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Struggles for recognitional justice through payments for ecosystem services contracts in Ecuador's Andes

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ABSTRACT

Programs based upon payments for ecosystem services may carry pervasive attitudes, ideas, and language that confront pre-existing institutional arrangements for land management and local concepts of socio-environmental relationships. Through an empirical case study of a water trust fund payments for ecosystem services model in the Ecuadorian Andes, this research examines contracts as an important component of conservation incentive projects that can reveal contention over the representation of human-environment relationships and environmental governance institutions. In local communities charged with caring for targeted ecosystems. The study highlights how neoliberal visions of environmental management are challenged and reworked by communities in an effort to gain justice through recognition and visibility for pre-existing collective land management practices. While this analysis demonstrates how underlying neoliberal assumptions about socioenvironmental relationships may inform water trust fund conservation interventions, it also shows the role of local agency in co-constituting landscape management outcomes and underscore the unevenness of neoliberalism present in the various components of a payments for ecosystem services model operating at different sites and scales.

1. Introduction

Perceptions of injustice often rest at the heart of conflicts over nature, particularly within environmental governance interventions (Sikor and Newell, 2014). Payments for Ecosystem Services (PES) is one such form of environmental governance intervention that faces justice-oriented questions about the distribution of benefits, the inclusion or exclusion of participants, and the recognition of local socio-natural relations, all affecting how targeted people and communities interact with and experience conservation arrangements (Sikor et al., 2014). Scholars assert that considerations of justice are crucial for reducing conflict over conservation and fully achieving the transformative change necessary to successfully confront current environmental crises (Fougères et al., 2022; Massarella et al., 2021).

In particular, engagement with the justice dimension of recognition can provide insight into how the "status, values, institutions, and interests of diverse peoples" are integrated into conservation interventions (Fougères et al., 2022, 5). It can likewise support critical assessments of the power dynamics shaping conservation program development, implementation, and evaluation (Massarella et al., 2020). Despite this, recognition receives little attention in conservation literature examining justice (Friedman et al., 2018).

This article contributes to the literature on recognitional justice in PES conservation arrangements through an empirical case study of the Ecuadorian water trust fund arrangement called *Fondo para la proteccion del agua* (FONAG). In this arrangement, rural communities in Quito's watersheds make contractual agreements with FONAG to pursue conservation activities in the paramo, an alpine humid grassland ecosystem critical for water resource provision. In return, FONAG provides communities with development projects in an in-kind exchange supporting the rearrangement of land uses and land management practices. Conservation activities have required local labor inputs for planting vegetation, collecting litter, and removing livestock. They have also involved policies prohibiting local burning or hunting practices. Development projects, also called productive projects, have supported vegetable gardens, guinea pigs, pasture improvement, and ecotourism.

I have been following the development of FONAG as a long-term case study starting in 2010. My data and analysis presented in this article, however, comes from a prolonged period of in-country fieldwork and examines the iterations of FONAG contracts produced during the development of a conservation agreement in the community of Quinchucajas, Ecuador over seven months in 2013. I particularly examine how the evolution of FONAG's conservation contracts reflects a community's struggle to gain broader recognition of local socio-

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environmental relations.

Although mostly overlooked as a focal point of research, contracts form a core part of PES interventions. Indeed, PES itself has been called the "frontrunner of contractual conservation" (Wunder, 2015, 241). Contracts are a direct tool of environmental governance connecting visions of socio-environmental relations from agents across various sites and scales of a conservation program to those charged with directly caring for the targeted ecosystem. Contracts are essential to PES because they link ecosystem service providers –i.e., people and communities– to those willing to pay for the maintenance and continuation of those services. They define the problems of human interaction with an ecosystem and outline the obligations of those residing in and around it to address those problems. Conservation contracts are thus not apolitical, but include assumptions about human-environment relationships and institutions mediating those relationships (Milne and Adams, 2012).

Environmental discourses within contract agreements reflect power relations and represent a particular ordering of the landscape. These discourses can have far-reaching effects that may imprint on the biophysical environment itself as people who accept and perpetuate the discourse in turn define environmental problems and their sources, and then act upon those problems for the sake of conservation (Mels, 2009). Nevertheless, power relations are situated and include relational practices of dominance and resistance. Discourses refract power relationships by privileging and normalizing certain representations of reality. Examining how documents mediating human-environment relationships, such as conservation contracts, are rescripted to shift representations of landscapes and socio-environmental relations offers insight into the evolution of agreements, including the points of contention and negotiation (Jepson, 2012).

Questions about the justice dimension of recognition in forming and implementing environmental governance arrangements such as PES also hinge on debates about neoliberal governmentality and the role of agency in justice outcomes. Some authors suggest that actor agency is the most crucial factor in justice outcomes (e.g. Corbera, 2015; Shapiro-Garza et al., 2020), while others highlight that the opportunities for justice in market-oriented conservation may be limited itself by a neoliberal framework (e.g. Fletcher and Büscher, 2019; Matulis, 2014). As both agency and underlying framework undoubtedly contribute to conservation arrangement outcomes, my intention with this article is not to argue for the importance of one or the other but instead to 1) contribute an empirical study to the existing literature on the justice dimension of recognition in PES, 2) illustrate how justice issues of recognition may arise over neoliberal discourses shaping conservation agreements and 3) explain how agents on a local scale can experience and then counter recognitional injustice to redirect narratives.

