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Serendipitous conservation: Impacts of oil pipeline construction in rural northwestern Ecuador

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ABSTRACT

Since the early 1980s investment has moved into the Nono-Tandayapa-Mindo-Los Bancos region of NW Ecuador largely through a rapid expansion of ecotourism facilities. Cows and pastures have been replaced with lodges and secondary growth forest. The creation of the Mindo-Nambillo Bosque Protector that was subsequently declared Birdlife International's first IBA (Important Bird Area) in South America, the completion of the tarmac Calacalí-Independencia Highway in 1981 connecting Quito, Ecuador's capital, to Mindo and then the coast, and the completion in 2002 of the New Trans-Andean pipeline Oleoducto de Crudos Pesados (OCP) seems to have facilitated this expansion. The new Calacalí-Independencia road cut transit times from Quito to Mindo from 6 to 8 h to 2 h while the new OCP pipeline access road, renamed the "Ecoruta Paseo del Quinde," provides access to the upper Choco endemic bird area. It appears that the OCP construction protests were a unifying force for good, motivating four distinct groups to challenge the building of the OCP oil pipeline; to try to develop ecological sound, sustainable development in Mindo, the Tandayapa Valley and Los Bancos; purchase conservation tracts; and initiate non-local investment in these three locations. Drawing on findings from unstructured interviews with NGO representatives, ecolodge owners, and key environmental activists in the region, this paper examines how Nono-Mindo-Tandayapa-Los Bancos region has become the most popular ecotourism destination in Northwest Ecuador.

1. Introduction

Since the mid-1960s, oil has been an economic and hence political necessity in Ecuador (Gerlach, 2003). In 1987 a rupture of the original Trans-Ecuadorian Oil Pipeline System (SOTE) caused by an earthquake near Baeza led to a 50% reduction in oil exports and a 46% decline in GDP. In fact since 1972 the original 450 km trans-Ecuadorean pipeline (SOTE) has ruptured at least 60 times, spilling in excess of 614,000 barrels of oil (Soltani et al., 2001; Knudsen, 2003). In addition, recent political crises that led to the presidency changing hands eight times in 10 years, including five presidents in 1997 alone, occurred at least in part because of such disruptions in oil production and thus fluctuations in revenues (Gerlach, 2003; Sawyer, 2004).

The proposed construction of a new oil pipeline Oleoducto de Crudos Pesados (OCP) in 2000, intended to facilitate the transport of larger volumes of crude from the Amazon basin, across the Andes to refineries on the coast, was to cross several ecologically-sensitive areas of northwest Ecuador. In reaction to this pipeline expansion, a complex web of resistance emerged in northwest Ecuador. This variegated environmental movement was centered on the town of Mindo and the nearby Tandayapa Valley, an area that had recently begun to promote itself as a significant bird-tourism destination. The broader economic and political forces driving the oil pipeline construction clashed with local, national, and international resistance in the Mindo area, resulting in a unique case of successful conservation in the wake of the failure to block or re-route the pipeline.

In what follows, we argue that the case of the OCP oil pipeline expansion through northwest Ecuador should be viewed as a case of unintended and unforeseen conservation, as the pipeline construction helped Mindo to solidify its emerging identity as one of Ecuador's primary ecotourism destinations.

2. Conservation, oil and development

Worldwide, tropical forests are disappearing at alarming rates (Achard et al., 2002). Many argue that focusing conservation efforts on biodiversity 'hotspots' is failing (Myers, 1993; Terborgh, 1999). For instance, by 1988 only 8% of western Ecuador's prime forest

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remained (Dodson and Gentry, 1991), but conservation efforts still abound with some success (Rudel, 2000; Welford, 2000; Welford and DeFalco, 2003; Widener, 2007, 2009). Looking eastward to the Ecuadorian Amazon, conservation has been hit-and-miss. For instance, approximately 56% of the prime Amazonian forest remains (Rudel et al., 2002) but Yasuni National Park, the largest park in the Ecuadorian Amazon, is under significant threat from government support of the oil extraction industry (Finer et al., 2009; Pellegrini et al., 2014). Meanwhile, oil extraction activities near Cuyabeno Wildlife Reserve continue to threaten its indigenous people and wildlife (Kimmerling 1991; Lerner and Meldrum, 1992; Gould, 1999; Wunder, 2000). Moreover, there exists a fundamental linkage between the oil and tourism industries. As Widener (2009) aptly notes, flow and mobility characterize both. She explains, "Both the oil and tourism industry extract and supply a resource (oil) or an experience (tourism) to nonlocal consumers, who enjoy the benefits of both industries, without the social, economic, and environmental burdens associated with residing alongside either one" (Widener 2009; 270). A persistent socio-spatial divide, therefore, exists between the benefits and burdens of both industries, given that the people and places that benefit are generally quite distinct from those who bear the negative impacts.

