International Institute of Social Studies

COMMUNITY-BASED MONITORING OF OIL EXTRACTION IN ECUADOR: LESSONS LEARNED

Introduction

Commercial exploitation of oil began in the Northern Ecuadorian Amazon in the 1970s. Since then, oil extraction has expanded enormously. Local inhabitants suffer from exposure to oil pollution, including oil spills, toxic waste and gas flaring.

Research question
Can community based-based monitoring (CBM) help indigenous communities track, document and report liabilities?

CBM in a nutshell

Citizens and communities monitor...
The foundation of CBM is the idea that citizens can find, monitor and report environmental liabilities.

... often using technology...
Such as sensors, data loggers, cameras, GPS devices, drones, mobile phones and real-time reporting.

... and systematically collect information.
Which can be shared with relevant actors such as regulators, mass media, NGOs and activists.

CBM initiative in Ecuador

1. **Establish teams of monitors**
Selected by Frenta de Defensa de la Amazonia & Union of Affected People by Texaco (UDAPT)
2. **Distribution of technological package**
Monitors received drone and mobile phones with GPS, photography and reporting applications.
3. **Training of monitors**
Lessons on ecology, environmental testing, geographical information systems and reporting.
4. **Develop baseline**
In order to identify past liabilities and fill existing gaps in existing (official) records.
5. **Detect and communicate environmental liabilities**
Monthly monitoring using technological package. Information is verified and uploaded to web-mapping portal www.monitoreoparticipativo.org

Results

28 months
(2015-2017)

1.37 million
hectares

212 liabilites
detected

Of the 212 liabilities detected:
- **25%** were new cases of oil pollution
- **42%** of the cases pre-dated the monitoring
- **33%** concerned other forms of pollution

Lessons learned

Existing functional social organizations are key
Strong community organizations with enough funds, time and experience are critical for establishing CBM.

Crucial to construct baseline of past liabilities
To fill in gaps due to ineffective or ad hoc state monitoring and allow monitors to track and compare changes.

CBM strategy needs to be flexible
So that it can adjust to environmental and political changes and operate with a long-term horizon.

CBM is a means not an end
Data collection is the easier step. The challenge is using data especially in the face of administrative and legal barriers.

Media attention is difficult to achieve and sustain
Establishing direct contacts between monitors and reporters may help in getting coverage in the media.

Technology helps
Impact assessment found that CBM based on technology increased the detection rates of environmental liabilities.

Conclusion

The study found that CBM contributed to detection and reporting of oil liabilities. In this regard, the potential of CBM is large. Lessons learned may be relevant for indigenous communities facing other expanding extractive frontiers, such as agriculture, now the main driver of worldwide deforestation.

In working towards realizing Sustainable Development Goal 15 on life on land, which includes sustainable forest management, the UN has called on the inclusion of local communities and their traditional knowledge. CBM offers a tool to do just that.

> **“ Meaningful change was achieved by providing local communities with the evidence and arguments to hold extractive industries accountable for their actions, and in the long term, by providing a systematized environmental record that could be used by communities, state authorities and civil society. ”**

Note: For more information about ongoing ISS research on CBM in the Amazon see: **www.iss.nl/en/research/research-projects/all-eyes-amazon**

Based on Carlos F. Mena, Murat Arsel, Lorenzo Pellegrini, Marti Orta-Martinez, Pablo Fajardo, Ermel Chavez, Alexandra Guevara & Paula Espin (2020) **Community-Based Monitoring of Oil Extraction: Lessons Learned in the Ecuadorian Amazon, Society & Natural Resources**, 33:3, 406-417, DOI: 10.1080/08941920.2019.1688441 and Pellegrini, Lorenzo. **Community monitoring of socio-environmental liabilities with advanced technologies in the Ecuadorian and Peruvian Amazon** (New Delhi: 3ie, International Initiative for Impact Evaluation, 2019).