

Value from Ruin? Governing Speculative Conservation in Ruptured Landscapes

Wolfram H. Dressler¹, Robert Fletcher² and Michael Fabinyi³

Abstract

This paper examines how state and non-state actors govern through pursuing speculative conservation among resource-dependent people who must renegotiate altered livelihoods amidst extractivism in ruptured landscapes. As donor aid declines and changes form, bilaterals, state agencies, and civil society now pursue advocacy in overlapping spaces of intensifying extractivism and speculative governance in the ruptured frontiers of Southeast Asia. In these spaces, bilaterals and non-governmental organisations (NGOs) struggle to work with upland farmers who negotiate the contrasting expectations of the abstract, speculative nature of conservation initiatives and the lucrative nature of extractive labour in the face of dramatic transformations of agrarian livelihoods and landscapes. Through a case study of the Philippine uplands, we demonstrate that as speculative conservation unfolds and manifests within and beyond these landscapes, it endeavours to revalue nature monetarily in ways that help reorganise labour and capital in an effort to overcome the exhaustion of capital wrought by rupture. We propose that during moments of rupture speculative conservation coproduces value from ruin by renewing and preserving capital flows.

KEYWORDS: Rupture, Value, Livelihood Change, Speculative Governance, Southeast Asia

INTRODUCTION

AFTER DECADES OF CHAMPIONING indigenous rights, empowerment, and sustainability, state and non-state actors must now engage with new conjunctures of global governance and deepening commodity production that intersect and conflict in Southeast Asia's frontiers. In particular, state agencies and NGOs engage with, and broker on behalf of, the rural poor who increasingly negotiate the overlapping worlds of intangible forms of speculative governance via conservation and the tangible draw of extractivism in landscapes rupturing around them. In the process, the livelihoods and landscapes of poor, resource-dependent peoples have become subject to dramatic transformations that arise through the cumulative stresses of deepening capital flows, intensifying markets, and resource accumulation – coalescing in a process of 'rupture' (Lund 2016; Moore 2015;

¹Associate Professor, ARC Future Fellow, School of Geography, University of Melbourne; wolfram.dressler@unimelb.edu.au

²Associate Professor, Sociology of Development and Change, Wageningen University

³Senior Research Fellow, School of Communication, University of Technology Sydney

Tsing 2015). Both speculative conservation and extractivism are implicated in such ruptures. The massive socio-material changes that drive and emerge from rupture can accelerate governance flows, conservation interventions, and enclosures that reinforce authority and control over ‘value-added’ resources in the making (Margulis *et al.* 2013). Here both conservation and industrial practices work together to reinforce accumulation and control over land, labour, and capital (Kelly 2011). As speculative conservation and extractive expansion converge, landscapes are apportioned, revalued, and remade into capital’s own image, whether for (abstract) natural capital accounting (Sullivan 2013) and or (tangible) oil palm expansion (Moore 2015). Rupture is thus constitutive of the social and material geographies of capital in spaces being remade as conservation and extractive worlds collide (Stoler 2013; Gordillo 2014). It is in these spaces that marginal uplanders must renegotiate life and livelihood.

This paper explores the impact and outcomes of speculative conservation and extractivism that intersect with upland livelihoods and landscapes in the context of rupture. We examine how, in the last decade, state, bilaterals, and civil society have shifted governance gears to promote the ostensive virtues and benefits of speculative interventions based on the perceived financial value of ‘future nature’—a growing trend in global conservation, where selling perceived benefits and success go hand-in-hand with capitalising on the anticipated value of nature and any associated financing that is stoked by crisis (Büscher 2014; Büscher and Fletcher 2015; Igoe *et al.* 2010; West 2009). In this shift, bilateral, state, and NGO practices—our primary focus—have partly shifted from an earlier developmental agenda (Dressler *et al.* 2010) where ‘community-based’ interventions often drew on existing resources and value chains, to more speculative governance promises based on the economic potential of conserving a ‘parcelled nature’ (Fairhead *et al.* 2012), where the generative (but often uncertain) potential of natural assets (or ‘natural capital’) is constructed, elevated, and conveyed through discourses of success. In this context, stocks of natural capital are rendered legible, valuated, and somehow tapped in order to finance and support local livelihoods and afforestation programs (without necessarily knowing when and from where equivalent funds will flow) (Büscher *et al.* 2014). The potential of such governance to harness nature’s capital as ‘added value’ is thus framed in terms of future-oriented promises and benefits among uplanders whose livelihood needs are real and immediate.

We then examine how such governance overlaps with emerging extractive development in the context of ruptured landscapes, changing local social relations of production and exchange so significantly in the process that older ways of life and livelihoods are reworked and remade (Gordillo 2014). For example, social relations and valuation of land and labour may transform with heightened expectations of profit and material benefits only to be subsequently subsumed with fears of debt and uncertainty. As rupture unfolds, it is rural smallholders who must negotiate the varied risks, uncertainties, and opportunities that

emerge as conservation and extraction co-constitute rural landscapes. We explore how state and non-state actors try to govern in this context by pursuing speculative, intangible interventions among resource-dependent smallholders who are being subsumed by extractivism in significantly altered landscapes.

In so doing, we offer a conceptual and empirical *proposition*: as speculative governance unfolds institutionally and manifests across scale, varied programs and agendas may create value from ‘ruined nature’ through the financing of ideas and practices that aim to overcome or regenerate the very exhaustion wrought by the rupture itself (see Büscher 2014). In other words, the value speculative conservation seeks to generate represents a spatial-temporal ‘fix’ for capital over-accumulation situated at the conjuncture of conservation and extractivism (Harvey 2006). Coupled with moments of rupture, speculative conservation works to monetise ‘natural capital’ as a ‘discursive commodity’ (Vel 2014) that is forged through conservation narratives and practices. Its core concepts and technical practices are framed as inherently successful—a form of boosterism—that promotes and extends its legitimacy and potential to create more financial value. As the notion of natural capital is promoted and sold as a successful concept or policy intervention, its value mounts as it circulates within and through the mainstream conservation bureaucracy’s social networks, particularly big international NGOs, through which it gains recognition, legitimacy, and financing (see Büscher 2014). This unfolds irrespective of the reality that the ‘natural capital’ pursued can often remain largely immaterial, particularly for local actors whom it is primarily intended to benefit. The discursive valuation of natural capital therefore intensifies when new technologies and ideas circulate in an ostensive bid to save ecosystem services that are immanently threatened due to rupture. Moments of crisis and rupture thus create opportunities for the (re)production of financial value, wherein governance actors and processes circulate ideas and finance across the countryside, reinvesting in labour and capital to contend with transformed rural landscapes (e.g. through associations, livelihood support programs, etc.). Speculative conservation thus holds the potential to function as frontier capitalism’s latest ‘spatial fix’ in its promise to create additional value by reorganising, expanding, and connecting ideas, capital, and labour to new markets and financing opportunities in important landscapes subject to rupture (Harvey 2001: 23). We explore how indigenous farmers negotiate livelihood realities and expectations at the nexus of these powerful conjunctures in the Philippine uplands.

Our paper contributes to a nascent body of literature in critical agrarian studies that examines how new governance regimes overlap and conflict with extractive industries with varied impacts and outcomes (see Corbera *et al.* 2017; Hunsberger *et al.* 2017; Peluso and Lund 2011). As we do, this critical literature points to how governance draws value from ruptured agrarian landscapes and centres of rule well beyond frontier spaces. A recent special issue, for example, highlights how often the state’s withdrawal from providing social and

environmental safeguards effectively transfers degrees of sovereign control over land, resources, and people to the private sector, civil society, and donors (Corbera *et al.* 2017; Uson 2017). Several cases show that as state agencies and financial institutions facilitate investment opportunities and cede degrees of authority and responsibility in managing land and people, spaces open up for private capital to govern land and labour by way of cheap extraction and high profits (Uson 2017)—inducing a crisis of capitalist reproduction. In this process, the reordering of indigenous institutions and land rights facilitates deepening capital flows that push people and landscapes to points of rupture, effectively inducing a crisis of over-accumulation and collapse. In these ruptured spaces, speculative conservation emerges in direct response to these crisis tendencies to reset or fix them by reforming to capital's abstract value (Ekers and Prudham 2017).

