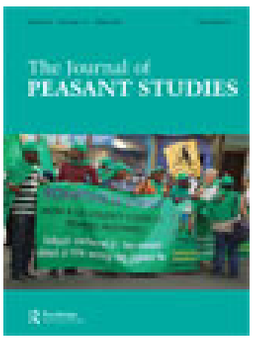

The Journal of Peasant Studies

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/fjps20

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To cite this article: Megan Mills-Novoa, Rutgerd Boelens, Jaime Hoogesteger & Jeroen Vos (2022): Resisting, leveraging, and reworking climate change adaptation projects from below: placing adaptation in Ecuador's agrarian struggle, The Journal of Peasant Studies, DOI: 10.1080/03066150.2022.2144252

To link to this article: https://doi.org/10.1080/03066150.2022.2144252

THE JOURNAL OF PEASANT STUDIES
https://doi.org/10.1080/03066150.2022.2144252

Routledge
Taylor & Francis Group

Resisting, leveraging, and reworking climate change adaptation projects from below: placing adaptation in Ecuador's agrarian struggle

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ABSTRACT

As climate change escalates, donors, international organizations, and state actors are implementing adaptation projects. Embedded within these adaptation projects are imaginaries of rural resilience. These imaginaries, however, are contested by individuals and collectives targeted by such initiatives. In this article, we draw on Foucault's notion of counter conducts to understand how beneficiaries in Ecuador resist, leverage, and/or rework adaptation interventions and towards what end. We identified five counter conducts: (1) negotiating for control, (2) setting the terms for participation, (3) opting out, (4) subverting the discursive frame, and (5) leveraging longevity. We argue that these counter conducts are generative, enacting multi-scalar counter-hegemonic politics of agrarian transformation.

KEYWORDS

Climate change adaptation; resistance; political ecology; Latin America; governmentality; politics

1. Introduction

Agrarian landscapes and the people who live there are subject to both the impacts of climate change as well as the proliferation of climate change adaptation initiatives. Since the early 2000s, climate change adaptation has become a major focus of policy and rural development projects throughout the Global South through national and regional planning processes as well as concrete projects (Berrang-Ford et al. 2021). These initiatives are often funded through bilateral or multi-lateral climate funds with donations from historical greenhouse gas emitters such as the United States or the European Union. As of 2020, multi-lateral climate funds had approved US$5.8 billion for

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adaptation (Watson and Schalatek 2021a). In Latin America, US$480 million has been approved for 71 adaptation projects between 2003 and 2020 (Watson and Schalatek 2021b).

Adaptation projects aim to reform or transform agrarian livelihoods and landscapes in response and/or anticipation of climate changes and their effects (IPCC 2007). But the question of what type of agrarian future will be most resilient[1] under climate change is not agreed on and resonates with broader debates about what desirable agrarian transformation entails (Akram-Lodhi and Kay 2010; Paprocki 2018a; Camargo 2022). Project promoters sidestep these contested topics by justifying adaptation interventions based on the urgent nature of the climate crisis (Paprocki 2018b) while advancing an often technocratic rural imaginary that dictates what forms of agricultural production and agrarian lifeways are 'resilient' and need support (Mills-Novoa et al. 2020). Towards this end, climate change adaptation projects restructure access to and use of resources (Borras, Franco, and Nam 2020; Mikulewicz 2021; Borras et al. 2022).

To date, adaptation projects have predominantly made incremental changes that adjust or reform existing systems (Bassett and Fogelman 2013; Berrang-Ford et al. 2021). Beyond their incremental nature, many adaptation projects have explicitly reinforced capitalist forms of agrarian development through interventions such as promoting agro-export development (Mills-Novoa 2020), increasing the agricultural efficiency, productivity, and market access for 'vulnerable' agrarian communities (Zografos 2017; Funder, Mweemba, and Nyambe 2018; Duarte-Abadía, Boelens, and Buitrago 2021; Eriksen et al. 2021), and/or expropriating land and water as part of powerful regimes of accumulation (Borras and Franco 2018; Paprocki 2018a). Among these more capitalist-oriented adaptation approaches, adaptation relies strongly on the 'adaptive and self-organizing capacities of the market above all else' (Watts 2015, 40).

The logic of adaptation projects and the embedded view of agrarian political economy, however, is not always coherent or overtly capitalist. In many cases, adaptation finance and related projects are positioned as 'conciliatory' actions that meld market power with Indigenous or local knowledges and capacities to help these communities endure turbulence wrought by climate change and related forms of capitalism (Abya Yala 2009, 1; Watts 2015; Khan et al. 2019).

Within the literature on climate change adaptation projects, scholars have primarily focused on the project of rule, missing the political contests, negotiations, collaborations, feigned compliance, and refusals that arise on-the-ground. When the focus remains primarily on the strategies and intentions of project promoters, so-called beneficiaries can easily be understood as communities and individuals to whom adaptation projects happen (Keskitalo, Juhola, and Westerhoff 2012; Beck 2017). This conceptualization of beneficiaries, however, obscures the creative, plural ways in which beneficiaries oppose adaptation projects and how their opposition articulates with and builds on broader

[1]While adaptation projects are often framed in terms of increasing resilience to climate change, resilience and adaptation have important differences. Rooted in socio-ecological systems theory (Holling 1974), resilience has been heavily critiqued for its vagueness and depoliticized focus on 'bouncing back' without acknowledging that the starting state may be highly unequal and that the large-scale political, economic and social forces being preserved are precisely the ones that historically produced rampant inequality (Mikulewicz 2019). Adaptation is a broader concept, which encompasses both radical concepts of transformative adaptation that reconsider the political economy of and power relations that produce climate change, as well as more incremental approaches that reinforce the status quo, and transitional adaptation that lies in between (Pelling 2011; O'Brien 2012; Bassett and Fogelman 2013; Watts 2015).

agrarian struggles for territorial control, food sovereignty, or anti-extractivism (McMichael 2008; Borras and Franco 2018; Sekine 2021; Duarte-Abadía 2022).

This article contributes to the JPS forum on 'climate change and critical agrarian studies' by studying the counter-hegemonic politics of climate change adaptation through an examination of how these projects are negotiated on-the-ground and towards what end (van der Ploeg 2008; Tria Kerkvliet 2009; Boelens 2015). We do so through the Foucauldian notion of counter-conducts, which enables us to focus on an analysis of power from the bottom-up reflecting the 'micropolitics' of adaptation (Foucault 2008; Cadman 2010; Dean 2010). In understanding adaptation initiatives as an emerging frontier for advancing agrarian transformation, we use counter conducts to understand the tendencies and processes through which rural relations of domination and subordination are being transformed through varied forms of opposition (Scott 1985; Byres 1991; Bernstein 1996; Akram-Lodhi and Kay 2010). To better understand the strategic logics underlying the identified counter conducts, we draw on Katz's (2004) typology of resistance to capitalism.

To this end, we look across the seven internationally funded projects that constitute Ecuador's adaptation project portfolio to understand if, how and why the so-called beneficiaries resist, leverage, and/or rework adaptation projects. Ecuador is a timely case to study agrarian climate change adaptation projects. As a country, Ecuador has been highly strategic and proactive in accessing international adaptation finance, having received projects from every fund for which they are eligible. The individuals and communities that participated in these climate change adaptation projects as 'beneficiaries' are heterogenous but were universally deemed vulnerable by project implementors due to their reliance on land-based livelihoods and exposure to climatic hazards.

Central to our analysis is an effort to understand how the counter conducts intertwine and relate to broader anti-capitalist social mobilization and agrarian/Indigenous movements in Ecuador. Thus far, climate change adaptation has remained peripheral to large-scale social mobilizations around agrarian or even climate justice. However, we argue that local negotiations of climate change projects should not be understood in isolation, but rather, as part and parcel of broader agrarian justice movements (Colloredo-Mansfeld 2009; Velásquez 2022).

We argue that the counter conducts employed by people negotiating adaptation projects are generative – producing and enacting a counter-hegemonic micropolitics of agrarian transformation that reflect and intertwine with broader goals of grassroots struggles to carve out their own (agrarian) futures (Sekine 2021). By focusing on the imaginaries furthered through bottom-up resistance to adaptation projects, we can understand agrarian transformations more expansively, not just as a material process borne out of class struggle, but also as the product of the 'agencies, desires, and expectations of those who experience climate disasters and adaptation policies in their everyday life' (Camargo 2022, 714).

