**Case 10.3**

***The IMF Bailout in Indonesia***

Indonesia's forests have been the source of more than $5 billion per year in foreign exchange earnings for the past decade. However, these valuable rainforests have been unsustainably exploited and, even prior to the recent severe economic downturn, its forest industries were beginning to face supply shortfalls. The forest harvesting and processing industry in Indonesia has been described as the epitome of monopolistic crony capitalism that contributed to the East Asian financial crisis. The export-oriented plywood industry, which accounts for two-thirds of the foreign currency earned by the forestry sector, was tightly controlled by an association headed by one of former President Suharto's closest associates. The pulp and paper industry has long promised to reduce its dependence on natural forests through the establishment of forest plantations, but very little progress has been made—leading to continued conversion of biologically rich rainforests to serve as feedstock for this industry. The policies governing industry taxation and reinvestment in forest husbandry have also been inconsistent and subject to political manipulation.

With the collapse of the Indonesian economy, the bailout led by the IMF was perceived to provide leverage for comprehensive forest sector reform. The World Bank was enlisted to propose a slate of forest sector reforms to be included in the IMF's Letter of Intent. However, neither organization established mechanisms for implementation and evaluation to determine if the reforms were actually made. A small group of advisors in the Forest and Trade and Industry ministries duly wrote ministerial decrees in response to the call for forest sector reforms.

Progress was made—at least on paper—in implementing several of the key measures. The plywood and rattan cartels were broken, a new forest taxation scheme was introduced, and the Ministry of Finance took control of the off-budget $1 billion "reforestation fund" financed by a special tax on harvested logs. A new policy allowing greater community involvement in the management of state forests was also issued.

However, because the reform process was veiled in secrecy and lacked transparency, follow-up implementation was limited. While plywood output declined, this mainly reflected a depressed regional market rather than a response to structural reforms. The reforms orchestrated by the bailout precipitated backlash from the private forestry sector, which had been excluded from the policy reform loop. After the reforms were introduced, there was a marked increase in illegal logging and unauthorized conversion of production land and protected forests to plantations. As a result, the condition of the forests was worse than before the reforms.

Several lessons can be learned from this case. First, attempting to undertake reform of the "real sector" in an economic emergency as a condition of emergency loans may not work, particularly if the normal policy reform process is short-circuited or expedited. Since the bailout included few financial incentives for the sectoral ministries tasked with forest reforms, the IMF and World Bank had surprisingly little leverage to influence real changes. In retrospect, pursuit of reforms in the forest sector during normal economic periods, especially if they could be combined with sector incentives, might have been more productive. Second, secret negotiations and a lack of transparency encourage a lack of accountability on the part of the government, dilute the commitment to reform, and make it difficult to build the consensus required to implement the reforms.

# Lesson 11: Early Involvement of Implementers and Stakeholders Can Improve Policy Design and Build Consensus for Implementation

## What Has Been Learned

Consensus building is the process of developing support for proposed policy reforms. At the policy design stage, consensus building can involve bringing policy issues to the attention of high-level officials (for example, to solve transboundary problems) or crafting a role for local decision makers or stakeholders. Early involvement of implementers and key stakeholders can be valuable in identifying and addressing impediments and developing a policy that will work; the resulting policy is more likely to receive the commitment needed at the later stage of implementation.

## Key Underlying Issues

***Participatory Decision making.*** The evolution of democratic governance is often a slow process characterized by uneven progress and regression. Even among partners with open elections, the democratic spirit often does not permeate to ministries and executive agencies. Policymaking and review processes are often closed to outside groups and stakeholders, either by legislative decree or stated policy. For example, in Romania, a working group process is utilized to assess and develop new legislation, regulations, and other legal documents. Membership in the working group has been limited to ministerial representatives, thus excluding stakeholder groups that may be affected by the proposed legislation and policies. Recently, EPIQ has made some progress in encouraging Romania's Ministry of Water, Forests, and Environmental Protection to open up the working group process for the development of a self-financing system for local environmental protection agencies. Because the self-financing system relies on permitting fees, EPIQ has suggested that industrial plants and municipal services facilities, or their associations, be invited to participate in working groups to provide feedback on various system design elements. Case 11.1 illustrates another successful collaboration between local environmental officials and industrial facilities in developing environmental management systems in the industrial city of 10$^{th}$ of Ramadan in Egypt.

***Involving the Right Participants.*** One key to effective policymaking is the involvement of the appropriate implementers and stakeholders. If local officials will be required to play a pivotal role in implementing policies, their early involvement in the policy process can help to identify implementation constraints and resource needs. In the region of the Aral Sea, efforts to develop effective transboundary policies on water quantity and quality were initially stymied by a failure to involve decision makers from the various

countries. Case 11.2 describes efforts to address this shortcoming. Even though decision makers were brought into the process, other factors have impeded progress in resolving the problems.

### Programmatic Implications

1. Consensus building should involve a process of broad-based participation in policy design while recognizing the trade-offs between the number of participants and prospects for reaching agreement on the most contentious elements of the policy reform.

2. Donors should review the list of participants in the process, identify key parties that are not represented in the process, and encourage decision makers to open up the process, noting the value of groundtruthing of policies and of developing support among stakeholders prior to implementation.

3. Experience has shown that it pays to engage key players—be they government officials, NGO leaders, private-sector representatives, or beneficiary citizens—at the level closest to where the changes will most be felt.

4. Donor organizations should "go for low-hanging fruit." In some cases, it may be possible to reach consensus fairly quickly on some policy reforms. Small victories can provide the groundwork for more difficult efforts to build consensus on controversial reforms later.

5. Groups that will benefit from environmental policy reforms often have less to gain on a per-capita basis than groups (such as industry) that are adversely affected by policy reform. Donors may need to create or shift the agenda of organizations such as NGOs and private and voluntary organizations (PVOs) to ensure that the interests of beneficiary groups are reflected in policy formulation.

| **Case 11.1**<br>***Environmental Management in 10th of Ramadan City, Egypt*** |
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| The 10th of Ramadan, an industrial city in Egypt, illustrates how urban environmental management can be implemented and integrated into a larger policy framework, enhancing environmental policy implementation at both the local and national levels. The 10th of Ramadan is adapting an Environmental Management System (EMS), a concept originally developed by the private sector and the International Standards Organization for the management of industrial and other wastes produced in the city. Because EMS provides a framework for defining the roles and responsibilities of stakeholders and mechanisms for monitoring, evaluation, and continual improvement, it offers a comprehensive methodology for improving urban environmental management. The 10th of Ramadan has gathered stakeholders including private industry, city officials, and national-level environmental officials to define roles and responsibilities, create an incentive system for improving environmental management, and build a monitoring system for continued environmental improvement. These systems are all based on existing command and control regulations, combined with market-based incentives for improved environmental management. The EMS approach to urban environmental management, in this case, has allowed local action to define and assure its integration to larger national and regional policy. The EMS strengthens environmental policy implementation by providing a demonstration vehicle for other local governments and by integrating national policy into local initiatives. Overall, such an approach could improve urban environmental management by integrating both “bottom-up” and “top down” approaches, thereby creating a win-win situation for all stakeholders. |

**Case 11.2**

***Building Consensus on Regional Initiatives: Improving Water Quality in Central Asia***

The ecological and human health crisis in the Central Asian region of the Aral Sea has received considerable international attention. As a result of Soviet-era water diversions for irrigation that exceeded the available resources, the Aral Sea was robbed of its inflows and its surface area shrank by approximately 50 percent from 1960 to 1990. This set in motion a vicious cycle of ecological degradation and human suffering as fisheries collapsed, wells ran dry, wildlife dependent upon river deltas perished, and toxic dust storms carrying salts and pesticides from the former sea bed contaminated agricultural lands and human settlements as far as 1,000 kilometers away.

With the collapse of the Soviet Union, an appeal for international assistance went out from the five new Central Asian Republics—Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan—which form the bulk of the catchment area for the two rivers, Syr Darya and Amu Darya, that flow to the Aral Sea.

Working through a regional body established to deal with water mismanagement in the Aral Sea Basin (the Interstate Committee on Saving the Aral Sea, or ICAS), a group of water experts supported by the World Bank prepared a report in 1994 that documented a wide range of water quality problems in addition to those manifest in the "ecological disaster zone" surrounding the Aral Sea. The study, however, established no basis for setting priorities and thus was unable to put forward a coherent action plan. The head of the Central Asian team of experts felt that consensus could be reached on concrete steps only if the team was to meet together with key national decision makers in a facilitated setting.

To this end, the Central Asian USAID Mission (USAID/CAR)—in cooperation with the World Bank and ICAS—sponsored a workshop in Bukhara, Uzbekistan, in April 1996. The workshop's stated purpose was to review the ICAS expert team's preliminary findings and bring together the key players needed to reach agreement on priorities for both bilateral and regional action to mitigate water quality problems.

The Bukhara meeting involved facilitated small group discussions that brought together experts and policy counterparts from five countries to develop an action plan for steps at the national and regional levels. A key element of the Bukhara Action Plan was the introduction of a narrow and regionally agreed-upon range of water quality indicators to reduce monitoring costs and improve their efficiency. National priorities were established for each of the five countries—ranging from decreased river salinization through improved management of agricultural drainage water to the upgrading of urban water treatment facilities in selected cities.

To date there has been only limited progress in implementing this action plan although several of the transboundary problems have been addressed. In these cases—involving toxic river-borne pollutants moving from an upstream to a downstream state—there was sufficient political will to act due, in part, to increasing public awareness of the risks and to the potential international consequences of a failure to reduce these risks. But little has been done to implement either the national-level agendas or to establish an integrated regional network for water quality monitoring and problem solving.

Because the analysis that led to the Bukhara Action Plan was—by definition—centered on the identification of a regional agenda, it is not surprising that less progress has been made with national actions. The regional group lacked authority to do more than suggest to national governments that the problems identified were of high priority and deserved their attention. Although there was an opportunity to obtain international financing for associated investments (through World Bank loans), this financial support was withheld due to the refusal of national governments to introduce appropriate service pricing schemes needed to assure adequate cost recovery. All of the Central Asian Republics involved were undergoing severe economic transition problems at the time of this effort, so the opportunity to finance even high-priority water quality improvements from national budgets was severely constrained.

# Lesson 12: Environmental Policy Design Should Be Linked to Economic Development and to Specific Problems That Improved Policies Can Address

## What Has Been Learned

Enhancing environmental quality and conserving natural resources require that the economic challenges faced by developing countries and economies in transition be addressed. While appealing to people's sense of stewardship can elicit vague expressions of sympathy, most countries, especially poor ones, are unwilling to make economic sacrifices to enhance environmental quality. Rather, environmental goals are more easily advanced when they also contribute to economic progress. Addressing environmental problems rationally means setting appropriate spatial and institutional boundaries for analysis and specific actions.

## Key Underlying Issues

***Market Failures.*** The integrative perspective of environmental economics focuses on trade-offs between environmental quality and demands for goods and services. Inefficient trade-offs, or "market failures," result when market prices reflect only private costs, ignoring damages from pollution or natural resource exploitation, and consumers neglect external environmental impacts of production, consumption, and other activities. An integrated environmental-economic perspective includes an examination of taxes, regulations, and other policy instruments that a government can apply to alleviate market failures.

***Policy Failures.*** While market failure is pervasive in poorer countries, excessive pollution and resource depletion often result from governmental suppression of market forces, scarce human capital, and weak institutional underpinnings for a market economy. Policy design can best address such "policy failures" by focusing on ways to increase productivity, enhance environmental quality, and contribute to economic well-being. For example, municipal water supply systems throughout the developing world have been heavily subsidized. Tariffs paid by those firms and households that are fortunate enough to have water system connections seldom cover the full cost of the service; central governments usually defray the system's financial losses. Thus, neither suppliers nor users have incentives to conserve water. At the same time, pumping stations, water mains, and related infrastructure are constructed and operated with little heed for cost-efficiency, and managers are seldom responsible for financial shortfalls resulting from their decisions. Rather, the poor—who most often rely on unsanitary, expensive water sources—foot the bill. Finally, watershed management is a remote concern.

***Appropriate Resource Pricing and Cost Recovery.*** Many opportunities exist to increase efficiency, promote equity, and conserve natural resources through appropriate pricing and cost recovery. In particular, increasing prices (and reducing subsidies) can impel consumers to use water more carefully. Moreover, the need to cover expenses out of revenues instead of tapping into the central government's budget inspires system managers to accurately account for costs and encourages efficient design and operation of physical assets—and these managers are also more inclined to conserve watersheds. Appropriate resource pricing results in opportunities to extend environmental services to poor communities.

***Macroeconomic Linkages and Incentives.*** Micro-level incentives must reflect the macro-level options available. For example, if a policy change aims to slow the rate of agricultural expansion into forested lands, then the macro-economy must offer farm households alternative ways of increasing their income. Access to fertilizer and credit, market infrastructure, imported or domestic availability of agricultural machinery, and foreign exchange policies may have as much influence on deforestation rates as forestry sector policies. If, as in the former socialist countries of Eastern Europe, the declared policy is to reduce energy consumption (and pollution levels) per unit of economic output, then it matters whether energy prices reflect true economic costs and whether cost-saving and profitability create any appreciable benefits for the plant managers who make the decisions.

***National and Global Context.*** Environmental policy options also depend on a society's broader economic, political, and governance paths. For example, the temptation to adopt command-and-control environmental approaches must be weighed against the growth and efficiency benefits of a market-driven economy. In the United States, our judicial and governance systems have strongly influenced environmental policy, including the right to bring suit against polluters and the public's right to information. In the rapidly expanding economies of Southeast Asia, the emerging concept of "greening the supply chain" is affecting environmental policies because export industries depend on Western consumers who increasingly place a high premium on environmentally responsible production. NGOs, both domestic and international, have also gained influence as information networkers and lobbyists.

***Linking Environment and Development.*** When people are convinced that a habitat—or management practices associated with conservation—offer economic value, they are more eager to protect that habitat. For example, conservation efforts in Madagascar often concentrate on understanding and improving agricultural practices in the regions surrounding parks and protected areas (see Case 12.1). In Ecuador, the government

attaches major importance to preserving the Galápagos islands since they comprise the environmental basis for a sizable ecotourism industry. In late 1992, tourism operators agreed to pay higher fees for access to the archipelago once they were assured that additional revenues would fund improved environmental management (see Case 12.2).

***Spatial Dimension of Environmental Problems.*** Today's major global and local environmental problems—including global climate change, loss of biological diversity, unsustainable land use, natural resources depletion, air and water pollution, and the demographic-resource imbalance—all require action that crosses national, sectoral, and institutional boundaries. Watersheds provide excellent examples of such linkages. For example, soil erosion in the Himalayas affects flooding in the Ganges delta; while deforestation in the Futa Jallon, through the effects of evapotranspiration, reduces water flows and irrigation potential along 1,000 miles of the Niger River. Cases 12.3 and 12.4 describe situations in Botswana and Central Asia that demonstrate the importance of setting an appropriate spatial scale for policy design that is coterminous with the problem at hand.