Rather than accepting the “exhaustion of capitalism's Cheap Nature strategy” (Moore 2015), the actors, ideas, and technologies of speculative conservation reform capital to draw out its abstract value from well beyond sites of accumulation and rupture. Such conservation does so by stoking the finance attached to ‘big ideas’ such as natural capital accounting (NCA) valuation, various funding flows, and even corporate subsidies. Uson (2017) shows, for example, that for the central Visayas, Philippines, the rupture created by typhoon Haiyon in 2013 and associated humanitarian interventions created a complex spatial fix wherein climate change policies and discourses changed the direction of land rights struggles to open the door for private sector control and profit accumulation. Indeed, it may be no coincidence that big international NGOs and bi/multilateral governance schemes increasingly intersect with and draw value from ruptured spaces in the pursuit of their own ‘value objectives’ (see Büscher and Davidov 2013).

The core logic of how speculative conservation sustains itself partly reflects the ways in which surplus capital constantly searches for productive investment (Ekers and Prudham 2017), but in a way that remains abstract and intractable to local resource users and seldom ever materialises in tangible benefits. We argue that the prospect of conserving ‘natural capital’ can only ever be speculative and abstract because it is defined and valued precisely in this way, and its putative physical basis is subject to extensive rupture which compromises the ‘natural capital’ ostensibly being conserved and valued. We show that while speculative conservation, particularly NCA, misaligns with livelihoods and landscapes being remade through extractive rupture, it may manifest as a spatial fix by creating value out of the ruined spaces themselves.

We focus on the frontier island of Palawan where two major governance interventions—REDD+ (Reduced Emissions from Deforestation and Degradation) and Phil-WAVES (Philippine Wealth Accounting and the Valuation of Ecosystem Services)—are manifesting in upland and coastal landscapes ruptured by flanking oil palm plantations and mine sites. Palawan is an ideal setting for

such a study. Long considered undeveloped, unsettled, and bountiful, the island was once considered a safety valve for political and economic challenges in other parts of the Philippines (Eder and Fernandez 1996). Recently, intensifying battles concerning over-development and conservation involving social movements, NGOs, and major extractive corporations have emerged on the island once again (Eder and Evangelista 2015). Rather than provide an empirical analysis of how farmers rework livelihoods at moments of rupture and speculative conservation, we aim to contrast the objective of conserving natural capital with the harsh realities of (actually doing so in) fractured landscapes increasingly devoid of 'ecosystem services' amongst indigenous farmers who contend with precarious livelihoods (see Fletcher *et al.* 2016).

We focus on two localities where local agrarian landscapes have been transformed by oil palm and mining to the point where notions of conserving natural capital through the transformation of farmer labour have become untenable.

Methods

This paper draws on 40 in-depth interviews and participant observation in two communities (Biluan and Maracuan) located at the southeastern and western coast/interior of Palawan Island, respectively. Over four months between 2012 and 2016, the first author carried out key informant interviews with NGO representatives (6), Barangay officials (6), tribal leaders (3), leaders of palm oil cooperatives (5), swidden farmers/palm oil labourers (20), and other activists involved in campaigns against extractive industries on Palawan. Most interviews ran between one to two hours and some respondents were interviewed more than once. The sample was purposeful and involved referrals by knowledgeable people. Interviews were mostly in the town proper and lowland, coastal sitios (villages, just beyond ancestral lands). Analysis focused on repeat responses within and between the interviews, with common themes drawn together as narrative. All areas and respondent names are pseudonyms.

DECLINING FUNDS, SPECULATIVE CONSERVATION, AND RUPTURED LANDSCAPES

In Southeast Asia, the prospects of NGOs and other actors sustaining the environmental governance interventions introduced in earlier decades (1980–1990s) recently changed for the worse. As Southeast Asian countries began deregulating their economies, donor funding was slashed and, in some cases, national economies attained 'lower middle-income status' (Bello *et al.* 2004). Many NGOs thus faced declining domestic funds and scrambled for scarcer, competitive global funding (Malhotra 2000).

In the late 1990s, public-private partnerships emerged whereby funding was provided by the private sector and or new global governance initiatives that



Figure 1. Palawan Island, The Philippines.

promoted market-oriented schemes. In much of Southeast Asia, many cash-strapped domestic (and wealthier international) NGOs increasingly made so-called market-based instruments (MBIs) central to their policies (Dressler and Roth 2011). While various left-wing NGOs distanced themselves from the approach, in general, such market-based conservation aimed to assign monetary values to nature, which, in turn, could ostensibly be harnessed to finance program interventions. In practice, the interventions (e.g. PES and REDD+) usually included local incentive schemes and compensation for lost income-generating opportunities due to livelihood restrictions or substitutions (Büscher *et al.* 2014).

Regionally, global governance schemes and bilateral aid have now (though usually only rhetorically) established the role of MBIs as the most efficient and effective way to generate money by realising the 'true' value of nature (Büscher *et al.* 2014). In tapping this value, programs and projects ought to be self-financing and offer incentives that compel farmers to adopt more sustainable practices. In embracing market-based programs, NGOs have combined their conventional efforts and institutional practices (e.g. community-organising etc.)

to garner rapport and trust among local residents with newer interventions (typically framed as ‘low carbon’ livelihoods) that offer incentives, and varied market opportunities offering the promise of multiplier effects (usually associated with sedentary farming and or non-timber forest products). The framing of these interventions commonly features future-oriented promises with locally anticipated ‘positive returns’, but usually with delayed, hollow, or intangible outcomes (e.g. revenue from carbon trading once a new global market materialises) (Fletcher and Büscher 2017; Novellino and Dressler 2009). Following Sullivan (2013), we call these interventions ‘speculative conservation’.

Speculative Conservation in Ruptured Landscapes

Bilaterals, state agencies, and NGOs in particular have become increasingly entangled with transnational governance dynamics. In time, these actors have advocated speculative interventions that stoke local expectations of potential and hope, but hopes pinned on abstract, intangible, and future-oriented promises that offer little for present livelihood realities in rupture landscapes. In many cases, the ideas that underscore speculative conservation interventions often already have positive and desirable attributes assigned to them well before implementation, which are invoked locally to inform expectations (Ahmed 2010). Maintaining perceptions of success and associated expectations thus depends upon how policies and programs are produced within and through influential institutional and discursive networks that invest in, reproduce, and circulate the underlying truth claims (Ahmed 2010). As Rap (2005: 1301) notes for water governance in Mexico, the “preoccupation with the performance of success” ensures that assertions of success become self-referential and self-evident amongst those investing (politically and economically) in the reifying policy narrative (see also Büscher 2014; Mosse 2004). In reference to REDD+, Lund *et al.* (2017: 2) note that “policy models are therefore dependent upon narratives and metaphors that distil complex realities” into simplified narratives to legitimate expert ideas, practices, and the continued flow of resources. In this way, natural capital accounting and similar schemes are thus less about material natures than discursive strategies that aim to draw finance to maintain projects, even in the face of contradictory empirical data (Bücher 2014; Roe 1991, 1994; Sullivan 2013). Consequently, the durability of speculative conservation only wanes amongst policy makers and practitioners when they no longer support the broader narrative within which its concepts and promises sit (cf. Mosse 2004).

Among local farmers, however, project interventions can gradually set expectations and aspirations that produce ‘big hopes’ for outcomes that, given the discursive nature of projects and local conditions of rupture, often simply do not exist. Yet the promise of interventions can stoke expectations and aspirations despite objectives neither being fully understood nor ever eventuating. Even when understood, the time lag to achieving outcomes is often well beyond the

daily, short-term, and future planning of rural households who desire tangible improvements in the here and now. Inculcating a sense of hope amongst local smallholders through speculative interventions thus articulates with local senses of livelihood security and progress but typically bypasses the immediacy of farmer realities, needs, and expectations. Little, however, is known about how such interventions might unfold in the context of farmers negotiating new livelihoods realities in the debris of ruptured landscapes. How, for example, can natural capital accounting generate value from ecosystem services and offer farmers incentives to conserve lands after having lost agricultural plots, or having water contaminated from toxic mining operations nearby? We take up these issues in our Palawan case study.

Declining Funds, Speculative Conservation, and Ruptured Landscapes in the Philippines

In the Philippines, scholars have pointed to a long history of social movements struggling for political change through protest that bypasses formal political processes (Clarke 1998). While NGOs have often worked with state officials and retained weak ties with local communities, Ferdinand Marcos' authoritarian dictatorship (1965–1986) had most NGOs forging grassroots movements that resisted elite control over the political system for personal and familial gain (Clarke 1998; McCoy 2002). As Marcos quelled civic organisation and political unrest, NGOs and People's Organisations (POs) expanded through covert socio-political networks with other groups, forming diverse coalitions to resist state control and subordination (Constantino-David 1998). NGO-driven social movements soon culminated in the 'People Power' revolution that ousted Marcos in 1986.

