

THE CONVERSATION



The world's forests will collapse if we don't learn to say 'no'

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A red-and-green macaw in the Amazon. ©Pete Oxford/www.peteoxford.com

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An alarming new study has shown that the world's forests are not only disappearing rapidly, but that areas of "core forest" — remote interior areas critical for disturbance-sensitive wildlife and ecological processes — are vanishing even faster.

Core forests are disappearing because a tsunami of new roads, dams, power lines, pipelines and other infrastructure is rapidly slicing into the world's last wild places, opening them up like a flayed fish to deforestation, fragmentation, poaching and other destructive activities.

Most vulnerable of all are forests in the tropics. These forests sustain the planet's most biologically rich and environmentally important habitats.

The collapse of the world's forests isn't going to stop until we start to say "no" to environmentally destructive projects.

Damn the dams

Those who criticise new infrastructure projects are often accused of opposing direly needed economic development, or — if they hail from industrial nations — of being hypocrites.

But when one begins to look in detail at the proposed projects, an intriguing pattern appears: Many are either poorly justified or will have far greater costs than benefits.

For example, in a recent essay in the journal *Science*, Amazon expert Philip Fearnside argues that many of the 330-odd hydroelectric dams planned or under construction in the Amazon will be more trouble than they're worth.



Construction of the São Manoel Dam in the Brazilian Amazon. International Rivers/Flickr, CC BY-NC-SA

Many of these dams will have huge environmental impacts, argues Fearnside, and will dramatically increase forest loss in remote regions.

This happens both because the Amazon is quite flat, requiring large areas of forest to be flooded, and because dams and their power lines require road networks that open up the forest to other human impacts. For instance, the 12 dams planned for Brazil's Tapajós River are expected to increase Amazon deforestation by almost 1 million hectares.

Furthermore, Fearnside argues, much of the electricity the Amazon dams produce will be used for smelting aluminium, which provides relatively little local employment.

Fearnside asserts that mega-dams planned for the Congo Basin and Mekong River will also cause big problems, with limited or questionable benefits.

Roads to ruin

The explosive expansion of roads into the world's last wild places is an even more serious problem. Indeed, Eneas Salati, one of Brazil's most respected scientists, once quipped that "the best thing you could do for the Amazon is to blow up all the roads".

Current projections suggest that by 2050, we'll have nearly 25 million kilometres of additional paved roads — enough to encircle the Earth more than 600 times.

I have led three major studies of planned road expansion, for the entire planet and for the Brazilian Amazon and sub-Saharan Africa. All three show that many planned roads would have massive impacts on biodiversity and vital ecosystem services while providing only sparse socioeconomic benefits.



Logging truck in Malaysian Borneo (c) Rhett Butler / Mongabay.com

In Africa, for example, our analyses reveal that 33 planned “development corridors” would total over 53,000 kilometers in length while crisscrossing the continent and cutting into many remote, wild areas. Of these, we ranked only six as “promising” whereas the remainder were “inadvisable” or “marginal”.

Progress at any price?

There is a very active coalition of pro-growth advocates — including corporate lobbyists, climate-change deniers, and die-hard proponents of “economic growth” — that immediately decry any effort to oppose new developments.

Added to this are those who argue reasonably for economic development to combat poverty and disparity in developing nations. Such advocates often assert that an added bonus of development is greater sustainability, because impoverished people can be highly destructive environmentally. The denuded nation of Haiti is one such example.

Yet the on-the-ground reality is often far more complex. For instance, the heavy exploitation and export of natural resources, such as minerals, fossil fuels or timber, can cause nations to suffer “Dutch Disease” — an economic syndrome characterised by rising currency values, economic inflation and the weakening of other economic sectors, such as tourism, education and manufacturing.

Dutch Disease tends to increase economic disparity, because the poor are impacted most heavily by rising food and living costs. Further, the national economy becomes more vulnerable to economic shocks from fluctuating natural-resource prices or depletion. The Solomon Islands — which relies heavily on timber exports that are collapsing from overexploitation — is a poster-child for Dutch Disease.



The poor suffer most from inflation: Rural woman in the Western Ghats of southern India. William Laurance

On top of this is the toxic odour of corruption that pervades many big infrastructure projects. One would need an abacus just to keep track of the allegations.

To cite just two recent examples: in Malaysia, an independent investigation has concluded that nearly US\$4 billion was misappropriated from a state-owned fund set up to attract international property, infrastructure and energy investments. And in Brazil, the granting of contracts for major Amazon dams has been drowning in allegations of corruption.

In both nations, public coffers needed for education, health and other vital services appear to have been hugely defrauded.

Just say 'no'

The bottom line is that many big infrastructure projects are being pushed by powerful corporations, individuals or interests that have much to gain themselves, but often at great cost to the environment and developing societies.

Globally, the path we're currently following isn't just unsustainable. It's leading to an astonishingly rapid loss of forests, wildlife and wilderness. From 2000 to 2012, an area of forest two and half times the size of Texas was destroyed, while a tenth of all core forests vanished.



Red Titi Monkey from the western Amazon ©Pete Oxford/www.peteoxford.com

If we're going to have any wild places left for our children and grandchildren, we simply can't say "yes" to every proposed development project.

For those that will have serious environmental and social consequences, we need to start saying "no" a lot more often.

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