Conflicts between developers and conservationists that revolve around oil exploration, extraction and transportation (in particular oil pipelines) are not new. In Alaska debates have raged since 1977 on whether to drill in the Arctic National Wildlife Refuge (ANWR) (Burger, 2001; Mitchell, 2001; Schlosser, 2006). In this case, the debate revolves around estimates of recoverable oil versus the harm to wildlife, in particular the Porcupine Caribou. Created in 1980 by Congress and recently added to by President Obama, ANWR has survived and grown, but it does not illustrate typical responses in the Global North or Global South. In the Global South the exploration, extraction and transportation of 'black gold' has proved to be mostly a curse for economies (Karl, 2004; Kolstad and Soreide, 2009), democracies (Schubert, 2006) and the environment (Peet and Watts 1996; Barragán and Ramos, 2002). Oil-exporting economies typically have high poverty rates (i.e., Nigeria), poor health care, high child mortality and low education attainment rates (Karl, 2004). Oil dependence concentrates power in the hands of the elite in 'secure communities', fosters corruption and encourages rent-seeking behavior (where individuals attempt to increase their share of wealth without creating any new wealth) (Schubert, 2006; Kolstad and Soreide, 2009). Pools of toxic leaked oil in the Amazon appear to be ubiquitous with Ecuadorian oil exploration (Barragán and Ramos, 2002).

Therefore, suggesting oil pipeline construction or mining development or the occurrence of a disaster can lead to positive economic and/or environmental benefits is highly unusual. Nevertheless, dark and human misery tours, collectively known as 'dark tourism', are a growing economic sector (Lennon and Foley, 2000). Widener (2007, 2009) argues that oil disasters (and implicitly all mining developments) that attract media attention can inspire community, national and transnational challenges to oil and mining developments such as Podocarpus NP (Noboa, 1997; Tello et al., 1998); stimulate tourism infrastructure growth (Widener, 2007, 2009); and mobilize communities, for example Mindo, to seek alternatives to oil development such as expanding tourism (Widener, 2007, 2009). This latter example speaks to the notion of nature-society hybrids (Zimmerer, 2000) where this example of conservation is part of a boom in conservation that illustrates a reworking of capitalist modernity. In other words, the growth of an ecotourism economy in Mindo in a post-OCP environment represents part of the 'ecological phase of capital' (Escobar, 1995) or the 'commodification of nature' (O'Connor, 1994): so rather than destroy nature, societies or rather communities (in this case Mindo and more recently Milpe in the face of external pressures) attempt to conserve nature and profit from it.

Nature-society hybrids come in many forms: for instance, National Parks (NPs), private reserves or private protected areas that include game reserves, and conservation easements. All of these 'protected areas' exhibit a clearly defined spatial area that is recognized, protected and managed. Most nature-society hybrids, especially private parks, are designed to conserve biodiversity while making money (Sekercioglu, 2002, 2003; Ferraro and Pattanayak, 2006), yet many publicly funded NPs make money indirectly for adjacent communities through various ecotourism activities (Hvenegaard et al., 1989; Sekercioglu 2002, 2003; Glowinski, 2008). Furthermore, many nature-society hybrids fail to preserve or conserve nature but rather accelerate the degradation of the landscape, cause declines in biodiversity, and increase poverty among locals (Adams and Hutton, 2007; Di Minin and Toivonen, 2015). Only with the recent introduction of both the wolf and forest 'let it burn' policy in Yellowstone NP has Yellowstone started to return to a pre-European landscape and pre-European levels of biodiversity (Ripple and Beschta, 2011).

Several immediate questions come to mind from the above discussions, including who or which organization(s) attempted to mobilize the communities to conserve and subsequently commodify nature in and around Mindo and Milpe; who benefitted from this nature-society hybrid; are these nature-society hybrids sustainable now and in the future; how much land is actually conserved; and has conserving the spatial landscape come at the expense of understanding the space-time linkages within the landscape? In other words, are the communities of Mindo and Milpe assuming what forest remains is pristine and previously unaffected by society? Given the confines of this paper, we will address the first two questions and comment sparingly on the last three, leaving a full analysis to a later work.

Through a combination of secondary sources, informal discussions, and formal interviews with over 20 stakeholders in the region, we analyze the multifaceted reactions to the proposed oil pipeline across the Mindo area of northwest Ecuador and the consequences of its ultimate construction. This study builds on the existing literature by providing an updated analysis of the impact of the OCP pipeline controversy, while also identifying a more fragmented and variegated social movement/response than has been found previously. The paper is organized as follows. We first discuss the economic, political and social significance of oil exploration and export in Ecuador. We then briefly turn to land tenure and forest fragmentation before analyzing the effects of the conflict over the OCP pipeline expansion in northwest Ecuador. Finally, we conclude with some thoughts and suggestions on future research regarding conservation, reforestation, and private ecotourism ventures in this region of Ecuador.

3. Oil: an economic, political, and social necessity

Since the first export of oil from Ecuador, in addition to funding economic growth, revenues have been used to support social-welfare programs (e.g., subsidized, cheap gasoline and cooking gas, political-manipulation and organized labor and indigenous oversight programs for decades) (Perreault, 2003). Thus continuous and increased oil production and its exports have remained critical to the political lifespan of most governments in Ecuador over the past 50 years. This has necessitated the building and maintenance of several pipelines across the Andes from oil production fields in the Amazon to Ecuador's single oil exporting facility in Esmeraldas Province on the Pacific coast. Expansion of this capacity has become necessary as political programs and social-welfare programs have grown exponentially since the 1970s.