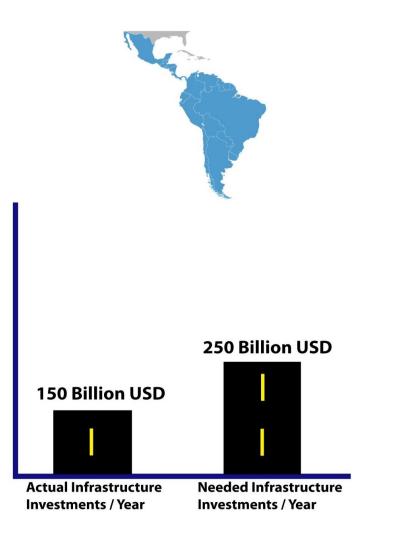
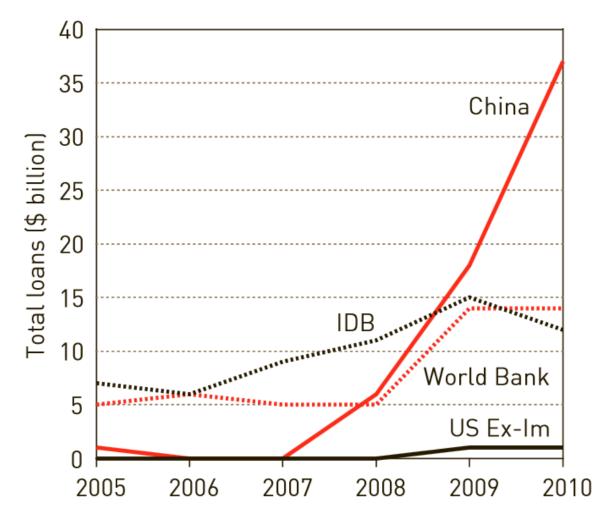
Integrating ecosystem services in IDB financed projects

Graham Watkins Lead Environmental Specialist Inter-American Development Bank

Investment gap for infrastructure in Latin America and the Caribbean



Comparison of Chinese and Western Bank Loans to Latin America



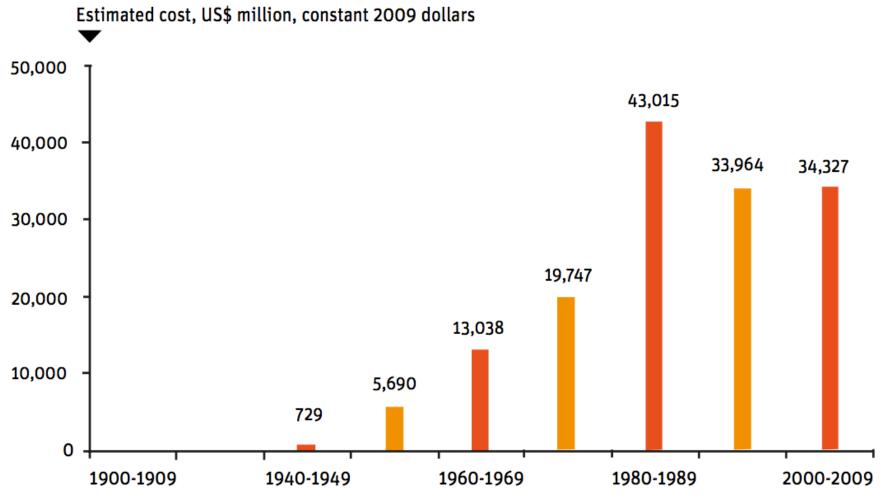
World Bank, IDB, US Ex-Im Sources: respective Annual Reports