## Programmatic Implications

1. Donors must identify environmental deterioration caused by policy failure or inadequate investment in human and social capital and then focus on win-win opportunities that simultaneously improve environmental quality and development prospects.

2. USAID must carefully appraise the potential effects of environmental policy change on natural systems and populations to determine appropriate boundaries for environmental policy analysis and actions.

3. The underlying causes of environmental problems should be considered when preparing National Environmental Action Plans or other intervention programs, policies, and institutional reforms. Positive action requires a strong consensus that the social costs associated with environmental mismanagement are taking a serious economic toll, and obvious policy failures must be addressed before dealing with market failures.

**Case 12.1**

***Conserving Madagascar's Unique Biological Diversity Through Rural Development***

The battle to conserve Madagascar's unique biological diversity cannot be waged in isolation from the country's economic and demographic challenges. A 1995 environmental analysis helped reorient the focus of policy dialogue from resource protection toward understanding the dynamic linkages between environment and development. Winning the environmental battle absolutely requires successful policies to address the economic battle.

Madagascar's population will at least double in the next generation, even if fertility reduction programs are successful. Food availability must double over the next 25 years, a growth rate of 3 percent per year. Most of this browth will need to come from increased crop output and yields rather than imports. Most farmers in Madagascar are poor, small landholders who practice traditional land management. Little "intensification" of land use is as yet taking place; most increases in output driven by the growing population's need for food security and survival take place through "extensification" of land use—pushing up fragile hillsides and out into biodiversity-rich forests. This results in more land degradation and shrinking commons—both of which spell even greater impoverishment of farmers and of the country as a whole.

Breaking the vicious circle of extensification and degradation of the farmlands and commons cannot be accomplished sustainably by somehow barring small landholders from forests or hills since their strategies are based on desperation and a lack of alternative strategies. Rather, the battle to protect Madagascar's biodiversity will be won or lost on agricultural land away from the forest because the battle in which rural populations are engaged is about production and land use, not about the environment. In this battle, environmental outcomes are the by-product of land management and production decisions. In the absence of a land management and agricultural production policy, there is no viable resource conservation policy because how people manage land and production options determines what they do to the forest.

The need to strike the right balance for program resource allocation is key. Specifically, the environment strategy needs to be adjusted by substantially increasing the emphasis on rural development and small landholder management on farmlands and open-access lands, especially in areas where population pressure is the greatest, which are often far from the protected forests and parks. This will require links between sectoral programs.

The suggested rural development path would: (1) intensify production in the valley floors and lower hillsides, and (2) protect the land through anti-erosion investments on hillsides and upper watersheds. Intensification will require much more fertilizer and manure use, and roads and jobs to generate cash to help buy them and to sell the products. Land protection requires cash to hire labor and greater valley yields to buy breathing room to make more investments. But poverty alleviation needs to be a key part of the strategy. Rural poverty is the enemy of intensification and land protection insofar as widespread rural poverty is directly and indirectly driving destruction of forests and hillsides. Poverty also exacerbates the dilemma by increasing population growth. Thus poverty alleviation will also enhance family planning programs.

Critical time and scale elements are implicit in this strategy. It must respond quickly enough for poor peasants on the margin of survival. And it must make substantial numbers of small landholders better off, rather than just reaching the pockets of people in the buffer zones around the forests.

**Case 12.2**

**Winning Agreement for Higher Tourism Operator Fees in the Galápagos Islands**

The home of a large number of unique and endemic species, the Galápagos islands are where Charles Darwin's observations during a five-week visit in 1835 later flowered into his theory of evolution driven by natural selection. An ecotourism industry that generates tens of millions of dollars in foreign exchange each year also thrives on the archipelago today.

Ecuador's Institute of Forestry and Natural Areas (INEFAN) administers the Galápagos and determines access fees to the park. Domestic and foreign visitors pay well-established entrance fees. But in the early 1990s, tourism industry payments to INEFAN were scrutinized more carefully.

In 1991, a researcher working on a USAID contract in Ecuador carried out a study revealing that yearly berth fees (*patentes*) paid by cruise ship operators were ridiculously low. For example, *patentes* paid by large vessels, which could carry up to 100 guests and had annual net revenues of at least $1.5 million, were under $1,000.

In August 1992, these findings were presented to INEFAN's new director, who responded by calling a meeting of representatives of conservation organizations, local government, the tourism industry, and various government agencies. All agreed that the existing *patentes* were too low, but no consensus was reached as to an appropriate increase. During the course of negotiations, municipal officials, concerned that higher fees might cause industry cutbacks, were won over with the promise that some additional revenues would benefit local projects. Industry representatives agreed to the policy change because additional monies would be spent on effective conservation measures. By the end of the meeting, all agreed on raising the annual per-berth fee—from $6 to $200.

**Case 12.3**

***Regional Policy Design to Preserve Wildlife Habitats in Botswana***

Parks and protected areas in Southern Africa compete with alternative land use by local populations. Many rural producers earn higher returns in the short run through resource mining than through sustainable resource use. Given low subsistence incomes, short-run profits are typically chosen over long-term sustainability. Inhabitants near parks and protected areas raise crops and livestock, gather fuel, and hunt wildlife on the land. Rapid, and sometimes alarming, rates of degradation on these protected areas threaten these environmental and biological resources. The region, richly endowed with some of the most attractive natural assets in the world, can support high-value tourism that can generate substantial income for local populations. If properly managed, returns from tourism could vastly exceed returns from resource mining, thereby reversing current incentives. High incomes derived from tourism create powerful, long-term incentives for resource conservation, while also directly increasing rural incomes. Multiplier impacts can further raise rural benefits.

However, national tourist potential must be augmented by cross-border visitors to make high-value tourism possible. Regional pulling power, enhanced by multiple destinations within the region, requires regional investment, skills enhancement, institutional capacity building, and infrastructure development. Regional coordination in tourism development can enhance the attractiveness of packages offered, thus increasing the size of the regional tourism pie. Finally, tourism in every country depends heavily on a strong regional image overseas—thus turmoil in one country hurts all the countries in the area.

Tourism development in the Chobe Enclave in northeastern Botswana illustrates the need for policy dialogue since improvements in national policy environments might still leave the desired result unattained. The Chobe Enclave is surrounded by protected areas that contain a wealth of wildlife. Such areas have enormous potential to attract tourists and provide income to the farming and herding families close to protected lands. To reduce the costs to the Chobe community that come from restricting livestock use and farming practices, the Botswana Natural Resources Managmeent Project (funded by USAID) began a process of involving the community in the planning and management of a wildlife utilization proposals. Each village in the enclave has participated in meetings to foster understanding of community-based resource management projects with a focus on wildlife quotas. Representatives from each village form the Chobe Enclave Conservation trust board, which manages wildlife quotas for the protected areas through a safari company. Through leases to safari companies, revenues can potentially provide more income to local populations than traditional subsistence activities. Since its inception, revenues from tourism activities undertaken by the safari company have continually risen and were expected to increase by 100 percent with the reintroduction of elephant sport hunting in 1996.

The first revenue received from the lease was 25,000 pula in 1993. By 1996, annual revenues from the leases were expected to reach 300,000 pula (about $100,000) for local communities, exceeding current household per capita income, assuming the revenue is distributed to villagers. Most project income is passed on to the participating villages, further strengthening their commitment to maintain the environmental and biological assets of the surrounding parks and protected areas.

Policy design must account for regional conditions in order to solve the technical problems in parks and protected areas management and create the enabling conditions to support actual increases in tourism revenues. On the technical level, three important issues emerge:

First, management of water resources is critical. The Okavango Delta is supplied by rivers that flow across borders. To solve severe domestic water shortages, Namibia has initiated plans to divert a portion of the water from the Okavango River. Governments and environmental groups have expressed serious concern about the potential impact of this initiative on the viability of wildlife and tourism in Okavango. The policy dialogue has therefore moved to a regional discussion of the economic and environmental trade-offs.

Second, in both Botswana and Namibia, livestock fences have direct negative impacts on

wildlife migration patterns across national borders. Policy design must address the sectoral concerns of economic and livestock actors as well as the transnational resource issues.

Third, the migratory patterns of wildlife require that neighboring parks and protected areas continue to provide viable habitat. Without this, no matter how successful the policy in Botswana, wildlife herds will diminish. This, in turn, would directly undercut the attractiveness of the area to tourists and the potential return to low-value, subsistence-level, and resource-degrading economic activities.

**Case 12.4**

***U.S.-Central Asian Cooperation in Response to the Aral Sea Disaster: Setting an Appropriate Spatial Scale for Policy Design***

The Soviets' desire for a textile industry to rival that of China and the United States caused one of the world's greatest ecological disasters. Implementing a grand scheme to bring vast amounts of irrigation water to the deserts of Central Asia for cotton production, by the 1970s, three-fourths of the USSR's cotton output came from the then Soviet Republics of Kazakhstan, Uzbekistan, and Turkmenistan. The goal of making the Soviet Union self-sufficient in cotton production was achieved, but at a terrible price. In 1960, the Aral Sea received over 50 billion cubic meters of water each year from its two tributary rivers—the Amu Darya and Syr Darya. By 1975, this had fallen by 80 percent, and by the mid-1980s flows to the sea had slowed to a trickle.

The diversion of the Aral Sea's waters set in motion a complex and deadly chain reaction. This environmental catastrophe devastated the region's economy and left 3.5 million people without access to clean water. Infant and maternal mortality rates have increased due to toxic dust on the former seabed, and agricultural production has declined rapidly from the combined effects of the ubiquitous salts and localized climate change.

With the breakup of the Soviet Union, new challenges were introduced. The Aral Sea Basin suddenly encompassed parts of six independent republics: Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, Kyrgyzstan, and Afghanistan. New institutions were needed to achieve agreement on water management at a scale appropriate to the problems being addressed. The five heads of state of the Central Asian Republics (excluding Afghanistan) met in 1993 and 1994 to establish an Interstate Commission on Problems of the Aral Sea (ICAS) and to pledge their support for cooperative solutions to the ecological crisis (as described previously in Case 11.2).

The international community also responded. The United States began with a focus on providing humanitarian assistance: by improving access to potable water supplies for those in the zone of greatest need. The assistance centered on a major program to improve access to safe and reliable drinking water supplies. The World Bank contributed substantially, making clear its backing for a regional approach to the problem and supporting a broad-based program of studies meant to define a set of concrete investments in the water sector. The European Union stepped in with related analyses of water and agricultural institutions.

USAID's investments in providing access to drinking water helped to create strong working relationships with the region's new governments on issues of water management. Beginning in 1995, this credibility was used to establish a new USAID-supported regional program on water resources management to introduce concepts of water economics and conservation to the Aral Basin.

U.S. experts felt that the greatest single barrier to more efficient use of scarce water resources in the region was the lack of effective water pricing—whether for domestic, industrial, agricultural, or other purposes. Introducing the notion of water metering and pricing to republics scarcely emerging from their communist past seemed a radical idea at the time, but it quickly caught on among water planners and environmental officials alike. A recent survey found that all five republics now have some form of water pricing in place. Even in Turkmenistan, where

President Niazov has decreed all water to be free, charges are gradually being introduced—for the cost of delivery, rather than for the water itself.

The U.S.-sponsored policy analysis and follow-up dialogue on water pricing soon led to work on an even more pressing issue: averting conflict over competing water uses between upstream and downstream states. The USAID project first sponsored a regional conference on water quality issues. The initially pure waters from the Tien Shan Mountains of Kyrgyzstan, Tajikistan, and Afghanistan become highly polluted with wastes from industry, mining, cities, and agriculture as they make their way toward the Aral Sea. In cooperation with the World Bank, a plan of action was prepared for cooperative efforts to address a variety of upstream-downstream water quality issues.

Even more contentious than water quality problems are concerns about water distribution. The major question is whether upstream reservoirs should be used primarily to store water for irrigation or to generate hydropower. During the Soviet period, reservoirs were used for agriculture, and upstream states received their power supplies through the planned economy. But now energy and water transactions must take place in an international context—and increasingly in the marketplace. The problem is most acute in the Syr Darya River, where Kyrgyzstan is inclined to run the power turbines of its Toktogul Dam all winter to provide cheap electricity for heating. This creates huge problems for the downstream states of Kazakhstan and Uzbekistan, which want the water stored for their summer growing seasons. But there is a further problem. If the water is released for hydropower in the winter, the frozen rivers cannot accommodate the flow and much of the water is diverted to an inland depression in Uzbekistan and will never even reach the Aral Sea!

Because these water-sharing issues are so vital to the economies of the three republics, a series of one-year agreements had been negotiated between Kyrgyzstan, Uzbekistan, and Kazakhstan to set the water-release pattern from Toktogul Dam in favor of agriculture, with compensation in the form of cash payments and transfers of gas and coal to Kyrgyzstan. In an effort to move beyond this ad hoc arrangement, U.S. water and energy experts have been working alongside their Central Asian counterparts to devise an equitable multiyear agreement for water sharing in the Syr Darya River that incorporate principles of fair cost allocation and compensation. After two years, a new five-year interstate agreement was signed linking the three countries plus Tajikistan in cooperative use the Syr Darya's waters. The agreement will also help to ensure adequate annual flows to the Aral Sea to support its gradual restoration.

This case illustrates the obvious need for policy design and associated dialogue on a scale appropriate to the environmental problems being addressed. Furthermore, what began as an effort to deal with the acute problems of a shared ecological catastrophe evolved into an opportunity to promote regional peace and prosperity. By assisting the Central Asian states in their efforts to reduce tensions derived from natural resource scarcity and mismanagement, USAID is helping convert water issues from a source of conflict into a force for peace and economic stability.

# Lesson 13: Donors Should Analyze the Incentive Structures of Policy Instruments

## What Has Been Learned

Policies may perform poorly in practice because of flaws in the design of incentive structures. Ideally, policies will result in certain and predictable directional changes in stakeholder performance such as reductions in pollution, longer forest rotations, reduced fishing effort to increase yields, or adoption of more environmentally friendly technologies. However, in practice, unanticipated flaws in the design or weak enforcement may undermine policy implementation. To a certain extent, both types of problems can be anticipated at the design stage; it may be possible to modify the policy or, if not, to make adjustments during implementation to compensate for design flaws. Thus, donor groups should fully assess the structure of incentives and the factors that may reduce a policy's effectiveness.

