Forestry Development: a Review of Bank Experience

Changes in the world's forests affect the economic, social, and environmental conditions of both rural and urban populations. Forests provide an enormous array of useful products and services, ranging from goods for direct household use and for industry, to environmental benefits. A recent OED review, timed to coincide with the Bank's development of a "new forest policy", traces the evolution of Bank forestry lending and draws lessons of experience. Though the performance of completed operations has been largely satisfactory, there are some important issues and lessons for project design and policy formulation.

Lending: growth and change

Bank lending for forestry began in 1949 and now amounts to $2.5 billion. Several million dollars have also been invested in forestry components in agriculture and rural development, energy, and other projects. Up to 1978, about 95 percent of Bank forestry lending was for industrial projects--for example industrial plantations and sawmills. But in response to the Forestry Policy paper of 1978, the Bank made a major effort to finance social or rural development and environmental forestry projects. These "new-style" projects put much more emphasis on the living standards of people in the project area and less on the extraction of raw materials for industry.

Most of the pre-1978 projects perceived finance and physical capital as the scarce resources, and the forest as abundant and under-used. Sustainable forestry development required a set of working rules for managing and exploiting the forest in harmony with natural laws. In new-style projects, people, not forests, are central. Forests are perceived as scarce resources. To sustain these projects, the rules must agree not only with natural laws, but also with those followed by the communities involved. In public or private lands, this reconciliation has been possible. But in lands under multiple rights systems or under common property rights--often those lands that are the most abundant and most environmentally fragile--fully satisfactory arrangements for sustainable forestry have not yet been found.

Overview of results

Determinants of performance: Generally similar in forestry to those elsewhere in the
economy:

- careful project preparation, with realistic goals, suitable technologies, and low--or good balance of--risk, so that the failure of one component does not jeopardize the whole project;

- favorable marketing structure;

- effective management; and

- adequate institutional capacity at the sector and project level.

Performance also depends on the country economic policy regime, which affects the incentives for using land; on land tenure and property rights; and on local customs and culture. Changes in these factors are not readily accomplished through individual forestry projects.

Environmental impact: Generally positive. Environmental benefits of forestry lending result mainly from improving land use and thus reducing soil erosion, sedimentation, and desertification; rehabilitating low-value lands; stabilizing weather patterns; and improving the ecosystem's capacity to regulate the water cycle. However, forestry projects by themselves are not the most effective way to address many environmental problems in developing countries.

Human impact: Social forestry projects have directly benefited large numbers of people. In community-based social forestry projects in rural India, farmers and the landless have planted trees near their homesteads as a highly efficient way to accumulate capital. Forestry projects have also benefited the urban poor, by increasing the supply of fuelwood.

Many social forestry operations have explicitly tried to benefit women. Doing so is often more difficult than expected, for four reasons:

- disputes over property rights, not resolved to benefit women;

- limited capacity of local organizations to deal with and represent women's rights;

- complex culture and caste structure, limiting women's economic activity;

- choice of technical solutions that ignores women's views, knowledge, constraints.

Sustainability: Has been difficult to achieve. It depends on the technical competence of the implementing agency, the degree to which activities are self-financing, the commitment of government and participants to project goals, and the policy environment. In social and environmental forestry projects, it also depends heavily on human, institutional, and cultural factors. Such projects usually need to provide not just for
training and education, but also for community participation in their management.

Institutional response to policy change: The Bank clearly changed the thrust of its lending in response to the 1978 policy paper. Several projects under preparation were redesigned (to increase community participation), elements of the sector policy were revised, and the policy dialogue with several borrower countries took a new direction. Lending grew rapidly, from about one project a year, at an average cost of less than $20 million, in 1968-78, to more than six a year, at an average cost of more than $150 million, in 1978-88.

But the translation of the paper into action was selective. Most of the projects in fact were supply-oriented, designed to satisfy an apparent acute shortage of fuelwood; their implementation suffered from a lack of understanding of fuel supplies and of beneficiary communities and traditional systems of land use and property rights. By the late 1980s, forestry projects were being better planned, with a focus on land use rather than on fuelwood.

