
Indonesia: deforestation and forest degradation in Borneo's forests

Borneo, one of the biggest islands of the Malaysian archipelago in South East Asia, is under the sovereignty of three states: Malaysia, Indonesia and Brunei. Originally this big island was completely covered by dense tropical forests. The expansion of the lumber-exporting industry, together with oil palm and pulpwood plantations both in Malaysia and Indonesia have nearly completely destroyed the Bornean forests. Consumers of tropical timbers in the North, such as buyers of plywood for home building in the USA are ultimately responsible for this ecological disaster. Timber exports contribute \$8 billion annually to the Indonesian economy and provide 80% of the plywood used in the US home building industry.

New scientific research provides persuasive evidence that forest sustainability is primarily determined by conditions over large scale biogeographical territories and that ongoing human-induced climate disorders at the global level are severely jeopardizing tropical forests.

In fact, Borneo's rare tropical rainforest -where reproduction of the trees is intricately linked to the arrival of the El Niño-Southern Oscillation (ENSO) phenomenon- face imminent death due to increased logging and human-intensified climate change. ENSO is a combined phenomenon of variation of temperature and atmospheric pressure respectively at the ocean and the air levels. The trees synchronize their reproduction -called masting- to the onset of ENSO, which occurs about once every four years. Climatic conditions created by El Niño trigger simultaneous fruiting in dipterocarps and are essential for seed production, which the abundant fauna use as food. Local villagers collect seeds to eat and to sell as a cash crop.

According to a research in ecology recently performed at the University of Michigan, the degradation of dipterocarp forests will have repercussions both in Bornean terrestrial ecosystems and in regional economies, with global implications in the near future. The problem, the researchers discovered, is that intensive logging on the island around the Gunung Palung National Park over the past decade has drastically reduced seed production from 175 pounds per acre in 1991 to 16.5 pounds per acre in 1998. As intensive logging reduces the local density and biomass of mature trees, the spatial extent of masting is affected. As a consequence, the entire ecosystem -included flora, fauna and human beings- is menaced.

As this disaster goes on, the Indonesian government continues to turn a deaf ear to the demands of its people -exemplified by the long struggle of the indigenous people- and to the evidences provided by good science. Its unbridled race to increase more and more incomes generated by wood exports will quickly destroy the remaining Borneo forests. Increased support to the Borneo peoples' resistance is for the time being the main means to counteract such destructive policy.

Source: Glen Barry, 16/12/99;