## Key Underlying Issues

***The Nature of Incentives.*** All environmental and natural resource policy reforms involve a modification of the existing incentive structures of stakeholders. In some cases, policy reforms dictate changes in behavior, compelling stakeholders to adopt certain practices or discontinue use of inputs. Examples include bans on certain agricultural chemicals, regulations requiring specific technologies to address pollution, modifications in fuel quality (such as elimination of lead in gasoline or reduction of sulfur content in diesel fuels), fishing gear restrictions, and regulations on replanting of harvested forestlands. For other types of policies, changes in the incentive structures involve the modification (or introduction) of prices for inputs, outputs, or pollution. In these cases, stakeholders are afforded some flexibility in responding to the new price information and in modifying their consumption or production decisions. Examples of policy instruments that provide flexibility to respond to prices include such mechanisms as product charges, fuel taxes, emissions trading, fees on pollution, liability rules for environmental damages, or severance taxes on timber or minerals.

***Economic Assumptions.*** For many environmental and natural resource policies, incentive structures for stakeholders are designed to encourage changes in investment of production processes. The policy reforms are structured in a way that will elicit the desired shift, whether to reduce pollution levels through end-of-pipe controls or process changes, or to alter natural resource investments. In designing incentives, assumptions are made about economic and market conditions and stakeholders' motivational structure (for example, profit maximization). As long as these assumptions reflect the actual situation,

the policy reforms, ceteris paribus, will yield the desired results. Unfortunately, considerable uncertainty may be associated with these assumptions, especially in developing countries and economies in transition such as the states of the former Soviet Union (see Case 13.1). Similar problems have been observed in Asian markets, where a combination of decreased demand and tightening credit have reduced economic investment and likely crowded out environmental investment activity and discouraged natural resource-based industries from making environmentally friendly investments.

***Market Assumptions.*** Another type of market problem relates to the development of new markets for commodities. In Jamaica and elsewhere in the Caribbean, small farmers and larger plantation owners were encouraged by the prospects of high export demand to convert lands to crops such as bananas and other fruits. However, a combination of excess supply, trade barriers, and overly optimistic price predictions resulted in the abandonment of many of these crops when prices fell too low to even justify harvesting. Thus careful analysis of emerging markets for agricultural crops and timber is necessary to ensure that stakeholders respond to policies in the desired way. For example, a policy designed to encourage cultivation patterns that reduce erosion, conserve water, or require less chemical inputs must be responsive to market conditions and potential barriers.

***Conflicting Policies.*** The effectiveness of environmental and natural resource policies may be diminished because they conflict with other policies. Often, these conflicting policies have been promulgated and justified on economic grounds, resulting in trade-offs between environmental and economic goals. Examples of sector policies that may undermine environmental policies include customs and tariff policies that inhibit access to (or increase the cost of) innovative technologies that can effectively reduce pollution and commodity board requirements that necessitate the profligate use of agricultural chemicals to meet export product standards. Another example is inheritance and property ownership laws in some African countries that prohibit or severely limit the ownership of property among women, thereby restricting their ability to meet collateral requirements of loans. A number of examples of conflicting policies arise in forest and watershed management. In the examples provided in Case 13.2, governments have tried to encourage good stewardship of the land with one policy change while maintaining other policies that seriously reduced the potential benefits of the first policy.

***Benefits and Costs.*** From a social perspective, policy reforms should typically result in net benefits—although there may be losers as well as winners. Donor organizations must recognize the key benefits and costs associated with a policy and to anticipate the pressures that may be exerted on the policy by powerful stakeholders who are motivated by their often significant self-interest to alter incentive structures in their favor, dilute

enforcement, or derail the policy entirely. Some key characteristics of benefits and costs include the following:

- Most mainstream environmental policies are characterized by a relatively large beneficiary group (such as residents with reduced morbidity or mortality risks) for which benefits per beneficiary are small. Losers are typically those stakeholders who must comply with the policy and incur costs that may be significant on a per facility or company basis.

- Environmental and natural resource policies exhibit a distinct temporal structure, with benefits often lagging costs and accruing over a longer time period.

- The benefits of environmental policies are often nonmonetary, while costs are in monetary terms.

Those interests who benefit from the status quo and will be negatively affected by a policy change are likely to be better organized and more motivated to act than those likely to benefit from the proposed change. This is particularly true in the case of environmental and national resource (ENR) policy where the principal beneficiaries are often the population at large, the natural resources themselves, or generations unborn, and where the initiative for policy reform often originates outside the country. Moreover, few of the civil society groups in developing or transitional countries concerned with advancing public interests with regard to ENR policy are broad-based membership organizations or can credibly claim to represent the interests or views of large constituencies. Well-organized or politically connected stakeholders may be able to exert pressure on governmental officials to ensure their interests are protected. Cases 13.3 through 13.6 describe situations in Zambia, Thailand, and Niger that demonstrate how such pressure, motivated by monetary gains, can reduce a policy's effectiveness or even derail the policy entirely.

### Programmatic Implications

1. Donors should identify key assumptions linked to how stakeholders respond to incentives. Economic scenarios should be scrutinized, and alternative scenarios and outcomes identified and analyzed in terms of their impact on stakeholder incentives.

2. Policy trade-offs are both inevitable and ubiquitous. Although win-win outcomes are possible, whereby both economic and environmental goals are promoted simultaneously, sectoral and environmental policies are more likely to conflict.

3. Potential conflicts with other policies should be identified early in the design process to determine the extent to which the conflicting policy will adversely impact on the proposed reform and also to determine if the proposed environmental policy adversely affects sectoral policies. As noted previously, broad-based dialogue beyond the ENR agency is often necessary to overcome or minimize these conflicts.

4. Benefits and costs of empowered stakeholders often are better served than those with less power, particularly if a policy is not clearly and formally articulated. In assessing winners and losers and the respective magnitudes of benefits and costs associated with new policies, some of the potential difficulties can be anticipated.

5. Overcoming the type of political pressures that aggrieved but powerful stakeholders may exert on policies requires attention to the process of policy design, implementation strategies, and issues such as monitoring to improve accountability, providing implementers with appropriate incentives to promote the policy, and increasing transparency through greater involvement of the public through NGOs and PVOs in the development of implementation strategies.

**Case 13.1**

***Environmental Investment in Central and Eastern European Countries and the Former Soviet Union***

The period of economic transition in Central and Eastern Europe (CEE) and the former Soviet Union (FSU) provides a number of illustrations of the effect that prolonged recession and sluggish market reforms can have on environmental investment. Among the economic factors that have led to a virtual cessation in environmental investment in the FSU and decreased levels in CEE countries are the following:

- Loss of historical markets for both inputs and outputs, followed by new barriers in trade resulting from the creation of new countries delineated by national borders, with the flow of goods monitored by customs services.
- Protracted periods of recession, reduced per capita incomes, high rates of inflation, and under- and unemployment coupled with a rigid, immobile labor market and a severely stressed social safety net.
- Poorly functioning capital markets that focus mainly on servicing official government debt and currency transactions. When loans have been available, they have been characterized by short repayment periods and high interest rates.

These factors have seriously constrained investment activities in the environmental sector in countries hardest hit by the economic downturn. Among enterprises, both capital and operations and maintenance (O&M) expenditures on the environment have declined precipitously, with many enterprises resorting to economic triage to maintain bloated labor forces and keep production lines open. Investments in environmental services, which must increasingly rely on user charges and local taxes as national governments devolve authority to municipalities, have also been seriously curtailed because households and businesses are unable to pay user fees that fail to cover even O&M expenditures adequately. Thus, while environmental regulations and economic instruments such as pollution fees should contribute to improved environmental quality, economic conditions decrease incentives for investment, reinforced (not surprisingly) by lax enforcement.

| **Case 13.2**<br>***Conflicting Forestry Policies*** |
|---|
| In northeast Thailand, in an effort to get people in selected watershed areas to plant trees, land certificates are offered to those who plant trees on their land. However, the forest service has designated only five species of trees that qualify, all of which are forest trees "owned" by the government. Local residents would like to plant trees with secondary outputs—such as mulberry, the leaves of which are used for silk production, or jackfruit, which provides a valuable fruit while the tree grows for timber. The failure to include these types of trees has undermined local participation in the environmental policy goals. In other areas of Thailand, farmers given over teak plantations to manage have frequently pulled out the teak in favor of less desirable species. Again, all teak is owned by the government whereas less valuable species may benefit the landholder. The same situation is seen in India where the valuable but increasingly scarce sandalwood tree has been the sole property of the government and local people pull it out when it is young rather than risk having it grow on their land. |
| Burkina Faso recently attempted to preserve the remaining trees in that deforested country by declaring a policy that all trees are the property of the government. This meant that farmers who had planted or managed woodlands on their own property lost the opportunity to use them. At the same time the government gave new recognition to traditional healers to deal with a number of ailments and gave them official posts in the hospitals. Healers told of being praised by the Health Ministry for their work and yet being arrested by forestry personnel as they cut tree bark and roots or collected leaves and animals necessary for their medicines. When policies of different sectors conflict, effective implementation is in doubt. |

| **Case 13.3**<br>***Community Forestry in Zambia*** |
|---|
| The government of Zambia, with FAO assistance, established a forestry program for local communities in the early 1990s. The program would enable local communities to manage the forests and wildlife to meet their needs and involved a planning process with forestry officials providing advice. One community wanted to reintroduce a type of deer native to their island home which had been previously overhunted. Forestry officials approved an inexpensive plan in which local residents would capture and transport the deer, working with a professional zoo keeper who had experience moving and managing these animals. Officials reported that they had obtained a permit for the community to capture the deer. Community members invested a great deal of time and energy readying the area for the deer and in developing a management plan. However, just before the deer capture began, an official of a different service within the same wildlife ministry decided that the deer could only be captured by his staff at considerable expense and transported by airplane instead of local boats. (It was rumored that the richer farmers on the mainland coast had offered to buy permits to capture the deer for game ranching.) Governmental support for the community plan and the permit for the animals evaporated. |

**Case 13.4**

***Charcoal Production in Zambia***

A community of Zambian charcoal makers living illegally in a forest near Lusaka, the capital, proposed to manage the forest for the government according to an agreed-upon management plan. In return they wanted to live in their homes legally and to retain and sell the cuttings as charcoal. The forestry officials, without personnel or funds to manage the forest, agreed to a consultation to establish the legal basis for such management as well as a baseline of the biophysical and human resources for establishing the plan. After initial progress, the government rescinded approval for the consultancies. It was found that the Commonwealth Development Corporation (CDC), with frozen local currency, had proposed to clear-fell the local forest to replant with a fast-growing species—a plan that had been rejected earlier by the World Bank as not being economic. To garner support, the CDC had offered individuals as well as ministries part of the stock in this for-profit venture. The charcoal makers were forthwith given notice to vacate the forest.

**Case 13.5**

***Agricultural Land Policies in Thailand***

In Thailand a number of activities are supported by the royal family or by governmental departments or semigovernmental corporations. In each of these project areas, the tenure rules are created independently within the government's overall policies of improving the lives of the rural poor as well as improving the environment. One project managed by FAO had these goals plus the Thai government's special goal of redistributing land areas more equitably so that more resources would be available to the rural poor. The project established infrastructure for villages. Individuals could form communities and apply to move into these villages, each family receiving a specific area of land. A number of the villages were formed and have endured. The people who joined the project were initially poor and have generally remained poor because the land allotment was small. Farmers in project areas who initially had large landholdings would have lost both quantity and quality of land had they joined the project. They were usually friends of the officials who managed the villages, and their farms were often points of pride for visitors to see. The project did nothing to equalize landholdings from the perspective of the large landholders; it could only increase the landholdings of a limited number of the poor.

**Case 13.6**

***Poorly Designed Incentives in Niger***

In Niger, a government-instituted policy intended to enhance tree cover had the opposite effect. For years, fines had been levied for cutting branches of trees, and property owners could be fined even if the branches had been cut illegally on property they owned. At the same time, a permit to harvest trees may be purchased from the government and may include trees on any private property in a particular zone. Farmers who planted trees for live fencing gave up the practice because it requires the continual trimming, shaping, and reinforcing the fence line for which they could be fined. Owners lacked incentive to plant trees and would pull out wildlings before they were noticed to avoid fines or the prospect that the trees would later be harvested without compensation.

# Lesson 14: Effective Design Must Anticipate Implementation Barriers

## What Has Been Learned

Even if policy reforms are conceptually sound in terms of providing appropriate incentives for stakeholders to address environmental problems or utilize natural resources more effectively, experience shows that the best design can fail unless implementation problems are anticipated and addressed before the final design is approved. Two keys to better design are early, preemptive analysis of potential implementation barriers and accommodations for implementers to participate in finalizing the design of policies.

## Key Underlying Issues

***Taxonomy of Implementation Barriers.*** A number of implementation barriers may decrease the effectiveness of policy reforms. Generally, three players have a key role in policy implementation: governmental institutions that facilitate implementation, implementing agencies and organizations, and stakeholders. Each group has the ability to reduce the effectiveness of policy reform. Some of the potential barriers related to each group are described below:

- **Governmental power structures**. Once a policy has been approved, the executive, legislative, and judicial branches of government all have the potential to derail the policy. As noted previously, major losers from policy reform will often be well organized and have access to the government through trade associations, lobbyists, and personal connections with individuals in government. Government officials, even if they are not directly involved in the implementation of policy, can undermine policy through their role in allocating budgets to implementing agencies, enacting legislation to complement policy reforms, or adjudicating legal challenges to policy or specific attempts to enforce the policy. For example, in South Korea, lagging industrial compliance in the 1980s and early 1990s could be attributed in part to the political influence of the country's large business groups *(chaebols).* As seen in Indonesia, cutbacks in agency budgets can undermine the ability of regulators to monitor air and water quality, detect permit violations, and develop an enforcement case against noncompliant facilities (see Case 14.1). In addition, courts can stall implementation by enjoining new legislation. Policy reforms that feature enforcement sanctions as a deterrent to noncompliance often depend heavily on the support of the judicial branch of government to prosecute violations and to levy sanctions commensurate with the violation. In many poor countries, officials are unwilling to arrest the poor for

crimes they commit to eke out a subsistence existence, in part because judges are often lenient and may reduce or dismiss damages. An example of alternative "punishment" was observed in Negril, Jamaica: a local man, arrested for fishing with dynamite, was offered the opportunity to learn to dive so he could obtain legal employment.

- **Institutions.** After approval, responsibility for implementation shifts to government agencies, or in some cases to NGOs, that are sometimes ill equipped to carry out the functions elaborated in the policy reform. Potential problems include the following: unclear delineation of roles and responsibilities, limited resources or capacity to carry out the new responsibilities, or a lack of commitment to the new policy on the part of the implementing institution's management (see Case 14.2). This is particularly true in countries in which policies are decided upon by small groups of policy elites in distant capitals. If implementers have not "bought in" to the policy reforms, there may be resistance, as was seen in India (see Case 14.3). In many cases, enforcement may put local officials at risk without adequate compensation. For example, the introduction of new laws to curb poaching or illegal harvesting may receive limited support from local officials and could provide incentives for officials to receive illegal payments for lax enforcement.

