



# ENVIRONMENT DEPARTMENT DISSEMINATION NOTES

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## Participation in Forest and Conservation Management

*The participation of local communities and other stakeholders in managing forestry and conservation projects can help to improve forest productivity, alleviate poverty, enhance environmental sustainability, and make rules governing forest access more enforceable. Introducing participatory management depends on government commitment; and it requires time and resources to develop consensus among stakeholders, establish new institutional arrangements, decentralize finance and administration, ensure appropriate rules and incentives for local involvement, and build organizational capacity at the local level.*

There has been a fundamental shift over the last decade in approaches to forestry and conservation—from a focus on centralized planning and management by government agencies to a more participatory approach which balances social, environmental and economic objectives. Reflecting this shift, between 1991 and 1994, Bank investment in forestry projects classified as social and environmental increased from US\$ 834 million to US\$ 1.2 billion, or 27% of all lending in the forestry sector.

Key differences between the two approaches are outlined in Box 1. Under most centralized forest policies, large scale management units are oriented to a single-use objective (such as timber production or policing a conservation site), and the rights of local users are limited to low value secondary products and temporary concessions. In contrast, participatory forest projects are based on a broader valuation of forest resources, taking into account the multiple values of forests and the social and economic needs of local forest users. Access and use rights to forests, and conflicts arising between competing users, are locally defined and managed. The structure of incentives and the choice of technologies are geared to environmental sustainability over the long term.

### Benefits

#### Cooperation

In practice, one of the most compelling reasons for seeking the participation of forest users in the management of forest resources has been the inability of governments to police forest areas effectively and enforce their own rules of access and use without local public support. When local communities and private companies share in the design, benefits, costs and management responsibility of forestry projects, they have incentives to cooperate in enforcing rules which they have themselves agreed upon.

#### Poverty Alleviation

The majority of the people who occupy forest areas, or the agricultural fringes that surround them, are poor and vulnerable populations. Many are indigenous peoples, or landless people who have migrated from other areas. Enabling these people to share in the benefits, as well as the management, of forestry development and commercialization helps to alleviate their poverty and diversify their sources of income.

#### Forest Productivity

With the benefit of local knowledge and participation, the value of non-timber forest

This note is based on the paper written by Ajit Banerjee, Gabriel Campbell, Maria C. Cruz, Shelton Davis and Augusta Molnar as a contribution to the Participation Sourcebook. Copies of the full paper are available from the Environment Department, Social Policy and Resettlement Division, of the World Bank, Washington, D.C. 20433, Fax (202) 522-3247.

*Dissemination Notes represent the views of their authors and are not official publications of the World Bank.*

**Box 1.**  
**Contrasting Forest and Conservation Management Approaches**

	<u>Centralized Government Approaches</u>	<u>Participatory Approaches</u>
<b>Objectives</b>	Timber production or other single-use objective (e.g., watershed protection; short-rotation fuel-wood). Protection of biodiversity paramount over other uses.	Usually multiple production and biodiversity conservation objectives involving all stakeholders; developing local skills for forest and conservation management.
<b>Scale</b>	Large-scale management units based on natural biophysical or political boundaries.	Micro management units corresponding to self-selected or residential units.
<b>Local Use Rights</b>	Usually very limited and frequently ambiguous or temporary.	Extensive, clearly defined rights for local users.
<b>Protection</b>	Policing by forest service guards and fencing; often ineffective and expensive.	By local community, frequently using <i>social fencing</i> ; higher local costs but low government costs; local accountability.
<b>Typical Plan</b>	Long rotation of even age stands for economies of scale in management and industrial supply; centralized management of protected areas and conservation sites.	Short rotation of uneven age stands designed to supply diverse products for continuous income and subsistence needs; community management.
<b>Harvesting Contracts</b>	Generally large government contracts with administrative pricing mechanisms and subsidized supply arrangements.	Generally combine multiple household marketing arrangements with small-scale contracts for higher value products.
<b>Technical Basis</b>	Based on results of scientific research and single product optimization models.	Based on combination of traditional knowledge and use patterns with forest and conservation service guidance.
<b>Planning Process</b>	Centralized management planning process carried out by forest and conservation service staff.	Plans drawn up by community or household participants with guidance and approval from forest and conservation service.
<b>Plan Revisions</b>	Generally little flexibility in management prescriptions without cumbersome bureaucratic approvals.	High flexibility in management prescriptions to adapt to changing conditions and needs.

products to different users—for food, fiber, medicines, oils and gums—can be more fully exploited (Box 2). Indigenous productive technologies, based on close knowledge of local ecological conditions, can enrich scientific research and serve as potential sources of new products.

