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Part 2

Conservation

Chapter 6

Bonding nature(s)?

Funds, financiers and values at the impact investing edge in environmental conservation

Sian Sullivan

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Abstract This chapter highlights the value assumptions underscoring the recent and contested emergence of debt-based financing for the conservation of ‘standing *natures*’ *in situ*. In the aftermath of the United Nations Framework Convention on Climate Change (UNFCCC) Paris climate agreement of late 2015, there has been a noticeable proliferation of policy publications and reports espousing the benefits of leveraging debt-based finance and impact investing for the conservation of so-called natural capitals. The chapter examines how new measures of the health and improvement of natures *in situ* are becoming a focus for financial concerns in ‘impact investing’. It introduces the concept and practice of impact investing and traces developments in the field of impact investing for the conservation, restoration and rehabilitation of terrestrial ecosystems. The chapter explores the innovations we are seeing today that seek to create conserved natures *in situ* as an *asset class* for impact investing, and sets them within a broader turn towards impact investing in social and development contexts. In doing so the chapter identifies the value-making mechanisms proposed and in place for translating projected natural capital quantities into financially leverageable forms of value.

Introduction

The bond market is the great innovation that distinguishes western capitalism from previous economic systems. (Climate Bonds Initiative 2010: 1)

A key element of the work of the Leverhulme Centre for the Study of Value has been to document and analyse the many different ways through which concepts and indicators of nature health and harm are becoming economised and capitalised. This exploration of the performance of economic value for units of nature health and harm *in situ* has drawn attention to the discursive, numerical-economic, material and institutional dimensions and consolidations through which new economic values for nature are articulated.

‘Articulation’ here is understood in two senses: as speech act utterances that shape discursive reality as understood amongst those participating in relevant speech communities (Austin 1962); and as acts of ‘joining’ and connection between people, organisations and practices associated with the qualification, quantification and materialisation of nature-as-natural-capital (MacDonald and Corson 2012; Corson et al. 2013; MacDonald 2013; Sullivan 2013a, 2014, forthcoming; Wilshusen and MacDonald 2017).

Our research has focused on the following cases and issues: analysis of planning negotiations and policy proposals for biodiversity offsetting at connected sites of nuclear power production (UK) and uranium extraction (Namibia) (Sullivan 2013b); the application and adjustment of technical calculative devices for the quantification of biodiversity value at sites of damage and conservation in biodiversity offsetting in England (Carver 2015; Carver and Sullivan 2017, Chapter 7 this volume; Sullivan and Hannis 2017); value struggles arising over biodiversity offsetting as a new conservation technology for mitigating harms caused by development (Sullivan and Hannis 2015); development of new balance sheet accounting practices for bringing nature as ‘natural capital’ into national and corporate annual accounts (Sullivan and Hannis 2017); and the ontological dimensions and politics infusing the controversial revisioning and making of ‘nature’ as ‘natural capital’ (Sullivan 2014, 2017a, 2017b, forthcoming; Sullivan and Hannis 2017). These analyses have drawn attention to the multiplicitous ways in which value(s) for nature(s) are *fabricated* rather than found (Sullivan 2017c, forthcoming). As such, they align with broader approaches in economic sociology that assert *performative* dimensions of numerical-economic devices and counting practices as they are applied to the calculation and valuation of environmental healths and harms (for example, Fourcade 2011; Ehrenstein and Muniesa 2013; Lippert 2014; Lohmann 2014).

Drawing on review of grey literature sources, as well as attendance and participation in a series of environmental policy events in recent years (listed in Sullivan forthcoming), in this chapter I focus on new ways in which measures of the health and improvement of natures *in situ* are becoming a focus for financial concerns in ‘impact investing’. Echoing notions of ‘standing forests’, in which forests tend to be viewed in terms of economic values waiting to be articulated and then captured through harvest of the timber embodied in the trees that are ‘standing’ (as documented and critiqued in Scott 1998), I use the term ‘*standing natures*’ to invoke a view of natures *in situ* being similarly approached as sources of new economic value that are *poised for* potential capitalisation and marketisation. This is a speculative form of value realisation based on assumed correspondences between natures standing now, current marketable prices and assumptions regarding likely future scenarios that can be economised and capitalised. In particular, I want to set innovations we are seeing today that seek to create conserved natures *in situ* as an *asset class* for impact investing within a broader turn towards impact investing in social and development contexts. In doing so, I provide some illustrations of how conserved and restored natures *in situ* are becoming part of the bond market identified in the epigraph above as the great innovation distinguishing western capitalism from previous economic systems. In the next section I introduce the concept and practice of impact investing. I then trace some developments in the field of impact investing for the conservation, restoration and rehabilitation of terrestrial ecosystems.

What is impact investing?

Broadly speaking, impact investing (II) is a form of financing inspired by venture capitalism that promises a *dual return* on investment: returns on investment are calculated in terms of both profit and positive social, and increasingly environmental, impacts – hence *impact investing* (Chiapello and Godefroy 2017: 152). In II, the aim is to blur the boundary between philanthropic gift-giving and financial returns. Impact investing is framed increasingly as desirable as an ‘innovative’ source of financing for social, development and environmental concerns normally funded through public spending because of declines in public funding, especially in the wake of the 2007–2008 financial crisis.