I observe a rescripting of neoliberal narratives about socio-environmental relationships by tracing the discursive shifts within iterations of FONAG's contracts. Ideas presented as normalized in the first iteration of the contract are actively challenged and revised in the second document. Nevertheless, the discursive shift is incomplete, as the final contract retains portions of the original neoliberal frame. The study highlights how communities targeted as the labor for PES can counter and rework neoliberal visions of environmental governance and how power can be claimed or lost through the process. While this analysis demonstrates how underlying neoliberal assumptions about socio-environmental relationships may inform PES conservation interventions, it also shows the role of local agency in co-constituting landscape governance outcomes and the unevenness of neoliberalism's influence within the various components and sites comprising a PES arrangement.

The next section of this paper will examine environmental justice as connected to ecosystem services conservation. After contextualizing the study within a broader movement of resistance to neoliberal environmental governance in Ecuador, I then present the case of Quinchucajas and their negotiations over the land and labor institutions within the contract agreements. I close with a discussion of how attention to different forms of justice can advance knowledge on the production of conservation landscapes organized around the concept of ecosystem services generation.

2. PES and the Justice Dimension of Recognition

Although several definitions of PES exist, the most widely cited is that from Wunder (2005), describing it as a voluntary and conditional agreement in which at least one 'buyer' pays at least one 'provider' for activities aimed at securing a targeted ecosystem service (Kaiser et al., 2021). This definition positions the buyer as a beneficiary of ecosystem services such as carbon sequestration, water capture and filtration, and habitat for biodiversity. The provider, then, acts as a land steward charged with managing the ecosystem's site to produce those services. PES, therefore, derives from a utilitarian perspective of socio-environmental relations in which the concept of ecosystem services is grounded in an understanding of nature as deriving its value from the potential benefits (i.e., services) it offers to humanity (Gomez-Baggathun et al., 2010; Wegner, 2016). As such, ecosystem services are also conceptualized in terms of their exchange, or instrumental, value.

From this perspective, environmental degradation is ultimately the result of improper incentive structures. Humans over-exploit nature and degrade ecosystems because economic incentives exist to do so. The logic follows that attaching strong incentives to protect and maintain ecosystems and the services they produce would result in conservation (Engel et al., 2008). By employing positive and conditional economic incentives to reward providers for their conservation efforts, PES seeks to internalize market externalities and imbue ecosystem services with monetary value (McElwee et al., 2014). Many scholars thus emphasize incentives as a key feature of PES regardless of whether it exists within a competitive arrangement (e.g. Muradian et al., 2010; Sommerville et al., 2009; Tacconi, 2012).

PES schemes accordingly frame environmental problems as primarily technical issues that can be addressed by simply applying the correct incentives (Gomez-Baggethun and Muradian, 2015). However, PES and its supporting logics are neither ideologically neutral nor apolitical (Gomez-Baggathun et al., 2010). Rather, PES reflects a neoliberal rationality that broadly identifies and promotes markets as the ideal institutional framework for organizing society to achieve overall well-being (Fletcher and Büscher, 2019). The practices associated with neoliberalization, including decentralization, privatization, commodification, and marketization, among others, aim to facilitate the spread and operation of markets as a governance mechanism (Igoe and Brockington, 2007; Holmes and Cavanagh, 2016; Castree, 2010). Discursively, neoliberal policy is represented as 'common sense' and includes imperatives for economic growth, increased efficiency, and enclosure (Perreault and Martin, 2005; Bakker, 2007; Büscher and Dressler, 2012). Engaging with Fletcher and Büscher (2017)'s conceptualization of neoliberalism as informed by Marxist and Foucauldian scholarship, I recognize 'neoliberalism' as not only a capitalist mode of accumulation, but a governmentality directing the design and implementation of incentive structures to shape a subject's decision-making and actions.

Environmental governance mechanisms privileging particular world-views may support and obscure power imbalances that directly impact environmental justice outcomes (Berbés-Blázquez et al., 2016). Scholars have accordingly urged for the examination of conservation arrangements via a multi-dimensional formation of environmental justice[1] (Martin et al., 2014). The core parts form an overlapping triad including 1) a distributive dimension addressing the fair apportioning of costs and benefits of environmental interventions, 2) a procedural dimension addressing the process of environmental decision making and

[1] The triad is also interchangeably called radical environmental justice (Massarella et al., 2020) or equity (see Dawson et al., 2018; Mabele, 2020; Pascual et al., 2014; Friedman et al., 2018).

participation, and 3) a recognitional dimension acknowledging and accounting for differences between stakeholder experiences, knowledge systems, values, identities, and institutions (Schlosberg, 2003, 2007).

In broader conservation research, analyses focusing on recognitional justice are still needed. A systematic literature review of multi-dimensional justice in conservation research identified recognitional justice as an analytical focus in less than 10% of publications (Friedman et al., 2018). The lack of attention to recognitional justice is also evident in literature addressing justice issues in PES, as papers tend to focus on examining distributive and procedural justice dimensions (Wegner, 2016). Regarding distributive justice, advocates claim that PES should support a just allocation of the costs and benefits of conservation, in that its mechanism aims to voluntarily achieve conservation while compensating those who traditionally bear its costs (see Ferraro, 2001; Frank and Muller, 2003). Further, they highlight the potential for PES to support procedural dimensions of justice by providing opportunities for broader participation and bargaining in an alternative to exclusionary, top-down conservation approaches (Wegner, 2016). Critics assert that these arguments, however, fail to acknowledge uneven power relationships that limit stakeholder bargaining abilities (Lele, 2013).

Recognitional justice is crucial in analyses of PES-based environmental governance because it emphasizes the need to make visible and acknowledge the differences between stakeholder experiences and the cultural and political institutions that contribute to uneven power relationships in environmental governance platforms (Schlosberg, 2007, 2004). As such, it can reveal the points of conflict stemming from different visions, histories, and knowledges of an ecosystem as held by various interests (Forsyth and Sikor, 2013). As Sikor et al. (2014, 525) observe, "the environmental behavior of stakeholders is likely to depend on how they perceive the legitimacy and fairness of ecosystem governance." Thus, recognitional justice is crucial for sustainability outcomes (Dawson et al., 2018). However, governance interventions are informed by particular knowledge regimes and therefore recognize and privilege some forms of knowing and valuation while overlooking or even suppressing others (Gomez-Baggathun et al., 2010; Lele, 2013).