Under the post-Marcos Aquino administration, new government policies opened up political spaces to accommodate the growth and participation of NGOs within Philippine society (Brillantes 1994; Mercer 2002). The changing sentiment and policies of development agencies towards 'good-governance' and 'people-centred' programs spurred NGO growth while directing their objectives and their networked relationships in the country (Brillantes 1994; Putzel 1998). With the amended Philippine Constitution of 1987 supporting the involvement of civil society in governance and development, the legitimacy of NGOs as government partners in development grew significantly (Brillantes 1994). As a Constitutional extension, the Local Government Code of 1992 facilitated the decentralisation of political process and introduced provisions for the participation of NGOs and People's Organisations, effectively formalising civil-society partnerships (Eaton 2003). Thus, Philippine NGOs brought "to the public agenda issues hereto ignored or repressed" (Silliman and Noble 1998: 292). By 1999, the country hosted more than 60,000 NGOs compared to 27,100 in 1986 (Parks 2008).

In the late 1990s, however, a decline in NGO funding and esteem in various sectors saw civil society activities shift strategically. Under the deepening oligarchic state of then-president Gloria Macapagal Arroyo, the intensification of

neoliberalism and sense of NGO over-funding saw ‘Leftist’ organisations being ‘hollowed out’ (Bello *et al.* 2004). Indeed, after successive governments—from Ramos to Estrada—had already facilitated trade liberalisation, Arroyo soon drove what Bello called an “all-sided free market transformation marked by rapid deregulation, privatisation and trade and investment liberation” (Bello *et al.* 2004: 12). In turn, being declared a lower middle-income country soon prompted many major donors to leave the Philippines; donor aid thus declined significantly throughout the 1990s (Parks 2008). In the early to mid-1990s, for example, aid commitments from major donor countries including Canada and the USA dropped from US \$2.7 billion in 1990 to US \$1.4 billion in 1996, with only limited funds taking the form of grants (Aldaba *et al.* 2000). Overseas Development Assistance grants decreased in particular from \$296.5 million to only \$165.9 million over the same period. This in itself was problematic for domestic NGOs in the Philippines because “unofficial estimates of donor dependency... [suggested] that 50% to 95% of their annual budgets” (Aldaba *et al.* 2000: 675) came from such grants.

After 9/11, aid declined rapidly, forcing donors such as the Ford Foundation to leave the country and cut their core funding of more than 200 local NGOs (Parks 2008). There were few, if any, domestic donors to take the place of such funding organisations and bilateral aid. Despite sustained national growth, domestic NGOs failed to find proportional levels of funding in the country (Parks 2008). Collectively, these pressures meant that NGOs soon tapped limited but increasingly prevalent sources of funding for market-based schemes in conservation and development (Novellino and Dressler 2009). A broader governance agenda “emerged under the mantra that assigning a monetary value to nature was the most efficient and effective way of saving it” (Roth and Dressler 2012: 363). The idea was that by assigning an imputed dollar value (or price) to ‘scarce’, valuable natural resources (flora, fauna, ecosystem services etc.), the ‘real’ monetary value of these resources would be realised through various types of market exchanges (trading, offsetting etc.) whereby actors, institutions, and or agencies pay for the delivery of ecological services/values, typically through resource users and biophysical processes (Roth and Dressler 2012: 363). The revenues realised from these transactions are asserted to efficiently finance conservation and farmers for lost livelihood opportunities, to support transitions to more sustainable resource use, and to generate more revenue from existing resource uses to offset future exploitation (Büscher *et al.* 2014). However, these ideas and interventions were typically speculative and restructured in terms of the objectives, incentives, and outcomes that they hoped to produce locally.

Over time, grassroots NGOs have found themselves negotiating the rhetoric and practice of market-based governance in a so-called emerging ‘green economy’, drawing on governance programs from bilaterals advocating for speculative conservation. In particular, as part of the state’s ‘climate smart’

investments, governance platforms such as the Wealth Accounting and the Valuation of Ecosystem Services' (or 'WAVES') Payment for Ecosystem Services initiative and, relatedly, Reduced Emissions from Deforestation and Forest Degradation (REDD+) emerged to facilitate local climate change mitigation and adaptation by paying smallholder farmers to conserve 'natural capital' (e.g. forest carbon and hydrological functions) amidst expanding mining and biofuel production in rapidly transforming frontiers.

SPECULATIVE CONSERVATION AND RUPTURE – THE PALAWAN CASES

The rise of transnational governance programs involved speculative, market-based conservation that aimed to add value to natural resources that local users would tap to overcome the opportunity costs of moving to 'greener' livelihoods. In the case of Palawan, REDD+ and the Philippine WAVES program (Phil-Waves) was launched in this spirit as commodity production deepened in the island's hinterlands.

REDD+

In Palawan, a dynamic NGO consortium soon adopted REDD+ under the green economy banner.⁴ New partners included the regional NGO, the Non-timber Forest Products Exchange Program (NTFP-EP), and the international NGOs, Fauna and Flora International and Conservation International, among other domestic groups.

Needing a new funding base and policy instrument to curb the incursion of oil palm and secure lands for indigenous peoples, NGOs decided that adopting REDD+ might help them achieve this. Working with academics, other NGOs, and the state, the NGOs drafted and submitted two key documents: the Readiness Preparedness Plan (RRP), submitted to the World Bank's Forest Carbon Partnership Facility, and the Philippine National REDD Plus Strategy (PNRPS), submitted in 2009 to UN REDD. Both documents were approved in 2010–2011. This outcome led to coordinated preplanning initiatives with the Department of Environment and Natural Resources (DENR), the Forest Management Bureau (FMB), and a consortium of REDD partners. The NGO consortium emerged as the grassroots initiative, CODE REDD, or community

⁴Since the 2007 Bali Action plan (UNFCCC COP 2008), international bodies and states have championed REDD+ as an innovative and efficient way for wealthier countries to pay poorer ones to enlist rural farmers to conserve forest and carbon. Post-Paris (COP 21), it remains a fragmented global initiative to create a financial value for the carbon stored in forests, offering incentives to governments and farmers in developing countries to reduce emissions from forestlands and invest in low-carbon rural development pathways (see www.un-redd.org).

development through REDD+. The consortium saw REDD+ as a “potential funding scheme for forest conservation” and “to strengthen the voice of indigenous groups, forest-based communities and civil society in the Philippines [...] in the REDD plus discourse and in the UNFCCC discussions.”⁵

On a practical level, the CODE REDD consortium aimed to establish a 50,000 hectare REDD+ pilot project across select sites in the Victoria-Anepahan mountain range of southern Palawan (PNRPS 2010)—an area overlapping with both mining and palm oil production (and in one area, an indigenous ancestral domain claim) in southwestern Palawan. As part of the consortium, different NGOs had contrasting functions in executing the Readiness programme. The Palawan-based indigenous federation, NATRIPAL, was charged with connecting farmers with so-called forest governance bodies, establishing Free Prior Informed Consent (FPIC) and developing low carbon livelihood activities with the NGO IDEAS (PNRPS 2010). Moreover, it was hoped that indigenous Palawan and Tagbanua forest users might be sufficiently trained to engage in forest governance so as to draw on non-carbon forest and biodiversity ‘co-benefits’ and, eventually, ‘sustainable carbon financing’ schemes.

NGOs thus intensified their governance initiatives during the REDD+ Readiness phase. While carbon financing and payments were still in the design stages, livelihood ‘co-benefits’ for sustainable farming were being rolled out with a focus on non-carbon benefits such as water supply systems, agroforestry enterprises, and NTFP value-adding, as well as cash cropping (e.g. rubber, mango, and jack fruit), all of which were geared toward low carbon futures and eventually carbon-trading based revenue. In one key implementation area, called Biluan and the Biluan (Tagbanua) ancestral domain claim, key consortium NGOs debriefed community participants about the loss of forest cover in the area, the essence of the carbon inventories, and the level of carbon stocks across key transects. In the process, NGO agents themselves noted that the results may be too technical for the local people to digest easily (FFI 2014). As we show, these speculative governance promises held little meaning: flanking and overlapping the Biluan ancestral domain claim was a long-standing nickel mine and expanding oil palm plantation that had already incorporated most of those lands slated for REDD+ governance.