As the basis for this article, we paired an institutional ethnography of adaptation project governance with multi-sited, community-based research. We conducted 96 semi-structured interviews with adaptation professionals and community leaders, participant observation in communities that participated in one of Ecuador's seven internationally funded adaptation projects, participatory mapping of project sites, and a systematic review of adaptation project documentation. This data was collected by the first author

over 12 months of fieldwork in Ecuador (July–August 2018, October 2018–February 2019, and August–December 2019).

The article is structured as follows. We begin by discussing how counter-conducts, as a theoretical lens, provide insight into how climate change adaptation projects are negotiated on-the-ground. Next, we examine the rise of adaptation projects in Ecuador and their entanglements with historical struggles for agrarian justice. We then present the five counter-conducts identified in our research. For each of these counter conducts, we review the dominant rationalities advanced by project funders and implementors as well as the alternative imaginaries of climate change adaptation being advanced by beneficiaries, while also relating these to broader agrarian movements and demands in Ecuador. We conclude by discussing how these identified counter conducts relate to broader struggles for agrarian justice and the possibilities they create for shaping the future of agrarian Ecuador and climate change adaptation.

2. Theoretical framework

2.1 Climate change adaptation governmentalities

When analyzing climate change adaptation projects through the Foucauldian lens of governmentality, these initiatives employ different strategies that aim to conduct-the-conduct of beneficiaries (Oels 2005; Dowling 2010). This is often advanced by project implementors that assert that the entrenchment of capitalist forms of development in the rural agrarian world is *the* means by which to create climate-resilient subjects in an increasingly globalized economy (Bäckstrand and Lövbrand 2006; Borras et al. 2022). This is done through the creation of new socio-economic, political and cultural relations in and among beneficiaries and their broader socio-environmental networks (Foucault 1991, 1991, 2008; Dean 2010).

As analyzed in Mills-Novoa et al. (2020), climate change adaptation projects need and thus create objects (landscapes) and 'vulnerable' subjects (beneficiaries) to justify and target their interventions. Distinct knowledge practices and government techniques (sovereign, disciplinary and neoliberal governmentalities) are employed by project implementors to create an object for intervention in adaptation projects (Foucault 2008; Fletcher 2017; Hommes et al. 2020). Relatedly, the project requirements, recognition politics and associated participatory mechanisms that are enacted simultaneously produce new 'adaptive' and 'resilient' subjects that fit with the adaptation truth regime. In other words, these new beneficiary subjects are instrumental to and constitutive of project implementors' vision of agrarian development and related climate change adaptation (Mosse 2005; Beck 2017). For this, projects need beneficiaries to frame their needs, worldviews, relationships, and approaches in the context of climatic risk, exposure, resilience, vulnerability and adaptive capacity (Li 2007; Eriksen, Nightingale, and Eakin 2015; Webber 2016; Usón, Henríquez, and Dame 2017).

Though beneficiaries are central in the discourse and justification of climate change adaptation projects, their presence in project documentation is peripheral. While analyzing the documentation of Ecuadorian adaptation projects, one only sees fleeting glances of the beneficiary. In climate change adaptation projects' public transcripts such as evaluations, promotional materials, and reports, beneficiaries are enumerated with evaluation

references such as '78 drip irrigation systems' (GEF-PNUD 2015, 53). Occasionally, beneficiaries are described as able bodies for communal workdays in progress reports where implementors collaborated 'with human resources in the construction of adequate infrastructure' (ibid, 12). Beneficiaries are sometimes made strategically visible as glossy photos attached to a glowing testimonial. Despite these myriad appearances, in all these cases beneficiaries tend to be portrayed as 'ideal' and 'unproblematic' subjects that unquestionably fit, benefit from, and therefore are in dear need of the projects. This understanding and portrayal of beneficiaries, however, hides, denies, and ignores the agency of the individuals, families and communities that leverage, and at other times resist or rework, an adaptation project through quotidian struggles and engagements in and with these initiatives.

2.2 Negotiating adaptation projects from below through counter-conducts

When beneficiaries consent to a climate change adaptation project, in practice they negotiate and reshape the project to fit their own needs and imaginaries of climate change adaptation (de Certeau 1984; Long and van der Ploeg 1989; Mosse 2004; Camargo 2022). They are not naïve subjects (as often portrayed in project documentation), but rather, active agents that shape and reshape agrarian futures in- and through climate change adaptation projects (Liverman 2015). They do so through strategies such as noncompliance (e.g. Wyborn et al. 2014), ambivalence (e.g. Camargo and Ojeda 2017), fraught negotiation (e.g. Caretta and Borjeson 2015), overt conflict (e.g. Eriksen and Lind 2017), and political use of climate change policies to strengthen territorial and resource control (Funder, Mweemba, and Nyambe 2018). Within adaptation scholarship, opposition has primarily been examined in the context of contentious resettlements in flood-prone or coastal areas (e.g. Broto 2020; Arnall 2018; Henrique and Tschakert 2019; Paprocki 2019).

Opposition to climate change adaptation projects is often positioned as being a reactive, opposing force *against* the imposed dominant rationalities and practices of project implementors (Death 2010; Lindegaard 2016). This simplistic view of opposition, however, does not capture the negotiation, sometimes subtle and sometimes stark, between governments, donors, NGOs, consultants, local communities, and individual beneficiaries within these multi-faceted, multi-scalar projects (Mosse 2004; Horowitz 2011; Rasch and Köhne 2016). There is a tight interrelationship between the techniques of government and the resistance they elicit (Boelens and Gelles 2005; Pieck 2015; Hoogesteger, Boelens, and Baud 2016). Subaltern groups are subject to cross-cutting fields of force even as they resist. This means that there is no autonomous originary space for opposition, but rather it is shaped by and shapes identities, place, and the very terrain of the struggle (Gramsci 1971; Moore 1998; Fletcher 2001).

So how do we understand these 'revolts of conduct' (Foucault 2009, 196)? These acts of opposition are fundamental responses to the power exercised via governmentalities and raise various fundamental questions, which include 'By whom do we consent to be directed? How do we want to be conducted? Toward what do we want to be led?' (ibid, 197). When discordance exists between adaptation project beneficiaries and implementors around these fundamental questions, 'counter conducts' arise as diverse forms of opposition. In many cases, counter conducts may not register as explicitly rejecting

government or even as being political in nature (Scott 1998; Odysseos, Death, and Malmvig 2016). Counter conducts, defined as 'the will not to be governed thusly, like that, by these people, at this price,' do not exist outside governmentality but are 'wholly immanent and necessary to the formation and development of governmentality' (Cadman 2010, 540; Foucault 2008, 75).

Counter conducts, themselves, form particular subjectivities and identities through the act of dissent itself (Death 2010). Thus, practices are fundamental, whether consciously deployed or not, because they generate or dissociate forms of identification and belonging to particular knowledge regimes. Dissenting subjectivities are formed by transforming 'one's relation to oneself and others' and represent interventions by groups or individuals into 'both the ethical and political practices and forces that shape us' (Davidson 2011, 32).

Resistance to adaptation can happen on varied terrains of struggles, towards multiple imaginaries, and with diverse tools. Resistance to adaptation can be found in quotidian negotiations over project control (Nightingale 2017) or transnational movements against the commodification of environmental services (Dupuits et al. 2019). As an example of how counter conducts arise and are advanced, Valladares and Boelens (2019), investigated the mining conflict in Ecuador's Quimsacocha highlands through four governmentalities – truth, sovereign, neoliberal and disciplinary governmentality (Foucault 2008, 313; Fletcher 2017). They found repressive mining policy strategies advanced by the state mingled with subtler, capillary powers that attempted to assign identities to human and non-human subjects and set boundaries on peasant political participation. These governmentalities, however, were met with opposition when inhabitants of Quimsacocha defended their territories against mining by disputing each of the four governmentalities enacted by the state to govern them. Valladares and Boelens highlight that the counter-conducts of people in Quimsacocha, 'occur in formal political and legal settings, but above all in communities' day-to-day practices' (Valladares and Boelens 2019, 77). These everyday practices of opposition were also highlighted by Xu, Boelens, and Veldwisch (2022) in a Chinese case in which the state water governmentality scheme was profoundly and permanently contested not through coordinated bottom-up resistance but through ongoing misalignment of institutional structures and interests and actions both among state, local villagers and among villager groups themselves. Consequently, intervention projects were 'continually negotiated through people's everyday practices, which went far beyond and were far more complex than overt resistance or covert weapons of the weak' (Xu, Boelens, and Veldwisch 2022, 9). As these cases exemplify, counter conducts are as multiple and innovative as the varied practices employed by powerful actors to forward their projects.

