

Infrastructure expansion and the fate of Central African forests

by William F. Laurance¹, Mahmoud I. Mahmoud², Fritz Kleinschroth³

The tropical forests of Central Africa sustain exceptionally high biodiversity and environmental services such as forest hydrology and carbon storage. These forests span the Congo Basin and equatorial forests adjoining it. Like much of sub-Saharan Africa, this region is facing dramatic changes in the number, extent and environmental impacts of large-scale infrastructure projects. A particular concern is how such projects will affect important wildlife habitats, protected areas, and environmental services.

Across Africa, infrastructure projects are expanding at an unprecedented pace. These projects include a large number of industrial mining projects; over 50,000 km of proposed ‘development corridors’ that would crisscross much of the continent; the world’s largest hydropower dam complex, at Inga Falls on the Congo River; ambitious plans to increase industrial and smallholder agriculture; widespread industrial logging; and a variety of other transportation, energy, and mining ventures.

Although African infrastructure expansion is largely driven by foreign investments to exploit natural resources such as minerals, timber, and fossil fuels, major infrastructure projects are also being advocated because of concerns about Africa’s booming population, which is projected roughly to quadruple this century. This creates serious concerns about food security and human-development challenges, and broader anxieties about the potential for social and political instability.

AFRICAN DEVELOPMENT CORRIDORS A true game-changer for African nature conservation is at least 33 ongoing and proposed “development corridors” that will crisscross sub-Saharan Africa. If completed in their entirety, the corridors would collectively span more than 53,000 km in length.

The development corridors would have a range of environmental effects, including major impacts on existing protected areas. First, they could bisect reserves, fragmenting them and opening them up to illegal

Rainforest clearing for a Chinese-operated road-construction camp in the northwest of the Republic of Congo.
Photo © William Laurance

