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JUSTICE AND EQUITY IN CARBON OFFSET GOVERNANCE

Debates and Dilemmas

Mary Finley-Brook

Justice and Equity in Carbon Offset Governance

Trade-offs complicate development interventions so that benefits for one group or area often imply costs for another; large-scale projects deemed highly efficient in economic terms may generate harmful environmental or social externalities. This chapter explores issues of justice in carbon trading in terms of decision-making power and the subsequent distribution of positive and negative impacts. It explores whether offset governance can help resolve widespread problems, such as racial or income inequality and environmental injustice.

A spectrum of offset governance structures exists in regulated compliance markets organized through the United Nations Framework Convention on Climate Change (UNFCCC) and in voluntary markets, ranging from highly rigorous approaches to informal exchanges. To contextualize offsets, it is helpful to identify key actors and assess prior initiatives, including national-level payments for environmental services (PES). Lessons can also be drawn from the UNFCCC's Clean Development Mechanism (CDM) and first-generation initiatives for reducing emissions from deforestation and forest degradation (REDD). While offset impacts are site-specific, the study of cross-national and multisite patterns can help identify nascent trends (Caplow et al. 2011; Murdiyarso et al. 2012; Sunderlin et al. 2014). To achieve REDD+, as opposed to basic REDD, is something that few projects have done—it requires sustainable forest management and enhancement of carbon stocks as well as 3E+ criteria (effectiveness, efficiency, equity, social and environmental co-benefits) (Sunderlin et al. 2014).

The analysis in this chapter draws from civic, state, and private sector accounts, scholarly publications, and fieldwork since the mid-1990s assessing a wide range of community development models and their intersections with state

governmentality, donor interventions, market trends, and nongovernmental organization (NGO) initiatives. Important insights arise from annual fieldwork since 2009 analyzing CDM projects in Costa Rica, the Dominican Republic, Nicaragua, and Panama, as well as REDD readiness initiatives in Panama and Peru (2013 and 2014).¹

Geographic Tools for Analyzing Ecological Change, Complexity, and Power

Geographers view climate change mitigation and adaptation as important examples of dynamism and complexity in human-environment interactions. Topics that integrate political, economic, cultural, and ecological knowledge generally benefit from geographic analysis; and PES and offset cases throughout this book demonstrate the utility of several common practices in geography, including:

1. Simultaneous focus on multiple governance scales and various social groups, with the recognition that perceptions and priorities can shift based on scale and sector;
2. Attention to economic flows and other connections between locations as well as resulting changes to landscape patterns and livelihood strategies;
3. Documentation of uneven development through patterns of ecological, spatial, and social distributions of costs and benefits;
4. Analysis of power and its linkages to territoriality and claims to space.

Offset Governance

Environmental governance has broadened from the centralized government mandates of former decades as decision-making shifted upward to multilateral and transnational organizations, downward to regional and local institutions, and outward to indigenous federations, NGOs, and the private sector (Swyngedouw 2000; Thompson et al. 2011). Changes often resulted from intense political struggle, and governance processes remain marred by power inequalities and vested interests (Swyngedouw 2000). Offset governance research must examine decision-making power (procedural equity) as well as implications for material outcomes, such as access to resources or profits (distributional equity) (Larson and Petkova 2011). It is also essential to determine if there are historical or pre-existing conditions that limit or facilitate access to procedural and distributional equity (contextual equity) (McDermott et al. 2013). For example, land tenure insecurity will negatively impact both distributional and procedural equity.

The ways powerful groups define environmental issues legitimizes certain potential solutions while marginalizing others (Thompson et al. 2011). The Kyoto Protocol sought to mitigate climate change through carbon offsets in developing

countries without achieving binding commitments to reduce domestic emissions in industrialized nations. Offsets build from the assumption that valuation in monetary terms will correct ecological imbalance with more efficient resource allocation (Corbera 2012). Using market instruments to rectify environmental problems is limited because it breaks nature into measurable components, while financial mechanisms protect only the parts capable of generating income (Corbera 2012; COICA 2014).