Within agrarian climate change adaptation projects in Ecuador or elsewhere, not all counter conducts are explicitly anti-capitalist or oppositional. Camargo (2022) found that peasants in Northern Colombia rework and reimagine climate change adaptation, but toward their own vision of an agrarian future in which they act as rural entrepreneurs who actively shape the development of capitalism. In this case, imaginaries of climate change adaptation are remade but not toward an anti-capitalist alternative. Additionally, some counter conducts may not be explicitly oppositional, meaning that those employing the counter conducts are not consciously disrupting or subverting systems of oppression (Benjamin 1978).

Furthermore, in recognizing the open and sometimes implicit nature of opposition, it is important not to exaggerate or romanticize resistance (Abu-Lughod 1990; Horowitz 2011)

particularly when examining subtle forms of everyday resistance (Scott 1985). It is therefore important to provide analytical precision to the 'strategic logics' that underlie resistance to adaptation. Such examination enables insight into critical questions regarding the degree to which contemporary agrarian movements have internalized (or not) 'climate change politics as a key context for and object of political struggle' (Borras et al. 2022, 8).

To understand opposition to climate change adaptation projects, Katz's typology of resistance helps to differentiate the strategic logics underlying the counter conducts arising in response to climate change adaptation projects. Cindi Katz distinguishes between resilience, reworking and resistance. *Resilience* refers to autonomous acts that help sustain individuals or communities as they endure capitalism. In this article, we refer to this as 'leveraging' adaptation projects to avoid confusion with mainstream understandings of climate change resilience. *Reworking* entails acts where individuals or collectives seek to alter oppressive and unequal conditions rather than endure them. They seek pragmatic strategies for recalibrating power relations or material distribution, 'retooling themselves as political subjects and social actors' (Katz 2004, 247). These acts can be successful at reordering or occasionally undermining the structural constraints of everyday life under capitalism. *Resistance* entails people seeking to subvert and disrupt the underlying conditions of exploitation and oppression. Resistance requires an 'oppositional consciousness' wherein individuals recognize social relations of power and have a vision for change and utterly different social relations. The categories of leveraging, reworking, and resisting are not exclusionary but overlapping.

Katz's typology for resistance provides analytical precision to examinations of counter conducts, and responds to some critiques of Foucault's theorizations. Foucault has often been criticized for being 'totalizing' and 'power-deterministic'. Contrary to his critics, however, Foucault's concept of power is not that it is 'all-powerful' but 'infinite' (Gordon 1991, 47). Though not always consistently, he elaborated on subjects' resistance to normalizing powers while maintaining the fact of their embeddedness in governmentalizing webs. Subjects are subjectified: simultaneously becoming active subjects and subjected actors. Thereby, actors are not simply determined by powers that cannot be influenced or understood by those who are subject to those powers. Foucault, non-deterministically, remarked that 'there is no power without potential refusal or revolt' (Foucault 1988, 84): but *not* in independent, autonomous ways. By drawing on counter conducts, we can understand resistance as bound together and mutually constitutive with the project of rule in climate change adaptation projects.

Based on these notions, we draw on Katz's typology to better understand the strategic logics underlying the counter conducts we identified and examine in this article namely: (1) negotiating for control over project governance, (2) setting the terms for participation, (3) opting out, (4) subverting the discursive frame of climate change, and (5) leveraging longevity. As we show in our analysis, oppositional acts can integrate various strategic logics (conscious and unconscious) over time, parts of the struggle and at different scales. Therefore important scalar interrelations are at play between the studied 'local' negotiation of adaptation projects and the broader agrarian/Indigenous movements in Ecuador (see Andolina, Laurie, and Radcliffe 2009; Hoogesteger and Verzijl 2015; Hoogesteger et al. 2017; Colloredo-Mansfeld et al. 2018; Velásquez 2022).

3. Climate change adaptation projects and their agrarian entanglements in Ecuador

Since 2009, Ecuador has received seven large-scale adaptation projects from the large multi-lateral climate funds as well as three smaller Green Climate Fund-funded readiness grants for adaptation planning and capacity building, and some limited bilateral adaptation investment from the German Corporation for International Cooperation (GIZ) and Japan International Cooperation Agency (JICA) (Table 1). For this study, we focus on the seven adaptation projects that constitute Ecuador's portfolio of multilaterally funded adaptation projects because these projects are the largest in scale, ambition and finance in the country, and reflect broader trends in adaptation projects. Importantly, the same multi-lateral climate funds and international organizations active in Ecuador are presently funding and shaping climate change adaptation initiatives and their governance across the Global South (Figure 1).

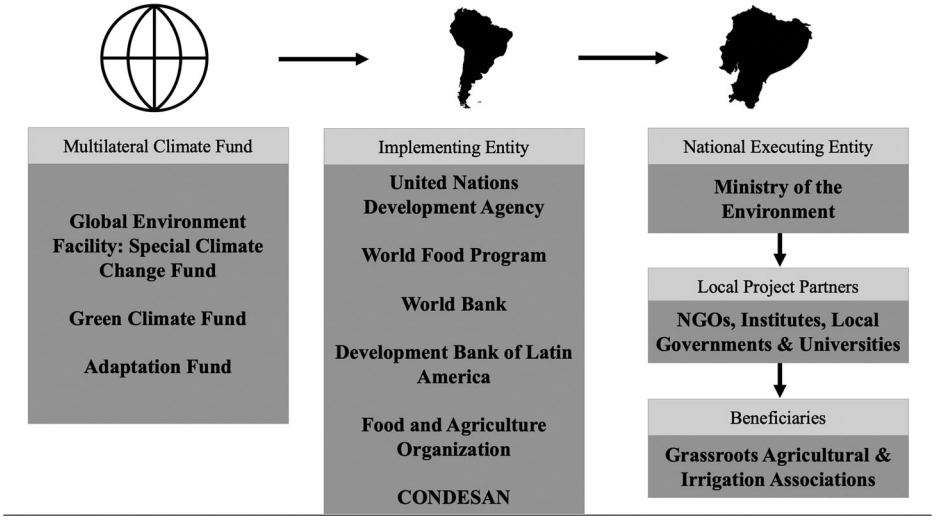

Figure 1. Simplified model of multi-scalar governance of climate change adaptation projects from the global to regional to local scale.

In Ecuador, the bureaucracy governing climate change adaptation finance solidified in direct response to the country's growing portfolio of projects. The rise of climate finance occurred in the context of Rafael Correa's *Revolución Ciudadana* (Citizens' Revolution, 2007–2017), which sought to reassert the role of the state in environmental governance and international development aid. Under Correa, Ecuador built a national policy and organizational architecture to attract international climate dollars. Ecuador's 2008 Constitution, which famously recognized the legal Rights of Nature, explicitly addresses climate change in Article 414 where the Ecuadorian State commits to 'protect at-risk populations' and employ 'adequate, transversal measures' to mitigate climate change (del Ecuador 2008). To bolster the role of the state in climate change governance, then-President Correa issued executive decree 1819 in 2009, creating the Sub-Secretary of Climate

Table 1. Internationally funded climate change adaptation projects in Ecuador.

