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A Second Hydrocarbon Boom Threatens the Peruvian Amazon



A rapid and unprecedented proliferation of oil and gas concessions threatens the megadiverse Peruvian Amazon. The amount of area leased is on track to reach around 70% of the region, threatening biodiversity and indigenous people. This is one of the central conclusions from a pair of researchers from the Institut de Ciència i Tecnologia Ambientals (ICTA) of UAB, and the Washington DC-based NGO Save America's Forests, who have, for the first time, documented the full history of hydrocarbon activities in the region and made projections about expected levels of activity in the near future.

The study, conducted by Martí Orta and Matt Finer, researchers at ICTA and Save America's Forests, respectively, and published in "Environmental Research Letters", reconstructs the full history of hydrocarbon activities in the region and makes projections for the next five years. Researchers have found that more of the Peruvian Amazon has recently been leased to oil and gas companies than at any other time on record. There are now 52 active hydrocarbon concessions covering over 41% of the Peruvian Amazon, up from just 7% in 2003. The authors

warn that the region has now entered the early stages of a second hydrocarbon exploration boom and that the amount of area leased to oil and gas companies is on track to reach around 70% of the region.

The collected data reveals an extensive hydrocarbon history for one of the greatest rainforests on Earth -well over 100,000 km of seismic lines and nearly 700 wells have resulted in the extraction of nearly 1 billion barrels of oil over the past 70 years from the Peruvian Amazon, the second largest land area of the Amazon Basin after Brazil. The first major hydrocarbon exploration boom took place in the Peruvian Amazon in the early to mid 1970s, immediately followed by an exploitation boom from the late 1970s to the early 1980s.

The authors also discovered a number of interesting trends. For example, there has been a steady decline in Amazonian oil production ever since its peak in the early 1980s. In contrast, natural gas production from the Peruvian Amazon has been skyrocketing since 2004 and the start of production at Camisea. The year 2009 had the lowest oil output in over 30 years, but marked the sixth consecutive year of rapidly increasing natural gas production.

The vast majority of these concessions overlap sensitive areas, such as official state natural protected areas and indigenous peoples' lands. Nearly one-fifth of the protected areas and over half of all titled indigenous lands in the Peruvian Amazon are now covered by hydrocarbon concessions. And perhaps most disturbingly, over 60% of the area proposed as reserves for indigenous peoples in voluntary isolation are covered by oil concessions. The authors stress that one of the more troubling aspects of the new boom is the expanding hydrocarbon frontier, as much of the last remote and pristine tracts of rainforest left in the Amazon are now fair game for oil and gas companies.

As an example, the researchers highlighted Block 67, operated by Perenco. It is located in one of the most megadiverse and intact corners of the Amazon, but it is slated for major development as it sits on top of over 300 million barrels of probable oil reserves. Block 67 also overlaps a proposed reserve for uncontacted indigenous peoples.

The first hydrocarbon boom of the early 1970s brought with it severe negative environmental and social impacts, according to the authors, and all indications are that this second boom will do so as well. Indeed, in 2009 there was a deadly conflict between indigenous protestors and government forces in Bagua, Peru, largely stemming from government efforts to lease or sell indigenous lands without their free, prior and informed consent.

The authors call for a rigorous policy debate, including a greater analysis of potential environmental and social impacts and how they could be effectively avoided or at least minimized. For example, the authors highlight Ecuador's innovative Yasuni-ITT Initiative, which seeks international contributions in exchange for leaving the massive ITT oil fields untapped beneath a megadiverse Amazonian national park. Given that Block 67 is just across the border from ITT, the authors conclude the paper by suggesting that perhaps Peru employ a similar strategy.

Researchers have compiled official government data collected by the Peruvian Ministry of Energy and Mines and the Peruvian state energy companies Petroperú and Perúpetro.

Specifically, they extracted information dealing with contracts, seismic testing, well construction, oil development, and natural gas development for Amazonian oil and gas concessions for each of the past 40 years. Information for activities prior to 1970, when there were only two producing oil concessions, has been pieced together as much as possible from these documents as well.

Impacts on indigenous people and biodiversity impacts were gauged using Geographical Information Systems to calculate overlaps among hydrocarbon concessions and different land-use categories: areas in the official protected area system, titled indigenous lands and Territorial Reserves created for the protection of indigenous people in voluntary isolation.

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References

"A second hydrocarbon boom threatens the Peruvian Amazon: trends, projections, and policy implications". Matt Finer and Martí Orta-Martínez. Environmental Research Letters. Volume 5, Number 1 : 014012. (Feb. 2010).

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