Using Limiting Factors to Overcome the Problem of Long Time Horizons in Evaluation

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The Challenge

Develop a practical basis for assessing whether a project is on track to achieve its goal



The problem: polluted water

Time to achieve goal: unknown Duration of funding: finite



The goal: clean water

Limiting Factors

What is preventing achievement of the goal?



Environmental Regulations Enforcement Funding Scientific Understanding



Institutional Capacity Economic Forces Stakeholder Coordination



Program Design

Are there strategies to overcome each limiting factor?



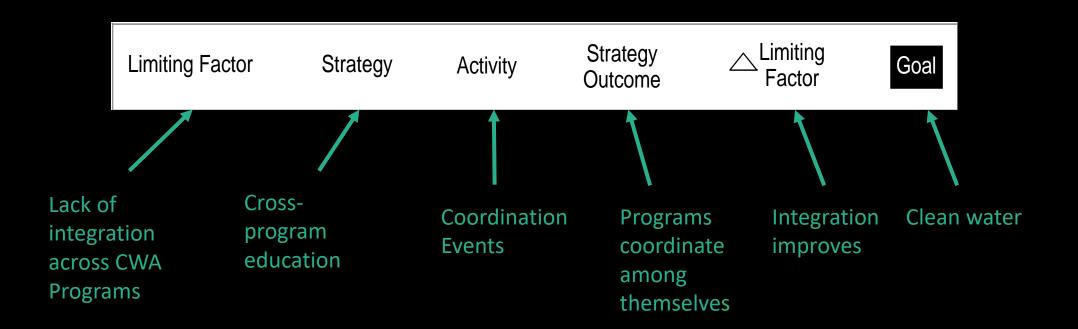
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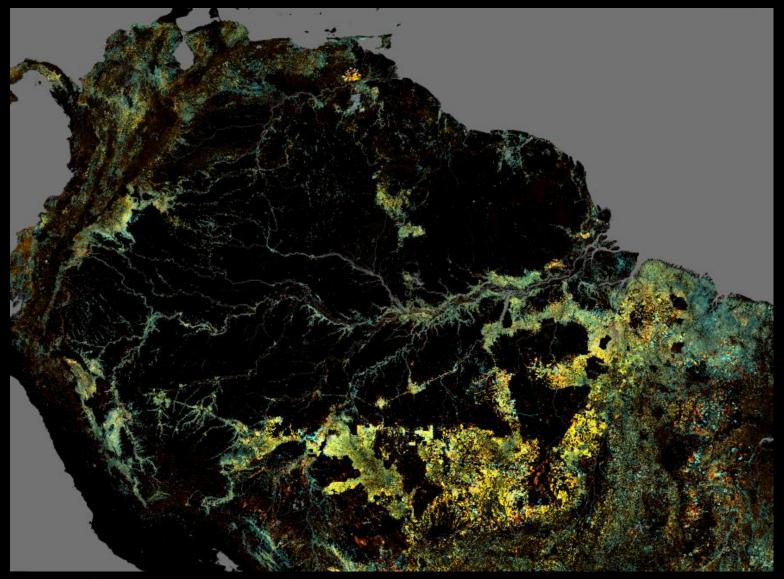
What to Measure in Evaluation?



Design for Evaluation

Lack of integration across CWA Programs	ng Factor ₁ I I I I I I I	Strategy _a	Activity _{a1} Activity _{a2}	Strategy Outcome _a	
Sites not prioritized for intervention	ng Factor _n	Strategy _c	Activity _{b1} Activity _{c1} Activity _{d1}	Strategy Outcome _b Strategy Outcome _c	Goal

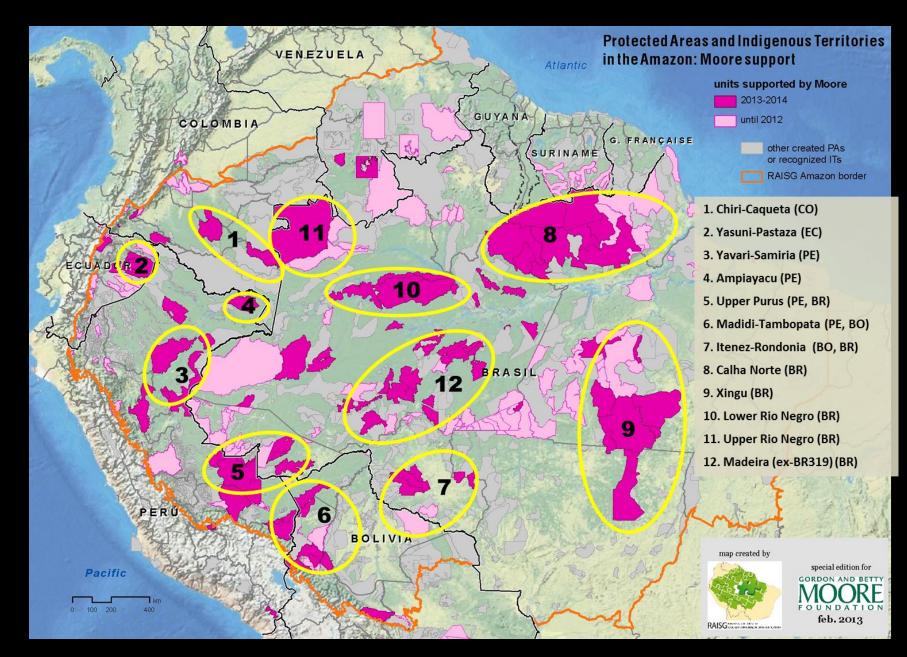
Example: Andes Amazon Initiative of the Gordon & Betty Moore Foundation

