

## SDG 15

### Trends in the privatization and corporate capture of biodiversity

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Similar to other sectors, biodiversity policy has been significantly influenced by the neoliberal economic theories of environmental economists, who have promoted the privatization and commodification of the values and 'services' biodiversity provides, and market-based mechanisms and business involvement in biodiversity policy in general. Unfortunately the reference to ecosystem services under SDG 15 on the use of terrestrial ecosystems opens the door to such trends, which are increasingly opposed by some developing countries. An example is the influence of corporate interests in the forestry sector, as corporations have deliberately tried to weaken some of the forest-related targets under SDG 15. In addition the promotion of public- private partnerships (PPPs) and blended private-public finance facilitates the corporate capture of biodiversity policy, potentially frustrating a transformative change agenda.

#### Ecosystem services and the privatization of biodiversity

Target 15.1 under SDG 15 on biodiversity and the terrestrial ecosystem urges governments to conserve and restore "ecosystems and their services". The seemingly innocent term 'services' supports a discourse about the economic value of what are considered ecosystem services that has been described as a political-scientific strategy to integrate biodiversity into capitalist economies.<sup>1</sup> It has also encouraged governments to establish markets or other economic incentive schemes that provide payments for these ecosystem services. Or as environmental scholar Jessica Dempsey states: "An ecosystem services approach, critical scholars (including myself) argue, risks reducing complex ecosystems to market logic, laying the ground for new round of accumulation and profiteering [...]."

Payments for Ecosystem Services (PES) represent an environmental economic approach to correct the failure of conventional markets to reflect the true value of biodiversity. The rationale is that through the internalization of the value of environmental services, conservation is made profitable and that this will attract additional funding.<sup>2</sup> In a market for ecosystem services such services are enclosed, measured and given a market value through a process of commodification that creates new fictitious commodities like 'carbon credits' based on what were often public goods.<sup>3</sup> PES can be seen as a reflection of an increasingly popular approach to environmental governance where "the virtues and efficiency of economic liberalism are often taken for granted".<sup>4</sup>

1 Dempsey (2016), p. 92.

2 Pirard (2012).

3 Reynolds (2012) and Beymer-Farris and Bassett (2012).

4 Broughton and Pirard (2011), p. 3.

The conditionality of PES is expected to lead to increased delivery of ecosystem services and thus more efficient conservation, and create a win-win situation of long-term conservation and economic development amongst communities.<sup>5</sup> Communities are assumed to be free to choose whether they participate in PES mechanisms or not. However, government-imposed PES mechanisms are not always voluntary and often force citizens, through taxes or otherwise to pay for carbon sequestration or other environmental services. Service providers are sometimes forced to participate too, as for example through a decision of their local authorities.<sup>6</sup> Other complications with PES and other market-based conservation schemes are that they are often based on a dubious scientific foundation and use highly simplified indicators, proxies and definitions for the ecosystem services they provide.<sup>7</sup> Even more problematic is the fact that many PES mechanisms invest in the protection and enhancement of tree cover, without scientifically assessing the impacts of these activities on climate change mitigation and other ecosystem services.<sup>8</sup> Especially monoculture tree plantations tend to have significant negative impacts on biodiversity, watersheds and climate resilience, as they are far more prone to forest fires and more vulnerable to storms, droughts and climate change-induced pests.

PES and other market-based mechanisms can have many negative social impacts too. It is estimated that up to 80 percent of the world's most important biological areas are found in areas that are territories of indigenous peoples or other economically and politically marginalized local communities.<sup>9</sup> There is growing recognition of the fact that these local communities

play a key role in biodiversity conservation and restoration, as a result of their traditional knowledge, value systems and customary governance structures, which allow for relatively effective enforcement of local conservation norms. But these communities often lack formally recognized land rights.<sup>10</sup> As a result, the main benefits of PES schemes tend to go to relatively wealthy landowners, while groups without recognized land tenure rights, which often include women, indigenous peoples, pastoralists and local communities, will not be rewarded for their biodiversity conservation efforts. Especially women tend to lose out in PES and other market-based conservation schemes, as they often lack formal land rights, even though they tend to play a vital role in conserving and restoring biodiversity. PES schemes do not only often ignore their role, but they can even lead to blocking women's access to the ecosystems they have conserved and used to provide resources for their livelihoods.<sup>11</sup> Elite resource capture and even land grabbing are inherent risks in PES schemes, as demonstrated by experiences in countries as varied as Nepal and Uganda.<sup>12</sup> More generally, because of unbalanced power relations market-based conservation schemes tend to be more beneficial to buyers of environmental services, or the intermediaries in market-based schemes, rather than to the original providers of these environmental services.<sup>13</sup>