Phil-WAVES - PES

In 2010, during the Convention on Biological Diversity (CBD) meeting in Nagoya, Japan, the WAVES’ (Wealth Accounting and the Valuation of Ecosystem Services) initiative was launched. Overseen by the World Bank, the WAVES program was rolled out (with International Monetary Fund and European Union support) across several countries, including the Philippines, to introduce programs for natural capital accounting (NCA) in line with “internationally agreed standards...

⁵CoDe REDD 2011. Website: <http://ntfp.org/coderedd/about-code-redd/objectives-and-strategies/>.

[and] other ecosystem service accounts”.⁶ The work plan for each country was slated to compile and scale up ‘accounts’ for natural resources such as forests, water, and minerals in line with the UN’s System of Environmental-Economic Accounting (SEEA). Once uploaded, such national level accounting would be aligned with the global level assessment.

In 2013, consultations for the Philippine component of this program, Phil-WAVES, were being carried out by national government agencies and NGOs in two areas that exemplified the ‘status quo’ of rupture in the country (Fontanilla 2014): the Laguna Lake Basin and southern Palawan. In both areas, the objectives were to “promote sustainable development through wealth accounting, with natural capital as its major determinant” (Fontanilla 2014: 1). In practice, this meant establishing ecosystem service accounting for two areas in southern Palawan and to assist with an analysis of trade-offs associated with different resources and ecosystem use scenarios. In 2015, a particularly busy year, technical working groups provided NCA workshops and training through database management, satellite analysis, and geographic information systems design. To date, several key ecosystem service accounts have been completed, including land and CO², with the changing plantation landscape and ‘intangible’ indigenous values of the landscapes proving difficult and sensitive to itemise and value.

Phil-WAVES’ Palawan-based activities aimed to account for stocks of natural capital and their relative financial value in already ruptured landscapes. In a recent ‘Pilot Ecosystem Account for Southern Palawan’ report (WAVES draft report 2015), the assessment of ecosystem value in ‘stocks’ and relative monetary value was characterised as contending with localised issues such as erosion control of upland forests, water regulation by upland forests, and the contribution of ecosystems to paddy rice production, and corn and palm oil production. The new WAVES initiatives sought to show that in the uplands, a tree left standing is worth more than a tree felled, despite upland forests already having been largely cleared for mining and oil palm around farmer homesteads.

We show that, in the context of REDD+ and Phil WAVES case areas—the Biluan and Maracuan interior in southwestern and southeastern Palawan, respectively—indigenous Tagbanua and Pala’wan perceptions and values regarding land and livelihoods had little to do with conserving natural capital. Instead, their livelihood struggles and aspirations contended with ancestral landscapes—former mosaics infused with cultural meanings—now being worked over by mining and oil palm development. Understanding the significance of the REDD+ and Phil-WAVES breaking on southern Palawan is therefore best achieved by contrasting the promises of natural capital with the livelihood realities of indigenous uplanders residing in the same ruptured landscapes.

⁶<https://www.wavespartnership.org/en/about-us>

Mining and Palm Oil Development on Ruptured Lands

As state, bilateral and NGO actors were in the process of implementing REDD+ and Phil-Waves, mining and oil palm expansion continued unabated, with both adjacent to another in locally ruptured landscapes. As each space overlapped with upland localities, varied consequences unfolded for local livelihoods and aspirations.

With the passing of the Mining Act in 1995, the Philippine state opened the door to major foreign investment, ownership, and expansion of mining in the country. Recent tariff liberalisation (Executive Order 264) facilitated such investments and expedited the permitting of mining (Bello *et al.* 2004); in 2004, 350 mining applications were approved on Palawan alone (Rasch 2013). Most mines overlapped with indigenous lands, destroying swidden plots and forests while drawing farmers out as wage labourers. In some quarters, this necessitated formal consultation concerning the co-benefits and compensation for indigenous peoples negatively affected by mineral extraction, which tended to happen through the ‘formal’ process of Free Prior Informed Consent (FPIC). With the ratifying of the Indigenous Peoples Rights Act (IPRA) in 1997, indigenous peoples worked with certain NGOs and the Department of Environment and Natural Resources (DENR) to establish certificates of ancestral domains as titled holdings (CADTs). In establishing these claims, peoples had to demonstrate indigeneity by way of cultural continuity and connectedness to the land (i.e. occupancy and use over time). This meant that those indigenous communities with CADTs—or their state-reified tribal council—held formal tenure rights and claims over land and forest resources, necessitating that mining and other extractive industries engage in FPIC and potentially offer local financial compensation. In Palawan, however, the paying out of benefits ultimately meant ‘lubricating’ elite indigenous brokers and ‘greasing the wheels’ of extraction. Since the 1990s, more mines have been encroaching and, in some cases, even overlapping with CADTs (see case).

Over time, oil palm development grew rapidly on Palawan, often flanking mining areas and overlapping with REDD+ and Phil-WAVES conservation territories. Since then-President Gloria Macapagal Arroyo’s signing of the Biofuel Act in 2006, as well as Medium-term Development Plans aimed at developing millions of hectares of high value cash crops, the penultimate President, Aquino Jr., continued to promote the financing of boom crop production in order to replicate production seen in Malaysia, Indonesia, and Thailand (Larson *et al.* 2014). In 2004, the provincial government created the Palawan Palm Oil Industry Development Council (PPOIDC) to promote the expansion of the industry. Thereafter, the Palawan Palm and Vegetable Oil Mills Inc. (PPVOMI) and its sister company, Agumil Philippines Inc. (AGPI), began palm oil development on the island.⁷ The first palm oil seedlings were planted in 2007 and then harvested in 2011, and the initial 3591 planted hectares were to expand beyond

⁷PPVOMI is 60% Singaporean- and 40% Filipino-owned and AGPI is 75% Filipino- and 25% Malaysian-owned (Larson *et al.* 2014). The Malaysian parent company is Agusan Plantations Inc.

15,469 hectares (Larson *et al.* 2014). This included the sites of speculative conservation, Biluan and Maracuan, in southern Palawan.

Located in the southern municipality of Brooke's Point, the PPVOMI controlled the land upon which oil palm milling takes place and had also established a tree nursery. AGPI facilitated access to land for cultivation through lease agreements and/or contact arrangements through out-grower schemes. While some farmers planting palm oil from AGPI were agrarian reform beneficiaries under the Certificates of Land Ownership Awards (where the CLOA serves as collateral), contracts were also established between farming communities and the AGPI by setting up cooperatives, or by farmers themselves who were supported by wealthier, independent landowners. Most cooperatives consisted of migrant settlers who managed an initial labour force of poor and titleless indigenous peoples for forest clearing. Under Production, Technical, and Marketing Agreements (PTMAs) with AGPI, cooperatives were also compelled, under contract, to ask members and non-members to include their land for production and collateral for the financier, the Land Bank of the Philippines (LBP). As part of the loan agreements, AGPI provided capital and technical expertise to facilitate production (Larson *et al.* 2014).

In the process of AGPI facilitating palm oil expansion, more and more out-grower schemes 'took root' inside and or around ancestral domain claims, including the Biluan CADT and the Maracuan area. In these instances, shadowy agents and brokers created 'instant' cooperatives (or associations) to facilitate uneven PTMA agreements with tribal leaders without conducting FPIC (Larson *et al.* 2014). As a result, indigenous farmers invariably relinquished their usufruct land holdings by signing off on swidden lands for palm oil production under pressure from more powerful brokers (typically their own chiefs and politicians), effectively becoming landless and forced to look for new and increasingly scarce forest to clear for swidden. At last count, there were 150 hectares of palm oil in CADT areas (Larson *et al.* 2014), the same areas slated for REDD+ and Phil-WAVES.