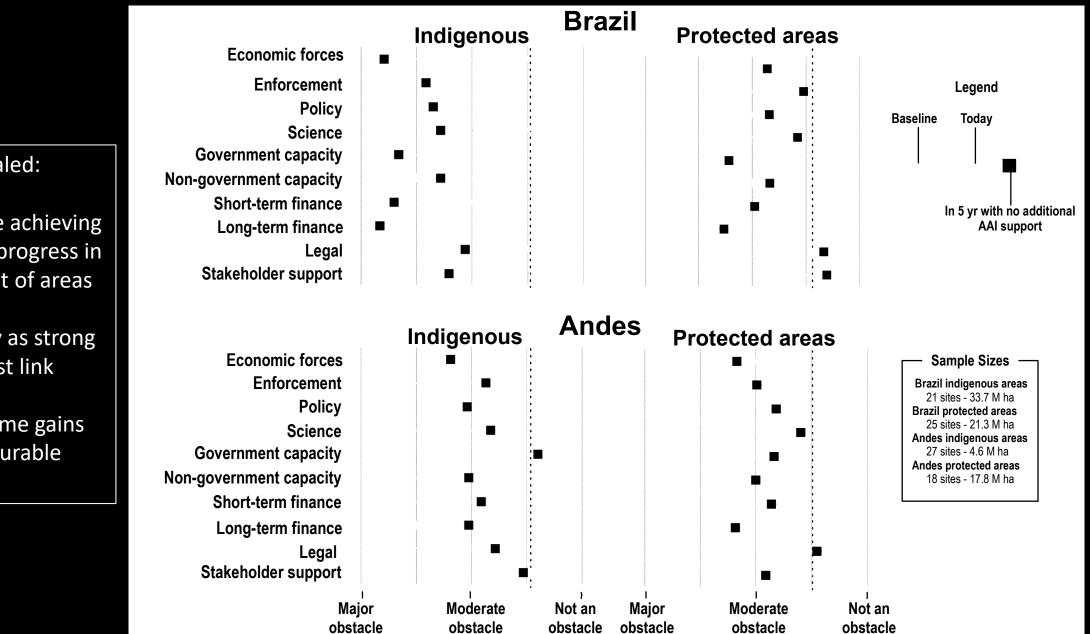


Source: http://earthenginepartners.appspot.com/science-2013-global-forest

Evaluation revealed:

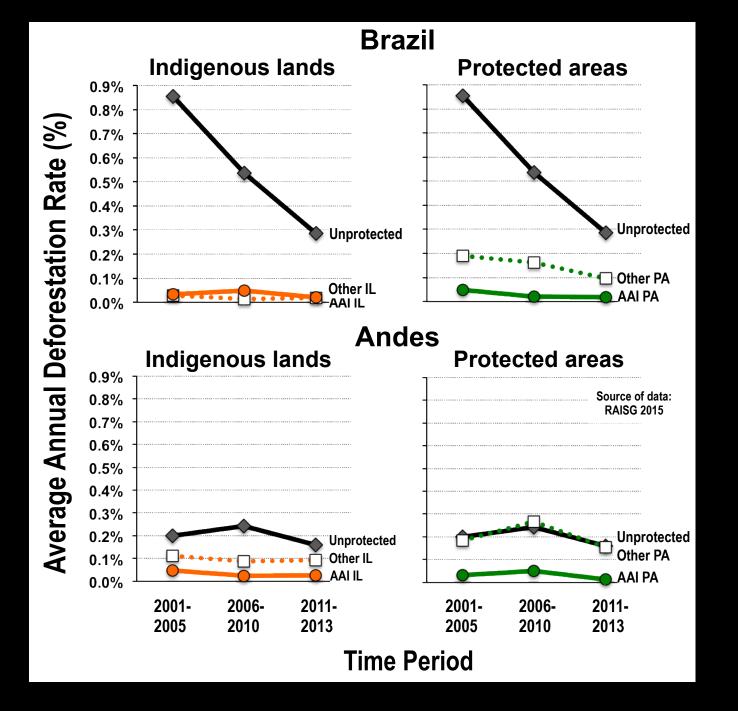
- Grantees are successful in *establishing* new protected areas: 64M ha vs goal of 80M ha
- Effectively managing those areas remains a challenge





Evaluation revealed:

- 1) Grantees are achieving meaningful progress in management of areas
- 2) Chain is only as strong as its weakest link
- 3) Cannot assume gains are always durable



Evaluation revealed:

- 1) The program works:
 - Addressing limiting factors generates outcomes on the ground
 - Results are better than the counterfactuals

2) More work is needed

The result: Donor renewed and expanded the program for another 5 years

Key Concepts to Carry Forward

Set a measurable goal

Figure out what is keeping you from achieving the goal – limiting factors Develop *necessary and sufficient* strategies to overcome the limiting factors Measure interim outcomes of those strategies Measure the extent that limiting factors are reduced/overcome

Whenever possible, quantify achievement of goal

Follow Up

Gullison, R.E. and J. Hardner. 2009. Using limiting factors analysis to overcome the problem of long time horizons when evaluating biodiversity conservation projects. *New Directions in Evaluation* no. 122: 19-29.

Gullison, R.E., J. Hardner. 2018. Progress and challenges in consolidating the management of Amazonian protected areas and indigenous territories. *Conservation Biology*: Vol 0, No. 0, 1-11.

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