- **Stakeholders.** Beneficiary groups are often not organized or empowered to assert their interests in policy reforms. To ensure that implementers are accountable to the public for policy, appropriate information must be made available to the public *and* the public must be able to assess and disseminate this information. In some cases, it may be necessary to create or refocus the activities of NGOs to play this role.

***Ex Ante Assessment Requires Early Involvement of Donors.*** Ideally, potential implementation barriers are evaluated and discussed during the stage of policy dialogue. For such a discussion to occur requires the participation of implementing agencies and stakeholders who are in the best position to identify potential problems and to help find solutions. In some cases, implementation barriers may be so difficult to overcome that an alternative policy, perhaps less complex or relying to a greater extent on voluntary compliance, must be considered. Discovering serious implementation barriers after a policy has been adopted can reduce the government's credibility and dampen donor interest in providing technical or financial assistance.

## Programmatic Implications

1. An analysis of the implementing institutions and players can help donors and implementers develop their respective assistance and implementation strategies. The key focus should be to review the previous stages of the policy process, assess the participation and respective roles of agencies, government officials, and stakeholders to determine if important players in implementation have been adequately and appropriately engaged in the stages of dialogue and design.

2. Analysis of the policy winners and losers should focus on institutions that may have gained new responsibilities and resources, as well as stakeholders. Donors should recognize that powerful stakeholders would likely have supporters in nonenvironmental ministries and agencies that may be able to exert indirect influence on the policy through budgeting of financial resources for the implementing agency or in reducing political support for enforcement.

3. Poor linkages between central and local authorities can undermine implementation. Donors should strive to involve local agencies and authorities in the implementation process as early as possible, support workshops to present the new policy to local implementers, and target local officials and staff for training programs and procurement programs that support implementation.

**Case 14.1**

***Monitoring and Enforcement in Indonesia***

In 1990, Indonesia created a national environmental impact agency, BAPEDAL, and vested it with responsibility for implementing the country's environmental laws and regulations. Between 1990 and 1996, BAPEDAL's staff increased from 30 to 500, and it had a budget of $12 million by 1997. With support from the World Bank and other donors, the technical capabilities of its staff have improved steadily.

Despite these promising developments, serious problems remain. Direct and regular collection of data on ambient environmental quality is limited. Quality control problems plague data collection and laboratory analysis because labs suffer from outdated and inadequate equipment, a shortage of well-trained staff, and a lack of standardized protocols for monitoring and analyzing samples. In addition, BAPEDAL's legal authority for monitoring and enforcement is hampered by flaws in its mandate which prevent it from entering facilities to monitor emissions and from bringing charges against polluters in court.

BAPEDAL has overcome some of these limitations through creative and strategic approaches, forging alliances with NGOs to increase public outrage over egregious pollution problems and developing voluntary programs such as the Clean Rivers Program (PROKASIH) and PROPER, an environmental business rating program.

**Case 14.2**

***Marine Damages in Egypt: Prosecution Constraints to Implementation of a System of Fines***

Marine resources of the Red Sea are vital to Egypt's burgeoning "sea and sun" tourism industry and represent a major source of foreign currency. However, the high volume of marine traffic passing through the Red Sea to the Suez Canal and Mediterranean Sea has generated a substantial amount of pollution from accidental spills and illegal pumping of bilges. In 1994, Law 4 (Environmental Protection Act) included provisions for assessing and collecting marine damages, and provided that the revenues from marine damage settlements should be deposited in the account of the newly created Egyptian Environmental Protection Fund (EPF). Through the middle of 1998, marine damages represented 78 percent of EPF revenues in local currency (about $6.4 million) and 100 percent of revenues in hard currency ($7 million).

The administration of marine damages involves a number of steps. First, a minimum fine is collected from the ship's captain prior to the boat's departure from Egyptian territorial waters. This fine is held in trust until the court has issued its decision, after which the amount of the fine assessed by the court is transferred to the account of the EPF. In many cases, the defendants seek to settle out of court to save time and expense. In fact, defendants tend to fare well in both settlements and the courts, with the actual amounts of settlements or court assessments being significantly below the estimated damages. The problem relates to a lack of capacity on the part of the legal department in the Egyptian Environmental Affairs Agency (EEAA) to negotiate settlements or prepare court cases. Accordingly, there is always a backlog of cases under study and settlement may take years to reach. This lack of capacity dilutes the incentive value of the sanctions and significantly reduces the revenue base of the fund.

This case raises an interesting implementation question. The costs of strengthening the legal capacity of EEAA are far less than the additional revenue that could be collected with better management of damage cases. However, it has been difficult to increase the budget of the EEAA to fund staff positions, in part because of rigidities in the budget process and competing demands for staff among various departments of EEAA. In addition, it is difficult to recruit competent legal staff given the civil service pay scale. An alternative would be to retain private sector counsel and legal researchers to manage the damage cases and clear the backlog of pending cases. Presumably, perceptions among defendants of the ability of EEAA to prepare its legal cases for the courts would be enhanced if private legal services were used and might serve to encourage more settlements, possibly at negotiated amounts more favorable to Egypt.

Clearly the proposed system of marine damage fines did not anticipate the institutional capacity constraints. Possibly, a system of fines that could be assessed and collected administratively would have been more effective in generating revenue even if the amounts of fines were set by administrative fiat and were not commensurate with damages.

**Case 14.3**

***Regulatory Reform in India***

In 1997, USAID implemented a Regulatory Reform and Restructuring program in India directed at (1) creating independent Electric Power Regulatory Commissions at the national level and within individual states, and (2) unbundling state-owned electricity boards into separate generation, transmission, and distribution companies. The primary goal was to move stated-owned utilities to the private sector, thereby creating the opportunity to substantially increase sector efficiencies. The regulatory role would be twofold in this program, acting as overseer of the power sector reform and functioning as conventional regulatory commissions of the reformed sector.

During the design phase of the program, USAID consulted with ministries at the national level and received enthusiastic support for the goals of the program. A commitment was secured from the Ministry of Power to establish a unit within that ministry that would lead the reform effort in India and also function as the program counterpart with USAID. A second counterpart organization, the Power Finance Corporation (PFC), agreed to assist in selecting states that would participate in the power sector restructuring program.

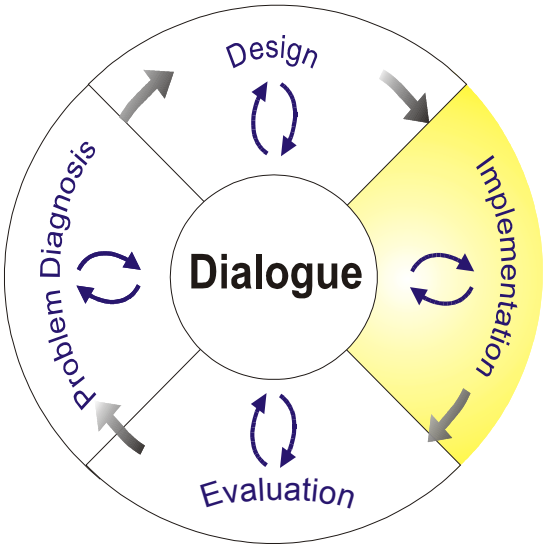
India had instituted a program to attract private investment into power-sector generation prior to the start of the reform program. This program was intended to solve serious power shortages throughout much of the country. Since hardly any power generation projects reached advanced stages, the government concluded that the early focus on power generation was mistaken and that the focus should have been on resolving the significant distribution problems. The Regulatory Reform and Restructuring program was thus designed to address the perceived failure of the earlier power-sector assistance program.

The assistance enabled the drafting of legislation that allowed the creation of independent regulatory commissions, and provided simplified processes for individual states to create commissions. At the end of the project, ten such commissions were in operation. This success can be attributed in part to the desire of politicians to shift the criticism attached to electricity tariffs from themselves and to the offer by the PFC to award concessional loan rates to state electricity boards if the state established a regulatory commission. But whatever the reasons, the commissions have developed into professional organizations in a very short time. USAID contributed to this success by providing significant training and assistance. An interesting, and unexpected, outcome of this project was the interest and participation of the public in commission hearings, which gave the public a voice it had never had in the past.

The restructuring aspect of the regulatory reform program was less successful. Although the government and USAID were firmly behind the program, the decision to reform the state electricity boards depended on state action. The states had not participated in the original development of the program and were mostly unwilling to give up the authority they had over the power sector. State Electricity Boards (SEB) unions were opposed to restructuring because it led to privatization and subsequent downsizing. Several strikes were held opposing any changes to the SEBs. Although PFC nominated several states for restructuring assistance, all but one was turned down by USAID. At the end of the program, Orrissa was the only state that had successfully restructured and partially privatized its power sector, and this without assistance from the program. The state of Haryana received significant assistance from the program to complete the unbundling of its power sector; however, a change of state government halted further changes. The government of Punjab received limited support to establish commercial operation centers, but this was never implemented.

During the project, the governments of India and Pakistan detonated several nuclear devices and USAID placed the program on hold for some time. When a revised program was allowed to restart, the recipients of the assistance believed that USAID was not fully supportive and it took months to overcome this perception. While there appeared to be full support for the program as designed, an inability to get the states to accept the assistance was a major shortcoming of the project.

# Chapter 7: Policy Implementation




The ultimate test of a policy is its effective implementation. Even if all participating parties believe that the policy emerging from the design phase provides optimal incentives to achieve the desired environmental or natural resource goals, many things can go wrong during implementation. In most countries, local and regional agencies play a larger role in implementing policy than in designing policy. Policies that lack local support and commitment may be derailed by local resistance. In addition, effective implementation requires resources and sustained commitment to monitor and enforce the policies. This chapter includes six lessons and ten cases that illustrate lessons learned about providing assistance for implementation activities.

## Lessons

| **Lessons 15. It May Not Be Possible to Implement the Policy As Designed**<br>In some cases, obstacles to implementation have not been anticipated at the stage of policy design or the drafters of the policy were guided by an agenda not shared by stakeholders (or, in some cases, by the implementing agencies). It may be necessary to revise the design or target additional resources to institutional capacity to ensure effective implementation. | |
|---|---|
| Case 15.1 | Management of Bunaken National park in North Sulowesi, Indonesia |
| Case 15.2 | Ambient Standards for Pollution in the Former Soviet Union |
| **Lesson 16. Donor Organizations Should Encourage Partners to Develop Implementation Strategies**<br>Our partners face significant challenges in mobilizing resources and building capacity to implement policies. Implementation plans serve an important role in elaborating compliance or implementation schedules, identifying capacity gaps, and informing discussions with budget authorities and donors. | |
| Case 16.1 | Strategies for Approximating with European Union Environmental Legislation |
| Case 16.2 | Environmental Financing Strategies |

| | |
|---|---|
| **Lesson 17. The Benefits of Policy Implementation Should Be Marketed in Terms of Local Impacts**<br>Local incentives are the driving force for widespread adoption of policies. Governments, donors, and NGOs can encourage and support widespread improvements in environmental management, but local actors influence specific resources can implement necessary changes. Governments and donors can improve effectiveness at the implementation stage by focusing attention on local obstacles and resource constraints. | |
| Case 17.1 | Local Impacts As the Incentive for Improved Resource Management in |
| **Lesson 18. Implementation Must Be Reinforced by Commitments to Sustain Financial Support**<br>Donor financing can play a catalytic role in implementation start-up, but can become a crutch if there is not a strong commitment from the government to sustain financing. | |
| Case 18.1 | Environmental Investment in Central and Eastern European Countries and the Former Soviet Union |
| Case 18.2 | Graduation Requirements for Jamaican NGOs |
| Case 18.3 | Revenue Enhancement to Support Red Sea Protection |
| **Lesson 19. Implementation Will Be More Successful If Implemented by Those Closest to the Problem**<br>It is important to involve agencies at the local level because they are more accountable for success, understand the problems better, and are more familiar with (and may have more influence on) stakeholders. | |
| Case 19.1 | Wildlife Management in Tanzania |
| Case 19.2 | Decentralization of Natural Resource Management in East Kalimantan Province, Indonesia |
| **Lesson 20. Donors May Need to Help Build the Capacity of Stakeholders**<br>Implementing agencies must cater to the needs of stakeholders by communicating new policy requirements and assisting stakeholders in acquiring new skills or information to use the new policies to advantage. | |
| Case 20.1 | Popularization of the Niger Rural Code |

# Lesson 15: It May Not Be Possible to Implement the Policy As Designed

## What Has Been Learned

A number of factors may impede the implementation of the policy as designed. Before providing implementation assistance, the policy should be analyzed to identify barriers that may reduce its effectiveness and assess options for overcoming these barriers. This assessment may indicate the need for changes in the policy or changes in the implementation strategy to overcome weaknesses in the policy. Most importantly from USAID's perspective, such an assessment will aid in determining the likely success of proposed assistance programs and deploying these resources strategically.

## Key Underlying Issues

***To Assist or Assess?*** USAID and other donors are often asked to provide assistance with the implementation of policies. This may involve training for staff in environmental agencies or technical assistance for stakeholders. Before providing such assistance, it is useful to determine whether the policy provides adequate incentives for stakeholders to respond in the desired way and whether there are impediments that may diminish the policy's effectiveness. Possible impediments include weaknesses in institutional capacity to implement a policy or the inability of stakeholders to respond to incentives because of their limited access to capital or information. The scope of assessment will depend on the nature and timing of the request for assistance as well as the resources the donor can mobilize for the assessment. At one extreme, the scope of assessment may be quite broad and take several months to complete. For example, in 1997, an EPIQ team conducted an assessment of the environmental sector in Egypt that included an examination of the state of the environment, environmental policies, institutional capacities, and previous and ongoing assistance efforts. USAID used the assessment in developing a broad-based environmental policy program. On a smaller scale, EPIQ conducted an assessment of water-quality problems in Jamaica in 1998. This "Ridge-to-Reef" assessment focused on policies that impact on water quality and included recommendations for new assistance activities to promote improved watershed management and water quality downstream. In both of these cases, USAID was developing new initiatives rather than responding to specific requests from partners. Where the request for assistance focuses on a single policy, the scope of analysis may be more limited than those described here.