Project name	Years	Climate fund	Implementing entity	Beneficiaries	Targeted sectors
PACC: Proyecto de Adaptación al Cambio Climático a través de una efectiva gobernabilidad del agua en Ecuador	2008–2015	GEF SCCF	UNDP	4,455 direct beneficiary families and 28,983 indirect individuals	Agro-ecology, sustainable livestock, water saving, efficient irrigation systems, irrigation storage and reforestation
PRAA: Proyecto Regional Andino de Adaptación al Cambio Climático	2008–2014	GEF SCCF	World Bank	Approx. 40,000 direct beneficiaries	Glaciers and conservation of highland wetlands (páramos)
FORECCSA: Proyecto Fortalecimiento de la Resiliencia de las Comunidades ante los efectos adversos del Cambio Climático con énfasis en Seguridad Alimentaria	2011–2018	Adaptation Fund	World Food Programme	19,356 direct beneficiaries and 60,000 indirect beneficiaries	Water, food security, and agriculture
AICAA: Proyecto de Adaptación a los Impactos del Cambio Climático en Recursos Hídricos en los Andes	2018–2021	GEF SCCF	Development Bank of Latin America (CAF)/ CONDESAN	No stated number of expected beneficiaries	Natural resources, hydropower, and conservation
Proyecto Binacional: Construyendo capacidades adaptativas al Cambio Climático a través de la seguridad alimentaria y acciones nutricionales en comunidades afro e indígenas en la zona fronteriza Colombia-Ecuador	2017–2022	Adaptation Fund	World Food Program	Expected 10,144 female and 9,724 male direct beneficiaries	Climate change risk reduction and food security through ancestral knowledge
Proyecto Toachi Pilatón: Aumentar la capacidad de adaptación de las comunidades locales, los ecosistemas y los sistemas hidroeléctricos en la cuenca alta del Río Blanco	Approved in 2018, I 2020–2024	Adaptation Fund	Development Bank of Latin America (CAF)/ FAO	553 direct beneficiary families and 49,367 individual indirect beneficiaries	Water resources and hydropower
Proyecto Regional Chile – Ecuador: Reducir la vulnerabilidad climática y el riesgo de inundación en áreas urbanas y semiurbanas costeras en ciudades	Approved in 2018, 2020–2023	Adaptation Fund	Development Bank of Latin America CAF/ UNDP	700 direct beneficiary families/population of Esmeraldas as indirect beneficiaries	Early warning systems and disaster risk management

Change within the Ministry of the Environment (MAE).[2] This office was created with the explicit goal of capturing resources from the Kyoto Protocol's Clean Development Mechanism and other climate finance sources (Article 2). At the time, Ecuador was already implementing its first set of pilot adaptation projects and Correa's administration recognized the potential of leveraging these dollars for national development priorities. The Sub-Secretary of Climate Change, which was subsequently divided into two offices, one for adaptation and the other for mitigation, is responsible for the coordination of all climate change adaptation and mitigation activities in the country.

MAE is the locus for all adaptation projects in Ecuador. MAE is recognized by multilateral climate funders as the national focal point therefore it represents the national interest in choosing projects, designing initiatives, and implementing funded proposals (Figure 1). The centrality of the state within the administration of climate change adaptation projects means that the projects promoted through these initiatives map closely onto the state's broader politics of agrarian development.

Within Correa's government, there was a highly contested discourse around agrarian futures and food sovereignty. During his rise to power, Correa galvanized a large coalition of agrarian and Indigenous movements with promises of combating hegemonic transnational neoliberalism and reasserting national food sovereignty. Prior to Correa's election in 2006, he signed an agreement with the *Mesa Agraria*, which was a coalition of four prominent peasant/Indigenous organizations. In this agreement he committed to initiating an 'agrarian revolution' based on the tenets of food sovereignty. This revolution would entail the democratization of land and water access and state investment in the revitalization of the 'peasant economy' (Giunta 2014; Henderson 2017; Tilzey 2019). This agrarian revolution, however, never occurred. Correa was unwilling to challenge capitalist social-property relations and never delivered a more radical version of food sovereignty. Instead, he invested in reformist initiatives in small farm productivity and social welfare programs through which he sought to neutralize calls for land and resource redistribution whilst exempting the landed oligarchy from any version of agrarian reform (Herrera Revelo 2017; Tilzey 2019). Importantly, Correa's government funded their social welfare programs and agricultural development initiatives through the extraction of mineral and fossil fuel resources as well as agri-fuels. The contradictions of Correa's post-neoliberal Ecuador – 'earth-extractivism to save Mother Earth' (Valladares and Boelens 2019), wherein explicitly anti-capitalist discourse cloaked social repression and deepening resource exploitation, reflect the evolving capitalisms (and resultant agrarian struggles) visible in South America and beyond (Radcliffe 2012; Silveria et al. 2017; Baud, Boelens, and Damonte 2019).

Adaptation projects in Ecuador have largely focused on agrarian livelihoods and production systems, reconfiguring production through efficient water management, value chain enhancement, and agro-ecology (Table 1). These projects and their constitutive agrarian imaginaries reflect the Ecuadorian state's co-option of food sovereignty, which

[2]When the fieldwork for this paper was undertaken by the first author (2018–2019), the Ministerio de Ambiente (Ministry of the Environment, MAE) was the national executing entity for adaptation projects. MAE, however, has since gone through substantial reorganization. In March 2020, MAE was merged with the Secretariat of Water (SENAGUA) and its name was changed to Ministerio del Ambiente y Agua (Ministry of the Environment and Water, MAEA). In June 2021, MAEA was once again rebranded and became Ministerio del Ambiente, Agua y Transición Ecológica (Ministry of Environment, Water, and Ecological Transition, MAATE). We refer to this Ministry as MAE throughout this article.

has ultimately translated to national food provisioning by productivist means such as expanding agro-exports and value chain enhancement (Tilzey 2019). The dominant imaginaries advanced through adaptation projects in rural Ecuador sideline more radical notions of food sovereignty advanced by peasant and Indigenous movements that seek a post/alternative development model of cooperative social relations founded in the concept of a good life (*buen vivir* or *Sumak kawsay*) (Giunta 2014; Vergara-Camus 2014; Tilzey 2017).

Following Correa's tenure, President Lenin Moreno's government undertook an aggressive austerity campaign to make-up for shortfalls in government revenue due to persistently low oil prices and to satisfy the conditions of a US$4.2 billion loan that Ecuador received from the International Monetary Fund in 2019. These sweeping austerity measures included a 70% cut in MAE's budget between 2015 and 2019. In the face of these budget reductions, the Sub-Secretary of Climate Change has remained relatively insulated because most of its budget comes from international funding. As national environmental and social initiatives have been hollowed out in the name of austerity, internationally funded projects are the sole adaptation initiatives occurring in Ecuador.

In Table 1, we present the seven internationally funded climate change adaptation projects that have been implemented in Ecuador at the time of data collection (see Mills-Novoa et al. (2020) for a detailed examination of two of these projects and their government rationalities). These projects were implemented in varied regions of Ecuador (Figure 2). When speaking with adaptation project implementors and national peasant and Indigenous organizations, we examined dynamics across Ecuador's portfolio of projects. We also analyzed three projects in greater depth: FORECCSA, PACC, and the Binational project. Both FORECCSA and PACC were multi-sited but had the greatest number of beneficiaries in mestizo and Indigenous agrarian communities in the Ecuadorian highlands (Figure 2). During the time of fieldwork, the Binational project in northeastern Ecuador was just beginning and explicitly targets Indigenous and Afro-descended communities on the Colombia/Ecuador border.

In the following sections, we discuss the five counter conducts that we observed across Ecuador's portfolio of climate change adaptation projects.

4. Adaptation counter conducts

4.1 The empowered beneficiary: negotiating for control (resisting adaptation)

Within the dominant imaginary of climate change adaptation projects, the local communities are project partners who participate in projects in prescribed fora, but the state and international agencies retain financial and administrative control over projects and their interventions. Within Ecuador, however, communities are actively negotiating their role in projects to assert greater control in determining the nature of the initiative (Hoogesteger 2013, 2015). Through this counter-conduct, communities seek to transcend the role of beneficiary. In doing so, these communities question the legitimacy of the state as the key interlocutor for adaptation finance and advance their own imaginaries in the process.