SPATIAL CONJUNCTURES: SPECULATIVE CONSERVATION IN RUPTURED LANDS

REDD+

Those NGOs spearheading REDD+ were soon faced with the harsh realities of former indigenous allies and farmers distancing themselves from the initiative in favour of the seemingly more lucrative benefits from mining and oil palm plantations unfolding nearby. In the case of REDD+ in Biluan, the indigenous leadership charged with managing the CADT and allied farmers adopted a strong pro-mining and pro-oil palm stance. They highlighted the economic potential

of the mining and oil palm as a major means to support indigenous livelihoods. In introducing the idea of REDD+ to the Biluan community as part of their broader consultations, a staff member of the indigenous NGO, NATRIPAL (the indigenous federation of Palawan), stated:

We tried to involve them, our target was 12 areas, so we tried to do the consultations with the leaders [...] in the Quezon area... but they felt threatened by REDD+ because they had already started with the mining activities. At first they endorsed the project, but later on they wanted to withdraw the endorsement deal. (Puerto Princesa City, 2015)

However, an interview with the former chief of Biluan who was initially approached by NATRIPAL, suggested that the initial consultation process might have unfolded rather differently:

So, they told us about this program and asked us to fill out an application for REDD+ as a CADT representative, CADT holder. We were waiting but they didn't call us again. But the problem emerged when other NGO groups entered the area and never called on us again. They provided for the other people; they organized the other group, without our knowledge. So when they finalized the orientation, many of our indigenous leaders didn't have enough information about it [REDD+]. That's why our group refused REDD+.

NATRIPAL helped organise Tagbanua groups in every sitio for orientation, but they failed to contact the official indigenous leaders in the community.

In fact, one of the NGO leaders said there is "no need to go to the Barangay leaders, no need to have Indigenous leaders, what we're doing is for 'the good', after we have an official, they will be the ones who can manage it and they will be the representatives of the Carbon Trading or REDD+."

And for those Tagbanua who were part of the orientation, well they didn't understand and got misinformation about REDD+ promises. (Biluan, September 2015)

According to the former Biluan chief, even amongst those few who did understand what REDD+ was about, there was much more interest in planting oil palm, despite the NGO campaigns against the crop. Indeed, the chief and his tribal council thought that much of the short fallow swidden in their domain claim could be put to better use if oil palm was planted there. A few years later, he and his comrades took it upon themselves to establish their own palm oil growers association (technically a cooperative) so as to enter into a contractual lease with Agumil and the LBP. Today, at least 60 hectares of the CADT are filled with palm oil, despite initially being meant to host REDD+.

As elsewhere, however, local farmers' expectations of REDD+ relative to oil palm development and mining exhibited ambiguity, in that neither speculative conservation nor extractive labour were seen to be an adequate means to improve their quality of life (e.g. sending kids to high school, having a continuous supplies of rice, paying medical expenses etc.). This ambiguity manifested in farmer reticence toward maintaining tree cover to conserve carbon for the REDD+ scheme, but also in scepticism concerning the uncertain financial outcomes of extractivism. In the Biluan case, interviews with farmers clarified this situation, with one saying:

I came back here for palm oil again... because they [the leadership and AGUMIL] gives us a salary. They are supposed to pay us every fifteen days, but it takes one and a half months before we get our salary. They still owe us one month's worth of salary. (Biluan, September 2015)

Another farmer noted that people remained in the area to work on the palm oil plantation inside of the CADT, exclaiming:

We work as daily wage labourers here for the salary... and we no longer get products from the forest. This is because we work in the palm oil every day. So life has really changed.... (Biluan, September 2015)

These and many other farmers from the CADT point to the range of ambiguous outcomes from oil palm (such as delayed payments) and the difficulty in returning to forest-based livelihoods because of landscape rupture. Indeed, many farmers who have been involved in both mining and oil palm development suggest that relying on older livelihood practices is more difficult because of the cumulative impact of mining and oil palm. As one farmer noted:

Oil palm has not helped us, because we did not even know that our land was leased to palm oil. We just found that out when it was already bulldozed; and even those coconut trees that we had before in the area were already destroyed without us knowing. From 100 coconut trees, only nine trees are left now. (Biluan, January 2014)

Another stated:

They held meetings here about the oil palm project that will improve the livelihood of our community. So some had their kasoy (cashew) trees felled to plant oil palm... the others also cleared coconut farms. This was the negative thing that occurred. Before clearing their land, they could harvest kasoy and copra meat every three months. They are not able to harvest anything now, no more coconuts, everything was replaced by oil palm. Now what? The farmers are given no shares, they get a meagre P10,000 (USD \$200.00) per year. (Biluan, January 2015)

Finally, the wife of a farmer who had both worked in the mine and the oil palm plantation noted that neither job was sufficient and that returning to fishing activities was problematic because the mine's laterite had already poisoned the fish and clams in nearby waters:

The mining activities have affected our seas. I have seen many children who frequently visit the doctor because of stomach aches. They got diarrhoea from the seafood. When you eat it, you'll get a stomach-ache. We think it is because of the presence of mines here now. If you picked shellfish at the innermost area, you can get a really bad stomach ache. The area is covered with soil [laterite] from the mines.

Last month, my son got sick due to stomach ache for a month. It's a good thing that we are covered by Philhealth.

She went on to say:

My husband simply wants to fish; the salary in the mine or the oil palm wasn't enough. But now our kaingin (swidden) yields are declining. The harvests from kaingin are not as good as before, the palay are also smaller than before. And the seafood is no longer safe because of the ship and barge activities at the port of the nickel mine. With the backhoe's activities, toxic laterite soil also spills into the sea. Then the fishermen catch the fish that eat the contaminated soil. So if the fish are contaminated too, and people will eat them, all of the people here will get sick. I've seen the local ambulance going to Quezon; it passes by here three times a day. (Biluan, February 2015)

As the upland landscapes of Tagbanua and Pala'wan farmers are ruptured by extractivism, the various carbon-related ecosystem services that the REDD+ programme sought to conserve have already been, or are about to be, destroyed. Only the idea of natural capital and its reputed value remained.

Phil-WAVES

Various state actors at the provincial and national level, including the Palawan Council for Sustainable Development, the Department of Environmental and Natural Resources, and the Forest Management Bureau, soon worked with NGOs to implement Phil-WAVES and produce a 'Pilot Ecosystem Accounting (system) for Southern Palawan' (WAVES draft report 2015). As noted, the assessment involved an accounting of the 'stocks' and monetary value of ecosystem services. A core initiative was to take stock of carbon storage, timber production, water for drinking, and non-timber forest products in the remaining closed and open forests in the south of the island, including Maracuan, and to design new land use plans to counter degradation there.

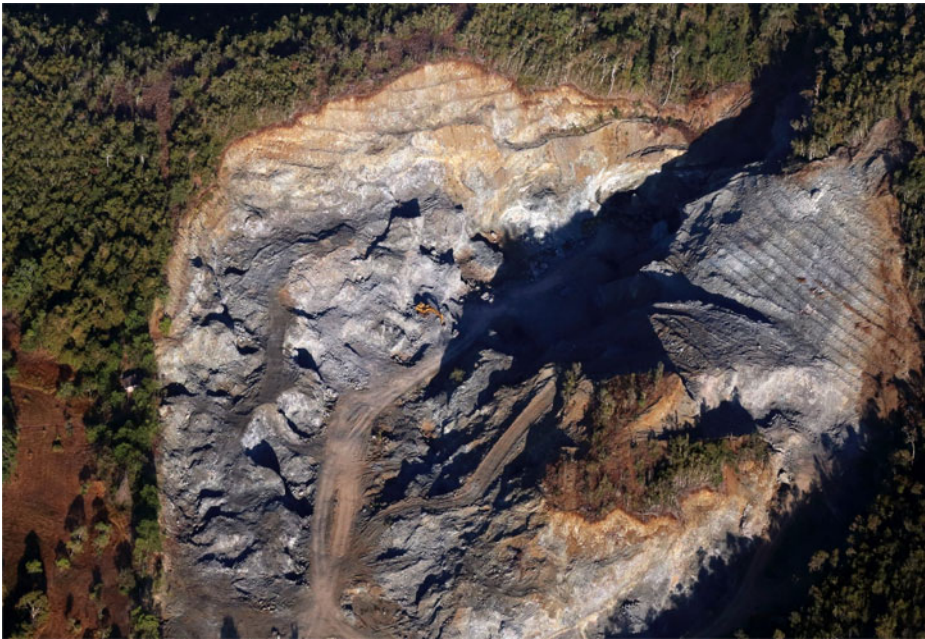


Figure 2. Rupture, Biluan Nickel Mine. Source: Jonah Van Beijnen.