***Changing the Policy.*** If there is agreement that a new or revised policy is flawed, the next step is to determine whether the policy can be changed. The donor and its assistance partners must examine the design process, how long it took to approve the policy, major

problems that had to be overcome before consensus was reached, and the receptiveness of policymakers to changes in the original policy (see Case 15.1). If the policy has been in place for several years, changes are likely to entail a comprehensive assessment and vetting of this analysis in the stage of problem diagnosis (see Case 15.2). If the policy has only recently been introduced, it may be possible to short-circuit the process if the policy has gone through design and the needed changes are minor. Again, if the donor has participated in the design process, the prospects for changing the policy prior to implementation may be greater. The donor should substantiate the proposal for changes with alternatives and accompanying analysis and reinforce its commitment to assistance. If merited by the situation, the donor should be prepared to withhold assistance if negotiations for revisions fall through (although politically this may be difficult to do). Alternatively, the donor may commit to different levels of assistance depending on the outcome of discussions on revising the policy.

***Overcoming Bad Policy with Good Implementation.*** In some cases, the donor may be unable to change a policy, but may be able to overcome some of the identified weaknesses during the implementation process. The donor must first determine the policy's flaws, identify options for overcoming them, and then determine if such an implementation approach can be facilitated. Even if the success of the implementation options is uncertain, the donor's effort may enhance the donor organization's credibility and commitment to assisting the partner and provide an opportunity to revise the policy in the future. As a rule, it is easier to address policy flaws during the implementation stage if they relate to capacity issues for implementers and stakeholders rather than to poorly designed incentive structures.

## Programmatic Implications

1. Donors should understand the dynamics of the policy formulation process, how long it takes to modify current policies or recently introduced reforms, who the key players are, and what steps may be required to reopen the policy dialogue.

2. Donors should assess government's responsiveness to making additional changes in the policy. In many cases, enactment of laws is so difficult that the only feasible changes in the near term are those that can be accomplished through decrees, directives, or regulations. This requires donors to make a careful examination of the law and the limits it imposes on the modifications needed to improve the policy.

3. Donors should recognize that revision of a recently adopted policy might be construed as weakness of the authority that formulated the policy, in which case

resistance or inertia can be expected. Donors may have to be creative in helping authorities to demonstrate that the changes are needed and in deflecting criticism. Obviously, the extent of the proposed assistance program will be a critical factor in how the authorities are perceived among other government agencies, the public, and stakeholders.

4. Counterparts may need to be convinced that a suggested policy change is really needed. To this end, some implementation may be necessary before changes can be constructively discussed. If so, donors should encourage implementers to introduce the policy in phases, establishing intermediate goals or benchmarks so that performance can be evaluated. If possible, donors should encourage implementers to simplify the policy, break it into manageable components, or consider piloting activities to better assess implementation barriers.

5. Donors need to play a role in the implementation stage, even if the policy is flawed, so as to ensure that counterparts will remain receptive to proposals for reform. Strategically, the donor should target some assistance to initial implementation tasks, assist in designing protocols for monitoring implementation progress, maintain open dialogue with both policy formulators and implementers, and take other steps to ensure the donor is positioned to promote policy changes.

**Case 15.1**

***Management of Bunaken National Park in North Sulawesi, Indonesia***

Bunaken National Park, established as a marine national park in 1991, has become one of Indonesia's major marine ecotourism destinations. While designation as a national park should have afforded greater protection for the physical resources of the land and sea area within the park's boundaries, the park has instead suffered slow but continuous degradation of its marine resources. While this deterioration has been attributed to ineffective management and enforcement, it appears that some of the management problems can be traced to the area's designation as a national park and a prescriptive management system based on various use zones (referred to as the zonation system).

Prior to its designation as a national park, the area—then known as Bunaken Sea Gardens nature reserve—was under the control of local authorities. As a national park, control was transferred to the central government, including authority to collect entrance fees. Local authorities contend that North Sulawesi receives no direct benefits from the park as a result of its designation. Moreover, park entrance fees are not being collected, largely because of the lack of a park "gateway" and lack of consensus on how fees might be collected. This has resulted in an estimated aggregate revenue loss of $50,000 to $250,000 since the park was established. Although Indonesian law provides for revenue distribution between central and local governments, the majority of funds, if they were collected, would remain in the state treasury. These revenues could be used to improve the management of the park and, if a portion were transferred to local governments, might improve the relationship between the park and local authorities (which has been described as antatonistic).

A consensus has been reached on how the fee collection system should be structured, but Indonesia law appears to be too inflexible to accommodate these proposals. Key elements would include: (1) equitable revenue distribution between the park management and local government to fund enforcement, education and awareness, reef and beach cleanups, and public works projects in the park; (2) an increase in the entrance fee for foreign visitors (from less than $3 to about $10); and (3) creation of a gateway for land-based use and alternative collection methods for divers. For now, some enforcement costs are being funded by a preservation fund financed by a voluntary $5 per diver fee that is being collected by dive operators. In addition, discussions are underway to establish a trust fund dedicated to park management.

Another problem relates to the official zonation system that has been promulgated by the Director General of Forest Protection and Nature Conservation. This system is characterized by zone categories that have resulted in confusion as to the range of permitted activities and weak regulations for each zone. Locally, there are also concerns about how the boundaries for each zone have been drawn and frustration that the official zonation system differs from the system proposed in the park's management plan, which was designed by the North Sulawesi Provincial Office of Forestry with local input from villagers, dive operators, and government officials. The USAID-funded Natural Resources Management II (NRM2) program has been assisting locally initiated efforts to hold a series of meetings to discuss a revision and simplification of the zonation system. It is hoped that the revised zonation system can be implemented in the spirit of the government's decentralization policy and will provide a basis for improved management and enforcement activities in the park.

**Case 15.2**

***Ambient Standards for Pollution in the Former Soviet Union***

In the 1980s, the Soviet Union developed an extensive system of ambient standards for air, water, and soil. Ambient standards were developed and implemented for hundreds of individual air pollutants, water pollutants and solid waste. Standards often were set at levels that were fully protective of human health, meaning that the pollutant concentration should be sufficiently low to ensure that no adverse human health effects (morbidity, mortality, mutagenicity, developmental disabilities, etc.) would result.

These ambient standards were far stricter than those recommended by the World Health Organization or implemented by most Western countries. Apart from the ideological baggage attached to the "toughest standards in the world," there were fundamental differences between the methodologies behind the standards. In the Soviet Union, the standards were established by the State Committee on Health based on human physiological responses to various pollutants and the determination of de minimis levels at which no adverse response could be expected. In setting these ambient standards, no consideration was given to the technological or economic feasibility of achieving the standards. In Western countries, ambient standards allow for small "acceptable" health risks (such as one cancer case per million population) and consider costs and existing technology in establishing emission or technical standards designed to achieve the standards.

The use of strict ambient standards as long-term goals, while commendable, created difficulties in setting emission standards for industrial facilities. Emission standards were supposed to be set at levels that would ensure that the ambient standards were met. For air, ambient concentrations were to be measured at the edge of the sanitary protection zone (typically one kilometer from a facility's property boundaries). Several difficulties were encountered in making these determinations. First, few of the ambient standards could be monitored, which meant that theoretical dispersion models would need to be relied on to estimate ambient concentrations. Second, for those pollutants that could be measured, no account was taken for background levels or pollutant transport. Third, the emission levels needed to meet the ambient standards could only be achieved by discontinuing the offending activity. As a result, emission levels set by environmental authorities and reflected in a facility's "ecological passport" were the result of negotiations between the authorities and facility managers. Their main purpose was to establish the basis for payment of environmental charges and often did not require facilities to adopt any pollution control measures.

In effect, the policy as it was designed could not be implemented. This undermined the credibility of the environmental authorities and created a mentality among facilities that, by paying their environmental charges, the responsibility for addressing enviornmental concerns shifted to the environmental authorities who controlled the revenues that facilities paid. As the newly independent states began to develop their own environmental policies following the dissolution of the Soviet Union, a central theme among donors providing assistance has been to reduce the number of standards and revise the stringency of remaining ambient standards in order to match these standards to technologies and production processes.

# Lesson 16: Donor Organizations Should Encourage Partners to Develop Implementation Strategies

## What Has Been Learned

Once a policy is approved, donors should encourage counterparts to prepare an implementation strategy or plan. Such plans serve a useful role in establishing compliance or implementation schedules and helping implementers identify key gaps in institutional capabilities and funding, thus enabling donors to target their assistance resources more effectively.

***Capitalizing on the Momentum of Design.*** The design stage leading up to approval of a policy is often characterized by intense last-minute negotiations, fine-tuning of laws or regulations, and mobilization of legislative support. Practical issues relating to implementation budgets, compliance planning, and capacity building are put aside to concentrate efforts on approval of the policy. Once the policy is approved, stewardship for the policy shifts to implementing agencies. A challenge for implementing agencies is to capitalize on the support and attention that various decision makers and stakeholders have focused on design. The development of a comprehensive strategy for implementing the policy may aid in focusing attention on resource needs and institutional strengthening requirements (see Cases 16.1 and 16.2).

***Strategy Basics.*** In recent years, the development of implementation plans has become more common in developing countries and economies in transition. The ten accession countries in Central and Eastern Europe have recently prepared strategies for implementing specific EU environmental legislation that address many of the issues enumerated in Table 7.1. These documents serve the purpose of helping to mobilize resources and upgrade staff, set compliance schedules, and conduct negotiations with the EU. As part of its assistance programs in Africa, the World Bank cooperates with partner countries in the preparation of Environmental Support Plans (ESPs). These plans are designed to expand on the institutional needs identified and prioritized in National Environmental Action Plans. A third type of implementation plan is the environmental financing strategy. To date, financing strategies have been prepared in Lithuania and Armenia, and the Danish EPA is supporting additional national and regional strategies in the countries of the former Soviet Union. Financing strategies typically focus on environmental expenditures required to meet the stated goals in national strategies or action plans, including the costs of management and investments, sources of financing, and options for closing the financial gaps that typically exist in these countries. Financing strategies may also focus on specific legislation; priorities by media, sector, or region; or a comprehensive slate of environmental objectives.

**Table 7.1 Components of Implementation Strategies**

- Sequencing of activities, creation of intermediate deadlines, use of pilots and demonstrations, and phased implementation by sector, facility size, geographical location, etc.
- Elaboration of the respective roles of agencies at the national, regional, and local levels.
- Staff resource requirements in terms of skill levels and deployment.
- Training and capacity-building requirements for implementers and stakeholders.
- Financial requirements for staff and equipment and assessment of financing gaps.
- Identification of institutional gaps requiring the creation of new institutions (such as development of environmental funds and other financing facilities to help enterprises in transition economies undertake compliance investments).
- Strategies for addressing unanticipated events, such as political or economic changes that alter the flow of financial resources.
- Protocol for monitoring performance of the policy during implementation.

Some problems that need to be addressed in developing implementation strategies include the following:

- **Implementer incentives**. One of the major difficulties in developing countries is providing appropriate incentives for implementing agencies and staff. Often, salaries in government ministries and agencies are far lower than those in the private sector, making it difficult for implementers to retain their most highly skilled staff. This may diminish support for staff training among managers. In addition, understaffing may lead to overworked staff or create significant lags in key implementation activities such as permitting, inspections, and enforcement. Low salaries may increase the potential for bribes and diminish staff initiative to undertake potentially risky activities such as inspections of fishing boats or forested areas suspected to have been cleared and planted with illegal crops.

- **Opportunity costs of donor projects**. Donor assistance is often a conundrum for implementers. Most donors are prohibited from compensating government staff for the time they spend on coordination of donor projects although these activities detract from their regular duties. In some countries, however, staff receives salary

supplements when they participate in donor-financed activities such as training, workshops, and advisory or steering committees. Such incentives can lead staff to pursue these financial rewards to the exclusion of other work. In some cases, training and study tours to other countries can partially compensate for lower salaries. Ultimately, problems of staff incentives and high salary differentials can be addressed only through comprehensive civil service reforms.

- **Lack of transparency and accountability.** The public can be an important ally of agencies in their implementation efforts provided the public has access to information and is allowed to participate in the review of environmental management actions. In many countries, public involvement and scrutiny of government are limited. Bilateral assistance programs often feature democratization as a key objective, with the environment sector offering significant opportunities for changing the relationships with the public. By conducting implementation activities openly and transparently and providing public access to information on the performance of the regulated firms, implementers can increase their accountability with the public and legitimize their enforcement role with stakeholders. Mobilizing recipients of policy benefits to make effective demands on policy implementers and to provide feedback to policy monitors is another way to deal with problems of unresponsiveness, sloth, and slippage.

## Programmatic Implications

1. Counterparts are unlikely to prepare implementation plans voluntarily. Resistance is likely because the task is time-consuming (either staff must be pulled away from other duties or costs incurred if outside consultants are used) and may be perceived to be of limited value. Donors can help overcome the resistance by financing preparation using experts outside the agency and arranging twinning relationships with countries that have experience in developing implementation strategies.

2. Donors can also tie future assistance to the preparation of the implementation plan and make the case that the plan will improve the effectiveness of the policy and serve as a vehicle for mobilizing other donor assistance.

**Case 16.1**

***Strategies for Approximating with European Union Environmental Legislation***

Ten Central and Eastern Euopean (CEE) countries are schedulued to become full members of the European Union in the current decade. As a precondition for membership, CEE countries must approximate their legislation with that of the EU. Implementing the environmental *acquis* is viewed as one of the major and most costly challenges for CEE countries, with cumulative investment costs for the air, water, and waste sectors estimated to be close to 50 billion Euros and annual costs to exceed 10 billion Euros per year. These estimates do not include the costs of managing the implementation of this large body of legislation.

To assist CEE countries in preparing for membership, the EU and bilateral donors have funded the development of "approximation" strategies in these countries. Some countries (such as Lithuania) have developed comprehensive strategies while others have focused on specific environmental sectors or even specific directives (e.g., a landfill directive, integrated pollution prevention and control directive, etc.). These strategies have generally included an analysis of the legislative changes required to transpose existing national laws with EU laws, estimated costs (often directive-by-directive) of the new requirements, and the institutional capacity required to guide implementation.

In addition to providing a "game plan" for preparing for EU membership, these approximation strategies have proven useful in determining key gaps in skills that may be addressed with donor assistance, informing negotiations between the accession countries and the EU on their proposed schedules for transposing and enacting new legislation, and providing an analytical basis for discussions within the government on future staffing and budget requirements for implementation. One weakness of the approximation strategies is their lack of attention to the issue of mobilizing the financing required to fund implementation of the environmental *acquis*. This is a critical omission because it is difficult for the EU to judge if proposed compliance schedules are realistic. This shortcoming can be addressed by environmental financing strategies (see Case 16.2). To date, one accession country (Lithuania) has developed an environmental financing strategy and other accession countries are preparing to do so.

**Case 16.2**

***Environmental Financing Strategies***

As part of the Environmental Action Programme (EAP) for Central and Eastern Europe launched at the Lucerne meeting of environmental ministers in 1993, the participating countries agreed to prepare National Environmental Action Plans (NEAPs). These NEAPs were supposed to articulate and rank environmental priorities, describe necessary policy reforms and institutional strengthening activities, and consider the investments and other actions required to achieve priority environmental objectives.

