Executive Summary

The *Initiative for the Integration of the Regional Infrastructure of South America* (IIRSA) is a visionary program that will transform the countries of South American into a community of nations. Unlike past diplomatic efforts and customs unions, IIRSA is an eminently practical initiative that proposes to physically integrate the continent — long an historical goal of South America's democracies. However, many of IIRSA's planned investments will take place on parts of the continent with ecosystems and cultures that are extremely vulnerable to change. This includes the world's largest intact tropical forest, the Amazon Wilderness Area, which is situated between the Tropical Andes and the Cerrado Biodiversity Hotspots, two geographic regions characterized by an extraordinarily large number of species found nowhere else on the planet. In addition, the Amazon is home to numerous indigenous communities that are struggling to adapt to a globalized world. Unfortunately, IIRSA has been designed without adequate consideration of its potential environmental and social impacts and thus represents a latent threat to these ecosystems and cultures. A visionary initiative such as IIRSA should be visionary in all of its dimensions, and should incorporate measures to ensure that the region's renewable natural resources are conserved and its traditional communities strengthened. Failure to foresee the full impact of IIRSA investments, particularly in the context of climate change and global markets, will bring about a combination of forces that could lead to a perfect storm of environmental destruction. At stake is the greatest tropical wilderness area on the planet, which provides multiple strategic benefits for local and regional communities, as well as the entire world.

THE NEED FOR IIRSA AND A CONCURRENT CONSERVATION STRATEGY

IIRSA is motivated by the very real need to stimulate economic growth and reduce poverty among its member nations. As such, it contemplates a series of well-defined investments in three strategic sectors: transportation, energy, and telecommunications. Some of its most important investments will upgrade roads that span the Amazon, Andes, and Cerrado and link the Pacific and Atlantic coasts to create a modern continental-scale highway system. Although the financial institutions responsible for IIRSA have relatively high standards for environmental and social evaluation, environmental assessments are linked to individual projects and do not consider the collective impact of multiple investments. Nor do they adequately address the long term drivers of change, such as agriculture, forestry, hydrocarbons, minerals, and biofuels. For example, no environmental assessment has addressed the link between improved highways, increased deforestation, and carbon emissions, nor how deforestation might impact local and continental precipitation patterns.

Conservation International (CI) is developing a comprehensive strategy to evaluate and monitor IIRSA and other infrastructure investments based on the findings and recommendations of this document. This document examines how development in the region involves local and regional actors, the importance of global commodity markets, and how climate change might impact these phenomena individually and collectively. For example, agriculture is the largest driver of land-use change in the region and will expand even faster and further in response to global markets, as IIRSA highways make previously remote land accessible and as new agricultural technologies make production more profitable. Modern transportation systems will lead to more intensive logging over wider areas, particularly in the previously remote western Amazon as it is linked to Asian markets via Pacific Coast ports.

Improved river transport systems (hydrovias) will make agricultural commodities, biofuels, and industrial minerals from the southern and eastern Amazon more competitive in international markets. Forest fragmentation and degradation caused by clearing and logging will bring about an increase in wildfires, which may also be exacerbated by regional manifestations of global warming. Accelerated deforestation will create a dangerous feedback loop with global atmospheric and ocean systems, accelerating global warming and perhaps altering rainfall patterns at the local, continental and global scale. These are all risks that need to be evaluated in an integrated analysis, and IIRSA must incorporate measures to avoid or mitigate the most dangerous of these impacts.

IIRSA and similar investments will profoundly affect the region's unique and vulnerable biodiversity. All but one of the ten IIRSA corridors intersect a Biodiversity Hotspot or High Biodiversity Wilderness Area—highly vulnerable regions that contain species found nowhere else in the world. In the montane forests of the Andes where there are extremely high levels of local endemism, any and all investments run a risk of creating an extinction event. In lowland Amazonian rain forests renowned for the regional uniqueness of their biodiversity, deforestation belts around highways will lead to fragmentation that will interfere with the ability of species to shift their geographic ranges in response to climate change. The natural grasslands of the Cerrado will continue to feel the brunt of agricultural development, with current