Proponents of PES and other formations of neoliberal conservation may assume that all stakeholders hold —or should hold—a similar understanding of socio-environmental relationships based on utilitarian valuation. Built on a neoliberal worldview, PES schemes privilege certain knowledge forms and ways of interaction between people and the land, as well as among people themselves (Berbés-Blázquez et al., 2016). Critical scholars assert that neoliberal conservation arrangements may therefore ignore or attempt to silence alternative forms of knowledge and non-utilitarian relational values embedded in many non-western and indigenous conceptualizations of socio-environmental relationships (Himes and Muraca, 2018; Fletcher and Büscher, 2017).

Relational values are collectively held and derive from interpersonal relationships within a group and with nature to constitute a meaningful and satisfying life (Chan et al., 2016; Ishihara, 2018). They can take diverse formations historically rooted in a place's socio-ecological context. While neoliberal interpretations of the world divide humans from nature, the firm separation of human and non-human relations is nonsensical in many cultures, as interactions between entities regularly take place and are viewed as ongoing, dynamic, and inseparably connected within the lived experience of the world (Jackson and Palmer, 2015). Land interactions and the concept of territory thus link together within a web of relationships shared by both human and non-human beings (Himes and Muraca, 2018).

Environmental governance mechanisms with neoliberal underpinnings particularly contribute to questions about injustice arising from misrecognition (Bétrisey et al., 2018). Misrecognition, also sometimes called mal-recognition, can be understood as a social status injury and social subordination (Fraser, 1999, 2000). Status misrecognition may come about through either a pattern of non-recognition akin to being rendered invisible, or may be performed through acts of disrespect such as the routine reduction of a group of actors through stereotypical representations (Honneth, 1996). In either case, some actors are given a lesser status than others and are treated as such. To achieve justice, recognizing difference is not enough; an aspect of redistribution directed towards creating parity in societal participation is necessary (Fraser, 2001).

Given the importance of the justice dimension of recognition and the role of relational values in driving the social and material outcomes of conservation, recent scholarship urges further scrutiny of assumptions driving ecosystem services conservation arrangements such as PES, and has called for research examining non-utilitarian relational values (e.g Ishihara, 2018). Himes and Muraca (2018) suggest that doing so would encourage greater nuance in understanding human-environment relationships and support justice by illuminating power dynamics. Along this vein, Van Hecken et al. (2015, 123) call for 'power-sensitive' studies of PES that recognize environmental governance formations as "intercultural confrontations where multiple and contrasting systems of norms and values, as well as cultural and social logics, interact at different levels." Scholars have furthermore called for empirical research investigating justice conflicts in environmental interventions structured by neoliberal rationalities and the role of agency in shaping PES outcomes (Fletcher and Büscher, 2019; Martin et al., 2014).

Examining the evolution of contract documents in a PES offers an excellent opportunity to identify the points of conflict stemming from diverse understandings of socio-environmental relations at a local level and the ways stakeholders reconcile them—or not. As such, understanding the role of recognitional justice in conflict during the development and negotiation phases of a PES intervention becomes a focus of this article. Because activities at a local scale occur in a larger context, I examine the role of neoliberal policy and its contestations in shaping the broader landscape of ecosystem services conservation in Ecuador in the following section.

3. Neoliberal Environmental Governance in Ecuador and FONAG's Origins

Like many countries in Latin America during the latter decades of the 20th century, Ecuador underwent significant political and financial turmoil. National debt soared into the 1990s and international financial institutions pushed Ecuador to reorient its economy towards orthodox neoliberal policies promoting export-oriented industrialization and the intensification of market governance aimed at reducing trade barriers, government subsidies, and public-sector ownership (Andolina, 2012). As in Chile, Uruguay, Bolivia, and Colombia, many of Ecuador's policy reforms targeted water and other publicly-managed natural resources (Harris and Roa-Garcia, 2013).

These shifts promoted environmental governance through market mechanisms and expanded the involvement of international organizations and agencies who structured environmental objectives as a means to achieve social development (Boelens et al., 2015; Sneddon, 2013; Perreault and Martin, 2005). The World Bank particularly believed that privatization was necessary for providing water access to marginalized people, as it considered the goal otherwise unattainable because of inefficient state agencies (Goldman, 2007). The Inter-American Development Bank and the US Agency for International Development (USAID) further strengthened this policy model in Ecuador by supporting water rights liberalization and water institution reforms (Andolina et al., 2009). In tandem, these influential entities identified water as a commodity under a demand-based paradigm.

Embedded in this context, and with support from the Inter-American Development Bank, the public water company serving Ecuador's capital city of Quito became a target for privatization under the auspices of more efficient and equitable provision. This shift fueled widespread popular protests in 2002 against neoliberal reforms. Indigenous and campesino groups rallied against the move to privatize water, claiming that the emphasis on the exchange value of water overlooked and threatened water's relational values as a source of life and would lead to

alienation from water access (Boelens, 2006). Debates over water privatization extended to include questions over the governance of ecosystem services (Kauffman, 2017).

