

SDG 15

The 30-year search for biodiversity gold: history repeats itself?

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Conservation finance, private equity funds, land and rainforest bonds: all are attempting to ‘unlock’ the supposed trillions of dollars waiting around to finance the global environmental agenda.¹ A recent report by Credit Suisse, World Wildlife Fund and McKinsey claims that conservation could generate all the funding needed to conserve worldwide biodiversity if main investor segments, including high-net-worth individuals, retail and institutional investors, allocated only “1% of their new and reinvested capital to conservation”.² That is, it is claimed that the equivalent of a teeny-tiny spit in a large bathtub could save us all from degraded ecosystems.

While seductive, the last quarter century of international conservation efforts is riddled with exciting promises to generate financial returns from conservation. But these promises never seem to materialize at any scale, although they are always followed by another set of exciting promises: rinse and repeat.

Gene Gold

Going back at least 30 years, the first promise is that of ‘gene gold’. This dream is perhaps best articulated within the 1987 *Our Common Future*, which, during the then-emerging biotechnological revolution, viewed the vast genetic resources of the tropics as an almost limitless source of wealth, wealth that could fund biodiversity conservation. The famed report predicted that the economic value in genetic

resources “is enough to justify species preservation”.³ Meaning: the incentive to sell the genetic information in tropical forests to pharmaceutical and agricultural companies would outweigh the value of other opportunities, in say, timber or the land for agriculture. Such dreams of win-win-win finance – with positive environment, development and profit outcomes – also found their way into the Convention on Biological Diversity (CBD), ratified in 1992.

Enthusiasm for bioprospecting as a revenue source for conservation in the tropics perhaps peaked in 1991 when pharmaceutical giant Merck signed a 10-year, US\$ 1.3 million deal with the Costa Rican National Biodiversity Institute (INBio). But INBio notwithstanding, bioprospecting has largely failed to deliver on its promises of both profits and conservation.⁴ And a 2012 assessment found that it generated only a meager US\$ 50 million for conservation.⁵

Even as people were hanging their hats on the promise of biosprospecting in the CBD negotiations in the late 1980s and early 1990s, chief International Union for Conservation of Nature (IUCN) scientist Jeffrey McNeely and others like the former director of the Millennium Ecosystem Assessment Walter Reid were already seeing the writing on the wall, arguing for a focus on calculating and including the *indirect* economic values of biodiversity.⁶ Such indirect values

1 UNEP (2011) and World Bank (2015).

2 Credit Suisse/World Wildlife Fund/McKinsey & Company (2014), p. 16.

3 World Commission on Environment and Development (1987), p. 155.

4 See, e.g., Firn (2003) and Burtis (2008).

5 Parker et al. (2012)

6 McNeely (1988) and McNeely et al. (1990)

referred to ecosystem functioning and services, services that, when calculated, “may far outweigh direct values” like genetic resources. These might include services of carbon sequestration and water purification.

REDD+ Gold

And so quickly following on the toes of “gene gold”, is REDD+ gold, which promised that sale of carbon sequestration would generate revenue to save tropical forests (and many other ecosystems). The peak of this promise is perhaps the 2008 Eliasch review, commissioned by the United Kingdom. Released just prior to the Copenhagen climate conference (COP 15), the review suggested that including REDD in a well-designed carbon trading system could provide the finance and incentives to reduce deforestation rates up to 75 percent by 2030. One scenario modelled by the review predicted that US\$ 7 billion could be generated by the carbon markets by 2020.⁷ The most recent Ecosystem Marketplace “State of the Forest Carbon Market” report reports that the forest-based emission reduction market peaked in 2014 with US\$ 257 million in value, down to a measly US\$ 120 million in 2016.⁸ It seems we hit peak forest carbon market before anything close to peak oil.⁹

REDD seems dead, although continues in a zombie form: now folks are betting on inclusion of forest carbon offsets in the aviation industry emission reduction scheme and proclaiming the wonder of new financial technologies, namely blockchain.

7 Eliasch (2008).

8 Hamrick/Grant (2017). This figure cited for 2016 excludes revenue from the Australian Emissions Reduction Fund, which transacted US\$ 509.5 million dollars. But it is not a traditional market as there is only one buyer, the Australian government who awards emission reduction contracts by reverse auction.

9 Despite its low revenue, it is crucial to note that REDD is not benign for all communities; depending on the project it can result in land dispossession and further entrench social inequities. For an overview see Holmes/Cavanagh (2016). Another recent academic paper summarizes that REDD+ projects have faced issues of “insecure land tenure, elite capture of incentives, equity concern between recipients of payments and beneficiaries of ecosystem services, uncertainty over conditional based incentives” (Clark et al. (2018), p. 341).

REDD will not die completely, but remains in a state of ever-promise, always around the corner.

Conservation finance gold

And now we are living through another phase of promise – this time focused on financial institutions and mechanisms: from bonds to private equity all now promising to solve what is a giant failure of governments.