Carbon trading is only one form of climate change mitigation, but it has broad support among multilateral agencies, development banks, private firms, and big NGOs. As networks of powerful actors promote carbon trade, developing countries with high potential for forest offsets may experience greater supply of funding for REDD readiness than actual demand (Gustavo Suárez de Frietas, interview, July 7, 2014). Meanwhile, dozens of voluntary sector forest carbon projects began in many countries before national policies or procedures for avoided deforestation could be defined.

Climate governance regimes are becoming increasingly complex (Chhatre et al. 2012; Suárez de Frietas, interview, July 7, 2014) through the growth of entities such as the UNFCCC, voluntary market associations, consulting agencies, and carbon brokers. At the same time, bilateral and multilateral institutions like the United Nations and World Bank have assumed leadership roles in carbon finance and climate policy. Offset mechanisms can be ill-suited for governance in national or local arenas because they are based on external priorities and build from development networks with predefined ideals (Clements 2010; Corbera 2012). In order to limit corruption, donors' reporting standards and accountability requirements are demanding and thus may impede or complicate customary governance processes within and among local and regional bodies. Changes required by donors might not respect the autonomy of local organizations, institutions, and government entities. For example, a lack of bylaws impeded Panama's National Coordinator of Indigenous Peoples (COONAPIP) from directly receiving UN-REDD funds, but subsequent pressure to convert the indigenous federation into an NGO violated a legal right to define self-governance (Mezúa, interview, July 9, 2014). This example demonstrates the complexity of defining authority within multiscale, multisector offset governance as stakeholders have different priorities, yet the ideals of those who control funds may be disproportionately privileged.

Tenure insecurity, widespread in developing countries and particularly in indigenous territories, is a contextual or historical inequality that often constrains local decision-making toward and benefits from avoided deforestation projects (Chhatre et al. 2012). Tenure rights should be clarified before starting resource management projects. Nevertheless, even after titling, rights sometimes exist only on paper: corruption and state failure to defend local rights against intrusions or competing interests contribute to ongoing insecurity (Larson 2011). Further, titleholders may not be considered owners of natural resource rights

above and below the ground, including trees and carbon (Sunderlin et al. 2014), which could limit community benefit from REDD and encourage conflict during project creation and implementation.

Learning from Prior Conservation Initiatives

For more than two decades, integrated conservation and development programs (ICDPs) have attempted to move beyond the fortress-style environmental protection stemming from a false dichotomy of “people versus parks” in order to integrate social development into conservation. By 2000 an estimated 300 ICDPs utilizing millions of dollars of investment existed worldwide (Hughes and Flintan 2001). Nevertheless, most ICDPs struggled to balance both conservation and development and some did not achieve either (Blom et al. 2010), in part because project-scale interventions did not adequately address broader drivers of ecosystem degradation or lacked effective involvement from local communities (Sunderlin et al. 2014). ICDPs are similar to avoided deforestation initiatives because they share a goal of promoting sustainable livelihoods and poverty reduction within subnational environmental protection projects; thus the failures of ICDPs can provide important insights on how to improve the design of REDD (Blom et al. 2010). While REDD readiness programs generally promote institutional and policy reforms to encourage broader conservation, subnational avoided deforestation projects often still cannot address pressures exerted through tax policies or foreign investments that facilitate resource extraction and agro-industrial expansion (Sunderlin et al. 2014; Crippa and Gordon 2013). Moreover, government agents frequently remain unwilling or unable to impede illegal extraction in logging, mining, and other economic sectors that will negatively impact the viability and broader social and ecological resilience of project-based interventions.

As the implementation of many REDD initiatives continues to be at the project level, existing community-based natural resource management efforts, including ICDPs, have begun to target the inclusion of emissions reductions to take advantage of economic incentives (Blom et al. 2010; Sunderlin et al. 2014). Building from established ICDPs could benefit REDD projects, since relationships and governance structures already exist. Nevertheless, standing agreements and practices with communities could also create barriers to the adoption of new performance-based measures, whereby participants are compensated only after verification of emissions reductions, which is a foundational element of REDD.

Other pre-existing community forestry projects that might provide a base for REDD sell certified-sustainable timber. In these hybridized projects, extraction would complement avoided deforestation and carbon credits would be supplemental to logging income (Danis Saavadra, interview, June 30, 2014); however, the total amount of carbon captured per acre would decrease. Income diversification is important for poverty alleviation, especially because forest-based communities usually share proceeds from carbon sales with brokers, intermediaries,

and consultants. If logging is curtailed, avoided deforestation projects need to recover opportunity costs so as not to intensify poverty. Potentially complementary activities include agro-forestry, sales of non-timber and artisanal products, ecotourism, and income from additional ecosystem services.

