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## Preface

Tropical forests cover about 15% of the land surface<sup>1</sup>. But they are being rapidly degraded and deforested. Roughly 13 million hectares are converted to other land uses each year. Since forest store a large amount of carbon ( that is about 25% of carbon in the terrestrial biosphere.), this level of deforestation results in nearly 20% of global carbon emissions, making deforestation the second largest contributor to global warming. Thus preserving and growing forests plays a vital role in any initiative to combat climate change.

Further, forests are home to nearly 90% of the world's terrestrial biodiversity. Forest resources also directly support the survival and livelihoods of 90% of the 1.2 billion people. The forest communities depend on forests as a source of fuel, food, medicines and shelter. The loss of forests thus jeopardises poverty alleviation. Further the resultant climate change will exacerbate their situation making them the hardest hit.

Conversely, reducing deforestation, protecting forests, and rejuvenating them, will help forest communities build their resilience to climate impacts. Indigenous (Adivasi) and forest-dependent peoples are natural stewards of their forests and they protect it as their lives depends on it. Thus it is these communities which provide the rest of humanity with vital ecosystem services (ES).

At local to global scales, forests provide essential ecosystem services beyond carbon storage – such as watershed protection, water flow regulation, nutrient recycling, rainfall generation and disease regulation. Old growth forests also soak up carbon dioxide from the atmosphere – offsetting human induced emissions. Protecting tropical forests has a double-cooling effect, by reducing carbon emissions and maintaining high levels of evaporation from the canopy.

### **Causes of Deforestation**

The causes of deforestation are multiple and complex. These vary from country to country. Since forests are the source of livelihood, when natural & traditional regeneration cycles are disturbed, survival needs further disrupt the cycles, leading to de-generation. Further, poverty and population pressure drives more people to seek survival from the forest, either for food, fuel or for additional farmland.

The drivers of the demand for agricultural land vary globally. Whilst millions of people still cut down trees to make a living for their families, a major cause of deforestation is now large-scale agriculture. In Africa, it is primarily small-scale subsistence farming. In South America, it is large-scale farming enterprises, producing beef and soy for export markets. In South East Asia, the driver is somewhere between the two, with palm oil, coffee and timber the main products. In India, it is dams, mining and development projects. In recent decades deforestation has shifted from a largely state-initiated process to an enterprise-driven one.

Meanwhile, tropical forests are now being put at the centre of emerging international efforts to contain and prevent further changes in the climate. A set of proposals titled Reducing Emissions from Deforestation and Forest Degradation (REDD) were put together at the Cancun Conference in December 2010. Activists fear that the proposals will push the forests further into the hands of private enterprise, and alienate local communities from their natural survival options.

Security is being shifted from a nature dependent system to a market/cash based system.

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<sup>i</sup> [www.globalcanopy.org](http://www.globalcanopy.org); a good source of information of forests eco-system services.