Within Ecuador, this negotiation is exemplified by a new multi-lateral adaptation project in which the Grand Family Awá, the Network of Southern Pacific Community councils, and the Afro-Ecuadorian Confederation of Northern Esmeraldas have fought to govern the project by negotiating directly with international agencies and funders. The

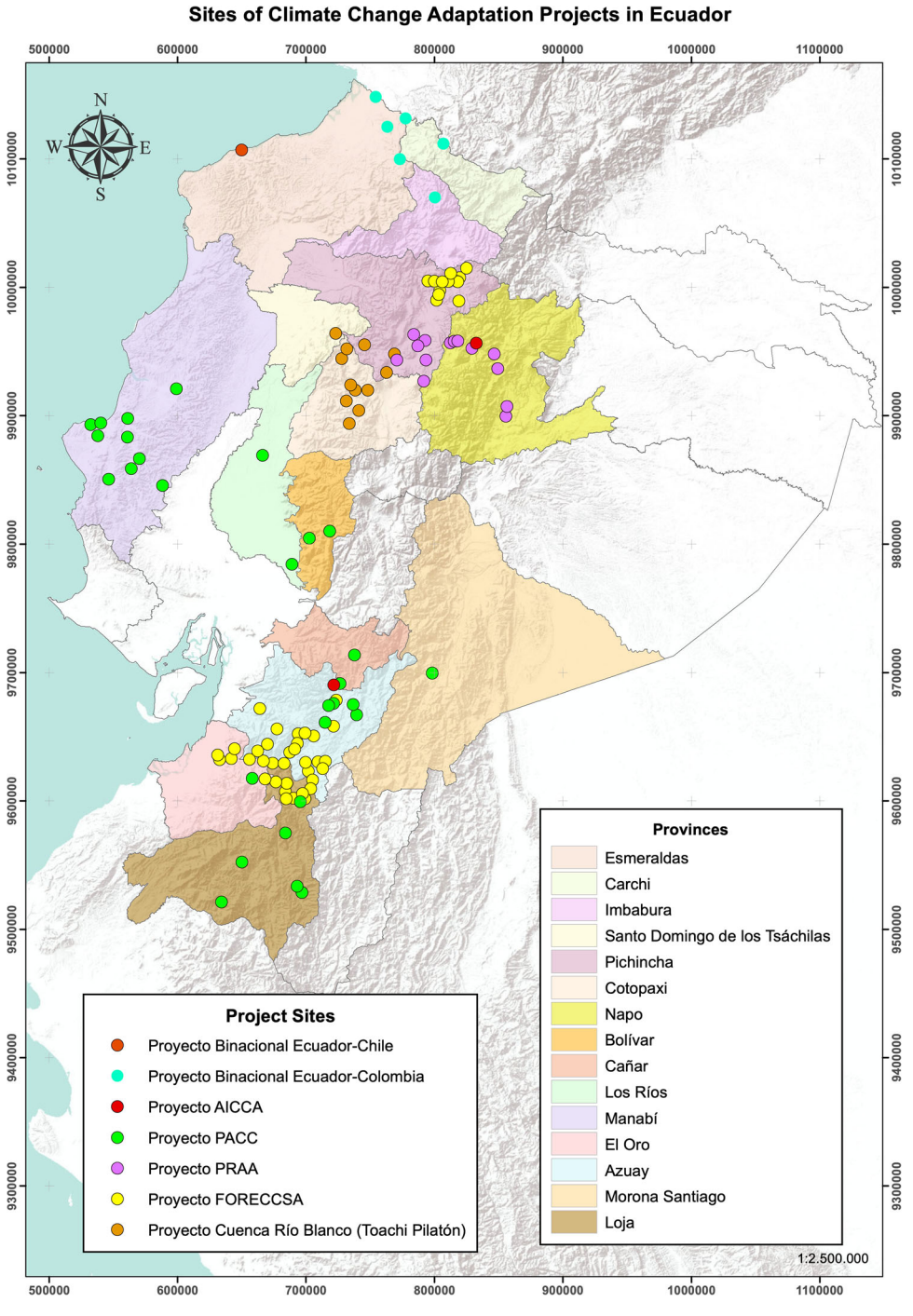

Figure 2. Map of project sites across Ecuador's portfolio of internationally funded climate change adaptation projects.

14-million-dollar project, *Building adaptive capacity to climate change through food security and nutrition actions in vulnerable Afro- and Indigenous communities in the Colombia-Ecuador border areas* which is commonly referred to as the 'Binational' project was developed by the World Food Programme (WFP) and funded by the Adaptation Fund (Table 1).

Unlike previous adaptation projects in the country, project implementors had to get approval from the general assemblies and leaders of these groups to develop and implement the project. Though this project was still in its nascent stages when the first author conducted fieldwork, the Grand Family Awá, which is highly distrustful of the state, had already asserted control in the project by requiring that all significant decisions be presented by WFP to the general assembly for approval (Binational project staff member, Interview, 22 February 2019). Furthermore, the Afro-Ecuadorian and Indigenous organizations have positioned themselves as project executors meaning that they implement the project in their territory and receive resources directly from WFP.

MAE retains a role on the national steering committee, but it has been relegated to the role of advisor. When asked about MAE being sidelined in the Binational project, a former director of MAE's Adaptation Directorate blamed WFP for this, 'We fought until the end and with all the allies of MAE so that this couldn't happen, at the end of the day it is against the sovereignty of the country. We were fighting very strong for the role of the state. The role of the state is above any implementing agency' (Interview, 26 February 2019). WFP's privileging of the sovereignty of the Afro-Ecuadorian and Indigenous project counterparts reflects the growing sensitivity of funders and international agencies to issues of Indigenous sovereignty.

The case of the Binational project reflects how some local actors are countering the state's role in adaptation by asserting a central role in the execution of projects to advance their imaginary of climate change adaptation. In the early stages of the project, the Grand Family Awá and the Network of Southern Pacific Community have reoriented this 'food security and nutrition' themed adaptation project to focus on their imaginary of climate change adaptation including recovering traditional practices and native species with community leaders and members identifying and collecting plants, holding seed fairs, and developing ancestral community-based disaster risk management practices (World Food Programme 2020). These adaptation measures point toward a different vision of adaptation than that being propagated through more top-down adaptation projects in the country where the focus is on improving irrigation efficiency, increasing agricultural productivity, and enhancing value chains. The climate change adaptation imaginary advanced by the Grand Family Awá and the Network of Southern Pacific Communities reflect both an alternative vision of project control and governance as well as material interventions that reflect broader efforts by CONAIE for Indigenous sovereignty, bicultural education, and food sovereignty (Pacari 2020).

While WFP remains a key interlocutor between the Adaptation Fund and these project partners, it is clear the Grand Family Awá and the Network of Southern Pacific Communities councils have employed an effective counter-conduct via direct negotiation to sideline the state and gain greater control over the Binational project. This counter-conduct reflects an overt oppositional consciousnesses where Indigenous and Afro-descended communities actively deny the legitimacy of the state and gradually seek to assume state power through administering their adaptation project thus asserting greater control over their territory, resources, and the nature of adaptation. These political fights over project control are

part of CONAIE and its members' long legacy of challenging the state and demanding respect for Indigenous territories and ways of life (Akchurin 2015).

4.2 The conditional beneficiary: setting the terms for being governed (leveraging adaptation)

While the final project evaluations report that FORECCSA benefited 12,585 families and PACC benefited 4,455 households, there exists substantial differences in how those beneficiaries embrace, conditionally accept, and/or abandon adaptation interventions. As summarized by a MAE adaptation official:

> There is 50/50 people that are empowered and have been able to carry forward [agricultural] production for themselves. But there are other people, other beneficiaries that are used to paternalism. When the project ends and there aren't more resources, they leave the initiatives that they participated in on the side. (Interview, 9 November 2019)

This view of beneficiaries is common among project implementors. Namely, that while some beneficiaries are transformed into emerging entrepreneurs, adaptive agriculturalists, and/or resilient irrigators, other beneficiaries will not occupy those subject positions. Or these beneficiaries will only inhabit those roles while the project is ongoing and funds continue to roll into the community. This ambivalence and conditional acceptance of adaptation projects, however, reflects another counter-conduct, where beneficiaries only inhabit the beneficiary subject position if they feel that the project implementors and the state is fulfilling its obligations. Far from becoming an idealized *homo economicus*, fully embodying the rational adaptive, productive agricultural positionality, these beneficiaries make it clear that their support is contingent on ongoing support that helps them endure turbulence in climatic, social, economic, and/or political conditions.