Avoided deforestation project designers have much to learn from prior PES initiatives due to concerns about procedural and distributive equity in PES programs around the world (Pascual et al. 2010; Corbera 2012; McDermott et al. 2013). PES efforts in national programs in places like Costa Rica, Mexico, Tanzania, Uganda, and Vietnam suggest the need to improve engagement of marginalized populations (Corbera 2012; McElwee 2012; McDermott et al. 2013). Without targets for increasing income equity and reducing poverty gaps, most PES arrangements are unlikely to have strong anti-poverty implications. For example, early Costa Rican PES programs demonstrated a tendency toward capture of benefits by businesses, large landholders, and farmers with higher levels of education (Kaimowitz 2008; McDermott et al. 2013). Farmers without land are unable to participate in some locations, while in Mexico they could participate but received fewer benefits, potentially widening inequalities between land holders and landless (Rico García-Amado et al. 2011). Furthermore, in some PES programs, intermediaries obtained as much as 50 percent of total income (Hajek et al. 2011). Even though financial mechanisms in PES and REDD have been identified in the literature as “game changers” because they provide direct incentives for conservation-oriented behavior (Murdiyarso et al. 2012), according to research done by the Center for International Forestry Research (CIFOR), provision of conditional incentives provided to participants after conservation success has become less of a priority in recent years (Sunderlin et al. 2014). International CIFOR research suggests many initial REDD projects are currently backing away from promising direct payments for avoided deforestation because of the lack of reliable and predictable future funding.

Learning from Clean Development Mechanism Offsets

For forestry projects to enter into the CDM they could not merely involve the preservation of standing forests and instead had to increase afforestation or reforestation (A/R). Due to high costs and administrative problems, A/R forestry offsets were seldom included in the CDM (Lederer 2011), but it is still important to evaluate clean development as a precursor to REDD in terms of social justice impacts. The first decade of CDM project experience highlights a number of risks for host communities, as well as negative ramifications for indigenous peoples and economically marginalized populations (Indigenous Environmental Network 2008; Finley-Brook and Thomas 2011; Savaresi 2012). For example, since 2007, a series of wind projects have been registered in Mexico under the CDM in spite of three interrelated concerns: (1) insufficient compensation to local populations; (2) disingenuous and illegal procedures for obtaining

land contracts; and (3) the erosion of indigenous common property governance institutions (Baker 2012). Members of host communities often complain they were not formally consulted about projects and when they received information it was inaccurate, misleading, or partial (Pasqualetti 2011; Baker 2012). Project developers did not allow community decision-making about the size and number of turbines, construction of access roads, uses of water, irrigation access, and other issues impacting local economies. Local ranchers and farmers have found wind farm rents too low to compensate for production losses (Hawley 2009; Baker 2012).

Driven by methodological concerns related to leakage and verification, CDM validation processes are often perceived as cumbersome and costly. Nonetheless, public consultation procedures are frankly minimal and usually only involve a brief informational meeting where stakeholder comments are recorded; this is usually held in a semi-urban or town location and requires travel for impacted community members living at or near project sites. Second, the public consultation period has a 30-day window to record comments via the Internet (Finley-Brook and Thomas 2011). CDM proponents interpret low participation in consultation processes as “affirmative silence” (Lederer 2011); an alternative interpretation is that the consultation methods used are ineffective or inaccessible.

To assure CDM integrity, social safeguards should go beyond a letter of support from a host government, the current CDM application requirement (du Monceau and Brohé 2011). National authorities cannot be considered neutral parties because they are biased in favor of projects that build infrastructure such as roads, ports, and electrical lines or encourage foreign investment (Finley-Brook and Thomas 2011; Savaresi 2012). Nonetheless, UNFCCC verification procedures rely heavily on national-level determinations of CDM project suitability because they (1) reduce UN oversight responsibilities and (2) uphold principles of sovereignty and non-intervention.