With the first phase of ecosystem accounting completed for carbon sequestered in the Maracuan Watershed, estimates indicated that in 2014, closed and open forest supposedly amounted to 492 and 70, 715 million tons of carbon sequestered in that year, respectively. The estimated financial value for the specified amount of carbon for each forest type in 2014 was 0.23 and 32.67 million pesos, respectively. This amounted to an average of just over 4000 pesos (USD \$80.00) per hectare of closed and open forest in the uplands of the Maracuan interior. But how would farmers realise these benefits? Where would the financing come from, how quickly would it be produced, and to whom would it go? Did the policy rhetoric match local realities?

From Phil-WAVES policy presentations and documents, it becomes clear that the main threats to the reputed monetary value of this ‘natural capital’ was identified as the ‘conversion of forests to agricultural land uses and expansion’ in the uplands (read: swidden) and various other significant factors mentioned in the study’s ‘Ecosystem Condition Account’ (WAVES 2014). Terrestrial ecosystem conditions supposedly reflected a high risk of landslides and flooding due to forest clearance from swidden negatively impacting upon the hydrological regime of the watershed (Phil WAVES 2015). In response, key policy applications that emerged from the pilot study involved support for selection of plantations, support for water management and... to identify opportunities for ecotourism (Southern Palawan Ecosystem Accounts 2015: 21). Ostensibly, the incentives produced from these interventions would eventually give smallholders in the

uplands sufficient reason to clear less forest and plant more trees (Southern Palawan Ecosystem Accounts 2015).

Just like in Biluan, however, the Phil-WAVES initiative in Maracuan was unfolding against a backdrop of Pala'wan farmers negotiating the rupture of livelihoods and ancestral landscapes from oil palm and mining. The community of Maracuan, situated in the 'Maracuan Watershed' subject to WAVES, was simultaneously being transformed by oil palm from the private companies, Agumil and the Palawan Palm and Vegetable Oil Mills (PPVOMI), as well as the transnational mining company, Maracuan-Nickel. Both the plantation and mine have enclosed swidden plots and ancestral lands.

Oil Palm, Mining, and (a Declining) Speculative Potential

The expansion of oil palm plantations reflects a vital conjuncture in Maracuan's contemporary agrarian political economy. In less than a decade, this expansion has created challenging political, economic, and biophysical conditions for farmers that have contributed to major difficulties in accessing fallow lands for swidden, declining upland rice yields, and greater degrees of dependency on foodstuffs provided by cooperatives (Montefrio and Dressler, *forthcoming*). In addition to the mine's impact, these conditions have significantly constrained Pala'wan livelihoods and ended any possibility for rural smallholders to even consider engaging in Phil-WAVES and other speculative conservation initiatives.

Agumil and the PPVOMI established the oil palm plantation in Maracuan in 2007, with the plantation reaching about 1000 hectare in total. The plantation consists of an anchor site (750 ha) and an outgrower (250 hectares) area held by Agumil and a local cooperative, respectively. Between 2001–2006, the COOP's Board of Directors (BOD) reorganised for oil palm after being enticed by the Department of Agrarian Reform (DAR) and the Municipal Agrarian Reform Officer (MARO). After a series of meetings with oil palm representatives who convinced the BOD of the potential benefits of oil palm, they enthusiastically went house-to-house to bring other landowners into the project. Starting with only 25 members at the outset, the cooperative quickly expanded to over 100 members. The first fresh fruit bundles were harvested in 2010.

Pala'wan farmers who had laboured on and lost land to the plantation had the most to lose from restricted access to land and subsistence, less and irregular income, and greater indebtedness to the foodstuffs loaned out by the oil palm cooperative (Montefrio and Dressler, *forthcoming*). In most cases, it was migrants who were leasing land to the oil palm concession and who had originally or recently claimed or purchased lands from Pala'wan uplanders for rice and/or copra and then oil palm production. Migrant farmers often purchased land outright, often for very little money, from Pala'wan who commonly sold land to overcome the costs incurred from sickness and or death in the family. With municipal

officers serving as witnesses to these land claims, plots were parcelled out and zoned, then incorporated into the plantation.

The entry and expansion of plantations had thus exacerbated problems that began when migrants entered lands formerly occupied by Pala'wan. In the months leading up to the plantation development, a land rush ensued with migrants claiming or purchasing tens of hectares of land specifically to secure greater rent from oil palm development. Migrant landowners originally saw the entry of AGPI as an opportunity to earn from lands that they had claimed. Moreover, after the initial sections of the plantation were established, more and more land had been claimed from Pala'wan ancestral territory for the plantation without consultation. While official government discourse suggests that 'idle' swidden lands are put to better use as oil palm (Montefrio and Dressler 2016), the reality is that indigenous farmers typically use swidden fallows for NTFP collection and other types of cultivation (Dressler *et al.* 2016).

With the mine flanking the same lands swallowed up by oil palm, farmers soon spoke of the devastating impacts of both forms of rupture unfolding in their ancestral landscapes. When asked about whether access to and use of upland forest resources, including swidden, had been impacted by oil palm and mining, one farmer noted:

Kaingin (swidden) today is not enough because we harvest much less than before. And the others don't have any loans to give us. So it is not like before because most of our swidden lands are now planted with oil palm; there used to be bamboo (buho) in our fallows that we valued. We earned money from bamboo harvesting and processing; we would just make walling from it (sawali) and would sell it for extra money. We also used to get resin (saheng) from the forest, which we would burn for lighting. But now there is very little forest here. Nothing is left. (Maracuan, May 2016)

She stated further:

It's hard today. Before you could plant your land, but today most lands are already planted with palm oil. You cannot plant your crops there anymore. Land is very limited now, many of us just suffer from working for Agumil because we don't have the land for kaingin farms anymore.

Closer to the coast, another farmer who fished, stated:

We are also affected with the oil palm because when they spray insecticides, our water source also gets affected especially during the rainy season. The insecticides will be carried along to the shore where we fish. We eat these fish! (Maracuan, May 2016)

Those same farmers negatively impacted by the oil palm complained bitterly about the concurrent impact of the nickel company's mine site:

I think we would part ways. And we would look for a place where we can start a new life. Although one could say that the mining might eventually stop operating someday, its damage is already in the soil. For example, before we never used any fertilizers, but years later after the mine came, we had to use one sack of it per two hectares. Now, if you don't have nine to ten sacks of fertilizers, you can't harvest 90 to 100 sacks of rice. It's the impact of laterite from the mine. (Maracuan, May 2016)

As the upland landscapes of Pala'wan farmers are being dismantled by extractivism, either directly or indirectly with flow on effects, the various ecosystem services that Phil-WAVES seeks to conserve are being undone and, in certain instances, are already being destroyed. The potential to conserve the ecosystem services of these lands by offering Pala'wan farmers various types of incentives is rather disconnected from the reality of their livelihoods currently undergoing profound changes. In many cases, long-standing mixed livelihood pursuits are being dismantled as access to and the use of forests is increasingly difficult due to landscapes being subsumed and reordered by expanding plantations and mining activities. Extensive tracts of forest fallows have been clear-cut, pesticides have contaminated soil, and laterite has leached into the waterways that Pala'wan families depend upon for survival. In this context, then, how can Pala'wan farmers adjust their livelihoods to conserve forests and maintain stocks of carbon and hydrological functions in such ruptured landscapes? What, if any, incentives would compel farmers to maintain forest cover when they themselves are not complicit in this rupture?

DISCUSSION AND CONCLUSION

As we have shown, the prospect of state and non-state actors governing as they once did—by offering livelihood support that tried to align with local needs and concerns in forest mosaics (Dressler *et al.* 2010)—is now being subsumed by speculative conservation that touches down in landscapes undergoing major transformations. The art of governing speculatively now invariably intersects with the troubling conjunctures of deepening commodity production and extractivism that ruptures frontier landscapes on Palawan and throughout Southeast Asia. In these landscapes, marginal uplanders who are subject to such governance are told to modify typically resilient livelihoods to conserve 'natural capital' in disappearing landscapes that once supported long-standing resource uses and social practices (see Dressler *et al.* 2016).

In changing frontier settings, bilaterals and NGOs struggle to work with upland farmers who must negotiate the contrasting expectations of the intangible



Figure 3. Rupture, The Maracuan Nickel Mine. Source: Jonah Van Beijnen.

nature of speculative conservation and the draw of extractivism as processes of rupture remake landscapes that once ensured their survival. In this sense, the future-oriented character of conserving ‘natural capital’—where governance techniques aim to conserve nature by assigning abstract, imputed dollar values (whose source is unknown) to an ecosystem ‘service’ (Sullivan 2013)—can only be interpreted as being misaligned with the major social and material changes that emerge from rupture.