Like the project implementor quoted above, many project implementors attribute the ambivalence of beneficiaries to long-standing paternalism, which project implementors view as something approximating a pathology among beneficiaries and therefore in need of reeducation or sanction. An adaptation expert at MAE describes this view of beneficiaries:

> We have a lot of virtues, but also a lot of flaws and among the defects that we have as Latin Americans is that we are very comfortable. So the Spanish inheritance that the Spaniards brought us was not very good in this sense. I tell you this with shame and sadness, but it is still very ingrained in people the tendency to want things to come easily. And if things come easily for you then why are you going to do difficult things if they can come easily? So, if you got used to the fact that for three or four or five years [the average length of an adaptation project] you have things easy. So are you going to take out the hoe to work for the same thing? You are always waiting for another project to come that will bring you things. Sometimes I think that we have to pass a certain point with the beneficiaries and be more cautious in the selection and identification of beneficiaries, not only for their poverty or lack of services, or certain social or economic indicators for who is the most needy – that is true. But, I also believe we have to work hard to educate the beneficiaries so that they know at the end of the project that they have been beneficiaries. (Interview, 15 January 2019)

This view of the uncooperative beneficiary clearly holds racist and classist undertones, and also reflects the deep frustration that adaptation project implementors feel when

beneficiaries don't behave like thankful beneficiaries during or beyond the end of a project.

Expectations of patronage and implicit quid-pro-quo by beneficiaries, wherein adaptation projects are viewed as being in exchange for political support, are highly problematic in the eyes of project implementors because it disrupts the technocratic imaginary of these projects, which they feel should be successful on technical merits alone. This dynamic, however, closely maps onto the state-society relationships reinforced during the technocratic populism of former president Rafael Correa. Under Correa, experts felt they could build a rational and just society without input from social movements or citizens (Torre 2013, 2018). Instead, social welfare payments by the state to Indigenous and other poor Ecuadorians sought to neutralize calls for more radical reforms. These social programs were designed to engender a sense of indebtedness and political allegiance amongst recipients (Torre 2013, 2018). Under Lenin Moreno and deepening economic austerity, these social programs have been incrementally rolled back, but patronage relationships have long been part of the state-society contract in Ecuador and extend to state interventions like adaptation projects. Under the current center-right President Guillermo Lasso, these social programs are likely to be further dismantled.

Adaptation projects, as a form of state intervention, are also being implemented in communities and autonomous, grassroots irrigation or agricultural associations with their own set of social dynamics and governance norms that shape how beneficiaries do or do not relate to an external project. Incursions by project technical staff into the oversight of association members is often met by fierce resistance by local leaders as exemplified by a conflict that arose between a PACC project technician and an autonomous irrigation association. As recounted by a leader of the irrigation association:

> I told him, 'Look Engineer. It is not a problem if the comrades come or do not come. You are directing the project, you are not supervising who comes to work or not. That is what we do. Let's be clear on this, Juaca [an engineer and member of the association] is executing the project and we are the beneficiaries who are lending a hand and you don't get to track who has not been coming. (Interview, 6 December 2019)

This irrigation association leader is strongly asserting that the adaptation project staff member and the state, which that staff member represents, do not have the authority to sanction their members. Within this irrigation association, there is a counter-hegemonic politics that seeks to govern adaptation infrastructure based on autonomous governance structures enacted through grassroots irrigation associations and other local territorial institutions.

The variation in how project beneficiaries relate to project interventions and embody the beneficiary subject position speaks to the messy execution of projects and the varied social dynamics, history, and imaginaries of the individuals and communities that participate in these programs. By viewing beneficiary's willingness to embody that subject position as conditional, we can see how beneficiaries are willing to be governed only under particular terms, and their disengagement is a counter-conduct employed when, from their vantage point, the state-society contract is broken by the state and project implementors. As a counter-conduct, the conditionality of beneficiaries undermines the official narratives of project outcomes as presented in proposals, evaluations, and promotional materials.

4.3 The beneficiary that refuses to be a beneficiary: opting-out (leveraging and resisting adaptation)

Perhaps the most obvious counter-conduct open to potential adaptation project beneficiaries is an out-right refusal to participate in the initiative. This 'right of refusal' to external climate change adaptation projects is a key counter-conduct employed by both Indigenous and mestizo communities in asserting their territorial rights (Simpson 2017). Refusals to climate change adaptation projects are often undocumented and thus hard to find. The communities that do not enter into agreements with MAE for climate change adaptation projects are not documented in formal paperwork and often these refusals happen at a very early stage of project design.

Many project designers avoid these refusals altogether by choosing communities that they know will be amenable to climate change adaptation projects. In our interviews with project designers, they often cited two reasons for why they chose particular sites for intervention. The first was technical with project designers justifying project sites selection based on climate change vulnerability or impact studies. The second site selection criterion was based on the pre-existing relationships, political alliances or the vaguely stated 'willingness to work' of particular communities (Interview, former PACC project staff, 10 September 2019). One former adaptation project designer described their experience of project site selection:

> The majority of the times [project implementors] make a political decision and then figure out how to substantiate it. The majority of time politics function this way, not the reverse. This country is not an open canvas, there is power, there are interests, territories. (Interview, 9 September 2019)

By prioritizing communities with whom state and international actors have pre-existing relationships or political affinities, these refusals are avoided before they can happen.

While it may be hard to document cases of community-wide refusal in climate change adaptation projects, within each community or association that participated in PACC and FORECCSA, there are individuals or families that chose not to participate in a climate change adaptation project. When asked why particular individuals refused, community leaders partially attributed this to both restrictive financial and labor project requirements and the advanced age of beneficiaries. Beyond these constraints, community leaders also cited internal conflicts, mistrust of the state, and unwillingness to provide financial or in-kind contributions as reasons that some individuals chose to opt out.

By opting out, these beneficiaries deny climate change adaptation as a viable field of action and reject its related subjectivities. As a counter-conduct, the opting out of individuals and/or communities are autonomous actions that protect them from enduring climate change adaptation initiatives not by opposing state power directly but sheltering themselves and others from the productivist logics embedded in adaptation initiatives.

The refusals of individuals or communities to participate in climate change projects is also linked to national and international efforts led by the national Confederation of Indigenous Nationalities of Ecuador (CONAIE, *Confederación de Nacionalidades Indígenas del Ecuador*) to challenge the legitimacy of the state in administering climate finance and reject market-based climate change solutions like Reducing Emissions for Deforestation and Forest Degradation (REDD+) and its national manifestation, Socio-Bosque. In 2008,

Humberto Cholango, the then president of CONAIE, wrote directly to Ban Ki Moon and Christiana Figueres, the General Secretary of the UNFCCC, to explicitly condemn REDD+ and denounce the negotiation of the Ecuadorian state and United Nations as against the will of Ecuador's Indigenous peoples. More recently, Jaime Vargas, the president of CONAIE from 2017-2020, denounced Ecuadorian President Lenin Moreno at the 2019 UNFCCC Conference of Parties 25 in Madrid, stating that Moreno's support of REDD+ and payment of ecosystem services was a 'just a little bit of bread to the Indian so they will maintain the forests while we continue industrializing' (Pressenza 2019).

While CONAIE has largely focused their advocacy on contesting market-based mitigation strategies like REDD+, they have openly challenged the legitimacy of the Ecuadorian state in climate change governance. More generally, CONAIE rejects the market-based, capitalist imaginaries of climate change solutions and instead advances an alternative imaginary grounded in food sovereignty, peasant's rights, and Earth-rights.

The trans-environmental Indigenous movement represented by CONAIE and other agrarian movement allies is actively seeking to disrupt the underlying conditions of exploitation, resistance within and through an explicitly anti-capitalist platform. While CONAIE has not made a formal position on climate change adaptation, they have articulated a clear call for 'structural changes of coexistence with Nature through Buen Vivir/Vivir Bien' and a rejection of the 'conciliatory "adaptation" that is the ambition of multinationals [corporations]' (Abya Yala 2009, 1).

