Environmental Issues in World Bank Projects

Over the past two decades, and particularly since the mid-1980s, the Bank has given a growing concern for environmental issues both in its lending policies and processes and in its organizational structure and operations. It is too early to assess the experience under recent policy directives and with the operation of environmental projects in progress. But a review of how the Bank approached environmental issues in projects that are now completed yields useful lessons for the future. OED included such a review in Evaluation Results for 1991.

Managing renewable resources

One hundred completed projects with effects on the management of renewable resources were reviewed, to identify patterns in the Bank's experience and draw lessons for the future. The projects mainly in forestry, fisheries, livestock, and land settlement—sought improvements in resource management directly and indirectly through a wide range of instruments. Many supported administrative and legislative reforms, assignment of rights to land and other resources, and community organization. The following lessons stand out:

Incentive structure: For private individuals to maintain or enhance natural resources, both short and long-run incentives are needed. In the short run, the benefits offered to the target population should be evident, understandable, and likely to materialize quickly. Favorable incentives were important in the success of the Uttar Pradesh Social Forestry Project in India. The project set out to encourage tree planting by the poor for subsistence. The relationship between poverty and the environment is still not well understood. Many of the poverty-focused projects and components evaluated suffered from being undertaken with little knowledge of the quality of the natural resource base or of the environmental aspects of the changes they supported. Many were launched within a policy context that did not favor conservation of resources important to the livelihood of the poor. Land-related interventions had significant limitations, partly for lack of good quality land, and partly because of difficulties in changing land rights and tenure arrangements in the short term.

Socio-cultural factors: Traditions and beliefs may work with or against market incentives, and need to be understood before interventions can be planned. The Eastern Senegal Livestock Project succeeded in improving pastures, because it built on the results of thorough studies of the socioeconomic conditions and habitats of the pastoralists affected.

Technological viability: The technology to be promoted in a project should be chosen only after reaching a thorough understanding of the natural resources and the physical conditions in which the project will be implemented.

Policy environment: Monetary, fiscal, and trade policies significantly affect the ways an economy conserves existing “use rights” to grazing and water resources. Its success in establishing groups of pastoralists to administer these resources seems to be closely tied to its consultations with beneficiaries, sensitivity to their needs and priorities, and establishment of trust. Pastoralists now manage many of the project's functions.

Environment and poverty alleviation: The relationship between poverty and the environment is still not well understood. Many of the poverty-focused projects and components evaluated suffered from being undertaken with little knowledge of the quality of the natural resource base or of the environmental aspects of the changes they supported. Many were launched within a policy context that did not favor conservation of resources important to the livelihood of the poor. Land-related interventions had significant limitations, partly for lack of good quality land, and partly because of difficulties in changing land rights and tenure arrangements in the short term.
or depletes its natural resources. In most cases where natural resource depletion occurred in Bank-supported operations, it could be traced to undervaluation of these resources.

Investment projects by themselves are poor vehicles for promoting policy and institutional reforms, particularly those that affect the use of natural resources. Loan conditionality is no substitute for reform, policy implementation, government commitment, or political support.

Recommendations

- Resource degradation should be a major concern of macroeconomic and sectoral policies. Environmental considerations should be incorporated into decision making on adjustment operations, and in public investment and expenditure reviews, as well as in national environmental action plans.

- In most projects affecting natural resource management, performance depends heavily on the participation of resource users or beneficiaries. To achieve effective participation may require local and national institutions to be changed or strengthened; often a process both slow and politically charged. The Bank should encourage the participation of NGOs and seek to help replicate successful experiences.

Managing the urban environment

To address urban-industrial environmental issues, the Bank has financed physical investments and supported improvements in planning for land use, transport, and public utilities; introduction of pollution control standards, regulations, and sanctions; and improvements in resource pricing and cost recovery. The experience emphasizes the need for realism: decisions on environmental management are politically sensitive, and attaining urban environmental goals takes large amounts of human and financial resources, efficiently managed, over comparatively long periods.

**Water supply and sanitation:** The Bank began lending for urban water supply and sanitation in the early 1960s and, by the end of 1991, had completed 136 projects involving total investments of $11.7 billion. More than half these projects were for water supply alone; fewer than 15 percent were for sewerage alone.

The projects supported have improved living standards for millions of urban dwellers, but water and sanitation agencies have typically remained poorly managed and have failed to build up the financial and institutional basis to maintain existing facilities, let alone expand them (see Precis No. 29).

Sewerage has received far less attention than water supply, and in many instances the additional wastewater generated as a result of water supply investments is not being adequately disposed of. Despite some very successful experiences, many sewerage projects and components suffered both from design flaws and serious problems in implementation and recurrent-cost financing.

The Bank's policies on water supply and sanitation are basically sound, but need to be translated into effective strategies for water resource management that are environmentally sustainable and strike an adequate balance between competing uses of water.

**Urban pollution control:** Since 1970 the Bank has given much attention to avoiding or abating pollution in individual industrial projects, and most pollution control components have had satisfactory results.

The Bank has also supported a handful of free-standing pollution control operations in cities with very serious air and water pollution problems. The results emphasize that effective urban-industrial pollution control requires adequate policy, legal, regulatory, and institutional frameworks at both the national and local levels, together with sufficient political support.

**Solid waste management:** Many urban and water supply projects have contained components for solid waste management (SWM). Though diverse, most of these interventions have taken a narrowly-focused, partial approach, and for this reason have had little lasting impact.

Recommendations

- Give greater priority to urban environmental issues and especially to urban sanitation and pollution control in the largest and fastest-growing cities.

- Before drawing up plans for urban environmental management, analyze underlying problems on a citywide basis, identify alternatives and define priorities for public and private sector action, and select cost-effective interventions. Coordination is needed across infrastructure sectors to achieve consistency in the policies that affect urban water supply and sanitation, land development, and transport.

- Give close attention to the institutional and financial dimensions of providing urban environmental services. Favorable public opinion, participation by nongovernmental and community agencies, and enhanced local resource mobilization are all likely to be needed for improved urban sanitation, solid waste management, and pollution control. So is day-to-day coordination among institutions, both public and private, and across jurisdictions.