Sector work

Though the 1978 policy paper was meant to foster sector work, in fact very little sector work was done until the late 1980s. Experience confirms that poor sector work translates into poor performance at the project and policy levels. Sector work is critical for understanding the constraints on the optimal management of forests and the interactions between socioeconomic factors and natural resources. Key constraints facing borrowers in developing sector strategies are limited institutional capacity and lack of political commitment. The Bank may need to become more active than hitherto in designing and implementing studies and sectoral assessments. It should consider establishing a forestry assessment unit, similar to those for energy, water supply, and irrigation development. Regional divisions could draw on the unit’s specialized expertise as needed, and benefit from cross-country transfer of experience.

Implications

Lessons from experience are summarized in Box 1. Some have important implications for policy and operations. Sector management

Supervision reports show that the most common problems faced during implementation were managerial. They concerned both the management of forests and the management of the forestry sector.

Often, project design gave too little attention to forestry institutions and sector management questions such as incentive structure, administration and organization of development, the roles to be played by public and private sector agents, and community participation. It was often assumed that an effective incentive structure was in place, or that a project itself would be an adequate vehicle for institutional reforms. But experience shows these questions need more explicit attention.
To prepare projects with a sector and country focus, most forestry agencies need economists, financial analysts, management specialists, and other experts usually perceived to be outside the domain of forestry. For lack of such a focus, projects are not widely considered in public expenditure and investment reviews, enough government funds are not allocated to the sector, and macroeconomic policies are implemented without consideration for forestry. The Bank should help borrower countries develop capacity to identify, prepare, and appraise their own projects, as well as to carry out the necessary sector and policy work.

Financial issues

Supervision reports show that many completed and ongoing projects have had acute financial problems. The high ratio of recurrent cost to capital cost is a major problem in sustaining forestry projects at the country level, particularly when pressures exist to reduce public expenditures.

Financially, forestry projects are not straightforward. They may need a special financing instrument because of their long-term nature and uncertainties with regard to future prices and benefits. In any event, the Bank should spend more time nurturing projects than is allowed by its typical project cycle. It and other donors should consider alternative forms of disengagement after completion of disbursements; donors may still need to participate actively in the policy dialogue with the borrower country.

Political commitment

Forestry, like other long-term programs, requires a strong commitment at the government and community levels. Several borrower countries have not developed national or sectoral policies for forestry. Some of the commonest problems have arisen from the effects of macroeconomic policies (especially pricing, interest rates) on land use patterns. Many of the other problems are institutional, financial, and organizational, and require actions at the sectoral level. Borrower commitment greatly affects performance--without it, public interventions will be fragmented, forestry services will be ineffectual, and projects will seldom succeed.

Incentive structure

Experience shows that intersectoral links are much more important in forestry development than often assumed. It has become increasingly important to assess the inputs of other sectors, investments, and policies on forestry development. For example, fuelwood prices depend strongly on pricing policy for other energy sources, while a rise in support prices for coffee or cocoa can provide strong incentives to clear forested land for agriculture. The ecological, long-term benefits from forestry call for an approach to pricing policy that adequately reflects the flow and stock value of the forest and takes into account the full range of the opportunity costs. Non-market incentives--property rights in particular--have had even stronger influences on project performance than
market incentives. In many projects of the late 1970s, for example, land that seemed likely to be available for forestry development in fact proved not to be, often because it was common property or because it was subject to multiple, competing claims.

New-style forestry projects

These are more complex than industrial forestry projects and need to be allocated more lead time and funding to prepare. They typically involve very large numbers of beneficiaries and a much broader set of development goals (e.g., economic growth, fairer income distribution, enhanced energy supplies, sustainability). To be implemented successfully, they require new institutional boundaries to be drawn, displacing the usual divisions between economic sectors or geopolitical regions. Such institutional changes take time to achieve, and tension has grown between the traditional organizational structures and those needed to implement the projects successfully. Natural forest management

Natural forest management components, included in most completed operations, have not been very successful. Often there is misunderstanding about what management of natural forests really means. The result is that in several countries, no agreements exist on maximum allowable cut, stumpage values, rotations, taxation, preservation of wildlife, or suitable technologies for land clearing.

