

Strengthening community-based environmental monitoring in the Amazon

About 3ie evidence impact summaries

[Read](#) how 3ie verifies and classifies evidence impact

Highlights

Evidence impact

- Informed by the evaluation data and the experience of the project team, which included Amazon Defense Coalition, the Ecuadorian government included community-based environmental monitoring in a new law, Ley Orgánica para la Planificación Integral de la Circunscripción Territorial Especial Amazónica, regulating economic activity in the Amazon special territory.

Factors that contributed to impact

- The evaluation project piloting low-cost, technology-based community monitoring generated rapid and timely monitoring data, which was presented to the Ecuadorian committee of lawmakers that was revising drafts of the law regulating extractive activity in the Amazon region.
- The researchers at the International Institute of Social Studies and the University of San Francisco at Quito partnered with credible and experienced local activist organisations, which were aware of the drafting of the law and were able to convince lawmakers to take the evaluation data into account.

Impact evaluation details

Title: [Community monitoring of socio-environmental liabilities with advanced technolog...](#)

Authors: Lorenzo Pellegrini



Context

The Amazon region in Ecuador and Peru has recently witnessed a surge in hydrocarbon extraction, triggering adverse environmental and public health outcomes. However, regulatory frameworks and the capacity to continuously monitor, detect and manage the impact of hydrocarbon extraction have been insufficient in both countries.

In 2015, 3ie supported the lead researcher at the International Institute of Social Studies to work with the University of San Francisco at Quito and local civil society groups the Union of People Affected by Texaco and the Amazon Defense Coalition to evaluate the impacts of technology-assisted community monitoring on detecting environmental liabilities, reporting to state authorities and coverage by media.

The intervention equipped community teams with open-source apps, smartphones, drones, and user-friendly interfaces with routines and protocols for the collection, storage, organisation and transfer of monitoring information in standard formats.

This enhanced monitoring package sought to equip the communities to detect oil spills early using drones; document the spills with the help of global positioning system information and smartphone apps; and transmit the information to the headquarters of indigenous organisations, state agencies, oil companies and mass media through cloud-based synchronisation and transmission.

Evidence

The evaluation showed that community-based, high-tech environmental monitoring of extractive industries, especially in remote, hard-to-reach areas, can be an effective tool to increase transparency. The treatment led to an increase in the detection of environmental liabilities such as oil spills, as well as an increase in reporting to state authorities and by the media. The treatment increases the number of detections by approximately one detection every three months by each team, and the number of liabilities reported to the state by one report per year per team.

Monitoring teams detected a total of 367 environmental liabilities – 212 in Ecuador and 155 in Peru. On average, each team detected 0.6 liabilities per month, slightly more than one event every other month. Detection was more common in Ecuador than in Peru, and more common amongst treatment teams compared to control teams. Although reporting by the media increased in relation to the average number of reports, this was mostly because media reporting was low before the intervention.

Evidence impacts

Ecuadorian government makes evidence-informed changes to a new law

Based on evaluation findings, the researchers recommended that policymakers create the political and legal mechanisms required to ensure the safety and effectiveness of the community-based monitors. Informed by the evaluation evidence, Ecuador's lawmakers revised the draft of a new law, Ley Orgánica para la Planificación Integral de la Circunscripción Territorial Especial Amazónica, to include community monitoring of environmental degradation in the Amazon. In 2017, the researchers and implementers presented monitoring and qualitative data from the evaluation to the committee drafting the law, and made the case for recognising community monitoring as a just and effective mechanism to monitor environmental degradation. Following the presentation, the 2018 law regulating economic activity, particularly the extractive industry, in the Amazon territory included an article on community-based environmental monitoring.

Suggested citation

International Initiative for Impact Evaluation (3ie), 2020. *Strengthening community-based environmental monitoring in the Amazon* [online summary], Evidence Impact Summaries. New Delhi: 3ie.

Related

www.asambleanacional.gob.ec/es/blogs/comision-de-la-biodiversidad-y-recursos-naturales/56540-comision

This blog records the presentation made by Amazon Defense Coalition using evaluation data to argue for legal guarantees that recognise community environmental monitoring activities as a

right of the inhabitants of the territory.

Evidence impact summaries aim to demonstrate and encourage the use of evidence to inform programming and policymaking. These reflect the information available to 3ie at the time of posting. Since several factors influence policymaking, the summaries highlight contributions of evidence rather than endorsing a policy or decision or claiming that it can be attributed solely to evidence. If you have any suggestions or updates to improve this summary, please write to influence@3ieimpact.org

Last updated on 3rd November 2020