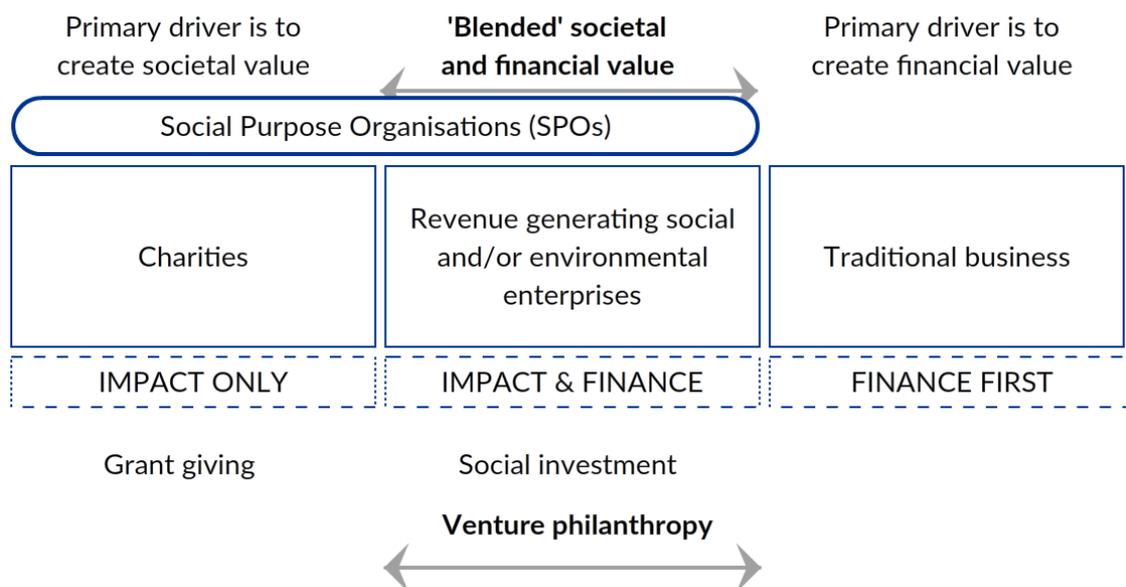
So-called ‘Innovative Financing Mechanisms’ (IFMs) are financial products and instruments that tap into funds and partners beyond commitments from conventional donors and bonds from traditional international financial institutions (Douste-Blazy 2009; Ketkar and Ratha 2009; Hurley 2012; OECD 2013). Declines in public finance associated in part with neoliberal transfers of power and assets to the private sector, coupled with crisis in multiple spheres of socio-economic and environmental life, are giving rise to a perceived need to *unlock*, i.e. to release or mobilise, funds from a buoyant private sector to finance initiatives associated in the post-World War 2 period with the public sector, at least in the industrialised north. Innovative Financing Mechanisms, including II, are thus being designed as financial instruments that will ‘unlock’ private sector funds. The imperative to ‘unlock’ these funds is in order to ‘scale up’ financial resources for social, development and environmental arenas that, especially in the post-World War 2 period, have been considered the responsibility of the public sector. This scaling-up of private sector resources is considered necessary so as to fill the ‘funding gap’ arising as public coffers have been emptied through combinations of asset transfers, bailouts, austerity regimes and declines in tax revenue. All of these phenomena are linked to the propensity for crisis that even economists of the International Monetary Fund (IMF) – one of the primary institutional architects of a global neoliberal regime¹ – now affirm are amplified by neoliberal policies (Ostry et al. 2016). Indeed, ‘funding gap’, ‘unlock’ and ‘scaling-up’ are terms frequently used in promotional, advocacy and technical documentation regarding II as a source of ‘innovative finance’ for social, development and environmental investments (for example, WWF et al. 2011; OECD 2013; Centre for Public Impact 2017: 1; Environmental Finance 2017).

Given the current plutonomic concentration of financial assets in the wealth of (ultra) high net worth individuals ((U)HNWIs) and large investors such as pension funds (Kapur et al. 2005; OXFAM 2016), finance for social, development and environmental concerns is increasingly being sought from these private sources (Mawdsley 2015). Private sector funds, designed to be complementary to and interwoven with more conventional aid and public spending commitments, are thus a focus of urgent calls for a shift in global investment patterns to generate new funds for connected endeavours in social development, the conservation of terrestrial ecosystems, carbon/climate management, and infrastructure development, including renewable energy. New financial products designed so as to source private finance for a spectrum of interconnected global challenges include: social impact bonds (Centre for Public Impact 2017; discussion in Harvie in press); green development and climate bonds²; and, increasingly, a variety of impact investments linked with conservation outcomes in terrestrial ecosystems or ‘standing natures’ (Credit Suisse et al. 2014; Huwyler et al. 2014; Credit Suisse

and McKinsey Center for Business and Environment 2016; Credit Suisse et al. 2016). These financial instruments are designed to appeal to desires amongst the wealthy of society to ‘do good’ in an entrepreneurial spirit, and are thus also referred to as enabling ‘venture philanthropy’³ and/or ‘impact entrepreneurship’ (Social Impact Investment Taskforce 2014).

Impact investing constitutes a particular strand in an array of so-called IFMs for social, development and environmental agendas. As depicted in Figure 6.1, II sits between conventional finance-first investment and pure grant- or gift-giving. Chiapello and Godefroy (2017: 153) describe II as involving an *adaptation* of financial investors’ practices to social and now environmental sectors, creation of a new type of investment fund, i.e. an impact investment fund, and a *redefining* of the existing funding practices of social and/or environmental organisations such that they become oriented towards and entangled with financial asset management structures. The II market is construed and constructed as a *concerned market* whose *performance* is measured on the basis of a *double return* in terms of value: ‘a financial one for the investors and a social [and/or environmental] one for the public interest’ (Chiapello and Godefroy 2017: 158). As a form of ‘payment-by-results (PbR)’ financing, II brings together socially and environmentally motivated private finance organisations with social and environmental providers, such that previously public services become outsourced both to private sources of finance and to private sources of provision, albeit usually with some form of publicly funded incentive or subsidy (Centre for Public Impact 2017: 1). Hailed as a revolutionary ‘paradigm shift in capital market thinking’ that uses private finance to leverage the value of public expenditure, II is framed by proponents as the *invisible heart* of capital markets: as a force capable of harnessing ‘entrepreneurship, innovation and capital to power social [and environmental] improvement’ (Social Impact Investment Taskforce 2014: 1).

