## Indicator 64. Capacity To Conduct and Apply Research and Development Aimed at Improving Forest Management and Development of Methodologies To Measure and Integrate Environmental and Social Costs and Benefits into Markets and Public Policies, and To Reflect Forest-Related Resource Depletion or Replenishment in National Accounting Systems

### What Is the Indicator and Why Is It Important?

This indicator assesses the ability to fully account for the costs and benefits of public and private decisions on forest resources. While information on traditional economic measures of forest market values is usually available, information on social and environmental values is often incomplete. Incomplete information may result in suboptimal decisions about forest management. Lack of such information in national accounting frameworks can result in a misleading portrayal of forest resources.

### What Does the Indicator Show?

Numerous market and nonmarket valuation methods can be applied to forest resources to improve information on the broad array of costs and benefits. In addition to economic valuation techniques, other methods have been developed to measure resource values. In some cases, resource values cannot be easily characterized, and often a combination of measures must be employed to display consequences of management alternatives and policies on forest resources.

Efforts to expand the U.S. national income and product accounts to incorporate resource stocks and flows, environmental costs, and externalities were largely halted in 1994, when the work of the Bureau of Economic Analysis (BEA) was put on hold, pending an outside review by the National Research Council. The review was published in 1999. The panel concluded that most of the data and methods exist to construct forest accounts. The BEA, however, has not been authorized by Congress to resume work on this topic. The capability to reflect forest-related resource depletion or replenishment in national accounting systems is not available. Work in this area continues internationally, through individual country efforts and work by international organizations such as the World Bank and the United Nations.

Application of available methods is often limited by lack of reliable data on the physical quantities of the resource. Even if physical measures are clearly defined, data collection is often expensive. Also few standards exist for collecting data on quantities of nonmarket goods and services.