### **Sustainability**

While still seeking to generate economic benefits from forest resources, policymakers are increasingly aware of the important role played by forests in preserving biodiversity and protecting critical watersheds. Especially in regions with large and growing populations, participation is often the only viable way to conserve forest areas for sustainable use or for their intact environmental values.

### **Costs and Limitations**

There are some circumstances in which participatory approaches have proven unworkable: (i) when conflicts over forest resources are particularly intense; (ii) when forest resources are abundant relative to a small, dispersed population in the forest vicinity; (iii) when powerful interests at the national level are opposed to policy reform in the sector or to decentralization of authority; or (iv) when extreme social inequalities at the local level reinforce the control of forest benefits by local elites.

Even in favorable circumstances, time and resources are needed to establish effective participatory processes. Costs are incurred in three

broad areas: (i) identifying key stakeholders and creating the conditions for effective consultation; (ii) establishing appropriate institutional arrangements, including intermediary organizations with the skills and incentives to address environmental and social objectives; and (iii) building the organizational capacity of local communities to manage large forest areas.

### Conditions for Success

Bank experience provides a number of lessons concerning the conditions for successful participation in forestry and conservation management, and the measures which have helped to establish these conditions.

#### Government Commitment

Success depends first and foremost on government commitment to broad stakeholder participation in determining forest sector and conservation objectives. Measures by TMs to facilitate policy dialogue have included: sponsoring international or regional meetings at the ministerial level, enabling policymakers to benefit from other countries' experience in devolving authority to forest users; holding donor meetings to coordinate initiatives and assist government in defining the agenda; using forest sector reviews and biodiversity conservation strategy work to initiate policy discussions with decisionmakers and key stakeholders; and supporting the preparation of issues papers by experts from stakeholder groups.

When government is actively involved in discussions with stakeholders, forestry reforms are easier to introduce. For example, the multisectoral stakeholder workshops held in Mexico and Zimbabwe were helpful in identifying key reforms in forest tenure policy, regulations on marketing

of non-wood products, and delineation of protected areas for biodiversity conservation.

#### Decentralization

A wide range of different institutional arrangements, from private contractual agreements to joint public/private partnerships, have been used to devolve authority over forest management to the local level. In most cases, some restructuring of government agencies has been called for as well as changes in procurement and other administrative procedures.

Methods of ensuring the availability of funds at the local level have included increasing private sector involvement—by opening up lines of credit, underwriting private sector forestry investments, or endorsing joint contractual management of forests—as in forestry projects in Indonesia, Zambia, the Philippines, Bangladesh and Costa Rica. In other cases, direct funding to NGOs has proved the best means of delivering funds directly to communities. For example, under the Bank/GEF financed Conservation of Priority Protected Areas Project in the Philippines, a grant is made to a consortium of NGOs for implementation of conservation programs. Trust funds have proved useful, as in Bhutan and Uganda, when returns to investments occur over the very long term.

#### Stakeholder Analysis and Consultation

Identifying and consulting stakeholders at the earliest possible stage is important not only for ensuring that all the important issues are addressed but also for strengthening commitment to implementing the necessary reforms. Gender analysis can be used to assess the differential impact of proposed policies on men and women, and measures taken to ensure that women share in decisionmaking and project benefits (Box 3).

#### Box 2

##### Learning from Indigenous Practices to Increase Local Participation and Improve Forest Productivity

**Using Under-exploited Tree and Crop Species in Africa.** Trees in agroforestry systems in Africa provide many other products and services such as food, fiber, medicines, oils, and gums which are used by many indigenous groups (e.g., *Elaeis guineensis* for oil, wine, thatch and mulch; *Moringa oleifera* as source of edible flowers and leaves and fodder; *Xylopiya aethiopica* as tobacco substitute and fuel in most of Kenya and the Fouta regions in Senegal). The annual harvestable production from leaves and fruits is about 300 kg/ha in the typical Sahel areas and over 600 kg/ha in the Sudano-Sahel.