At the nexus of extractivism and conservation initiatives, the social and material substance of farmer livelihoods are undone and redone as upland landscapes transform over time and space. Governance interventions, extractivism, and local livelihood realities are now situated at a critical juncture, where pre-existing labour relations and land uses become restructured by the generative and destructive capacities of capital (Harvey 2006). Older ways of living and labouring have become devalued as the influx of capital finance and investment reworks landscapes so as to make way for newer, more destructive pathways of capital accumulation. It is therefore unsurprising that speculative conservation interventions have little traction amongst smallholders who must negotiate livelihoods with fewer and lesser quality options available to them.

Although the process of rupture is not a linear manifest destiny, the idea that marginalised resource-deficient farmers garner agency to find new openings and opportunities to thrive with secure livelihoods in over-exploited landscapes is untenable. The legitimacy of speculative conservation in such landscapes must therefore be called into question. Most speculative, market-based schemes unfold with limited certainty and local tractability in terms of how the concepts

and ideas translate locally, particularly in terms of how projects try to enrol local users and inculcate eco-rational behaviour (see Dressler 2014). In many respects, the legitimacy of intangible market-based interventions rests on the extent to which success can be constructed, leveraged, and sold to audiences and participants, wherein solutions, ideas, and projects are rendered valuable and beneficial in order to achieve and sustain buy-in (Büscher 2014). The durability of such misaligned policy models stems from the necessity of state and non-state actors to reinvest in and circulate the truth claims and value potential of the underlying beliefs concerning such initiatives (Fletcher and Büscher 2017; Lewis and Mosse 2006). The question therefore remains how practitioners of speculative conservation can ever assume local ‘buy-in’ when livelihoods and landscapes are undergoing profound transformations. Indeed, if rupture reflects the afterlife of deepening commodity relations and fractured landscapes (see Gordillo 2014), where long-standing livelihoods and views of forests are remade, how can bilaterals, state agencies, and NGOs advocate for speculative conservation in the debris of ruptured landscapes? What motivates the proponents of speculative conservation to believe that poor farmers will understand and be interested in conserving ‘natural capital’ in the midst of their livelihoods and landscapes being remade?

Answers to these questions rest in how varied forms of finance continuously penetrate the “everyday life, and above all into the reproduction of extra-human life” (Moore 2010: 390), particularly in terms of extractivism and market-based initiatives that intersect with the lives and livelihoods of uplanders. In the case of speculative conservation, we see how the (often rhetorical) transformation of nature into ‘natural capital’ facilitates the parcelling of social and ecological processes in practice so as to assess its potential future net-worth (Sullivan 2013: 199).

As shown, the rise of speculative conservation in times and spaces of rupture is less about material substance and local realities than the ability of social actors to manoeuvre networks to leverage the promise of big ideas and practices (e.g. NCA) by asserting the reputed effectiveness of certain schemes. In reference to natural capital accounting, then, the nature of its own success and that of other programs thus becomes self-referential, self-evident, and unquestionable, such that narratives of ‘policy success’ come to underpin the value of the very ‘natural capital’ they are supposed to merely reflect. The discursive construction of natural capital value is therefore less dependent on its imagined material reality—ostensive stocks and flows—than on the socio-spatial reorganisation of capital and labour at moments of over-accumulation, degradation, and crisis in frontier environments. Coupled with moments of rupture, speculative conservation works through socio-political networks that promote technologies and ideas to help capital expand and deepen in ways that create markets for value production in new conservation territories.

In this way, speculative conservation could well serve as frontier capitalism’s newest spatial fix in its potential to overcome, through discursive productions of

value, the creative destruction of labour and land during and after extractivist rupture. At this nexus, speculative conservation seeks to revalue the land, labour, and capital that has been eroded due to extractivism by monetising the use value of each through the finance, technologies, and ideas that underpin natural capital accounting. Despite there being few prospects to actually conserve ‘natural capital’ in ruptured landscapes, as demonstrated by our case study, speculative conservation’s overall governmental process of enabling reinvestment in labour and capital (in local areas and urban centres from where these programs emanate) helps to produce ideas, values, and profits out of ruined landscapes. Value is thus generated from rupture itself, although often well beyond the confines of ruptured areas. Rather than being spatially fixed, speculative conservation effectively feeds boundlessly on rupture, overcoming the spatial thresholds of capital exhaustion by becoming a new “accumulation frontier for finance capital [that involves] the wholesale re-conceptualisation of conserved nature in monetary and tradable terms” (Sullivan 2013: 200).

In this sense, the financialisation of nature for conservation offers a spatial fix that functions as a safety valve that not only redirects or deflects ‘negative externalities’ from extractivism, but, in so doing, also legitimises the spatial reorganisation and intensification of capital. Elsewhere, it legitimises the capture of surplus within and beyond the uplands. The rise of speculative conservation in moments of rupture may therefore not necessarily be a coincidence. Rather, it may be of historical and contemporary consequence in its quest to overcome creative destruction across degraded landscapes. However, it is marginal farmers who have the most to lose from these dynamics. With the loss of control over their land, labour, and livelihoods, these farmers have but few options other than resignation or relocation.

References

- Ahmed, Sara. 2010. *The Promise of Happiness*. Durham: Duke University Press.
- Aldaba, Fernando, Paula Antezana, Mariano Valderrama and Alan Fowler. 2000. “NGO strategies beyond aid: perspective from Central and South America and the Philippines.” *Third World Quarterly* 21(4): 669–683.
- Bello, Walden F., Marissa de Guzman, Mary Lou Malig and Herbert Docena. 2004. *The Anti-development State. The Political Economy of Permanent Crisis in the Philippines*. London: Zed Books.
- Brillantes, Jr., Alex B. 1994. “Redemocratisation and Decentralisation in the Philippines: The increasing leadership role of NGOs.” *International Review of Administrative Sciences* 60: 575–586.
- Büscher, Bram. 2014. “Selling Success: Constructing Value in Conservation and Development.” *World Development* 57: 79–90.
- Büscher, Bram, and Veronica Davidov. Eds. 2013. *The Ecotourism-Extraction Nexus Political Economies and Rural Realities of (un)Comfortable Bedfellows*. London and New York: Routledge.

- Büscher, Bram, Wolfram Dressler and Robert Fletcher. 2014. *Nature Inc.: Environmental Conservation in the Neoliberal Age*. Tuscon: University of Arizona Press.
- Büscher, Bram, and Robert Fletcher. 2015. "Accumulation by Conservation." *New Political Economy* 20(2): 273–298.
- Clarke, Gerald. 1998. *The Politics of NGOs in South-East Asia: Participation and protest in the Philippines*. London: Routledge.
- Constantino-David, Karina. 1998. "From the Present Looking Back: A history of Philippine NGOs." In *Organizing for Democracy: NGOs, Civil Society, and the Philippine State*, edited by G. Sidney Silliman and Lela Garner Noble, 26–48. Honolulu: University of Hawai'i Press.
- Corbera, Esteve, Carol Hunsberger and Chayan Vaddhanaphuti. 2017. "Climate Change policies, land grabbing and conflict: perspectives from Southeast Asia." *Canadian Journal of Development Studies* 38(3): 297–304.
- Dressler, Wolfram, Bram Büscher, Michael Schoon, Dan Brockington, Tanya Hayes, Christian Kull, James McCarthy and Krishna Streshta. 2010. "From Hope to Crisis and Back? A Critical History of the Global CBNRM Narrative." *Environmental Conservation* 37(1): 1–11.
- Dressler, Wolfram, and Robin Roth. 2011. "The Good, the Bad and the Contradictory: Neoliberal Conservation Governance in Rural Southeast Asia." *World Development* 39(5): 851–862.
- Dressler, Wolfram. 2014. "Green Governmentality and Swidden Decline on Palawan Island, the Philippines." *Transactions of the Institute of British Geographers* 39(2): 250–264.
- Dressler, Wolfram, Jessica de Konig, Marvin Montefrio and Jennifer Finn. 2016. "Land sharing not sparing in the 'green economy': The role of livelihood bricolage in conservation and development in the Philippines." *Geoforum* 76: 75–89.
- Eaton, Kent. 2003. "Restoration or Transformation? "Trapos" versus NGOs in the democratisation of the Philippines." *The Journal of Asian Studies* 62(2): 469–496.
- Eder, James and Janet Fernandez. 1996. "Palawan, a Last Frontier." In *Palawan at the Crossroads: Development and the environment on a Philippine frontier*, edited by James Eder and Janet Fernandez, 136–145. Manila: Ateneo De Manila University.
- Eder, James, and Oscar Evangelista. 2015. *Palawan and its Global Networks*. Quezon City: Ateneo de Manila University Press.
- Ekers, Michael, and Scott Prudham. 2017. "The Metabolism of Spatial Fixes: Capital Switching, Spatial Fixes and the Production of Nature." *Annals of the American Association of Geographers* 107(6): 1370–1388.
- Fairhead, James, Melissa Leach and Ian Scoones. 2012. "Green Grabbing: a new appropriation of nature?" *Journal of Peasant Studies* 39(2): 237–261.
- Fauna and Flora International (FFI). 2014. "Partners' Meeting and Presentation of Results." *Briefing Report*.
- Fletcher, Robert, Wolfram Dressler, Bram Büscher and Zachary Anderson. 2016. "Questioning REDD+ and the future of market-based conservation." *Conservation Biology* 30(3): 673–675.
- Fletcher, Robert, and Bram Büscher. 2017. "The PES Conceit: Revisiting the Relationship between Payments for Environmental Services and Neoliberal Conservation." *Ecological Economics* 132: 224–231.
- Fontanilla, Angelito. 2014. "WAVES in the Philippines (Phil-WAVES)" (presentation, representing Financial and Management Services, Department of Environment and Natural Resources, Republic of the Philippines, Bangkok, Thailand, 6–8 May 2014).