CDM project developers have relatively unchecked power in terms of how they treat host communities. A CDM project has not been rejected for purely social reasons (du Monceau and Brohé 2011; author’s analysis),² even when the CDM Executive Board was aware of alleged violations of human rights. For example, in 2011, the Honduran oil palm company Exportadora del Atlántico received CDM registration following the murder of dozens of local farmers and the displacement of hundreds (Directorate-General for External Policies 2012). Although describing events in Honduras as “deplorable,” the chairman of the Executive Board asserted, “the Board is not equipped” to address or investigate human rights abuses (Neslen 2011).

Indigenous populations living near the Barro Blanco CDM hydroelectric project in Panama were not properly consulted before the initiation of construction (Anaya 2013). Barro Blanco was registered under the CDM even after impacted Ngäbe submitted letters arguing project developers violated CDM stakeholder consultation rules. The secretary to the CDM Executive Board replied to the

letter submitters that no comments were received “during the global stakeholder commenting period (27 June 2009–26 July 2009)” (Howard 2011, 1). Since this one-month window was missed, the host community’s letters, although received “in a timely matter” and “considered in full,” did not influence the decision of the Executive Board (Howard 2011, 1). Howard added, “It may be mentioned here that the Board at its next meeting will consider means of addressing significant deficiencies in validation and verification reports which lead to registration/issuance.” This response suggested Barro Blanco’s shortcomings might influence broader CDM procedural reform, but in subsequent years the Board did not change policies to impede recurrence.

In 2012, Ngäbe communities near Barro Blanco experienced intimidation campaigns and violent repression leading to three deaths (Bill et al. 2012). With dam construction nearly complete, villagers face relocation and flooding of ancestral lands. UN bodies and host governments must take responsibility for human rights protections throughout the life cycle of CDM projects and develop impartial procedures to investigate and redress complaints. With reforms to CDM procedures under discussion since 2012, prevention of human rights violations was overshadowed by concerns about procedural efficiency and streamlining (see, for example, CDM Executive Board 2013).

REDD Debates and Dilemmas

Offsetting policies and markets are dynamic and disputed. Experts generally agree there are contradictory possibilities in terms of positive and negative governance and equity impacts from REDD (Table 4.1), meaning each project has potential to create opportunities, threats, or some combination of both.

REDD+ has been promoted as a method to achieve what previous conservation and climate change mitigation initiatives could not. Forest carbon preservation was initially highlighted as a means to mitigate more cheaply and easily than industrial offsets (Sunderlin et al. 2014), perhaps suggesting naiveté about the complexity of the institutional transformations and policy reforms necessary. More recently, it has been argued that REDD+ can generate transformative change through the capacity building required in preparatory REDD readiness programs (Murdiyarsa et al. 2012). However, in spite of millions of dollars transferred to state agencies as part of readiness investments, pitfalls are likely if institutional reforms are superficial and true participatory collaboration is lacking (Hagen 2014).

Successful offsets, defined here as providing procedural and distributional equity as well as contributing to ecological resilience in addition to greenhouse gas reductions, often emerge from unique windows of opportunity, such as in a partnership between the Smithsonian Tropical Research Institute (STRI) in Panama and the Ipeti-Emberá community in eastern Panama. STRI paid indigenous families to plant native tree species on deforested areas and maintain stands of

TABLE 4.1 Potential for contradictions in REDD results

<i>Opportunities</i>	<i>Sources</i>	<i>Threats</i>	<i>Sources</i>
Reform and strengthen forest policy and governance in developing countries	Clements (2010); Larson and Petkova (2011)	Create a new form of imperialism	Clements (2010); Corbera (2012)
Establish new sources of employment and income; food security with reforestation of agroforestry species	Caplow et al. (2011); Larson and Petkova (2011)	Create restrictions on local access to resources; threats to food production	Caplow et al. (2011); COICA (2014)
Recognition and valuation of numerous ecosystem services	COICA (2014)	Carbon focus could undermine ecology and other forest benefits	Clements (2010); Corbera (2012); COICA (2014)
Decentralization of development decision-making	Larson and Petkova (2011)	Recentralization; tensions between international, national, and local scales	Larson and Petkova (2011); Corbera (2012)
Improvements in legal and financial support to define and defend property rights	Larson (2011); Crippa and Gordon (2013)	Loss of local access to land; land grabbing	Larson (2011); Chhatre et al. (2012); Crippa and Gordon (2013)