**Crop-Livestock-Fallow Rotations.** In the Zimbabwe and Haiti Bank financed forestry projects, rotations of crop cultivation, grazing, and tree-shrub fallow are permitted as a result of documentations of indigenous crop-grazing systems. The rotations involve two or more sub-populations in the project site but often just one piece of land. Because lands are appropriated on the basis of kinship and ethnic affiliation, several families have use-rights to the land over a certain period of time. This multiple use arrangement encourages participation of other user groups.

### Box 3

#### Women's Participation in Bank-Financed Forestry Projects

**Kenya: Women Participating in Forest Sharing Agreements.** With the assistance of an international NGO (CARE), the Kenya Forestry Development Project solicited the help of women in devising an agreement between the government and local users regarding distribution of agroforestry or intercrop benefits, since most of the village agroforestry lands were controlled by women. During project implementation, women were in charge of recording households that received harvest shares and they were key actors in resolving conflicts over forest benefits.

**India: Women as Members of Forest Protection Committees (FPCs).** In the West Bengal II project, the Bank worked with the state forestry agency and NGOs to permit and encourage the recording of women as FPC members. This allowed women to participate fully in decision making and thereby receive a more equitable share of timber harvests. When women were given responsibilities in these committees, the project gained wider support and spread rapidly to other villages.

#### Security of Tenure

Because of the long gestation period of forestry and conservation investments, security of tenure is particularly important as an incentive for community investment of time and resources. Existing regulations frequently restrict access and undermine local or indigenous claims to resources. However, overlapping claims by government, different groups of forest users, and industry, can make adjudicating tenure rights a very complicated process. In Bank financed projects in Nepal and India (Box 4), publicly endorsed written agreements have been instrumental in resolving tenure conflicts.

#### Equitable Rules and Incentives

Forestry projects have the best chance of succeeding when the costs and responsibilities of each stakeholder are closely related to rights and benefits. Arrangements for the sharing of costs, benefits and management responsibilities, and mechanisms for resolving conflicts between groups, are most likely to motivate participation if they are widely understood and agreed upon by all stakeholders through an open negotiating process. Special measures may be needed to ensure that women, indigenous groups, and landless households are not excluded.

#### Appropriate Technology

Appropriate forest management technologies provide important incentives for participation. The participation of local users is encouraged by an annual flow of income from non-timber products such as agricultural intercrops, fodder or thatch grass, and commercially valuable seeds or leaves. This can only occur in plantations with wider spacings and multi-tiered, more diverse tree and shrub species than are found under conventional even-age management. Technologies defined by the community on the basis of local knowledge are

often more effective in terms of forest productivity and sustainability. Moreover, the entire community understands the management rules and has an incentive to monitor and enforce them.

#### Local Capacity

Most Bank and GEF/Bank financed forestry and biodiversity projects involve a capacity building component, often contracted to NGOs, to strengthen management capacity at the community level. The role of NGOs may include training of forest service staff and local leaders; village level publicity and extension; developing micro-planning tools and facilitating plan formulation; improving forest marketing information networks; facilitating the formation of women's groups and farm forestry associations; and technical support to forest product processing, energy alternatives or village-based conservation inventories. One of the most effective tools for building local capacity is the study tour, enabling stakeholders to visit and question their counterparts on projects where participatory management has already been established.

### Box 4

#### Tenure and Access to Forests in Nepal and India

The Bank-financed Nepal forestry project allowed user communities to take over forest management. Forest users received certificates ensuring long-term rights to forest benefits. The only control the Nepal state forestry agency retained over forests was through approval of village forest management plans. However, the project had to reconcile the multiple, and often conflicting, rights to forests by local villagers before long-term tenure could be recognized.

In the Bank-financed West Bengal II forestry project in India, written agreements between the state and villages established ownership and use-rights to forest protection committees. However, to maintain rights over forests, each committee had to provide evidence of sustainable forest use.