To date, a major weakness of NEAPs has been their failure to assess the costs of proposed actions and develop realistic plans for mobilizing and efficiently allocating the financial resources needed to support required investments and other activities. Recognizing these shortcomings, the EAP Task Force supported the development of a pilot environmental financing strategy in Lithuania in 1997. The purpose of this pilot was to demonstrate the potential utility of a strategy narrowly focused on the demand and supply of financing for environmental investments.

One weakness of the Lithuania pilot strategy was the lack of well-defined goals and targets, which complicated the task of determining the level of demand in each of the sectors analyzed. However, the preparation of the approximation strategy in 1997-98 provided a set of goals articulated at the level of individual EU directives. In 1999-2000, a second strategy was prepared for Lithuania that examined the demand and supply for investments in the water, wastewater, and municipal wastes in sufficient detail to determine realistic compliance schedules, identify specific sources of financing that would be used for investments, and analyze the affordability of the proposed expenditure program. The strategy also enabled policymakers to better understand potential financing obstacles (particularly on the domestic side) and the range of supporting activities that would be needed to develop and implement the slate of investments proposed in the strategy.

Environmental financing strategies have served a slightly different purpose in the newly independent states of the former Soviet Union where they have been developed or are under development (Georgia, Kazakhstan, Moldova, and two oblasts in Russia—Novgorod and Pskov). For these strategies, a computer-based tool was developed that enabled policymakers to specify environmental targets in the water and wastewater sectors and identify sources of finance that could be applied to support expenditures in these sectors. The tool estimates demand (in terms of investment and O&M expenditures) for several years and compares costs with available financing to determine if there is a financing gap. Policymakers can then adjust environmental targets or financing assumptions to close the gap. Thus these financing strategies serve the dual purpose of determining if environmental targets are realistic and inform discussions in government on policies and programs that are needed to support actions associated with the environmental targets.

# Lesson 17: The Benefits of Policy Implementation Should Be Marketed in Terms of Local Impacts

## What Has Been Learned

Governments, donors, and NGOs can encourage and support widespread improvements in environmental management, but only local actors influencing specific resources can implement necessary changes. Therefore, any new policy-driven environmental choices must make sense to those whose resources and hard work will produce change. Local incentives are the driving force for widespread adoption of improved methods. Removing policy obstacles to resource investment systematically helps to improve incentives. Nevertheless, all proposed local initiatives must undergo careful financial scrutiny to assure that potential benefits outweigh the costs and risks. Equally important, sociocultural incentives and obstacles, such as land and resource tenure and environmental awareness, must be considered. Local outreach and training are often necessary complements to environmental policy reform.

## Key Underlying Issues

***Political Economy.*** Whether dealing with the global issues of climate change and biodiversity or local issues such as village production systems and local water quality, the basic policy question remains: How can public policy (within the society's basic economic, political, and social frameworks) influence individual choices in ways that lead to preferred environmental outcomes? A basic lesson learned over nearly thirty years of environmental policy efforts is that people choose outcomes that they believe will help them. Policymakers must find solutions that offer practical benefits while also effecting preferred environmental outcomes from broader societal perspectives.

***Economic Transition.*** With a billion people and a gross domestic product (GDP) growth rate approaching 9 percent per year, China's heavy reliance on coal causes severe air pollution problems for its citizens and is becoming a dominant contributor to global warming. As the result of long-standing international discussions, Chinese policymakers recognize the potential global impacts of continued dependency on coal. However, a quarter of a billion Chinese households are also involved in a pressing and equally historic transition—from a poor society to one of middle-class consumers; from a technically backward to a technologically advanced economy; from a society facing periodic food shortages to one with filled refrigerators; and, most important, from a generation who has suffered much hardship to one whose children can aspire to a life of relative comfort. Like Western societies before them, the Chinese are choosing their own economic welfare over global environmental considerations.

***Global-Local Linkages.*** Depletion of the world's rainforests contributes to global warming and to loss of biological diversity. But, whether in Central Africa, Madagascar, the Amazon, or Indonesia, deforestation is driven by local opportunities and localized incentives that ignore the costly environmental degradation. Large timber concessionaires in the Amazon, Borneo, or Gabon will not readily sacrifice hundreds of millions of dollars in income for diffuse environmental gain. In Madagascar, which has among the richest and most diverse biological resources in the world, efforts to sell biodiversity as a reason to protect the forests have been unsuccessful. Environmental groups committed to preserving Madagascar's biodiversity recognize that increasing economic opportunities for impoverished Malagasy farm families is the only effective way to protect a resource so highly valued by the outside world. And in Niger local rather than global impacts served as incentives for resources management (see Case 17.1).

***Attitudes Change with Rising Incomes.*** With average GDP growth rates of more than 6 percent per year for the past two decades, Southeast Asian countries now manifest the more nuanced approach to local-level impacts that are characteristic of middle-income economies. While urban pollution and congestion were acceptable prices for higher incomes, populations are now willing to trade some income potential for environmental, health, and welfare benefits. Priorities for desired local impacts vary according to complex income, social, and environmental factors; nonetheless, the motivating impacts are not global, or even national, but local.

> The most dramatic change observed in rural Niger over the last five years is the perceived urgency of the need to do something to compensate for degrading resources. In areas where the ratio of population to fertile land is high—from the rich and densely populated areas of the Dallol Bosso to the arid and sparsely settled zones around Badaguicheri—little or no fallow remains. Therefore, the passage from low-input, rain-fed production to more intensified management has become personal and immediate, often about this year's crops, only a few months from planting. As more farmers have intensified production to offset falling yields, the benefits of intensification are more apparent. In each village visited, some farmers have visibly increased production and income while beginning to stabilize resources.
>
> Asif Shaikh and Michael McGahuey
> Capitalizing on Change

***Other Values.*** In the United States, even well off, environmentally conscious consumers are slow to sacrifice amenities that cause pollution. For example, most Americans continue to use bleached white paper towels and coffee filters even though they generate

up to three times the pollution of unbleached, brown-paper products. Simple choices thus sustain pollution levels that could be reduced with no loss of income.

### Programmatic Implications

1. Policy dialogue must recognize political and economic considerations and accurately inform participants about the gains and losses resulting from a policy change.

2. Local environmental problems that cause negative global impacts require local solutions

3. Day-to-day decisions determine the fate of the environment, and environmental outcomes result from basic consumption and production choices.

**Case 17.1**

***Local Impacts As the Incentive for Improved Resource Management in Niger***

Traditional agriculture in Niger maintained a complex land use interaction between herding and agriculture, both biophysically and through interdependence of specialized ethnic groups (an interaction often poorly understood by outside advisors). The society's organizing principle sought to sustain the nutrient balance of cultivated land. With an abundance of land relative to population, long fallow periods allowed natural renovation to restore soil fertility, aided by organic matter deposited by livestock during transhumance. Vegetation served as the custodian of ecological equilibrium, providing forage for the animals, supplying forest products and fall-back foods for communities, cycling nutrients, and protecting the soil from the impact of wind and water erosion.

Under the pressure of rapid population growth, traditional balancing mechanisms no longer work. Soil mining, a practice that extracts more nutrients from the soil than are put back in, has been documented in several scientific studies throughout the Sahel, including studies by the Royal Tropical Institute and the Centre for Agrobiological Research, both based in Holland. Over the last generation, shortened fallow periods and the introduction of soil mining have resulted in higher than sustainable yields. However, productivity has declined, and the long-term cost includes an accelerating loss of resiliency in the ecological system. Demographic pressure, which forced resource mining in the first place, has brought more problems: throughout the country, fallow is rapidly disappearing as a farming option. As a result, the situation is becoming more acute. *Jachère contrainte* (forced fallow) involves abandoning land that no longer produces, but does not necessarily assure access to more productive land. Often the *glacis* (crusted-over soils denuded of vegetation) offer the best available option for restoration and intensified management.

Vegetative cover has been in a long, slow decline for decades. Demands for fuelwood, construction materials, and forage have kept pace with the tripling of the rural population in the last fifty years. Each new rural inhabitant also requires approximately one-half hectare of agricultural land. Since 1950, at least 4 million hectares of vegetated land has been converted to agriculture. Sustainable yields from the forest are well below consumption levels throughout Niger, both as a result of increasing demand and a shrinking number of vegetated hectares. The gap is being filled by resource mining, which is eating into the resource stock and further aggravating imbalances between sustainable yields and consumption.

Clearly, traditional rural production systems require environmental balance in order to function; given population pressure and current levels of resource depletion, restoration of both rural income and the environment requires a new set of balancing mechanisms. With the current population and traditional land-use practices, insufficient biophysical capacity can neither maintain nor increase production. Improved natural resources management can allow increased production for a number of years—it at least buys time. A combination of improved natural resources management, small-scale infrastructure, and external inputs, including chemical fertilizers, can extend the horizon of stable or growing per capita production another twenty to forty years.

The central strategic question for policymakers is whether Niger has the biophysical capacity to restore equilibrium and support a growing population. The answer has two parts: (1) biophysical capacity can support real per capita growth in agricultural output of 2 to 4 percent per year for the next generation if improved land-use management practices are widely adopted, including eventual use of external inputs; and (2) this success is biophysically feasible, but cannot be separated from changes in the incentives system, the cost-benefit equation of specific land-use and investment choices, the growth of markets, and trade and commercial production.

After decades of policy-level alarm about degrading resources and productivity, local populations offered limited response because soil mining helps forestall local impacts on production and income. Since about 1990, however, as short-term, local production became extremely constrained, the number of farm households adopting improved natural resources practices has accelerated sharply. Interviews with several hundred villagers from 1987 to 1994 indicate that local, household-level impacts are the dominant factor in turning to new production practices. New opportunities that alter the local incentive structure—such as the devaluation of the CFA franc, the growth of urban markets, and regional economic and trade impacts (particularly vis-à-vis Nigeria)—provide a dramatic impetus to the transition from rain-fed subsistence agriculture to input-based commercial production.

# Lesson 18: Implementation Must Be Reinforced by Commitments to Sustain Financial Support

## What Has Been Learned

Funding for implementation is often limited in term or amount, particularly in developing countries and economies in transition. Donor financing can play an essential role during the start-up phase of implementation. However, this support can become a crutch if it is viewed as a permanent substitute for a strong commitment from government to sustain financing or adopt revenue mechanisms that can phase in as donor financing phases out. Implementation may be imperiled if the donor cuts back or terminates its support for implementation activities. The issue of sustaining financing is not limited only to expenditures by implementing agencies. Investment in environmental protection and natural resources is an ongoing process, which requires a sustained commitment. Governments are not expected to shoulder the responsibility for financing in the private or municipal sector, but they can play an important role in creating institutions and adopting and enforcing policies that will solidify the commitment of stakeholders to investment.

## Key Underlying Issues

***Devolution of Management Responsibility without Revenue Authority.*** Central authorities have increasingly delegated authority for environmental protection and natural resource management to local agencies or even to community-based organizations (CBOs) or NGOs. Such delegation may be motivated by a desire to reduce demands on central budgets or a recognition of the comparative advantages of local management compared to central management. In many instances, however, the transfer of these responsibilities has not been accompanied by funding to cover the local costs or authorization to implement revenue mechanisms. In Jamaica, the Natural Resources Conservation Authority has delegated management authority to NGOs to manage natural resource areas such as Montego Bay Marine Park and Negril Environmental Protection Area. However, the NGOs are not allowed to charge user fees to defray their management costs. Instead, they have been forced to rely on donor support, contributions, and merchandise sales. As donor support is withdrawn, other sources will be inadequate to fully over management costs. In Romania, a ministerial order recently transferred responsibility for the water permit program from Apele Romane (the national water company) to local EPAs. However, permitting-fee revenues are still collected by Apele Romane, requiring local EPAs to obtain resources to cover expanded responsibilities from the Ministry of Water, Forests, and Environmental Protection. However, in recent

years, the ministry's budget has been continuously reduced and local EPAs have been forced to trim back staff levels.

***Investments versus Recurring Costs.*** Donors often provide assistance in financing or co-financing investments in environmental infrastructure or equipment related to environmental services (such as garbage trucks and trash compactors) or environmental management (such as computers and monitoring and laboratory equipment). Financial support for investment is often more attractive to donors than support for recurring costs since the benefits are easier to quantify and such support provides opportunities for manufacturers in the donor country to enter the market in the recipient country. Most investments require associated expenditures on recurring costs such as maintenance of equipment, replacement of broken components, fuel and electricity, and staff to operate the equipment. The benefits of these initial investments may be decreased considerably by the failure of counterparts to sustain financing of recurring costs. While many of these investments do not directly relate to policy, they can undermine the success of policy reforms. In addition, environmental agencies cannot fully utilize donor-funded equipment if recurring costs are not covered in their budgets. Case 18.1 provides illustrations of investments where there was no commensurate funding for recurring costs.

***Planning for Sunset.*** Part of the reason for unsustainable financing can be traced to the design of donor programs. Project assistance often is not contingent on financial contributions from the recipients. For example, the USAID-funded Hillside Agricultural Project in Jamaica provided seedlings and technical assistance to encourage planting of trees to reduce erosion and improve water retention. The project continued for approximately ten years without securing a commitment from the government to continue either component of the project. More recently, USAID has gained a greater appreciation for the use of counterpart incentives, graduation provisions, and diversifying assistance to help partners develop financing to sustain projects and programs (see Cases 18.2 and 18.3).

## Programmatic Implications

1. In order to better assess the sustained support that partner countries and institutions can provide for implementation, donors need to understand the budgeting process of recipients. In particular, donors should review and assess the budgeting process at the national and local level, identify barriers that limit budget increases (for example, in Egypt, agency budgets typically are limited to a 10 percent increase from the previous year), and determine the existence and stability of earmarks, the nature of intergovernmental transfers, and any legal constraints on local governments' ability to raise revenue.

2. Developing countries often rely heavily on donor support in the environmental sector, to the detriment of their own effective and responsible financial planning. Donors need to consider and exploit the catalytic nature of their assistance, both to leverage scarce assistance resources and encourage commitments to sustained financing.

3. Donors will be more successful in their efforts to encourage sustained financing if their counterparts "own" the policy and are committed to the implementation effort. Thus, assistance programs focused on donor goals (such as transboundary pollution, global warming, and biodiversity protection) must be packaged to ensure that partners and their constituencies are represented as beneficiaries.

4. Some approaches that can be used to create conditionality for donor assistance programs follow:

   - Increase awareness of sustained financing issues by introducing this component to implementation strategies.

   - Tie assistance efforts to related and mutually reinforcing policy and institutional measures that will promote sustained financing.