Figure 6.1 The impact investing spectrum



Source: Adapted from the European Venture Philanthropy Association (see <http://evpa.eu.com/about-us/what-is-venture-philanthropy>, accessed 25 July 2017). Also see Social Impact Investment Taskforce (2014: 19) and Chiapello and Godefroy (2017: 164).

Importantly, the II market is based on *promises that bind* in two main ways: investment becomes bound with the promise of positive and measurable social and/or environmental impact; simultaneously, the social and or environmental asset to be enhanced through investment becomes bound to the investment and its *promise of profit to investors*.

We can see this binding more clearly by looking at examples of how the II market is starting to play out in practice in the social development arena. The UK, for example, has seen an expansion of investment in social development under the rubric of ‘Social investment’ and ‘Social Impact Bonds’ or ‘SIBs’. This expansion has been guided by a Social Impact Investment Taskforce set up by the G8 and led by a co-founder of the first venture capital fund set up in Europe in 1972 (Social Impact Investment Taskforce 2014; Chiapello and Godefroy 2017: 162). Whilst chairing the G8’s Social Impact Investment Taskforce, which oversees more than half of the 30-plus SIBs currently in operation in the UK, this individual was simultaneously the chair of a social impact investment fund called Big Society Capital,⁴ set up to finance social investments (Harvie forthcoming). The UK government under the former Conservative and Liberal Democrat coalition has been instrumental in supporting policies that will grow the II market, producing a number of policy papers between 2011 and 2014⁵ (for example, HM Government 2014). Since the first SIB was established in the UK in 2010, the UK now hosts the largest number (n = 32) of SIBs financing and providing social services, of a total global market in SIBs of around n = 61 (Centre for Public Impact 2017: 2). SIBs currently constitute only a very small proportion of total public service expenditure in the contexts specified. Nonetheless, II is considered indicative of ‘a wider shift in the way public services are funded and delivered’, especially in the developed world (Centre for Public Impact 2017: 3), with II models – specifically Development Impact Bonds (DIBs) – also being extended as financing structures for development aid spending (Centre for Global Development and Social Finance 2013).

To clarify how an SIB works, let us take an example of one UK SIB summarised in a paper by economist David Harvie (in press, and references therein) who writes that:

The Essex SIB, launched in April 2013, was the first SIB commissioned by a local authority, Essex County Council. The bond funds a £3.1 million scheme to ‘help 380 vulnerable 11–16 year olds on the edge of care or custody to stay safely at home with their families’, using an intervention called Multi-Systemic Therapy (MST), provided by children’s charity Action for Children. Investors include Big Society Capital [see above] and Bridges Ventures, with their £3.1m investment channelled via a special purpose [outsourced] vehicle Children’s Support Services Ltd. The key outcomes metric is ‘the saving in aggregate care placement days for each MST cohort, benchmarked against a historical comparison group’. The project will operate for five years, with outcomes payments, which will be capped at £7m extending into the eighth year. According to the [government-run] Centre for Social Impact Bonds⁶, ‘[t]he SIB could see investors earn 8–12% annual interest on their investment’, while the total saving to Essex County Council (net of outcome payments) could be £10.3million over the project’s timeframe.

As this example clarifies, this ‘financialization of the social’ (Chiapello and Godefroy 2017: 153) is described as generating multiple wins: social impact is achieved, investors

receive returns and government saves on expenditure. In addition, a secondary market seems to be emerging in connection with social II in the form of a ‘social impact exchange’,⁷ described as ‘the world’s first regulated exchange dedicated to businesses and investors seeking to achieve a positive social and environmental impact through their activities’.

This broader review of II in the SIB market indicates several iterative features:

- 1) a funding gap is identified requiring the ‘scaling-up’ of resources from the private sector;
- 2) work begins and becomes continuous to design and create new investment products that will attract private sources of investment and, particularly, to assert and stabilise new categories and boundaries that create new asset classes that can attract returns-seeking investment. Through this work, new asset classes of public social development domains are identified and stabilised through combinations of professional investment and risk management skills and the design and application of standardised metrics, benchmarks, ratings, devices, etc. for the assessment, classification, categorisation and valuation of both financial and social impact returns (Chiapello and Walter 2016; Chiapello and Godefroy 2017). These activities are coupled with the significance of stabilised value judgements ‘used to value not only products that are being exchanged, but also the actors that produce them’ (Chiapello and Godefroy 2017: 157), contributing both to consolidations of epistemic communities around II and to the stabilising of criteria on which to base costs and prices. Linked with the bringing forth of new asset classes, and the instituting of new accounting and audit practices for both asset and impact valuation, is the emergence and consolidation of a new cadre of intermediaries offering specialist services in accounting, impact measurement, brokerage and fund management;
- 3) *seed financing* is frequently offered to stimulate the design and stabilising of new II pathways to ‘build a marketplace’ and ‘unlock capital’ (Chiapello and Godefroy 2017: 161). For example, in 2008, the Board of Trustees of the Rockefeller Foundation approved \$38 million in support of an Impact Investing Initiative in the US for the period 2008–2011, and this is one amongst many such examples of initial funding commitments pledged to develop a market in II (discussed further below);
- 4) impact investing is made attractive through government support and subsidies, especially through the transfer of public funds, tax breaks and guarantees (Centre for Public Impact 2017: 14–15) coupled with competition amongst private investors for these sources of public financing. In addition, the state establishes the economic and policy context for social II by setting up appropriate regulatory and legal frameworks, and creating key supporting institutions.

The reason for going into the social II model in some detail is to clarify that models for II already exist that are now being transferred to and (re)designed for environmental concerns. This chapter thereby illustrates how calculative and valuation devices can be standardised in one value domain, and then circulated and applied to others, presumably with potential for commensurabilities between different social and environmental outcomes to also become possible. In the following section I turn to the II edge for valuing, conserving, restoring and

rehabilitating ‘standing natures’.