Given the urgency of protecting natural forests, however, the option of support for management of free-standing natural forests should always be considered during project appraisal. Development of restricted use zones around natural forest areas should be a national priority in many countries. Though it may sometimes be the only realistic option, replacement of natural forests by plantations is rarely economically, socially, or environmentally justified. Work plans for natural forest management need to be based on comprehensive resource assessment studies, and it is important to get clear commitments from governments on the necessary steps for implementing such plans.

Community participation

This is very important in forestry projects, and the form it should take is a central question in project design. A major source of conflict and of poor performance has been the intrinsic complexity of property rights, land tenure and use, and lack of understanding of the roles played by different actors in the economy. Experience shows that traditional systems of property rights are not readily changed, and that the Bank is not well placed to try to resolve conflicts in these areas.

Staffing supervision missions

The severe financial problems of forestry projects may partly reflect the skill composition of Bank project teams. Including financial analysts, and continuous participation by economists, in these teams might reduce some of these problems at the project level and make for more adequate discussion of economic and financial issues at the macro level.
Monitoring and evaluation

M&E has been weak; it needs to be improved in many projects, to make project management and performance assessment easier. In some projects, M&E has been solely input-oriented; it should also assess output and economic, environmental, and social outcomes. Documenting implementation experience in supervision reports would make it easier to plan future operations realisti

Program approach needed

New forms of lending may be needed to address the environmental imperatives, expand the supply of forest products, and properly manage existing forest resources. Natural forest and environmental management should be central features of the Bank's program.

Forestry operations in the 1990s should be of the program type, rather than discrete projects, and must be seen as long-term engagements. Even where circumstances call for discrete projects, these will need to be set within a clear sectoral policy framework and strategy. The Bank should not lend for forestry development in countries that do not have a well-defined comprehensive sector policy.

Program lending will need to develop an organizational structure to make forestry programs viable in the short and long term, and establish a basis for participation by governments, individuals, and communities. Establishing the proper structure will require investments in hardware and software, reforms to strengthen public sector agencies, and technical assistance packages tailored to the needs of the sector. Most lending operations will need to contain:

- institutional components, addressing the incentive structure, the management of forests, and the management of the forestry sector itself;
- human resource development components, for training, education, and extension; and
- sector work, to develop both policy and country sector strategies. They will need to be based on a clear recognition of the interplay between forests, people, and cultures.

The Bank's role

Most of the problems in forestry are institutional, rather than technical or financial. In the first instance, their solutions will depend on government commitment and action by institutions in borrower countries, rather than the Bank. But the Bank will still need to play an active role in:

- helping establish a sectoral framework to enable the borrowing country to achieve a sustainable forestry development strategy;
- providing mechanisms for transferring technology across countries;
- encouraging the integration of environmental concerns into macroeconomic policy; and
- providing financing on suitable terms.

Box 1: Findings and Lessons Summarized

Complexity

- Forestry lending has become increasingly complex as it has moved toward more people-centered projects in social and environmental forestry.

Intersectoral linkages

- Project performance depends very strongly on policies beyond the forestry sector, which affect land use and the management of existing forests. New forestry lending should be based on a much more thorough understanding than hitherto of conditions in the sector and of intersectoral linkages. Where possible, it should be accompanied by efforts to have forestry sector concerns incorporated into the broader dialogue with borrowers on economic policy. Programs for afforestation, plantation establishment, and natural forest management should only be implemented after fully considering the effects of policies in other sectors—e.g., pricing, subsidies, and taxes in agriculture; monetary; and trade.

- Individual projects are not enough to address broad sectoral concerns or structural imbalances in the economy.

Management

- The most common problems in the lending program stem from poor management, both of forests and of the forestry sector. People-oriented projects pose much heavier demands on management than do industrial forestry.

- If cooperation and coordination is needed among many line agencies to plan and implement a project, an effective mechanism for coordination is crucial. Finances

- Many forestry projects face serious financial problems. Forest projects mature very slowly, and the Bank should spend more time nurturing them than is allowed by its typical project cycle. Project design, preparation

- Forestry projects should be carefully planned, prepared, and processed; longer time frames should be allowed for some types of projects.

- Land tenure and potential land use conflicts should be thoroughly investigated during
project formulation.

- Market analysis and market programs should be an integral part of project preparation.

- Pricing policies should adequately reflect the flow and the stock value of the forest.