   - Incorporate financing indicators into evaluation frameworks such as Results Review and Resources Request (R4) process, typically as intermediate results.

   - Sequence assistance efforts and require assistance partners to reach benchmarks before "graduating" to the next phase of assistance.

   - Collaborate with other donors and IFIs on tied assistance strategies to increase counterpart incentives for sustained financing.

**Case 18.1**

***Sustaining Environmental Investments***

Central ministries and local environmental agencies often request donors to provide equipment in addition to assistance, but fail to adequately complement this equipment with staff or consummables, or to provide installation support.

The U.S. Environmental Protection Agency provided the municipality of Stara Zagora, Bulgaria, with a mobile air pollution monitor and vehicle to be used to measure air pollution and develop a plan for improving air quality, only to discover later that the municipality did not use the equipment because of insufficient funds for gasoline.

World Bank and Swiss funding were provided to Mariupol, Ukraine, to set up an air monitoring system. Substantial delays in getting the system operational were traced to problems such as these: one of five stations could not be used until electricity could be run from a nearby building, agency staff lacked a vehicle to drive between monitoring stations, staff to maintain and repair the equipment could not be hired, and replacement filters could not be procurred.

Equipment maintenance is a chronic problem in many developing countries. Donors and IFIs provide financing to purchase equipment, which the recipients too often fail to maintain. In some cases, policy reforms may hang in the balance. For example, USAID and other donors have supported investments in wastewater treatment in Egypt, but authorities have been reluctant to increase tariffs to the levels necessary to maintain the investment. Poor operations make it difficult to achieve standards and may result in lax enforcement among all facilities.

**Case 18.2**

***Graduation Requirements for Jamaican NGOs***

In Jamaica, the USAID-funded project Development of Environmental Management Organizations (DEMO) was designed to strengthen the capacity of NGOs and CBOs to manage environmental protection areas. During the early years of the project, financial and technical assistance was provided to these fledgling organizations. Despite the support, these organizations were unable to sustain the financing needed to carry out their responsibilities without continued financial assistance. To encourage sustainability, the DEMO project focused on two fronts: (1) a “graduation” program for NGOs, whereby future assistance was contingent on their ability to reach self-financing benchmarks; and (2) dialogue with the Natural Resources Conservation Authority to remove impediments to revenue raising for NGOs that manage national and marine parks in Jamaica.

| **Case 18.3**<br>***Revenue Enhancement to Support Red Sea Protection*** |
|---|
| In Egypt, USAID has supported efforts to manage Red Sea coral reefs. The comprehensive program helped, inter alia, to establish a Ranger Program to monitor diving activities and an extensive system of mooring buoys to protect the coral reefs from damage from boat anchors. Initially, USAID supported both investments with financial assistance, purchasing boats, buoys, and other equipment; providing technical assistance to train rangers; and financing the installation of the buoys in the dive areas near Hurghada. USAID does not plan to finance these investments in the near future and the EPIQ program is working with officials to explore alternative financing mechanisms that would support not only the investment programs but also sustain other management expenditures.<br><br>A number of revenue mechanisms are being considered including user fees levied on divers at dive shops, entry fees for attractions at which visitors are not currently charged, hotel taxes, airport exit taxes, and concession leases. In addition, options for enhancing existing revenue sources such as marine damages are being analyzed. For all of the user fee and tax options, a number of concerns have to be balanced, including how well the mechanism targets the beneficiary group (for example, a hotel or airport tax would be paid by divers and non-divers) and the likely impact on tourism demand. A concern among hotel and attraction operators is that demand is very elastic and that slight changes in price will lead to large reductions in visits because of the availability of substitute destinations. |

# Lesson 19: Implementation Will Be More Successful If Implemented by Those Closest to the Problem

## What Has Been Learned

Delegation of implementation responsibility to those who are closer to the problem may improve effectiveness because these authorities are more motivated to carry out the policy as designed, have greater credibility with stakeholders, and are likely to be more accountable because they are part of the community.

## Key Underlying Issues

***Decentralization.*** Throughout the developing world, donors have encouraged governments to decentralize many of the functions of government. In part, this strategy has been motivated by a political agenda to democratize government, promote shifts from centrally planned governments and economies, spread power more widely, and lay the foundation for greater participation in the election process. However, the strategy also reflects the experience of countries throughout the developed world in implementing all types of policy. A key issue is whether central authorities can effectively implement national policies. In case after case, it has been demonstrated that devolving responsibilities to local authorities increases the effectiveness of policy implementation. Generally, central agencies are less responsive to local concerns and priorities than are local officials. Local stakeholders perceive that their access to central officials is more limited. In addition, central agencies are more likely to be accountable to large well-organized constituencies that can influence policy at the national level. On the other hand, if the policy is poorly designed, local implementers may undermine the policy for all the reasons they would have implemented a well-designed policy. For example, forestry or fishery officials may be reluctant to prosecute illegal harvesting if they perceive that policies preclude the offenders from pursuing other economic opportunities. Local governments, assuming they have control over revenue and some managerial capacity, are at times (but not always) more responsive to the needs of those who stand to benefit from policy.

***Setting the Roles for Central and Local Implementers.*** Many years ago, Jeffery L. Pressman and Aaron Wildavsky suggested that each successive decision maker in an implementation chain adds to the probability that policy will be distorted from its original intent. Inevitably, ENR policies require the participation of more than one implementer, particularly if the policy reforms are introduced at the national level. Central agencies, even if they are not responsible for compliance monitoring and enforcement, often contribute to the implementation effort, taking a lead role in interpreting legislation by

writing regulations or developing more informal procedures and in preparing the implementation plan. In addition, central agencies may be better positioned to secure financial resources needed at the local level, resolve disputes, facilitate the transfer of technologies and lessons learned among local implementers, and monitor and evaluate the overall effectiveness of implementation. Local roles in implementation usually focus on those activities involving direct and frequent contact with stakeholders such as development and review of permits, facility inspections, monitoring and review of compliance activities, and enforcement action against violators. The following have been identified as key challenges to ensuring effective local roles in implementation of environmental and natural resource policies:

- **Selection of local implementers.** The selection of the local implementation partner may depend on what skills and resources the local agency can apply to the task as well as the degree to which the local authority's traditional jurisdiction relates to the area covered by the policy. The devolution of management or implementation responsibilities to local agencies may be difficult if the focus of a policy is a geographical area that covers more than one jurisdiction (such as a national park, watershed, or wildlife range). In these cases, it may be more desirable to create new institutions or devolve authority to NGOs, as has been done in Montego Bay Marine Park and Negril Environmental Protection Area in Jamaica. Such decisions must consider the time frame for implementation, barriers to transfer of management authority, and other factors such as historical relations between central authorities and the proposed local implementer. For example, wildlife ministries opposed a new wildlife management plan in Tanzania because the local managers who were to be entrusted with the country's wildlife had previously been the targets of enforcement efforts.

- **Provision of adequate funding for local staff.** In many countries, local governments have limited authority to generate revenue to cover staff salaries and related costs. They must often depend on transfers from central budgets to support these activities. In many OECD countries, local authorities rely on a combination of transfers and self-generated revenues. In the United States, consistent implementation of national legislation is sometimes achieved through program certification provisions that are linked to transfer of federal funds to state environment programs.

- **Local capacity.** Lack of local capacity is often the most difficult problem to overcome. Monitoring and enforcement activities require a level of education and training among staff that may be in short supply in local jurisdictions (see Case

19.1). In addition, salaries are often low relative to salaries in the private sector. Thus, recruitment and retention problems may make it difficult to carry out implementation activities in local agencies.

- **Delineation of responsibilities.** Local responsibilities are often not clearly defined in legislation or regulations, making it difficult for local people to execute the functions of government. In some cases, various agencies may have overlapping responsibilities, or an important component of implementation activities may not be permitted (for example, in Indonesia, environmental officials are not authorized to enter businesses to conduct inspections). In other cases, the responsibilities are not clearly communicated to local officials or the central government fails to help local officials develop the needed capacity (see Case 19.2).

## Programmatic Implications

1. In providing implementation assistance, donors should look for opportunities to involve and support local implementers. They can help create "demand" for local implementation by working with or creating local NGOs to monitor implementation of policies with distinct local benefits.

2. Donors should determine weak links in the implementation process (typically as they relate to local agencies) and encourage national agencies to address legal or institutional impediments and help co-finance capacity-building activities.

3. Donors should look for opportunities to demonstrate the benefits of local implementation through the support of pilot programs and demonstrations, coupled with public awareness and outreach activities. A "bottom-up" approach may be useful in promoting policy changes as well as locally led implementation.

**Case 19.1**

***Wildlife Management in Tanzania***

Tanzania recently adopted a new wildlife policy that vests responsibility for wildlife in residents living among the animals. This strategy is based on the theory that if communities receive economic benefits from the animals (through tourism and hunting), they will have incentives to conserve them. Even assuming that political will (and government institutional capacity) for this change exists throughout the relevant line ministries, the institutional challenge at the community level to implement such a change is enormous.

Communities are clearly starting off at a disadvantage in assuming these responsibilities:

- Years of training, experience, and know-how have helped African wildlife professionals become expert in the requirements of law enforcement, wildlife management, disease control, water management, and range management. Communities are being expected to absorb these skills overnight.
- Communities are expected to be able to organize themselves to execute the task (assuming the technical skills exist). But problems such as these accompany this approach: (1) community residents, unlike park wardens, don't know the applicable boundaries; because conservation areas normally encompass more than one traditional community, larger alliances often must be formed; (2) they lack an organizational structure since the new wildlife areas often involve establishing modified decision structures including more than one community; and (3) rules don't exist since the right to regulate wildlife is being introduced for the first time in modern governance.

Thus communities are at a big institutional disadvantage in trying to take responsibility for protection of wildlife. They can't succeed by themselves, even with a supportive and capable wildlife ministry. Community Based Organizations (CBOs) may need legal, socioeconomic analysis, organizational, public relations, credit, cooperative production and marketing, and technical assistance with natural resource management.

To address this constraint, EPIQ/Tanzania is assisting CBOs in USAID's target areas to form alliances with Tanzanian organizations that can provide such assistance. A supportive Tanzanian institutional network is needed to establish and perpetuate these fledgling institutions. Government can't provide all these support services and it is expensive, unwieldy, inefficient, inappropriate, and unsustainable for U.S. PVOs or contractors to provide them. Therefore, limited assistance to these potential allies is an important part of USAID's policy implementation program.

This relatively straightforward concept, adopted as policy after a ten-year gestation period, requires an almost revolutionary change in thinking. For years the Tanzanian government was the sole guardian of the nation's wildlife endowment, and wildlife officers were trained to view community residents as potential criminals to be kept away from the nation's treasures.

Current middle- and upper-echelon managers of wildlife ministries spent their formative professional years chasing the same community members they are now expected to entrust with a cherished resource. Many are unwilling to promote this transition rapidly. However, thorough implementation is necessary to produce the incentives required for community conservation.

As the "policy" project in USAID/Tanzania's strategic objective in natural resource management, EPIQ/Tanzania finds itself in a quandary. For the strategic objective to succeed, communities must gain rights over wildlife and assume responsible stewardship. Since the government cannot police all game outside protected areas, the only feasible alternative is to foster community collaboration via CBO.

**Case 19.2**

***Decentralization of Natural Resource Management in East Kalimantan Province, Indonesia***

Following the political watershed in which the 32-year authoritarian regime of President Suharto was replaced by a democratically elected government in 1999, Indonesia embarked on a rapid program of political and fiscal decentralization. The country was scheduled to transform itself from one of the most centralized to one of the most decentralized countries in the region in a short two-year period.

Legislation was enacted embodying a set of fundamental policies in which power over most economic and social matters is devolved to the provincial and subprovincial governments down to the village level. Previously upward-looking administrators are suddenly to be empowered with significant authority over the disposition and management of natural resources. As a part of this process, the national government also promulgated a policy of creating new provinces and *kabupatens* (districts) to size regional and local government jurisdictions on the basis of greater efficiency and manageability in the context of devolution. Also, under decentralization, provincial and local government assemblies were no longer to act as mere rubber stamps but would have significant fiscal and political powers.

All of these fundamental policies and legislation were undertaken with very little consultation and communication with the affected local and regional governments, either to prepare them for these new responsibilities or to determine their capacity to take on these new functions.

EPIQ's Indonesian program works in East Kalimantan, one of Indonesia's largest and resource-rich provinces. Like the country's other resource-rich outer island provinces, East Kalimantan historically provided huge revenues from oil, gas, coal, wood products, and other products but received only a small fraction of the development budget in return. Essentially the government administration was far better suited to facilitating the extraction of resources and revenues to the center than to providing a wide range of goods and services for its own population or managing budgets, land use, and resource management issues. As a part of the decentralization process, eight new districts and municipalities were created—each with little or no existing administration or local legislative assembly. The central government did not mandate local elections needed to create the assemblies, yet administrations could not be staffed until the assemblies were in place.

The reorganized or newly created local jurisdictions quickly realized that they were completely unprepared for their new roles and responsibilities. Moreover, Jakarta's central government continued to argue over which powers actually should be devolved and to which levels. Decisions finally made would have potentially major consequences for new revenues and shifts in power bases.

East Kalimantan's active environmental NGO network, which spans the range of resources and NGO types (service, advocacy, education, etc.) quickly realized that (1) the local governments were unprepared for their new responsibilities or, in the case of the new jurisdictions, barely even existed; (2) local governments and assemblies were likely to make new policies and regulations that could increase resource degradation, social conflict, and economic problems rather than improve the situation, and (3) national government agencies were not going to provide either guidance or training anytime soon. A number of local assemblies and governments also realized this and realized that each side had much to gain from reaching out for the expertise and guidance of the civil society sector (NGOs, universities, and other social groups).

Through its small grants program and its technical assistance, EPIQ has been actively involved in the development and funding of the Aliansi Pemantau Kebijakan Sumberdaya Alam, an alliance of NGOs and other interested parties that recognize the link between policy and their own field activities, as well as the importance of developing political clout to effect policy changes. Successes to date include the signing of a memo of understanding with the head of the Kutai *kabupaten* and an agreement with the Kutai district assembly to assist with capacity strengthening of the legislature, close involvement in the preparation of local legislation

governing the establishment and management of community forests, and responding to a request from the district assembly for assistance with drafting local legislation for managing mangrove areas. EPIQ also has been promoting the concept of public consultation mechanisms, and the DPRD has expressed interest in developing local legislation to ensure that government activities, including the formulation of legislation, are open to public participation.

The provincial government also requested assistance in developing mechanisms for public participation in the formulation of the provincial five-year development plan. EPIQ has helped distribute drafts of this plan and is assisting the Provincial Planning Agency (BAPPEDA) with developing the processes for ensuring public participation in provincial planning for the future.