The protests ultimately supported a major shift in national political rhetoric on environmental governance with the presidential election of Rafael Correa in 2006 and the rewriting of Ecuador's national constitution in 2008 (Harris and Roa-Garcia, 2013). These are reflected in Article 314 declaring the State as "responsible for the provision of the public services of potable water and irrigation," and Article 74 declaring that "Environmental services will not be susceptible to appropriation; their production, benefits, usage, and exploitation will be regulated by the State." Despite the discursive appearance of the national government pivoting from neoliberal development policies, scholars point out that Ecuador continued to operate largely on the same path with maintaining old political alliances and continuing neoliberal policy practices (e.g. Valladares and Boelens, 2019; Harris and Roa-Garcia, 2013). With the government's unfulfilled promises of change and a continued prioritization of the exchange value of water rather than social and relational values, protestors continued to crowd the streets of Quito in events like the march for 'Water, Life, and Dignity' that brought thousands to the city in March 2012.

The context of neoliberal reform in the 1990s also provided the conditions for FONAG's creation. International non-governmental organizations assumed key roles in environmental governance during this period, as they aimed to strengthen environmental protection to reconcile the presumed degradation that accompanied economic growth (Brockington et al., 2008). Backed by the US Agency for International Development (USAID), The Nature Conservancy (TNC) aimed to strengthen protected areas in Ecuador and targeted six parks and their surrounding landscapes adjacent to Quito. Many of the targeted parks partially overlapped with watersheds supporting Quito's water supplies. Drawing on a utilitarian framing particularly of the paramo ecosystems within those watersheds, TNC eventually spearheaded a plan to convince urban water users to pay for land management activities aimed at their protection and maintenance. Forming an official partnership with Quito's water company in 2000 to create FONAG, TNC envisioned it as a mechanism to simultaneously fund efforts for conserving biodiversity and protecting the city's water resources originating from the high-altitude humid grasslands (Joslin and Jepson, 2018). A trust fund finances the work of FONAG, into which a group of constituents make monetary contributions. The constituents have grown from TNC and Quito's public water company to now also include two private beverage bottling companies, an agricultural consortium, and Quito's public electric company.

Though not a constituent, USAID remained FONAG's largest donor until Ecuador ended its formal relationship with the agency in 2014. Through its funding agreements, USAID heavily influenced the structure of FONAG's interventions, including outcome measurements and conceptualizations of community agreements that emphasize translating financing into a discrete unit area of land conserved (Joslin, 2019). USAID documents evaluating FONAG underscore its interpretation of the program's structure as supporting the management of water as a commodity. A 2011 report provides an example of this conceptualization stating, "Nowadays fresh water is a valuable good that is produced, sold, and consumed, and therefore it is necessary to invest in protecting water resources" (USAID United States Agency for International Development, 2011, 29). USAID was so involved in shaping FONAG's on-the-ground interventions that FONAG's contracts were marked in the header as 'USAID-FONAG' through the period of fieldwork.

FONAG is ultimately a product of international intervention and efforts to decentralize environmental governance by moving authority from the State into public–private arrangements (Joslin and Jepson, 2018). It redefines land as a proxy for ecosystem services and water in terms of supply and demand relations. It further represents a movement towards markets as a primary tool of governance through focusing on incentives to direct activities towards pursuing conservation activities.

Often used as an example of a successful Payments for Ecosystem Services arrangement by international conservation practitioners and scholars (see Goldman-Benner et al., 2012; Joslin, 2019), FONAG has likewise struggled over its discursive representation, mirroring broader debates over Ecuadorian environmental governance. Far from being an easy adoption by rural communities, accounts exist of outright rejection of FONAG proposals as poorly aligned with local visions of socio-environmental relations (see Diehn, 2005).

Although FONAG's, 2009-2013 Strategic Plan proclaims: "This is a mechanism of payment for environmental services aimed at protecting and regenerating water sources" (FONAG, 2009, 1), Ecuadorian practitioners of FONAG avoid calling the program PES as the term has connotations of privatization (2012 Interview, FONAG Technical Secretary; see also Kauffman 2014). Given FONAG's origins in neoliberal reforms, it may be expected that these undertones would also create tension for communities identified as service providers at the sites of targeted ecosystems. In the next section, I discuss the role of contracts in PES and their application within FONAG.

4. Contract Agreements as Codifying Socio-Environmental Relations

PES contracts exist to define the terms of exchange and clarify relations between actors involved in the agreement. They also invoke a particular vision of the relationship between actors and a landscape by defining the environmental problem, identifying activities to pursue as solutions, and setting the terms of 'success' by delineating practices of compliance or non-compliance (Milne and Adams, 2012). The production of contract agreements can thus be understood as part of a performative of Foucauldian neoliberal governmentality, which "socially reproduces symbolic meanings, imaginaries, ways of being or doing, or the very framing of reality to identify governable subjects" (Kolinjavadi et al., 2019, 5). That contracts outline payments as conditional to certain land-use changes and land management practices implies the universal acceptance of underlying social conventions, including conceptions of human-environment relations (Bastian, 2012).

Thus, discourses within contracts matter because they not only visibly reproduce and inscribe particular worldviews into a document, but they are also a part of performing a vision of how the world operates and serve as a technology of discipline to reinforce particular knowledge regimes. As PES programs are intertwined with neoliberal rationality, it would follow that neoliberal discourses would be incorporated into the documents describing the agreements and within the contract documents themselves describing the exchange.

The contract agreement is a fundamental tool of FONAG for initiating conservation interventions within rural communities. According to detailed quarterly summary reports from USAID, at least thirteen conservation contract agreements had been initiated by FONAG within rural communities between 2008 and 2013. Though the entire community must agree to support the conservation activities, the beneficiaries of the development activities are typically a small sub-set of the community with a particular interest in the activity (2012 Interview, FONAG Program Coordinator). Indeed, an average of 15% of households in any given community directly benefited from FONAG projects during that time period.