old growth forest in order to offset the carbon produced from their operations, determined to be equivalent to 4,000 tons annually. Twenty families committed a quarter of their land to the project and in exchange received direct payments for the carbon sequestered as well as a pool of shared funds to benefit of the whole community. After a successful 3-year pilot, preparation of a second longer-term contract involving more families is underway (Catherine Potvin, personal communication, November 2, 2015). A McGill University scientist worked with STRI personnel to train local populations in participatory mapping and carbon inventories, but if technical support were purchased at market value, would projects like this be economically viable, particularly if intermediaries commonly found in the voluntary market were also paid transaction fees? Furthermore, it is often difficult for avoided deforestation projects working with local communities to pay participants an adequate compensation to cover opportunity costs, meaning the equivalent a producer or landowner could earn from timber, palm oil, or other crops on the same land (Rico García-Amado et al. 2011; Sunderlin et al. 2014).

Analyses of early offset projects suggest that improvements to procedural equity can increase distributional equity and, alternatively, that linking marginalized

populations to markets without identifying and addressing power inequalities can contribute to exploitation and harm (Tienhaara 2012). The designation of some exploitative projects as carbon piracy—a form of green grabbing—is accurate (Espinoza Llanos and Feather 2011). Even UN agencies did not comply with standards in the UN Declaration on the Rights of Indigenous Peoples during the initiation of the UN-REDD program in Panama (Cuéllar et al. 2013; Feiring 2013): state and donor agencies were unwilling to spend the time and resources necessary to consult regional and local indigenous governance bodies (Cuéllar et al. 2013). In Peru, delays in sharing information and power contributed to frustration and strong criticisms from indigenous federations (Espinoza Llanos and Feather 2011; Feiring 2013; White 2014). Once conflicts arose in Panama and Peru, officials promised to improve participation, but state institutions may not have the capacity to effectively consult and share governance (Feiring 2013). Meanwhile, REDD programs can foment conflict within indigenous organizations. For example, the indigenous federation COONAPIP's involvement in UN-REDD in Panama led to two *comarcas* (semi-autonomous territories) withdrawing from the federation to demonstrate disapproval (Cuéllar et al. 2013; Feiring 2013).

Indigenous Responses to REDD and Justice Concerns

Donors often respond to emerging critiques about procedural and distributional inequity in avoided deforestation initiatives by creating additional training manuals, safeguard policies, reporting tools, accountability assessments, and workshops. Although information-sharing strategies are essential, written documents and brief informational gatherings cannot replace consultation and dispute resolution based on standards for free, prior, and informed consent (FPIC). One-time training events, although popular, have limited impact (Hagen 2014).

Since 2008, indigenous federations such as the Inter-Ethnic Association for the Development of the Peruvian Amazon (AIDESEP) have criticized the exclusion of indigenous peoples from decision-making in REDD readiness initiatives (Espinoza Llanos and Feather 2011; White 2014). In 2011, AIDESEP circulated an alternative proposal they call “Indigenous REDD+” (Espinoza Llanos and Feather 2011; Abate and Kronk 2013), which is essentially incompatible with the Peruvian state approach as designed with support from the World Bank and multilateral agencies (White 2014). Key conditions for Indigenous REDD+ are (1) industrialized countries need to target domestic emission reductions and (2) specific fiscal mechanisms to trade carbon in forest offsets must be eliminated, while still finding methods for wealthy countries to pay the ecological debt they owe. According to advocates, Indigenous REDD+ arrangements are more likely to support holistic forest protection if they remain outside of international carbon markets seeking to provide cheap offsets (Abate and Kronk 2013).

In 2013, AIDESEP agreed to co-coordinate Peru's Indigenous Platform for REDD readiness (Feiring 2013). Feiring wonders if the Peruvian state created

this platform to subdue criticisms of exclusionary planning rather than as a sincere commitment to collaboration. Can AIDESEP use this role to advance an indigenous agenda?