Chinese tycoon pushes for Nicaraguan canal to rival Panama's



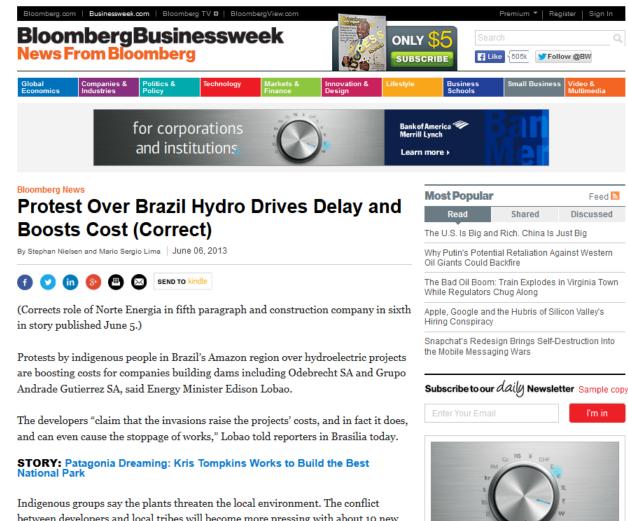
Dr. Jean-Paul Rodrigue, Dept. of Global Studies & Geography, Hofstra University.

Distribution of economic damages from natural disasters, LAC (1900-2009)



Source: EM-DAT, Bureau of Labor Statistics, and authors' calculations.

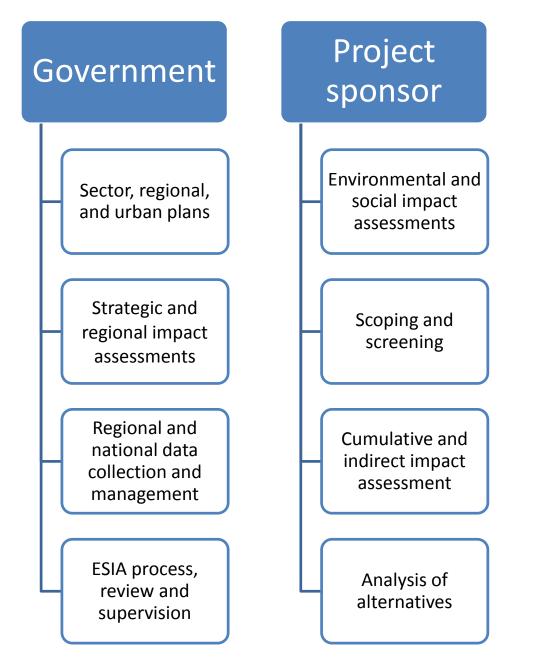
Project Delays

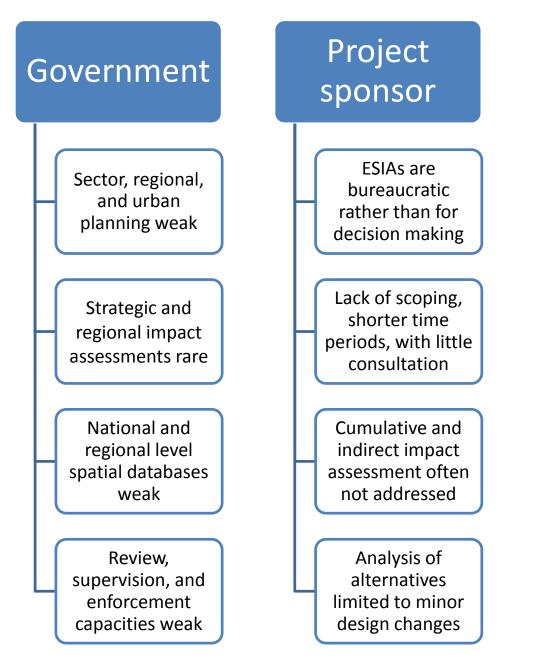


between developers and local tribes will become more pressing with about 10 new hydro projects planned in the Amazon region with more than 10,000 megawatts of capacity over the next decade, according to Erik Eduardo Rego, director of the energy consulting company Excelencia Energia.

