

Environmental Services

Promoting wise use

Tropical forests support over half of all terrestrial plant and animal species. They supply us with timber, food, fuel and fibre. They also provide a range of environmental services. For example, they soak up the greenhouse gases which cause global warming, recycle nutrients and stabilise soils. If we lose the forests, we lose far more than the trees, yet each year an area of forest the size of Greece is destroyed or converted to other land uses. Most of the losses are occurring in the developing world.

CIFOR's Environmental Services and Sustainable Use of Forests programme aims to improve the way we use forests, both natural and planted, and provide the knowledge needed to ensure that forests deliver a range of goods and services. The programme works at many levels, from the local to the global, from the village farm to the city boardroom. The beneficiaries range from governments and development agencies to corporations involved in industrial timber production and small farmers who grow a few hectares of trees to sell to their local pulp mill.

2005 saw the launch of a major new project on climate change. CIFOR scientists and their partners are now working in countries around the tropics, exploring the way in which climate change affects forests. The research will enable governments to develop policies to help them adapt to climate change. CIFOR scientists continued to explore the ways in which forests can be used to reduce the levels of carbon dioxide, and at the same time improve livelihoods. Major publications included *Carbon Forestry – Who Will Benefit?* and *Tropical Forests and Adaptation to Climate Change*.

Using market forces to achieve environmental goals by providing payments for environmental services (PES) – for example, by planting forests which sequester carbon – has received much attention in recent years. By drawing on research projects in Vietnam, Bolivia and elsewhere, CIFOR scientists have been able to provide an objective analysis of the role which such payments could play as incentives for conservation.

It is frequently claimed that logging and deforestation are a significant cause of disastrous floods. *Forests and floods – drowning in fiction or thriving on facts?*, which was jointly published by CIFOR and the UN Food and Agriculture Organisation (FAO), poured cold water on this theory. Marshalling all the available scientific evidence, it showed that there is no direct link between deforestation and large-scale floods. This myth-busting review received widespread media coverage around the world.



A tree nursery in Machacos, Kenya. (Photo by Christian Cossalter)