

Forests

The Conservator of Forests in Trinidad in the 1930s stated: 'There will be no forest development, nor preservation of forests, without proper land-use management'. In May 1998, the Expert Meeting on Forest Policies in the Caribbean, held in Port of Spain, came to exactly the same conclusion – and land use management was identified as the key issue for forestry development in the region.

In recent years, tropical deforestation has stimulated interest and debate, stemming in part from the magnitude of the problem facing the region and the role that land-use changes play in biological diversity and climate stability. Caribbean forest cover continues to decline.

Annual deforestation rates in almost all island states vary between 0.8 per cent and 7.2 per cent (FAO 1997). In the fifteen years between 1980 and 1995 the region suffered moderate losses in its total forest cover (Figure 1.3) which is generally regarded as a slowing down of the rapid deforestation of the past. At the inter-regional level, South America and the Caribbean have lost significantly more tropical forest than their Asian, South Pacific and African counterparts, although at a rate slower than that of Asia and the South Pacific (WRI/UNEP/UNDP/WB 1994). At current levels, deforestation is destroying part of the region's biodiversity and soil fertility. On the other hand, the natural resources in some forest zones are not being fully utilized. (It should be noted that generally, when deforestation is analysed in Latin America and the Caribbean, the emphasis is on tropical and sub-tropical moist forests (closed forests) and that tropical and sub-tropical dry forests (open forests) are ignored.)

The main forestry issues for Caribbean island states are deforestation, land tenure, forest conservation and forest policies, and the provision of potable water. Forests play a major role in providing potable water, and continued deforestation will reduce the availability of drinking water. High population densities also lead to an increased need for agricultural land, and as the forests are regarded as land reserves they are often occupied by squatters. Uncertainty of land tenure then leads to unsustainable soil management practices, which lead in turn to an increased need to clear more of the forest. Land use practices and land tenure of agricultural lands are key issues that must be addressed in the preservation and conservation of forests.

Historically, in almost all the countries in the Caribbean, forests have been extensively logged to provide timber for ships, housing and furniture, and

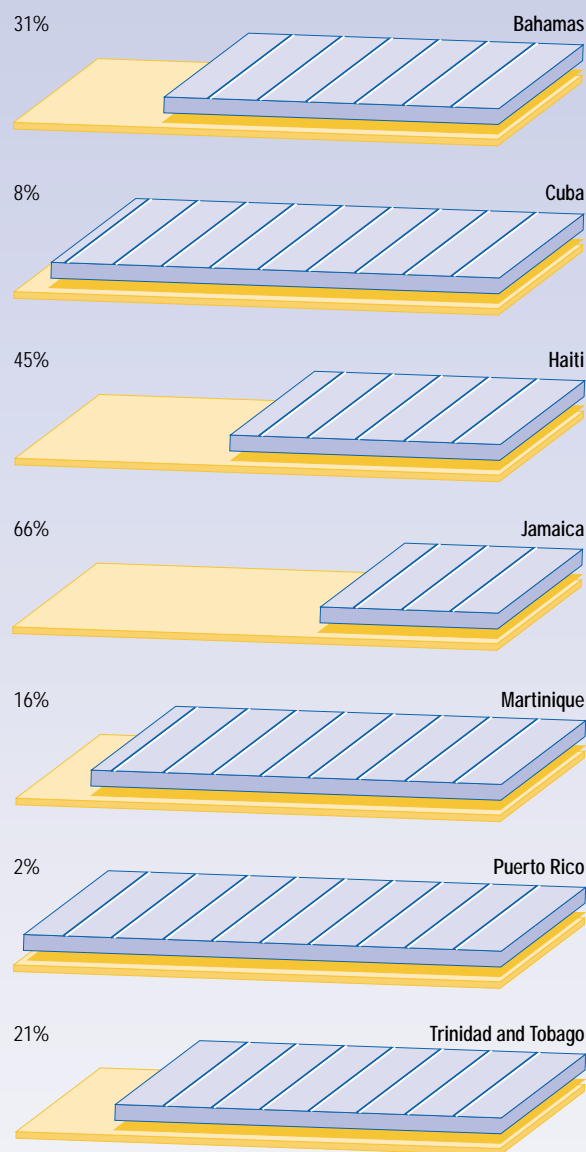
later cleared for sugar and banana plantations and other land-intensive economic development. This has left telltale traces on current forest structure and species composition as most of the forests in the region are secondary forests lacking the rich biological diversity that once existed. Fragmentation has also affected much of the few remaining natural forests (mostly in the Greater Antilles) as in the cases of Cuba, uplands areas of the Dominican Republic, and Dominica. Surviving tropical rain forests exist as fragments in inaccessible, mountainous interior locations. Continuing pressure on marginal forest areas from population growth and development, as well as the inexorable spread of exotic species, put these remaining patches at increasing risk.

There are three important points to bear in mind in examining the data on forest use and forest characteristics in the Caribbean.

- The forest baseline used nowadays has shifted radically from the natural forest cover in pre-colonial days. Most of the smaller and lower islands of the region were covered with a dry mahogany forest which was logged off by the eighteenth century, and which has not been restored anywhere in the region. Experience in reserves such as the Virgin Islands National Park indicate that regeneration of the natural dry mahogany forest may require many centuries.
- The destruction of lowland forest areas on most islands has created small 'islets' of upland forest which may not be sufficiently large to withstand major stresses such as hurricanes and accidental fires. These small upland reserves serve as aquifer recharge sites and habitat for a great diversity of endemic species. Even small reductions in overall forest cover may mask the destruction of key habitats.
- Official statistics on forest cover in the Caribbean are likely to understate the actual extent of deforestation and forest degradation by as much as one-half. This issue has been measured for estimates of forest change in the Amazon: similar conditions affect forest estimates in the Caribbean (Monastersky 1999). The problem arises because remote sensing techniques are not sensitive to indicators of degradation from selective cutting, forest fires and other encroachments on the natural forest.

Some data claim a less pronounced change in forest cover over the past 30 years. For example, the UN FAOSTAT Forest and Woodland database (December

Figure 1.3: Loss of natural forest and woodland in some Caribbean islands: 1980–1995



Sources: Food and Agriculture Organization of the United Nations (FAO), Forest Resources Division, State of the World's Forest 1997; International Tropical Timber Organization (ITTO), Annual Review and Assessment of the World Tropical Timber Situation, 1997.

1998) shows virtually constant forest cover for the period 1961 to 1994. It may be that by combining forests and woodlands in one data set the FAOSTAT data may mask severe degradation in the quality of woodland habitat, as areas move from closed woodlands to scrub through gradual harvesting of forest fringes.