AIDESEP is collaborating with the Council of Indigenous Organizations of the Amazon Basin (COICA) to forward an integral conservation plan called Indigenous Amazonian REDD+ (RIA). RIA recognizes a minimum of 22 ecosystem services beyond carbon sequestration and aims to improve coordination between strategies for adaptation, mitigation, and resiliency. COICA's (2014) proposed front line of defense to stop rainforest destruction is indigenous self-governance and land rights. Yet, as noted, indigenous resource rights are frequently challenged.

Indigenous peoples around the world have criticized exclusionary development of climate policy and worked to development alternative carbon mitigation strategies that acknowledge harm caused by historical political and economic marginalization and that aim to provide emancipatory and equitable means to reduce environmental degradation and avoid deforestation without risk of additional land dispossession (Doolittle 2010; Johnstone 2010; Baez 2011). Although indigenous peoples have often struggled to gain agency to influence state climate policy at national scales, they have increasingly formed alliances across borders to advocate for change at international scales thus increasing their leverage in local, regional, and national policy arenas (Johnstone 2010; Schroeder 2010; Baez 2011).

Conclusion

Some environmental justice advocates remain critical of emissions markets (Indigenous Environmental Network 2008; Burnham et al. 2013). Increasingly, researchers point out that carbon mitigation schemes in some locations have been shown to threaten and cause harm to marginalized groups (Baez 2011; Finley-Brook and Thomas 2011; Burnham et al. 2013; Crippa and Gordon 2013). For many critics, the root cause of runaway climate change is capitalism, an inequitable, growth-oriented economic system unlikely to fix the crisis it created. Carbon trading allows the wealthy to pay to pollute, does not reduce consumption, and supports privatization of global and local commons (Durban Group for Climate Justice 2004).

Even indigenous leaders who engage in REDD readiness processes may still remain skeptical about the willingness or ability of the state to reform, although they hope for opportunities to reinforce self-governance (Faquin Fernandez 2014; Mezúa 2014). The Indian Law Resource Center³ has called for reorientation of carbon trading to defend the rights of indigenous peoples by cementing procedures for FPIC and self-determination (Crippa and Gordon 2013). A message for policy-makers is that placing indigenous peoples in broad categories such as "vulnerable groups" will not protect their distinct land, resource, and self-governance rights. There is a need for rigorous, enforceable, and specific

safeguards for indigenous populations in alignment with FPIC standards as defined in the UN Declaration on the Rights of Indigenous Peoples (Doolittle 2010; Johnstone 2010; Crippa and Gordon 2013). Equally necessary are procedural reforms creating spaces for indigenous peoples to become directly involved in the formulation of climate policies at all governance scales, including within UNFCCC proceedings (Doolittle 2010; Schroeder 2010; Abate and Kronk 2013).

McDermott et al. (2012) define forest carbon trade as plastic and open to interpretation, since many details remain to be defined, and scenarios for time periods, objectives, market prices, and even payment strategies diverge widely. The unsettled structure contributes to ambiguity and even confusion. Furthermore, performance-based financial mechanisms complicate cost-benefit calculations, as payment transfers may not occur for years or decades. In the meantime, geographic frameworks help organize and understand complex, uneven distributions of social, political, economic, ecological, and cultural costs and benefits between various scales, sectors, and spaces.

As researchers slowly record offset results, social justice advocates and environmentalists should not wait passively. Based on CDM results, there is strong evidence of potential risks from emissions trading for indigenous peoples and low-income populations. Moreover, policy objectives must go beyond prevention of human rights violations to assure poverty eradication and build socio-ecological resilience. Broad political transformations are necessary; otherwise business-as-usual practices are likely to impede emissions reduction on the one hand, and expand environmental injustice on the other.

Notes

1. A Carole Weinstein International Grant supported fieldwork in the Dominican Republic, a Higher Education for Development and United States Agency for International Development-sponsored project, Building Conservation Capacity for a Changing Amazon financed research in Peru, and the University of Richmond funded travel to Costa Rica, Nicaragua, and Panama.
2. This conclusion was drawn after reading ruling notes on rejected projects available from <https://cdm.unfccc.int/Projects/rejected.html>. Central reasons for rejection are (1) concerns about *additionality*—proving the project required CDM support and (2) lack of evidence of progress toward CDM registration throughout project implementation. By late 2015, 7,680 projects had been registered and only 335 were rejected or withdrawn, showing a propensity toward approval.
3. See <http://www.indianlaw.org/climate> for more information.

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