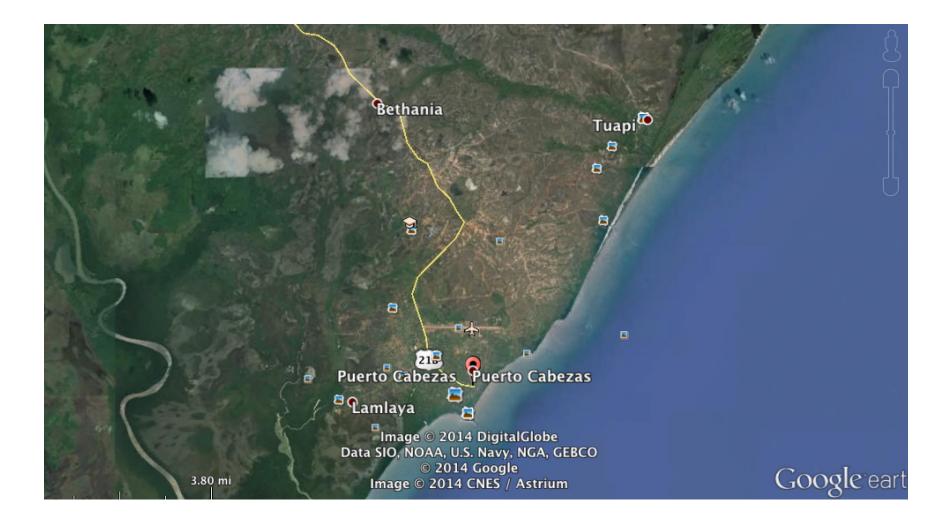


"Protests by indigenous people in Brazil's Amazon region over hydroelectric projects are boosting costs for companies building dams including Odebrecht SA and Grupo Andrade Gutierrez SA, said Energy Minister Edison Lobao."





Drinking Water, Bilwi, Nicaragua

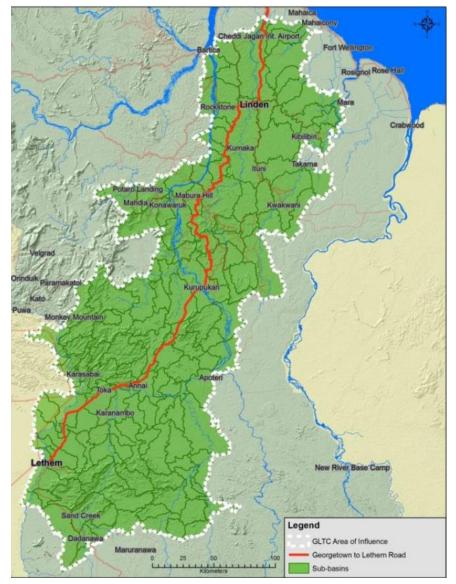


Ecosystem services analysis

- Qualitatively as part of special scoping
- Modified connectivity for migratory species
- Modified sedimentation patterns
- Modified water quality
- Modified water flow regime
- Three alternatives compared

- ESIA TORs prepared based on scoping
- Led to reconsideration of viable alternatives
- Avoided dam and reservoir creation in a protected area

Georgetown Lethem Road, Guyana



Ecosystem services analysis

- Part of a year-long additional biodiversity impact assessment
- Modification of fisheries, wildlife, and gathering activities
- Modification of freshwater flows and water quality
- Modification of erosion controls
- Modification of carbon storage functions

- Insufficient available data for effective analysis
- Services incorporated in cost-benefit analysis affecting project viability
- Stakeholder engagement more complete in indigenous peoples plan
- Mitigation measures already contemplated
- Many of the issues already contemplated in indigenous peoples plan

Initial Conclusions

- ES analysis for sector, regional, and urban plans and in national and regional databases
- ES analysis role in scoping to engage stakeholders through qualitative assessment for prioritization
- ES analysis detail is constrained by data and time available for ESIAs
- Given challenges in ESIAs in LAC, unclear broader "value added" of ES analysis against:
 - Enhanced stakeholder engagement
 - Focused data gathering for management
 - Indirect and cumulative impact assessment
- Potential role in improving cost benefit analyses through incorporating externalities