Yet, the evidence on this front is also not looking good. While there are difficulties assessing the entire field which is highly fragmented and also often privately held, my own and others scoping research shows that these capital flows are tiny in relation to the size of the problems, and essentially infinitesimal in the world of capital flows writ large.¹⁰ As CIFOR scientists recently conclude, “Expecting such a shortfall [in funding for SDGs, including biodiversity conservation] to be picked up by the private, or indeed any other sector, is arguably misguided and clearly represents the current disconnect between stated ambitions and reality”.¹¹ So far, the return-generating (meaning for-profit) conservation finance sector faces serious challenges scaling up, a problem readily recognized by the sector itself. As the Conservation Finance Alliance concludes, “The overwhelming majority of the financial sector has yet to show interest in biodiversity conservation”.¹² Or as NatureVest and their co-authors plainly state, conservation investments are much “less competitive compared to competing market opportunities.”¹³

For the most part, the capital that is flowing is of a particular sort, deployed by investors who are ok with low liquidity (assets that can be bought and sold quickly are liquid) and who are willing to take no to low return that is often highly risky, investment terms unpalatable to most investors.¹⁴ And in order to make such low-return, high risk investments, the

10 Dempsey/Suarez (2016). See also Clarke et al. (2018).

11 Clarke et al. (2018), p. 338.

12 Conservation Finance Alliance (2014), p. 4.

13 NatureVest/EKO Asset Management Partners (2014), p. 12.

14 Dempsey/Suarez (2016).

whole enterprise relies on the deployment of public and charitable capital that essentially “de-risk” the investments (known as blended capital).

Furthermore, the global geographic distribution of biodiversity finance, both public and private, is uneven. One report concludes that the United States, Canada, Europe, and China “generate and receive the majority of the world’s biodiversity finance”.¹⁵ The Global South, on the other hand, receives far less biodiversity finance: Africa receives 6 percent, Latin America and the Caribbean receive 6 percent, and Asia (not including China) receives 7 percent of overall global biodiversity finance. Similarly, a more recent survey of private investment in conservation found that 92 percent of the private investment found in their survey originated from U.S.-based investors and that across the three areas of conservation investment examined (green commodities, habitat, and water), Canada and the United States received 82 percent of this finance.¹⁶

From gold-seeking to justice-seeking

Given a shortage of political will, private capital and financial innovation are presented as the plausible and pragmatic approach to solving persistent environmental problems and wealth inequalities. Yet I suggest we understand ‘conservation finance gold’ the most recent attempt to achieve positive environmental and social outcomes that are return-generating, the latest in a more than quarter century effort.

And it does feel like history repeats itself. At its 2018 meeting in Davos, the World Economic Forum released a report calling for the 4th Industrial Revolution, a revolution propelled by new scientific and technological capabilities that will, the document proclaims, “enable society to realize the full value of nature and catalyze a new, inclusive bio-economy”, inclusive for humans and nonhumans on earth.¹⁷

What is on offer in that report sounds remarkably similar to that the found in the 1987 *Our Common Future*.

Another day, another bio-economic or green financial revolution, a so-called ‘revolution’ that is always just around the corner: “selling nature to save it” is always promissory, always just out of reach, existing in swirling clouds of hype that project hockey-stick like growth and political-economic transformation that most often flounder, even on their own terms.¹⁸ Placing our faith in this approach is equivalent to burying our heads in the sand while crossing our fingers for good luck, a far cry from pragmatic and plausible.

What is the other path? For decades, activists and critical environment-development academics have understood so-called “underdevelopment” and ecological degradation as a problem created via ongoing imperial and colonial relations: rich countries and individuals have accumulated their vast wealth by extracting resources (and disposing waste) beyond their borders, over hundreds of years. This conceptualization of the problem suggests we must do more than “unlock” private capital; it suggests redistribution - payments for ecological debt (PED). The concept of ecological debt is about showing how value accrued in the Global North has depended inextricably on devaluation in the Global South. It is inherently about linking distant places and rectifying cumulative historical geographical inequalities.¹⁹ Rather than promoting a kind of trickle-down theory of economic “green” development, PED is based upon redistribution and reparations.

Might the conservation world rally around PED? Payments to those conserving biological diversity would thus not be for “ecological services” produced, but rather be debt payments made by those who have taken up disproportionate space of the global commons. How might such debts be paid? In a recent book, Ashley Dawson provocatively suggests that payments might flow through a guaranteed income

¹⁵ Parker et al.(2012), p. 109.

¹⁶ NatureVest/EKO Asset Management Partners (2014).

¹⁷ World Economic Forum (2017), p 4.

¹⁸ Selling nature to save it is a term first used by McAfee (1999).

¹⁹ For an overview of the concept see Warlenius et al. (2015).

supplement for inhabitants of nations who are owed “biodiversity debt”. While surely controversial, Dawson argues that such incomes should flow not through the state, but rather to people directly, given that so many governments are captured by resource extraction interests. Dawson argues that such direct repayments of debt “would entitle the indigenous and forest-dwelling peoples who make these zones of rich biodiversity their homes with the economic and political power to push their governments to implement significant conservation measures”.²⁰ Could conservation organizations and holders of capital facilitate not the development of tourism lodges that compete against each other and return in profit, but rather support a transnationally organized union or movement of “conservation labourers” who might collectively demand higher payments for ecological debt?

These ideas are not silver bullets, holy grails, or miracle cures. There is no such thing. But we live in a desperate time of countless human and nonhuman tragedies, on a planet that is less lively, less bio-culturally diverse by the year - an earth, as Donna Haraway writes, “full of refugees, human and not, without refuge.”²¹ Such a tragedy is a wholly political problem demanding a political solution, which suggests our time and energy is best spent building powerful movements and organizational infrastructures that can move capital and states towards less extractive directions.

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²⁰ Dawson (2016), p. 91.

²¹ Haraway (2015), p. 160.

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