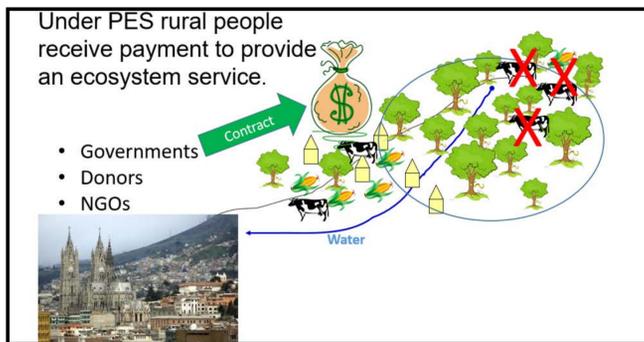


# What happens when payments for conservation stop?

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## Problem: Paying for Conservation

Payment for conservation or ecosystem services (PES) has emerged as a prominent policy tool to motivate conservation and support poverty alleviation in low-income countries.



Payment programs are highly controversial, particularly when contracts are made with communities, not individuals.

- Effective tool for conservation and poverty alleviation?
- Equitable and just for all community members?
- Sustainable: what happens to conservation and livelihoods when payments stop?

## Context: Payments in Ecuador

In Ecuador, the government started a PES program in 2009 to support conservation and alleviate poverty on communal lands.

- Communities sign a 20-year conservation contract: reduce grazing, no agriculture, fire or hunting on collective lands.
- Communities receive collective payment per area conserved. Average of \$20,000 per year.
- Communities collectively decide how to spend payment.



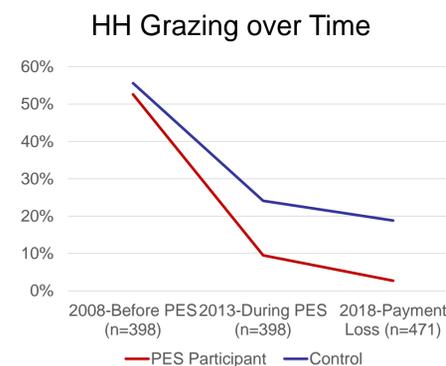
In 2016, the Ecuadorian government abruptly stopped payments.

## Our Research Questions

1. How do communal payments for environmental conservation impact household land-use behavior and livelihoods?
2. What happens when payments stop?

## Results

PES motivates households to change their land-use behaviors; these conservation behaviors may be sustained even when payment stop.

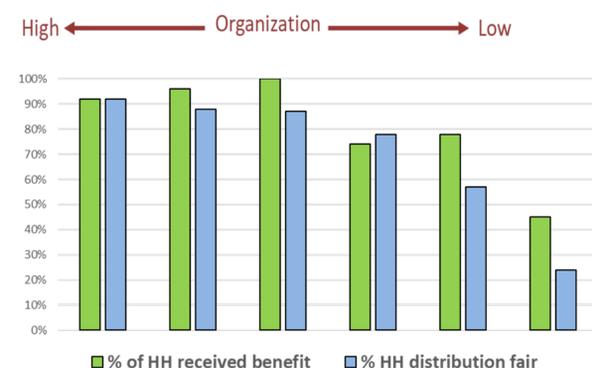


In the first stage of the program, PES contributed to an additional 12% decrease in grazing when compared to non-participating households. Result based on Difference-in-difference model,  $n=776$ ,  $R^2=.22$

After payments stop, preliminary results indicate grazing continues to decline more in PES communities when compared to control.

Strong communal governance conditions are critical for attaining desired conservation, livelihood, and equity goals.

52% of households perceived net benefits from participation, but communal organizational capacity matters for equity and inclusion.



In poorly organized communities, households fail to have information, receive benefits, or perceive the distribution is fair.

## Methods

Data Gathering: Fieldwork 2012-2018

Leader interviews  $n=44$  treatment/ 23control (2013 & 2018)

12 in-depth case studies (7 treatments/5 control)

Focus group discussions; Timeline; Mapping; Transect walks

HH interviews,  $n=911$  (2013 & 2018)

Landcover analysis 2000, 2010, 2018

Analysis

Difference-in-difference and logit models

Institutional analysis of governance changes

Visual interpretation of air photos and satellite images

## Sharing our Results

With communities: This summer we worked with SU students to share relevant results with the communities where we work.

- Communal maps;
- Workshops
  - Ecotourism
  - Climate change



With Ecuadorian practitioners and policymakers via presentations and executive summaries of findings.

With academics

Use your phone to see our publications



## Acknowledgements

This work has been made possible by grants from the National Science Foundation (SES # 1156271 and SES #1734051). We also wish to thank the Ecuadorian Ministry of the Environment, the Consortium for Sustainable Development in the Andes (CONDESAN), and the communities we work with for their support.