

FACTBOX-What's so bad about deforestation?

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Source: Reuters

June 4 (Reuters) - Worldwide about 13 million hectares or 32 million acres of forest -- an area the size of Greece or Nicaragua -- is cleared every year, the United Nations estimates.

Here are some explanations of the environmental impacts associated with deforestation:

CLIMATE CHANGE:

-- Trees store carbon by absorbing carbon dioxide via photosynthesis and holding it in woody branches and roots.

-- When trees are burned, or cut and left to decay, their stored carbon is released into the atmosphere.

-- Tropical deforestation contributes 20 percent of global carbon emissions. Slowing the rate of forest destruction is one of the cheapest ways to fight climate change, experts say.

LANDSLIDES AND FLOODING:

-- Clear-cutting old growth timber increases the likelihood of landslides by speeding erosion; as large trees' root structures bind soil to underlying bedrock.

-- Forests foliage canopy dissipates rainfall over large areas and vegetation soaks up rainfall, so the risk of floods is raised when dense forests are cleared.

SOIL NUTRIENT DEPLETION AND DESERTIFICATION:

-- Deforestation-exacerbated wind and water erosion of soil depletes it of vital mineral nutrients like nitrogen and phosphorus, making soil less fertile and less able to sustain agricultural production, and speeds desertification.

OXYGEN PRODUCTION:

-- Sucking in carbon dioxide and sending out oxygen through photosynthesis, the world's largest tropical rainforest in Brazil's Amazon contributes an estimated 20 percent of global oxygen production.

-- As different plants put out differing amounts of oxygen, some scientists say it is misleading to call forests "the lungs of the Earth", as some are oxygen neutral, and sea plants like plankton and algae are more significant oxygen producers.

BIODIVERSITY/HABITAT

-- Around two thirds of the world's estimated five to 30 million animal and plant species live in forests.

-- An estimated 60 million people inhabit forests and depend on them for their livelihoods, according to Global Forest Watch.

-- Species threatened by forest loss include the great apes (orangutan, gorillas, chimpanzees and bonobos,) tiger, Asian rhino, and elephant, the World Wide Fund for Nature (WWF) says.

DOES REPLANTING HELP?:

-- Rehabilitated and/or secondary forests can never fully replace original rainforest's multi-storied mix of trees and millions of organisms, some of which are only now being discovered.

Sources: Global Forest Watch (www.globalforestwatch.org/english/about/faqs.htm), The United Nations Environment Programme (www.unep.org/billiontreecampaign/FactsFigures/QandA/index.asp) The Center for International Forestry Research (CIFOR), (www.cifor.cgiar.org), World Wide Fund for Nature, Species Habitat Loss (www.panda.org/about_wwf/what_we_do/species/problems/habitat_loss_degradation/index.cfm) ((For a feature on deforestation please see "Indonesia's forests threatened by logging, palm oil" or Xtra clients can click on [ID:nJAK305067]))