FONAG contract documents are formal written agreements that outline a general, overarching purpose or objective for the contract, specific objectives, a strategy for sustainability, and explicit goals. They also typically include timelines and budget responsibilities. At minimum, contracts receive signatures from the Technical Secretary of FONAG, the president of the community, and the intermediary called a paramo guard who is a resident of the area and is a trained FONAG employee responsible for overseeing interventions. This agreement is brought to the community assembly for discussion before signing. If the community votes to support the terms, then the community's president will sign the project contract. Occasionally FONAG will also require the

subgroup to sign the document, with illiterate members placing a thumbprint as their signature next to their typed name. Although representing an agreement, the contracts are not legally binding. The non-compliance penalty, and the source of conditionality, is that FONAG will not offer another project (2012 Interview, FONAG Technical Secretary). On FONAG's part, no legal obligation exists to offer further projects to the community or fulfill contracts that were signed. Although formalized, the contracts are solely bound by trust between the communities and FONAG.

Examining the various contract documents FONAG produced between 2008 and 2013 also uncovers a pattern of underlying neoliberal assumptions. First, contracts prioritize revenue-generating productive projects that support new avenues for market integration. This aspect is unsurprising, given that pamphlets, reports, and other documents from FONAG and its supporting organizations largely frame the problem of environmental degradation in the paramo as poverty (Joslin, 2020). A USAID (2011, 21–22) report describes the projects:

> "In each project, biodiversity conservation activities are combined with 'productive activities' that seek to boost incomes and/or employment… USAID believes that residents of sensitive and biodiverse areas must have consistent and sufficient income from environmentally, economically, and socially sustainable practices. Such income reduces the incentive to use natural resources in ways that offer short-term economic gains while eroding the long-term health and productivity of the lands and watersheds."

The example demonstrates a core belief that environmental degradation is primarily an economic issue to be resolved through the proper manipulation of incentives. Thus, FONAG's most common productive projects offered to communities in exchange for conservation agreements include the expansion or intensification of agriculture at lower elevations, with the hopes that the that project participants will be able to sell excess production in local market centers to generate revenue.

Incentives are connected to revenue generation, and contracts thus also emphasize using them as the primary way to motivate and direct human behaviors regarding the paramo landscape. The main problem to fix with these contracts, after all, is framed around the community's inefficient and inadequate relationship to markets, resulting in poverty. An example from another FONAG contract directly describes productive projects as a means to "…influence decisions to protect the flora, fauna, and water" (FONAG, 2009, 4). The contracts likewise generally overlook or omit mention of current land management practices. As contracts assume there are no market incentives to care for the land, they also reflect an underlying assumption that no mechanisms to manage targeted communal lands pre-exist.

Next, the contracts emphasize the reorganization of land and labor regimes. They stress a need to compartmentalize the landscape in the name of efficient use, dividing the land into sites for agricultural production and ecosystem services production. Many contracts identify the main objective as to "optimize the landscape." This discourse is also reflected in several of FONAG's publications, such as descriptions of the productive projects as having a purpose "…to reduce the exploitation or inadequate uses of [community] natural and productive spaces" (Escandón, 2010, 10). This implies a particular (re)ordering of socio-environmental relationships with the land and new designations of what is appropriate land use and management.

Finally, the contracts assume individualized labor regimes. The community as a scale of focus for contracts appears to contradict this characteristic. However, the contracts present an assumption that the community makes decisions about land use autonomously, rather than considering communities as a part of a larger network of neighboring communities who coordinate and share the labor of paramo management, as is common in the northern Andes. In the next section, I present a case study examining how neoliberal undercurrents within a conservation contract support the misrecognition of pre-existing resource management institutions and socio-environmental relationships, and how a community shifts the narratives to gain recognitional justice.

5. Contract Contestation and Revision

Located on the slopes of the snow-capped Cayambe volcano at roughly 3,700masl, the community of Quinchucajas is comprised of 105 families. Its parceled territory of 600 ha sits roughly 80 km northwest of Quito and borders approximately 4300 ha of communally-owned paramo[2]. Like several neighboring communities, Quinchucajas affiliates with the Kayambi indigenous group and originated through Ecuador's processes of agrarian reform. Prior 1964 policy reforms, many haciendas in Ecuador operated on a sharecropping system derived from Spanish colonial occupation. Indigenous people were allowed to live on the land and cultivate a small plot for subsistence in exchange for providing labor to the hacienda owner (Moates and Campbell, 2006). Agrarian reform lasted through the 1990s, until officially closed by the Land Development Law. At the time, Ecuador's government tended to enforce expropriations at higher elevations, including paramo lands, which it considered less arable and thus less valuable (Chiriboga and Chehab, 2007). While state-owned protected areas encompass 40% of Ecuador's paramos (Beltrán et al., 2009), indigenous communities have claims to large portions of the rest.

While FONAG initiated its first contract with Quinchucajas in 2009, I focus here on FONAG's second contract initiated in 2013 which aimed to install an irrigation system to support gardens on 9 ha in the community's lower elevations in exchange for paramo conservation activities. During this time, I regularly engaged in participant observation and was present for the project development, implementation, and completion in Quinchucajas. Furthermore, I acquired copies of the initial and final conservation contracts that demonstrate a notable discursive shift in the representation of community and land relations.

FONAG targeted its 2013 project towards the same women's group of 22 members that benefited from the previous one. FONAG identified 'unused' land in the lower parts of the community as potentially supporting vegetable gardens. When FONAG approached the group suggesting a contract for paramo conservation in exchange for gardening materials, the members commented that the targeted land was uncultivated because it lacked water access. The group countered with a proposal for an irrigation project for that space (Community member, Interview 2012). The project would directly benefit approximately 9 families.