Training also has been provided to provincial government officials in areas such as the use of resource valuation as a planning tool, Geographic Information Systems (GIS), community mapping and its role in spatial planning, and training trainers in institutional development framework skills.

# Lesson 20: Donors May Need to Help Build the Capacity of Stakeholders

## What Has Been Learned

Often the major assistance priorities conveyed to donors are activities to strengthen the institutional capacity of implementing agencies. While such capacity building is important, the need to strengthen the capacity of stakeholders to respond to policies is often overlooked—even though such assistance may make a greater contribution to compliance rates.

## Key Underlying Issues

***The Increasing Complexity of Policy.*** Policy reform often involves the introduction of management approaches or tools that have not previously been employed in the partner country. Introduction of concentration-based emission standards, vehicle emission testing equipment, state-of–the-art abatement technology or silviculture methods, or environmental monitoring and testing equipment can necessitate the recruitment of more specialized and skilled staff as well as training for both existing and new staff. In addition to the costs and time requirements of training programs, additional expenditures are often required to purchase and maintain the equipment that is needed to enable staff to carry out the implementation functions. Stricter environmental standards translate into higher investment costs and place a premium on the design of compliance plans to minimize costs. Stakeholders also may be expected to self-monitor and report air emissions and water discharges.

***Weaknesses in Stakeholder Capacity.*** A potentially weak link in the implementation process is the limited capacity of stakeholders to respond to incentive structures associated with the new policy. Issues that may account for weak capacity include limited access to information and limited skills to evaluate financial alternatives and select the most cost-effective strategy or investment. In some cases, the targeted stakeholder group cannot take advantage of new policies because of lack of education or language barriers (in countries where a number of local languages or dialects are spoken in addition to the "official" language). In Niger, these constraints were overcome through multilingual and visual awareness campaigns (see Case 20.1). Other weaknesses in stakeholder capacity include the following:

- **Limited access to information.** In many countries where Western environmental standards have been adopted and regulated firms have been required to develop compliance strategies, it is difficult to obtain information on suitable abatement

technologies. Ideally, with the greater availability of Internet services, information will be more readily available. However, for small businesses, acquisition of computers and the associated training may beyond their means. Implementing agencies and donors can play a constructive role in developing information bases and helping firms access this information. At the same time, implementing agencies must develop the capacity to respond to compliance questions, review compliance action plans, and assist firms in accessing information and equipment vendors. Often, demand for financing is sluggish because of lax enforcement and limited financial resources and there may be inadequate level of activity for private markets to develop in the country to provide compliance-related services and equipment.

- **Limited capacity to develop projects.** In the CEE economies in transition, a major impediment to investment has been limited skills in preparing investment projects, including assessing cost-minimizing technologies, developing financial plans, and identifying financing. Several donor efforts to help investors build capacity have been organized through a network of donors and international financial institutions called the Project Preparation Committee. Although the major function of this committee has been to match donors and IFIs with CEE project proponents, they have also supported development of project pipelines. In addition, USAID's Environmental Action Project Support (EAPS) and C4EP programs have worked closely with environmental funds, ministries, and investors to prepare projects, train applicants in the preparation of applications to environmental funds, and strengthen institutions. In Poland, EAPS and C4EP jointly prepared a sourcebook on domestic and foreign sources of financing for environmental investments, which was both distributed in hard copy and made available on the environmental ministry's web page (see Case 20.2).

- **Matching technical assistance to educational levels.** In Sub-Saharan Africa, high rates of illiteracy are the rule in rural areas, particularly among women. Assistance programs to help develop rural-based cottage industries have often been under subscribed because target groups lack the education to fully utilize the assistance offered. Even if target groups can read and write, the types of financial analysis required may be beyond their capabilities. In all cases, assistance programs that provide training to stakeholders should include both a needs assessment and a skills assessment. Assistance programs that have proven effective elsewhere may need to be tailored to enhance their effectiveness in a new country or region.

## Programmatic Implications

1. In programming assistance resources, donors should evaluate policies in terms of how stakeholders are likely to respond to incentives and determine if their response could be enhanced through capacity building.

2. Before providing capacity-building assistance to stakeholders, donors should identify barriers that limit stakeholders' ability to utilize the assistance. For example, people with limited education or living in remote locations or with limited access to various media forms may not be able to take advantage of the assistance offered.

**Case 20.1**

***Popularization of the Niger Rural Code***

In Niger and other countries of the West African Sahel, a series of landmark meetings on the subjects of desertification control, environmental and natural resources management, and sustainable local development all pointed to the critical importance of land tenure. Without secure tenure, rural producers had little incentive to invest in agricultural intensification, soil fertility management, soil and water conservation, agroforestry, reforestation, and other environmental management practices.

Between 1980 and 1990, USAID and other donors invested considerable resources in researching land tenure and related policy issues in Niger. After years of field studies, consultation, policy dialogue, and assistance in crafting a new Rural Code, the government of Niger officially adopted a new tenure policy in 1993. Niger's Rural Code was formulated to increase the security of land tenure by providing a legal basis for the recognition of customary (informal) and modern (formal) land-use rights. The application of the Code, however, was dependent on making its contents known to a multicultural population of millions of farmers, herders, and other rural producers.

To help support both the formulation and implementation of the new land tenure policies, USAID funded the Agriculture Sector Development Grant–Phase II (ASDG-II). This ambitious program included $20 million in non-project assistance (NPA) and $8 million of project assistance (PA). The PA component funded work by the Land Tenure Center and other group designed in support of the analytical research which fed into the formulation of the Rural Code, as well as technical support for the establishment of a Permanent Secretariat for the Rural Code and other institutions to assist with the administration of the new Code. The NPA was released when a number of conditions were satisfied related to targeted policy reforms, such as the adoption of the Rural Code. NPA funds were in turn programmed to help support country-level activities related to the implementation of the new policies. For example, a portion of the first tranche of NPA was used to disseminate and popularize the Rural Code.

Working closely with the Rural Code Secretariat, the ASDG-II project assistance team helped develop a popularization plan which included translation of the Rural Code into the eight major languages spoken in Niger and widespread distribution of copies of the Code in each language. This team also helped organize a series of workshops in each major administrative region to provide a forum for presenting and discussing the contents of the new Code, as well as a media campaign using radio, television, and other media to familiarize the population of Niger with the Rural Code. In less than two years, the new Rural Code became widely known among the dispersed rural populations of Niger, and the stage was set to progress further in implementing the new policy.

USAID provided assistance of a similar nature in Mali and Senegal to "popularize" and help implement the newly enacted Forest Codes and other environmental policies.

**Case 20.2**

***Increasing Stakeholder Capacity to Identify and Mobilize Financing for Environmental Investments in Poland***

Since its independence in 1989, Poland has undertaken a number of steps to improve the quality of the natural and built-up environment. In 1989, Poland consolidated a number of environmental and natural resource funds, establishing a national environmental fund and 49 regional funds. To provide working capital for these funds, the system of environmental charges and fines was revamped, and revenues—quickly rising to more than $500 million dollars (U.S.) per year—were earmarked for environmental projects. In 1992, Poland created the Polish Ecofund, the first debt-for-environment swap in Central Europe. With the United States, France, and Switzerland forgiving a portion of Poland's debt, the Polish Ecofund has supported environmental projects with annual working capital in excess of $30 million.

At the same time, Poland was adopting policies, enacting legislation, and strengthening management capabilities to increase the demand for environmental investments. In 1991, the National Environmental Policy was adopted, which set short-, medium-, and long-term priorities. Numerous environmental laws and regulations were promulgated, and monitoring and enforcement capabilities at both the central and regional levels were improved.

Although there has been a substantial amount of financing available in Poland for environmental investments—much of it in the form of grants or loans with very attractive credit terms, project preparation capacity among regulated facilities was identified as a key constraint to environmental investment.

To address this problem, USAID funded the EAPS project to assist facilities in preparing projects and applying for support from Poland's environmental funds. Under EAPS, facilities could submit project summaries and request assistance in developing technical and financial project components. In addition, EAPS collaborated with the Polish Ecofund and the Katowice Regional Fund to conduct a special competition to address low-stack air emissions in Katowice. EAPS provided training to facilities in preparing applications for support from the two funds. EAPS, in cooperation with HIID's C4EP project in Poland, also developed a sourcebook on financing that was available to Polish facilities. The sourcebook covered commercial sources, IFI loans and lines of credit, donor grants, and environmental funds. More than 5,500 copies of the sourcebook were published in Polish (plus a smaller number of English abstracts). An electronic version of the sourcebook was made available on the Ministry's web page early in 1999.

Such stakeholder assistance can greatly accelerate environmental compliance. However, a key challenge comes in convincing environmental authorities of the value of sustaining support for stakeholders in preparing investments, both in terms of the environmental benefits accruing from accelerated compliance and the reduced costs of environmental monitoring and enforcement programs. A promising development has been the distribution of a questionnaire on financing sources by the Fundacja Economistow Ochrony Srodowiska in Bialystok under the auspices of the Ministry of Environment in 2000, indicating that the sourcebook will be updated.

# Annex 1: Sources for Cases

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Case 2.3 *Building a Sustained Policy Dialogue*, Theodore Panayotou.

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Case 8.4 *Interactive Water Policy Dialogue in Egypt,* Michael Rock.

Case 9.1 *Use of Analytical Approaches in the Philippines Environmental and Natural Resources Accounting Project,* Juan Sève.

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Case 11.1 *Environmental Management in the 10th of Ramadan City, Egypt,* Glen Anderson.

Case 11.2 *Building Consensus on Regional initiatives: Improving Water Quality in Central Asia,* David McCauley.

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Case 20.2 *Increasing Stakeholder Capacity to Identify and Mobilize Financing for Environmental Investments in Poland*, Glen Anderson.

# Annex 2: Matrix For Lessons Learned Cases

| Cases | USAID Regions | | | | Natural Resources | | | | | | Environmental Protection | | | | Involved Institutions or Groups | | | | Policy Reform Components | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAC | ENI | ANE | AFR | Water | Agriculture | Forests | Biodiversity | Tourism | Energy | General | Air | Water | Waste | Central Government | Local Government | NGOs | Stakeholders | Strategies & Action Plans | Legislation | Policy Instruments | Institutional Strengthening | Financing Mechanisms |
| **Chapter 3: Overarching Lessons for the Policy Process** | | | | | | | | | | | | | | | | | | | | | | | |
| Case 1.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 1.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 2.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 2.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 2.3 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 3.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 3.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 4.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 4.2 | | | | | | | | | | | | | | | | | | | | | | | |
| **Chapter 4: Policy Dialogue** | | | | | | | | | | | | | | | | | | | | | | | |
| Case 5.1 | | | | | | | | | | | | | | | | | | | | | | | |

| Cases | USAID Regions | | | | Natural Resources | | | | | | Environmental Protection | | | | Involved Institutions or Groups | | | | Policy Reform Components | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAC | ENI | ANE | AFR | Water | Agriculture | Forests | Biodiversity | Tourism | Energy | General | Air | Water | Waste | Central Government | Local Government | NGOs | Stakeholders | Strategies & Action Plans | Legislation | Policy Instruments | Institutional Strengthening | Financing Mechanisms |
| Case 5.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 5.3 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 5.4 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 5.5 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 6.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 6.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 7.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 7.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 8.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 8.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 8.3 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 8.4 | | | | | | | | | | | | | | | | | | | | | | | |

| Cases | USAID Regions | | | | Natural Resources | | | | | | Environmental Protection | | | | Involved Institutions or Groups | | | | Policy Reform Components | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAC | ENI | ANE | AFR | Water | Agriculture | Forests | Biodiversity | Tourism | Energy | General | Air | Water | Waste | Central Government | Local Government | NGOs | Stakeholders | Strategies & Action Plans | Legislation | Policy Instruments | Institutional Strengthening | Financing Mechanisms |
| Case 8.5 | | | | | | | | | | | | | | | | | | | | | | | |
| **Chapter 5: Problem Diagnosis** | | | | | | | | | | | | | | | | | | | | | | | |
| Case 9.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 9.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 9.3 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 9.4 | | | | | | | | | | | | | | | | | | | | | | | |
| **Chapter 6: Policy Design** | | | | | | | | | | | | | | | | | | | | | | | |
| Case 10.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 10.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 10.3 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 11.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 11.2 | | | | | | | | | | | | | | | | | | | | | | | |

| Cases | USAID Regions | | | | Natural Resources | | | | | | Environmental Protection | | | | Involved Institutions or Groups | | | | Policy Reform Components | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAC | ENI | ANE | AFR | Water | Agriculture | Forests | Biodiversity | Tourism | Energy | General | Air | Water | Waste | Central Government | Local Government | NGOs | Stakeholders | Strategies & Action Plans | Legislation | Policy Instruments | Institutional Strengthening | Financing Mechanisms |
| **Case 12.1** | | | | | | | | | | | | | | | | | | | | | | | |
| **Case 12.2** | | | | | | | | | | | | | | | | | | | | | | | |
| **Case 12.3** | | | | | | | | | | | | | | | | | | | | | | | |
| **Case 12.4** | | | | | | | | | | | | | | | | | | | | | | | |
| **Case 13.1** | | | | | | | | | | | | | | | | | | | | | | | |
| **Case 13.2** | | | | | | | | | | | | | | | | | | | | | | | |
| Case 13.3 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 13.4 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 13.5 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 13.6 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 14.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 14.2 | | | | | | | | | | | | | | | | | | | | | | | |

| Cases | USAID Regions | | | | Natural Resources | | | | | | Environmental Protection | | | | Involved Institutions or Groups | | | | Policy Reform Components | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAC | ENI | ANE | AFR | Water | Agriculture | Forests | Biodiversity | Tourism | Energy | General | Air | Water | Waste | Central Government | Local Government | NGOs | Stakeholders | Strategies & Action Plans | Legislation | Policy Instruments | Institutional Strengthening | Financing Mechanisms |
| Case 14.3 | | | | | | | | | | | | | | | | | | | | | | | |
| **Chapter 7: Policy Implementation** | | | | | | | | | | | | | | | | | | | | | | | |
| Case 15.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 15.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 16.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 16.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 17.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 18.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 18.2 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 18.3 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 19.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 19.2 | | | | | | | | | | | | | | | | | | | | | | | |

| Cases | USAID Regions | | | | Natural Resources | | | | | | Environmental Protection | | | | Involved Institutions or Groups | | | | Policy Reform Components | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LAC | ENI | ANE | AFR | Water | Agriculture | Forests | Biodiversity | Tourism | Energy | General | Air | Water | Waste | Central Government | Local Government | NGOs | Stakeholders | Strategies & Action Plans | Legislation | Policy Instruments | Institutional Strengthening | Financing Mechanisms |
| Case 20.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Case 20.2 | | | | | | | | | | | | | | | | | | | | | | | |