

International Initiative for Impact Evaluation

3ie Transparency and Accountability Thematic Window

Community monitoring of socio-environmental liabilities with advanced technologies in Ecuador and Peru: Evidence from a randomised control trial using high-frequency data

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Structure of presentation

- 1. Introduction
- 2. Context: issues, opportunities, policy relevance
- 3. Intervention
- 4. Theory of change
- 5. Evaluation questions, outcomes
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1. Introduction

 Community monitoring of socio-environmental liabilities with advanced technologies in Ecuador and Peru: Evidence from a randomised control trial using high-frequency data

Research idea:

The impact of technologically advanced transparency and accountability tools the hands of indigenous and local communities

Collaboration between:

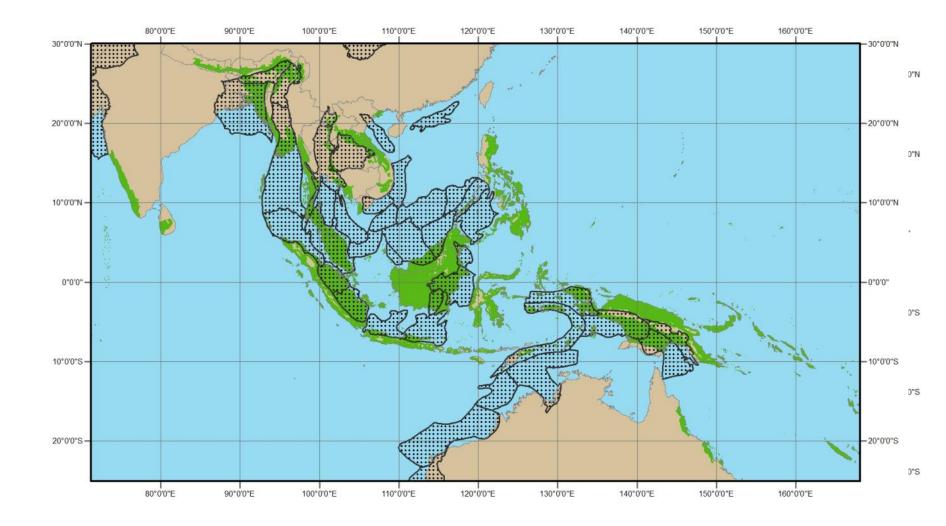
- International Institute of Social Studies (ISS), Erasmus University, The Netherlands
- University San Francisco of Quito, Ecuador
- FDA, Amazon Defence Front, Ecuador
- UDAPT, Union of People Affected by Texaco, Ecuador
- PUINAMUD, Amazon People in Defence of their Territory, Peru



2. Context







2. Context: issues, opportunities, policy relevance

- Environmental liabilities in general and oil spills in particular are not addressed effectively, resulting in negative environmental and health impacts
- Opportunity to provide effective detection and reporting of liabilities
- Longstanding relationships with parties in the proposal, other implementing agencies and donors
- Hivos, Digital democracy, Rockefeller foundation, Alternativa, NWO (Netherlands Organization for Scientific Research), Dutch Ministry of Foreign Affairs, Rainforest Foundation, Catalan Development Agency...

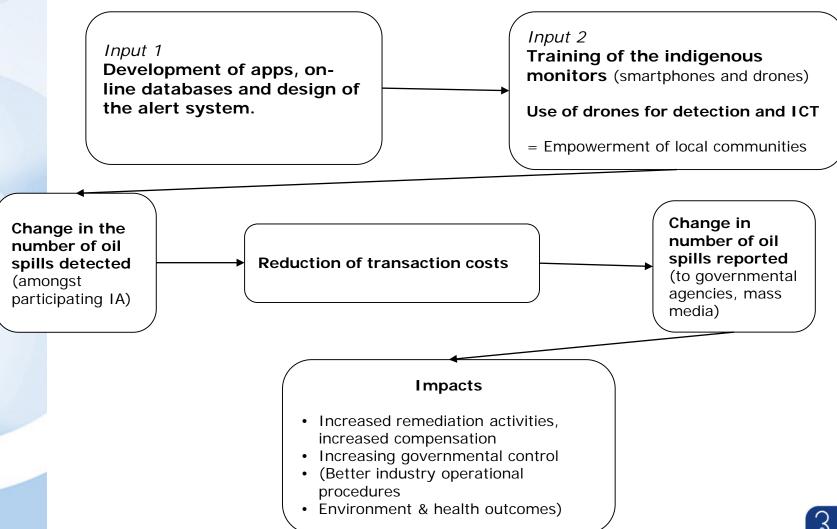


3. Intervention





4. Theory of change





5. Evaluation questions, outcomes

- To date reports on oil spill occurrences in Peru and Ecuador are based on oil companies self-reporting.
- Will high tech tools in the hands of local communities increase the number of oil spills documented and reported? Will stronger local control and capacities prompt the oil industry to improve operational procedures and remediation activities?

 Outcomes of interest: # of oil spills documented and reported, visits by state representatives (intermediary outcomes); remediation, compensation and improved operational standards (ultimate outcomes)



6. Identification strategy

- Monthly monitoring data for 24 months
 - Phased-in Treatment: 24 groups of monitors
 - Balanced distribution of the groups across the two countries
- Identification and counterfactual construction
- Random phase-in of the ICT intervention
- Data: geographical data on spatial distribution of communities, oil extraction activities –GIS. Census data, monitoring data.



Source of information	1:	
Ecuador		
	FDA	41
	UDAPT	57
	Province Orellana	36
	Sub-total	134
Peru		
	FECONACO	55
	FECONAT	7
	FEDIQUEP	6
	OPIKAFPE	11
	ORIAP	4
	PUINAMUD	1
	OEFA	43
	Sub-total	128
Total		262

Number of event			
	Ecuador	Peru	Total
2014	29	30	59
2015	37	48	85
2016*	63	42	105
	129	120	249

^{*} Till October 2016.



	Ecuador	Peru	Total
Diesel spill	5	10	15
Formation water spill	7	6	13
Oil spill	53	57	110
Water pollution	7	3	10
Other*	58	47	105
Total	130	123	253



Reported to State Agencies				
	Ecuador	Peru	Total	
Yes	8	94	102	
No	56	27	83	
NA	65	2	67	
	129	123	252	



Reported			
	Ecuador	Peru	Total
Yes	4	6	10
No	57	115	172
NA	68	2	70
	129	123	252



Sanctions or sanctioning procedure				
	Ecuador	Peru	Total	
Yes	1	30	31	
No	46	0	46	
NA	82	93	175	
	129	123	252	



Compensatio	n		
	Ecuador	Peru	Total
Yes	18	0	18
No	50	41	91
NA	61	82	143
	129	123	252



Remediation			
	Ecuador	Peru	Total
Yes	28	24	52
No	41	16	57
NA	60	83	143
	129	123	252



8. Engagement and evidence uptake

• Ecuador: Ministry of the environment, Prefectura de Orellana

• Peru: OEFA

• Internationally: 'All Eyes on the Amazon'



9. Capacity building

Partnership with USFQ

• (see previous)



10. Lessons, challenges and mitigation

• Slowdowns, turnover, political change...

• Value for money?



10. Next steps

• Continue the roll-out of the intervention

Continuous updating of the database



Thank you!

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