During the negotiations over the 2030 Agenda and the SDGs, these concerns about the social and environmental impacts of markets in environmental services and the ecosystem services discourse in general were shared by a number of developing countries. As a result, they opposed explicit references to the concept of ecosystem services in the targets and while the SDG negotiation text that was produced in April 2014 still contained six references to ecosystem services, the final text includes one vague reference to "ecosystems and their services", while other references to market-based mechanisms like carbon

5 Pirard (2012).

6 An example is the Chinese Sloping Land Conversion Program, where the decision to participate was often taken by the local authorities, without consultation with the farmers themselves, see Bennett and Xu (2008).

7 Accounting for an ecosystem service like carbon sequestration, e.g., is complicated – estimating the carbon content in trees through different methods can lead to variations of more than 100% and other carbon pools in forests such as bushes and soils are even harder to account for, see Pelletier et al. (2012).

8 Porras et al. (2013) and Leimona et al. (2015).

9 Sobrevila (2008).

10 E.g., only 25% of the forest in developing countries is under recognized community governance, Bluffstone et al. (2013).

11 Seymour (2008) and World Bank (2009).

12 Jindal et al. (2008) and Maraseni et al. (2014).

13 Peskett et al. (2011).

offset trade were removed. However, the lack of these other references to ecosystem services and PES in the 2030 Agenda has not yet halted the expansion of PES schemes and other market-based mechanisms, which are particularly promoted by many donor countries and others with a strong ‘green economy’ agenda.

### **The corporate capture of ecosystems: The case of the forestry sector**

In the course of the 2030 Agenda negotiations, the forestry sector long strived for an independent SDG on forests, but in the end proponents accepted the compromise of a specific separate mention of “sustainable forest management” in the title of SDG 15, and a specific forest-oriented target. The separate reference to forests alongside ecosystems in the title of SDG 15 makes little sense from a scientific perspective, as forests are an ecosystem. But it was in line with the forestry sector discourse that biodiversity is just an element of forests, and that there is a need for self-standing forest policies and agreements alongside the legally binding Convention on Biodiversity (CBD). This discourse has resulted in a deep and partly deliberate fragmentation in international forest policy. There are at least 26 legally and non-legally binding international agreements related to forests, and these agreements often duplicate or even conflict with each other.<sup>14</sup>

This legal fragmentation is very much the result of the corporate interests that dominate the forestry sector. These corporate interests are rooted in the forestry profession itself, which is primarily oriented towards timber production. Many public forestry agencies have an explicit mandate to economically exploit public forests and as a result, their policies tend to prioritize the production of timber over biodiversity and other environmental and social values of forests. Only in countries where a Ministry of Environment has the primary responsibility for forest policies do these policies tend to prioritize conservation.

The de facto corporate interests of many forestry departments have triggered a complex governance situation, in which public agencies have a clear economic incentive to weaken environmental standards. As described below, public-private partnerships between public and private forestry institutions and the promotion of so-called blended finance caused even greater challenges for forest governance, as the financial dependencies created by these partnerships trigger a disincentive for setting strict environmental and social standards and proper law enforcement.

### **How corporations tried to undermine the SDGs**

While the separate references to sustainable forest management in the title and targets of SDG 15 are questionable from a forest biodiversity perspective, target 15.2 on sustainable forest management did form a historic victory for forest conservationists by setting an ambitious target to halt deforestation by 2020. This target was inspired by Aichi Target 5 of the CBD’s Strategic Plan, which states that “by 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero”. It is noteworthy that the crucial words “where feasible” and “close to” zero were removed in target 15.2, which means the target is significantly more ambitious.