The Impact Investing Edge in Conservation Finance

We strongly believe that natural capital is the next frontier of impact investment and both specialist skills and a critical size are required to successfully address this nascent but promising market. (Philippe Zaouati, CEO of Mirova Responsible Investing, quoted in Natixis, Mirova and Althelia Ecosphere 2017: 2)

Echoing the circumstances described above, a significant funding gap is considered to characterise environmental conservation, restoration and rehabilitation, requiring filling through IFMs, including II. Aichi Target 20, agreed in 2010 by the Conference of Parties of the Convention on Biological Diversity, thus focuses on the need to scale up financial resources for the conservation of biodiversity,⁸ and an Annexe to the COP’s Strategic Plan for Biodiversity in 2011–2020 speaks of the possibility for IFMs to help fill this gap.⁹ Assertions of the need to scale up financial provision in the environmental arena have been accompanied by growth in proposals for how to unlock new sources of private finance so as to support investments in the conservation, restoration and rehabilitation of ‘standing natures’, particularly in tropical contexts in the ‘global south’. Simultaneously, a number of new financing facilities have appeared to support ‘conservation enterprise’ via II for conservation: see, for example, Rewilding Europe Capital¹⁰ and Conservation Capital,¹¹ the latter of which has a specific emphasis on Conservation Impact Investment¹² and also partners with African conservation projects through African Wildlife Capital.¹³ Similarly, the ENGO The Nature Conservancy (TNC), for example, now sells ‘Conservation Notes’ for a minimum investment of \$25,000 over 1, 3 or 5 years, with dual return of interest rates up to 2 per cent (depending on term selected) and environmental returns measured annually in ‘acres protected, landscapes preserved, and habitat restored’ (TNC 2017: online).

In what follows I document and review some moments in the emergence of proposals for II to support the conservation of standing natures *in situ*. My aim is to show how this II edge is opening and taking hold in the environmental conservation arena, some of the organisations and consolidating collaborations involved, and some of the value-framings being mobilised so as to generate both financial and conservation impacts through instruments becoming operational at this edge.

A pertinent starting point occurs in 2011. In this year a collaboration between the global ENGO the World Wide Fund for Nature (WWF), the Global Canopy Programme, the Climate Bonds Initiative and the banking/investment firms Goldman Sachs and Lombard Odier consolidated proposals for the development of ‘Forest Bonds’ to finance what they call ‘ecological infrastructure such as tropical forests’ (Kanak et al. 2011: 5). As occurs with II for social development, this collaboration proposed that public sector funds and incentives such as tax breaks be used to support private sector investment in forests, in return for government issued bonds based in part on the monetary value that could be mobilised from the ‘natural capital’ of tropical forests (WWF et al. 2011). The advice of these organisations was that ‘the investment proposition needs to be large and liquid to attract the largest investors’, and that multilateral donors might ‘play an additional catalytic role by issuing a forest bond

themselves and helping to pump-prime the forest bond market' (WWF et al. 2011: 5). The income for repaying the investment was proposed to derive from new sources of forest carbon revenue, generated, for example, through the United Nations REDD+ programme¹⁴ (which received new support through the Paris Climate Agreement in 2015¹⁵), ecosystem service markets, sustainable timber and agriculture and taxes, all of which would arise as outcomes of the positive and measurable impacts effected through proposed private sector investments (WWF et al. 2011).

To take one source of projected value from standing natures mentioned here, forest carbon revenue is a reference to the 'future streams of payments for expected emissions reductions' (World Bank Group 2012: 1) provided by the carbon contained in standing forests that are projected to be 'unlocked' under REDD+. The REDD+ programme encourages forests of the global south deemed to be under sustainable forest management and involving the conservation and enhancement of carbon stocks beyond a counterfactual scenario of forest degradation to become tradable in global emissions offsets markets. This process involves various (and contested) practices of quantification, calculation and monetisation, relating in particular to both documenting the quantity of carbon stored in trees left standing and the counterfactual calculation of carbon that would otherwise be lost without a REDD+ scheme in place (for details see especially Lohmann 2009, 2014; Ehrenstein and Muniesa 2013; Asiyanbi 2017).

