

Optimizing Road Development in the Asia-Pacific :Minimizing Environmental Damage and Maximizing Social Outcomes

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Abstract

The 21st century will see an unprecedented expansion of roads, dams, power lines, and gas lines, as well as massive investments in mining and fossil fuel projects. At least 25 million kilometers of new roads are anticipated by 2050. Nine-tenths of all road construction is projected to occur in developing nations, including many tropical regions that sustain exceptional biodiversity and vital ecosystem services. The penetration of roads and other infrastructure into remote or frontier areas are a major proximate driver of habitat loss and fragmentation, wildfires, overhunting, and other environmental degradation, often with irreversible impacts on native ecosystems. Unfortunately, much infrastructure proliferation is chaotic or poorly planned and the rate of expansion is so great that it often overwhelms the capacity of environmental planners and managers. Dr Campbell will highlight ongoing efforts to plan, prioritize, and mitigate rapid road and infrastructure expansion, focusing predominantly on the tropics.

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