This triggered an argument that between the presentation of the draft SDGs in July 2014 and their final adoption in September 2015 target 15.2 had become incorrect, and that the end date should be 2030, as the 2020 deadline would be unachievable. Yet, this argument ignored the fact that according to the FAO Forest Resources Assessment 2015, almost two-thirds of the world’s countries have already halted forest loss. For these countries, the main challenge is forest degradation, and addressing biodiversity loss triggered by the replacement of forests by monoculture plantations of invasive alien tree species like Eucalypt and Pine, in line with target 15.8, rather than halting forest cover loss.

The involvement of business and industry in this discussion was symptomatic of the problematic role large corporations play in weakening international agreements through their active and on the face of

<sup>14</sup> Cashore et al. (2010) and Gupta (2012).

## Corporate capture of agricultural biodiversity threatens the future we want

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Agricultural biodiversity is the basis of the agriculture we need; one that is able to sustainably increase production, nourish people through diverse diets and be resilient to environmental stresses. It is clear that the conventional, industrial model of agriculture is failing on many counts.<sup>1</sup> The need for a paradigm shift to biodiversity-based farming practices such as agroecology is increasingly urgent, particularly in the light of climate change.<sup>2</sup>

Nonetheless, such a transition will be stymied if concentration in the seed and pesticides sectors continues. Already, the Big Six mega-seed and chemical corporations (BASF, Bayer, Dow, DuPont, Monsanto and Syngenta) control 75 percent of the global agrochemical market, 63 percent of the commercial seed market and over 75 percent of private sector research and development (R&D) in seeds/pesticides (see [box on agribusiness mega-mergers in Chapter 2](#)).<sup>3</sup>

Currently, regulators around the world are evaluating three mega agri-mergers: Dow Chemical and DuPont; China National Chemical Corporation (ChemChina) and

Syngenta; and Bayer and Monsanto. Should these mergers be approved, an oligopoly will end up controlling the world's food systems.

The combined power and influence of these corporations is bigger than their market share; a variety of inter-firm agreements such as cross-licensing and research and development (R&D) alliances are actually forms of collusion and cartel behaviour, creating barriers to entry and reinforcing their top-tier market power.

This concentration would further squeeze global food systems, locking them onto a narrow technological path, characterized by ongoing dependence on proprietary seed, including genetically engineered seed and agrochemical inputs.<sup>4</sup> The concentration of power in food systems reinforces other lock-ins that result in less diversity in the crops grown, due to the tendency towards standardized, input-intensive crop varieties, to the detriment of traditional varieties and agricultural biodiversity.

The consolidation also means that the companies will be well positioned to access massive banks of genetic data. Efforts such as DivSeek, a large international digital gene-banking project, will facilitate the corporate control and capture of agricultural biodiversity. DivSeek plans to link and facilitate analysis of databases that will host the genomes of hundreds of thousands crop seeds as well as seeds of crop wild relatives, along with characteristic information about them.

Records released under Freedom of Information laws have revealed a DivSeek steering committee's interest in a Syngenta-proposed funding scheme to sell access to genetic data and apparent acquiescence to the company's demands on patenting of plant genes, sequences and traits,<sup>5</sup> while a DivSeek founder has offered early access to genetic sequences and patent rights to valuable climate change genes to DuPont and Syngenta.<sup>6</sup> Proprietary control via patents would be the ultimate corporate capture of agricultural biodiversity that is meant to be held in trust.

1 IAASTD (2009) and UNCTAD (2013).

2 IPES-Food (2016) and Altieri et al. (2015).

3 ETC Group (2015).

4 African Centre for Biodiversity (2017).

5 Hammond (2016a).

6 Hammond (2016b).

The mega-seed industry's agenda includes collaborating with DivSeek to advance a goal of evading benefit-sharing requirements when it accesses genetic resources electronically. The use of synthetic biology technologies, such as gene synthesis and gene editing, means that digital genetic resources data can be used to select, recreate, manipulate and utilize key genes without physically transferring materials – and potentially without implementing benefit-sharing obligations required under the Convention on Biological Diversity (CBD) and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).

Freed of these obligations, the use of these technologies would allow corporations to enjoy the financial fruits of mining international and other seed banks for valuable sequences, while leaving farmers and indigenous peoples – who have nurtured agricultural biodiversity – behind.<sup>7</sup> This is a violation of farmers' rights and removes an incentive to continue conserving and sustainably using agricultural biodiversity.