4.4 The subversive beneficiary: undermining the discursive frame of climate change adaptation (reworking adaptation)

Adaptation project designers work hard to define and bound how a project responds specifically to climate change impacts. The climate rationality and impact studies that justify adaptation interventions and produce a regime of truth are foundational to how funders select projects and how beneficiaries are schooled to understand projects (Li 2007). For an adaptation project to be labeled, 'just another development project' is a pejorative for many adaptation project implementors (Implementing entity project director, Interview, 12 September 2019). The ability of adaptation projects to respond directly to climate change impacts, cementing their additionality above and beyond baseline development, both justifies projects to funders but also creates a powerful justification for territorial intervention. Considering this careful framing, subverting the discursive frame of climate change adaptation projects represents a key counter-conduct as exemplified by the community of Santa Rosa.[3]

Santa Rosa, like many communities in the southern highlands of Ecuador, has silver, lead and zinc deposits within the parish. To exploit these resources, an underground mine was developed in the 1970s. For twenty years, a Filipino company owned the mine and employed a mixed foreign and local workforce. In the early 1990s, however, the mine was purchased by the Ecuadorian subsidiary of a Canadian mining conglomerate and then closed soon after. This closure was driven by compounding factors including low silver prices, extensive water contamination leading to community resistance, and the efforts of the local labor force to unionize for better wages (Terán 1994). Despite the

[3]Fictionalized name.

closure of the mine twenty years ago, it remains an active specter of the threats of extractivism for the residents of Santa Rosa and neighboring communities.

In 2012, there were reports that staff from the mining company were conducting inspections and visiting families in the vicinity of the mine. This activity stoked fears that the silver mine would reopen prompting protests by communities across the canton[4] and local politicians to denounce this threat to vital water systems . A former employee of the mine and current leader of the local irrigation association remembered this struggle:

> What we didn't want again was those mines because those goddamn mines took our water. […] We made a war against [the mining company] that wanted to return to mining here. We didn't accept it and we raised up as four parishes, we gathered between 1500 and 2000 people in defense of the water. (Interview, 11 October 2019)

It was in this context that Santa Rosa began preparing their proposal to MAE for a sub-grant from a new adaptation pilot project.

The *Adaptation to Climate Change through Effective Water Governance* (or PACC for its acronym in Spanish) was funded by the Global Environment Facility's Special Climate Change Fund and implemented by the United Nations Development Program between 2009 and 2014 (Table 1). This 3-million-dollar project's objective was to 'reduce vulnerability via the efficient management of water resources' (UNDP 2008, 2). Within the project, MAE officials advanced an imaginary of productivist agricultural reform where campesino farmers increased their agricultural production and water use efficiency through irrigation system improvements, capacity building, and some highland reforestation for improved water availability.

When developing their PACC sub-grant proposal, parish leaders of Santa Rosa created an ambitious project where they would construct seven reservoirs and improve irrigation infrastructure in collaboration with multiple irrigation associations across the parish. While this project was designed to help local farmers respond to changing water availability, it also served an important political purpose in stymying the reactivation of the mine. The parish government decided to site their largest planned reservoir in the tailings of the old mine. Nestled between the abandoned mill house and former company office, community leaders hoped that by constructing the reservoir there they could gain state-recognized rights over related land and water, thus strengthening their claim over their territory and providing them a legal basis by which to oppose the re-opening of the mine. When asked about how his administration chose the site for the largest PACC-funded reservoir, the former president of the parish responded, 'There are many places you can put a reservoir, but only one place we could also stop the mine from re-opening' (Interview, 8 October 2019). Santa Rosa's proposed PACC project thus served a dual purpose of increasing water storage to buffer increasingly erratic seasonal rains and asserting control over land and water rights.

MAE realized that this reservoir site presented political and environmental concerns. Officials even suggested that the reservoir be relocated because of water contamination and instability in the tailings. But in 2014, the Santa Rosa parish government defiantly

[4]Within Ecuador, there are three key scales of sub-national state governance – provincial, canton, and parish – with parish being the most local form of government.

informed MAE that it would not be relocating its reservoir. In the official memo, the Santa Rosa parish council credited their decision to the lack of other sites with sufficient untitled water. What was not written in these official documents was the political work that that reservoir was performing in the tailings. The placement of the reservoir represented an overt act of resistance to the neo-extractivist stance of the Ecuadorian state and an explicit statement about a future agrarian landscape free from mining.

The case of Santa Rosa represents a key counter-conduct. Here the local leaders mimic the discourse of climate change adaptation, but toward very different ends. By subverting the discursive frame of the climate change adaptation project, the people of Santa Rosa were able to assert control over their territory and build political subjectivities that are tied to the national movement against extractivism, which faced substantial persecution under former president Correa (Machado Aráoz 2015). The elected leaders of Santa Rosa's parish council and campesino irrigation associations leveraged adaptation projects to reinforce an agrarian future rooted in agricultural lifeways, anti-extractivism, and defense of water.

Additionally, the case of Santa Rosa reflects the skill of local leaders in reworking the adaptation project to support their alternative territorial imaginaries. It is also important to highlight that the reservoir that was constructed in the tailings does still provide important water storage to downstream farmers (though with elevated contaminant levels). Therefore, the subversion of the climate change adaptation rationality is not complete, rather it challenges purist fantasies of project implementors who often wish to separate the risk of climate change from the milieu of long-standing territorial struggles. The strategic articulation of struggles for agrarian climate justice and long-standing anti-extractivism mobilization, highlights the growing convergence between local and national struggles (Borras and Franco 2018; Sekine 2021).

By deploying this counter-conduct, the beneficiaries of Santa Rosa reworked the capitalist logic, seeking to alter the unequal conditions that they have endured under neo-extractivism. Their counter conduct reflects a pragmatic strategy for recalibrating power relations and safeguarding agrarian livelihoods in their territory.

4.5 The long-standing beneficiary: leveraging longevity (reworking adaptation)

Climate change adaptation projects are ephemeral. The implementation of these projects generally lasts between four and five years and then project implementors expect for local governments, individuals, and/or grassroots organizations to sustain these projects into the foreseeable future. The longevity of beneficiaries in their community as compared to the often-episodic presence of international or state actors provides beneficiaries a key counter conduct. By leveraging their longevity, beneficiaries can contest the imposition of dominant territorial projects and reinforce their own imaginaries of climate change adaptation.

The infrastructure installed during adaptation projects in Ecuador such as reservoirs or irrigation systems are left to agricultural or irrigation associations or individuals to maintain. In the hands of grassroots organizations, adaptation projects are subject to customary water management norms, but there remains a fraught give and take with the state over the governance of adaptation interventions and the organizations themselves. On one hand, adaptation projects forge relationships and dependencies between grassroot

organizations and the state by requiring water concessions. In both the case of FORECCSA and PACC, water concessions for newly installed reservoirs had to be approved by the secretariat of water (SENAGUA). As one irrigation association board member that participated in PACC explains:

> We have to stay legal with SENAGUA because the water belongs to the state. The concessions do not consider us as owners, but only authorizes the use of the water as an authorization. So that is why we are dependent on SENAGUA. (Lama 2020, 44)

As this board member clearly articulates, PACC fostered ties between the state and autonomous irrigation systems through water concessions, but project implementors stopped short of requiring irrigation associations be legally formalized.

While associations may agree to attain and maintain water concessions for additional security over water access and use, irrigation associations have been reluctant to formally legalize as organizations with the state. The legal formalization of grassroots irrigation or agricultural associations in Ecuador entails registering with SENAGUA, agreeing to ratify and abide by approved water governance statutes, and attaining a tax ID. One parish president explained why he did not require irrigation associations to legalize before participating in PACC:

> It does not matter. It was not necessary to be legally constituted to benefit. We never demanded it from them because we saw that it was a burden. […] No, we discarded the idea and started to work with organizations that we saw wanted to work … that had the drive to work. So we said let's work with them. We did not make them legalize. Then came SENAGUA saying they needed to legalize. I don't know how many are (legalized) at the moment, but we did not demand that they be legally constituted. (Interview, 8 October 2019)

Since PACC, very few irrigation associations have completed their legalization process, instead opting to govern their irrigation infrastructure according to customary water governance norms. When asked why so few have legalized, the president of the National Federation of Irrigation Association replied:

> It is about sovereignty […] There are many communities that aren't legalized and I personally tell them that they don't need to legalize. The truth is that you have to contract a lawyer, which costs a lot, and pay for all the expenses. The other [barrier] is after you are legalized you have to register with the Internal Revenue Service. For that you need an account, a professional to sign for you, another expense. (Interview, 7 September 2019)

While there are clearly monetary and bureaucratic barriers to legalization, these alone are not the only reason. When there have been periods in the past when procedural and financial barriers were simplified or removed by SENAGUA, many associations still chose not to legalize because some irrigation association leaders felt that it was not necessary since they had long been managing water communally and resolving conflicts. The unwillingness to conform with state rationalities about water management following a adaptation project's closure represents a counter conduct through which beneficiaries oppose adaptation rationalities wherein water governance under a changing climate reflects technocratic norms of 'rational' and 'efficient' water use. By not undertaking the legalization process, grassroots irrigation associations defy the desires of the state and support an alternative imaginary wherein newly implemented

adaptation projects are manged according to customary norms and collective social relations following the closure of the project.

