## **Preface**

This study is intended to review and revitalize the dialogue about conservation and development in the Amazon Wilderness Area and in the two adjacent Biodiversity Hotspots, the Cerrado and the Tropical Andes. Although our discussion touches on a variety of factors influencing the possible paths for conservation and development in the region, including the trade-offs emerging from different scenarios, the central theme and motivating factor for the study is the *Initiative for the Integration of the Regional Infrastructure of South America (IIRSA)*. IIRSA is rapidly becoming the organizing principle behind the push to improve physical links among the South American countries via highways, hydrovias, energy projects and other initiatives.

The study attempts to evaluate IIRSA objectively by examining the likely changes it will bring to the region. It is not intended to be an anti-IIRSA diatribe. We recognize that IIRSA is, potentially, a visionary initiative — one that can promote cultural exchange and stimulate economic growth. Regional integration can offset the harsher aspects of globalization and provide an alternative to the boom and bust cycles caused by an over-reliance on the export of commodities. IIRSA can become a solid step in the direction of economic growth and poverty reduction and an essential ingredient for the future well-being of South America.

Our hope is that this document will stimulate IIRSA to become an even more important and relevant initiative, one that incorporates the vision of an ecologically and culturally intact Amazon. Recent experiences in participatory democracy have shown that infrastructure investments can be modified to respond to the environmental concerns and social priorities of civil society. These forums have made important contributions to biodiversity conservation and provided economic opportunity for local communities. Since the natural resources of the Amazon are the foundation of the regional economy, all sectors of society should have input on their use and management.

We believe that our study provides a novel perspective on development in the Amazon, questioning the sustainability of the current forest management model, as well as the long-held assumption that large-scale agriculture is inherently nonviable in the wet tropics. A special effort was made to describe the risk posed by global climate change and its potential impact on forest function. If there is a term that describes this analysis, it is the identification of linkages — between climate change and wildfire, deforestation and precipitation, forest fragmentation and species extinction, ore mines and hydroelectric power, to name a few.

These issues are part of the larger question of "What constitutes sustainable development?" The current paradigm has taken us halfway to our goal but has not (yet) succeeded in changing the essentially exploitive nature of natural resource-based development in the Amazon. In most cases, it manages only to mitigate the most egregious negative impacts. The Amazon needs a new development paradigm that will promote economic growth and reduce poverty, while simultaneously promoting the conservation of natural resources and the long-term economic health of the region.

How then can we improve IIRSA or, more importantly, how can we make "development" work better in its environmental, social and economic dimensions? This study provides the first regional-scale analysis (albeit preliminary) of the costs and benefits associated with the proposed infrastructure investments. There must be a serious effort to document the projected replacement cost in carbon emissions from deforestation; preliminary estimates are in the tens of billions of dollars. Might not these resources be used to subsidize productions systems that do not entail clearing forest? At the very least, the costs and benefits from IIRSA must be reevaluated in the context of one the most important issues of our time: the role of Amazonian development in either mitigating or exaggerating the impact of global warming. We need to understand how deforestation and climate change will impact precipitation patterns in other parts of the continent, because even a small reduction could reduce agricultural yields with enormous economic consequences.