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<sup>7</sup> Hammond (2017).

it benign involvement in sustainable development policy. In September 2014, 57 large corporations, in collaboration with UN entities and a range of other stakeholders organized a big Forest Summit in New York City which adopted, with great pomp, a New York Declaration of Forests.<sup>15</sup> The Declaration included a commitment to eliminate deforestation, but by 2030 only. Due to the publicity campaign they deployed the New York Declaration was heralded as a great breakthrough, while its target date was actually ten years later than the target date the UN itself had just agreed upon in July 2014. The corporations that supported the New York Declaration included such companies as Unilever, Nestle, Walmart, McDonalds and Wilmar International, which were heavily dependent upon commodities such as beef, soy, palm oil and wood that were amongst the main drivers of deforestation, and the early target date of 2020 would thus be detrimental to their business interests.

Happily, the corporate-led campaign to weaken SDG 15.2 was not successful, as UN Member States did not want to re-open negotiations on the difficult compromise text that had been agreed upon in July 2014. It was also recognized that the target date of 2020 was in line with the overall objective of the CBD Strategic Plan to halt biodiversity loss by 2020, as it would be impossible to do so if deforestation is not halted, taking into account that forests represent an estimated 90 percent of the world's biodiversity.

### The risks of public-private partnerships and corporate involvement for transformative change

Public-private partnerships (PPPs) between governments, corporations and other actors like NGOs have been actively promoted by the UN as a strategy to maintain its relevance in diversified governance models, and as a fundraising strategy. The financial dependency of UN entities and several governments on private sector contributions through partnerships and other private investments creates perverse incentives and conflicts of interests, and compromises

their role as unbiased institutions promoting general public interests. In sectors like the forestry sector the impacts have been particularly problematic, as corporations will prefer to invest in profit-oriented activities like the exploitation of monoculture tree plantations, instead of marginally or not profitable activities like forest conservation or community forest governance. As described above, monoculture tree plantations have significant negative impacts on biodiversity and climate resilience, yet due to the dependence of especially contemporary climate funds on private funding, several tree plantation projects have or are about to receive financial support through these funds.<sup>16</sup>

In addition, an inherent problem with corporate involvement in sustainable development policy-making is that corporations can accept and support qualitative sustainability measures that improve their production, but they cannot accept quantitative measures that would affect the growth of their production. No matter the political good will of some business leaders, the rules of capitalist economies do not allow a company to accept policy measures that would affect the economic growth of its business. PPPs and other forms of business engagement thus form a major obstacle to policies that aim to address demand-side drivers of biodiversity loss and climate change like meat and dairy consumption through quantity-related policy measures. Yet in light of the planet's physical boundaries, limits to growth have to be set, especially when it concerns products like beef, palm oil and soy that have a disproportionate negative impact on biodiversity and thus the biosphere's resilience.

15 [www.undp.org/content/dam/undp/library/Environment%20and%20Energy/Forests/New%20York%20Declaration%20on%20Forests\\_DAA.pdf](http://www.undp.org/content/dam/undp/library/Environment%20and%20Energy/Forests/New%20York%20Declaration%20on%20Forests_DAA.pdf).

16 Examples include a recently approved Forest Investment Programme investment into a teak plantation in Ghana and the Paraguayan PROEZA project, which has been proposed as the first forest-related project to be financed by the Green Climate Fund. PROEZA would finance the establishment of more than 35,000 hectares of Eucalyptus monoculture plantations to provide biomass for the soy sector to dry soy.

## Conclusion: corporate involvement as an obstacle to transformative change

Market-based conservation mechanisms and corporate involvement in sustainable development policies form a major obstacle to the transformative change mandated by the 2030 Agenda. As described above, market-based conservation mechanisms have a weak scientific basis, and they risk marginalizing the actors that play a central role in biodiversity conservation: indigenous peoples, local communities and women. The strong corporate involvement in the forestry sector has led to serious conflicts of interests that undermine effective biodiversity policy. Corporations have also played a dubious role in trying to undermine one of the most ambitious targets of the 2030 Agenda. More generally, PPPs and blended finance instruments create serious conflicts of interests, tend to support business as usual, and marginalize or even prevent quantity-related measures to address unsustainable consumption. As such, they will promote business as usual rather than transformative change.

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