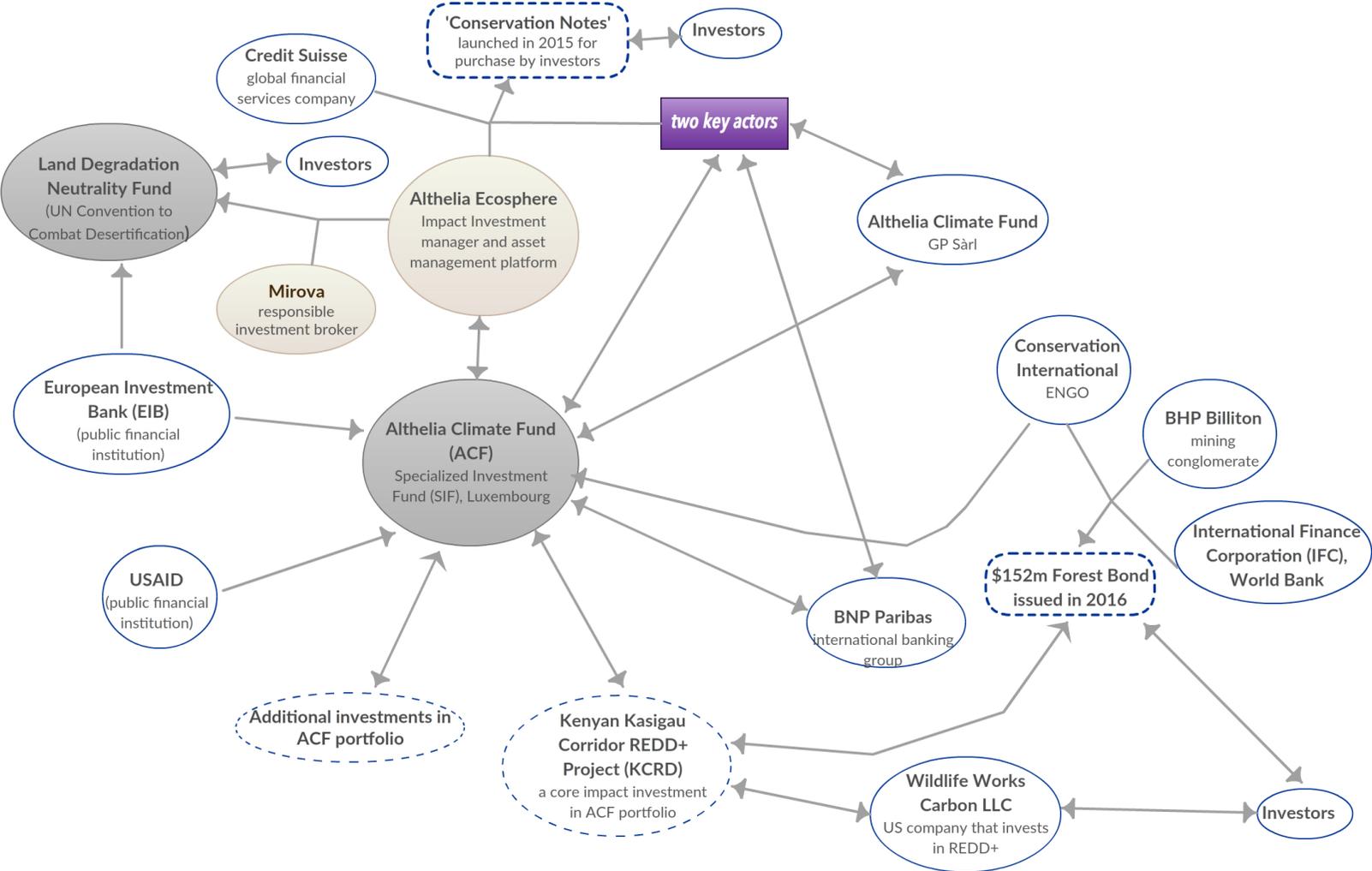
In parallel, over the last few years new investment funds have been established to raise capital to invest in emerging markets associated with environmental conservation efforts. The Althelia Climate Fund (ACF) is prominent amongst these new II funds focusing on environmental conservation parameters. Althelia Climate Fund is a Specialised Investment Fund based in Luxembourg, established and managed by asset management platform Althelia Ecosphere – 'an impact investment manager that delivers financial returns that are fully aligned with the conservation of nature and sustainable social development'¹⁶ – and supported by ENGO Conservation International (Kill 2016). Althelia Ecosphere invests 'in activities with the objective of providing net-positive impacts for their communities and ecosystems'.¹⁷ Performance is measured according to a seven-pointed star of categorised 'impact themes', namely 'climate', 'ecosystems', 'species', 'livelihoods', 'inclusivity', 'sustainable enterprise' and 'fair economic returns', framed specifically in connection with the UN Sustainable Development Goals (SDGs) (Althelia Ecosphere 2016, 2017 – access to the full impact data tables is protected, requiring an investor login to the Althelia Ecosphere website). Kill (2016: 9) reports that the administrative agent and custodian bank of ACF is BNP Paribas Securities and Services, and the two major founding shareholders of the Althelia Climate Fund (as well as the major shareholders of the entity that holds a third General Partner share in ACF) previously held positions as head of Carbon Finance and Director of Environment and Forestry for BNP Paribas Corporate and Investment Banking.

In 2013 ACF was described as comprising 'a diversified portfolio of investments in Africa, Latin America and Asia that take the form of real assets (certified commodities and agricultural produce) and environmental services (verified emissions reductions and other ecosystem services)' that will deliver 'cash dividends to investors' (Althelia Ecosphere 2013: 1). At the outset the fund proclaimed an interest in potential flows of both conservation and

financial value arising in particular through REDD+ and Payments for Ecosystem Services (PES) markets (Abusaid 2011). Its intention has been to create ‘new environmental assets that reflect the value of natural capital’,¹⁸ with ‘[e]cosystem goods and services from Natural Capital’ proclaimed as ‘worth trillions of US dollars per year’ (Althelia Ecosphere 2013: 3). Initial seed investments in the ACF from the public financial institution the European Investment Bank (EIB) amongst other investors totalled €101 million in June 2014 (Kill 2016: 2), asserted as fully invested by 2017 (Althelia Ecosphere 2017). The fund was enhanced with more than \$130 million lent from the USAID in 2014,¹⁹ assisting with guaranteeing prices to investors financing Althelia’s global portfolio of investments (Kill 2016: 8). Althelia Climate Fund was paid some €4.40 million in 2014–2015 in management fees charged as a proportion of investment (Kill 2016: 4). Figure 6.2 illustrates the II institutional structure and entanglements consolidating around ACF and connected organisations.

A core project in Althelia’s portfolio is the Kenyan Kasigau Corridor REDD+ Project (KCRD)²⁰ with recent expansions into the neighbouring ‘Taita Hills Conservation and Sustainable Land Use Project’. Here, Althelia has collaborated with the US-based company Wildlife Works Carbon LLC to commit funds that invest in REDD+ and that repay investors through income arising from the sale of carbon credits from woodlands conserved and rehabilitated through the Kasigau–Taita projects. This II initiative has recently received new impetus through the release in 2016 of the first Forest Bond designed to pay its investors with both cash and/or carbon credits. Issued by the International Finance Corporation (IFC) of the World Bank and developed with mining conglomerate BHP Billiton and Conservation International, this ‘[i]nnovative \$152 million bond to protect forests and deepen carbon-credit markets’ (Klopper and Panajyan 2016: online) represents an important first linking between two accounting nodes of green finance architecture: the green bond market and the carbon-accounted offset market. In this case carbon credits are purchased from the REDD+ and conservation scheme in Kenya’s Kasigau Corridor, operated by the private sector company Wildlife Works LLC and amongst the portfolio of investments brokered by Althelia Climate Fund. Repayments in certified carbon credits can be used either to offset corporate carbon emissions or sold on carbon markets (Klopper and Panajyan 2016: online). The 5-year bond is designed to scale up private sector climate change finance and conservation liquidity, but nonetheless exists in a context of concern regarding local socio-economic impacts of Kasigau offset provision (Chomba et al. 2016; Kill 2016). The bond has been sold to major global institutional investors, including the pension funds California State Teachers’ Retirement System (CalSTRS) and Teachers Insurance and Annuity Association of America (TIAA), the impact investment fund Treehouse Investments LLC and the insurance company QBE (Klopper and Panajyan 2016: online). As well as preventing deforestation, proceeds from the bond are intended to support private sector development and particularly IFC’s private sector lending in emerging environmental markets (Klopper and Panajyan 2016: online).