This counter-conduct by former project beneficiaries, however, does not go unnoticed. When reservoirs or other project interventions need major repairs or other large-scale investments, local leaders often petition the provincial government, which has the constitutional responsibility for rural development and irrigation. As an example, San Bartolomé Central, an irrigation association that participated in PACC, needs to replace the ruptured membrane lining of their PACC-funded reservoir at a cost of US$30,000. As one irrigation association member explains, this assistance is desperately needed, 'When the reservoir [lining] breaks, we need to ask for the support of the regional government otherwise we cannot irrigate anymore' (Lama 2020, 51). The provincial government of Azuay, which encompasses San Bartolomé, however, has withheld support. The irrigation association president recounts the conditions for provincial support, 'We have visited the prefecture asking for help to repair the reservoir, but they won't help us until we are legalized as an irrigation association.' (Interview, 6 October 2019). The ongoing debate over the legalization of irrigation associations following the closure of adaptation projects reflects the governmentalities and counter conducts that arise as the beneficiaries and state continue to negotiate the nature of climate change adaptation and agrarian change into the uncertain future.

The interplay between state actors and local irrigation associations around legalization highlights that the governance of climate change adaptation and its subjects does not terminate with the closing of the project. By leveraging longevity, beneficiaries subvert and seek to turn the formal adaptation project rules and rationalities into myriad projects of their own making: redirecting agrarian livelihoods and asserting control over their own futures.

5. Conclusion

Looking across Ecuador's portfolio of climate change adaptation projects and the opposition that these initiatives have generated, we do not find a burgeoning and coherent trans-environmental, trans-regional, anti-capitalist peasant social movement that places climate justice, much less climate change adaptation, at the core of its political struggle. CONAIE, as one of the strongest and longest-running social movements in Latin America and the hub of a broad agrarian coalition across Ecuador, has played a central role in elevating the rights of Mother Earth (Akchurin 2015) and food sovereignty (Peña 2016). Despite this leadership, CONAIE has remained largely silent on the topic of climate change adaptation beyond dismissing it as a 'conciliatory' discourse driven by the interests of transnational corporations (Abya Yala 2009).

The most recent mass social mobilization in June and July 2022 exemplifies the peripheral nature of climate change to CONAIE's central platform. During the mobilization, CONAIE's leaders alongside their broad coalition of campesino rights and labor-based organizations issued a list of ten demands to President Guillermo Lasso as a response to the 'crisis caused by neoliberalism' (CONAIE 2022). The ten demands included core issues relating to agrarian justice including debt cancelation, fair agricultural prices, protection of national markets, improved labor protection, halting the extractive frontier, bicultural education and Indigenous sovereignty, stopping the privatization of strategic

sectors, and price controls on items of basic necessity (ibid). Topping this list, however, was the demand for the increased subsidy of diesel and gasoline to cushion rising prices. This demand highlights how climate justice remains a far second to meeting the immediate needs of Indigenous and poor Ecuadorians in the context of growing domestic austerity and international market turbulence.

Contestation over climate change adaptation is not yet happening on the national stage, but it is happening in agrarian communities across Ecuador. An examination of the counter conducts, as 'revolts of conduct', enable us to examine the micropolitics through which project beneficiaries challenge and negotiate adaptation initiatives on-the-ground and towards what ends (Foucault 2009, 196). Fundamentally, struggles over climate change adaptation are struggles over the future of agrarian people, livelihoods, and landscapes. Therefore these counter conducts should not be seen as separate, dislocated or 'merely local' struggles. Across these varied counter conducts and their underlying strategic logics, communities are also forming new subjectivities, collectivities, and imaginaries wherein vernacular notions and practices of climate change adaptation become incorporated into broader struggles for agrarian justice. We argue that local contestation of agrarian adaptation projects should be seen and theorized as a part of the broader agrarian and Indigenous movement that at different scales pragmatically and eclectically struggles to create an alternative agrarian future for rural communities.

From the Binational project on the northern border to Santa Rosa in the Southern highlands, we see agrarian communities advancing long-standing demands for agrarian justice through their contestation of adaptation projects but with varied logics underlying their counter conducts (Katz 2004). In the Binational Project, Indigenous and Afro-descended communities are actively seeking to disrupt the underlying conditions of oppression by fiercely asserting their sovereignty and demanding control over adaptation finance. As a result of their *resistance*, they are advancing an alternative imaginary of climate change adaptation that resonates with broader struggles to build greater sovereignty, strengthen local territorial control, and foster agrarian production that reflects anti-capitalist notions that forefront food sovereignty, cooperative social relations, and the co-existence and entanglement of people and nature (Abya Yala 2009).

Other individuals are *reworking* the unequal conditions and structures of oppression through their negotiation of climate change adaptation projects. In the case of Santa Rosa, local leaders used their adaptation project to fortify their territorial claims, block the reopening of a silver mine, and promote an imaginary of anagrarian future that is based in smallholder agriculture over extractive industry. As an another example of reworking adaptation, grassroot irrigation associations across the Ecuadorian highlands are outlasting project implementors to bring these projects under local, autonomous governance structures.

Other counter conducts that we identified enable project beneficiaries (or would be beneficiaries) to *leverage* adaptation projects to help them endure turbulence in markets, politics, and even the climate. As an example, some individuals or communities chose to not participate in projects altogether to shelter themselves from state intervention and productivist logics advanced by these initiatives. Others chose to participate in adaptation projects but only under particular conditions or when receiving material benefits.

What do these counter conducts mean for the future of climate change adaptation in agrarian Ecuador? Over the nearly 15 years of adaptation project implementation in Ecuador, beneficiaries have begun to take a more oppositional and proactive role in dictating the terms of climate change adaptation. It is an open question if Indigenous and agrarian movement actors will begin to explicitly incorporate climate change adaptation into their demands, and importantly, if these local counter conducts will enable agrarian communities to position themselves translocally or transnationally in the changing landscape of adaptation finance and the struggle over the nature of climate-resilient agrarian development. It is commonly said by adaptation scholars and practitioners that climate change adaptation is inherently local, yet as we have shown, the negotiation of these local projects is deeply entwined with and rooted in the broader multi-scalar struggles of Indigenous and agrarian movements that aim to carve out space, autonomy, and political leverage to develop alternative agrarian futures.

Acknowledgements

The authors would like to acknowledge Carol Tapia who served as research assistant on this project. The authors would also like to acknowledge Diana Liverman, Andrea Gerlak, Elizabeth Oglesby, and Gökçe Günel for their helpful comments on earlier drafts of this article as well as participants in the 2022 *Climate Change and Agrarian Justice Conference, 2020 EASST+4S Conference*, and 2021 *2nd World Forum on Climate Justice* who provided feedback on earlier versions of this paper.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding details

This work was supported by University of Arizona's College of Social and Behavioral Sciences Summer Dissertation Writing Fellowship, National Science Foundation Doctoral Dissertation Research Improvement Grant (Grant Number: 2002829), Conference of Latin American Geography PhD Field Study Award, National Science Foundation/Dutch Research Council Graduate Research Opportunities Worldwide Grant, American Association of Geographers Dissertation Fieldwork Grant, American Geographical Society Council Fellowship, University of Arizona - School of Behavioral and Social Sciences Research Institute Dissertation Grant, Ida Grace Guy Endowed PEO Scholarship, American Association of Geographers-Cultural Anthropology & Political Ecology (CAPE) Specialty Group Dissertation Fieldwork Award, American Association of Geographers-Latin American Specialty Group Dissertation Fieldwork Award, and Tinker Foundation Research Travel Award.

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