FONAG presented a contract at Quinchucajas' community assembly, a regular meeting with obligatory attendance from each household. However, the paramo that FONAG targeted for conservation did not pertain solely to Quinchucajas. Rather, it is collectively owned and actively managed by an inter-community committee called *Ñukanchik Urku*, or 'Our Mountain' in Kichwa. In addition to Quinchucajas, Ñukanchik Urku includes seven other Kayambi communities that border the paramos and two more that depend on water deriving from the territory.

Upon learning of the proposed contract, Ñukanchik Urku launched complaints. Members asserted that the document failed to acknowledge the ongoing, cooperative, and intentional labor already infused into the landscape (Ñukanchik Urku leadership, Interview 2013). Officially organized in the late 1990s, Committee Ñukanchik Urku had cooperatively managed the páramo to maintain the hydrologic processes that were critical for their supply of water for irrigation and consumption within their communities for two decades. Each community elects individuals to monitor the paramo to ensure that the mutually agreed upon rules for páramo use, such as no grazing, burning, or planting over

[2] At the time of fieldwork, the boundaries of communal paramo lands were under dispute between local communities and the adjacent Cayambe-Coca National Park. FONAG reports the area as 4300 ha, while the community reported 4700 ha. The discrepancy was likely a product of the dispute.

particular elevation limits. They report violations publicly at community assembly meetings, which is also the forum for decision-making about sanctions for the rule-breaks. Livestock found in the off-limit zones of the paramo, for example, may become communal property and serve as dinner at the next community meeting or celebration.

The evolution of contracts becomes apparent when directly comparing them. The introduction of the documents shows the greatest difference. The rejected contract begins:

> "At present, one of the greatest challenges in this area is the search for sustainable production using planning tools for agricultural activities and the conservation of fragile ecosystems… The area to conserve (approximately 2000 ha)… is the ancestral property of the Quinchucajas community and the entire community swears by that, even though the last documents are registered in [the name of the former hacienda owner]. Of the 2000 ha to be conserved, 60% are inside the Cayambe Coca National Park and 40% are outside. For those 2000 ha, a basic management plan will be created that will protect ecosystem services." (FONAG, 2013a, 2).

In contrast, the introduction of the revised document states:

> "The communities… organized within the Committee for the Care of the Paramos – 'Nukanchik Urku' have been working on the care of communal paramos for more than 20 years, achieving important results in the environmental and social-organizational spheres and transforming itself into a local and regional example of communal paramo management. Management that despite benefiting a great number of communities, populations, haciendas, and agricultural businesses, has not received acknowledgement nor support from any public or private entity…. With the present project, a process of recognizing one of the member communities of the Committee is initiated…for its great effort in fulfilling its conservation goals under the principles of reciprocity, from which the environmental functions of the paramos of Nukanchk Urku and all of us benefit." (FONAG 2013b).

The introduction's discursive shift continues to be reflected through the fundamental components of the contract. Table 1 provides an overview of changes.

The two contracts significantly differ in how they discursively frame land management and the community's relationship with FONAG. The first contract identifies the agreement with Quinchucajas as a mechanism for impelling the community put their labor towards conserving and restoring the páramo. It frames Quinchucajas as disorganized, with tenuous claim, and struggling to manage its land at the expense of 'ecosystem services.' In contrast, the second agreement highlights Quinchucajas as positioned within a network of communities with an established history of intentional paramo management to support the flow of water, and removes the term 'ecosystem services' from all parts of the of the contract.

The objectives, strategy, and goals continue with the alternative framing. The most notable areas of change between the documents included the objectives and the purpose of the project. As Table 1 shows, the general objective transforms from "to launch the recovery and conservation…" (FONAG, 2013a, 4) into "to support the continuation of recovery and conservation…" (FONAG, 2013b, 5). Rather than adopting new practices, the second contract reframes the project as promoting the responsible practices that were already in place. This subtle change continues to frame the rest of the terms of the agreement. While never mentioned in the first contract, the second contract also invokes the word 'reciprocity' multiple times, harkening to the relationship between Quinchucajas and Committee Ñukanchik Urku and the system of benefit sharing through labor. The final contract also represents the agreement as a reciprocal arrangement with FONAG, which positions all parties at an equal standing and also lessens the connotations of an agreement based on exchange value to one based on relational values. The revised contract portrays an agreement in which all parties mutually help each other.

Notably, FONAG's annual reports before 2013 did not use reciprocity in descriptions of productive projects. A reference to reciprocity is also absent within discussion of FONAG's productive projects in the 29 issues of FONAG's quarterly outreach newspaper *Agua-a-Fondo* published by FONAG before the Quinchucajas project. Furthermore, none of the contract agreements between FONAG and communities prior to the Quinchucajas case study refer to reciprocity in any way. The term reciprocity appears in *Agua-a-Fondo* and within conservation contracts following this event, suggesting that the conflict may have catalyzed a discursive shift in FONAG.

Despite major shifts, there are aspects of the contracts did not change. Both Quinchucajas contracts emphasize compartmentalizing the landscape into productive areas and conservation areas, and land is still described in terms of its utility to humans. Both contracts emphasize efficiency improvements and creating market engagement opportunities. Further, one explicit 'expected result' of the project remained reaffirming the PES framework. This expected result recognized the labor of the community to be "maintaining the functions of the páramo ecosystem," for the duration of 24 months, during which timeframe FONAG would monitor activities. The contract gave the work an explicit value of $700 (FONAG 2013b, 8), thus emphasizing exchange value as a

Table 1
Comparison of Quinchucajas conservation contracts highlighting major changes. The bolded words are the author's emphasis.