Figure 6.2 Impact investment organisational structure emerging around Althelia Climate Fund and associated organisations



Source: Derived from information reported in Kill (2016), Klopfer and Panajyan (2016), Cobley (2017: online) and <https://althelia.com/> (accessed 27 July 2017).

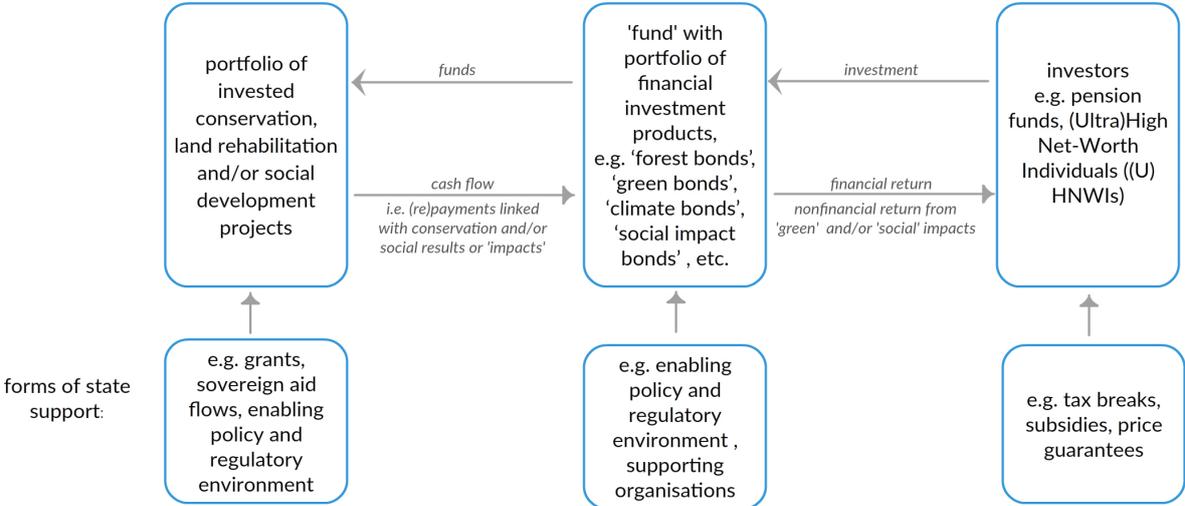
Notes. The Funds and intermediaries are shaded, and specific financial products are indicated with a dashed border.

Forest Bonds are also being established that focus specifically on Indonesian forests. In April 2015, ADM Capital,²² an investment manager seeking long-term capital appreciation through opportunities in Asia and Eastern Europe, collaborated with the ENGO Flora and Fauna International,²³ to launch a \$1 billion bond programme in ‘Rainforest Impact Bonds’ as a finance mechanism for tropical forest conservation that stimulates green economic growth (ADM Capital 2015). This initiative has recently been boosted by a new grant to support the design of a Tropical Landscapes Finance Facility (TLFF) and Tropical Landscapes Bond (TLB), developed in partnership with the United Nations Environment Programme (UNEP), the International Center for Research in Agroforestry (ICRAF) and (again) the bank BNP Paribas (Genasci 2017). As described above, these bond structures are designed in connection with sovereign aid commitments from developed countries to stem global climate change by reducing forest carbon emissions through deforestation and habitat degradation. The flow of repayments to investors in Rainforest Impact Bonds is thus projected to derive from newly commodified and marketable carbon values in tropical forests whose value has been made legible in part via sovereign aid commitments derived from public monies.

These forest and rainforest bonds as instruments for supporting II in the conservation of standing natures are themselves part and parcel of proliferating proposals for the scaling-up of conservation investments from institutional investors and (ultra) high net worth individuals ((U)HNWIs), i.e. the super-super-rich, through financial products linked with emerging or predicted conservation markets (Huwyler et al. 2014: online; also Credit Suisse et al. 2014; Credit Suisse and McKinsey Center for Business and Environment 2016). In these new impact-related conservation finance structures, investor risk is projected to be reduced through mobilising such newly eligible-leverageable assets and the ‘land or usage rights’ from which they derive as underlying collateral (see, for example, Credit Suisse and McKinsey Centre for Business and Environment 2016: 17). Credit Suisse is emerging as a key financial institution in mobilising debt-based conservation finance, having also worked with Althelia Ecosphere (see above) to sell ‘Conservation Notes’ in 2015,²⁴ raising \$14 million from around 50 HNWI investors for conservation projects invested in via Althelia Climate Fund’s portfolio (Kill 2016: 7). Credit Suisse envisage and propose the matching of portfolios of conservation projects with a portfolio of investments, as shown in Figure 6.3, a structure that makes it increasingly hard to link any particular investment with any particular conservation project or outcome.

