## Jamaica: Deforestation linked to mining, agriculture and tourism

Jamaica, the third largest island in the Caribbean, is dominated by an extensive cordillera. The island was once almost entirely covered by forest, of which there are four main types whose distribution is determined by the rainfall pattern: dry limestone forest on southern lowlands and hills; intermediate limestone forest in the central uplands, wet and very wet limestone forest in the Cockpit Country and John Crow Mountains, and rainforest (lowlands and mountain).

At present, Jamaica's lowlands have been mostly cleared for agriculture, and overall more than 75% of the original forest has been lost. Remaining forest is largely secondary in nature and only the mountain forest in the most remote, inaccessible and steep part of the island has survived undisturbed.

Hurricane Gilbert played havoc in Jamaica in 1988, with torrential rains and winds. Subsequent extreme flooding and numerous landslides left a toll of death, homeless people and much of the country's infrastructure destroyed. But blame was not on nature alone. Increasing deforestation in Jamaica's mountains and the resulting soil erosion worsened the impact of the hurricane.

The country has a sad record of local deforestation speed, much of it due to the fast growing tourism industry and agriculture expansion, mainly coffee plantations. While the tourism industry replaces beaches and forests with newly built hotels and roads, inappropriate agricultural practices on lands where forests once grew have resulted in accelerated soil erosion that cause downstream sedimentation and flooding. Like a chain reaction, this has caused the degradation of the coral reefs and beaches that surround the island.

But bauxite mining -- the island's second largest foreign exchange earner after tourism-- is considered to be the single largest cause of deforestation in Jamaica. On the one hand, this activity destroys large areas of forest because bauxite is extracted by open cast mining, which requires the complete removal of vegetation and topsoil. But at the same time bauxite mining is an indirect cause of deforestation through the opening of access roads into forests. Once access roads are cut, loggers, coal burners and yam stick traders move in, taking the trees in and around the designated mining areas. Mining is thus responsible for extensive deforestation far beyond the mining areas themselves.

Kaiser --owned by the US-based company of the same name-- Alumina Partners (Alpart) --owned jointly by Kaiser and Norwegian Hydro-- and Alcan --owned by Alcan Canada and the Jamaican government-- are the outstanding players whose mining rights supersede all others under Jamaican law.

In recent years, deforestation has led to the deterioration of more than a third of Jamaica's watersheds, drying up streams and rivers and rendering cities and towns suffering from lack of water. The diversity of plant and animal life is also threatened by the destruction of forests, leading to the loss of traditional ways of life, the knowledge about local plants and their medical and other uses.

Although there are currently plans and projects to sustainably manage existing forests and to restore degraded areas through tree planting activities, it is clearly necessary to address the direct and underlying causes leading to deforestation in order to create the adequate conditions to achieve that aim. And if bauxite mining is the "the single largest cause of deforestation in Jamaica", then this should be the starting point to revert the process.