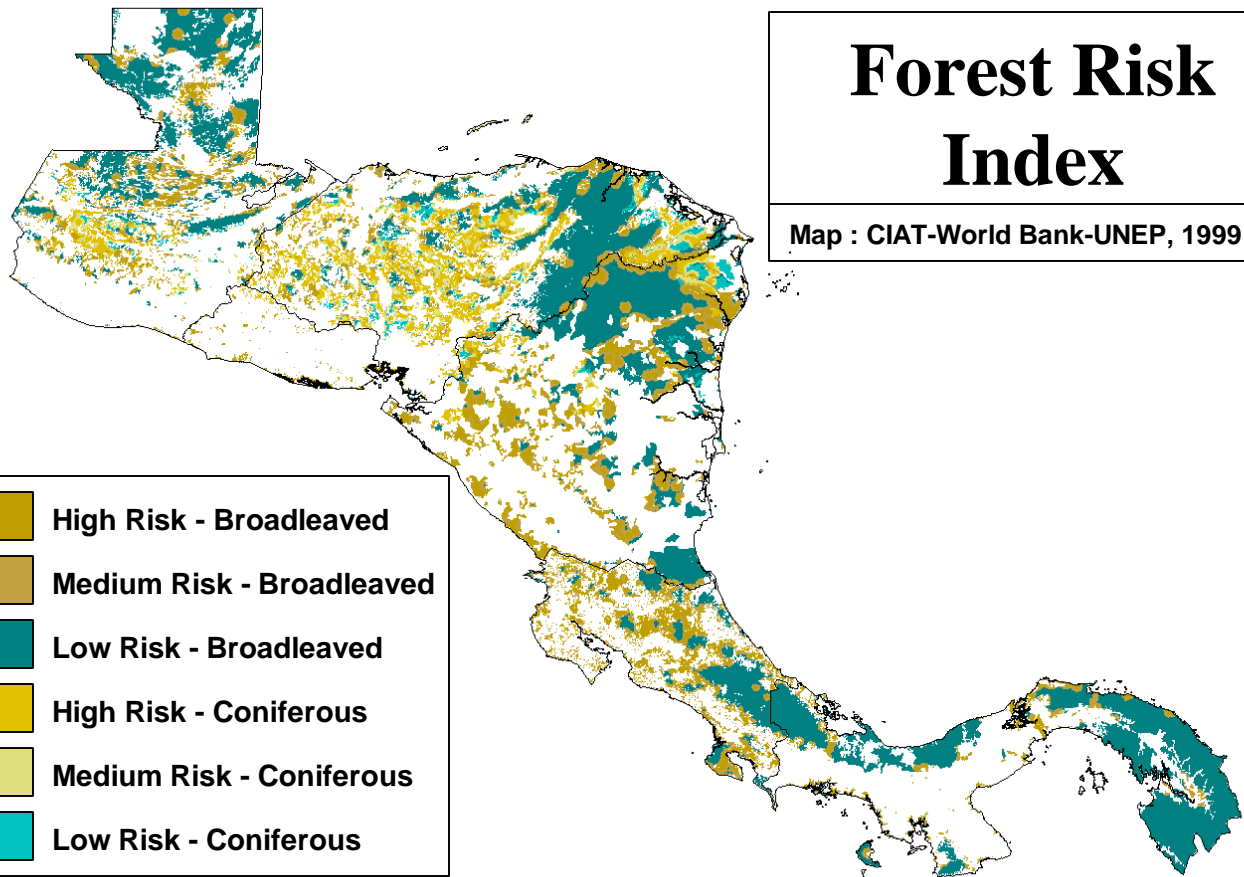


Forest Risk Index

Map : CIAT-World Bank-UNEP, 1999



Analysis of the Index

Deforestation and the fragmentation of forests are some of the principal consequences of the development process in Central America. Presently 45% of the land in the region is forested, the vast majority of this (84%) is broadleaf forest with the remaining amount being mainly coniferous. However 29% of the region's forests are at a high risk of being lost, 21% are at intermediate risk and 50% have a low risk. Moreover 55% of the coniferous forests are at high risk in comparison with the 23% at high risk for broadleaf forest, and only 14% of coniferous forest are at low risk in comparison with the 58% for the broadleaf forest.

Explanation of the Index

All forested areas were classified according to their accessibility to markets. Accessibility values refer to the time taken for the transportation of goods to markets. The mode of transport, and therefore the speed and accessibility value, are dependent on the topography and quality of the transport infrastructure. Three classes of accessibility were used:

High risk is defined as those areas of forest that are within 1 hour of a market.

Intermediate Risk is defined as those areas of forest that are between 1 and 2 hours from a market.

Low Risk forests are those that are greater than 2 hours from a market.

Forests were classified into Broadleaved and Coniferous types.

Assumptions

The main assumption in this index is that the risk to forests is closely associated with accessibility. This is an intuitive conclusion but is based on evidence from Amazonia (Pfaff, The World Bank -Policy Research Working Paper 1772: What Drives Deforestation in the Brazilian Amazon?, 1997) and Central America (Utting, United Nations Research Institute for Social Development, Discussion Paper 24, The Social Origins and Impact of Deforestation in Central America, 1991).

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