The above examples focus on preventing the degradation of high-value ‘standing natures’. A different but related emerging aspect of II for conservation focuses on financing structures for the rehabilitation of land considered degraded. Once again, ‘large amounts of financial resources’ are asserted as required to fill the funding gap understood as a barrier to meeting the UN SDG target (15.3) of ‘a land degradation neutral world’ by 2030, and are envisaged to be provided by ‘[n]ew financial instruments and intermediaries, as well as enabling conditions, ... to catalyze private capital around SDG implementation’.²⁵ One response to this nexus of constraints and possibilities, and as outlined by the UN Convention to Combat Desertification (UNCCD), is the establishment of an independent Impact Investment Fund for Land Degradation Neutrality (LDN), expected to be launched in 2017 as ‘a first-of-its-kind investment vehicle leveraging public money to raise private capital for sustainable land management and land restoration projects worldwide’.²⁶

Figure 6.3 Schematic representation of impact investing finance for environmental and social impacts.



Source: Drawing on Credit Suisse, WWF and McKinsey&Company (2014: 11), ADM Capital (2015) and Credit Suisse and McKinsey Center for Business and Environment (2016: 9).

Echoing the structures outlined above, the LDN Fund will be designed and managed by Mirova, a ‘responsible investment’ affiliate of French investment company Natixis Asset Management²⁹ managing ‘nearly €7bn in green equity, bond, impact and infrastructure funds’, and seeking to raise €1 billion for the LDN Fund (Cobley 2017: online). Private finance is to be complemented by seed finance and support from public financial institutions including the EIB.³⁰ This means that ‘state backers [will] make up around 30% of the fund’s investor base, under an arrangement that would see them take the first hit if any investments go sour’ thereby lowering ‘risk for private-sector investors like pension funds, ... the idea being that private investors would benefit from returns of around 8% a year’ (Cobley 2017: online). In a bid to become ‘the European leader in natural capital investing’ (Natixis et al. 2017: 1), Mirova, under contract with UNCCD, is negotiating a majority equity interest in Althelia Ecosphere (see above), through which it will seek to build and manage the LDN Fund as ‘a public–private investment fund to regenerate and manage farmland around the world – at a profit’ (Cobley 2017: online). The LDN Fund is described as ‘being structured as a layered fund, designed as a public–private partnership for blended finance’ to ‘complement and scale up existing financial instruments and funds for sustainable land management and rehabilitation by providing financing that would not otherwise be available in the market’.³¹ These developments are thereby reframing and approaching land considered degraded as a new asset class suitable for investment (WBCSD 2015).

To summarise, the examples outlined in this section repeat and consolidate the II structures considered in the previous section. They take shape in contexts of oft-stated concerns regarding the gaps in available finance for public expenditures. Reflecting broader interest in financial instruments that ‘blend’ public and private provision they frequently draw on seed funding and other guarantees from public financial institutions and are supported by enabling

regulatory and policy structures. They involve the vesting of skills, control and fees in intermediaries located in finance, thereby entangling solutions for environmental concerns with expertise in financial asset creation and management. In the following concluding section I consider some structural implications of this II edge in financing the conservation, restoration and rehabilitation of standing natures.

Conclusion: ‘You know what I mean by a bond? Something that binds’³²

Institutional investors are actually very good at coming to terms with new sectors and making investments. But the thing that drives them to do that is returns. If there is a way things can be structured to get higher returns, the market will work really well. (Rupesh Madlani, CEO Global Sustainable Capital Management, in Environmental Finance 2017: online)

Put together, these resources would provide the strategic vision for growth, strong investment processes, and support functions needed to scale up this natural capital investing business. (Natixis, Mirova and Althelia Ecosphere 2017: 1)

The proposals outlined above for binding standing natures with financial domains through II aim to transform the supply of private capital to social, development and ecological enterprise with measurable impact, i.e. that better evidences the value (for money) that has been created. They require the creation of new asset classes of conserved, restored and rehabilitated ‘standing natures’ that can attract or ‘unlock’ new sources of private capital investment so as to fill identified funding gaps in possibilities for social and environmental improvement. This, then, is a financing approach in which the qualification of ‘standing natures’ as ‘natural capital’ *in situ*, coupled with quantification through (ac)counting and valuation technologies, is permitting translations of projected natural capital quantities into financially material, i.e. leverageable, forms of value.

Impact investing for the conservation, restoration and rehabilitation of standing natures is a new edge in the world of conservation finance. It is too early to say exactly what social, economic and material effects these innovations will manifest, or how much money will flow, to where and to whom. Some commentators have asserted the nascent, halting and faltering nature of this new investment field (for example, Dempsey and Suarez 2016; Dempsey 2017). As Asiyambi (2017: 1) writes, however, while ‘material processes appear thin, sluggish, fractured, hybridised or stalled in practice’, the emergent and expanding green projects outlined above can simultaneously be understood as ‘durable processes of becoming’ and as consolidating, rather than retreating, ‘markets-in-the-making’. Indeed, several of the examples shared here illustrate a keen appetite in ensuring success in this new edge in conservation finance on the part of their architects in public financial institutions, private intermediary organisations and ‘on-the-ground’ suppliers of carbon and ecosystem value. This appetite is demonstrated by new seed investments, new alliances between intermediaries that may assist with scaling up investment portfolios, and consolidated policy support at national and international levels. All these dimensions are ‘organising actions’ exhibiting a neoliberal tendency towards the ‘truth regime of the market’ (Foucault 2008(1979) wherein interventions in environmental management are rendered increasingly intelligible to market

and financial logics (Sullivan 2013a; also Asiyambi 2017: 5).

At the same time, financialisation can be thought of in multiple ways that are not about financial flows only (for example, Sullivan 2013a; Chiapello and Godefroy 2017). Financialisation of course is about volumes and directions of money that both move and accumulate via financial instruments and investments. But it is also about making and valuing new aspects of the world in the image of finance through the creation of newly (ac)countable asset classes that perhaps close off and *devalue* other(ed) and prior ways of knowing social and natural worlds. It is about creating opportunities and communities aligned around the fizz of potential and promise as new asset classes are fabricated in the world. It is about framing and taming social and natural worlds as (pump)primed for (ac)counting, acquisition and accumulation, as occurs in the creation of all speculative investment bubbles in which there is money to be made precisely because such opportunities may be unsustainable.