- Gordillo, Gaston. 2014. *Rubble: The Afterlife of Destruction*. Durham: Duke University Press.
- Harvey, David. 2001. "Globalization and the "Spatial Fix."" *Geographische Revue. Zeitschrift für Literatur und Diskussion* 3(2): 23–30.
- Harvey, David. 2006. *The Limits to Capital*. London: Verso Books.
- Hunsberger, Carol, Esteve Corbera, Saturnino Borrás Jr., Jennifer Franco, Kevin Woods, Courtney Work and Romulo de la Rosa. 2017. "Climate change mitigation, land grabbing and conflict: towards a landscape-based and collaborative action research agenda." *Canadian Journal of Development Studies* 38(3): 305–324.
- Igoe, James, Katja Neves and Dan Brockington. 2010. "A spectacular eco-tour around the historic block: Theorising the convergence of biodiversity conservation and capitalist expansion." *Antipode* 42(3): 486–512.
- Kelly, Alice B. 2011. "Conservation practice as primitive accumulation." *Journal of Peasant Studies* 38(4): 683–701.
- Larsen, Rasmus Kløcker, Francisca Dimaano and Michael Pido. 2014. "The emerging oil palm agro-industry in Palawan, the Philippines: Livelihoods, environment and corporate accountability." Working Paper 2014-03. Stockholm Environment Institute, Stockholm, Sweden.
- Lewis, David, and David Mosse. 2006. "Theoretical Approaches to Brokerage and Translation in Development." In *Development Brokers and Translators: the ethnography of aid and agencies*, edited by David Lewis and David Mosse, 1–26. Bloomfield: Kumarian Press.
- Lund, Christian. 2016. "Rule and Rupture: State formation through the production of property and citizenship." *Development and Change* 47(6): 1199–1228.
- Lund, Jens Friis, Eliezeri Sungusia, Mathew Bukhi Mabele, and Andreas Scheba. 2017. "Promising change, delivering continuity: REDD+ as conservation fad." *World Development* 89: 124–139.
- Malhotra, Kamal. 2000. "NGOs without aid: Beyond the global soup kitchen." *Third World Quarterly* 21(4): 655–668.
- Margulis, Matias E., Nora McKeon and Saturnino Borrás Jr. 2013. "Land grabbing and global governance: critical perspectives." *Globalizations* 10(1): 1–23.
- McCoy, Alfred. 2002. *An Anarchy of Families: State and family in the Philippines*. Quezon City: Ateneo de Manila University Press.
- Mercer, Claire. 2002. "NGOs, Civil Society and Democratization: a critical review of the literature." *Progress in Development Studies* 2(1): 5.
- Montefrio, Marvin Joseph Frontinac, and Wolfram Heinz Dressler. Forthcoming. "Declining Food Security in a Philippine Oil Palm Frontier: the role of cooperatives." *Development and Change*.
- Montefrio, Marvin Joseph Frontinac, and Wolfram Heinz Dressler. 2016. "The Green Economy and Constructions of the "Idle" and "Unproductive" Uplands in the Philippines." *World Development* 79: 114–126.
- Moore, Jason. 2010. "The end of the road? Agricultural revolutions in the capitalist world-ecology, 1450–2010." *Journal of Agrarian Change* 10(3): 389–413.
- Moore, Jason. 2015. *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. London: Verso.
- Mosse, David. 2004. "Is good policy implementable? Reflections on the ethnography of aid policy and practice." *Development and Change* 35(4): 639–71.
- Novellino, Dario, and Wolfram Heinz Dressler. 2009. "The role of "hybrid" NGOs in the conservation and development of Palawan Island, The Philippines." *Society and Natural Resources* 23(2): 165–180.

- Parks, Thomas. 2008. "The Rise and Fall of Donor funding for advocacy NGOs: Understanding the Impact." *Development in Practice* 18(2): 213–222.
- Peluso, Nancy Lee, and Christian Lund. 2011. "New frontiers of land control: Introduction." *Journal of Peasant Studies* 38(4): 667–681.
- Putzel, James. 1998. "Non-Governmental Organisations and Rural Poverty." In *Organizing for Democracy: NGOs, Civil Society, and the Philippine State*, edited by G. Sidney Silliman and Lela Garner Noble, 77–112. Honolulu: University of Hawai'i Press.
- Rap, Edwin. 2005. "The Success of a Policy Model: Irrigation Management Transfer in Mexico." *Journal of Development Studies* 42(8): 1301–1324.
- Rasch, Elizabeth. 2013. "Ecotourism, Not Mining in Palawan! Territorial Narratives on the Last Frontier (Palawan, the Philippines)." In *The Ecotourism-Extraction Nexus Political Economies and Rural Realities of (un)Comfortable Bedfellows*, edited by Bram Büscher and Veronica Davidov. London: Routledge.
- Roe, Emery. 1991. "Development narratives, or making the best of blueprint development." *World Development* 19(4): 287–300.
- Roe, Emery. 1994. *Narrative Policy Analysis: Theory and Practice*. Durham: Duke University Press.
- Roth, Robin, and Wolfram Dressler. 2012. "Market-oriented conservation governance: the particularities of place." *Geoforum* 43(3): 363–366.
- Silliman, G. Sidney, and Lela Garner Noble, eds. 1998. *Organizing for Democracy: NGOs, Civil Society, and the Philippine State*. Honolulu: University of Hawai'i Press.
- Southern Palawan Ecosystem Accounts. 2015. *WAVES draft report October 2015*. Philippines: WAVES Snapshot.
- Stoler, Anne. 2013. *Imperial debris: on ruins and ruination*. Durham: Duke University Press.
- Sullivan, Sian. 2013. "Banking nature? The spectacular financialisation of environmental conservation." *Antipode* 45(1): 198–217.
- Tsing, Anna. 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruin*. Princeton: Princeton University Press.
- Uson, Maria Angelina M. 2017. "Natural disasters and land grabs: the politics of their intersection in the Philippines following super typhoon Haiyan." *Canadian Journal of Development Studies*. 38(3): 414–430.
- Vel, Jacqueline. 2014. "Trading in discursive commodities: biofuel brokers' roles in perpetuating the jatropha hype in Indonesia." *Sustainability* 6(5): 2802–2821.
- WAVES. 2014. *Ecosystem Accounts in Southern Palawan, the Phil-WAVES implementation plan for Southern Palawan*. Wealth Accounting and the Valuation of Ecosystem Services, 14 February. Available at: https://www.wavespartnership.org/sites/waves/files/images/12_WAVES%20implementation%20%20Southern%20Palawan.pdf (accessed 21 December 2017).
- West, Paige. 2009. *Conservation is our Government Now*. Durham: Duke University Press.