	Rejected Contract, May 2013 (FONAG 2013a, 4)	**Final Contract, July 2013 (FONAG 2013b, 5)**
General Objective	To **launch** the recovery and conservation of areas of hydrologic interest through improving productive practices and strengthening the technical skills of production in the community of Quinchucajas.	To **support the continuation** of recovery and conservation of areas of hydrologic interest **in the páramo of *Ñukanchik Urku*** through improving productive practices and strengthening the technical skills of production in the Community of Quinchucajas, **under the principals of Reciprocity from the communities responsible for the management of páramo**
Specific Objectives	To **optimize** the management of natural resources through zoning productive territories in a way that the areas of hydrologic interest **will be conserved and restored** while the areas that are appropriate for agro-productive activities will be managed towards this calling.	To **implement mechanisms of reciprocity for the community of Quinchucajas,** member of *Ñukanchik Urku*, for the management of natural resources; through zoning productive territories, **supporting the continuation of conservation** in areas of hydrologic interest, and improving its level of agricultural productivity to assure food sovereignty.
Goals	**a.2000 ha of páramo will be adequately managed to conserve and improve ecosystem services**. b. Improving production systems as a demonstrational scenario… c. Training to improve the capacity for agricultural production of the families of Quinchucajas as a part of the process of organizational strength.	**a.1945 ha of Ñukanchik Urku Committee community páramo will continue to be adequately managed to conserve and improve the functions of the páramo ecosystem.** b. Improving production systems in 9 ha as a demonstrational scenario… c. Training to improve the capacity for agricultural production of the families of Quinchucajas as a part of the process of organizational strength.

driver for the desired land management practices.

Finally, it is important to note that the practical outcome of the two versions of the contract agreement is the same: Quinchucajas as a community would agree to support conservation of the paramo. In return, FONAG would provide in-kind financial support for the materials to construct the irrigation system. Quinchucajas would be responsible for providing the manual labor involved in both the project's productive and conservation components. The funding amounts and the labor expectations do not change. Why, then, would the discursive representation of socio-environmental relationships matter so much for Nukanchik Urku?

6. Labor, Land, and Struggles over Recognition

Cultural identity and the overall continuance of rural indigenous populations in the Andes are entwined in communal systems of mutual aid that support agro-pastoral livelihoods and water management systems (Boelens, 2014). In this context, reciprocity plays a major role in mediating interactions between individuals, groups, and communities. Labor institutions based on reciprocity are believed to have emerged from pre-colonial subsistence agricultural practices where seasonal labor investments exceeded the capacity of individual households and they continue to mediate the management of communal spaces in many Andean communities (Orlove, 1977). It is predicated upon a exchange that adds value through social capital generation and includes expectations of delayed returns that rarely result in an even financial exchange (Mayer, 2002).

Resonating with the norms of reciprocity that guide collective labor and land management institutions which have expectations of ongoing, delayed returns, Committee Ñukanchik Urku found it agreeable for Quinchucajas to accept the benefits of the project as long as the work of the collective was recognized (Joslin, 2022). The Committee also worked to reframe its relationship with FONAG as one of reciprocity in which both parties have an equal standing, which is important to achieving recognitional justice. Given that the agreement falls under the norms of reciprocity, an expectation further exists that FONAG over time will work with various communities that are a part of Nukanchik Urku (Nukanchik Urku Committee Representative, Interview 2012).

The revised contract furthermore serves to support the moral land claims of the communities by calling attention to the land as under active and intentional management. The Ecuadorian agrarian reform process was sometimes messy, and as the introduction of the first contract demonstrates, has left unresolved issues regarding land claims and the definition of territorial boundaries. Indigenous people in Ecuador, like elsewhere, have faced land dispossession and difficulties in acquiring title to ancestral territories. Scholars investigating the value of paramo to those communities that manage it have reported that the land can represent community cohesion, pride, and identity reflecting the shared labor institutions required maintain it as well as its connection to the fight for land tenure (Farley and Bremer, 2017). Given its cultural importance and the links to agrarian reform, the contract revisions can also be interpreted as an attempt counter narratives about communities being unable to care for the paramo because of poverty and to gain broader visibility that would support their ongoing claims to the land.

The main reason why many communities are presently sited with areas of communal paramo is that they were historically viewed as unproductive, harsh landscapes. Rather than wastelands, paramo ecosystems are now recognized in Ecuador as valuable for their connection to water resources vital to urban areas (Orozco, 2009). The paramo, however, also directly represents survival to many of the indigenous communities who rely upon it as a water source to support subsistence agriculture. Thus, it is not uncommon to hear the phrase "water is life" to describe paramo lands (Farley and Bremer, 375). This is certainly true with Quinchucajas, as Ecuador's 2010 agricultural census listed the community as 100% reliant on streams and canals supplied by the paramo for both agricultural as well as household water consumption needs.

Ñukanchik Urku has imprinted its pursuit of recognition in the landscape itself. Along access points to the paramo signs indicate that the land is actively managed. One of them with a map labeled 'Committee Ñukanchik Urku' is captioned: "Fires in the grassland end the life of the páramo and dries up the water" (see Fig. 1).

Despite the visual cues such as signs located along access points to the Committee Ñukanchik Urku's páramo, however, FONAG failed to recognize the collective labor arrangements and pre-existing páramo land management practices before it was challenged.

This speaks to a broader issue, however, of the neoliberal narrative informing FONAG's interventions. Neoliberal logics assuming that poverty will inevitably lead to degradationfundamentally shape the program's interventions to the point where pre-existing land management practices and non-utilitarian relational values embedded in local landscape management are simply ignored or regarded as unimportant. The continuance of PES and other neoliberal environmental governance arrangements, however, do not absolutely depend upon the maintenance of this narrative. Rather, they depend upon the perpetual extension and circulation of capital. If FONAG cannot implement interventions and move money, then donors and constituents will deem it a failure and the funding ends. Thus, the narrative of the contracts shifted enough to continue to allow the funding mechanism to operate while still maintaining the quantifiable components needed for justifying the inputs of capital. As USAID was a key donor in interventions, it required that zoning be put into place in order to translate financing into measurable conservation gains. Ñukanchik Urku and Quinchucajas accepted this, as the presence of the zones did not translate into a shift in their current land management institutions.