This chapter has traced some ways in which places and spaces reframed and revalued as asset classes are becoming further incorporated into financial(ised) value-frames, as testified by the brokers, intermediaries and investments funds for conservation finance outlined above. It is too soon to see the extent to which these proposals, policies and products will take hold, how much money will thereby flow either towards conservation investments or towards investors, or what conservation impacts may manifest in the long term and with what social effects. This is an edge that is moving fast, but it is also an edge animated by the promise of financial(ised) returns of value and the sustenance of capital(ist) political economic structures. These structures tend to distribute income unequally, pulling towards accumulation, speculation and inequity. In II for conservation finance, they may additionally intensify processes whereby standing natural capitals in southern countries become bound to outside investors in ways that may influence sovereignty over those resources, as well as increasing the indebtedness of the thus-invested contexts. Importantly, then, if these public–private investments in public social and environmental spheres are to elicit significant public understanding and confidence they will require impact measures, data tables and reporting to be publicly available for review and debate. This is an edge ripe for detailed empirical, comparative and independent case research especially to clarify evidence for positive social and/or environmental impacts for those for whom tropical ecosystems are home.

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Notes

¹ In particular through the coalescence of globalising political and economic policies that flowed from the Washington Consensus drawn up in 1989 by economic advisers to the major international financial institutions (primarily the World Bank and the IMF). This global(ising) economic framework is complex in structure and effects but has included: deregulation of international finance flows; protection of business interests, in part via the establishment of so-called ‘free trade’ regions; and structural adjustment and austerity programmes to which ‘developing’ countries, and latterly post-crisis European countries such as Greece, have been expected to agree and adhere in order to access donor funds for development purposes. These structural adjustment and austerity programmes introduce a range of conditionalities, frequently oriented towards the opening up of ‘southern’ markets and utilities to international business, and a transformed role for the state so as to permit further trade and donor permeability in such contexts. Major international non-governmental organisations (INGOs) and environmental non-governmental organisations (ENGOs) mushroomed in the wake of the Washington Consensus to fill the facilitating and implementation vacuum left in circumstances of weakened states and public sectors (Foucault 2008(1979); Hulme and Edwards 1997; Stiglitz 2002; Chapin 2004). The ways in which the combination of such structuring processes have vested sovereignty in locations beyond the nation state was famously termed *Empire* by Hardt and Negri (2000). See discussion in Sullivan (2006).

² For an up-to-date list of bonds self-labelled as ‘green’ see <https://www.climatebonds.net/cbi/pub/data/bonds> (Accessed 25 July 2017).

³ See, for example, the European Venture Philanthropy Association at <http://evpa.eu.com/> (Accessed 25 July 2017).

⁴ <https://www.bigsocietycapital.com/> (Accessed 25 July 2017).

⁵ At <https://www.gov.uk/government/publications/growing-the-social-investment-market-a-vision-and-strategy> (Accessed 25 July 2017).

⁶ https://data.gov.uk/sib_knowledge_box/home (Accessed 26 July 2017).

⁷ <http://socialstockexchange.com/> (Accessed 25 July 2017).

⁸ See <https://www.cbd.int/sp/targets/> (Accessed 26 July 2017).

⁹ See www.cbd.int/sp/ (Accessed 26 July 2017).

¹⁰ <https://www.rewildingeurope.com/rewilding-europe-capital/> (Accessed 26 July 2017).

¹¹ www.conservation-capital.com/ (Accessed 26 July 2017).

¹² www.conservation-capital.com/financing-conservation-ent/ (Accessed 26 July 2017).

¹³ www.conservation-capital.com/investment-awc/ (Accessed 26 July 2017).

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- ¹⁴ The UN programme for Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, www.un-redd.org/
- ¹⁵ United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement 2015, Article 4.1 consolidates an approach to global carbon management that emphasises an *aggregate* or *net* ‘balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases’ thereby and permitting global carbon management through offsetting, including through purchase of tropical forest carbon.
- ¹⁶ <https://althelia.com/> (Accessed 26 July 2017).
- ¹⁷ <https://althelia.com/our-approach/our-impacts-monitoring/> (Accessed 26 July 2017).
- ¹⁸ <https://althelia.com/our-approach/> (Accessed 25 July 2017).
- ¹⁹ <https://althelia.com/2014/05/29/usaid-announce-new-partnership-with-althelia/> (Accessed 25 July 2017).
- ²⁰ See www.coderedd.org/redd-project-devs/wildlife-works-carbon-kasigau-corridor/ (Accessed 25 July 2017).
- ²² <http://admcapital.com/> (Accessed 26 July 2017).
- ²³ www.fauna-flora.org/initiatives/innovative-finance-for-conservation/ (Accessed 26 July 2017).
- ²⁴ See <https://althelia.com/2015/01/14/althelia-ecosphere-joins-forces-credit-suisse-launching-nature-conservation-notes-accelerate-private-sector-conservation-finance-preservation-ecosystems/> (accessed 31 July 2017).
- ²⁵ See www.un.org/sustainabledevelopment/biodiversity/ and www2.unccd.int/actions/impact-investment-fund-land-degradation-neutrality (Both accessed 31 July 2017).
- ²⁶ www2.unccd.int/actions/impact-investment-fund-land-degradation-neutrality (Accessed 31 July 2017). Thank you to James Fairhead for drawing my attention to this fund.
- ²⁹ <https://www.ngam.natixis.com/global/1250194644819/Home> (Accessed 31 July 2017).
- ³⁰ www2.unccd.int/actions/impact-investment-fund-land-degradation-neutrality (Accessed 31 July 2017).
- ³¹ www2.unccd.int/actions/impact-investment-fund-land-degradation-neutrality (Accessed 31 July 2017).
- ³² From Pullman (1997: 187).