7. Conclusion: Agency and Recognitional Justice in Neoliberal Conservation

The Quinchucajas case study focuses on the context and process surrounding contestation and negotiation of land management narratives in a conservation contract by a well-known Ecuadorian water fund PES arrangement called FONAG. The original contract proposed by FONAG framed the discussion of value in terms of exchange and utility. It ultimately obscured the presence of alternative relational values by separating and misrecognizing pre-existing labor institutions and their relationship to the landscape. Committee Ñukanchik Urku challenged the misrepresentation of labor and land relationships to gain recognition of pre-existing collective institutions and the existence of relational values embedded in ecosystem management practices. Examination of this case contributes to political ecology literature on neoliberal environmental governance by engaging with the justice dimension of

Fig. 1. Sign at Ñukanchik Urku Access Point with map of paramo territory.

recognition, highlighting the roles of agency and structure in PES processes and outcomes, and bringing critical attention to the importance of contracts in PES interventions.

Communities that are targets of PES intervention are often embedded in socio-ecological relationships that may be largely invisible to the entities focused on implementing conservation contracts. The ability of Committee Ñukanchik Urku to challenge the narratives found in the contract demonstrates contingency and co-production at the site of PES arrangement development and implementation, underscoring calls from other researchers to avoid oversimplifying PES processes and outcomes into a hegemonic neoliberal tragedy (e.g. Upton, 2020; Shapiro-Garza et al., 2020). This case shows Ñukanchik Urku and targeted communities as willing and active actors in shaping the terms of their representation and agreement in the conservation contract. Participants of PES have their own agendas that they may achieve through negotiations. Not only can PES targets challenge neoliberal narratives, but they can also co-opt them to serve their broader need for legitimacy and recognition.

Despite the agency demonstrated by members of Ñurkanchik Urku to contest the language of the contracts to make visible local relational values as attached to the land and its associated labor processes, the contestation also demonstrates how conservation contracts serve to codify the relationship of communities and their land within exchange, inscribing particular socio-environmental relations onto the landscape. Contracts are a part of a neoliberal performative that Kolinjivadi et al. (2019) suggest exists to influence and legitimize perceptions of the world and how it operates–often at the expense of other perspectives. The focus of FONAG contracts on compartmentalizing land for efficient production emphasizes a perspective of socio-environmental relations based on instrumental value at the expense of non-instrumental relational values. PES conservation contracts are fundamental to (re) ordering of territory to align with a neoliberal worldview and serve as disciplinary technology of neoliberal governmentality.

In this case, the contract contestation was not necessarily over the land management practices themselves nor over the amount and distribution of compensation. Rather, the dispute focused on a default neoliberal undercurrent in the contract emphasizing instrumental value that failed to recognize the local relational values connected to the ecosystem and the labor to care for it. As such, the case also highlights issues of power inequality in the representation of those who are charged as the targets of reform in PES schemes as well as the continued importance of neoliberal assumptions justifying and driving the creation of PES contract agreements. Contrary to suggestions by some scholars (see Muniz and Cruz, 2015), simply avoiding cash payments and integrating the language of reciprocity into conservation contracts cannot necessarily ameliorate potential issues of injustice, particularly in terms of misrecognition.

PES organizations offer the agreement's terms and structure contract language. The communities and individuals targeted in contracts as the labor to support ecosystem service production and the associated conservation activities are then left to confront the representation of socio-environmental relations within proposals presented to them. The PES organization gives options regarding the types of activities to pursue, but it retains the ultimate power to determine acceptable land management practices. Communities targeted by PES programs risk being labeled as uncooperative or poor environmental stewards if they reject conservation contracts. This could potentially fuel future territorial disputes in which land is more directly appropriated under the premise that it is not being properly stewarded. Misrecognition of local land and labor institutions could thus translate into a direct existential threat to land rights.

A risk also exists that the neoliberal emphasis within PES agreements could prompt a long-term shift in relational values tied to labor and land institutions that have supported sustainable ecosystem management (Rode et al., 2015). After all, many conservation programs,including water funds, prioritize lands for conservation considered as the most intact and highly functioning (Dinerstein et al., 2019), perhaps with an assumption that those parcels of land were somehow overlooked in human interactions over time rather than being the product of them. Tensions surrounding potential justice issues are implicit within the creation of conservation contracts, and many of these are rooted in embedded neoliberal assumptions. The concept of ecosystem services itself is brought into existence through a combination of assumed values, goals and forms of communication, such as the contracts. Thus, Fletcher and Büscher (2019) rightly argue that the neoliberal foundations of PES have crucial implications for justice issues that empirical analyses of PES and other market-oriented conservation arrangements should not overlook.

PES-based environmental governance arrangements should be recognized as made up of many components, or parts of a whole, that interact at different scales and sites. Contracts are infused with ideals and logics stemming from various stakeholders operating at the global and regional scales and into the local communities targeted as the labor for ecosystem service production. Contracts thus represent a point of direct interaction between various interests that comprise a water fund and are crucial to its operation, and examination of contracts can illuminate clashes of values and logics surrounding socio-environmental relationships. As such, I also urge scholars to view PES arrangements as containing unevenness in the extent of neoliberalism in its various components and examine how these must be reconciled in operation.

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Data availability

The authors do not have permission to share data.

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